Asal Siviçler

Basic Switches

F

Asal Siviçler

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Basic Switches

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MN *Serisi Mini Siviçler*

- Geniş uygulama alanları için ürün çeşitliliği
- Uzun ömür
- Yüksek kontak güvenilirliği
- Standart montaj delikleri

Teknik Bilgiler

Mekanik Ömür	:	500.000 açma-kapama min. (60 dev/dk)
Elektriksel Ömür	:	100.000 açma-kapama min. (30dev/dk)
Çalışma Sıcaklığı		-15/+125 °C

Koruma Sınıfı

MN Serisi Tip 1 Mini Siviçler	:	IP20 - IP40 (Koruma Çerçeveli)
MN Serisi Tip 2 Mini Siviçler	:	IP20 - IP40 (Koruma Çerçeveli)
MN Serisi Tip 3 Metal Mini Siviçler	:	IP65
MN Serisi Tip 4 Mini Siviçler	:	IP20 - IP40 (Koruma Çerçeveli)

Çalışma Gerilimi (Ue)	:	440V AC
Çalışma Akımı (Ie)	:	10A
Yalıtım Gerilimi (Ui)	:	660V
Darbe Dayanım Gerilimi (Uimp)	:	2,5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı(f)	:	50 Hz.
İzolasyon Direnci	:	10 MΩ min. (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V AC (1 dakika için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1.5-2.5 mm²
Standart	:	TS EN 60947-5-1

MN *Series Mini Switches*

- *Variety of products for wide applications*
- *Long life time*
- *High contact reliability*
- *Standard mounting holes*

Technical Information

Mechanical Life	:	*500.000 operations min. (60 cyc/min)*
Electrical Life	:	*100.000 operations min. (30 cyc/min)*
Operating Temperature	:	*-15/+125 °C*

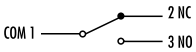
Protection Degree

MN Series Type 1 Mini Switches	:	*IP20 - IP40 (with Protection Housing)*
MN Series Type 2 Mini Switches	:	*IP20 - IP40 (with Protection Housing)*
MN Series Type 3 Metal Mini Switches	:	*IP65*
MN Series Type 4 Mini Switches	:	*IP20 - IP40 (with Protection Housing)*

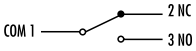
Operating Voltage (Ue)	:	*440V AC*
Operating Current (Ie)	:	*10A*
Insulation Voltage (Ui)	:	*660V*
Impact Resistance (Uimp)	:	*2,5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 Hz.*
Insulation Resistance	:	*10 MΩ min. (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V AC (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1.5-2.5 mm²*
Standard	:	*TS EN 60947-5-1*

MN Serisi Tip 1 Mini Siviçler / *MN Series Type 1 Mini Switches*

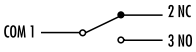
Kısa Kollu
Short Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1KIM1	1 Değişebilen Kontak *1 Changeover Contact*		Kol *Hinge Lever*	Metal *Metal*

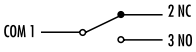
Orta Kollu
Medium Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1KIM2	1 Değişebilen Kontak *1 Changeover Contact*		Kol *Hinge Lever*	Metal *Metal*

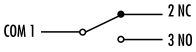
Uzun Kollu
Long Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1KIM3	1 Değişebilen Kontak *1 Changeover Contact*		Kol *Hinge Lever*	Metal *Metal*

Kısa Kollu Makaralı
Short Hinge Roller Lever

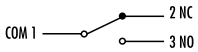
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1MIM1	1 Değişebilen Kontak *1 Changeover Contact*		Kol *Hinge Lever*	Metal *Metal*

Uzun Kollu Yaylı Makaralı
Long Hinge Roller Lever With Springs

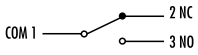
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1MIM1Y	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Hinge Lever*	Metal *Metal*

MN Serisi Tip 1 Mini Siviçler / *MN Series Type 1 Mini Switches*

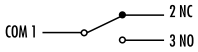
Uzun Kollu Makaralı
Long Hinge Roller Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1MIM2	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Hinge Lever*	Metal *Metal*

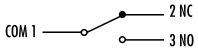
Pimli Eksene Paralel Makaralı
Panel Mount Roller Plunger

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1MUM3	1 Değişebilen Kontak *1 Changeover Contact*		Pimli Makara *Plunger*	Metal *Metal*

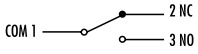
Pimli Eksene Dik Makaralı
Panel Mount Cross Roller Plunger

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1MUM8	1 Değişebilen Kontak *1 Changeover Contact*		Pimli Makara *Plunger*	Metal *Metal*

İnce Kısa Pimli
Pin Plunger

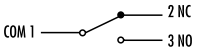
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1PUM1	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

İnce Uzun Pimli
Tall Pin Plunger

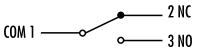
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN1PUM3	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

MN Serisi Tip 1 Mini Siviçler / *MN Series Type 1 Mini Switches*

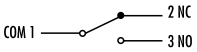
Kalın Kısa Pimli
Short Spring Plunger

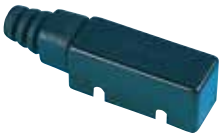
Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN1PUM7	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

Kalın Uzun Pimli
Panel Mount Plunger

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN1PUM9	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

Ekstra Uzun Metal Pimli
Extra Long Metal Plunger

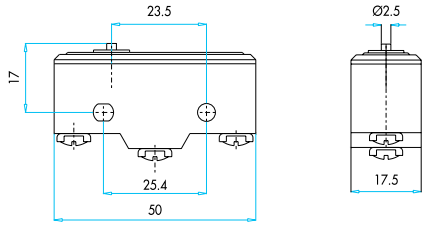
Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN1PUM9U	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*



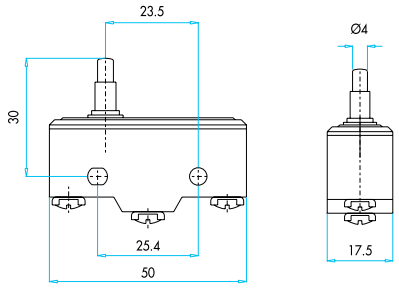
Plastik Koruma Kapağı
Plastic Protection Cover

Ürün Kodu *Code*	Kapak Malzemesi *Cover Material*	Rakor Malzemesi *Connection Material*
MN1YKAP	Plastik *Plastic*	Lastik *Rubber*

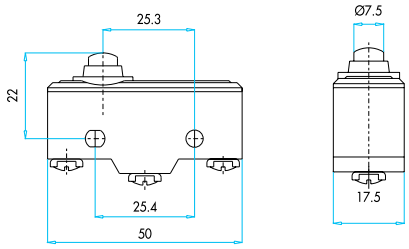
BOYUTLAR (mm) / *DIMENSIONS (mm)*



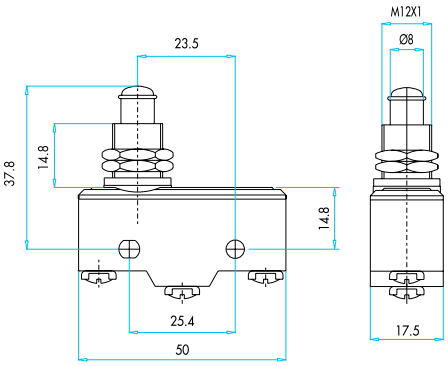
MN1PUM1



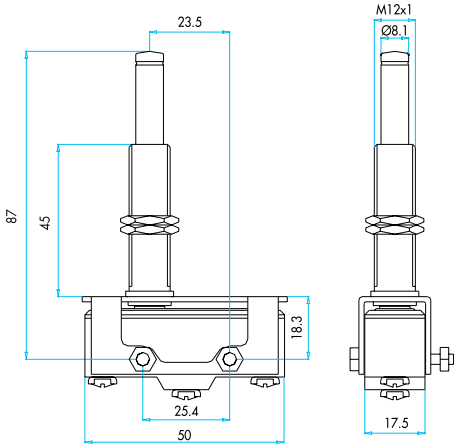
MN1PUM3



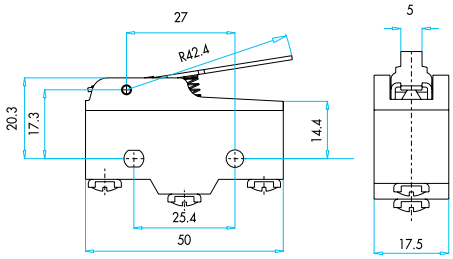
MN1PUM7



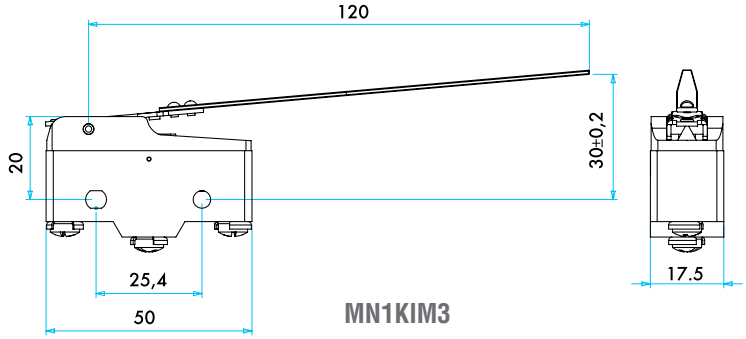
MN1PUM9



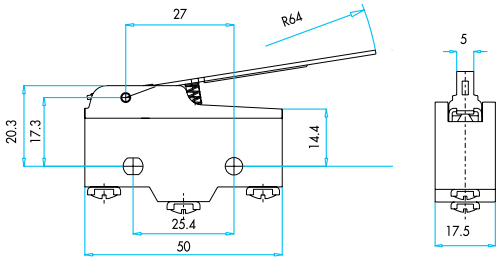
MN1PUM9U



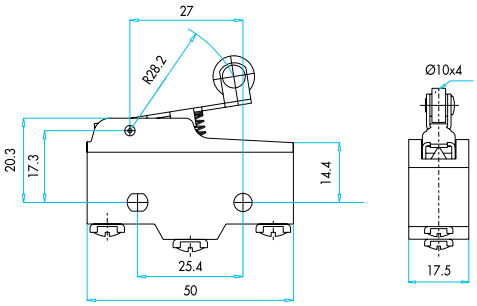
MN1KIM1



MN1KIM3

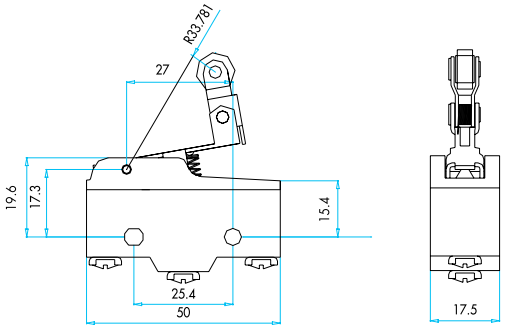


MN1KIM2

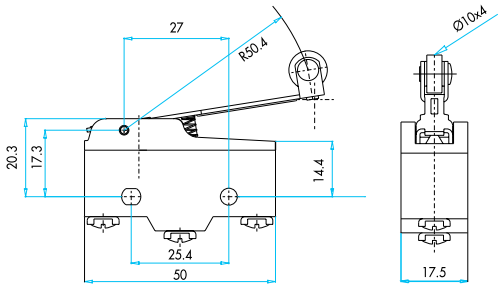


MN1MIM1

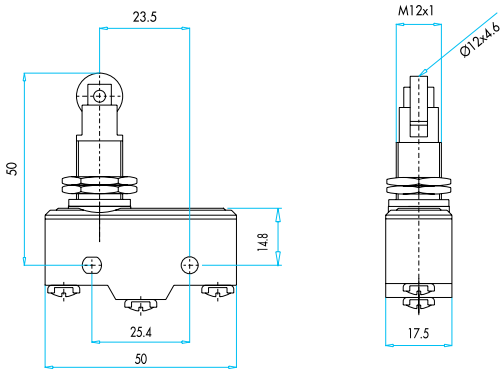
BOYUTLAR (mm) / *DIMENSIONS (mm)*



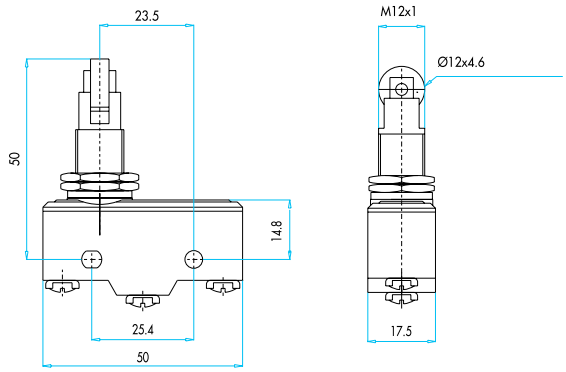
MN1MIM1Y



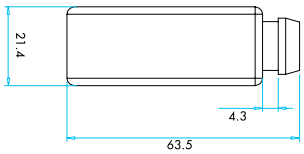
MN1MIM2

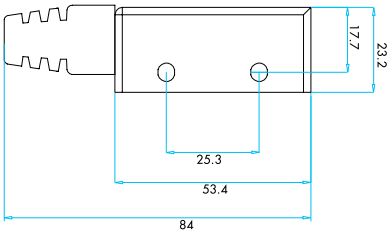


MN1MUM3



MN1MUM8

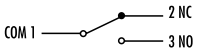




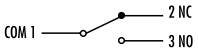
MN1YKAP

MN Serisi Tip 2 Mini Siviçler / *MN Series Type 2 Mini Switches*

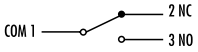
Kısa Kollu
Short Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2KIM1	1 Değişebilen Kontak *1 Changeover Contact*		Kol *Hinge Lever*	Metal *Metal*

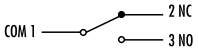
Orta Kollu
Medium Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2KIM2	1 Değişebilen Kontak *1 Changeover Contact*		Kol *Hinge Lever*	Metal *Metal*

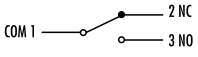
Uzun Kollu
Long Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2KIM3	1 Değişebilen Kontak *1 Changeover Contact*		Kol *Hinge Lever*	Metal *Metal*

Kısa Kollu Makaralı
Short Hinge Roller Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2MIM1	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Hinge Lever*	Metal *Metal*

Kısa Kollu Yaylı Makaralı
Short Hinge Roller Lever With Springs

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2MIM1Y	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Hinge Lever*	Metal *Metal*

MN Serisi Tip 2 Mini Siviçler / *MN Series Type 2 Mini Switches*

Uzun Kollu Makaralı
Long Hinge Roller Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2MIM2	1 Değişebilen Kontak *1 Changeover Contact*	COM 1 — 2 NC / 3 NO	Kollu Makara *Hinge Lever*	Metal *Metal*

Pimli Eksene Paralel Makaralı
Panel Mount Roller Plunger

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2MUM3	1 Değişebilen Kontak *1 Changeover Contact*	COM 1 — 2 NC / 3 NO	Pimli Makara *Plunger*	Metal *Metal*

Pimli Eksene Dik Makaralı
Panel Mount Cross Roller Plunger

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2MUM8	1 Değişebilen Kontak *1 Changeover Contact*	COM 1 — 2 NC / 3 NO	Pimli Makara *Plunger*	Metal *Metal*

İnce Kısa Pimli
Pin Plunger

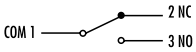
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2PUM1	1 Değişebilen Kontak *1 Changeover Contact*	COM 1 — 2 NC / 3 NO	Pim *Plunger*	Metal *Metal*

İnce Uzun Pimli
Tall Pin Plunger

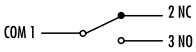
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN2PUM3	1 Değişebilen Kontak *1 Changeover Contact*	COM 1 — 2 NC / 3 NO	Pim *Plunger*	Metal *Metal*

MN Serisi Tip 2 Mini Siviçler / *MN Series Type 2 Mini Switches*

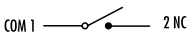
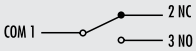
Kalın Kısa Pimli
Short Spring Plunger

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN2PUM7	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

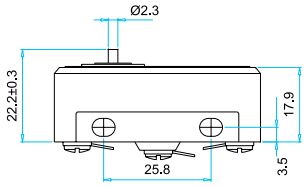
Kalın Uzun Pimli
Panel Mount Plunger

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN2PUM9	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

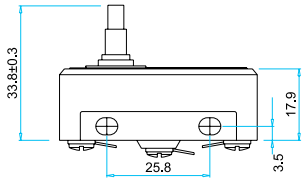
Plastik Tutamaklı
Plastic Handle

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN2TIP11	1 Değişebilen Kontak *1 Changeover Contact*		Tutamak *Handle*	Plastik *Plastic*
MN2TIP12	1 Değişebilen Kontak *1 Changeover Contact*		Tutamak *Handle*	Plastik *Plastic*

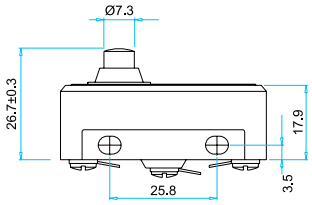
BOYUTLAR (mm) / *DIMENSIONS (mm)*



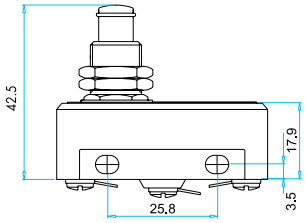
MN2PUM1



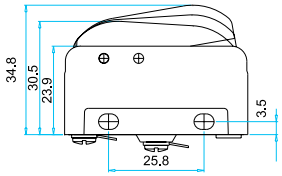
MN2PUM3



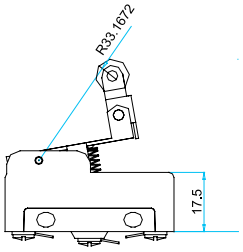
MN2PUM7



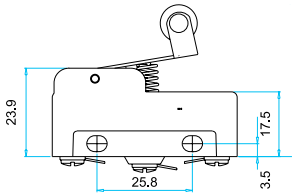
MN2PUM9



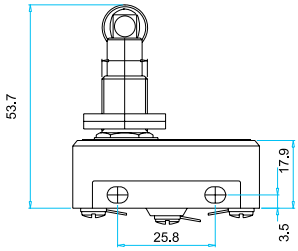
MN2TİP11/MN2TIP12



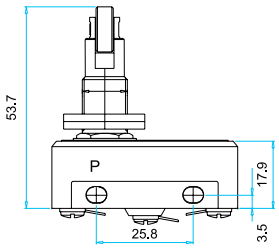
MN2MIM1Y



MN2MIM1

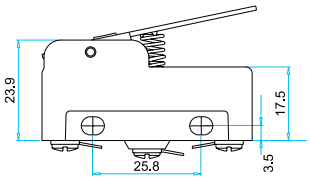


MN2MUM3

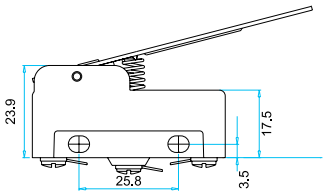


MN2MUM8

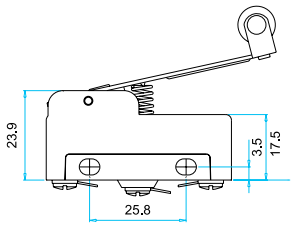
BOYUTLAR (mm) / *DIMENSIONS (mm)*



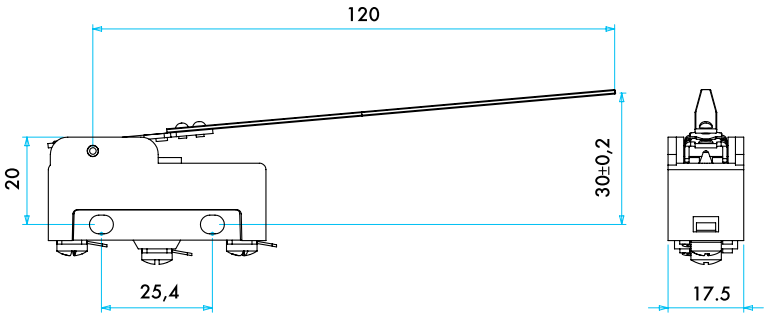
MN2KIM1



MN2KIM2



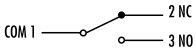
MN2MIM2



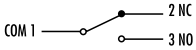
MN2KIM3

MN Serisi Tip 3 Metal Mini Siviçler / *MN Series Type 3 Metal Mini Switches*

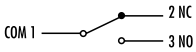
Kısa Kollu
Short Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN3KIM1	1 Değişebilen Kontak *1 Changeover Contact*		Kol *Hinge Lever*	Metal *Metal*

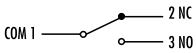
Uzun Kollu
Long Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN3KIM2	1 Değişebilen Kontak *1 Changeover Contact*		Kol *Hinge Lever*	Metal *Metal*

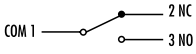
Kısa Kollu Makaralı
Short Hinge Roller Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN3MIM1	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Hinge Lever*	Metal *Metal*

Uzun Kollu Makaralı
Long Hinge Roller Lever

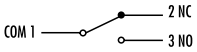
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN3MIM2	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Hinge Lever*	Metal *Metal*

Pimli Eksene Paralel Makaralı
Panel Mount Roller Plunger

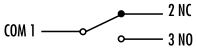
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN3MUM3	1 Değişebilen Kontak *1 Changeover Contact*		Pimli Makara *Plunger*	Metal *Metal*

MN Serisi Tip 3 Metal Mini Siviçler / *MN Series Type 3 Metal Mini Switches*

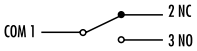
İnce Kısa Pimli
Pin Plunger

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN3PUM1	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

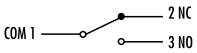
İnce Uzun Pimli
Spring Plunger

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN3PUM3	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

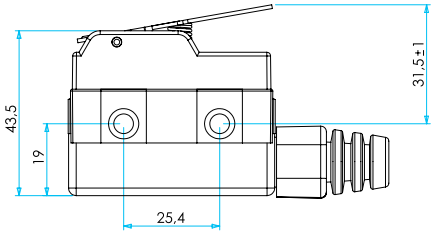
Kalın Kısa Pimli
Short Spring Plunger

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN3PUM7	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

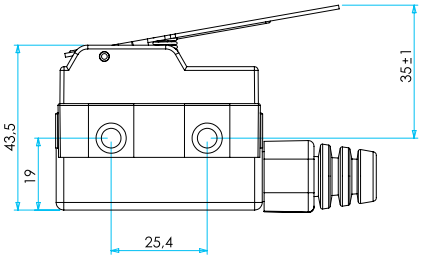
Kalın Uzun Pimli
Panel Mount Plunger

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN3PUM9	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Plunger*	Metal *Metal*

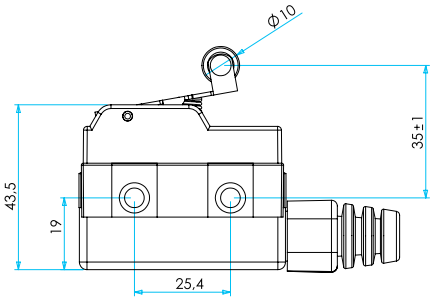
BOYUTLAR (mm) / *DIMENSIONS (mm)*



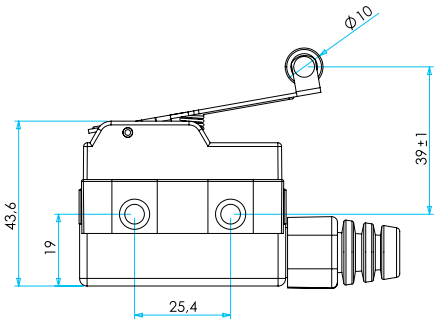
MN3KIM1



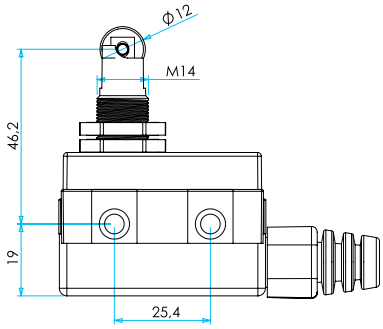
MN3KIM2



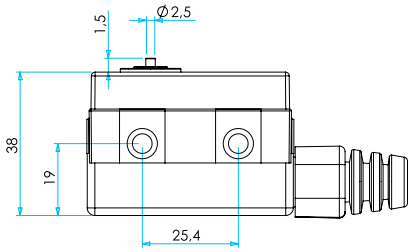
MN3MIM1



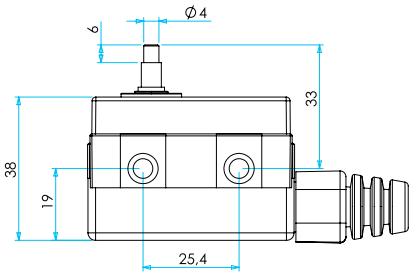
MN3MIM2



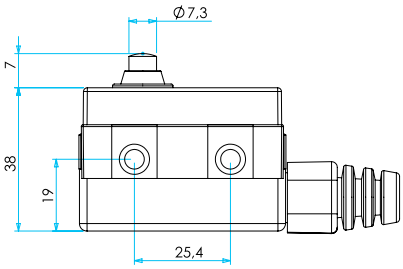
MN3MUM3



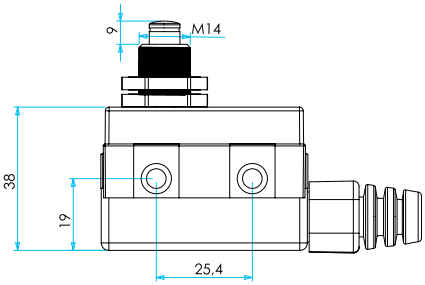
MN3PUM1



MN3PUM3

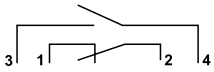


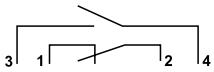
MN3PUM7

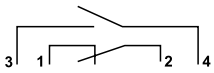


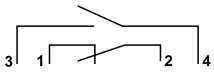
MN3PUM9

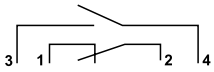
MN Serisi Tip 4 Mini Siviçler / *MN Series Type 4 Mini Switches*

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN4KIM1	1 Değişebilen Kontak *1 Changeover Contact*		Kısa Kollu *Short Hinge Lever*	Metal *Metal*

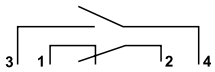
Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN4KIM2	1 Değişebilen Kontak *1 Changeover Contact*		Orta Kollu *Medium Hinge Lever*	Metal *Metal*

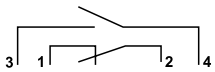
Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN4KIM3	1 Değişebilen Kontak *1 Changeover Contact*		Uzun Kollu *Long Hinge Lever*	Metal *Metal*

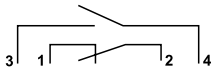
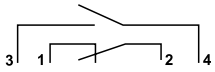
Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN4MIM1	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Short Hinge Roller Lever*	Metal *Metal*

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MN4MIM1Y	1 Değişebilen Kontak *1 Changeover Contact*		Uzun Kollu Yaylı Makara *Long Hinge Roller Lever With Spring*	Metal *Metal*

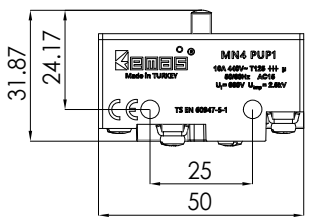
MN Serisi Tip 4 Mini Siviçler / *MN Series Type 4 Mini Switches*

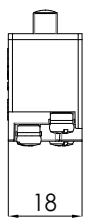
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN4PUM7	1 Değişebilen Kontak *1 Changeover Contact*		Pim *Short Pin*	Metal *Metal*

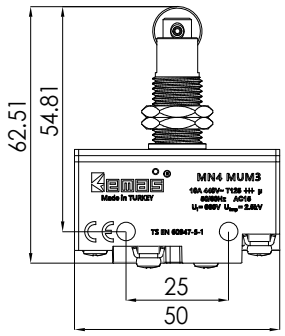
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN4PUM9	1 Değişebilen Kontak *1 Changeover Contact*		Kalın Uzun Pimli *Panel Mount Plunger*	Metal *Metal*

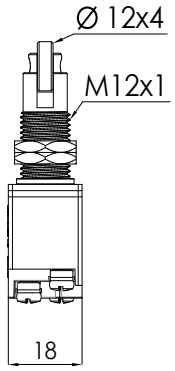
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MN4PUP1	1 Start NA *1 Start NO*		İnce Pim *Pin Plunger*	Plastik *Plastic*
MN4TİP12	1 Değişebilen Kontak *1 Changeover Contact*		Tutamak *Handle*	Plastik *Plastic*

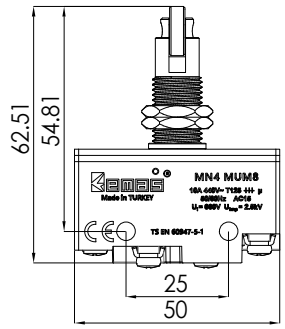
BOYUTLAR (mm) / *DIMENSIONS (mm)*

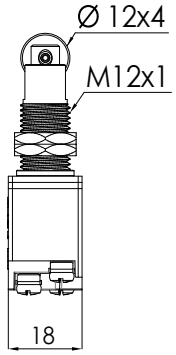


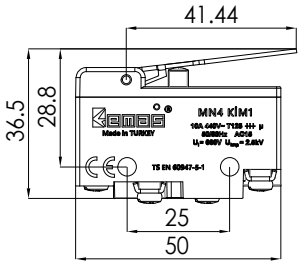


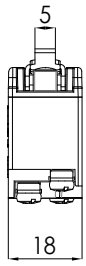


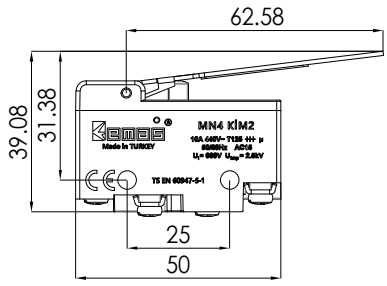


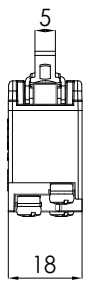


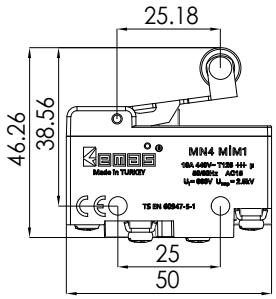


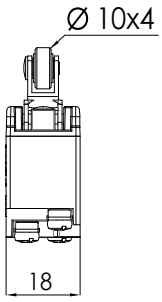


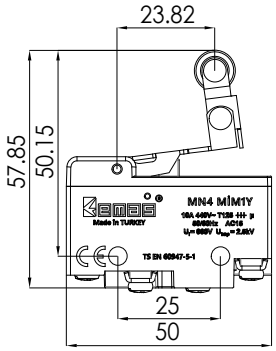


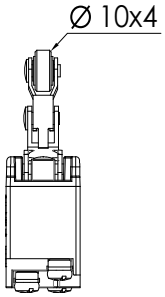


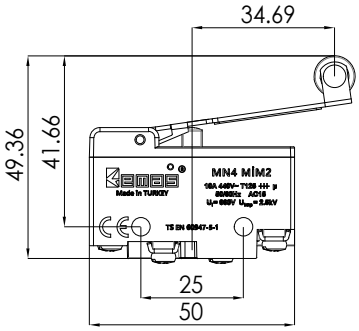


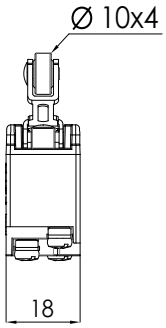


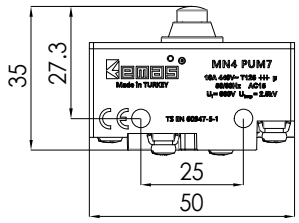


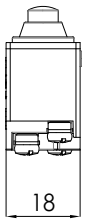


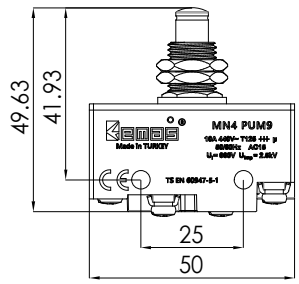


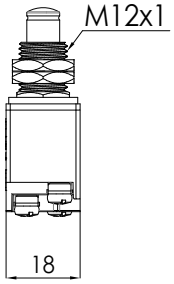












MK *Serisi Mikro Siviçler*

- Kompakt ve doğru çalışma
- Geniş uygulama alanları için ürün çeşitliliği
- Uzun ömür
- Yüksek kontak güvenilirliği
- Ürün güvenilirliğini arttıran V0 özellikli malzeme

Teknik Bilgiler

Mekanik Ömür	: 10.000.000 açma-kapama min. (60 dev/dk)
Elektriksel Ömür	: 100.000 açma-kapama min. (30dev/dk)
Çalışma Sıcaklığı	: -15 / +125 °C
Koruma Sınıfı	: IP20
Çalışma Gerilimi (Ue)	: 250V AC
Çalışma Akımı (Ie)	: 10 (4) A
Yalıtım Gerilimi (Ui)	: 660V
Darbe Dayanım Gerilimi (Uimp)	: 2,5 kV
Kısa Devre Kesme Kap. (Icn)	: 1 kA
Çalışma Frekansı (f)	: 50/60 Hz.
İzolasyon Direnci	: 10 MΩ min. (500V DC)
Kullanım Sınıfı	: AC15 - AC3
Dielektrik Mukavemeti	: 1.500V AC (1 dakika için)
Kirlenme Derecesi	: 3
Standart	: TS EN 60947-5-1

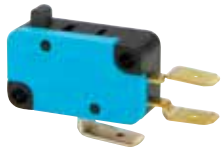
MK *Series Micro Switches*

- *Compact and precise operation*
- *Variety of products for all types of application*
- *Long lifetime*
- *High contact reliability*
- *Maximum product reliability with V0 material*

Technical Information

Mechanical Life	*: 10.00.000 operations min. (60 cyc/min)*
Electrical Life	*: 100.000 operations min. (30 cyc/min)*
Operating Temperature	*: -15 / +125 °C*
Protection Degree	*: IP20*
Operating Voltage (Ue)	*: 250V AC*
Operating Current (Ie)	*: 10 (4) A*
Insulation Voltage (Ui)	*: 660V*
Impact Resistance (Uimp)	*: 2,5 kV*
Short Circuit Breaking Capacity (Icn)	*: 1 kA*
Operating Frequency (f)	*: 50/60 Hz.*
Insulation Resistance	*: 10 MΩ min. (500V DC)*
Utilization Category	*: AC15 - AC3*
Dielectric Strength	*: 1.500V AC (for 1 minute)*
Pollution Degree	*: 3*
Standard	*: TS EN 60947-5-1*

MK Serisi Mikro Siviçler / *MK Series Micro Switches*

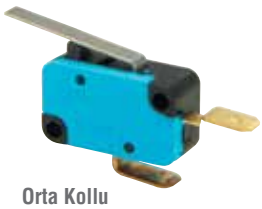


Pimli
Plunger

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MK1PUP1	1 Değişebilen Kontak *1 Changeover Contact*	NO 4, NC 2, 1 COM	Pim *Plunger*	Plastik *Plastic*
MK1PUP10G	1 Stop NK *1 Stop NC*	NC 2, 1 COM	Pim *Plunger*	Plastik *Plastic*

Kısa Kollu
Short Hinge Lever

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MK1KIM1	1 Değişebilen Kontak *1 Changeover Contact*	NO 4, NC 2, 1 COM	Kol *Hinge Lever*	Metal *Metal*



Orta Kollu
Middle Hinge Lever

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MK1KIM2	1 Değişebilen Kontak *1 Changeover Contact*	NO 4, NC 2, 1 COM	Kol *Hinge Lever*	Metal *Metal*
MK1KIM20	1 Stop NK *1 Stop NC*	NC 2, 1 COM	Kol *Hinge Lever*	Metal *Metal*
MK1KIM21	1 Start NA *1 Start NO*	NO 4, 1 COM	Kol *Hinge Lever*	Metal *Metal*

Uzun Kollu
Long Hinge Lever

Uzun Kollu Ağırlıklı
Long Hinge Lever With Metal Weight

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MK1KIM3 MK1KIM3A	1 Değişebilen Kontak *1 Changeover Contact*	NO 4, NC 2, 1 COM	Kol *Hinge Lever*	Metal *Metal*
MK1KIM30 MK1KIM30A	1 Stop NK *1 Stop NC*	NC 2, 1 COM	Kol *Hinge Lever*	Metal *Metal*
MK1KIM31 MK1KIM31A	1 Start NA *1 Start NO*	NO 4, 1 COM	Kol *Hinge Lever*	Metal *Metal*

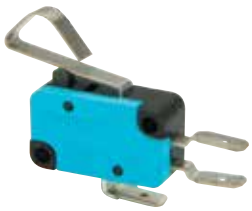
MK Serisi Mikro Siviçler / *MK Series Micro Switches*

Orta Kıvrık Kollu
Middle Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MK1KIM4	1 Değişebilen Kontak *1 Changeover Contact*	NO 4, NC 2, 1 COM	Kol *Hinge Lever*	Metal *Metal*

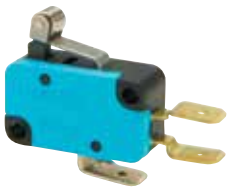
Uzun Kıvrık Kollu
Long Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MK1KIM5	1 Değişebilen Kontak *1 Changeover Contact*	NO 4, NC 2, 1 COM	Kol *Hinge Lever*	Metal *Metal*



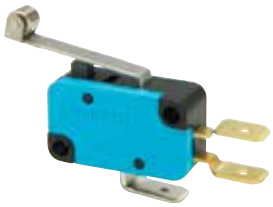
Uzun Ters Kıvrık Kollu
Reverse Long Hinge Lever

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MK1KIM6	1 Değişebilen Kontak *1 Changeover Contact*	NO 4, NC 2, 1 COM	Kol *Hinge Lever*	Metal *Metal*



Kısa Kollu Metal Makaralı
Short Hinge Roller Lever

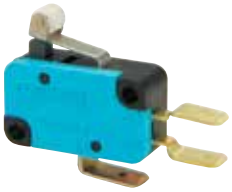
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MK1MIM1	1 Değişebilen Kontak *1 Changeover Contact*	NO 4, NC 2, 1 COM	Kollu Makarna *Hinge Roller Lever*	Metal *Metal*



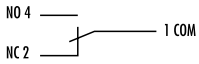
Uzun Kollu Metal Makaralı
Hinge Roller Lever

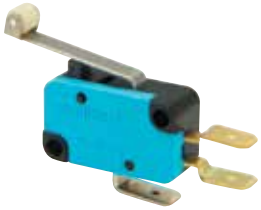
Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
MK1MIM2	1 Değişebilen Kontak *1 Changeover Contact*	NO 4, NC 2, 1 COM	Kollu Makarna *Hinge Roller Lever*	Metal *Metal*

MK Serisi Mikro Siviçler / *MK Series Micro Switches*

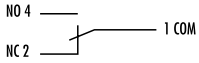


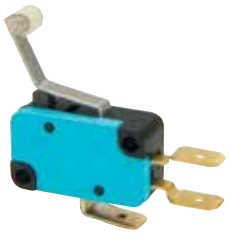
Kısa Kollu Plastik Makaralı
Short Hinge Roller Lever

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MK1MIP1	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Hinge Roller Lever*	Plastik *Plastic*

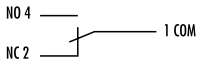


Uzun Kollu Plastik Makaralı
Hinge Roller Lever

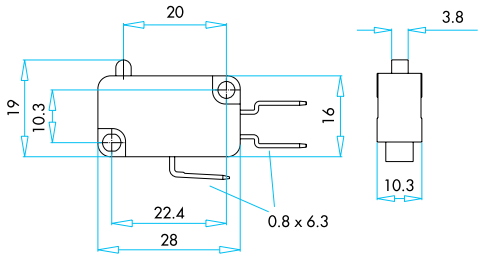
Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MK1MIP2	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Hinge Roller Lever*	Plastik *Plastic*



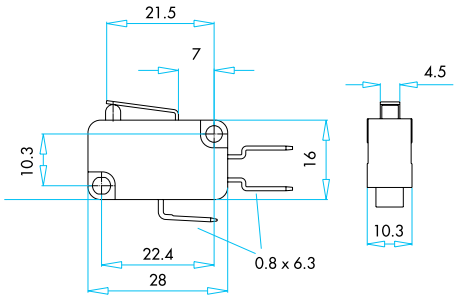
Uzun Kollu Kıvrık Plastik Makaralı
Reverse Hinge Roller Lever

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Kontak Şeması *Contact Scheme*	Duyar Blok Tipi *End Unit Type*	Duyar Blok Malzemesi *End Unit Material*
MK1MIP3	1 Değişebilen Kontak *1 Changeover Contact*		Kollu Makara *Hinge Roller Lever*	Plastik *Plastic*

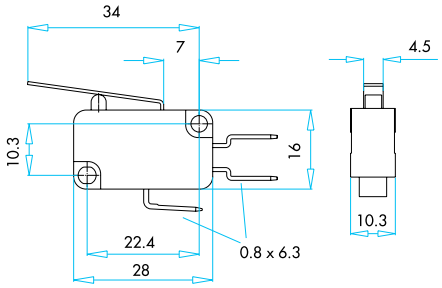
BOYUTLAR (mm) / *DIMENSIONS (mm)*



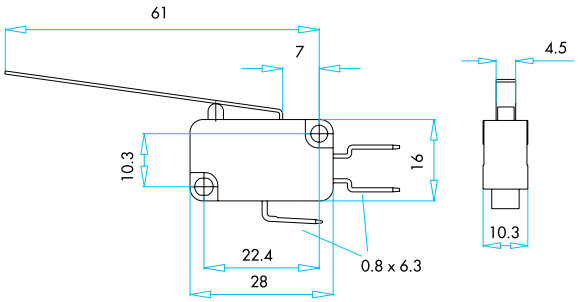
MK1PUP1



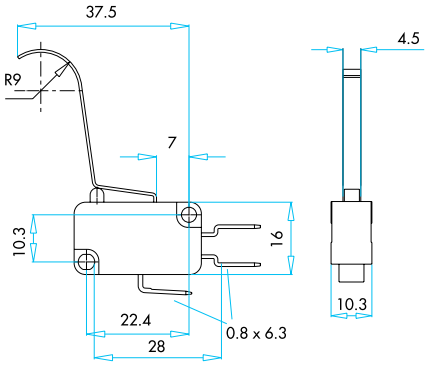
MK1KIM1



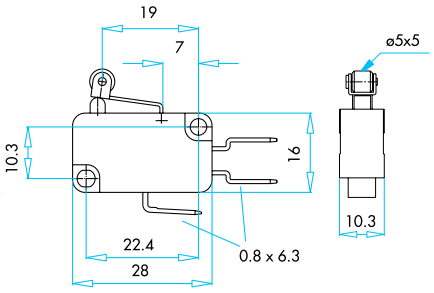
MK1KIM2



MK1KIM3

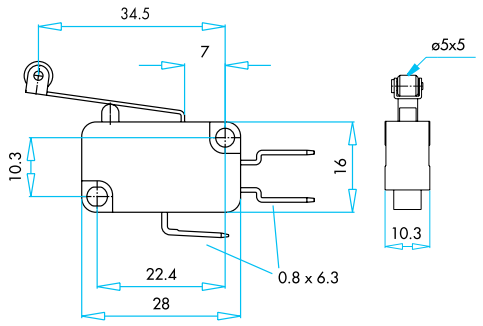


MK1KIM5

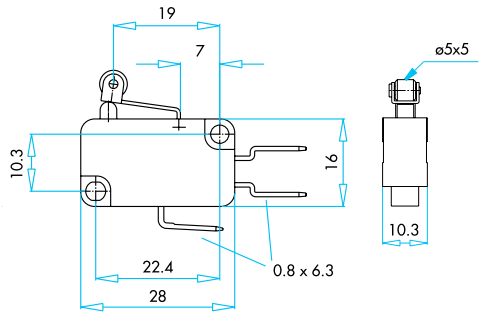


MK1MIM1

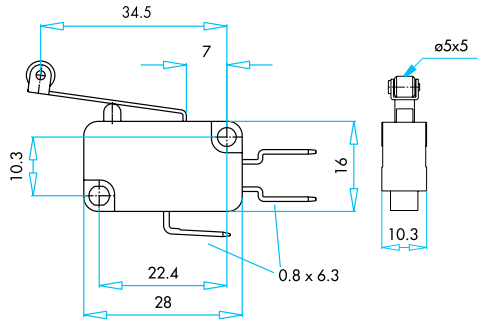
BOYUTLAR (mm) / *DIMENSIONS (mm)*



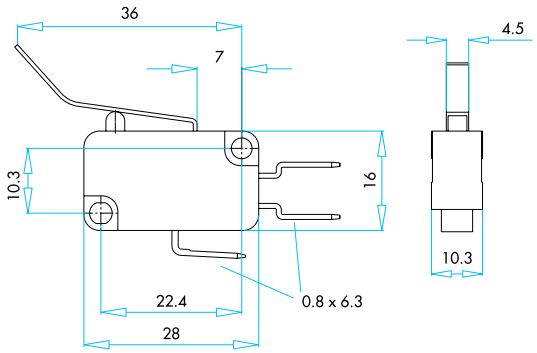
MK1MIM2



MK1MIP1



MK1MIP2



MK1KIM4

BS *Serisi Buton Siviçler*

- Çalışma güvenilirliğini arttıran V0 özellikli madde
- Ani veya yavaş hareketli kontak yapısı
- Uzun ömür
- Yüksek kontak güvenilirliği

Teknik Bilgiler

Mekanik Ömür	: 1.000.000 açma-kapama min. (60 dev/dk)
Elektriksel Ömür	: 100.000 açma-kapama min. (15dev/dk)
Çalışma Sıcaklığı	: -15/+85 °C
Koruma Sınıfı	: IP40
Çalışma Gerilimi (Ue)	: 250V AC
Çalışma Akımı (Ie)	: 16 (4) A
Yalıtım Gerilimi (Ui)	: 690V
Darbe Dayanım Gerilimi (Uimp)	: 2,5 kV
Kısa Devre Kesme Kap. (Icn)	: 1 kA
Çalışma Frekansı (f)	: 50 Hz.
İzolasyon Direnci	: 10 MΩ min. (500V DC)
Kullanım Sınıfı	: AC15 - AC3
Dielektrik Mukavemeti	: 1.500V AC (1 dakika için)
Kirlenme Derecesi	: 3
Standart	: TS EN 60947-5-1 - VDE 0630

BS *Series Button Switches*

- *Maximum product reliability with V0 material*
- *Snap or slow action*
- *Long life time*
- *High contact reliability*

Technical Information

Mechanical Life	*: 1.000.000 operations min. (60 cyc/min)*
Electrical Life	*: 100.000 operations min. (15 cyc/min)*
Operating Temperature	*: -15/+85 °C*
Protection Degree	*: IP40*
Operating Voltage (Ue)	*: 250V AC*
Operating Current (Ie)	*: 16 (4) A*
Insulation Voltage (Ui)	*: 690V*
Impact Resistance (Uimp)	*: 2,5 kV*
Short Circuit Breaking Capacity (Icn)	*: 1 kA*
Operating Frequency (f)	*: 50 Hz.*
Insulation Resistance	*: 10 MΩ min. (500V DC)*
Utilization Category	*: AC15 - AC3*
Dielectric Strength	*: 1.500V AC (for 1 minute)*
Pollution Degree	*: 3*
Standard	*: TS EN 60947-5-1 - VDE 0630*

BS Serisi Buton Siviçler / BS Series Button Switches

BS1010
Buton Siviç, 1 NA
Button Switch, 1 NO

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
BS1010	1 Normal Açık Ani Hareketli *1 Normally Open Snap Action*	3 4	Pim *Plunger*	Plastik *Plastic*
BS1020	1 Normal Açık Yavaş Hareketli *1 Normally Open Slow Action*	3 4	Pim *Plunger*	Plastik *Plastic*
BS1010 E	1 Normal Açık Ani Hareketli *1 Normally Open Snap Action*	3 4	Pim *Plunger*	Plastik Etanj Başlıklı *Plastic With Waterproof Cover*

BS1011
Buton Siviç, 1NK
Button Switch, 1 NC

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
BS1011	1 Normal Kapalı Ani Hareketli *1 Normally Closed Snap Action*	1 2	Pim *Plunger*	Plastik *Plastic*
BS1021	1 Normal Kapalı Yavaş Hareketli *1 Normally Closed Slow Action*	1 2	Pim *Plunger*	Plastik *Plastic*
BS1011 E	1 Normal Kapalı Ani Hareketli *1 Normally Closed Snap Action*	1 2	Pim *Plunger*	Plastik Etanj Başlıklı *Plastic With Waterproof Cover*

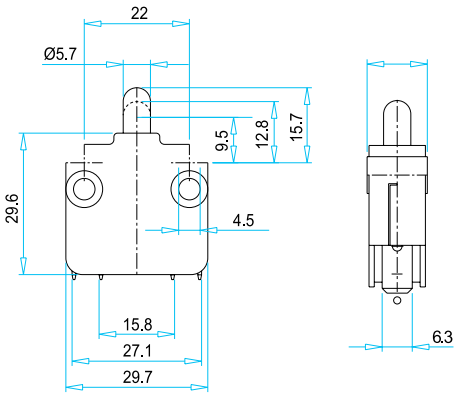
BS1012
Buton Siviç, 1NA+1NK
Button Switch, 1 NO+1 NC

Ürün Kodu	Kontak Yapısı	Kontak Şeması	Duyar Blok Tipi	Duyar Blok Malzemesi
Code	*Contact Type*	*Contact Scheme*	*End Unit Type*	*End Unit Material*
BS1012	Çift Devre Ani Hareketli *Double Circuit Snap Action*	3 1 2 4	Pim *Plunger*	Plastik *Plastic*
BS1022	Çift Devre Yavaş Hareketli *Double Circuit Slow Action*	3 1 2 4	Pim *Plunger*	Plastik *Plastic*
BS1012 E	Çift Devre Ani Hareketli *Double Circuit Snap Action*	3 1 2 4	Pim *Plunger*	Plastik Etanj Başlıklı *Plastic With Waterproof Cover*

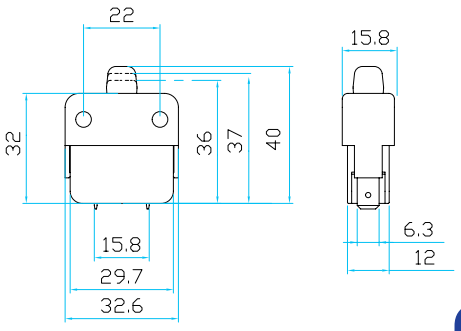
BS1012 E
Buton Siviç, 1NA+1NK
Button Switch, 1 NO+1 NC

BS1010-E
Buton Siviç, 1NA
Button Switch, 1 NO

BOYUTLAR (mm) / *DIMENSIONS (mm)*



BS1010



BS1012E

MA *Serisi Mandallı Siviçler*

- Ürün güvenilirliğini arttıran V0 özellikli malzeme
- Uzun ömür
- Yüksek kontak güvenilirliği
- Kontak yapısına uygun etiketler
- Farklı kullanımlar için geniş ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	: 100.000 açma-kapama min. (60 dev/dk)
Elektriksel Ömür	: 10.000 açma-kapama min. (15dev/dk)
Çalışma Sıcaklığı	: T85
Koruma Sınıfı	: IP20
Çalışma Gerilimi (Ue)	: 250V AC
Çalışma Akımı (Ie)	: 16A
Yalıtım Gerilimi (Ui)	: 300V
Darbe Dayanım Gerilimi (Uimp)	: 2,5 kV
Kısa Devre Kesme Kap. (Icn)	: 1 kA
Çalışma Frekansı (f)	: 50 Hz.
İzolasyon Direnci	: 10 MΩ min. (500V DC)
Kullanım Sınıfı	: AC15
Dielektrik Mukavemeti	: 1.500V AC (1 dakika için)
Kirlenme Derecesi	: 3
Bağlantı Kablo Kesiti	: 1.5-2.5 mm²
Standart	: TS EN 61058-1

MA *Series Toggle Switches*

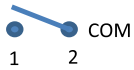
- *Maximum product reliability with V0 material*
- *Long life time*
- *High contact reliability*
- *Proper labels for different contacts*
- *Variety of products for all types of application*

Technical Information

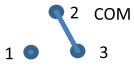
Mechanical Life	*: 100.000 operations min. (60 cyc/min)*
Electrical Life	*: 10.000 operations min. (15 cyc/min)*
Operating Temperature	*: T85*
Protection Degree	*: IP20*
Operating Voltage (Ue)	*: 250V AC*
Operating Current (Ie)	*: 16A*
Insulation Voltage (Ui)	*: 300V*
Impact Resistance (Uimp)	*: 2,5 kV*
Short Circuit Breaking Capacity (Icn)	*: 1 kA*
Operating Frequency (f)	*: 50 Hz.*
Insulation Resistance	*: 10 MΩ min. (500V DC)*
Utilization Category	*: AC15*
Dielectric Strength	*: 1.500V AC (for 1 minute)*
Pollution Degree	*: 3*
Cable Section	*: 1.5-2.5 mm²*
Standard	*: TS EN 61058-1*

MA Serisi Mandallı Siviçler / *MA Series Toggle Switches*

Mandallı Anahtar, On-Off
Handle Switch, On-Off

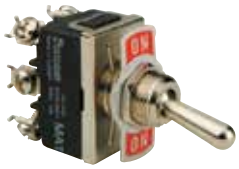
Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Kontak Şeması *Contact Scheme*	Terminal Sayısı ve Tipi *Terminal Quantity and Type*	Etiket *Label*
MA111*	1 NA 1 NK *1 NO* *1 NC*		2 Vidalı *2 Screws*	ON-OFF

Mandallı Anahtar, On-On
Handle Switch, On-On

Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Kontak Şeması *Contact Scheme*	Terminal Sayısı ve Tipi *Terminal Quantity and Type*	Etiket *Label*
MA112*	2 NA *2 NO*		3 Vidalı *3 Screws*	ON-OFF
MA113*	2 NA 1 NK *2 NO* *1 NC*		3 Vidalı *3 Screws*	ON-OFF-ON

Çift Devreli Mandallı Anahtar, On-Off
Double Circuit Handle Switch, On-Off

Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Kontak Şeması *Contact Scheme*	Terminal Sayısı ve Tipi *Terminal Quantity and Type*	Etiket *Label*
MA121*	4 NA 2 NK *4 NO* *2 NC*		4 Vidalı *4 Screws*	ON-OFF



Çift Devreli Mandallı Anahtar, On-On
Double Circuit Handle Switch, On-On

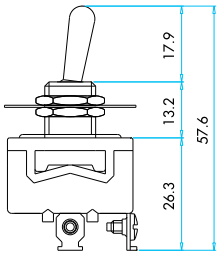
Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Kontak Şeması *Contact Scheme*	Terminal Sayısı ve Tipi *Terminal Quantity and Type*	Etiket *Label*
MA122*	4 NA *4 NO*		6 Vidalı *6 Screws*	ON-OFF
MA123*	2 NA 2 NK *4 NO* *2 NC*		6 Vidalı *6 Screws*	ON-OFF-ON
MA212	4 NA 4 NO		3 Terminalli *3 Terminals*	ON-ON
MA222	4 NA *4 NO*		6 Terminalli *6 Terminals*	ON-ON

*** ' L' Olursa Lehimli Terminalli olur** / *' L ' means soldered terminals*
*** ' T ' Olursa 6,35 mm Terminalli olur** / *' T ' means 6,35 mm terminals*
*** ' K ' Olursa Kapaklı olur /** *' K ' means protective cover*

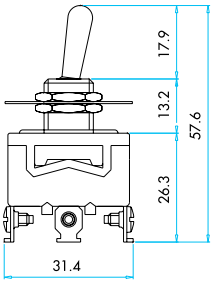
MA111K

Ürün Kodu *Code*	Malzeme *Material*
MAK	Metal - Plastik *Metal - Plastic*

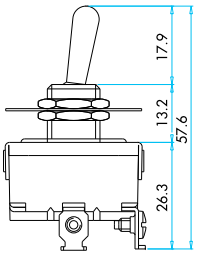
BOYUTLAR (mm) / *DIMENSIONS (mm)*



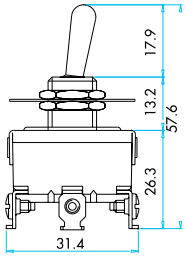
MA111



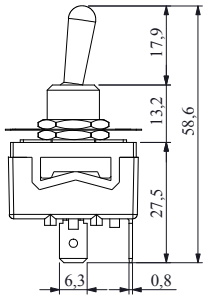
MA112 - MA113



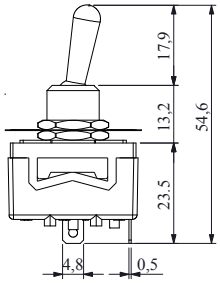
MA121



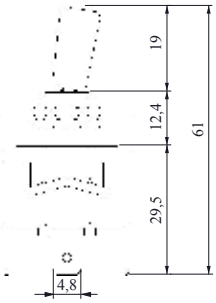
MA122 - MA123



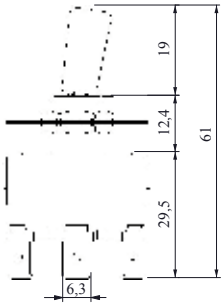
MA111T



MA111L



MA212



MA222

A Serisi Işıklı Siviçler

- Işıklı veya Işıksız seçenek
- Dört farklı renk
- Siyah veya beyaz gövde seçeneği
- Ani hareketli

Teknik Bilgiler

Mekanik Ömür	: 50.000 / (1800 aç.kapa/saat)
Elektriksel Ömür	: 50.000 / (900 aç.kapa/saat)
Çalışma Sıcaklığı	: T85
Koruma Sınıfı	: IP20
Çalışma Gerilimi (Ue)	: 250V AC
Çalışma Akımı (Ie)	: 16 (4) A
Yalıtım Gerilimi (Ui)	: 300 V
Darbe Dayanım Gerilimi (Uimp)	: 2.5 kV
Kısa Devre Kesme Kap. (Icn)	: 1 kA
Çalışma Frekansı (f)	: 50 Hz.
İzolasyon Direnci	: 10 MΩ min. (500V DC)
Kullanım Sınıfı	: AC15 - AC3
Dielektrik Mukavemeti	: 1.500V AC (1 dakika için)
Kirlenme Derecesi	: 3
Standart	: TS EN 61058-1 / IEC 61058-1

A *Series Illuminated Rocker Switches*

- With or without illumination types
- 4 different colours available
- Black or white housing types
- *Snap action*

Technical Information

Mechanical Life	*: 50.000 operations min. (1.800 cyc/hour)*
Electrical Life	*: 50.000 operations min. (900 cyc/hour)*
Operating Temperature	*: T85*
Protection Degree	*: IP20*
Operating Voltage (Ue)	*: 250V AC*
Operating Current (Ie)	*: 16 (4) A*
Insulation Voltage (Ui)	*: 300V*
Impact Resistance (Uimp)	*: 2,5 kV*
Short Circuit Breaking Capacity (Icn)	*: 1 kA*
Operating Frequency (f)	*: 50 Hz.*
Insulation Resistance	*: 10 MΩ min. (500V DC)*
Utilization Category	*: AC15 - AC3*
Dielectric Strength	*: 1.500V AC (1 dakika için)*
Pollution Degree	*: 3*
Standard	*: TS EN 61058-1 / IEC 61058-1*

Asal Siviçler
Basic Switches

Işıklı Kare Anahtar
Square Button Illuminated

Etanj Kılıf
Waterproof Cover

Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Göde Rengi *Housing Colour*	Özellik *Features*	Etiket *Label*
A11*	1NA *1NO*	Siyah *Black*	Işıklı *Illuminated*	0-I
A11H	1NA *1NO*	Siyah *Black*	-	0-I
A12*	1NA+1NA *1NO+1NO*	Siyah *Black*	Işıklı *Illuminated*	0-I
A12H	1NA+1NA *1NO+1NO*	Siyah *Black*	-	0-I
A14*	2NA *2NO*	Siyah *Black*	Işıklı *Illuminated*	0-I
A14H	2NA *2NO*	Siyah *Black*	-	0-I
A21*	1NA *1NO*	Beyaz *White*	Işıklı *Illuminated*	0-I
A21H	1NA *1NO*	Beyaz *White*	-	0-I
A22*	1NA+1NA *1NO+1NO*	Beyaz *White*	Işıklı *Illuminated*	0-I
A22H	1NA+1NA *1NO+1NO*	Beyaz *White*	-	0-I
A24*	2NA *2NO*	Beyaz *White*	Işıklı *Illuminated*	0-I
A24H	2NA *2NO*	Beyaz *White*	-	0-I

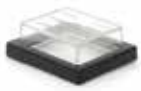
* (*) yerine istenen rengin harfi eklenir.

**Please choose the colour and replace (*) with the letter.*

A11

A22

A14K

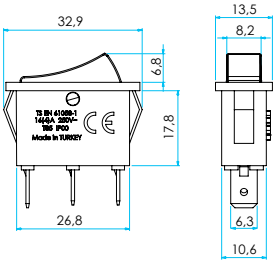


EK2

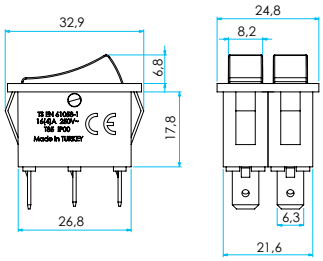
*** Renk Kodu; Kırmızı: K1, Sarı: S, Yeşil: Y, Siyah: H (Işıksız)**
** Colour Code; Red: K1, Yellow: S, Green: Y, Black: H (Without Light)*

Ürün Kodu *Code*	Malzeme *Material*
EK2	Silikon - Plastik *Silicon - Plastic*

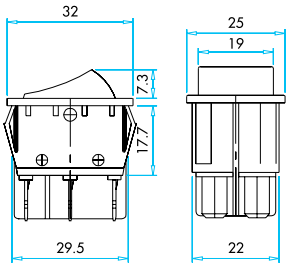
BOYUTLAR (mm) / *DIMENSIONS (mm)*



A11



A12



A14

K Serisi Orta Gerilim Hücre Sivici

- Ürün güvenilirliğini arttıran bakalit gövde
- Uzun ömür
- Yüksek kontak güvenilirliği
- Farklı kullanımlar için geniş kontak çeşitliliği

Teknik Bilgiler

Mekanik Ömür	: 1.000.000 açma-kapama min. (50 dev/dk)
Elektriksel Ömür	: 100.000 açma-kapama min. (30dev/dk)
Çalışma Sıcaklığı	: -25/+40 °C
Koruma Sınıfı	: IP20
Çalışma Gerilimi (Ue)	: 250V AC
Çalışma Akımı (Ie)	: 2A
Yalıtım Gerilimi (Ui)	: 300V
Darbe Dayanım Gerilimi (Uimp)	: 2,5 kV
Kısa Devre Kesme Kap. (Icn)	: 1 kA
Çalışma Frekansı (f)	: 50 Hz.
İzolasyon Direnci	: 10 MΩ min. (500V DC)
Kullanım Sınıfı	: AC15
Dielektrik Mukavemeti	: 1500V AC (1 dakika için)
Kirlenme Derecesi	: 3
Bağlantı Kablo Kesiti	: 1.5-2.5 mm²
Standart	: TS EN 60947-5-1

K *Series Medium Voltage Cell Switches*

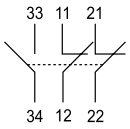
- *Maximum product reliability with bacalite material*
- *Long life time*
- *High contact reliability*
- *Variety of products for all types of application*

Technical Information

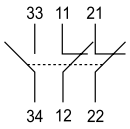
Mechanical Life	*: 1.000.000 operations min. (50 cyc/min)*
Electrical Life	*: 10.000 operations min. (30 cyc/min)*
Operating Temperature	*: -25/+40 °C*
Protection Degree	*: IP20*
Operating Voltage (Ue)	*: 250V AC*
Operating Current (Ie)	*: 2A*
Insulation Voltage (Ui)	*: 300V*
Impact Resistance (Uimp)	*: 2,5 kV*
Short Circuit Breaking Capacity (Icn)	*: 1 kA*
Operating Frequency (f)	*: 50 Hz.*
Insulation Resistance	*: 10 MΩ min. (500V DC)*
Utilization Category	*: AC15*
Dielectric Strength	*: 1500V AC (for 1 minute)*
Pollution Degree	*: 3*
Cable Section	*: 1.5-2.5 mm²*
Standard	*: TS EN 60947-5-1*

K Serisi Orta Gerilim Hücre Sivici / K Series Medium Voltage Cell Switches

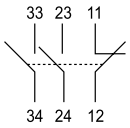
K25001T
Terminalli, 2NK+1NA
Orta Gerilim Hücre Sivici
Medium Voltage Cell Switch
With Terminal 2NC+1NO

Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Kontak Şeması *Contact Scheme*	Terminal Sayısı ve Tipi *Terminal Quantity and Type*
K25001T	2 NK 1 NA *2 NC* *1 NO*		6 Terminalli *6 With Terminal*

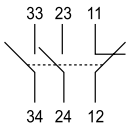
K25001V
Vidalı, 2NK+1NA
Orta Gerilim Hücre Sivici
Medium Voltage Cell Switch
Screwed 2NC+1NO

Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Kontak Şeması *Contact Scheme*	Terminal Sayısı ve Tipi *Terminal Quantity and Type*
K25001V	2 NK 1 NA *2 NC* *1 NO*		6 Vidalı *6 Screws*

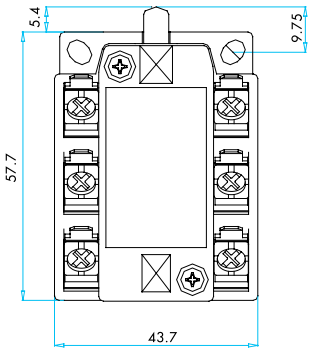
K25011T
Terminalli, 1NK+2NA
Orta Gerilim Hücre Sivici
Medium Voltage Cell Switch
With Terminal 1NC+2NO

Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Kontak Şeması *Contact Scheme*	Terminal Sayısı ve Tipi *Terminal Quantity and Type*
K25011T	1 NK 2 NA *1 NC* *2 NO*		6 Terminalli *6 With Terminal*

K25011V
Vidalı, 1NK+2NA
Orta Gerilim Hücre Sivici
Medium Voltage Cell Switch
Screwed 1NC+2NO

Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Kontak Şeması *Contact Scheme*	Terminal Sayısı ve Tipi *Terminal Quantity and Type*
K25011V	1 NK 2 NA *1 NC* *2 NO*		6 Vidalı *6 Screws*

BOYUTLAR (mm) / *DIMENSIONS (mm)*



Asal Siviçler
Basic Switches

MN1KİM1

MN1KİM2

MN1KİM3

MN1MİM1

MN1MİM1Y

MN1MİM2

MN1MUM3

MN1MUM8

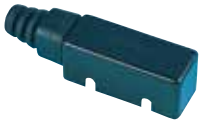
MN1PUM1

MN1PUM3

MN1PUM7

MN1PUM9

MN1PUM9U


MN1YKAP

MN2KİM1

MN2KİM2

MN2KİM3

MN2MİM1

MN2MİM1Y

MN2MİM2

MN2MUM3

MN2MUM8

MN2PUM1

MN2PUM3

MN2PUM7

MN2PUM9

MN2TİP11
MN2TİP12

Asal Siviçler
Basic Switches

MN3KİM1

MN3KİM2

MN3MİM1

MN3MİM2

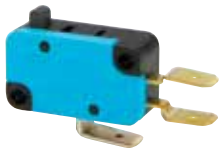
MN3MUM3

MN3PUM1

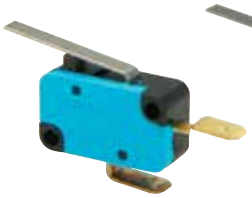
MN3PUM3

MN3PUM7

MN3PUM9


MK1PUP1

MK1KİM1

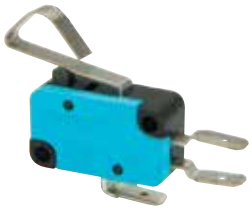

MK1KİM21

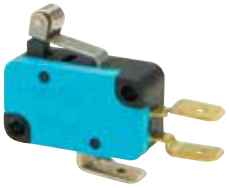
MK1KİM3

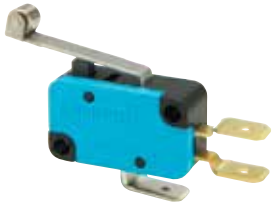
MK1KİM31A

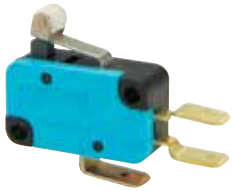
MK1KİM4

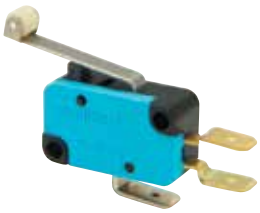
MK1KİM5


MK1KİM62G


MK1MİM1


MK1MİM2


MK1MİP1


MK1MİP2

MK1MİP3

BS1010

BS1011

BS1012

BS1012 E

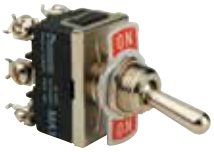
BS1010 E

MA111K

MA111

MA112

MA121


MA122

A14

EK2

K25001T

K25001V

K25011T

K25011V

Kumanda Butonları ve Sinyal Lambaları

Control Units and Pilot Lights

A

Kumanda Butonları ve Sinyal Lambaları
Control Units and Pilot Lights

B Serisi Ø 22mm Kumanda Butonları (IP50)

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Kontak Blok Tipleri	14
Yedekler	15
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D Serisi Ø 16mm Kumanda Butonları (IP50)

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Kumanda Butonları ve Sinyal Lambaları
Control Units and Pilot Lights

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MB Monoblock Series Ø 22mm Control Units (IP50)

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KB Serisi Ø 22mm Kumanda Butonları (IP50)

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KB Series Ø 22mm Control Units (IP50)

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Pilot Lights

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B Serisi Ø 22mm Kumanda Butonları

- Maksimum güvenlik için parmak koruma
- Darbe dayanıklı polikarbonat buton lensi
- Alev almayan V0 PA6.6 kontak bloklar
- İstenildiğinde çeşitli ışıklı kontak blokların uygunluğu
- Adaptöre kontak blokların takılmasında alete ihtiyaç olmaması
- Led ışıkla, minimum ısınma maksimum ömür
- Arka arkaya 2 kontak blok takılabilir
- Farklı dillerde ve özel işaretli çeşitli markalama etiketleri
- Tüm uygulamalara cevap verecek ürün çeşitliliği.

Teknik Bilgiler

Mekanik Ömür	:	500.000 açma-kapama min.
Elektriksel Ömür	:	100.000 açma-kapama min.
Çalışma Sıcaklığı	:	min./maks. °C -5/+40
Koruma Sınıfı	:	IP50
Çalışma Sıklığı	:	Yüksüz 3.000 açma-kapama/saat
	:	Yükte 1.200 açma-kapama/saat
Çalışma Gerilimi (Ue)	:	250 V AC
Çalışma Akımı (Ie)	:	4 A
Yalıtım Gerilimi (Ui)	:	300 V
Darbe Dayanım Gerilimi (Uimp)	:	2.5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
İzolasyon Direnci	:	10 MΩ min. (500 V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500 V AC (1 dakika için)
Standart Kontak Malzemesi	:	AgNi
Bağlantı Kablo Kesiti	:	1.5 - 2.5 mm²
Standart	:	UL 508 TS EN 60947-5-1 VDE0660
	:	IEC 60393-1 (BPR Potansiyometre için)

B Series Ø 22mm Control Units

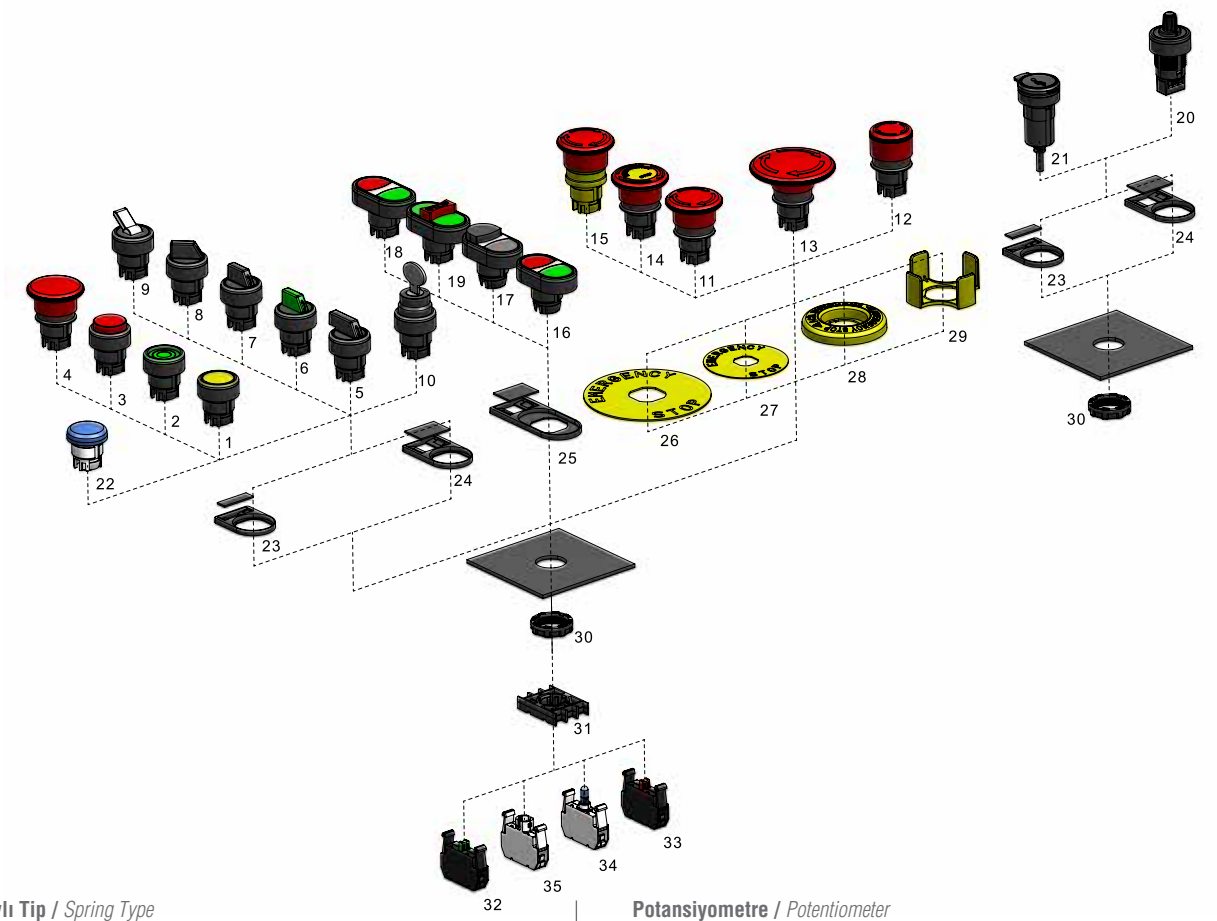
- *Finger safe protection for maximum safety*
- *Impact-resistant polycarbonate button lens*
- *Non-flammable V0 PA6.6 contact blocks*
- *Various illumination contact blocks availablity on request*
- *Tools not required to attach contact blocks to adapter*
- *With LED illumination, minimum warm-up and maximum lifetime.*
- *Contact blocks can be stacked by two blocks deep.*
- *Various legend plates with different languages and custom markings*
- *Variety of products for all areas of application*

Technical Information

Mechanical Life	:	*500.000 operations min.*
Electrical Life	:	*100.000 operations min.*
Operating Temperature	:	*min./max. °C -5/+40*
Protection Degree	:	*IP50*
Operating Frequency	:	*Without load 3.000 operations/hour*
	:	*At full load 1.200 operations/hour*
Operating Voltage (Ue)	:	*250 V AC*
Operating Current (Ie)	:	*4 A*
Insulation Voltage (Ui)	:	*300 V*
Impact Resistance (Uimp)	:	*2.5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500 V AC (1 for minute)*
Standard Contact Material	:	*AgNi*
Cable Section	:	*1.5 - 2.5 mm²*
Standard	:	*UL 508 TS EN 60947-5-1 VDE0660*
	:	*IEC 60393-1 (For BPR Potentiometer)*

B Serisi Ø 22mm Kumanda Butonları Genel Şema

B Series Ø 22mm Control Units General Scheme



Yaylı Tip / *Spring Type*

1	D	Düz / *Flush*
2	F	Kalıcı / *Stay Put*
3	H	Çıkık / *Extended*
4	M	Mantar, Ø 40 mm / *Mushroom, Ø 40 mm*

Seçici Tip / *Selector Type*

5	S	60° / 60°
6	SL	Işıklı, 60° / *Illuminated, 60°*
7	R	45° / 45°
8	T	90° / 90°
9	C	Mandallı / *Handle*

10 Anahtarlı Tip / *Key Operated Type*

Acil Stop / *Emergency Stop*

11	E	Ø 40mm, Çevirmeli / *Ø 40mm, Turn to Release*
12	E30	Ø 30mm, Çevirmeli / *Ø 30mm, Turn to Release*
13	E60	Ø 60mm, Çevirmeli / *Ø 60mm, Turn to Release*
14	EE	Ø 40mm, Etiketli, Çevirmeli / *Ø 40mm, With Label, Turn to Release*
15	EG	Ø 40mm, Pozisyon, Göstergeli / *Ø 40mm, With Position Cursor*

Çiftli / *Double*

16	K20	Düz Kafalı / *Flush*
17	K21	1 Çıkık Kafalı / *Single Extended*
18	B20	Büyük Düz Kafalı / *Big Flush*
19	B30	Üçüz Buton, 1 Çıkık Kafalı, Stop / *Triple, Single Extended, Stop*

Potansiyometre / *Potentiometer*

20	BPR	
21	USB	

Sinyal / *Pilots*

22	X	Yuvarlak, Sinyal / *Round, Pilots*

Aksesuarlar / *Accessories*

23	BROZET08	Rozet, 8mm / *Legend Plate Holder, 8mm*
24	BROZET18	Rozet, 18mm / *Legend Plate Holder, 18mm*
25	BCIFTLIROZET18	Rozet, İkiz Buton, 18mm / *Legend Plate Holder, Double, 18mm*
26	BET90A/P	Etiket, Ø90mm Acil Stop, Alüminyum Plastik *Legend Plate, Ø90mm Emergency Stop, Aluminium / Plastic*
27	BET60A/P	Etiket, Ø60mm Acil Stop, Alüminyum/Plastik *Legend Plate, Ø60mm Emergency Stop, Aluminium/Plastic*
28	BET60LED	Etiket, Ø60mm Acil Stop, LED *LED Illuminated Legend Plate, Ø60mm Emergency Stop*
29	BMUHAFAZA	Emniyet Koruma / *Emergency Protective Cover*
30	SOMUN	Plastic Somun, M22 X 1,5 / *Plastic Nut , M22 X 1,5*
31	ADAPTÖR	Adaptör / *Adapter*
32	START KONTAKBLOK	Kontak Blok, Start (NA) / *Contact Block, Start (NO)*
33	STOP KONTAKBLOK	Kontak Blok, Stop (NK) / *Contact Block, Stop (NC)*
34	LED KONTAK BLOK	Kontak Blok, LED / *Contact Block, LED*
35	AMPULLU LED	Ba9S Duylu Işık Kontak Blok / *Lampholder for Ba9S Bulbs*

B Serisi Kumanda Butonlar Seçim Tablosu
Series Control Units Selection Table

Seri	Kontak Blok Kombinasyonu			Buton Tipi
B	1	K	2	D
Series	*Contact Block Combination*			*Button Type*

Seri
Series

B	Serisi Ø 22mm Kumanda Butonu	*Series Ø 22mm Control Units*

Kontak Blok Tipi
Contact Block Type

0	Boş *Empty*	
1	Start *Start*	Butonluk *For Button*
2	Stop *Stop*	Butonluk *For Button*

Işık Bloğu Tipi
Illumination Block Type

0	Boş *Without Illumination*	
3	Işık Blok *Illumination Block*	Ba9S Ampullere Uygun Duylu *Suitable for Ba9S Bulbs*
5	12 - 30V AC/DC *12 - 30V AC/DC*	Beyaz LED'li *With White LED*
6	12 - 30V AC/DC *12 - 30V AC/DC*	Kırmızı LED'li *With Red LED*
7	12 - 30V AC/DC *12 - 30V AC/DC*	Mavi LED'li *With Blue LED*
8	12 - 30V AC/DC *12 - 30V AC/DC*	Sarı LED'li *With Yellow LED*
9	12 - 30V AC/DC *12 - 30V AC/DC*	Yeşil LED'li *With Green LED*
B	100 - 230V AC *100 - 230V AC*	Beyaz LED'li *With White LED*
K	100 - 230V AC *100 - 230V AC*	Kırmızı LED'li *With Red LED*
M	100 - 230V AC *100 - 230V AC*	Mavi LED'li *With Blue LED*
S	100 - 230V AC *100 - 230V AC*	Sarı LED'li *With Yellow LED*
Y	100 - 230V AC *100 - 230V AC*	Yeşil LED'li *With Green LED*
Q	Özel Gerilim *Special Voltage*	Beyaz LED'li *With White LED*
X	Özel Gerilim *Special Voltage*	Kırmızı LED'li *With Red LED*
V	Özel Gerilim *Special Voltage*	Mavi LED'li *With Blue LED*
W	Özel Gerilim *Special Voltage*	Sarı LED'li *With Yellow LED*
Z	Özel Gerilim *Special Voltage*	Yeşil LED'li *With Green LED*

Kontak Blok Tipi
Contact Block Type

0	Boş *Empty*	
1	Start *Start*	Butonluk *For Button*
2	Stop *Stop*	Butonluk *For Button*

Buton Tipi
Buton Type

Yaylı Tip
Spring Type

D	Düz *Flush*	
F	Kalıcı *Stay Put*	
H	Çıkık *Extended*	
M	Mantar *Mushroom*	Ø 40 mm *Ø 40 mm*

Seçici Tip
Selector Type

S20	2 Pozisyonlu *2 Position*		Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*	
S21	2 Pozisyonlu *2 Position*		Dönüşlü *Spring Return*	(0-I) *(0-I)*	60° *60°*	
S30	3 Pozisyonlu *3 Position*		Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*	
S31	3 Pozisyonlu *3 Position*		Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
S32	3 Pozisyonlu *3 Position*		Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
SL20	2 Pozisyonlu *2 Position*	Işıklı *Illuminated*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*	
SL21	2 Pozisyonlu *2 Position*	Işıklı *Illuminated*	Dönüşlü *Spring Return*	(0-I) *(0-I)*	60° *60°*	
SL30	3 Pozisyonlu *3 Position*	Işıklı *Illuminated*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*	
SL31	3 Pozisyonlu *3 Position*	Işıklı *Illuminated*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
SL32	3 Pozisyonlu *3 Position*	Işıklı *Illuminated*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
R20	2 Pozisyonlu *2 Position*		Kalıcı *Stay Put*	(0-I) *(0-I)*	45° *45°*	
R21	2 Pozisyonlu *2 Position*		Dönüşlü *Spring Return*	(0-I) *(0-I)*	45° *45°*	
T20	2 Pozisyonlu *2 Position*		Kalıcı *Stay Put*	(0-I) *(0-I)*	90° *90°*	
T21	2 Pozisyonlu *2 Position*		Dönüşlü *Spring Return*	(0-I) *(0-I)*	90° *90°*	
C	Mandallı *Handle*					

Renk	Yazı
K	1
Colour	*Pad Printing*

Anahtarlı Tip
Key Operated Type

AA20	2 Pozisyonlu *2 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*	
AA21	2 Pozisyonlu *2 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Dönüşlü *Spring Return*	(0-I) *(0-I)*	60° *60°*	
AA30	3 Pozisyonlu *3 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*	
AA31	3 Pozisyonlu *3 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
AA32	3 Pozisyonlu *3 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
AC20	2 Pozisyonlu *2 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all Positions*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*	
AC30	3 Pozisyonlu *3 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all Positions*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*	
AC31	3 Pozisyonlu *3 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all Positions*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
AC32	3 Pozisyonlu *3 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all Positions*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	

Acil Stop Tip
Emergency Stop Type

E	Ø 40mm *Ø 40mm*		Çevirmeli *Turn to Release*
E30	Ø 30mm *Ø 30mm*		Çevirmeli *Turn to Release*
E60	Ø 60mm *Ø 60mm*		Çevirmeli *Turn to Release*
EE	Ø 40mm *Ø 40mm*	Etiketli *With Label*	Çevirmeli *Turn to Release*
EG	Ø 40mm *Ø 40mm*	Pozisyon Göstergeli *With Position Cursor*	Çevirmeli *Turn to Release*

Çiftli Tip
DoubleType

K20	Düz Kafalı *Flush*		
K21	1 Çıkık Kafalı *Single Extended*		
B20	Büyük Düz Kafalı *Big Flush*		
B30	Üçüz Buton *Triple*	1 Çıkık Kafalı *Single Extended*	Stop *Stop*

Sinyal
Pilots

X	Sinyal *Pilot Lights*

B	Beyaz *White*	
K	Kırmızı *Red*	
M	Mavi *Blue*	
S	Sarı *Yellow*	
Y	Yeşil *Green*	
H	Siyah *Black*	
BB	Beyaz *White*	Beyaz *White*
HB	Siyah *Black*	Beyaz *White*
HH	Siyah *Black*	Siyah *Black*
KY	Kırmızı *Red*	Yeşil *Green*
SS	Sarı *Yellow*	Sarı *Yellow*
YY	Yeşil *Green*	Yeşil *Green*

0	0 *0*	Yazılı *Printed*
10	I-0 *I-0*	Yazılı *Printed*
1	I *I*	Yazılı *Printed*
2	II *II*	Yazılı *Printed*
12	I-II *I-II*	Yazılı *Printed*
L	LIGHT *LIGHT*	Yazılı *Printed*
OD	OK *Vertical Arrow*	Dikey Yazılı *Printed*
OY	OK *Horizontal Arrow*	Yatay Yazılı *Printed*
OK	OK *Special Arrow*	Özel Yazılı *Printed*
OO	OK *Special Arrow*	Özel Yazılı *Printed*
S	Siren İşareti *Siren Symbol*	*Printed*
Z	Zil İşareti *Bell Symbol*	*Printed*

Örnek: B1K2DK ⟶ Örnek olarak B serisi, start-stop, 100-230 V AC/DC kırmızı ledli, kırmızı renkli, düz buton seçilmiştir.

Example: *B1K2DK ⟶ B series, start-stop, 100-230 V AC/DC with red led, red coloured, Flush type button has been selected.*

B Serisi Ø 22 mm Adaptörlü Kumanda Butonu Tipleri
Series Ø 22 mm Push Buttons With Adapter

Yaylı Tip Kumanda Butonlar / Spring Type Control Units

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumination*	Buton Tipi *Button Type*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	Opsiyonel *Optional*		
B100D*	1	-	√	Düz / *Flush*	B K M S Y H
B101D*	2	-	√	Düz / *Flush*	B K M S Y H
B102D*	1	1	√	Düz / *Flush*	B K M S Y H
B200D*	-	1	√	Düz / *Flush*	B K M S Y H
B202D*	-	2	√	Düz / *Flush*	B K M S Y H
B100F*	1	-	√	Kalıcı / *Stay Put*	B K M S Y H
B101F*	2	-	√	Kalıcı / *Stay Put*	B K M S Y H
B102F*	1	1	√	Kalıcı / *Stay Put*	B K M S Y H
B200F*	-	1	√	Kalıcı / *Stay Put*	B K M S Y H
B202F*	-	2	√	Kalıcı / *Stay Put*	B K M S Y H
B100H*	1	-	√	Çıkık / *Extended*	B K M S Y H
B101H*	2	-	√	Çıkık / *Extended*	B K M S Y H
B102H*	1	1	√	Çıkık / *Extended*	B K M S Y H
B200H*	-	1	√	Çıkık / *Extended*	B K M S Y H
B202H*	-	2	√	Çıkık / *Extended*	B K M S Y H
B100M*	1	-	-	Mantar / *Mushroom*	B K M S Y H
B101M*	2	-	-	Mantar / *Mushroom*	B K M S Y H
B102M*	1	1	-	Mantar / *Mushroom*	B K M S Y H
B200M*	-	1	-	Mantar / *Mushroom*	B K M S Y H
B202M*	-	2	-	Mantar / *Mushroom*	B K M S Y H

- **(*) yerine istenen rengin harfi eklenir.**
- *Please choose the colour and replace (*) with the letter.*

- • **Işık Bloğu seçenekleri için bakınız sayfa 6 Kumanda Butonları Seçim Tablosu.**
- • *See page 6 Control Units Selection table for illumination block types.*

B100DY

B100FY

B200HK

B200MK

Kumanda Butonları ve Sinyal Lambaları
Control Units and Pilot Lights

Seçici Tip Kumanda Butonları / *Selector Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Işık	Etiket	Buton Tipi	Pozisyon	Renk
Code	*Contact Block Type*		*Illumi-nation*	*Button Plates*	*Button Type*	*Position*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	LED *LED*				
B100S20	1	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
B101S20	2	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
B102S20	1	1	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
B100S21	1	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
B101S21	2	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
B102S21	1	1	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
B101S30	2	-	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı -60° / *3 Position-Stay Put-60°*	H
B102S30	1	1	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı -60° / *3 Position-Stay Put-60°*	H
B101S31	2	-	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
B102S31	1	1	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
B101S32	2	-	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	H
B102S32	1	1	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü-60° / *3 Position-Double Spring Return-60°*	H
B100SL20*	1	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Işıklı -Kalıcı-60° / *2 Position-Illuminated-Stay Put-60°*	B K M S Y H
B101SL20*	2	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Işıklı -Kalıcı-60° / *2 Position-Illuminated-Stay Put-60°*	B K M S Y H
B100SL21*	1	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Işıklı -Dönüşlü -60° *2 Position-Illuminated-Spring Return-60°*	B K M S Y H
B101SL21*	2	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Işıklı -Dönüşlü -60° *2 Position-Illuminated-Spring Return-60°*	B K M S Y H
B101SL30*	2	-	√	II-0-I	Seçici / *Selector*	*3 Pozisyonlu-Işıklı-Kalıcı-60° 3 Position-Illuminated-Stay Put-60°*	B K M S Y H
B101SL31*	2	-	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Işıklı-Tek Dönüşlü-60° *3 Position-Illuminated-Single Spring Return-60°*	B K M S Y H
B102SL31*	1	1	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Işıklı-Tek Dönüşlü-60° *3 Position-Illuminated-Single Spring Return-60°*	B K M S Y H
B101SL32*	2	-	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Işıklı-Çift Dönüşlü-60° *3 Position-Illuminated-Double Spring Return-60°*	B K M S Y H
B102SL32*	1	1	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Işıklı-Çift Dönüşlü-60° *3 Position-Illuminated-Double Spring Return-60°*	B K M S Y H
B100R20	1	-	-	0-I	Seçici / *Selector*	2 Pozisyon-Kalıcı-45° / *2 Position-Stay Put-45°*	H
B101R20	2	-	-	0-I	Seçici / *Selector*	2 Pozisyon-Kalıcı-45° / *2 Position-Stay Put-45°*	H
B100R21	1	-	-	0-I	Seçici / *Selector*	2 Pozisyon-Dönüşlü-45° / *2 Position-Spring Return-45°*	H
B101R21	2	-	-	0-I	Seçici / *Selector*	2 Pozisyon-Dönüşlü-45° / *2 Position-Spring Return-45°*	H
B100T20	1	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-90° / *2 Position-Stay Put-90°*	H
B101T20	2	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-90° / *2 Position-Stay Put-90°*	H
B100T21	1	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-90° / *2 Position-Stay Put-90°*	H
B101T21	2	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-90° / *2 Position-Spring Return-90°*	H
B100C	1	-	-	-	Mandallı / *Handle Switch*	-	B
B102C	1	1	-	-	Mandallı / *Handle Switch*	-	B
B200C	-	1	-	-	Mandallı / *Handle Switch*	-	B

- **Işık Bloğu seçenekleri için bakınız sayfa 6 Kumanda Butonları Seçim Tablosu.**
- *See page 6 Control Units Selection table for illumination block types.*

B100S20

B100SL20Y

B131SL30Y

B101T20

B101R20

B100C

B Serisi Ø 22 mm Adaptörlü Kumanda Butonu Tipleri
Series Ø 22 mm Push Buttons With Adapter

Anahtarlı Tip Kumanda Butonları / Key Operated Type Control Units

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumination*	Etiket *Button Plates*	Tip *Type*	Pozisyon *Position*	Anahtar Çıkma Pozisyonu *Key Removal Position*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	LED *LED*				
B100AA20	1	-	-	0-I	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	0
B101AA20	2	-	-	0-I	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	0
B102AA20	1	1	-	0-I	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	0
B100AA21	1	-	-	0-I	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	0
B101AA21	2	-	-	0-I	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	0
B102AA21	1	1	-	0-I	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	0
B101AA30	2	-	-	II-0-I	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*	0
B102AA30	1	1	-	II-0-I	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*	0
B101AA31	2	-	-	II-0-I	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*	0
B102AA31	1	1	-	II-0-I	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*	0
B101AA32	2	-	-	II-0-I	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*	0
B102AA32	1	1	-	II-0-I	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*	0
B100AC20	1	-	√	0-I	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	Tüm / *All*
B101AC20	2	-	√	0-I	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	Tüm / *All*
B102AC20	1	1	√	0-I	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	Tüm / *All*
B100AC21	1	-	√	0-I	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	Tüm / *All*
B101AC21	2	-	√	0-I	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	Tüm / *All*
B102AC21	1	1	√	0-I	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	Tüm / *All*
B101AC30	2	-	√	II-0-I	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*	Tüm / *All*
B102AC30	1	1	√	II-0-I	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*	Tüm / *All*
B101AC31	2	-	√	II-0-I	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*	Tüm / *All*
B102AC31	1	1	-	II-0-I	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*	Tüm / *All*
B101AC32	2	-	-	II-0-I	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*	Tüm / *All*
B102AC32	1	1	-	II-0-I	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*	Tüm / *All*

B102AA31

Acil Stop Tip Kumanda Butonları / *Emergency Stop Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Etiket	Tip	Çap (mm)	Renk
Code	*Contact Block Type*		*Button Plates*	*Type*	*Dia (mm)*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*				
B100E	1	-		Çevirmeli / *Turn to Release*	Ø 40mm	K
B102E	1	1		Çevirmeli / *Turn to Release*	Ø 40mm	K
B200E	-	1		Çevirmeli / *Turn to Release*	Ø 40mm	K
B202E	-	2		Çevirmeli / *Turn to Release*	Ø 40mm	K
B100EE	1	-	Etiketli / *With Label*	Çevirmeli / *Turn to Release*	Ø 40mm	K
B102EE	1	1	Etiketli / *With Label*	Çevirmeli / *Turn to Release*	Ø 40mm	K
B200EE	-	1	Etiketli / *With Label*	Çevirmeli / *Turn to Release*	Ø 40mm	K
B202EE	-	2	Etiketli / *With Label*	Çevirmeli / *Turn to Release*	Ø 40mm	K
B100EG	1	-	Pozisyon Göstergeli / *With Position Cursor*	Çevirmeli / *Turn to Release*	Ø 40mm	K
B102EG	1	1	Pozisyon Göstergeli / *With Position Cursor*	Çevirmeli / *Turn to Release*	Ø 40mm	K
B200EG	-	1	Pozisyon Göstergeli / *With Position Cursor*	Çevirmeli / *Turn to Release*	Ø 40mm	K
B202EG	-	2	Pozisyon Göstergeli / *With Position Cursor*	Çevirmeli / *Turn to Release*	Ø 40mm	K
B100E30	1	-		Çevirmeli / *Turn to Release*	Ø 30mm	K
B102E30	1	1		Çevirmeli / *Turn to Release*	Ø 30mm	K
B200E30	-	1		Çevirmeli / *Turn to Release*	Ø 30mm	K
B202E30	-	2		Çevirmeli / *Turn to Release*	Ø 30mm	K
B100E60	1	-		Çevirmeli / *Turn to Release*	*Ø 60mm*	K
B102E60	1	1		Çevirmeli / *Turn to Release*	Ø 60mm	K
B200E60	-	1		Çevirmeli / *Turn to Release*	Ø 60mm	K
B202E60	-	2		Çevirmeli / *Turn to Release*	Ø 60mm	K

B200E

B200E30

B200E60

B200EE

B200EG

B Serisi Ø 22 mm Adaptörlü Kumanda Butonu Tipleri
Series Ø 22 mm Push Buttons With Adapter

Çiftli Tip Kumanda Butonları / Double Type Control Units

Ürün Kodu	Kontak Blok Tipi		Işık	Etiket	Buton Tipi		Renk
Code	*Contact Block Type*		*Illumination*	*Button Plates*	*Control Unit Type*		*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	Opsiyonel *Optional*				
B101K20KY	2	-	√	0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	K Y
B102K20KY	1	1	√	0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	K Y
B101K21KY	2	-	√	0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	K Y
B102K21KY	1	1	√	0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	K Y
B101K20HB	2	-	√	0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	B H
B102K20HB	1	1	√	0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	B H
B101K21HB	2	-	√	II-0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	B H
B102K21HB	1	1	√	II-0-I	Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	B H
B101K20HH	2	-	√	II-0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	H H
B102K20HH	1	1	√	II-0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	H H
B101K21HH	2	-	√	II-0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	H H
B102K21HH	1	1	√	II-0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	H H
B101K20SH	2	-	√	0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	S H
B102K20SH	1	1	√	0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	S H
B101K21SH	2	-	√	0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	S H
B102K21SH	1	1	√	0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	S H
B101B20KY	2	-	√	0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	K Y
B102B20KY	1	1	√	0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	K Y
B101B21KY	2	-	√	II-0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	K Y
B102B21KY	1	1	√	II-0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	K Y
B101B20HB	2	-	√	II-0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	B H
B102B20HB	1	1	√	II-0-I	Çiftli / *Double*	Düz Kafalı / *Flush*	B H
B101B21HB	2	-	√	II-0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	B H
B102B21HB	1	1	√	II-0-I	Çiftli / *Double*	Çıkık Kafalı / *Single Extended*	B H
B121B30BB	2	1	-		Üçüz Buton / *Triple*	1 Çıkık Kafalı / *Single Extended*	B K B
B121B30YY	2	1	-		Üçüz Buton / *Triple*	1 Çıkık Kafalı / *Single Extended*	Y K Y

B102K20KY

B102B20KY

B121B30YY

B132K21HB

- **Işık Bloğu seçenekleri için bakınız sayfa 6 Kumanda Butonları Seçim Tablosu.**
- *See page 6 Control Units Selection table for illumination block types.*

• • **Standart çiftli buton B102K20KY, kırmızı / yeşil ve şeffaftır.**
• • *Standard double head control unit is B102K20KY which is red/green and transparent.*

• • • **Çiftli butonda sadece kırmızı ve siyah renkli basma düğmeleri çıkıktır.**
• • • *For double head control unit, only red and black colored buttons are extended position.*

Potansiyometre / *Potentiometer*

	Ürün Kodu *Code*				
	BPR01K	BPR02K	BPR05K	BPR10K	BPR100K
Empedans (R) *Impedance (R)*	1 kΩ	2 kΩ	5 kΩ	10 kΩ	100 kΩ
Anma Gücü (P) *Rated Power (P)*	Lineer 1,5W (70˚C)				Lineer 1,22W (70˚C)
Koruma Sınıfı *Protection Degree*	IP65				
İzolasyon Direnci *Isolation Resistance*	min 10 MΩ (500V DC)				
Çalışma Sıcaklığı *Operating Temperature*	-25˚C / +70˚C				
Direnç Elemanı *Resistive Element*	Sermet / *Cermet*				
Elektriksel Kurs *Turning Range*	270˚ 15˚				
Tolerans *Tolerance*	%10				
Isı Katsayısı *Thermal Coefficient*	%100 ppm /˚C				
Dielektrik Dayanımı *Dielectric Endurance*	± 1750 Vrms				
Klimatik Kategori *Climatic Category*	55/125/56				
Maksimum Çalışma Gerilimi (V) *Maximum Operating Voltage (V)*	38.70	54.80	86.60	122.50	350
Maksimum Fırça Akımı (mA) *Maximum Brush Current (mA)*	38.70	27.4	17.30	12.20	3.5
Koruma Sınıfı *Protection Degree*	IP65				

BPR05K
5K Potansiyometre
5K Potentiometer

Potansiyometre / *Potentiometer*

Ürün Kodu *Code*		Özellik *Features*	Renk *Colour*
BPR01K	1 kΩ	Seramik, Telli / *Ceramic, Wired*	H
BPR02K	2 kΩ	Seramik, Telli / *Ceramic, Wired*	H
BPR05K	5 kΩ	Seramik, Telli / *Ceramic, Wired*	H
BPR10K	10 kΩ	Seramik, Telli / *Ceramic, Wired*	H
BPR100K	100 kΩ	Seramik, Telli / *Ceramic, Wired*	H

Bağlantı / *Connection*

Ürün Kodu *Code*	Özellik *Features*	Özellik *Features*
BUSB10	1 Metre / *1 Meter*	USB Bağlantı / *USB Connection*
BRJ45	-	ETERNET Bağlantı / *ETHERNET Connection*

BUSB

B Serisi Ø 22 mm Adaptörlü Kumanda Butonu Tipleri

Series Ø 22 mm Push Buttons With Adapter

Sinyaller / Pilot Lights

Ürün Kodu	Işık	Nominal Gerilim	Renk
Code	*Illumination*	*Nominal Voltage*	*Colour*
B030X*	Ba9S Duylu		B K M S Y H
B050XB	LED	12 - 30V AC/DC	B
B060XK	LED	12 - 30V AC/DC	K
B070XM	LED	12 - 30V AC/DC	M
B080XS	LED	12 - 30V AC/DC	S
B090XY	LED	12 - 30V AC/DC	Y
B0B0XB	LED	100 - 230V AC	B
B0K0XK	LED	100 - 230V AC	K
B0M0XM	LED	100 - 230V AC	M
B0S0XS	LED	100 - 230V AC	S
B0Y0XY	LED	100 - 230V AC	Y

B080XS

B050XB

Kontak Blok Tipler / Contact Block Types

Ürün Kodu	Kontak Blok Tipi		Işık	Nominal Akım	Nominal Gerilim	Renk
Code	*Contact Block Type*		*Illumination*	*Nominal Current*	*Nominal Voltage*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*				
B1	1		-	4A	250V	-
B2		1	-	4A	250V	-
B3			Ba9S Duylu	-	-	-
B5			LED	5-20mA	12-30V AC/DC	B
B6			LED	5-20mA	12-30V AC/DC	K
B7			LED	5-20mA	12-30V AC/DC	M
B8			LED	5-20mA	12-30V AC/DC	S
B9			LED	5-20mA	12-30V AC/DC	Y
BB			LED	5-15mA	100-230V AC	B
BK			LED	5-15mA	100-230V AC	K
BM			LED	5-15mA	100-230V AC	M
BS			LED	5-15mA	100-230V AC	S
BY			LED	5-15mA	100-230V AC	Y
BB4			LED	4-5mA	110V AC/DC	B
BK4			LED	4-5mA	110V AC/DC	K
BM4			LED	4-5mA	110V AC/DC	M
BS4			LED	4-5mA	110V AC/DC	S
BY4			LED	4-5mA	110V AC/DC	Y

- **Max. 2W'lık Ba9S duylu Neon Ampul takılabilir.**
- *Assembly possibility only for Neon Lamp with max. 2W socket.*

- • **Maksimum 3 adet kontak blok arka arkaya eklenebilir.**
- • *Max. 3 contact blocks can be added subsequently.*

B1

B2

B3

B9

Yedekler / *Spare Parts*

Ürün Kodu	Tip	Pozisyon	Renk
Code	*Types*	*Position*	*Colour*
BDD*	Düz / *Flush*		B K M S Y H
BDF*	Kalıcı / *Stay Put*		B K M S Y H
BDH*	Çıkık / *Extended*		B K M S Y H
BDM*	Mantar / *Mushroom*		K S Y H
BDS20	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	
BDS21	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	
BDS30	Seçici / *Selector*	3 Pozisyonlu-Kalıcı-60° / *3 Position-Stay Put-60°*	
BDS31	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	
BDS32	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	
BDSL20*	Seçici / *Selector*	2 Pozisyonlu-Işıklı-Kalıcı -60° / *2 Position-Illuminated-Stay Put-60°*	B K M S Y H
BDSL21*	Seçici / *Selector*	2 Pozisyonlu-Işıklı-Dönüşlü -60° / *2 Position-Illuminated-Spring Return-60°*	B K M S Y H
BDSL30*	Seçici / *Selector*	3 Pozisyonlu-Işıklı-Kalıcı-60°/ *3 Position-Illuminated-Stay Put-60°*	B K M S Y H
BDSL31*	Seçici / *Selector*	3 Pozisyonlu-Işıklı-Tek Dönüşlü-60° / *3 Position-Illuminated-Single Spring Return-60°*	B K M S Y H
BDSL32*	Seçici / *Selector*	3 Pozisyonlu-Işıklı-Çift Dönüşlü-60° / *3 Position-Illuminated-Double Spring Return-60°*	B K M S Y H
BDR20	Seçici / *Selector*	2 Pozisyon-Kalıcı-45° / *2 Position-Stay Put-45°*	
BDR21	Seçici / *Selector*	2 Pozisyon-Dönüşlü-45° / *2 Position-Spring Return-45°*	
BDR30	Seçici / *Selector*	3 Pozisyon-Kalıcı-45° / *3 Position-Stay Put-45°*	
BDT20	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-90° / *2 Position-Stay Put-90°*	
BDT21	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-90° / *2 Position-Spring Return-90°*	
BDC	Mandallı / *Handle Switch*		H
BDAA20	Anahtarlı / *Key Operated*	2 Pozisyonlu, Kalıcı / *2 Position, Stay Put*	
BDAA21	Anahtarlı / *Key Operated*	2 Pozisyonlu, Dönüşlü / *2 Position, Spring Return*	
BDAA30	Anahtarlı / *Key Operated*	3 Pozisyonlu, Kalıcı / *3 Position, Stay Put*	
BDAA31	Anahtarlı / *Key Operated*	3 Pozisyonlu, Tek Dönüşlü / *3 Position, Single Spring Return*	
BDAA32	Anahtarlı / *Key Operated*	3 Pozisyonlu, Çift Dönüşlü / *3 Position, Double Spring Return*	
BDAC20	Anahtarlı / *Key Operated*	2 Pozisyonlu, Kalıcı / *2 Position, Stay Put*	
BDAC21	Anahtarlı / *Key Operated*	3 Pozisyonlu, Kalıcı / *3 Position, Stay Put*	
BDAC30	Anahtarlı / *Key Operated*	3 Pozisyonlu, Kalıcı / *3 Position, Stay Put*	
BDAC31	Anahtarlı / *Key Operated*	3 Pozisyonlu, Tek Dönüşlü / *3 Position, Single Spring Return*	
BDAC32	Anahtarlı / *Key Operated*	3 Pozisyonlu, Çift Dönüşlü / *3 Position, Double Spring Return*	
LED24*	Ba9S Duylu LED / *Ba9S LED*	24V AC/DC	B K M S Y
LED220*	Ba9S Duylu LED / *Ba9S LED*	220V AC	B K M S Y

BDH

BDAA20

BDS20

BDK20KY

BDSL20Y

BDE60

BDMH

BDC

LED220K

LED24S

B Serisi Ø 22 mm Adaptörlü Kumanda Butonu Tipleri
Series Ø 22 mm Push Buttons With Adapter

Yedekler / Spare Parts

Ürün Kodu	Çap (mm)	Buton Tipi	Pozisyon	Renk
Code	*Dia (mm)*	*Control Unit Types*	*Position*	*Colour*
BDE	Ø 40mm	Acil Stop / *Emergency Stop*	Çevirmeli / *Turn to Release*	K
BDE30	Ø 30mm	Acil Stop / *Emergency Stop*	Çevirmeli / *Turn to Release*	K
BDE60	Ø 60mm	Acil Stop / *Emergency Stop*	Çevirmeli / *Turn to Release*	K
BDEE	Ø 40mm	Acil Stop / *Emergency Stop*	Etiketli - Çevirmeli / *With Label - Turn to Release*	K
BDEG	Ø 40mm	Acil Stop / *Emergency Stop*	Pozisyon-Göstergeli / *With Position Cursor*	K
BDK20KY		Çiftli / Double	Düz Kafalı / *Flush*	K Y
BDK21KY		Çiftli / Double	1 Çıkık Kafalı / *Single Extended*	K Y
BDK20HB		Çiftli / Double	Düz Kafalı / *Flush*	B H
BDK21HB		Çiftli / Double	1 Çıkık Kafalı / *Single Extended*	B H
BDK20HH		Çiftli / Double	Düz Kafalı / *Flush*	B H
BDK21HH		Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	B H
BDK20SH		Çiftli / *Double*	Düz Kafalı / *Flush*	S H
BDK21SH		Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	S H
BDB20KY		Çiftli / *Double*	Düz Kafalı / *Flush*	K Y
BDB21KY		Çiftli / *Double*	Düz Kafalı / *Flush*	K Y
BDB20HB		Çiftli / *Double*	Düz Kafalı / *Flush*	B K Y H
BDB21HB		Çiftli / *Double*	Düz Kafalı / *Flush*	B K Y H
BDB30BB		Üçüz Buton / *Triple*	Düz Kafalı / *Flush*	B K Y B
BDB30YY		Üçüz Buton / *Triple*	-	K Y Y
BDX*		Sinyal / *Pilot Lights*		B K M S Y

Özel Tampon Baskılı Butonlar / Special Pad Printed Control Units

Ürün Kodu / *Code*	B102K20KY-10	B101K20YY-12	B101K20YY-0K	B102K20HB-10	B101K20HH-0K	B101K20BB-12	B101K20SH-10	B101K20SS-12
Baskı / *Print*	I-0	I-II	Oklu / *Arrow Symbol*	I-0	Oklu / *Arrow Symbol*	I-II	I-0	I-II
Ürün Kodu / *Code*	B100DY-0D	B100DY-0Y	B100DH-0D	B100DH-0Y	B100DB-0D	B100DB-0Y	B100DB-Z	B100DB-L
Baskı / *Print*	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Zil / Bell	Lamba / Lamp
Ürün Kodu / *Code*	B100DY-1	B100DY-2	B100DB-1	B100DB-2	B200DK-0	B200DH-0	B200DS-Z	B200DS-L
Baskı / *Print*	I	II	I	II	0	0	Zil / Bell	Lamba / Lamp

Aksesuarlar / *Accessories*

BEB

BEBK20

BROZET08

BROZET18

BMUHAFAZA

BPUL

Ürün Kodu	Tip	Özellik	Özellik	Malzeme
Code	*Types*	*Features*	*Features*	*Material*
BA	Adaptör / *Adapter*			Plastik / Plastic
B-ANAHTAR	Anahtar / *Key*			
BBUTONORTA	Kontak Baskı Parçası / *Middle Contact Activator*	Düz Buton 22mm / *Flush Button 22mm*		
BCIFTLIROZET18	Çiftli Rozet / *Double Legent Plate Holder*	18mm		
BEB	Etanj Başlık / *Silicon Cover*	Düz Buton 22mm / *Flush Button 22mm*		
BEBK20	Etanj Başlık / *Silicon Cover*	Çiftli Butonlar / *Double Buttons*		
BEBK21	Etanj Başlık / *Silicon Cover*	1 Çıkık Kafalı-Çiftli Butonlar *Single Extended -Double Buttons*		
BMUHAFAZA	Emniyet Koruma / *Emergency Protective Cover*	Darbe Muhafaza / *Stroke Protection*		
BPROT	Buton Koruma / *Protective Cover*	Darbe Muhafaza / *Stroke Protection*		
BPUL	Pul / *Plate*	Buton Sıkıştırma / *Button Tightening*		
BROZET08	Rozet / *Legend Plate Holder*	8mm		
BROZET18	Rozet / *Legend Plate Holder*	18mm		
BSECICIORTA	Kontak Baskı Parçası / *Middle Contact Activator*	Tek Dönüşlü Seçici Buton *Single Spring Return Selector Button*		
BSOMAN	Somun Anahtarı / *Nut Tightener*			
BET08	Etiket / *Legend Plate*	8mm	BOŞ	
BET08-01	Etiket / *Legend Plate*	8mm	(0-1)	
BET08-01OK	Etiket / *Legend Plate*	8mm	(0-1) OKLU	
BET08-12	Etiket / *Legend Plate*	8mm	(I-II)	
BET08-201	Etiket / *Legend Plate*	8mm	(2-0-1)	
BET08-201OK	Etiket / *Legend Plate*	8mm	(2-0-1) OKLU	
BET08-201OK2	Etiket / *Legend Plate*	8mm	(2-0-1) ÇİFT OKLU	
BET08-START	Etiket / *Legend Plate*	8mm	START	
BET08-STOP	Etiket / *Legend Plate*	8mm	STOP	
BET18	Etiket / *Legend Plate*	18mm	BOŞ	
BET18-01	Etiket / *Legend Plate*	18mm	(0-1)	
BET18-START	Etiket / *Legend Plate*	18mm	START	
BET48P	Etiket / *Legend Plate*	48mm	EMERGENCY	Plastik / *Plastic*
BET60A	Etiket / *Legend Plate*	60mm	ACİL STOP	Alüminyum / *Aluminium*
BET60LED1	Etiket-Işıklı-24V AC/DC *Legend Plate-With LED-24V AC/DC*	60mm	ACİL STOP-*EMERGENCY*	
BET60LED2	Etiket-Işıklı-24V AC/DC *Legend Plate-With LED-24V AC/DC*	60mm	EMERGENCY STOP EMERGENCY STOP	
BET60P	Etiket / *Legend Plate*	60mm	EMERGENCY STOP	Plastik / *Plastic*
BET60P1	Etiket / *Legend Plate*	60mm	ACİL DURDURMA	Plastik / *Plastic*
BET60P2	Etiket / *Legend Plate*	60mm	ARRET D'URGENCE	Plastik / *Plastic*
BET90A	Etiket / *Legend Plate*	90mm	ACİL STOP	Alüminyum / *Aluminium*
BET90P	Etiket / *Legend Plate*	90mm	ACİL STOP	Plastik / *Plastic*
BET90P-1	Etiket / *Legend Plate*	90mm	ACİL DURDURMA	Plastik / *Plastic*

BET18

BET08

BET08-START

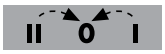
BET08-STOP

BET08-01

BET08-010K

BET08-201

BET08-2010K



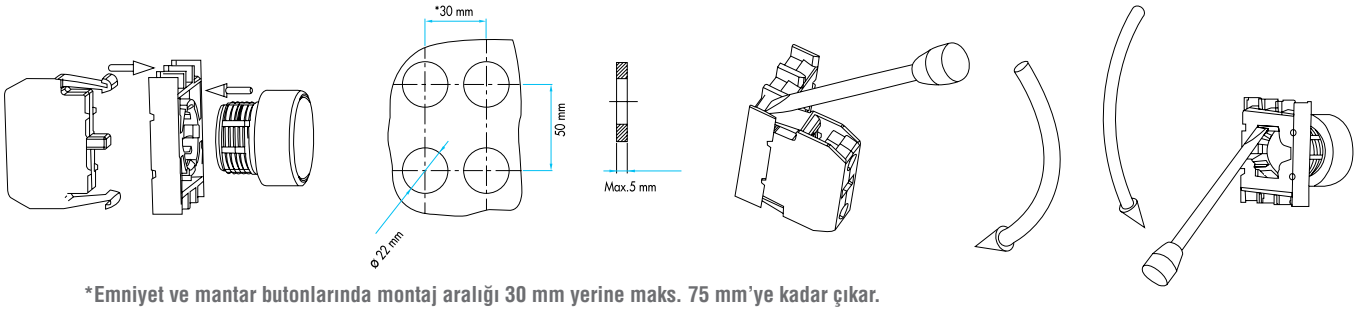
BET08-2010K2

BET60LED1

BET60P
BET60A

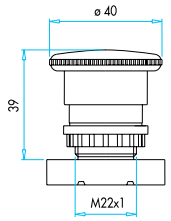
BET90P
BET90A

MONTAJ ŞEKLİ / *ASSEMBLY*

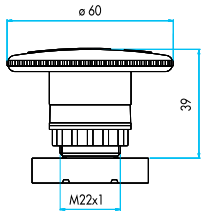


***Emniyet ve mantar butonlarında montaj aralığı 30 mm yerine maks. 75 mm'ye kadar çıkar.**
The mounting distance in emergency and mushroom buttons increases up to max. 75 mm instead of 30 mm

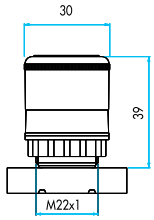
BOYUTLAR (mm) / *DIMENSIONS (mm)*



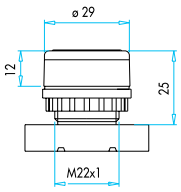
Acil Stop Ø 40 mm
Emergency Stop Ø 40 mm



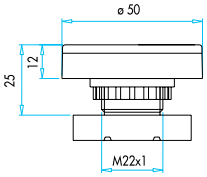
Acil Stop Ø 60 mm
Emergency Stop Ø 60 mm



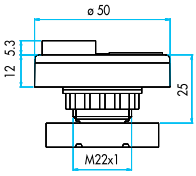
Acil Stop Ø 30 mm
Emergency Stop Ø 30 mm



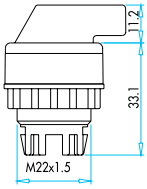
Düz
Flush



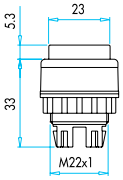
Çiftli Düz Kafalı
Double, Spring Return



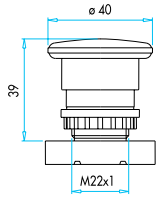
Çiftli Çıkık Kafalı
Double Extended, Spring Return



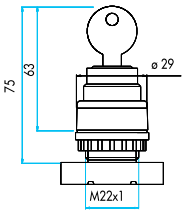
Seçici
Selector



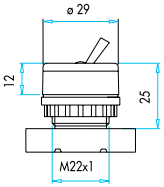
Çıkık Kafalı
Extended, Spring Return



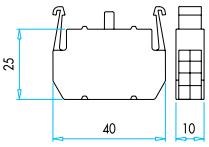
Mantar
Mushroom, Spring Return



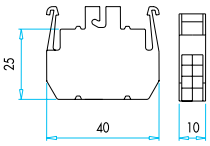
Anahtarlı
Key Operated



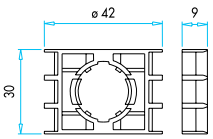
Mandallı
Handle Button



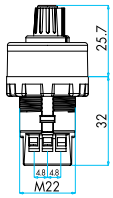
B Serisi Kontak Blok
B Series Contact Block



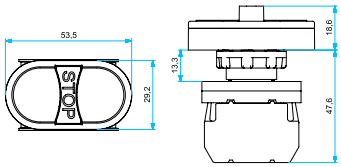
B Serisi Ampul Takılabilen Işıklı Blok
Neon Lamp Mauntable
B Series Light Block



Adaptör
Adapter



Potansiyometre
Potentiometer



Üçüz Buton
Triple, With Extended Stop

CM Serisi Metal Ø 22mm Kumanda Buton Tipleri

- Ağır koşullara dayanıklı metal yapı, korozyona karşı krom kaplama
- Maksimum güvenlik için parmak koruma
- Darbe dayanıklı polikarbonat buton lensi
- Alev almayan V0 PA6.6 kontak bloklar
- İstenildiğinde çeşitli ışıklı kontak blokların uygunluğu
- Kolaylıkla tek elle adaptörün sökülebilmesi, adaptöre kontak blokların takılmasında alete ihtiyaç olmaması
- Led ışıkla, minimum ısınma maksimum ömür
- Arka arkaya 2 kontak blok takılabilir
- Farklı dillerde ve özel işaretli çeşitli markalama etiketleri
- Üstün silikon conta tekniği ile IP65 koruma
- Tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	:	500.000 açma-kapama min.
Elektriksel Ömür	:	100.000 açma-kapama min.
Çalışma Sıcaklığı	:	min./maks. °C -5/+40
Koruma Sınıfı	:	IP65
Çalışma Sıklığı	:	Yüksüz 3.000 açma-kapama/saat
	:	Yükte 1.200 açma-kapama/saat
Çalışma Gerilimi (Ue)	:	230 V AC
Çalışma Akımı (Ie)	:	4 A
Yalıtım Gerilimi (Ui)	:	300 V
Darbe Dayanım Gerilimi (Uimp)	:	2.5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
İzolasyon Direnci	:	10 MΩ min. (500 V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500 V AC (1dk. için)
Standart Kontak Malzemesi	:	AgNi
Bağlantı Kablo Kesiti	:	1.5 - 2.5 mm^2
Standart	:	UL 508 TS EN 60947-5-1 VDE0660

CM *Series Metal Ø 22mm Control Units Types*

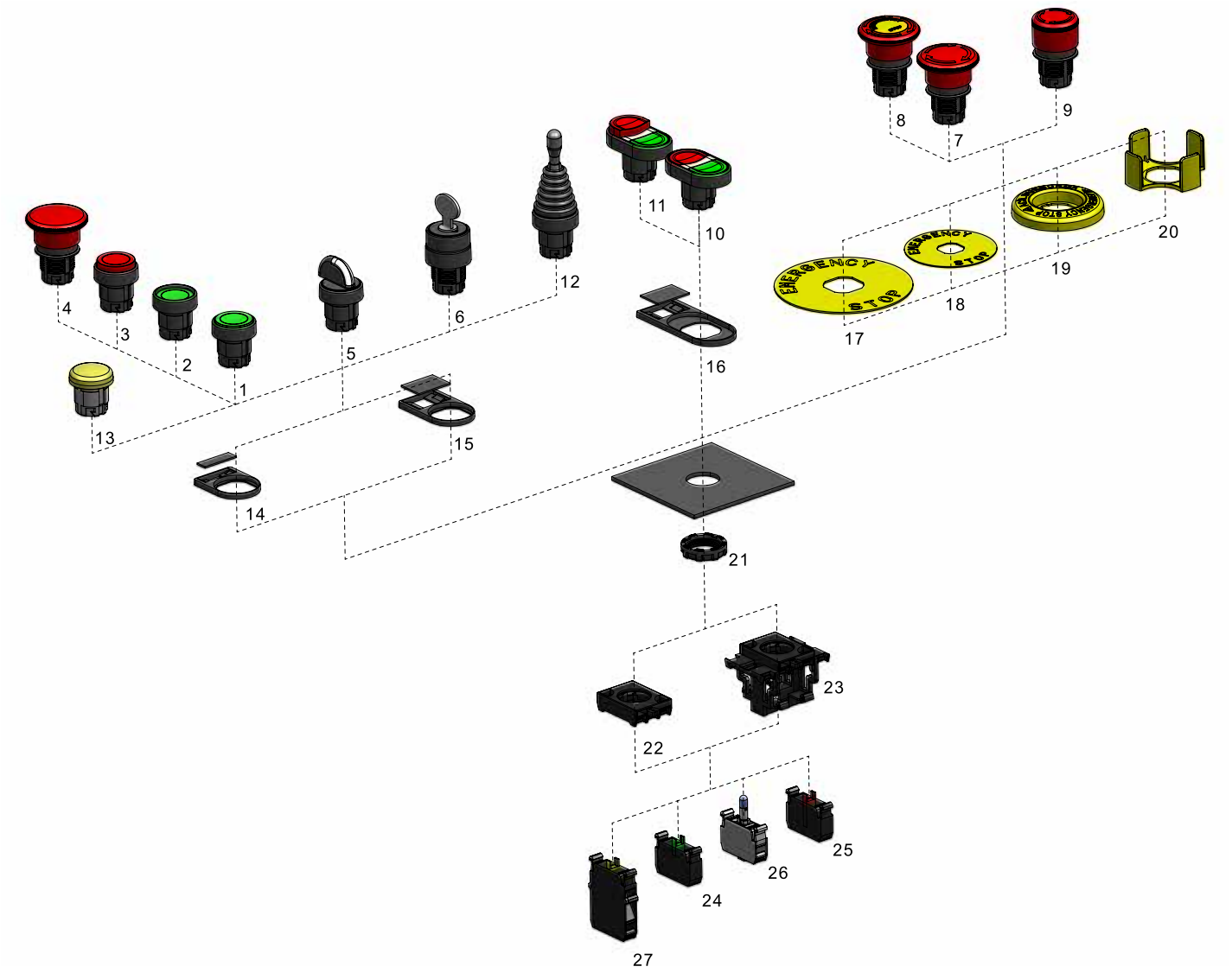
- *Die cast metal construction for harsh environment, corrosion-resistant chromate plating*
- *Finger safe protection for maximum safety*
- *Impact-resistant polycarbonate button lens*
- *Non-flammable V0 PA6.6 contact blocks*
- *Various illumination contact blocks availablity on request*
- *Easy one-hand adapter removal, tools not required to attach contact blocks to adapter*
- *With LED illumination, minimum warm-up and maximum lifetime.*
- *Compact design contact blocks can be stacked by 2 blocks deep*
- *Various legend plates with different languages and custom markings*
- *IP65 protection degree with superior silicone sealing techniques*
- *Variety of products for all areas of application*

Technical Information

Mechanical Life	:	*500.000 operations min.*
Electrical Life	:	*100.000 operations min.*
Operating Temperature	:	*min./max. °C -5/+40*
Protection Degree	:	*IP65*
Operating Frequency	:	*Without load 3.000 operations/hour*
	:	*At full load 1.200 operations/hour*
Operating Voltage (Ue)	:	*230 V AC*
Operating Current (Ie)	:	*4 A*
Insulation Voltage (Ui)	:	*300 V*
Impact Resistance (Uimp)	:	*2.5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500 V AC (for 1 minute)*
Standard Contact Material	:	*AgNi*
Cable Section	:	*1.5 - 2.5 mm^2*
Standard	:	*UL 508 TS EN 60947-5-1 VDE0660*

CM Metal Serisi Ø 22mm Kumanda Butonları Genel Şema

CM Metal Series Ø 22mm Control Units General Scheme



	Yaylı Tip / *Spring Type*	
1	D	Düz / *Flush*
2	F	Kalıcı / *Stay Put*
3	H	Çıkık / *Extended*
4	M	Mantar, Ø 40 mm / *Mushroom, Ø 40 mm*
	Seçici Tip / *Selector Type*	
5	S	60° / *60°*
	Anahtarlı Tip / *Key Operated Type*	
6		
	Acil Stop / *Emergency Stop Type*	
7	E	Ø 40mm, Çevirmeli / *Ø 40mm, Turn to Release*
8	EE	Ø 40mm, Etiketli, Çevirmeli / *Ø 40mm, With Label, Turn to Release*
9	EK30	
	Çiftli / *Double*	
10	K20	Düz Kafalı / *Flush*
11	K21	1 Çıkık kafalı / *Single Extended*
	Joystick Tip / *Joystick*	
12	DJ20	2 Pozisyonlu, Kalıcı / *2 Position, Stay Put*
12	DJ21	2 Pozisyonlu, Dönüşlü / *2 Position, Spring Return*
12	DJ40	4 Pozisyonlu, Kalıcı / *4 Position, Stay Put*
12	DJ41	4 Pozisyonlu, Dönüşlü / *4 Position, Spring Return*
	Sinyal / *Pilots*	
13	X	Yuvarlak, Sinyal / *Round, Pilots*
	Aksesuarlar / *Accessories*	
14	BROZET08	Rozet, 8mm / *Legend Plate Holder, 8mm*
15	BROZET18	Rozet, 18mm / *Legend Plate Holder, 18mm*
16	BCIFTLIROZET18	Rozet, İkiz Buton, 18mm / *Legend Plate Holder, Double, 18mm*
17	BET90A/P	Etiket, Ø90mm Acil Stop, Alüminyum/Plastik *Legend Plate, Ø90mm Emergency Stop, Aluminium/Plastic*
18	BET60A/P	Etiket, Ø60mm Acil Stop, Alüminyum/Plastik *Legend Plate, Ø60mm Emergency Stop, Aluminium/Plastic*
19	BET60LED	Etiket, Ø60mm Acil Stop, Led *LED Illuminated Legend Plate, Ø60mm Emergency Stop*
20	CMUHAFAZA	Emniyet Koruma / *Emergency Protective Cover*
21	SOMUN	Plastic Somun, M22 X 1,5 / *Plastic Nut, M22 X 1,5*
22	ADAPTÖR	Adaptör / *Adapter*
23	EKLİ ADAPTÖR	Ek adaptör / *Additional Adapter*
24	START KONTAKBLOK	Kontak Blok, Start (NA) / *Contact Block, Start (NO)*
25	STOP KONTAKBLOK	Kontak Blok, Stop (NK) / *Contact Block, Stop (NC)*
26	LED KONTAKBLOK	Kontak Blok, LED / *Contact Block, LED*
27	JOYSTIK KONTAKBLOK	Kontak, Joystik / *Contact Block, Joystick*

CM Serisi Kumanda Butonlar Seçim Tablosu
Series Control Units Selection Table

Seri	Kontak Blok Kombinasyonu			Buton Tipi
CM	1	K	2	D
Series	*Contact Block Combination*			*Button Type*

Seri
Series

CM	Metal Serisi Ø 22mm Kumanda Butonları *Metal Series Ø 22mm Control Units*

Kontak Blok Tipi
Contact Block Type

0	Boş *Empty*		
1	Start *Start*	Butonluk *For Button*	
2	Stop *Stop*	Butonluk *For Button*	
3	Yanyana *Tandem*	Start *Start*	Start *Start*
4	Yanyana *Tandem*	Start *Start*	Stop *Stop*
5	Yanyana *Tandem*	Stop *Stop*	Stop *Stop*
6	Start *Start*	Start *Start*	Düşey *Back to Back*
7	Start *Start*	Stop *Stop*	Joystick İçin *For Joystick*

Kontak Blok Tipi
Contact Block Type

0	Boş *Empty*		
1	Start *Start*	Butonluk *For Button*	
2	Stop *Stop*	Butonluk *For Button*	
3	Yanyana *Tandem*	Start *Start*	Start *Start*
4	Yanyana *Tandem*	Start *Start*	Stop *Stop*
5	Yanyana *Tandem*	Stop *Stop*	Stop *Stop*
6	Start *Start*	Start *Start*	Düşey *Back to Back*
7	Start *Start*	Stop *Stop*	Joystick İçin *For Joystick*

Işık Bloğu Tipi
Illumination Block Type

0	Boş *Without Illumination*	
5	12 - 30V AC/DC *12 - 30V AC/DC*	Beyaz LED'li *With White LED*
6	12 - 30V AC/DC *12 - 30V AC/DC*	Kırmızı LED'li *With Red LED*
7	12 - 30V AC/DC *12 - 30V AC/DC*	Mavi LED'li *With Blue LED*
8	12 - 30V AC/DC *12 - 30V AC/DC*	Sarı LED'li *With Yellow LED*
9	12 - 30V AC/DC *12 - 30V AC/DC*	Yeşil LED'li *With Green LED*
B	100 - 230V AC *100 - 230V AC*	Beyaz LED'li *With White LED*
K	100 - 230V AC *100 - 230V AC*	Kırmızı LED'li *With Red LED*
M	100 - 230V AC *100 - 230V AC*	Mavi LED'li *With Blue LED*
S	100 - 230V AC *100 - 230V AC*	Sarı LED'li *With Yellow LED*
Y	100 - 230V AC *100 - 230V AC*	Yeşil LED'li *With Green LED*
Q	Özel Gerilim *Special Voltage*	Beyaz LED'li *With White LED*
X	Özel Gerilim *Special Voltage*	Kırmızı LED'li *With Red LED*
V	Özel Gerilim *Special Voltage*	Mavi LED'li *With Blue LED*
W	Özel Gerilim *Special Voltage*	Sarı LED'li *With Yellow LED*
Z	Özel Gerilim *Special Voltage*	Yeşil LED'li *With Green LED*

Acil Stop Tip
Emergency Stop Type

E	Ø 40mm *Ø 40mm*		Çevirmeli *Turn to Release*
EE	Ø 40mm *Ø 40mm*	Etiketli *With Label*	Çevirmeli *Turn to Release*
EK30	Ø 30mm *Ø 30mm*	Kısa *Short*	Çevirmeli* *Turn to Release*

Çiftli Tip
DoubleType

K20	Düz Kafalı *Flush*
K21	1 Çıkık Kafalı *Single Extended*

Joystick Tip
Joystick Type

DJ20	2 Pozisyonlu *2 Position*	Kalıcılı *Stay Put*
DJ21	2 Pozisyonlu *2 Position*	Dönüşlü *Spring Return*
DJ40	4 Pozisyonlu *4 Position*	Kalıcılı *Stay Put*
DJ41	4 Pozisyonlu *4 Position*	Dönüşlü *Spring Return*

Sinyal
Pilot Lights

X	Sinyal *Pilot Lights*

Renk	Yazı
K	1
Colour	*Pad Printing*

Buton Tipi
Button Type

Yaylı Tip
Spring Type

D	Düz *Flush*	
F	Kalıcı *Stay Put*	
H	Çıkık *Extended*	
M	Mantar *Mushroom*	Ø 40 mm *Ø 40 mm*

Seçici Tip
Selector Type

S20	2 Pozisyonlu *2 Position*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*
S21	2 Pozisyonlu *2 Position*	Dönüşlü *Spring Return*	(0-I) *(0-I)*	60° *60°*
S30	3 Pozisyonlu *3 Position*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*
S31	3 Pozisyonlu *3 Position*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*
S32	3 Pozisyonlu *3 Position*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*

Anahtarlı Tip
Key Operated Type

AA20	2 Pozisyonlu *2 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*
AA21	2 Pozisyonlu *2 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Dönüşlü *Spring Return*	(0-I) *(0-I)*	60° *60°*
AA30	3 Pozisyonlu *3 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*
AA31	3 Pozisyonlu *3 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*
AA32	3 Pozisyonlu *3 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 Position*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*
AC20	2 Pozisyonlu *2 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all Positions*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*
AC30	3 Pozisyonlu *3 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all Positions*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*
AC31	3 Pozisyonlu *3 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all Positions*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*
AC32	3 Pozisyonlu *3 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all Positions*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*

B	Beyaz *White*	
K	Kırmızı *Red*	
M	Mavi *Blue*	
S	Sarı *Yellow*	
Y	Yeşil *Green*	
H	Siyah *Black*	
BB	Beyaz *White*	Beyaz *White*
HB	Siyah *Black*	Beyaz *White*
HH	Siyah *Black*	Siyah *Black*
KY	Kırmızı *Red*	Yeşil *Green*
SS	Sarı *Yellow*	Sarı *Yellow*
YY	Yeşil *Green*	Yeşil *Green*

0	0 *0*	Yazılı *Printed*
10	I-0 *I-0*	Yazılı *Printed*
1	I *I*	Yazılı *Printed*
2	II *II*	Yazılı *Printed*
12	I-II *I-II*	Yazılı *Printed*
L	LIGHT *LIGHT*	Yazılı *Printed*
OD	OK *Vertical Arrow*	Dikey Yazılı *Printed*
OY	OK *Horizontal Arrow*	Yatay Yazılı *Printed*
OK	OK *Special Arrow*	Özel Yazılı *Printed*
OO	OK *Special Arrow*	Özel Yazılı *Printed*
S	Siren İşareti *Siren Symbol*	*Printed*
Z	Zil İşareti *Siren Symbol*	*Printed*

Örnek: CM1K2DK → Örnek olarak CM metal serisi, start-stop, 100-230 V AC/DC kırmızı ledli, kırmızı renkli, düz, yuvarlak buton seçilmiştir.

Example: *CM1K2DK → CM series, start-stop, 100-230 V AC/DC with red led, red, Flush type button has been selected.*

CM Metal Ø 22 mm Kumanda Buton Tipleri

Metal Ø 22 mm Control Units Types

Yaylı Tip Kumanda Butonlar / Spring Type Control Units

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumination*	Buton Tipi *Button Type*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	Opsiyonel *Optional*		
CM100D*	1	-	√	Düz / *Flush*	B K M S Y H
CM101D*	2	-	√	Düz / *Flush*	B K M S Y H
CM102D*	1	1	√	Düz / *Flush*	B K M S Y H
CM200D*	-	1	√	Düz / *Flush*	B K M S Y H
CM202D*	-	2	√	Düz / *Flush*	B K M S Y H
CM303D*	4	-	√	Düz / *Flush*	B K M S Y H
CM305D*	2	2	√	Düz / *Flush*	B K M S Y H
CM101F*	2	-	√	Kalıcı / *Stay Put*	B K M S Y H
CM102F*	1	1	√	Kalıcı / *Stay Put*	B K M S Y H
CM200F*	-	1	√	Kalıcı / *Stay Put*	B K M S Y H
CM202F*	-	2	√	Kalıcı / *Stay Put*	B K M S Y H
CM101H*	1	1	√	Çıkık / *Extended*	B K M S Y H
CM102H*	1	1	√	Çıkık / *Extended*	B K M S Y H
CM200H*	-	1	√	Çıkık / *Extended*	B K M S Y H
CM202H*	-	2	√	Çıkık / *Extended*	B K M S Y H
CM100M*	1	-	-	Mantar / *Mushroom*	K S Y H
CM101M*	2	-	-	Mantar / *Mushroom*	K S Y H
CM102M*	1	1	-	Mantar / *Mushroom*	K S Y H
CM200M*	-	1	-	Mantar / *Mushroom*	K S Y H
CM202M*	-	2	-	Mantar / *Mushroom*	K S Y H

- **(*) yerine istenen rengin harfi eklenir.**
- *Please choose the colour and replace (*) with the letter.*
- **• Işık Bloğu seçenekleri için bakınız sayfa 22 Kumanda Butonları Seçim Tablosu.**
- *• See page 22 Control Units Selection table for illumination block types.*

CM100DY

CM100HY

CM200MK

Seçici Tip Kumanda Butonları / *Selector Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Işık	Etiket	Buton Tipi	Pozisyon	Renk
Code	*Contact Block Type*		*Illumi-nation*	*Button Plates*	*Button Type*	*Position*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	LED *LED*				
CM100S20	1	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CM101S20	2	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CM102S20	1	1	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CM100S21	1	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CM101S21	2	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CM102S21	1	1	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CM101S30	2	-	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı-60° / *3 Position-Stay Put-60°*	H
CM102S30	1	1	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı-60° / *3 Position-Stay Put-60°*	H
CM101S31	2	-	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
CM102S31	1	1	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
CM101S32	2	-	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	H
CM102S32	1	1	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	H

- **Işık Bloğu seçenekleri için bakınız sayfa 22 Kumanda Butonları Seçim Tablosu.**
- *See page 22 Control Units Selection table for illumination block types.*

CM100S20

CM Metal Ø 22 mm Kumanda Buton Tipleri
Metal Ø 22 mm Control Units Types

Anahtarlı Tip Kumanda Butonları / Key Operated Type Control Units

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Etiket *Button Plates*	Tip *Type*	Pozisyon *Position*		Anahtar Çıkma Pozisyonu *Key Removal Position*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*					
CM100AA20	1	-	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*		0
CM101AA20	2	-	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*		0
CM102AA20	1	1	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*		0
CM100AA21	1	-	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*		0
CM101AA21	2	-	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*		0
CM102AA21	1	1	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*		0
CM101AA30	2	-	(II-0-I)	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*		0
CM102AA30	1	1	(II-0-I)	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*		0
CM101AA31	2	-	(II-0-I)	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*		0
CM102AA31	1	1	(II-0-I)	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / 3 *Position*		0
CM101AA32	2	-	(II-0-I)	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*		0
CM101AA32	2	-	(II-0-I)	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*		0
CM100AC20	1	-	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*		Tüm / *All*
CM101AC20	2	-	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*		Tüm / *All*
CM102AC20	1	1	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*		Tüm / *All*
CM100AC21	1	-	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*		Tüm / *All*
CM101AC21	2	-	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*		Tüm / *All*
CM102AC21	1	1	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*		Tüm / *All*
CM101AC30	2	-	(II-0-I)	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*		Tüm / *All*
CM102AC30	1	1	(II-0-I)	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*		Tüm / *All*
CM101AC31	2	-	(II-0-I)	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*		Tüm / *All*
CM102AC31	1	1	(II-0-I)	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*		Tüm / *All*
CM101AC32	2	-	(II-0-I)	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*		Tüm / *All*
CM101AC32	2	-	(II-0-I)	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*		Tüm / *All*

CM100AC20

Acil Stop Tip Kumanda Butonları / Emergency Stop Type Control Units

Ürün Kodu	Kontak Blok Tipi		Etiket	Tip	Çap (mm)	Renk
Code	*Contact Block Type*		*Button Plates*	*Type*	*Dia (mm)*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*				
CM100E	1	-		Çevirmeli / *Turn to Release*	Ø 40mm	K S
CM102E	1	1		Çevirmeli / *Turn to Release*	Ø 40mm	K S
CM200E	-	1		Çevirmeli / *Turn to Release*	Ø 40mm	K S
CM202E	-	2		Çevirmeli / *Turn to Release*	Ø 40mm	K S
CM100EE	1	-		Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
CM102EE	1	1		Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
CM200EE	-	1		Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
CM202EE	-	2		Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
CM100EK30	1	-		Çevirmeli Kısa / *Turn to Release*	Ø 30mm	K
CM102EK30	1	1		Çevirmeli Kısa / *Turn to Release*	Ø 30mm	K
CM200EK30	-	1		Çevirmeli Kısa / *Turn to Release*	Ø 30mm	K
CM202EK30	-	2		Çevirmeli Kısa / *Turn to Release*	Ø 30mm	K

CM200E

CM200EE

Çiftli Tip Kumanda Butonları / Double Type Control Units

Ürün Kodu	Kontak Blok Tipi		Işık	Buton Tipi		Renk
Code	*Contact Block Type*		*Illumination*	*Control Unit Type*		*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	Opsiyonel *Optional*			
CM102K20HB	1	1	√	Çiftli / *Double*	Düz Kafalı / *Flush*	B H
CM102K20HS	1	1	√	Çiftli / *Double*	Düz Kafalı / *Flush*	S H
CM102K20KY	1	1	√	Çiftli / *Double*	Düz Kafalı / *Flush*	K Y
CM102K21HB	1	1	√	Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	B H
CM102K21KY	1	1	√	Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	K Y

- **Işık Bloğu seçenekleri için bakınız sayfa 22 Kumanda Butonları Seçim Tablosu.**
- *See page 22 Control Units Selection table for illumination block types.*

• • **Standart çiftli buton B102K20KY, kırmızı / yeşil ve şeffaftır.**
• • *Standard double head control unit is B102K20KY which is red/green and transparent.*

• • • **Çiftli butonda sadece kırmızı ve siyah renkli basma düğmeleri çıkıktır.**
• • • *For double head control unit, only red and black colored buttons are extended position.*

CM102K20KY

CM Metal Ø 22 mm Kumanda Buton Tipleri

Metal Ø 22 mm Control Units Types

Joystick Tip Kumanda Butonları / *Joystick Type Control Units*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Etiket *Button Plates*	Tip *Type*	Pozisyon *Position*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*				
CM101DJ20	2	-		Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	H
CM101DJ21	2	-		Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	H
CM102DJ21	1	-		Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	H
CM707DJ40	4	-		Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	H
CM707DJ41	4	-		Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	H

CM707DJ40

CM101DJ20

Sinyaller / *Pilot Lights*

Ürün Kodu *Code*	Işık *Illumination*	Nominal Gerilim *Nominal Voltage*	Renk *Colour*
CM050XB	LED	12 - 30V AC/DC	B
CM060XK	LED	12 - 30V AC/DC	K
CM070XM	LED	12 - 30V AC/DC	M
CM080XS	LED	12 - 30V AC/DC	S
CM090XY	LED	12 - 30V AC/DC	Y
CM0B0XB	LED	100 - 230V AC	B
CM0K0XK	LED	100 - 230V AC	K
CM0M0XM	LED	100 - 230V AC	M
CM0S0XS	LED	100 - 230V AC	S
CM0Y0XY	LED	100 - 230V AC	Y

CM090XY

CM050XB

CM0B0XB

CM0M0XM

CM0S0XS

Kontak Blok Tipler / *Contact Block Types*

Ürün Kodu	Kontak Blok Tipi		Işık	Nominal Akım	Nominal Gerilim	Kullanım Yeri	Özellik	Renk
Code	*Contact Block Type*		*Illumination*	*Nominal Current*	*Nominal Voltage*	*Place of Use*	*Features*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*						
C1	1	-	-	4A	230V	Butonluk / *For Control Units*		
C1AU	1	-	-	4A	230V	Butonluk -Altın Kaplamalı *For Control Units-Gold Plated*	Altın Kaplama / *Gold Plated*	
C2	-	1	-	4A	230V	Butonluk / *For Control Units*		
C2AU	-	1	-	4A	230V	Butonluk -Altın Kaplamalı *For Control Units-Gold Plated*	Altın Kaplama / *Gold Plated*	
C12	2	-	-	4A	230V	Joystick- Butonluk *Joystick For Control Units*		
CB5			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*		B
CB6			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*		K
CB7			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*		M
CB8			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*		S
CB9			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*		Y
CBB			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*		B
CBK			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*		K
CBM			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*		M
CBS			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*		S
CBY			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*		Y
CBB4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*		B
CBK4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*		K
CBM4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*		M
CBS4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*		S
CBY4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*		Y

- **Maksimum 2 adet kontak blok arka arkaya eklenebilir.**
- *Max. 2 contact blocks can be added subsequently.*

• • **C1AU, C2AU Altın kaplamalı kontak blok.**
• • *C1AU, C2AU gold plated contact block.*

• • • **C12, Joystik kontak blok.**
• • • *C12, Joystick contact block.*

C1

C2

CBB

CM

Metal Ø 22 mm Kumanda Buton Tipleri
Metal Ø 22 mm Control Units Types

Yedekler / *Spare Parts*

Ürün Kodu	Buton Tipi	Pozisyon	Renk
Code	*Control Unit Types*	*Position*	*Colour*
CMDD*	Düz / *Flush*		B K M S Y H
CMDF*	Kalıcı / *Stay, Put*		B K M S Y H
CMDH*	Çıkık / *Extended*		B K M S Y H
CMDM*	Mantar / *Mushroom*		K S Y
CMDS20	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CMDS21	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
CMDS30	Seçici / *Selector*	3 Pozisyonlu-Kalıcı -60° / *3 Position-Stay Put-60°*	H
CMDS31	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
CMDS32	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	H
CMDAA20	Anahtarlı / *Key Operated*	2 Pozisyonlu, Kalıcı / *2 Position, Stay Put*	
CMDAA21	Anahtarlı / *Key Operated*	2 Pozisyonlu-Dönüşlü / *2 Position-Spring Return*	
CMDAA30	Anahtarlı / *Key Operated*	3 Pozisyonlu-Kalıcı / *3 Position-Stay Put*	
CMDAA31	Anahtarlı / *Key Operated*	3 Pozisyonlu-Tek Dönüşlü / *3 Position-Single Spring Return*	
CMDAC20	Anahtarlı / *Key Operated*	2 Pozisyonlu, Kalıcı / *2 Position, Stay Put*	
CMDAC21	Anahtarlı / *Key Operated*	2 Pozisyonlu-Dönüşlü / *2 Position-Spring Return*	
CMDAC30	Anahtarlı / *Key Operated*	3 Pozisyonlu-Kalıcı / *3 Position-Stay Put*	
CMDAC31	Anahtarlı / *Key Operated*	3 Pozisyonlu-Tek Dönüşlü / *3 Position-Single Spring Return*	
CMDAC32	Anahtarlı / *Key Operated*	3 Pozisyonlu-Çift Dönüşlü / *3 Position-Double Spring Return*	
CMDK20HB	Çiftli / *Double*	Düz Kafalı / *Flush*	B H
CMDK20KY	Çiftli / *Double*	Düz Kafalı / *Flush*	K Y
CMDK21HB	Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	B H
CMDK21KY	Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	K Y
CMDJ20	Joystick	2 Pozisyonlu-Kalıcı / *2 Position-Stay Put*	H
CMDJ21	Joystick	2 Pozisyonlu-Dönüşlü / *2 Position-Spring Return*	H
CMDJ40	Joystick	4 Pozisyonlu-Kalıcı / *4 Position-Stay Put*	H
CMDJ41	Joystick	4 Pozisyonlu-Dönüşlü / *4 Position-Spring Return*	H
CMDX*	Sinyal / *Pilot Lights*		B K M S Y

Özel Tampon Baskılı Butonlar / *Special Pad Printed Control Units*

Ürün Kodu / *Code*	CM102K20KY-10	CM101K20YY-12	CM101K20YY-OK	CM102K20HB-10	CM101K20HH-OK	CM101K20BB-12	CM101K20SH-10	CM101K20SS-12
Baskı / *Print*	I-O	I-II	Oklu / *Arrow Symbol*	I-O	Oklu / *Arrow Symbol*	I-II	I-O	I-II
Ürün Kodu / *Code*	CM100DY-0D	CM100DY-0Y	CM100DH-0D	CM100DH-0Y	CM100DB-0D	CM100DB-0Y	CM100DB-Z	CM100DB-L
Baskı / *Print*	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Zil / Bell	Lamba / Lamp
Ürün Kodu / *Code*	CM100DY-1	CM100DY-2	CM100DB-1	CM100DB-2	CM200DK-0	CM200DH-0	CM200DS-Z	CM200DS-L
Baskı / *Print*	I	II	I	II	0	0	Zil / Bell	Lamba / Lamp

Not: Minimum Sipariş miktarı 50 Adettir.
Note : Minimum Order Quantity : 50 pcs

Aksesuarlar / *Accessories*

Ürün Kodu	Tip	Özellik	Etiket	Malzeme
Code	*Types*	*Features*	*Button Plates*	*Material*
BCIFTLIROZET18	Çiftli Rozet / *Double Legend Plate Holder*	18mm		
BEB	Etanj Başlık / *Silicon Cover*	Düz Buton 22mm / *Flush Button 22mm*		
BEBK20	Etanj Başlık / *Silicon Cover*	Çiftli Butonlar / *Double Buttons*		
BEBK21	Etanj Başlık / *Silicon Cover*	1 Çıkık Kafalı-Çiftli Butonlar *Single Extended -Double Buttons*		
BMUHAFAZA	Emniyet Koruma / *Emergency Protective Cover*	Darbe Muhafaza / *Stroke Protection*		
BPROT	Buton Koruma / *Protective Cover*	Darbe Muhafaza / *Stroke Protection*		
BPUL	*Pul / Plate*	Buton Sıkıştırma / *Button Tightening*		
BROZET08	Rozet / *Legend Plate Holder*	8mm		
BROZET18	Rozet / *Legend Plate Holder*	18mm		
BSOMAN	Somun Anahtarı / *Nut Tightener*			
BET08	Etiket / *Legend Plate*	8mm	BOŞ	
BET08-01	Etiket / *Legend Plate*	8mm	(0-1)	
BET08-01OK	Etiket / *Legend Plate*	8mm	(0-1) OKLU	
BET08-12	Etiket / *Legend Plate*	8mm	(I-II)	
BET08-201	Etiket / *Legend Plate*	8mm	(2-0-1)	
BET08-201OK	Etiket / *Legend Plate*	8mm	(2-0-1) OKLU	
BET08-201OK2	Etiket / *Legend Plate*	8mm	(2-0-1) ÇİFT OKLU	
BET08-START	Etiket / *Legend Plate*	8mm	START	
BET08-STOP	Etiket / *Legend Plate*	8mm	STOP	
BET18	Etiket / *Legend Plate*	18mm	BOŞ	
BET18-01	Etiket / *Legend Plate*	18mm	(0-1)	
BET18-START	Etiket / *Legend Plate*	18mm	START	
BET48P	Etiket / *Legend Plate*	48mm	EMERGENCY	Plastik / *Plastic*
BET60A	Etiket / *Legend Plate*	60mm	ACİL STOP	Alüminyum / *Aluminium*
BET60LED1	Etiket-Işıklı-24V AC/DC *Plate-With LED-24V AC/DC*	60mm	ACİL STOP- *EMERGENCY*	
BET60LED2	Etiket-Işıklı-24V AC/DC *Plate-With LED-24V AC/DC*	60mm	EMERGENCY STOP - *EMERGENCY STOP*	
BET60P	Etiket / *Legend Plate*	60mm	EMERGENCY STOP	Plastik / *Plastic*
BET60P1	Etiket / *Legend Plate*	60mm	ACİL DURDURMA	Plastik / *Plastic*
BET60P2	Etiket / *Legend Plate*	60mm	ARRET D'URGENCE	Plastik / *Plastic*
BET90A	Etiket / *Legend Plate*	90mm	ACİL STOP	Alüminyum / *Aluminium*
BET90P	Etiket / *Legend Plate*	90mm	ACİL STOP	Plastik / *Plastic*
BET90P-1	Etiket / *Legend Plate*	90mm	ACİL DURDURMA	Plastik / *Plastic*

BROZET18

BROZET08

BET60LED1

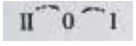
BET60LED2

BET60P

BPUL

BPROT

BMUHAFAZA



BET08-201OK2

BET08-201OK

BET08

BET18

BET08-START

BET08-STOP

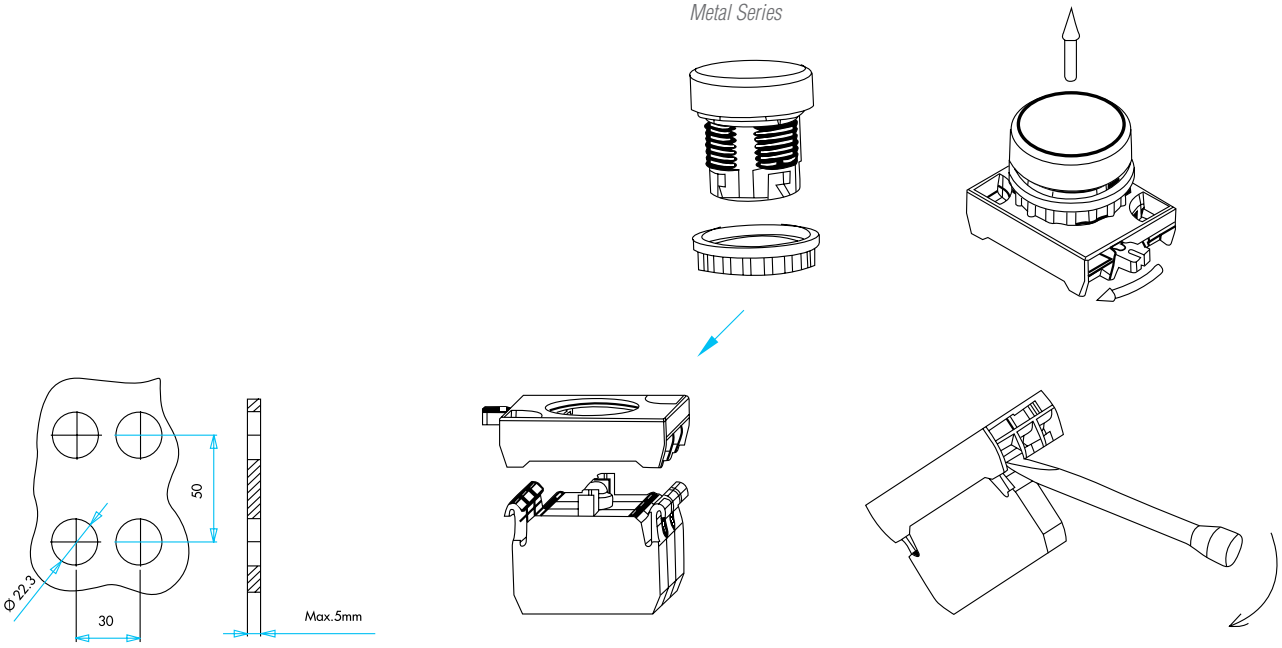
BET08-01

BET08-01OK

BET08-201

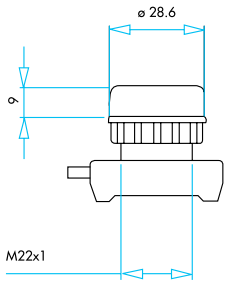
MONTAJ ŞEKLİ / *ASSEMBLY*

Metal Seri
Metal Series

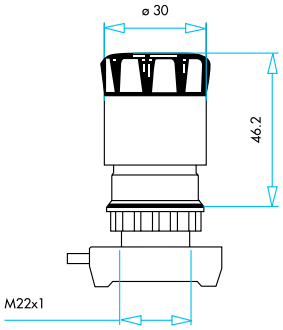


Emniyet ve mantar butonlarında 30 mm ölçüsü 45 mm'dir.
30 mm size is 45 mm in emergency and mushroom buttons.

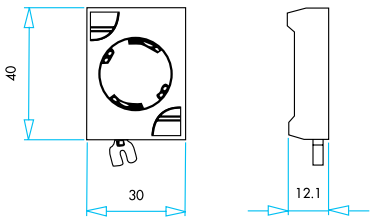
BOYUTLAR (mm) / *DIMENSIONS (mm)*



Düz, Yaylı
Flush, Spring Return



Acil Stop Ø 30 mm
Emergency Stop Ø 30 mm



Adaptör
Adapter

CP Serisi Plastik Ø 22mm Kumanda Buton Tipleri

- Maksimum güvenlik için parmak koruma
- Darbe dayanıklı polikarbonat buton lensi
- Alev almayan V0 PA6.6 kontak bloklar
- İstenildiğinde çeşitli ışıklı kontak blokların uygunluğu
- Kolaylıla tek elle adaptörün sökülebilmesi, adaptöre kontak blokların takılmasında alete ihtiyaç olmaması
- Led ışıkla, minimum ısınma maksimum ömür
- Arka arkaya 2 kontak blok takılabilir
- Farklı dillerde ve özel işaretli çeşitli markalama etiketleri
- Üstün silikon conta tekniği ile IP65 koruma
- Tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	:	500.000 açma-kapama min.
Elektriksel Ömür	:	100.000 açma-kapama min.
Çalışma Sıcaklığı	:	min./maks. °C -5/+40
Koruma Sınıfı	:	IP65
Çalışma Sıklığı	:	Yüksüz 3.000 açma-kapama/saat
	:	Yükte 1.200 açma-kapama/saat
Çalışma Gerilimi (Ue)	:	230 V AC
Çalışma Akımı (Ie)	:	4 A
Yalıtım Gerilimi (Ui)	:	300 V
Darbe Dayanım Gerilimi (Uimp)	:	2.5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
İzolasyon Direnci	:	10 MΩ min. (500 V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500 V AC (1 dk. için)
Standart Kontak Malzemesi	:	AgNi
Bağlantı Kablo Kesiti	:	1.5 - 2.5 mm²
Standart	:	UL 508 TS EN 60947-5-1 VDE0660

CP *Series Plastic Ø 22mm Control Units Types*

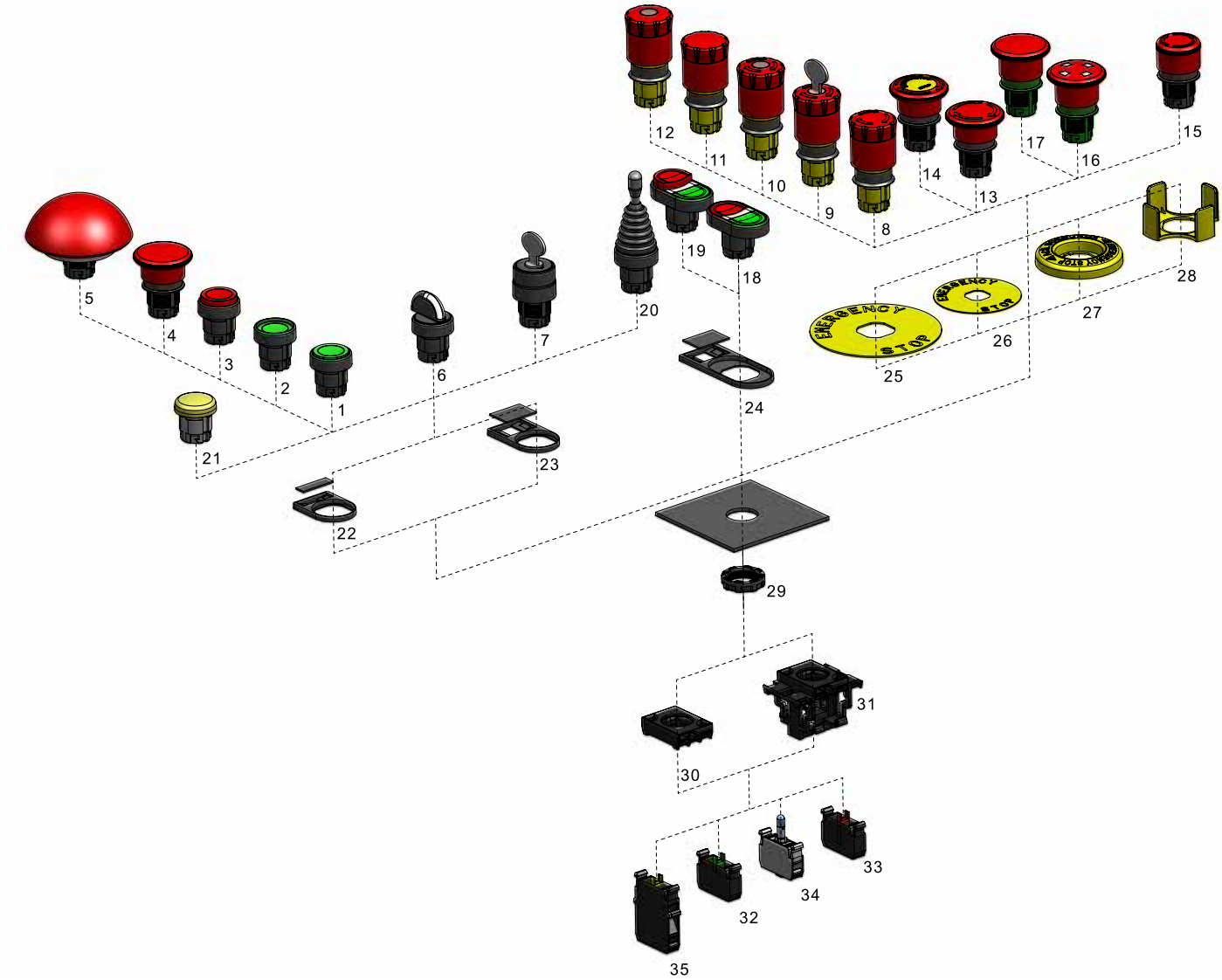
- *Finger safe protection for maximum safety*
- *Impact-resistant polycarbonate button lens*
- *Non-flammable V0 PA6.6 contact blocks*
- *Various illumination contact blocks availablity on request*
- *Easy one-hand adapter removal, tools not required to attach contact blocks to adapter*
- *With LED illumination, minimum warm-up and maximum lifetime*
- *Compact design contact blocks can be stacked by 2 blocks deep*
- *Various legend plates with different languages and custom markings*
- *IP65 protection degree with superior silicone sealing techniques*
- *Variety of products for all areas of application*

Technical Information

Mechanical Life	:	*500.000 operations min.*
Electrical Life	:	*100.000 operations min.*
Operating Temperature	:	*min./max. °C -5/+40*
Protection Degree	:	*IP65*
Operating Frequency	:	*Without load 3.000 operations/hour*
	:	*At full load 1.200 operations/hour*
Operating Voltage (Ue)	:	*230 V AC*
Operating Current (Ie)	:	*4 A*
Insulation Voltage (Ui)	:	*300 V*
Impact Resistance (Uimp)	:	*2.5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500 V AC (For 1 minute)*
Standard Contact Material	:	*AgNi*
Cable Section	:	*1.5 - 2.5 mm²*
Standard	:	*UL 508 TS EN 60947-5-1 VDE0660*

CP Plastik Serisi Ø 22mm Kumanda Butonları Genel Şema

CP Plastic Series Ø 22mm Control Units General Scheme



	Yaylı Tip / *Spring Type*	
1	D	Düz / *Flush*
2	F	Kalıcı / *Stay Put*
3	H	Çıkık / *Extended*
4	M	Mantar, Ø 40 mm / M*ushroom, Ø 40 mm*
5	M72	Mantar, Ø 72 mm / *Mushroom, Ø 72 mm*
	Seçici Tip / *Selector Type*	
6	S	60° / *60°*
	Anahtarlı Tip / *Key Operated Type*	
7	A	
	Acil Stop / *Emergency Stop Type*	
8	E30	Ø 30mm, Çevirmeli / *Ø 30mm, Turn to Release*
9	EA30	Ø 30mm, Anahtarlı, Çevirmeli / *Ø 30mm, Key Operated, Turn to Release*
10	ES30	Ø 30mm, Sinyalli, Çevirmeli / *Ø 30mm, With Signal, Turn to Release*
11	ECN30	Ø 30mm, Çekmeli / *Ø 30mm, Pull to Release*
12	ECS30	Ø 30mm, Sinyalli, Çekmeli / *Ø 30mm, With Signal, Pull to Release*
13	E	Ø 40mm, Çevirmeli / *Ø 40mm, Turn to Release*
14	EE	Ø 40mm, Etiketli, Çevirmeli / *Ø 40mm, With Label, Turn to Release*
15	EK30	Ø 30mm, Kısa, Çevirmeli / *Ø 30mm, Short, Turn to Release*
16	EP	Ø 40mm, Pencereli, Çekmeli / *Ø 40mm, With Window, Pull to Release*
17	EC	Ø 40mm,Çekmeli / *Ø 40mm, Pull to Release*
	Çiftli / *Double*	
18	K20	Düz Kafalı / *Flush*
19	K21	1 Çıkık Kafalı / *Single Extended*
	Joystik Tip / *Joystick*	
20	DJ20	2 Pozisyonlu, Kalıcı / *2 Position, Stay Put*
20	DJ21	2 Pozisyonlu, Dönüşlü / *2 Position, Spring Return*
20	DJ40	4 Pozisyonlu, Kalıcı / *4 Position, Stay Put*
20	DJ41	4 Pozisyonlu, Dönüşlü / *4 Position, Spring Return*
	Sinyal / *Pilots*	
21	X	Yuvarlak, Sinyal / *Round, Pilots*
	Aksesuarlar / *Accessories*	
22	BROZET08	Rozet, 8mm / *Legend Plate Holder, 8mm*
23	BROZET18	Rozet, 18mm / *Legend Plate Holder, 18mm*
24	BCIFTLIROZET18	Rozet, İkiz Buton, 18mm / *Legend Plate Holder, Double, 18mm*
25	BET90A/P	Etiket, Ø90mm Acil Stop, Alüminyum / Plastik / *Legend Plate, Ø90mm Emergency Stop, Aluminium / Plastic*
26	BET60A/P	Etiket, Ø60mm Acil Stop, Alüminyum / Plastik / *Legend Plate, Ø60mm Emergency Stop, Aluminium / Plastic*
27	BET60LED	Etiket, Ø60mm Acil Stop, LED / *LED Illuminated Legend Plate, Ø60mm Emergency Stop*
28	CMUHAFAZA	Emniyet Koruma / *Emergency Protective Cover*
29	SOMUN	Plastic Somun, M22 X 1,5 / *Plastic Nut, M22 X 1,5*
30	ADAPTÖR	Adaptör / *Adapter*
31	EKLİ ADAPTÖR	Ek Adaptör / *Additional Adapter*
32	START KONTAKBLOK	Kontak Blok, Start (NA) / *Contact Block, Start (NO)*
33	STOP KONTAKBLOK	Kontak Blok, Stop (NK) / Contact Block, Stop (NC)
34	LED KONTAKBLOK	Kontak Blok, LED / *Contact Block, LED*
35	JOYSTIK KONTAKBLOK	Kontak, Joystik / *Contact Block, Joystick*

CP Serisi Kumanda Butonlar Seçim Tablosu
Series Control Units Selection Table

Seri	Kontak Blok Kombinasyonu			Buton Tipi
CP	1	K	2	D
Series	*Contact Block Combination*			*Button Type*

Seri
Series

CP	Plastik Serisi Ø 22mm Kumanda Butonları *Plastic Series Ø 22mm Control Units*

Kontak Blok Tipi
Contact Block Type

0	Boş *Empty*		
1	Start *Start*	Butonluk *For Button*	
2	Stop *Stop*	Butonluk *For Button*	
3	Yanyana *Tandem*	Start *Start*	Start *Start*
4	Yanyana *Tandem*	Start *Start*	Stop *Stop*
5	Yanyana *Tandem*	Stop *Stop*	Stop *Stop*
6	Start *Start*	Start *Start*	Düşey *Back to Back*
7	Start *Start*	Stop *Stop*	Joystick İçin *For Joystick*

Kontak Blok Tipi
Contact Block Type

0	Boş *Empty*		
1	Start *Start*	Butonluk *For Button*	
2	Stop *Stop*	Butonluk *For Button*	
3	Yanyana *Tandem*	Start *Start*	Start *Start*
4	Yanyana *Tandem*	Start *Start*	Stop *Stop*
5	Yanyana *Tandem*	Stop *Stop*	Stop *Stop*
6	Start *Start*	Start *Start*	Düşey *Back to Back*
7	Start *Start*	Stop *Stop*	Joystick İçin *For Joystick*

Işık Bloğu Tipi
Illumination Block Type

0	Boş *Without Illumination*	
5	12 - 30V AC/DC *12 - 30V AC/DC*	Beyaz LED'li *With White LED*
6	12 - 30V AC/DC *12 - 30V AC/DC*	Kırmızı LED'li *With Red LED*
7	12 - 30V AC/DC *12 - 30V AC/DC*	Mavi LED'li *With Blue LED*
8	12 - 30V AC/DC *12 - 30V AC/DC*	Sarı LED'li *With Yellow LED*
9	12 - 30V AC/DC *12 - 30V AC/DC*	Yeşil LED'li *With Green LED*
B	100 - 230V AC *100 - 230V AC*	Beyaz LED'li *With White LED*
K	100 - 230V AC *100 - 230V AC*	Kırmızı LED'li *With Red LED*
M	100 - 230V AC *100 - 230V AC*	Mavi LED'li *With Blue LED*
S	100 - 230V AC *100 - 230V AC*	Sarı LED'li *With Yellow LED*
Y	100 - 230V AC *100 - 230V AC*	Yeşil LED'li *With Green LED*
Q	Özel Gerilim *Special Voltage*	Beyaz LED'li *With White LED*
X	Özel Gerilim *Special Voltage*	Kırmızı LED'li *With Red LED*
V	Özel Gerilim *Special Voltage*	Mavi LED'li *With Blue LED*
W	Özel Gerilim *Special Voltage*	Sarı LED'li *With Yellow LED*
Z	Özel Gerilim *Special Voltage*	Yeşil LED'li *With Green LED*

Acil Stop Tip
Emergency Stop Type

E	Ø 40mm *Ø 40mm*		Çevirmeli *Turn to Release*
E30	Ø 30mm *Ø 30mm*		Çevirmeli *Turn to Release*
EA30	Ø 30mm *Ø 30mm*	Anahtarlı *Key Operated*	Çevirmeli* *Turn to Release*
ECN30	Ø 30mm *Ø 30mm*		Çekmeli* *Pull to Release*
ECS30	Ø 30mm *Ø 30mm*	Sinyalli *With Signal*	Çekmeli* *Pull to Release*
EE	Ø 40mm *Ø 40mm*	Etiketli *With Label*	Çevirmeli *Turn to Release*
EK30	Ø 30mm *Ø 30mm*	Kısa *Short*	Çevirmeli* *Turn to Release*
EP	Ø 40mm *Ø 40mm*	Pencereli *With Window*	Çekmeli *Pull to Release*
ES30	Ø 30mm *Ø 30mm*	Sinyalli *With Signal*	Çevirmeli* *Turn to Release*
EC	Ø 40mm *Ø 40mm*		Çekmeli* *Pull to Release*

Çiftli Tip
DoubleType

K20	Düz Kafalı *Flush*
K21	1 Çıkık Kafalı *Single Extended*

Joystick Tip
Joystick Type

DJ20	2 Pozisyonlu *2 Position*	Kalıcılı *Stay Put*
DJ21	2 Pozisyonlu *2 Position*	Dönüşlü *Spring Return*
DJ40	4 Pozisyonlu *4 Position*	Kalıcılı *Stay Put*
DJ41	4 Pozisyonlu *4 Position*	Dönüşlü *Spring Return*

Sinyal
Pilot Lights

X	Sinyal *Pilot Lights*

Renk	Yazı
K	1
Colour	*Pad Printing*

Buton Tipi
Button Type

Yaylı Tip
Spring Type

D	Düz *Flush*		
F	Kalıcı *Stay Put*		
H	Çıkık *Extended*		
M	Mantar *Mushroom*	Ø 40 mm *Ø 40 mm*	
M72	Mantar *Mushroom*	Ø 72 mm *Ø 72 mm*	

Seçici Tip
Selector Type

S20	2 Pozisyonlu *2 Position*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*	
S21	2 Pozisyonlu *2 Position*	Dönüşlü *Spring Return*	(0-I) *(0-I)*	60° *60°*	
S30	3 Pozisyonlu *3 Position*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*	
S31	3 Pozisyonlu *3 Position*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
S32	3 Pozisyonlu *3 Position*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	

Anahtarlı Tip
Key Operated Type

AA20	2 Pozisyonlu *2 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 position*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*	
AA21	2 Pozisyonlu *2 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 position*	Dönüşlü *Spring Return*	(0-I) *(0-I)*	60° *60°*	
AA30	3 Pozisyonlu *3 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 position*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*	
AA31	3 Pozisyonlu *3 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 position*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
AA32	3 Pozisyonlu *3 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 position*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
AC20	2 Pozisyonlu *2 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all positions*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*	
AC30	3 Pozisyonlu *3 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all positions*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*	
AC31	3 Pozisyonlu *3 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all positions*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	
AC32	3 Pozisyonlu *3 Position*	Tüm Pozisyonlarda Anahtarı Çıkan *Key Removal at all positions*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*	

B	Beyaz *White*	
K	Kırmızı *Red*	
M	Mavi *Blue*	
S	Sarı *Yellow*	
Y	Yeşil *Green*	
H	Siyah Mat *Black Mat*	
BB	Beyaz *White*	Beyaz *White*
HB	Siyah *Black*	Beyaz *White Mat*
HH	Siyah *Black*	Siyah *Black*
KY	Kırmızı *Red*	Yeşil *Green*
SS	Sarı *Yellow*	Sarı *Yellow*
YY	Yeşil *Green*	Yeşil *Green*

0	0 *0*	Yazılı *Printed*
10	I-0 *I-0*	Yazılı *Printed*
1	I *I*	Yazılı *Printed*
2	II *II*	Yazılı *Printed*
12	I-II *I-II*	Yazılı *Printed*
L	LIGHT *LIGHT*	Yazılı *Printed*
OD	OK *Vertical Arrow*	Dikey Yazılı *Printed*
OY	OK *Horizontal Arrow*	Yatay Yazılı *Printed*
OK	OK *Special Arrow*	Özel Yazılı *Printed*
OO	OK *Special Arrow*	Özel Yazılı *Printed*
S	Siren İşareti *Siren Symbol*	*Printed*
Z	Zil İşareti *Bell Symbol*	*Printed*

Örnek: CP1K2DK ⟶ Örnek olarak CP plastik serisi, start-stop, 100-230 V AC/DC kırmızı ledli, kırmızı renkli, düz, buton seçilmiştir.

Example: *CP1K2DK ⟶ CP series, start-stop, 100-230 V AC/DC with red LED, red, Flush button has been selected.*

CP Plastik Ø 22 mm Kumanda Buton Tipleri
Plastic Ø 22 mm Control Units Types

Yaylı Tip Kumanda Butonlar / Spring Type Control Units

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumination*	Buton Tipi *Button Type*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	Opsiyonel *Optional*		
CP100D*	1	-	√	Düz / *Flush*	B K M S Y H
CP101D*	2	-	√	Düz / *Flush*	B K M S Y H
CP102D*	1	1	√	Düz / *Flush*	B K M S Y H
CP200D*	-	1	√	Düz / *Flush*	B K M S Y H
CP202D*	-	2	√	Düz / *Flush*	B K M S Y H
CP303D*	4	-	√	Düz / *Flush*	B K M S Y H
CP305D*	2	2	√	Düz / *Flush*	B K M S Y H
CP100F*	1	-	√	Kalıcı / *Stay Put*	B K M S Y H
CP101F*	2	-	√	Kalıcı / *Stay Put*	B K M S Y H
CP102F*	1	1	√	Kalıcı / *Stay Put*	B K M S Y H
CP200F*	-	1	√	Kalıcı / *Stay Put*	B K M S Y H
CP202F*	-	2	√	Kalıcı / *Stay Put*	B K M S Y H
CP101H*	1	1	√	Çıkık / *Extended*	B K M S Y H
CP102H*	1	1	√	Çıkık / *Extended*	B K M S Y H
CP200H*	-	1	√	Çıkık / *Extended*	B K M S Y H
CP202H*	-	2	√	Çıkık / *Extended*	B K M S Y H
CP100M*	1	-	-	Mantar / *Mushroom*	K S Y H
CP101M*	2	-	-	Mantar / *Mushroom*	K S Y H
CP102M*	1	1	-	Mantar / *Mushroom*	K S Y H
CP200M*	-	1	-	Mantar / *Mushroom*	K S Y H
CP202M*	-	2	-	Mantar / *Mushroom*	K S Y H
CP100M72*	1	-	-	Mantar Ø 72 mm / *Mushroom Ø 72 mm*	K H
CP200M72*	-	1	-	Mantar Ø 72 mm / *Mushroom Ø 72 mm*	K H

- **(*) yerine istenen rengin harfi eklenir.**
- *Please choose the colour and replace (*) with the letter.*

- • **Işık Bloğu seçenekleri için bakınız sayfa 36 Kumanda Butonları Seçim Tablosu.**
- • *See page 36 Control Units Selection table for illumination block types.*

CP200DK

CP100HK

Seçici Tip Kumanda Butonları / *Selector Type Control Units*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumi-nation*	Etiket *Button Plates*	Buton Tipi *Button Type*	Pozisyon *Position*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	LED *LED*				
CP100S20	1	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CP101S20	2	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CP102S20	1	1	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CP100S21	1	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CP101S21	2	-	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CP102S21	1	1	√	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CP101S30	2	-	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı-60° / *3 Position-Stay Put-60°*	H
CP102S30	1	1	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı-60° / *3 Position-Stay Put-60°*	H
CP101S31	2	-	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
CP102S31	1	1	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
CP101S32	2	-	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	H
CP102S32	1	1	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	H
CP303S30	4	-	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı-60° / *3 Position-Stay Put-60°*	H
CP305S30	2	2	√	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı-60° / *3 Position-Stay Put-60°*	H

- **Işık Bloğu seçenekleri için bakınız sayfa 36 Kumanda Butonları Seçim Tablosu.**
- *See page 36 Control Units Selection table for illumination block types.*

CP100S20

CP Plastik Ø 22 mm Kumanda Buton Tipleri

Plastic Ø 22 mm Control Units Types

Anahtarlı Tip Kumanda Butonları / Key Operated Type Control Units

Ürün Kodu	Etiket	Tip	Pozisyon	Anahtar Çıkma Pozisyonu
Code	*Button Plates*	*Type*	*Position*	*Key Removal Position*
CP100AA20	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	0
CP101AA20	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	0
CP102AA20	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	0
CP100AA21	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	0
CP101AA21	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	0
CP102AA21	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	0
CP101AA30	(II-0-I)	Kalıcı / *Stay Put*	*3 Pozisyonlu / 3 Position*	0
CP102AA30	(II-0-I)	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*	0
CP101AA31	(II-0-I)	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*	0
CP102AA31	(II-0-I)	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*	0
CP101AA32	(II-0-I)	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*	0
CP101AA32	(II-0-I)	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*	0
CP100AC20	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	Tüm / *All*
CP101AC20	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	Tüm / *All*
CP102AC20	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	Tüm / *All*
CP100AC21	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	Tüm / *All*
CP101AC21	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	Tüm / *All*
CP102AC21	(0-I)	Dönüşlü / *Spring Return*	2 Pozisyonlu / *2 Position*	Tüm / *All*
CP101AC30	(II-0-I)	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*	Tüm / *All*
CP102AC30	(II-0-I)	Kalıcı / *Stay Put*	3 Pozisyonlu / *3 Position*	Tüm / *All*
CP101AC31	(II-0-I)	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*	Tüm / *All*
CP102AC31	(II-0-I)	Tek Dönüşlü / *Single Spring Return*	3 Pozisyonlu / *3 Position*	Tüm / *All*
CP101AC32	(II-0-I)	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*	Tüm / *All*
CP101AC32	(II-0-I)	Çift Dönüşlü / *Double Spring Return*	3 Pozisyonlu / *3 Position*	Tüm / *All*

CP100AC20

CP100AA32

Acil Stop Tip Kumanda Butonları / Emergency Stop Type Control Units

Ürün Kodu	Kontak Blok Tipi		Tip	Çap (mm)	Renk
Code	*Contact Block Type*		*Type*	*Dia (mm)*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
CP100E	1	-	Çevirmeli / *Turn to Release*	Ø 40mm	K S
CP102E	1	1	Çevirmeli / *Turn to Release*	Ø 40mm	K S
CP200E	-	1	Çevirmeli / *Turn to Release*	Ø 40mm	K S
CP202E	-	2	Çevirmeli / *Turn to Release*	Ø 40mm	K S
CP100EE	1	-	Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
CP102EE	1	1	Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
CP200EE	-	1	Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
CP202EE	-	2	Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
CP100EP	1	-	Pencereli-Çekmeli / *With Window-Pull to Release*	Ø 40mm	K
CP102EP	1	1	Pencereli-Çekmeli / *With Window-Pull to Release*	Ø 40mm	K
CP200EP	-	1	Pencereli-Çekmeli / *With Window-Pull to Release*	Ø 40mm	K
CP202EP	-	2	Pencereli-Çekmeli / *With Window-Pull to Release*	Ø 40mm	K
CP100EK30	1	-	Çevirmeli Kısa / Short, *Turn to Release*	Ø 30mm	K
CP102EK30	1	1	Çevirmeli Kısa / Short, *Turn to Release*	Ø 30mm	K
CP200EK30	-	1	Çevirmeli Kısa / Short, *Turn to Release*	Ø 30mm	K
CP202EK30	-	2	Çevirmeli Kısa / Short, *Turn to Release*	Ø 30mm	K
CP100E30	1	-	Çevirmeli / *Turn to Release*	Ø 30mm	K
CP102E30	1	1	Çevirmeli / *Turn to Release*	Ø 30mm	K
CP200E30	-	1	Çevirmeli / *Turn to Release*	Ø 30mm	K
CP202E30	-	2	Çevirmeli / *Turn to Release*	Ø 30mm	K
CP102ES30	1	1	Sinyalli-Çevirmeli / *With Signal-Turn to Release*	Ø 30mm	K
CP200ES30	-	1	Sinyalli-Çevirmeli / *With Signal-Turn to Release*	Ø 30mm	K
CP102EA30	1	1	Anahtarlı-Çevirmeli / *Key Operated-Turn to Release*	Ø 30mm	K
CP200EA30	-	1	Anahtarlı-Çevirmeli / *Key Operated-Turn to Release*	Ø 30mm	K
CP102EC	1	1	Çekmeli / *Pull to Release*	Ø 40mm	K
CP200EC	-	1	Çekmeli / *Pull to Release*	Ø 40mm	K
CP102ECN30	1	1	Çekmeli / *Pull to Release*	Ø 30mm	K
CP200ECN30	-	1	Çekmeli / *Pull to Release*	Ø 30mm	K
CP102ECS30	1	1	Sinyalli-Çekmeli / *With Signal-Pull to Release*	Ø 30mm	K
CP200ECS30	-	1	Sinyalli-Çekmeli / *With Signal-Pull to Release*	Ø 30mm	K

CP200E

CP200EE

CP200EP

CP200EC

CP200EK30

CP200EA30

CP Plastik Ø 22 mm Kumanda Buton Tipleri
Plastic Ø 22 mm Control Units Types

CP102K20KY

Çiftli Tip Kumanda Butonları / *Double Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Işık	Buton Tipi		Renk
Code	*Contact Block Type*		*Illumination*	*Control Unit Type*		*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	Opsiyonel *Optional*			
CP102K20HB	1	1	√	Çiftli / *Double*	Düz Kafalı / *Flush*	B H
CP102K20HS	1	1	√	Çiftli / *Double*	Düz Kafalı / *Flush*	S H
CP102K20KY	1	1	√	Çiftli / *Double*	Düz Kafalı / *Flush*	K Y
CP102K21HB	1	1	√	Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	B H
CP102K21KY	1	1	√	Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	K Y

- **Işık Bloğu seçenekleri için bakınız sayfa 36 Kumanda Butonları Seçim Tablosu.**
- *See page 36 Control Units Selection table for illumination block types.*

• • **Standart çiftli buton B102K20KY, kırmızı / yeşil ve şeffaftır.**
• • *Standard double head control unit is B102K20KY which is red/green and transparent.*

• • • **Çiftli butonda sadece kırmızı ve siyah renkli basma düğmeleri çıkıktır.**
• • • *For double head control unit, only red and black colored buttons are extended position.*

CP707DJ40

Joystick Tip Kumanda Butonları / *Joystick Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Tip	Pozisyon	Renk
Code	*Contact Block Type*		*Type*	*Position*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
CP101DJ20	2	-	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	H
CP101DJ21	2	-	*Dönüşlü / Spring Return*	2 Pozisyonlu / *2 Position*	H
CP102DJ21	1	1	*Dönüşlü / Spring Return*	2 Pozisyonlu / *2 Position*	H
CP707DJ40	4	-	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	H
CP707DJ41	4	-	*Dönüşlü / Spring Return*	2 Pozisyonlu / *2 Position*	H

CP060XK

Sinyaller / *Pilot Lights*

Ürün Kodu	Işık	Nominal Gerilim	Renk
Code	*Illumination*	*Nominal Voltage*	*Colour*
CP050XB	LED	12 - 30V AC/DC	B
CP060XK	LED	12 - 30V AC/DC	K
CP070XM	LED	12 - 30V AC/DC	M
CP080XS	LED	12 - 30V AC/DC	S
CP090XY	LED	12 - 30V AC/DC	Y
CP0B0XB	LED	100 - 230V AC	B
CP0K0XK	LED	100 - 230V AC	K
CP0M0XM	LED	100 - 230V AC	M
CP0S0XS	LED	100 - 230V AC	S
CP0Y0XY	LED	100 - 230V AC	Y

Kontak Blok Tipler / *Contact Block Types*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumi-nation*	Nominal Akım *Nominal Current*	Nominal Gerilim *Nominal Voltage*	Kullanım Yeri *Place of Use*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*					
C1	1		-	4A	230V AC	Butonluk / *For Control Units*	
C1AU				4A	230V AC	Butonluk -Altın Kaplamalı/ *For Control Units-Gold Plated*	
C2		1	-	4A	230V AC	Butonluk / *For Control Units*	
C2AU				4A	230V AC	Butonluk -Altın Kaplamalı / *For Control Units-Gold Plated*	
C12				4A	230V AC	Joystick- Butonluk / *Joystick For Control Units*	
CB5			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*	B
CB6			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*	K
CB7			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*	M
CB8			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*	S
CB9			LED	5-20mA	12-30V AC/DC	Butonluk / *For Control Units*	Y
CBB			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*	B
CBK			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*	K
CBM			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*	M
CBS			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*	S
CBY			LED	5-15mA	100-230V AC	Butonluk / *For Control Units*	Y
CBB4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*	B
CBK4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*	K
CBM4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*	M
CBS4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*	S
CBY4			LED	4-5mA	110V AC/DC	Butonluk / *For Control Units*	Y
C3	1			4A	230V AC	*Kutuluk / For Boxes*	
C4		1		4A	230V AC	*Kutuluk / For Boxes*	
C3CK	1			4A	230V AC	*C Serisi Butona Uygun Kutuluk / Suitable for C Series Control Unit For Boxes*	
C4CK		1		4A	230V AC	*C Serisi Butona Uygun Kutuluk / Suitable for C Series Control Unit For Boxes*	
C3BK	1			4A	230V AC	*B Serisi Butona Uygun Kutuluk / Suitable for B Series Control Unit For Boxes*	
C4BK		1		4A	230V AC	*B Serisi Butona Uygun Kutuluk / Suitable for B Series Control Unit For Boxes*	
CK5			LED	5-20 mA	12-30V AC/DC	*Kutuluk / For Boxes*	B
CK6			LED	5-20 mA	12-30V AC/DC	*Kutuluk / For Boxes*	K
CK7			LED	5-20 mA	12-30V AC/DC	*Kutuluk / For Boxes*	M
CK8			LED	5-20 mA	12-30V AC/DC	*Kutuluk / For Boxes*	S
CK9			LED	5-20 mA	12-30V AC/DC	*Kutuluk / For Boxes*	Y
CKB			LED	5-15 mA	100-230V AC/DC	*Kutuluk / For Boxes*	B
CKK			LED	5-15 mA	100-230V AC/DC	*Kutuluk / For Boxes*	K
CKM			LED	5-15 mA	100-230V AC/DC	*Kutuluk / For Boxes*	M
CKS			LED	5-15 mA	100-230V AC/DC	*Kutuluk / For Boxes*	S
CKY			LED	5-15 mA	100-230V AC/DC	*Kutuluk / For Boxes*	Y
CKB4			LED	4-5 mA	110V AC/DC	*Kutuluk / For Boxes*	B
CKK4			LED	4-5 mA	110V AC/DC	*Kutuluk / For Boxes*	K
CKM4			LED	4-5 mA	110V AC/DC	*Kutuluk / For Boxes*	M
CKS4			LED	4-5 mA	110V AC/DC	*Kutuluk / For Boxes*	S
CKY4			LED	4-5 mA	110V AC/DC	*Kutuluk / For Boxes*	Y

- **Maksimum 3 adet kontak blok arka arkaya eklenebilir.**
- *Max. 3 contact blocks can be added subsequently.*

- • **C1AU, C2AU Altın kaplamalı kontak blok.**
- • *C1AU, C2AU gold plated contact block.*

- • • **C12, Joystic kontak blok.**
- • • *C12, Joystick contact block.*

C1

C2

C3

C4

CKM

CP Plastik Ø 22 mm Kumanda Buton Tipleri
Plastic Ø 22 mm Control Units Types

Yedekler / Spare Parts

Ürün Kodu *Code*	Çap (mm) *Dia (mm)*	Buton Tipi *Control Unit Types*	Pozisyon *Position*	Renk *Colour*
CPDD*		Düz / *Flush*		B K M S Y H
CPDF*		Kalıcılı / *Stay Put*		B K M S Y H
CPDH*		Çıkık / *Extended*		B K M S Y H
CPDM*		Mantar / *Mushroom*		B K M S Y H
CPDM72*	Ø 72mm	Mantar / *Mushroom*		K H
CPDS20		Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
CPDS21		Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
CPDS30		Seçici / *Selector*	3 Pozisyonlu-Kalıcı -60° / *3 Position-Stay Put-60°*	H
CPDS31		Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	H
CPDS32		Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
CPDAA20		Anahtarlı / *Key Operated*	2 Pozisyonlu- Kalıcı / *2 Position-Stay Put*	
CPDAA21		Anahtarlı / *Key Operated*	2 Pozisyonlu, Dönüşlü / *2 Position, Spring Return*	
CPDAA30		Anahtarlı / *Key Operated*	3 Pozisyonlu, Kalıcı / *3 Position, Stay Put*	
CPDAA31		Anahtarlı / *Key Operated*	3 Pozisyonlu, Tek Dönüşlü / *3 Position, Single Spring Return*	
CPDAA32		Anahtarlı / *Key Operated*	3 Pozisyonlu, Çift Dönüşlü / *3 Position, Double Spring Return*	
CPDAC20		Anahtarlı / *Key Operated*	2 Pozisyonlu, Kalıcı / *2 Position, Stay Put*	
CPDAC21		Anahtarlı / *Key Operated*	2 Pozisyonlu, Dönüşlü / *2 Position, Spring Return*	
CPDAC30		Anahtarlı / *Key Operated*	3 Pozisyonlu, Kalıcı / *3 Position, Stay Put*	
CPDAC31		Anahtarlı / *Key Operated*	3 Pozisyonlu-Tek Dönüşlü / *3 Position - Single Spring Return*	
CPDAC32		Anahtarlı / *Key Operated*	3 Pozisyonlu -Çift Dönüşlü / *3 Position - Double Spring Return*	
CPDE		Acil Stop / *Emergency Stop*	Çevirmeli / *Turn to Release*	
CPDEE	Ø 40mm	Acil Stop / *Emergency Stop*	Etiketli - Çevirmeli / *With Label - Turn to Release*	K
CPDEP	Ø 40mm	Acil Stop / *Emergency Stop*	Pencereli-Çekmeli / *With Window-Pull to Release*	K
CPDEK30	Ø 30mm	Acil Stop / *Emergency Stop*	Kısa, Çevirmeli / *Short, Turn to Release*	K
CPDE30	Ø 30mm	Acil Stop / *Emergency Stop*	Çevirmeli / *Turn to Release*	K
CPDES30	Ø 30mm	Acil Stop / *Emergency Stop*	Sinyalli-Çevirmeli / *With Signal-Turn to Release*	K
CPDEA30	Ø 30mm	Acil Stop / *Emergency Stop*	Anahtarlı-Çevirmeli / *Key Operated-Turn to Release*	K
CPDEC	Ø 40mm	Acil Stop / *Emergency Stop*	Çekmeli / *Pull to Release*	K
CPDECN30	Ø 30mm	Acil Stop / *Emergency Stop*	Çekmeli / *Pull to Release*	K
CPDECS30	Ø 30mm	Acil Stop / *Emergency Stop*	Sinyalli-Çekmeli / *With Signal-Pull to Release*	K
CPDK20KY		Çiftli / *Double*	Düz Kafalı / *Flush*	K
CPDK20HB		Çiftli / *Double*	Düz Kafalı / *Flush*	B H
CPDK20HS		Çiftli / *Double*	Düz Kafalı / *Flush*	S H
CPDK21KY		Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	K Y
CP102K21HB		Çiftli / *Double*	1 Çıkık Kafalı / *Single Extended*	B H
CPDJ20		Joystick	2 Pozisyonlu-Kalıcı / 2 *Position-Stay Put*	H
CPDJ21		Joystick	2 Pozisyonlu-Dönüşlü / 2 *Position-Spring Return*	H
CPDJ40		Joystick	4 Pozisyonlu-Kalıcı / *4 Position-Stay Put*	H
CPDJ41		Joystick	4 Pozisyonlu-Dönüşlü / 4 *Position-Spring Return*	H
CPDX*		Sinyal / *Pilot Lights*	Plastik / *Plastic*	B K M S Y

CPDY

CPDS20

Özel Tampon Baskılı Butonlar / *Special Pad Printed Control Units*

Ürün Kodu / *Code*	CP102K20KY-10	CP101K20YY-12	CP101K20YY-OK	CP102K20HB-10	CP101K20HH-OK	CP101K20BB-12	CP101K20SH-10	CP101K20SS-12
Baskı / *Print*	I-O	I-II	Oklu / *Arrow Symbol*	I-O	Oklu / *Arrow Symbol*	I-II	I-O	I-II
Ürün Kodu / *Code*	CP100DY-0D	CP100DY-0Y	CP100DH-0D	CP100DH-0Y	CP100DB-0D	CP100DB-0Y	CP100DB-Z	CP100DB-L
Baskı / *Print*	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Zil / Bell	Lamba / Lamp
Ürün Kodu / *Code*	CP100DY-1	CP100DY-2	CP100DB-1	CP100DB-2	CP200DK-0	CP200DH-0	CP200DS-Z	CP200DS-L
Baskı / *Print*	I	II	I	II	0	0	Zil / Bell	Lamba / Lamp

Not: Minimum Sipariş miktarı 50 Adettir.
Note : Minimum Order Quantity : 50 pcs

Aksesuarlar / *Accessories*

Ürün Kodu *Code*	Tip *Types*	Özellik *Features*	Etiket *Button Plates*	Malzeme *Material*
CA	Adaptör / *Adapter*			
CA11				
CBUTONORTA	Kontak Baskı Parçası / *Middle Contact Activator*			
CEA	Ek Adaptör / *Additional Adapter*			
CMB				
CMSB				
CMUHAFAZA	Emniyet Koruma / *Emergency Protective Cover*			
BCIFTLIROZET18	Çiftli Rozet / *Double Legend Plate Holder*	18mm		
BEB	Etanj Başlık / *Silicon Cover*	Düz Buton 22mm / *Flush Button 22mm*		
BEBK20	Etanj Başlık / *Silicon Cover*	Çiftli Butonlar / *Double Buttons*		
BEBK21	Etanj Başlık / *Silicon Cover*	1 Çıkık Kafalı-Çiftli Butonlar *Single Extended -Double Buttons*		
BMUHAFAZA	Emniyet Koruma / *Emergency Protective Cover*	Darbe Muhafaza / *Stroke Protection*		
BPROT	Buton Koruma / *Protective Cover*	Darbe Muhafaza / *Stroke Protection*		
BPUL	Pul / *Legend Plate*	Buton Sıkıştırma / *Button Tightening*		
BROZET08	Rozet / *Legend Plate Holder*	8mm		
BROZET18	Rozet / *Legend Plate Holder*	18mm		
BSOMAN	Somun Anahtarı / *Nut Tightener*			
BET08	Etiket / *Legend Plate*	8mm	BOŞ	
BET08-01	Etiket / *Legend Plate*	8mm	(0-1)	
BET08-01OK	Etiket / *Legend Plate*	8mm	(0-1) OKLU	
BET08-12	Etiket / *Legend Plate*	8mm	(I-II)	
BET08-201	Etiket / *Legend Plate*	8mm	(2-0-1)	

CP Plastik Ø 22 mm Kumanda Buton Tipleri
Plastic Ø 22 mm Control Units Types

Aksesuarlar / Accessories

Ürün Kodu	Tip	Özellik	Etiket	Malzeme
Code	*Types*	*Features*	*Button Plates*	*Material*
BET08-2010K	Etiket / *Legend Plate*	8mm	(2-0-1) OKLU	
BET08-2010K2	Etiket / *Legend Plate*	8mm	(2-0-1) ÇİFT OKLU	
BET08-START	Etiket / *Legend Plate*	8mm	START	
BET08-STOP	Etiket / *Legend Plate*	8mm	STOP	
BET18	Etiket / *Legend Plate*	18mm	BOŞ	
BET18-01	Etiket / *Legend Plate*	18mm	(0-1)	
BET18-START	Etiket / *Legend*	18mm	START	
BET48P	Etiket / *Legend Plate*	48mm	EMERGENCY	Plastik / *Plastic*
BET60A	Etiket /*Legend* Plate	60mm	ACİL STOP	Alüminyum / *Aluminium*
BET60LED1	Etiket-Işıklı-24V AC/DC *Plate-With LED-24V AC/DC*	60mm	ACİL STOP - EMERGENCY STOP	
BET60LED2	Etiket-Işıklı-24V AC/DC *Plate-With LED-24V AC/DC*	60mm	EMERGENCY STOP - EMERGENCY STOP	
BET60P	Etiket / *Legend Plate*	60mm	EMERGENCY STOP	Plastik / *Plastic*
BET60P1	Etiket / *Legend Plate*	60mm	ACİL DURDURMA	Plastik / *Plastic*
BET60P2	Etiket / *Legend Plate*	60mm	ARRET D'URGENCE	Plastik / *Plastic*
BET90A	Etiket / *Legend Plate*	90mm	ACİL STOP	Alüminyum / *Aluminium*
BET90P	Etiket / *Plate*	90mm	ACİL STOP	Plastik / *Plastic*
BET90P-1	Etiket / *Plate*	90mm	ACİL DURDURMA	Plastik / *Plastic*

BROZET18

BROZET08

BET60LED1

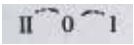
BET60LED2

BET60P

BPUL

BPROT

BMUHAFAZA



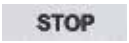
BET08-2010K2

BET08-2010K

BET08

BET18

BET08-START



BET08-STOP

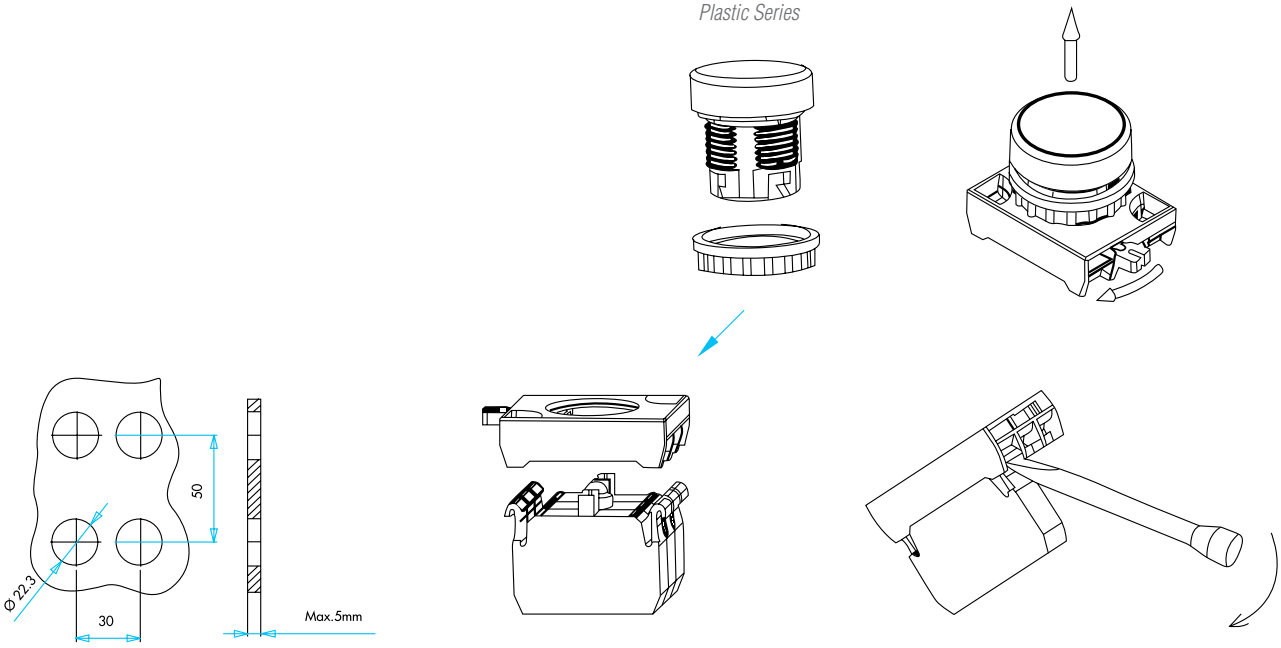
BET08-01

BET08-010K

BET08-201

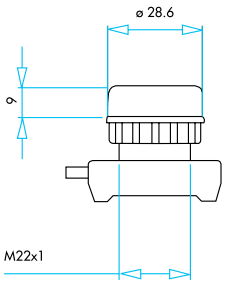
MONTAJ ŞEKLİ / *ASSEMBLY*

Plastik Seri
Plastic Series

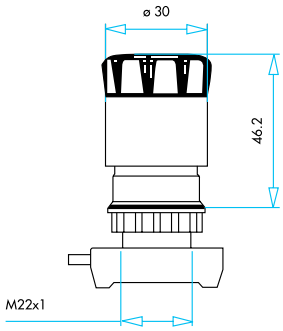


Emniyet ve mantar butonlarında 30 mm ölçüsü 45 mm'dir.
30 mm size is 45 mm in emergency and mushroom buttons.

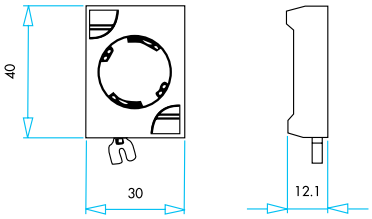
BOYUTLAR (mm) / *DIMENSIONS (mm)*



Düz, Yaylı
Flush, Spring Return



Acil Stop Ø 30 mm
Emergency Stop Ø 30 mm



Adaptör
Adapter

D Serisi Ø 16mm Kumanda Butonları

- Dar alanlarda kullanım kolaylığı
- Darbe dayanıklı polikarbonat buton lensi
- Alev almayan V0 PA6.6 kontak bloklar
- İstenildiğinde çeşitli ışıklı kontak blokların uygunluğu
- Adaptöre kontak blokların takılmasında alete ihtiyaç olmaması
- Led ışıkla, minimum ısınma maksimum ömür
- Tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	:	500.000 açma-kapama min.
Elektriksel Ömür	:	100.000 açma-kapama min.
Çalışma Sıcaklığı	:	min./maks. °C -5/+40
Koruma Sınıfı	:	IP50
Çalışma Sıklığı	:	Yüksüz 3.000 açma-kapama/saat
	:	Yükte 1.200 açma-kapama/saat
Çalışma Gerilimi (Ue)	:	250 V AC
Çalışma Akımı (Ie)	:	1,5 A
Yalıtım Gerilimi (Ui)	:	250 V
Darbe Dayanım Gerilimi (Uimp)	:	2.5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
İzolasyon Direnci	:	10 MΩ min. (500 V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500 V AC (1 dakika için)
Standart Kontak Malzemesi	:	AgNi
Bağlantı Kablo Kesiti	:	FASTON 2,8x0,5 mm
Standart	:	TS EN 60947-5-1 VDE0660

D *Series Ø 16mm Control Units*

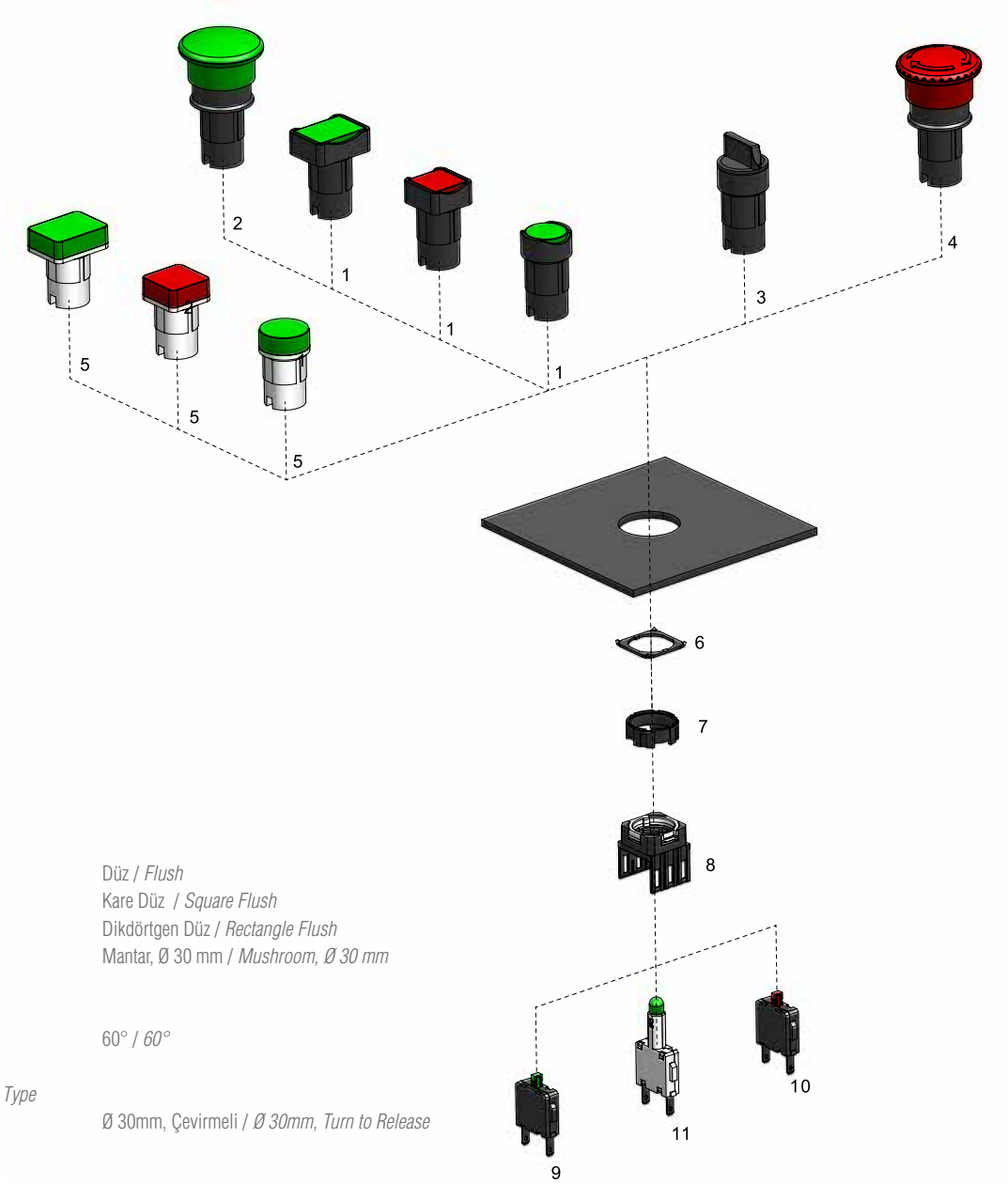
- *Ease of use in limited spaces*
- *Impact-resistant polycarbonate button lens*
- *Non-flammable V0 PA6.6 contact blocks*
- *Various illumination contact blocks availablity on request*
- *Tools not required to attach contact blocks to adapter*
- *With LED illumination, minimum warm-up and maximum lifetime*
- *Variety of products for all areas of application*

Technical Information

Mechanical Life	:	*500.000 operations min.*
Electrical Life	:	*100.000 operations min.*
Operating Temperature	:	*min./max. °C -5/+40*
Protection Degree	:	*IP50*
Operating Frequency	:	*Without load 3.000 operations/hour*
	:	*At full load 1.200 operations/hour*
Operating Voltage (Ue)	:	*250 V AC*
Operating Current (Ie)	:	*1,5 A*
Insulation Voltage (Ui)	:	*250 V*
Impact Resistance (Uimp)	:	*2.5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500 V AC (For 1 minute)*
Standard Contact Material	:	*AgNi*
Cable Section	:	*FASTON 2,8x0,5 mm*
Standard	:	*TS EN 60947-5-1 VDE0660*

D Serisi Ø 16mm Kumanda Butonları Genel Şema

D Series Ø 16mm Control Units General Scheme



	Yaylı Tip / *Spring Type*	
1	YD	Düz / *Flush*
1	KD	Kare Düz / *Square Flush*
1	DD	Dikdörtgen Düz / *Rectangle Flush*
2	M30	Mantar, Ø 30 mm / *Mushroom, Ø 30 mm*
	Seçici Tip / Selector Type	
3	S	60° / *60°*
	Acil Stop / *Emergency Stop Type*	
4	E30	Ø 30mm, Çevirmeli / *Ø 30mm, Turn to Release*
	Sinyal / *Pilots*	
5	KX	D Serisi Ø 16mm, Kare, Sinyal / *D Series Ø 16mm, Square, Pilots*
5	DX	D Serisi Ø 16mm, Dikdörtgen, Sinyal / *D Series Ø 16mm, Rectangle,* Pilots
5	YX	D Serisi Ø 16mm, Yuvarlak, Sinyal, / *D Series Ø 16mm, Round, Pilots*
	Aksesuarlar / *Accessories*	
6	DPUL	Metal Pul / *Metal Washer*
7	SOMUN	Plastik Somun / *Plastic Nut*
8	ADAPTÖR	Adaptör / *Adapter*
9	START KONTAKBLOK	Kontak Blok, Start (NA) / *Contact Block, Start (NO)*
10	STOP KONTAKBLOK	Kontak Blok, Stop (NK) / *Contact Block, Stop (NC)*
11	LED KONTAKBLOK	Kontak Blok, LED / *Contact Block, LED*

D Serisi Kumanda Butonlar Seçim Tablosu
Series Control Units Selection Table

Seri	Kontak Blok Kombinasyonu			Buton Şekli	Buton Tipi	Renk
D	1	6	2	D	D	K
Series	*Contact Block Combination*			*Button Shape*	*Button Type*	*Colour*

Seri
Series

D	Serisi Ø 16mm Kumanda Butonu	*Series Ø 16mm Control Units*

Kontak Blok Tipi
Contact Block Type

0	Boş	*Empty*	
1	Start	*Start*	Butonluk *For Button*
2	Stop	*Stop*	Butonluk *For Button*

Buton Şekli
Button Shape

0	Boş	*Empty*	
1	Start	*Start*	Butonluk *For Button*
2	Stop	*Stop*	Butonluk *For Button*

Kontak Blok Tipi
Contact Block Type

D	Dikdörtgen	*Rectangle*
K	Kare	*Square*
Y	Yuvarlak	*Round*

Işık Bloğu Tipi
Illumination Block Type

0	Boş	*Without Illumination*		
5	12 - 24V AC/DC	*12 - 24V AC/DC*	Beyaz LED'li	*With White LED*
6	12 - 24V AC/DC	*12 - 24V AC/DC*	Kırmızı LED'li	*With Red LED*
7	12 - 24V AC/DC	*12 - 24V AC/DC*	Mavi LED'li	*With Blue LED*
8	12 - 24V AC/DC	*12 - 24V AC/DC*	Sarı LED'li	*With Yellow LED*
9	12 - 24V AC/DC	*12 - 24V AC/DC*	Yeşil LED'li	*With Green LED*

Buton Tipi
Button Type

Yaylı Tip
Spring Type

D	Düz	*Flush*	
M30	Mantar	*Mushroom*	Ø 30 mm *Ø 30 mm*

Seçici Tip
Selector Type

S20	2 Pozisyonlu	*2 Position*	Kalıcı	*Stay Put*	(0-I) *(0-I)* 60° *60°*
S21	2 Pozisyonlu	*2 Position*	Dönüşlü	*Spring Return*	(0-I) *(0-I)* 60° *60°*
S30	3 Pozisyonlu	*3 Position*	Kalıcı	*Stay Put*	(II-0-I) *(II-0-I)* 60° *60°*
S31	3 Pozisyonlu	*3 Position*	Tek Dönüşlü	*Single Spring Return*	(II-0-I) *(II-0-I)* 60° *60°*
S32	3 Pozisyonlu	*3 Position*	Çift Dönüşlü	*Double Spring Return*	(II-0-I) *(II-0-I)* 60° *60°*

Acil Stop Tip
Emergency Stop Type

E30	Ø 30mm	*Ø 30mm*	Çevirmeli *Turn to Release*

Sinyal
Pilot Lights

X	Sinyal	*Pilot Lights*

B	Beyaz	*White*
K	Kırmızı	*Red*
M	Mavi	*Blue*
S	Sarı	*Yellow*
Y	Yeşil	*Green*
H	Siyah	*Black*

Örnek: D162DDK ⟶ D serisi, start-stop, 12 - 24V AC/DC, kırmızı LEDli, kırmızı renkli, Dikdörtgen, Düz, buton seçilmiştir.

Example: *D162DDK ⟶ D series, start-stop, 12 - 24V AC/DC, with red LED red, Rectangle, Flush button has been selected.*

Kumanda Butonları ve Sinyal Lambaları
Control Units and Pilot Lights

Yaylı Tip Kumanda Butonlar / *Spring Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Işık	Buton Tipi	Buton Şekli	Renk
Code	*Contact Block Type*		*Illumination*	*Button Type*	*Button Shape*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	Opsiyonel *Optional*			
D100DD*	1	-	√	Düz / *Flush*	Dikdörtgen / *Rectangle*	B K M S Y H
D101DD*	2	-	√	Düz / *Flush*	Dikdörtgen / *Rectangle*	B K M S Y H
D102DD*	1	1	√	Düz / *Flush*	Dikdörtgen / *Rectangle*	B K M S Y H
D200DD*	-	1	√	Düz / *Flush*	Dikdörtgen / *Rectangle*	B K M S Y H
D202DD*	-	2	√	Düz / *Flush*	Dikdörtgen / *Rectangle*	B K M S Y H
D100KD*	1	-	√	Düz / *Flush*	Kare / *Square*	B K M S Y H
D101KD*	2	-	√	Düz / *Flush*	Kare / *Square*	B K M S Y H
D102KD*	1	1	√	Düz / *Flush*	Kare / *Square*	B K M S Y H
D200KD*	-	1	√	Düz / *Flush*	Kare / *Square*	B K M S Y H
D202KD*	-	2	√	Düz / *Flush*	Kare / *Square*	B K M S Y H
D100YD*	1	-	√	Düz / *Flush*	Yuvarlak / *Round*	B K M S Y H
D101YD*	2	-	√	Düz / *Flush*	Yuvarlak / *Round*	B K M S Y H
D102YD*	1	1	√	Düz / *Flush*	Yuvarlak / *Round*	B K M S Y H
D200YD*	-	1	√	Düz / *Flush*	Yuvarlak / *Round*	B K M S Y H
D202YD*	-	2	√	Düz / *Flush*	Yuvarlak / *Round*	B K M S Y H
D100YM30*	1	-	-	Mantar Ø 30 mm / *Mushroom Ø 30 mm*	Yuvarlak / *Round*	B K M S Y H
D200YM30*	-	1	-	Mantar Ø 30 mm / *Mushroom Ø 30 mm*	Yuvarlak / *Round*	B K M S Y H

D100DDY

D200KDK

D200YDK

Seçici Tip Kumanda Butonları / *Selector Type Control Units*

Ürün Kodu	Buton Tipi	Pozisyon	Renk
Code	*Button Type*	*Position*	*Colour*
D100YS20	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
D100YS21	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
D101YS30	Seçici / *Selector*	3 Pozisyonlu-Kalıcı-60° / *3 Position-Stay Put-60°*	H
D101YS31	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
D101YS32	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü-60° / *3 Position-Double Spring Return-60°*	H

D101YS30

D Serisi Ø 16 mm Kumanda Buton Tipleri
Series Ø 16 mm Control Units Types

Acil Stop Tip Kumanda Butonları / *Emergency Stop Type Control Units*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Etiket *Button Plates*	Tip *Type*	Çap (mm) *Dia (mm)*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*				
D102YE30*	1	1		Çevirmeli / *Turn to Release*	Ø 30mm	K
D200YE30*	1	-		Çevirmeli / *Turn to Release*	Ø 30mm	K

D200YE30

Sinyaller / *Pilot Lights*

Ürün Kodu *Code*	Işık *Illumination*	Nominal Gerilim *Nominal Voltage*	Buton Şekli *Button Shape*	Renk *Colour*
D050DXB	LED	12 - 24V AC/DC	Dikdörtgen / *Rectangle*	B
D050KXB	LED	12 - 24V AC/DC	Kare / *Square*	B
D050YXB	LED	12 - 24V AC/DC	Yuvarlak / *Round*	B
D060DXK	LED	12 - 24V AC/DC	Dikdörtgen / *Rectangle*	K
D060KXK	LED	12 - 24V AC/DC	Kare / *Square*	K
D060YXK	LED	12 - 24V AC/DC	Yuvarlak / *Round*	K
D070DXM	LED	12 - 24V AC/DC	Dikdörtgen / *Rectangle*	M
D070KXM	LED	12 - 24V AC/DC	Kare / *Square*	M
D070YXM	LED	12 - 24V AC/DC	Yuvarlak / *Round*	M
D080DXS	LED	12 - 24V AC/DC	Dikdörtgen / *Rectangle*	S
D080KXS	LED	12 - 24V AC/DC	Kare / *Square*	S
D080YXS	LED	12 - 24V AC/DC	Yuvarlak / *Round*	S
D090DXY	LED	12 - 24V AC/DC	Dikdörtgen / *Rectangle*	Y
D090KXY	LED	12 - 24V AC/DC	Kare / *Square*	Y
D090YXY	LED	12 - 24V AC/DC	Yuvarlak / *Round*	Y

D060DXK

D080KXS

D070YXM

Kontak Blok Tipler / *Contact Block Types*

Ürün Kodu	Kontak Blok Tipi		Işık	Nominal Gerilim	Renk
Code	*Contact Block Type*		*Illumination*	*Nominal Voltage*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
D1	1	-	-	240V	-
D2	-	1	-	240V	-
D5	-	-	LED	12 - 24V AC/DC	B
D6	-	-	LED	12 - 24V AC/DC	K
D7	-	-	LED	12 - 24V AC/DC	M
D8	-	-	LED	12 - 24V AC/DC	S
D9	-	-	LED	12 - 24V AC/DC	Y

D9

D2

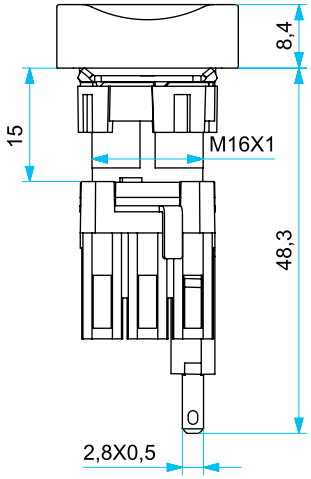
Yedekler / *Spare Parts*

Ürün Kodu	Buton Şekli	Buton Tipi	Renk
Code	*Button Shape*	*Control Unit Types*	*Colour*
DDD*	Dikdörtgen / *Rectangle*	Düz / *Flush*	B K M S Y H
DDK*	Kare / *Square*	Düz / *Flush*	B K M S Y H
DDX*	Dikdörtgen / *Rectangle*	Sinyal / *Pilot Lights*	B K M S Y H
DDY*	Yuvarlak / *Round*	Düz / *Flush*	B K M S Y H
DDYE30K	Yuvarlak / *Round*	Acil Stop / *Emergency Stop*	K
DDYM30*	Yuvarlak / *Round*	Mantar / *Mushroom*	B K M S Y H
DKX*	Kare / *Square*	Sinyal / *Pilot Lights*	K

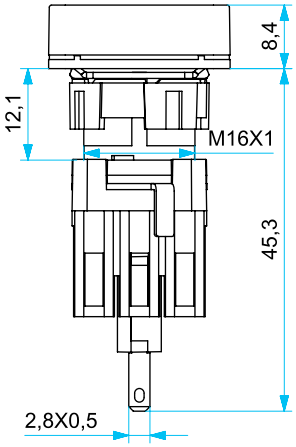
Aksesuarlar / *Accessories*

Ürün Kodu	Tip
Code	*Type*
DA	Adaptör / *Adapter*

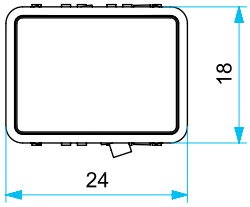
BOYUTLAR (mm) / *DIMENSIONS (mm)*



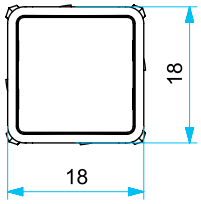
Dikdörtgen-Kare-Yuvarlak Buton
Rectangle-Square-Round Button



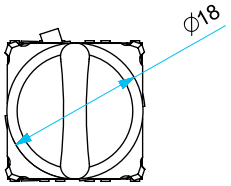
Dikdörtgen-Kare-Yuvarlak Led Buton
Rectangle-Square-Round LED Button

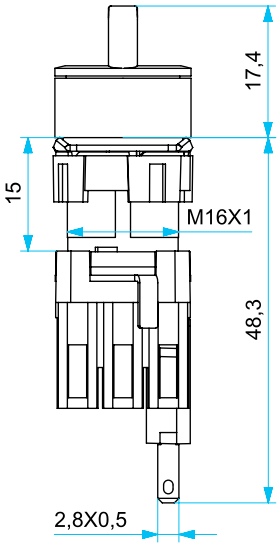


Dikdörtgen Buton
Rectangle Button

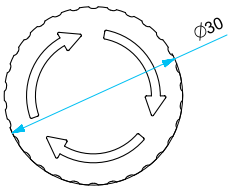


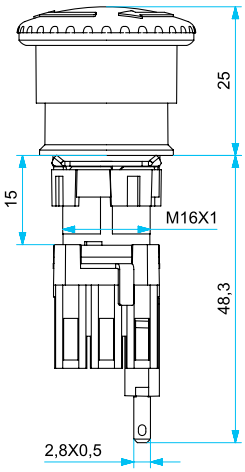
Kare Buton
Square Button



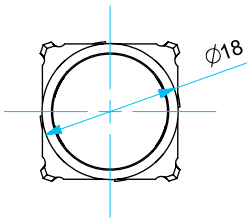


Seçici Buton
Selector Button





Emniyet Mantar Buton
Emergency Mushroom Button



Yuvarlak Buton
Round Button

H Serisi Ø 30mm Kumanda Butonları

- Darbe dayanıklı polikarbonat buton lensi
- Alev almayan V0 PA6.6 kontak bloklar
- İstenildiğinde çeşitli ışıklı kontak blokların uygunluğu
- Adaptöre kontak blokların takılmasında alete ihtiyaç olmaması
- Led ışıkla, minimum ısınma maksimum ömür
- Arka arkaya 2 kontak blok takılabilir
- Tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	:	500.000 açma-kapama min.
Elektriksel Ömür	:	100.000 açma-kapama min.
Çalışma Sıcaklığı	:	min./maks. °C -5/+40
Koruma Sınıfı	:	IP50
Çalışma Sıklığı	:	Yüksüz .3000 açma-kapama/saat
	:	Yükte 1.200 açma-kapama/saat
Çalışma Gerilimi (Ue)	:	250 V AC
Çalışma Akımı (Ie)	:	4 A
Yalıtım Gerilimi (Ui)	:	300 V
Darbe Dayanım Gerilimi (Uimp)	:	2.5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
İzolasyon Direnci	:	10 MΩ min. (500 V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500 V AC (1 dk. için)
Standart Kontak Malzemesi	:	AgNi
Bağlantı Kablo Kesiti	:	1.5 - 2.5 mm²
Standart	:	UL 508 TS EN 60947-5-1 VDE0660

Kontak Bloklarda

H Series Ø 30mm Control Units

- *Impact-resistant polycarbonate button lens*
- *Non-flammable V0 PA6.6 contact blocks*
- *Various illumination contact blocks availablity on request*
- *Tools not required to attach contact blocks to adapter*
- *With LED illumination, minimum warm-up and maximum lifetime*
- *Contact blocks can be stacked by two blocks deep*
- *Variety of products for all areas of application*

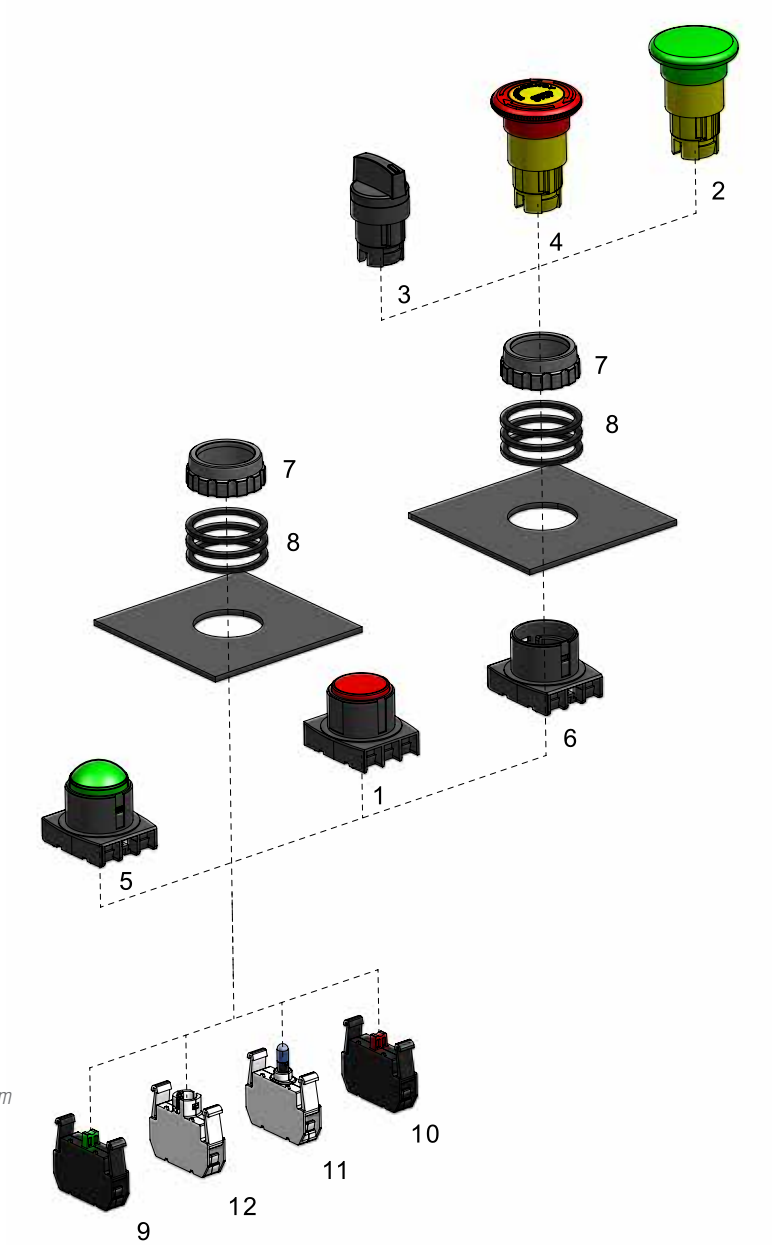
Technical Information

Mechanical Life	:	*500.000 operations min.*
Electrical Life	:	*100.000 operations min.*
Operating Temperature	:	*min./max. °C -5/+40*
Protection Degree	:	*IP50*
Operating Frequency	:	*Without load 3000 operations/hour*
	:	*At full load 1200 operations/hour*
Operating Voltage (Ue)	:	*250 V AC*
Operating Current (Ie)	:	*4 A*
Insulation Voltage (Ui)	:	*300 V*
Impact Resistance (Uimp)	:	*2.5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500 V AC (For 1 minute)*
Standard Contact Material	:	*AgNi*
Cable Section	:	*1.5 - 2.5 mm2*
Standard	:	*UL 508 TS EN 60947-5-1 VDE0660*

Contact Blocks

H Serisi Ø 30mm Kumanda Butonları Genel Şema

H Series Ø 30mm Control Units General Scheme



	Yaylı Tip / *Spring Type*	
1	D	Düz / *Flush*
2	M	Mantar, Ø 40 mm *Mushroom, Ø 40 mm*
	Seçici Tip / *Selector Type*	
3	S	60° / *60°*
	Acil Stop / *Emergency Stop Type*	
4	EE	Ø 40mm, Etiketli, Çevirmeli *Ø 40mm, With Label, Turn to Release*
	Sinyal / *Pilots*	
5	X	Yuvarlak, Sinyal / *Round, Pilots,*
	Aksesuarlar / *Accessories*	
6	ADAPTÖR	Adaptör / *Adapter*
7	SOMUN	Plastik Somun / *Plastic Nut*
8	CONTA	Mesafe Ayarlama Contası / *Spacing Gasket*
9	START KONTAKBLOK	Kontak Blok, Start (NA) / *Contact Block, Start (NO)*
10	STOP KONTAKBLOK	Kontak Blok, Stop (NK) / *Contact Block, Stop (NC)*
11	AMPULLU LED	Ba9S Duylu Işık Kontak Blok / *Lampholder for Ba9S Bulbs*
12	LED KONTAKBLOK	Kontak Blok, LED / *Contact Block, LED*

H Serisi Kumanda Butonlar Seçim Tablosu
Series Control Units Selection Table

Seri	Kontak Blok Kombinasyonu			Buton Tipi	Renk
H	1	K	2	D	K
Series	*Contact Block Combination*			*Button Type*	*Colour*

Seri
Series

H	Serisi Ø 30mm Kumanda Butonu	*Series Ø 30mm Control Units*

Kontak Blok Tipi
Contact Block Type

0	Boş	*Empty*	
1	Start	*Start*	Butonluk *For Button*
2	Stop	*Stop*	Butonluk *For Button*

Kontak Blok Tipi
Contact Block Type

0	Boş	*Empty*	
1	Start	*Start*	Butonluk *For Button*
2	Stop	*Stop*	Butonluk *For Button*

Işık Bloğu Tipi
Illumination Block Type

0	Boş	*Without Illumination*	
3	Işık Blok	*Illumination Block*	Ba9S Ampullere Uygun Duylu *Suitable for Ba9S Bulbs*
5	12 - 30V AC/DC	*12 - 30V AC/DC*	Beyaz LED'li *With White LED*
6	12 - 30V AC/DC	*12 - 30V AC/DC*	Kırmızı LED'li *With Red LED*
7	12 - 30V AC/DC	*12 - 30V AC/DC*	Mavi LED'li *With Blue LED*
8	12 - 30V AC/DC	*12 - 30V AC/DC*	Sarı LED'li *With Yellow LED*
9	12 - 30V AC/DC	*12 - 30V AC/DC*	Yeşil LED'li *With Green LED*
B	100 - 230V AC	*100 - 230V AC*	Beyaz LED'li *With White LED*
K	100 - 230V AC	*100 - 230V AC*	Kırmızı LED'li *With Red LED*
M	100 - 230V AC	*100 - 230V AC*	Mavi LED'li *With Blue LED*
S	100 - 230V AC	*100 - 230V AC*	Sarı LED'li *With Yellow LED*
Y	100 - 230V AC	*100 - 230V AC*	Yeşil LED'li *With Green LED*
Q	Özel Gerilim	*Special Voltage*	Beyaz LED'li *With White LED*
X	Özel Gerilim	*Special Voltage*	Kırmızı LED'li *With Red LED*
V	Özel Gerilim	*Special Voltage*	Mavi LED'li *With Blue LED*
W	Özel Gerilim	*Special Voltage*	Sarı LED'li *With Yellow LED*
Z	Özel Gerilim	*Special Voltage*	Yeşil LED'li *With Green LED*

Buton Tipi
Button Type

Yaylı Tip
Spring Type

D	Düz	*Flush*	
M	Mantar	*Mushroom*	Ø 40 mm *Ø 40 mm*

Seçici Tip
Selector Type

S20	2 Pozisyonlu	*2 Position*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*
S21	2 Pozisyonlu	*2 Position*	Dönüşlü *Spring Return*	(0-I) *(0-I)*	60° *60°*
S30	3 Pozisyonlu	*3 Position*	Kalıcı *Stay Put*	(II-0-I) *(II-0-I)*	60° *60°*
S31	3 Pozisyonlu	*3 Position*	Tek Dönüşlü *Single Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*
S32	3 Pozisyonlu	*3 Position*	Çift Dönüşlü *Double Spring Return*	(II-0-I) *(II-0-I)*	60° *60°*

Acil Stop Tip
Emergency Stop Type

EE	Ø 40mm *Ø 40mm*	Etiketli *With Label*	Çevirmeli *Turn to Release*

Sinyal
Pilot Lights

X	Sinyal	*Pilot Lights*

Renk

B	Beyaz	*White*
K	Kırmızı	*Red*
M	Mavi	*Blue*
S	Sarı	*Yellow*
Y	Yeşil	*Green*
H	Siyah	*Black*

Örnek: H1K2DK → H Serisi, start-stop, 100 - 230V AC, kırmızı LEDli, kırmızı renkli, Düz, buton seçilmiştir.

Example: *H1K2DK → H Series, start-stop, 100 - 230V AC, with red LED Red, Flush button has been selected.*

H Serisi Ø 30 mm Kumanda Buton Tipleri
Series Ø 30 mm Control Units Types

Yaylı Tip Kumanda Butonlar / *Spring Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Işık	Buton Tipi	Renk
Code	*Contact Block Type*		*Illumination*	*Button Type*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	Opsiyonel *Optional*		
H100D*	1	-	√	Düz / *Flush*	B K M S Y H
H101D*	2	-	√	Düz / *Flush*	B K M S Y H
H102D*	1	1	√	Düz / *Flush*	B K M S Y H
H200D*	-	1	√	Düz / *Flush*	B K M S Y H
H202D*	-	2	√	Düz / *Flush*	B K M S Y H
H102M*	1	1	-	Mantar / *Mushroom*	K S H
H200M*	-	1	-	Mantar / *Mushroom*	K S H
H202M*	-	2	-	Mantar / *Mushroom*	K S H

H100DY

H200DK

Seçici Tip Kumanda Butonları / *Selector Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Işık	Etiket	Buton Tipi	Pozisyon	Renk
Code	*Contact Block Type*		*Illumi-nation*	*Button Plates*	*Button Type*	*Position*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	LED *LED*				
H100S20	1	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
H101S20	2	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
H102S20	1	1	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
H100S21	1	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
H101S21	2	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
H102S21	1	1	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
H101S30	2	-	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı -60° / *3 Position-Stay Put-60°*	H
H102S30	1	1	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı -60° / *3 Position-Stay Put-60°*	H
H101S31	2	-	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
H102S31	1	1	-	II-0-I	Seçici / *Selector*	4 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
H101S32	2	-	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	H
H102S32	1	1	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü-60° / *3 Position-Double Spring Return-60°*	H

Acil Stop Tip Kumanda Butonları / *Emergency Stop Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Etiket	Tip	Çap (mm)	Renk
Code	*Contact Block Type*		*Button Plates*	*Type*	*Dia (mm)*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*				
H200E	-	1		Çevirmeli / *Turn to Release*	Ø 40mm	K
H200EE	-	1	√	Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K

H200EE

Sinyaller / *Pilot Lights*

Ürün Kodu	Işık	Nominal Gerilim	Renk
Code	*Illumination*	*Nominal Voltage*	*Colour*
H030X*	Ba9S Duylu		B K M S Y H
H050XB	LED	12 - 30V AC/DC	B
H060XK	LED	12 - 30V AC/DC	K
H070XM	LED	12 - 30V AC/DC	M
H080XS	LED	12 - 30V AC/DC	S
H090XY	LED	12 - 30V AC/DC	Y
H0B0XB	LED	100 - 230V AC	B
H0K0XK	LED	100 - 230V AC	K
H0M0XM	LED	100 - 230V AC	M
H0S0XS	LED	100 - 230V AC	S
H0Y0XY	LED	100 - 230V AC	Y

H060XK

H050XS

H090XY

H Serisi Ø 30 mm Kumanda Buton Tipleri
Series Ø 30 mm Control Units Types

Kontak Blok Tipler / *Contact Block Types*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumination*	Nominal Akım *Nominal Current*	Nominal Gerilim *Nominal Voltage*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*				
B1	1		-	4A	250V	-
B2		1	-	4A	250V	-
B3			Ba9S Duylu	-	-	-
B5			LED	5-20mA	12-30V AC/DC	B
B6			LED	5-20mA	12-30V AC/DC	K
B7			LED	5-20mA	12-30V AC/DC	M
B8			LED	5-20mA	12-30V AC/DC	S
B9			LED	5-20mA	12-30V AC/DC	Y
BB			LED	5-15mA	100-230V AC	B
BK			LED	5-15mA	100-230V AC	K
BM			LED	5-15mA	100-230V AC	M
BS			LED	5-15mA	100-230V AC	S
BY			LED	5-15mA	100-230V AC	Y
BB4			LED	4-5mA	110V AC/DC	B
BK4			LED	4-5mA	110V AC/DC	K
BM4			LED	4-5mA	110V AC/DC	M
BS4			LED	4-5mA	110V AC/DC	S
BY4			LED	4-5mA	110V AC/DC	Y

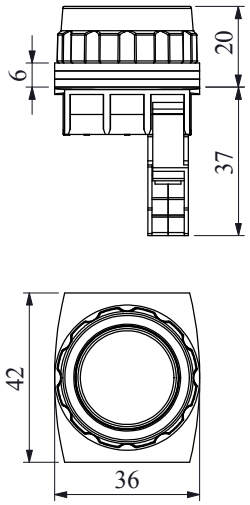
B1

B2

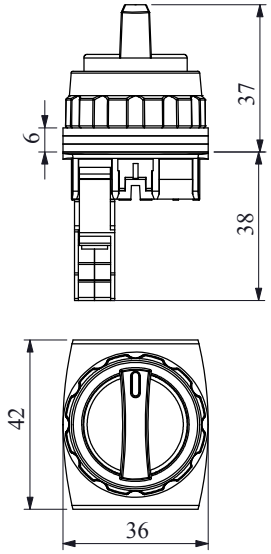
B3

B9

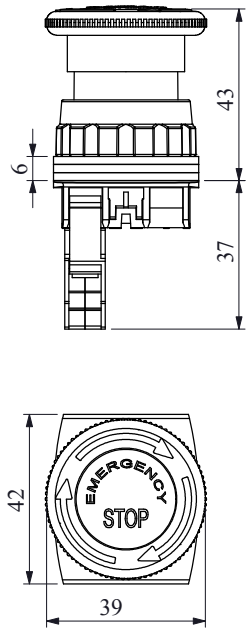
H100DY



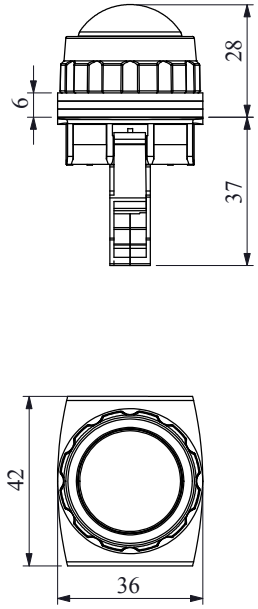
H100S20



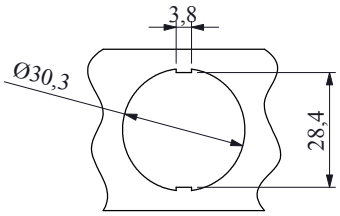
H200EE



H050XB



Montaj Ölçüsü / *Mounting Measures*



MB Monoblok Serisi Ø 22mm Kumanda Butonları

- Maksimum güvenlik için parmak koruma
- Darbe dayanıklı polikarbonat buton lensi
- Farklı dillerde ve özel işaretli çeşitli markalama etiketleri
- Tüm uygulamalara cevap verecek ürün çeşitliliği
- Yekpare sağlam gövde

Teknik Bilgiler

Mekanik Ömür	:	300.000 açma-kapama min.
Elektriksel Ömür	:	100.000 açma-kapama min.
Çalışma Sıcaklığı	:	min./maks. °C -5/+40
Koruma Sınıfı	:	IP50
Çalışma Sıklığı	:	Yüksüz 3.000 açma-kapama/saat
	:	Yükte 1.200 açma-kapama/saat
Çalışma Gerilimi (Ue)	:	240 V AC
Çalışma Akımı I(e)	:	3 A
Yalıtım Gerilimi (Ui)	:	250 V
Darbe Dayanım Gerilimi Uimp	:	2.5 kV
Anma Kesme Kapasitesi AC 15	:	1 kA
İzolasyon Direnci	:	10 MΩ min. (500 V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500 V AC (1 dk. için)
Standart Kontak Malzemesi	:	AgNi
Bağlantı Kablo Kesiti	:	1.5 - 2.5 mm^2
Standart	:	UL 508 TS EN 60947-5-1 VDE0660

MB *Monoblock Series Ø 22mm Control Units*

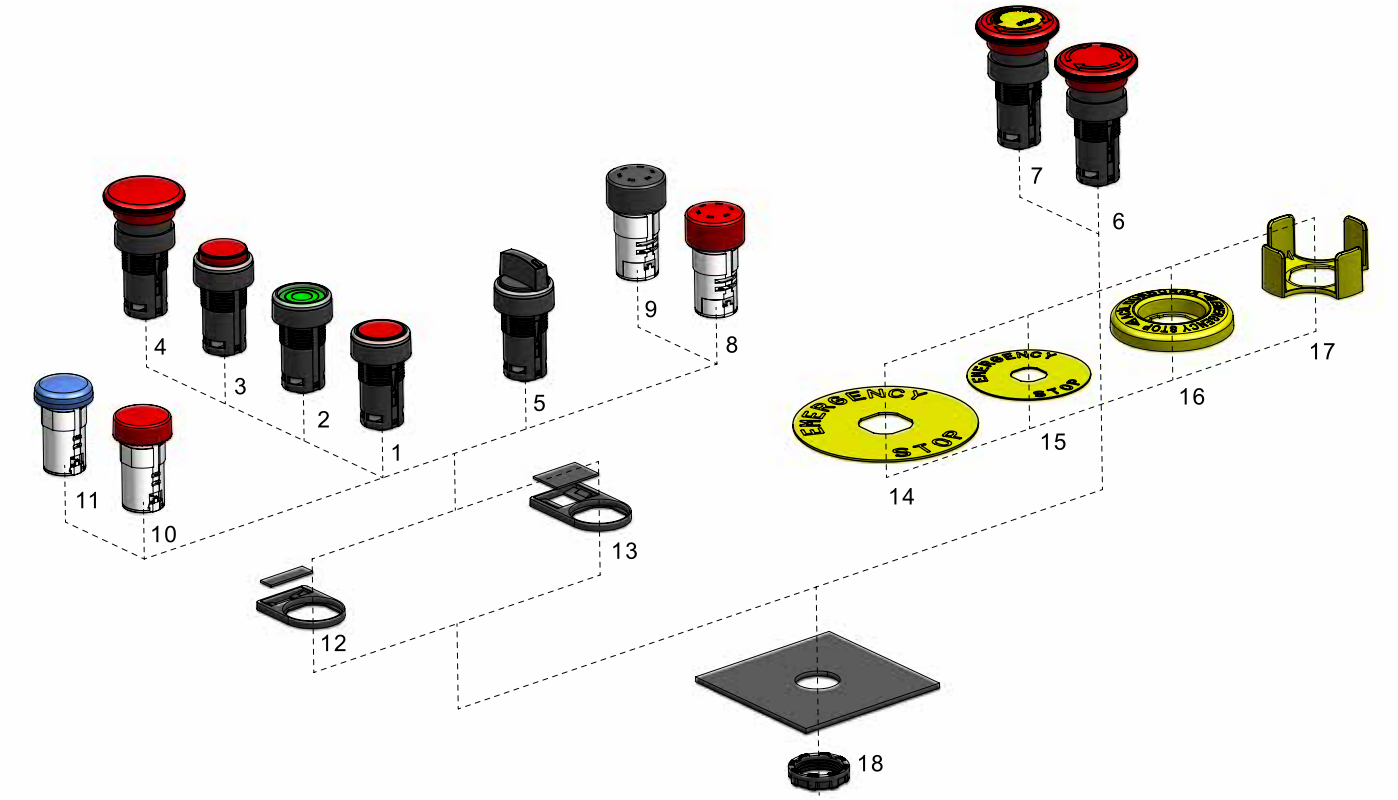
- *Finger safe protection for maximum safety*
- *Impact-resistant polycarbonate button lens*
- *Various legend plates with different languages and custom markings*
- *Variety of products for all areas of application*
- *Monoblock strong body*

Technical Information

Mechanical Life	:	*300.000 operations min.*
Electrical Life	:	*100.000 operations min.*
Operating Temperature	:	*min./max. °C -5/+40*
Protection Degree	:	*IP50*
Operating Frequency	:	*Without load 3.000 operations/hour*
	:	*At full load 1.200 operations/hour*
Operating Voltage (Ue)	:	*240 V AC*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*250 V*
Impact Resistance (Uimp)	:	*2.5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500 V AC (For 1 minute)*
Standard Contact Material	:	*AgNi*
Cable Section	:	*1.5 - 2.5 mm^2*
Standard	:	*UL 508 TS EN 60947-5-1 VDE0660*

MB Monoblok Serisi Ø 22mm Kumanda Butonlar Genel Şema

MB Monoblock Series Ø 22mm Control Units General Scheme



	Yaylı Tip / *Spring Type*	
1	D	Düz / *Flush*
2	F	Kalıcı / *Stay Put*
3	H	Çıkık / *Extended*
4	M	Mantar, Ø 40 mm / *Mushroom, Ø 40 mm*
	Seçici Tip / *Selector Type*	
5	S	60° / *60°*
	Acil Stop / *Emergency Stop Type*	
6	**E**	**Ø 40mm, Çevirmeli** / *Ø 40mm, Turn to Release*
7	EE	Ø 40mm, Etiketli, Çevirmeli / *Ø 40mm, With Label, Turn to Release*
	Buzzer / *Buzzer*	
8	ZS	Işıklı / *Illuminated*
9	ZX	Işıksız / *Without Illumination*
	Sinyal / *Pilots*	
10	SD	Düz, LED, Sinyal / *Flat, LED, Pilots,*
11	SP	Petekli, LED, Sinyal / *Cellular, LED, Pilots*
	Aksesuarlar / *Accessories*	
12	BROZET08	Rozet, 8mm / *Legend Plate Holder, 8mm*
13	BROZET18	Rozet, 18mm / *Legend Plate Holder, 18mm*
14	BET90A/P	Etiket, Ø90mm Acil Stop, Alüminyum / Plastik / *Legend Plate, Ø90mm Emergency Stop, Aluminium / Plastic*
15	BET60A/P	Etiket, Ø60mm Acil Stop, Alüminyum / Plastik / *Legend Plate, Ø60mm Emergency Stop, Aluminium / Plastic*
16	BET60LED	Etiket, Ø60mm Acil Stop, LED / *LED Illuminated Legend Plate, Ø60mm Emergency Stop*
17	BMUHAFAZA	Emniyet Koruma / *Emergency Protective Cover*
18	SOMUN	Plastic Somun, M22 X 1,5 / *Plastic Nut, M22 X 1,5*

MB Serisi Monoblok Kumanda Butonlar Seçim Tablosu
Series Monoblock Control Units Selection Table

Seri	Kontak Blok Kombinasyonu			Buton Tipi	Renk	Yazı
MB	1	0	2	D	K	1
Series	*Contact Block Combination*			*Button Type*	*Colour*	*Pad Printing*

Seri
Series

MB	Serisi Monoblok Ø 22mm Kumanda Butonu	*Series Monoblock Ø 22mm Control Units*

Kontak Blok Tipi
Contact Block Type

1	Start	*Start*	Butonluk	*For Button*
2	Stop	*Stop*	Butonluk	*For Button*

Kontak Blok Tipi
Contact Block Type

1	Start	*Start*	Butonluk	*For Button*
2	Stop	*Stop*	Butonluk	*For Button*

Işık Bloğu Tipi
Illumination Block Type

0	Boş	*Without Illumination*

Buton Tipi
Button Type

Yaylı Tip
Spring Type

D	Düz	*Flush*	
F	Kalıcı	*Stay Put*	
H	Çıkık	*Extended*	
M	Mantar	*Mushroom*	Ø 40 mm / *Ø 40 mm*

Seçici Tip
Selector Type

S20	2 Pozisyonlu / *2 Position*	Kalıcı / *Stay Put*	(0-I) / *(0-I)*	60° / *60°*	
S21	2 Pozisyonlu / *2 Position*	Dönüşlü / *Spring Return*	(0-I) / *(0-I)*	60° / *60°*	
S30	3 Pozisyonlu / *3 Position*	Kalıcı / *Stay Put*	(II-0-I) / *(II-0-I)*	60° / *60°*	
S31	3 Pozisyonlu / *3 Position*	Tek Dönüşlü / *Single Spring Return*	(II-0-I) / *(II-0-I)*	60° / *60°*	
S32	3 Pozisyonlu / *3 Position*	Çift Dönüşlü / *Double Spring Return*	(II-0-I) / *(II-0-I)*	60° / *60°*	

Acil Stop Tip
Emergency Stop Type

E	Ø 40mm / *Ø 40mm*	Çevirmeli / *Turn to Release*	
EE	Ø 40mm / *Ø 40mm*	Etiketli / *With Label*	Çevirmeli / *Turn to Release*

Sinyal
Pilot Lights

X	Sinyal	*Pilot Lights*

B	Beyaz	*White*
K	Kırmızı	*Red*
M	Mavi	*Blue*
S	Sarı	*Yellow*
Y	Yeşil	*Green*
H	Siyah	*Black*

0	0	*0*	Yazılı / *Printed*
10	I-0	*I-0*	Yazılı / *Printed*
1	I	*I*	Yazılı / *Printed*
2	II	*II*	Yazılı / *Printed*
12	I-II	*I-II*	Yazılı / *Printed*
L	LIGHT	*LIGHT*	Yazılı / *Printed*
OD	OK	*Vertical Arrow*	Dikey Yazılı / *Printed*
OY	OK	*Horizontal Arrow*	Yatay Yazılı / *Printed*
OK	OK	*Special Arrow*	Özel Yazılı / *Printed*
OO	OK	*Special Arrow*	Özel Yazılı / *Printed*
S	Siren İşareti	*Siren Symbol*	*Printed*
Z	Zil İşareti	*Bell Symbol*	*Printed*

H1K2DK → H Serisi, start-stop, 100 - 230V AC, kırmızı LEDli, kırmızı renkli, Düz, buton seçilmiştir.

Örnek: **MB102DK → MB Monoblok serisi, start-stop, kırmızı renkli, Düz Buton seçilmiştir.**

Example: *MB102DK → MB Monoblock series, start-stop, red, Flush Button has been selected.*

Kumanda Butonları ve Sinyal Lambaları
Control Units and Pilot Lights

Yaylı Tip Kumanda Butonlar / *Spring Type Control Units*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Buton Tipi *Button Type*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*		
MB100D*	1	-	Düz / *Flush*	B K M S Y H
MB101D*	2	-	Düz / *Flush*	B K M S Y H
MB102D*	1	1	Düz / *Flush*	B K M S Y H
MB200D*	-	1	Düz / *Flush*	B K M S Y H
MB202D*	-	2	Düz / *Flush*	B K M S Y H
MB100F*	1	-	Kalıcı / *Stay Put*	B K M S Y H
MB101F*	2	-	Kalıcı / *Stay Put*	B K M S Y H
MB102F*	1	1	Kalıcı / *Stay Put*	B K M S Y H
MB200F*	-	1	Kalıcı / *Stay Put*	B K M S Y H
MB202F*	-	2	Kalıcı / *Stay Put*	B K M S Y H
MB100H*	1	-	Çıkık / *Extended*	B K M S Y H
MB101H*	2	-	Çıkık / *Extended*	B K M S Y H
MB102H*	1	1	Çıkık / *Extended*	B K M S Y H
MB200H*	-	1	Çıkık / *Extended*	B K M S Y H
MB202H*	-	2	Çıkık / *Extended*	B K M S Y H
MB100M*	1	-	Mantar / *Mushroom*	K S H
MB101M*	2	-	Mantar / *Mushroom*	K S H
MB102M*	1	1	Mantar / *Mushroom*	K S H
MB200M*	-	1	Mantar / *Mushroom*	K S H
MB202M*	-	2	Mantar / *Mushroom*	K S H

MB102DM

MB100DY

MB200MK

MB100FY

MB100HY

Seçici Tip Kumanda Butonları / *Selector Type Control Units*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumi-nation*	Etiket *Button Plates*	Buton Tipi *Button Type*	Pozisyon *Position*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	LED *LED*				
MB100S20	1	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
MB101S20	2	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
MB102S20	1	1	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
MB100S21	1	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
MB101S21	1	1	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Dönüşlü-60° / *2 Position-Spring Return-60°*	H
MB101S30	2	-	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Kalıcı -60° / *3 Position-Stay Put-60°*	H
MB101S31	2	-	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Tek Dönüşlü-60° / *3 Position-Single Spring Return-60°*	H
MB101S32	2	-	-	II-0-I	Seçici / *Selector*	3 Pozisyonlu-Çift Dönüşlü -60° / *3 Position-Double Spring Return-60°*	H

MB100S20

MB Serisi Monoblok Ø 22 mm Kumanda Buton Tipleri
Series Monoblock Ø 22 mm Control Units Types

Acil Stop Tip Kumanda Butonları / *Emergency Stop Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Etiket	Tip	Çap (mm)	Renk
Code	*Contact Block Type*		*Button Plates*	*Type*	*Dia (mm)*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*				
MB100E	1	-		Çevirmeli / *Turn to Release*	Ø 40mm	K
MB102E	1	1		Çevirmeli / *Turn to Release*	Ø 40mm	K
MB200E	-	1		Çevirmeli / *Turn to Release*	Ø 40mm	K
MB202E	-	2		Çevirmeli / *Turn to Release*	Ø 40mm	K
MB100EE	1	-	√	Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
MB102EE	1	1	√	Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
MB200EE	-	1	√	Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K
MB202EE	-	2	√	Etiketli - Çevirmeli / *With Label - Turn to Release*	Ø 40mm	K

MB200E

MB200EE

Buzzerlar / *Buzzers*

Ürün Kodu	Işık	Özellik	Nominal Gerilim	Özellik	Renk
Code	*Illumination*	*Features*	*Nominal Voltage*	*Features*	*Colour*
MBZX012S	LED	IP40	12V AC/DC	90 db (10cm uzaklıkta) Sabit / *90 db (10cm distance) Single Melody*	K
MBZS024S	LED	IP40	24V AC/DC	90 db (10cm uzaklıkta) Sabit / *90 db (10cm distance) Single Melody*	K
MBZS024SE	LED	IP65	24V AC/DC	85 db (10cm uzaklıkta) Sabit / *85db (10cm distance) Single Melody*	K
MBZS110S	LED	IP40	110V AC	90 db (10cm uzaklıkta) Sabit / *90 db (10cm distance) Single Melody*	K
MBZS220S	LED	IP40	220V AC	90 db (10cm uzaklıkta) Sabit / *90 db (10cm distance) Single Melody*	K
MBZS220SE	LED	IP65	220V AC	85 db (10cm uzaklıkta) Sabit / *85db (10cm distance) Single Melody*	K
MBZX024S	LED	IP40	24V AC/DC	90 db (10cm uzaklıkta) Sabit / *90 db (10cm distance) Single Melody*	K
MBZX024SE	LED	IP65	24V AC/DC	85 db (10cm uzaklıkta) Sabit / *85db (10cm distance) Single Melody*	K
MBZX110S		IP40	110V AC	90 db (10cm uzaklıkta) Sabit / *90 db (10cm distance) Single Melody*	H
MBZX220S		IP40	220V AC	90 db (10cm uzaklıkta) Sabit / *90 db (10cm distance) Single Melody*	H
MBZX220SE		IP65	220V AC	85 db (10cm uzaklıkta) Sabit / *85db (10cm distance) Single Melody*	H

- **IP65 istendiğinde sonuna "E" harfi eklenmektedir.Ses 5 desibel düşmektedir.**
- *For IP65 preferences, please add "E"letter to end of the code. In case of IP65 preferences, volume has been decreased 5 db.*

MBZS024S

MBZX220S

Sinyaller / *Pilot Lights*

Ürün Kodu	Işık	Özellik	Nominal Gerilim	Renk
Code	*Illumination*	*Features*	*Nominal Voltage*	*Colour*
MBSD012*	LED	Düz / Flat	12V AC/DC	B K M S Y H
MBSD024*	LED	Düz / Flat	24V AC/DC	B K M S Y H
MBSD110*	LED	Düz / Flat	110V AC	B K M S Y H
MBSD220*	LED	Düz / Flat	220V AC	B K M S Y H
MBSP012*	LED	Petekli / Cellular	12V AC/DC	B K M S Y H
MBSP024*	LED	Petekli / Cellular	24V AC/DC	B K M S Y H
MBSP110*	LED	Petekli / Cellular	110V AC	B K M S Y H
MBSP220*	LED	Petekli / Cellular	220V AC	B K M S Y H

MBSD024Y

MBSP220M

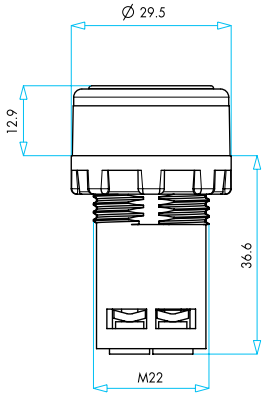
Özel Tampon Baskılı Butonlar / *Special Pad Printed Control Units*

Ürün Kodu / *Code*	MB100DY-0D	MB100DY-0Y	MB100DH-0D	MB100DH-0Y	MB100DB-0D	MB100DB-0Y	MB100DB-Z	MB100DB-L
Baskı / *Print*	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Dikey Oklu *Vertical Arrow*	Yatay Oklu Horizontal Arrow	Zil / Bell	Lamba / Lamp
Ürün Kodu / *Code*	MB100DY-1	MB100DY-2	MB100DB-1	MB100DB-2	MB200DK-0	MB200DH-0	MB200DS-Z	MB200DS-L
Baskı / *Print*	I	II	I	II	0	0	Zil / Bell	Lamba / Lamp

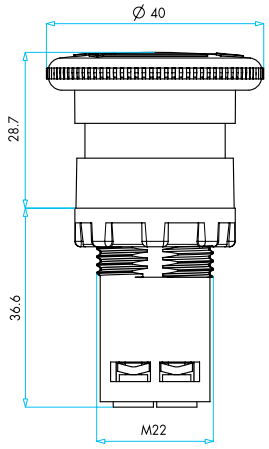
Aksesuarlar / *Accessories*

Ürün Kodu	Tip	Özellik
Code	*Type*	*Features*
BPUL	Pul / *Plate*	Buton Sıkıştırma / *Button Tightening*
BSOMAN	Somun Anahtarı / *Nut Tightener*	

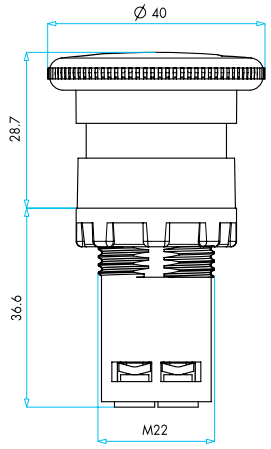
BOYUTLAR (mm) / *DIMENSIONS (mm)*



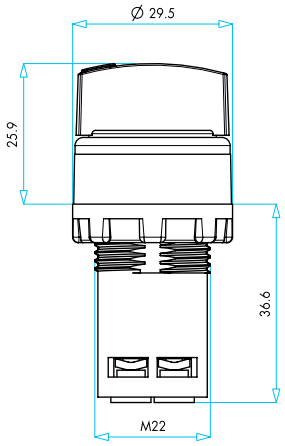
Düz Kafalı Yaylı Buton
Flush, Spring Return



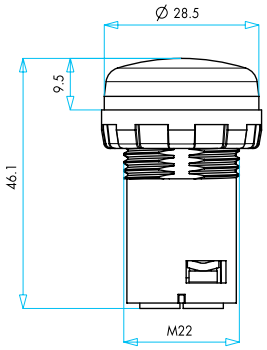
40 mm Acil Stop Butonu
40 mm Emergency Stop



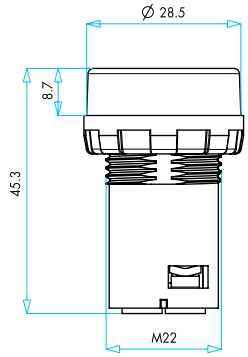
40 mm Mantar Buton
40 mm Mushroom Button



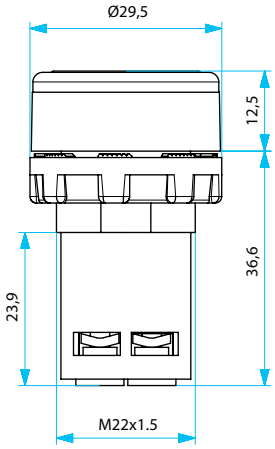
Seçici Buton
Selector Switch



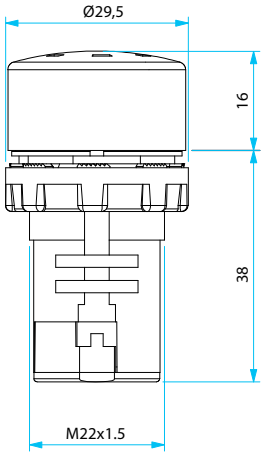
Sinyal (Petekli Cam)
Signal (Comb Glass)



Sinyal (Düz Cam)
Signal (Flat Glass)



Monoblok Kalıcı Buton
Monoblock Stay-Put Button



Monoblok Buzzer
Monoblock Buzzer

KB Serisi Ø 22mm Kumanda Butonları

- Darbe dayanıklı polikarbonat buton lensi
- Alev almayan V0 PA6.6 kontak bloklar
- Farklı dillerde ve özel işaretli çeşitli markalama etiketleri
- Tüm uygulamalara cevap verecek ürün çeşitliliği
- 1980'den beri güvenle kullanılan tasarım

Teknik Bilgiler

Mekanik Ömür	:	500.000 açma-kapama min.
Elektriksel Ömür	:	100.000 açma-kapama min.
Çalışma Sıcaklığı	:	min./maks. °C -5/+40
Koruma Sınıfı	:	IP50
Çalışma Sıklığı	:	Yüksüz 3.000 açma-kapama/saat
	:	Yükte 1.200 açma-kapama/saat
Anma işletme Gerilimi (Ue)	:	220 V AC
Anma işletme Akımı (Ie)	:	4 A
Yalıtım Gerilimi (Ui)	:	300 V
Darbe Dayanım Gerilimi (Uimp)	:	2.5 kV
Anma Kesme Kapasitesi AC 15	:	1 kA
İzolasyon Direnci	:	10 MΩ min. (500 V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500 V AC (1 dk. için)
Standart Kontak Malzemesi	:	AgNi
Bağlantı Kablo Kesiti	:	1.5 - 2.5 mm^2
Standart	:	UL 508 TS EN 60947-5-1 VDE0660

KB *Series Ø 22mm Control Units*

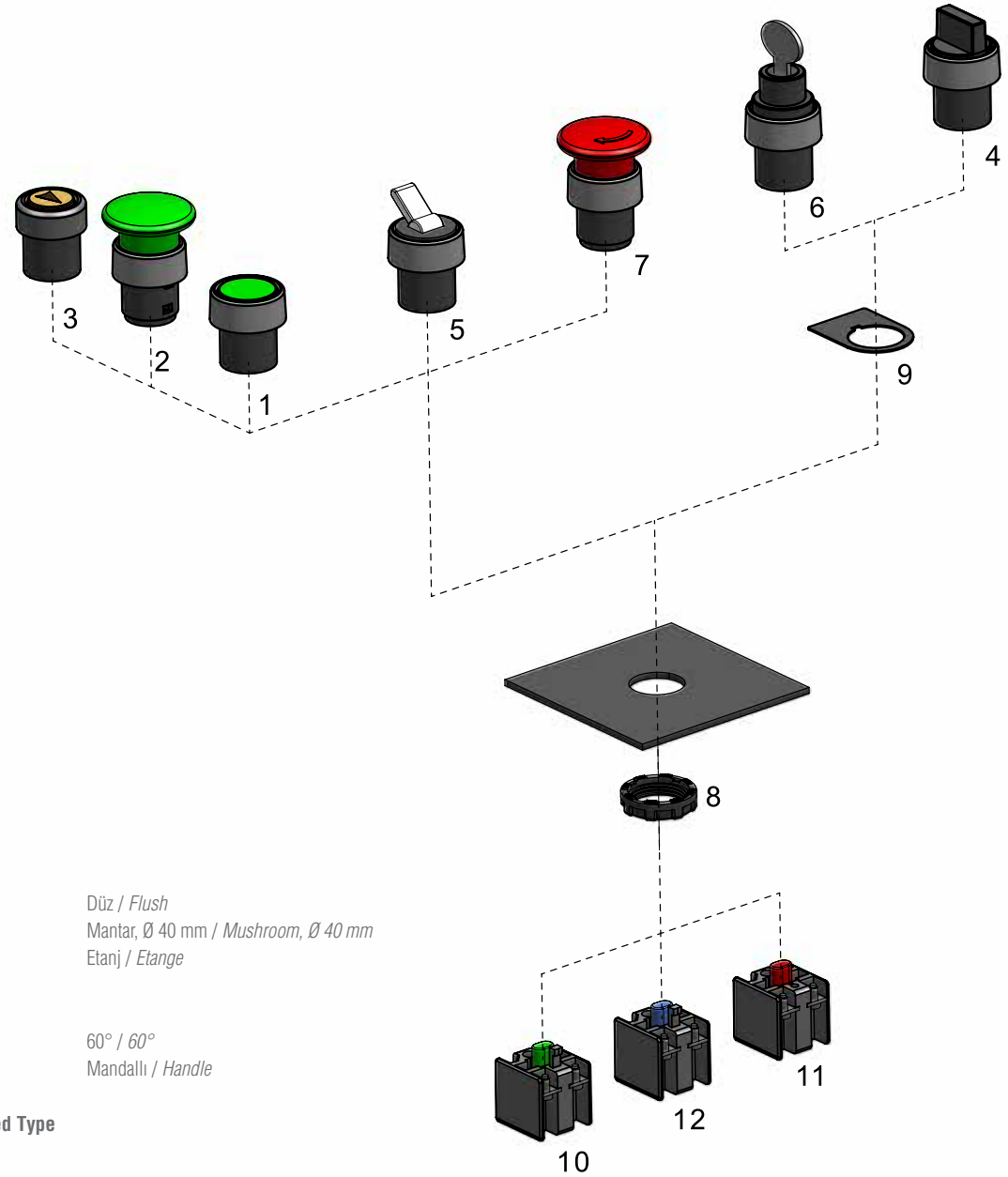
- *Impact-resistant polycarbonate button lens*
- *Non-flammable V0 PA6.6 contact blocks*
- *Various legend plates with different languages and custom markings*
- *Variety of products for all areas of application*
- *Reliable design since 1980*

Technical Information

Mechanical Life	:	*500.000 operations min.*
Electrical Life	:	*100.000 operations min.*
Operating Temperature	:	*min./max. °C -5/+40*
Protection Degree	:	*IP50*
Operating Frequency	:	*Without load 3.000 operations/hour*
	:	*At full load 1.200 operations/hour*
Operating Voltage (Ue)	:	*220 V AC*
Operating Current (Ie)	:	*4 A*
Insulation Voltage (Ui)	:	*300 V*
Impact Resistance (Uimp)	:	*2.5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500 V AC (For 1 minute)*
Standard Contact Material	:	*AgNi*
Cable Section	:	*1.5 - 2.5 mm^2*
Standard	:	*UL 508 TS EN 60947-5-1 VDE0660*

KB Serisi Ø 22mm Kumanda Butonları Genel Şema

KB Series Ø 22mm Control Units General Scheme



	Yaylı Tip / *Spring Type*	
1	D	Düz / *Flush*
2	M	Mantar, Ø 40 mm / *Mushroom, Ø 40 mm*
3	R	Etanj / *Etange*
	Seçici Tip / Selector Type	
4	S2	60° / *60°*
5	C	Mandallı / *Handle*
	Anahtarlı Tip / Key Operated Type	
6	A2	
	Acil Stop / Emergency Stop Type	
7	E	Ø 40mm, Çevirmeli / *Ø 40mm, Turn to Release*
	Aksesuarlar / Accessories	
8	SOMUN	Plastic Somun, M22 X 1,5 / *Plastic Nut , M22 X 1,5*
9	ROZET	Rozet, KB Buton / *Legend Plate Holder, KB Buton*
10	START KONTAKBLOK	Kontak Blok, Start (NA) / *Contact Block, Start (NO)*
11	STOP KONTAKBLOK	Kontak Blok, Stop (NK) / *Contact Block, Stop (NC)*
12	START-STOP KONTAK BLOK	Kontak Blok, Start-Stop (NA+NK) / *Contact Block, Start-Stop (NO+NC)*

KB Serisi Kumanda Butonlar Seçim Tablosu
Series Control Units Selection Table

Seri	Kontak Tipi	Buton Tipi	Renk	Yazı
KB	12	D	K	1
Series	*Contact Block Type*	*Button Type*	*Colour*	*Pad Printing*

Seri
Series

KB	Serisi Ø 22mm Kumanda Butonu *Series Ø 22mm Control Units*

Kontak Blok Tipi
Contact Block Type

12	Stop *Stop*
14	Çift Devre *Double Circuit*
34	Start *Start*

Buton Tipi
Button Type

Yaylı Tip
Spring Type

D	Düz *Flush*	
M	Mantar *Mushroom*	Ø40 mm *Ø 40 mm*
R	Etanj *Etange*	

Seçici Tip
Selector Type

S2	2 Pozisyonlu *2 Position*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*	✓
C	Mandallı *Handle*				

Anahtarlı Tip
Key Operated Type

A2	2 Pozisyonlu *2 Position*	0 Pozisyonunda Anahtarı Çıkan *Key Removal at 0 position*	Kalıcı *Stay Put*	(0-I) *(0-I)*	60° *60°*	✓

Acil Stop Tip
Emergency Stop Type

E	Ø 40mm *Ø 40mm*	Çevirmeli *Turn to Release*

B	Beyaz *White*
K	Kırmızı *Red*
M	Mavi *Blue*
S	Sarı *Yellow*
Y	Yeşil *Green*
H	Siyah *Black*

0	0 Yazılı *0 Printed*

Örnek: KB12DK → KB Serisi Stop, Düz kırmızı buton seçilmiştir.

Example: *KB12DK → KB Series, Stop, Flush, Red button has been selected.*

KB Serisi Ø 22 mm Kumanda Buton Tipleri
Series Ø 22 mm Control Units Types

Yaylı Tip Kumanda Butonlar / *Spring Type Control Units*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumination*	Buton Tipi *Button Type*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
KB12D*		1	-	Düz / *Flush*	B K M S Y H
KB14D*	1	1	-	Düz / *Flush*	B K M S Y H
KB34D*	1		-	Düz / *Flush*	B K M S Y H
KB12M*		1	-	Mantar / *Mushroom*	K S Y
KB14M*	1	1	-	Mantar / *Mushroom*	K S Y
KB34M*	1		-	Mantar / *Mushroom*	K S Y
KB12R*		1	-	Etanj / *Etange*	B K M S Y H
KB14R*	1	1	-	Etanj / *Etange*	B K M S Y H
KB34R*	1		-	Etanj / *Etange*	B K M S Y H
KB12RB-0		1	-	Etanj Oklu / *Etange*	S
KB14RB-0	1	1	-	Etanj Oklu / *Etange*	S
KB34RB-0	1		-	Etanj Oklu / *Etange*	S

KB34DY

KB12C

Seçici Tip Kumanda Butonları / *Selector Type Control Units*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Işık *Illumi-nation*	Etiket *Button Plates*	Buton Tipi *Button Type*	Pozisyon *Position*	Renk *Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	LED *LED*				
KB14S2	1	1	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
KB34S2	1	-	-	0-I	Seçici / *Selector*	2 Pozisyonlu-Kalıcı-60° / *2 Position-Stay Put-60°*	H
KB12C	-	1	-	0-I	Mandallı / *Handle Switch*		H
KB14C	1	1	-	0-I	Mandallı / *Handle Switch*		B
KB34C	1	-	-	0-I	Mandallı / *Handle Switch*		B

KB34S2

Anahtarlı Tip Kumanda Butonları / *Key Operated Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Etiket	Tip	Pozisyon	Anahtar Çıkma Pozisyonu
Code	*Contact Block Type*		*Button Plates*	*Type*	*Position*	*Key Removal Position*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*				
KB14A2	1	1	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	0
KB34A2	1	-	(0-I)	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	0

KB14A2

Acil Stop Tip Kumanda Butonları / *Emergency Stop Type Control Units*

Ürün Kodu	Kontak Blok Tipi		Tip	Çap (mm)	Renk
Code	*Contact Block Type*		*Type*	*Dia (mm)*	*Colour*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
KB12E	-	1	Çevirmeli / *Turn to Release*	Ø 40mm	K
KB14E	1	1	Çevirmeli / *Turn to Release*	Ø 40mm	K

KB12E

Kontak Blok Tipler / *Contact Block Types*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Nominal Akım *Nominal Current*	Nominal Gerilim *Nominal Voltage*	Kullanım Yeri
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
KB12	-	1	4A	220V	Butonluk / *For Control Units*
KB14B	1	1	4A	220V	Butonluk / *For Control Units*
KB14K	1	1	4A	220V	Kutuluk / *For Boxes*
KB34B	1	-	4A	220V	Butonluk / *For Control Units*
KB34K	1	-	4A	220V	Kutuluk / *For Boxes*

KB12

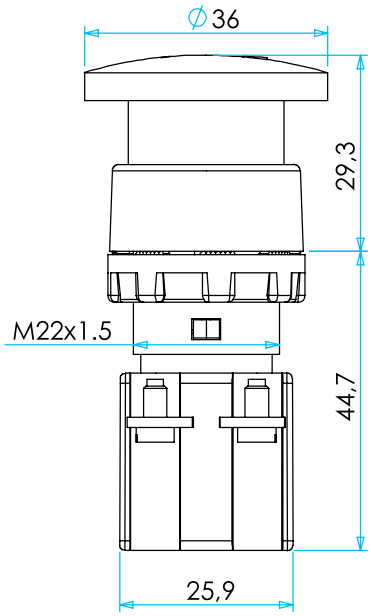
Yedekler / *Spare Parts*

Ürün Kodu *Code*	Nominal akım *Nominal Current*	Buton Tipi *Control Unit Types*	Pozisyon *Position*	Renk *Colour*
D*		Düz / *Flush*		B K M S Y
DM*		Mantar / *Mushroom*		B K M S Y
DR*		Etanj / *Etange*		B K M S Y
DR-O		Etanj Oklu / *Etange*		
DS2		Seçici / *Selector*		
DC		Mandallı / *Handle Switch*		
DA2	0-I	Kalıcı / *Stay Put*	2 Pozisyonlu / *2 Position*	
DE		Çevirmeli / *Turn to Release*	Ø 40mm	

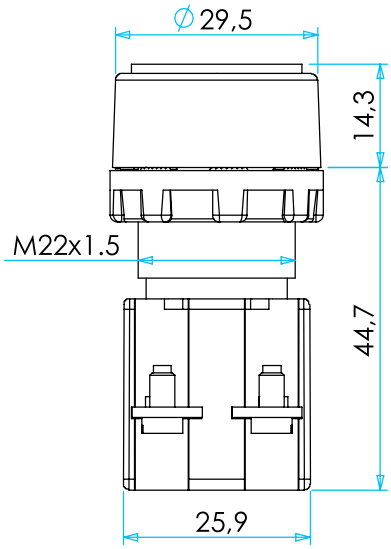
KB Serisi Ø 22 mm Kumanda Buton Tipleri

Series Ø 22 mm Control Units Types

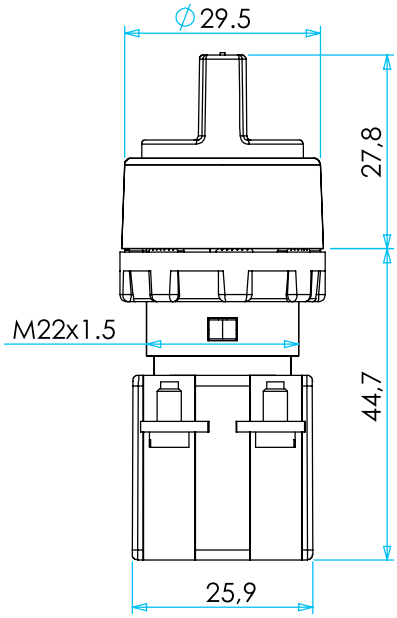
BOYUTLAR (mm) / *DIMENSIONS (mm)*



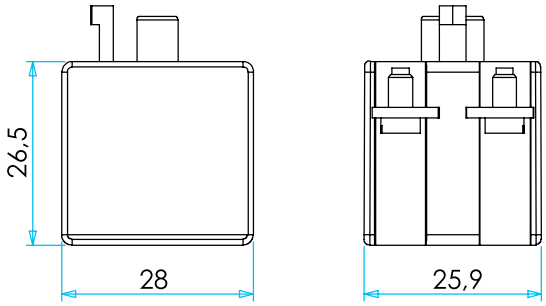
KB14E



KB14DY



KB14S2



KB14B

Sinyal Lambaları

- Ø10, 14, 22 mm çaplı yuvarlak sinyaller
- Darbe dayanıklı polikarbonat lens
- Farklı terminal çeşitleri ile bağlantı kolaylığı
- Değişik voltaj seçenekleri
- Somunlu veya tırnaklı sistem ile basit ve hızlı montaj

Teknik Bilgiler

Elektriksel Ömür : min. 10.000 saat
Çalışma Sıcaklığı : -5°C/ +85˚C

CE

Pilot Lights

- *Ø10,14, 22 mm round types*
- *Impact - resistant polycarbonate lens*
- *Connection facility with different terminal types*
- *Different voltage variety*
- *Basic and fast mounting with nut and fingerproof system*

Technical Information

Electrical Life : min. 10.000 hours
Operating Temperature : -5°C/ +85˚C

CE

Sinyal Lambaları
Pilot Lights

S100K

S100LK

Ürün Kodu	Cam Tipi	Bağlantı Tipi	Montaj Tipi	Çalışma Gerilimi (V)	Ampul ve Duy Tipi
Code	*Lens Type*	*Connection Type*	*Mounting Type*	*Voltage*	*Lamp and Socket Type*
S100*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Kablolu *With Cable*	Somunlu *With Nut*	230V AC	Neon *Neon*
S100L*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Kablolu *With Cable*	Somunlu *With Nut*	230V AC	LED *LED*
S100L1*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Kablolu *With Cable*	Somunlu *With Nut*	12V AC/DC	LED *LED*
S100L2*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Kablolu *With Cable*	Somunlu *With Nut*	24V AC/DC	LED *LED*

* **Renk**/*Colour* **B: Beyaz**/*White*, **K: Kırmızı**/*Red*, **M: Mavi**/*Blue*, **S: Sarı**/*Yellow*, **Y: Yeşil**/*Green*

S102S

Ürün Kodu	Cam Tipi	Bağlantı Tipi	Montaj Tipi	Çalışma Gerilimi (V)	Ampul ve Duy Tipi
Code	*Lens Type*	*Connection Type*	*Mounting Type*	*Voltage*	*Lamp and Socket Type*
S102*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunlu *With Nut*	230V AC	Neon *Neon*
S102L*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunlu *With Nut*	230V AC/DC	LED *LED*
S102L1*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunlu *With Nut*	12V AC/DC	LED *LED*
S102L2*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunlu *With Nut*	24V AC/DC	LED *LED*

* **Renk**/*Colour* **B: Beyaz**/*White*, **K: Kırmızı**/*Red*, **M: Mavi**/*Blue*, **S: Sarı**/*Yellow*, **Y: Yeşil**/*Green*

S105Y

Ürün Kodu	Cam Tipi	Bağlantı Tipi	Montaj Tipi	Çalışma Gerilimi (V)	Ampul ve Duy Tipi
Code	*Lens Type*	*Connection Type*	*Mounting Type*	*Voltage*	*Lamp and Socket Type*
S105*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunsuz *Nutless*	230V AC	Neon *Neon*

* **Renk**/*Colour* **B: Beyaz**/*White*, **K: Kırmızı**/*Red*, **M: Mavi**/*Blue*, **S: Sarı**/*Yellow*, **Y: Yeşil**/*Green*

S140K

Ürün Kodu	Cam Tipi	Bağlantı Tipi	Montaj Tipi	Çalışma Gerilimi (V)	Ampul ve Duy Tipi
Code	*Lens Type*	*Connection Type*	*Mounting Type*	*Voltage*	*Lamp and Socket Type*
S140*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunsuz *Nutless*	230V AC	Neon *Neon*

* **Renk**/*Colour* **B: Beyaz**/*White*, **K: Kırmızı**/*Red*, **M: Mavi**/*Blue*, **S: Sarı**/*Yellow*, **Y: Yeşil**/*Green*

Sinyal Lambaları
Pilot Lights

S140Y2

Ürün Kodu	Cam Tipi	Bağlantı Tipi	Montaj Tipi	Çalışma Gerilimi (V)	Ampul ve Duy Tipi
Code	*Lens Type*	*Connection Type*	*Mounting Type*	*Voltage*	*Lamp and Socket Type*
S140*1	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunlu *With Nut*	12V AC / DC	Flamanlı *With Filament*
S140*2	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunlu *With Nut*	24V AC / DC	Flamanlı *With Filament*

* **Renk**/*Colour* **B: Beyaz**/*White*, **K: Kırmızı**/*Red*, **M: Mavi**/*Blue*, **S: Sarı**/*Yellow*, **Y: Yeşil**/*Green*

S145S

Ürün Kodu	Cam Tipi	Bağlantı Tipi	Montaj Tipi	Çalışma Gerilimi (V)	Ampul ve Duy Tipi
Code	*Lens Type*	*Connection Type*	*Mounting Type*	*Voltage*	*Lamp and Socket Type*
S145*	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunsuz *Nutless*	230V AC	Neon *Neon*
S145*1	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunsuz *Nutless*	12V AC / DC	Flamanlı *With Filament*
S145*2	Yuvarlak, İnce, Termo *Round, Thin, Thermo*	Terminalli *With Terminal*	Somunsuz *Nutless*	24V AC / DC	Flamanlı *With Filament*

* **Renk**/*Colour* **B: Beyaz**/*White*, **K: Kırmızı**/*Red*, **M: Mavi**/*Blue*, **S: Sarı**/*Yellow*, **Y: Yeşil**/*Green*

S220K

Ürün Kodu	Cam Tipi	Bağlantı Tipi	Montaj Tipi	Çalışma Gerilimi (V)	Ampul ve Duy Tipi
Code	*Lens Type*	*Connection Type*	*Mounting Type*	*Voltage*	*Lamp and Socket Type*
S220*	Yuvarlak, Konik, Normal *Round, Conic, Normal*	Vidalı *Screw Mounting*	Somunlu *With Nut*	230V AC	Neon - Plastik *Neon - Plastic*
S220*6	Yuvarlak, Konik, Normal *Round, Conic, Normal*	Vidalı *Screw Mounting*	Somunlu *With Nut*	-	Neon - Vidalı *Neon - Screwed*

* **Renk**/*Colour* **B: Beyaz**/*White*, **K: Kırmızı**/*Red*, **M: Mavi**/*Blue*, **S: Sarı**/*Yellow*, **Y: Yeşil**/*Green*

S222K

S222LS

Ürün Kodu	Cam Tipi	Bağlantı Tipi	Montaj Tipi	Çalışma Gerilimi (V)	Ampul ve Duy Tipi
Code	*Lens Type*	*Connection Type*	*Mounting Type*	*Voltage*	*Lamp and Socket Type*
S222*	Düz, Petek, Termo *Flat, Cellular, Thermo*	Vidalı *Screw Mounting*	Somunlu *With Nut*	230V AC	Neon - Plastik *Neon - Plastic*
S222L*	Düz, Petek, Termo *Flat, Cellular, Thermo*	Vidalı *Screw Mounting*	Somunlu *With Nut*	230V AC	LED *LED*

* **Renk**/*Colour* **B: Beyaz**/*White*, **K: Kırmızı**/*Red*, **M: Mavi**/*Blue*, **S: Sarı**/*Yellow*, **Y: Yeşil**/*Green*

S224Y

Ürün Kodu	Cam Tipi	Bağlantı Tipi	Montaj Tipi	Çalışma Gerilimi (V)	Ampul ve Duy Tipi
Code	*Lens Type*	*Connection Type*	*Mounting Type*	*Voltage*	*Lamp and Socket Type*
S224*	Düz, Petek, Termo *Flat, Cellular, Thermo*	Terminalli / Vidalı *With Terminal / Screw Mounting*	Somunlu *With Nut*	230V AC	Neon - Sürgülü *Neon - Bayonet Ba9s*
S224*7	Düz, Petek, Termo *Flat, Cellular, Thermo*	Terminalli / Vidalı *With Terminal / Screw Mounting*	Somunlu *With Nut*	-	Sürgülü Ba9s - 10 mm *Bayonet Ba9s - 10 mm*

* **Renk**/*Colour* **B: Beyaz**/*White*, **K: Kırmızı**/*Red*, **M: Mavi**/*Blue*, **S: Sarı**/*Yellow*, **Y: Yeşil**/*Green*

Ampuller / *Neon Lamps*

PDA

N201

NA101

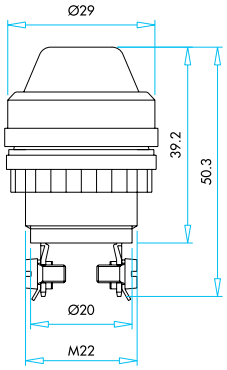
LED220K

LED24S

Ürün Kodu	Çalışma Gerilimi (V)	Akım (mA)	Ampul ve Duy Tipi	Ömür (s)	Renk
Code	*Voltage*	*Current*	*Lamp and Socket Type*	*Life (h)*	*Colour*
PDA	230 V AC	1.10÷1.80	Neon-Plastik *Neon-Plastic*	10.000	Sarı *Yellow*
NA101	230 V AC	0.80÷1.70	Neon-Vidalı 10 mm EX-10 *Neon-Screw 10 mm EX-10*	10.000	Sarı *Yellow*
NA101Y	230 V AC	0.45÷1.00	Neon-Vidalı 10 mm EX-10 *Neon-Screw 10 mm EX-10*	10.000	Yeşil *Green*
NA201	230 V AC	2.30÷2.50	Neon-Süngülü 10 mm Ba9s *Neon-Bayonet 10 mm Ba9s*	10.000	Sarı *Yellow*
NA201Y	230 V AC	1.60÷1.80	Neon-Süngülü 10 mm Ba9s *Neon-Bayonet 10 mm Ba9s*	10.000	Yeşil *Green*
LED24*	24 VDC/ AC		Ba9S Duylu LED		* *
LED220*	220 V AC		Ba9S Duylu LED		* *

* **Beyaz, Kırmızı, Mavi, Sarı, Yeşil** / *White, Red, Blue, Yellow, Green*

BOYUTLAR (mm) / *DIMENSIONS (mm)*



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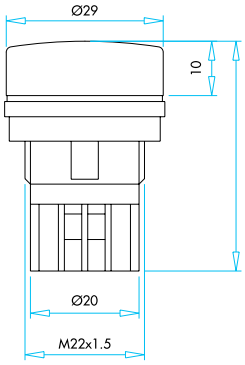

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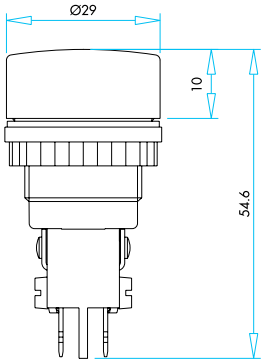

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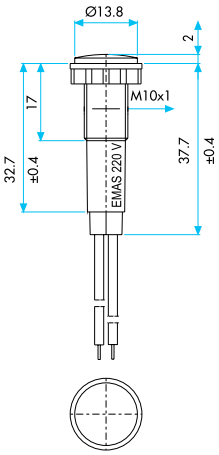

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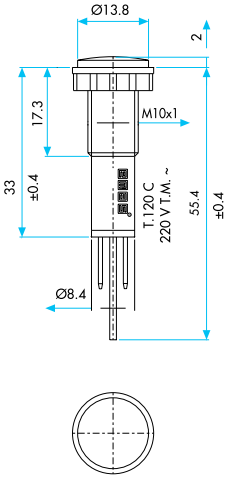

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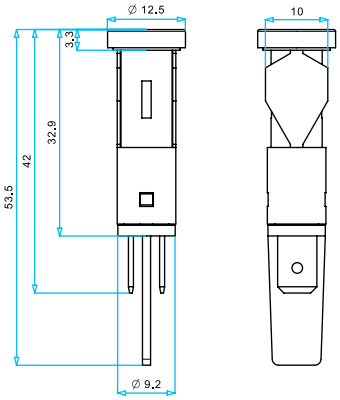

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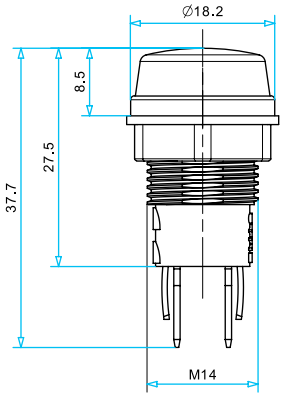

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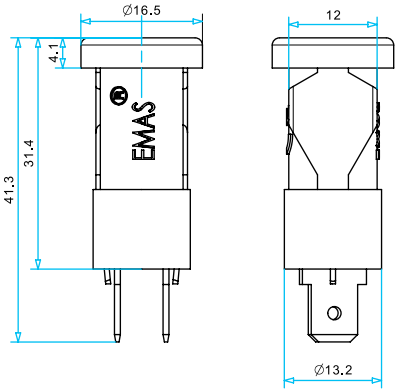

S145

Hareketli Kablo Taşıma Kanalı

Cable Carriers

R

HK Serisi Hareketli Kablo Taşıma Kanalı

Genel Özellikler ve Teknik Bilgiler 3
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Montaj Şekli 6

HK Series Cable Carriers

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Cable Carrier Types 5
Assembly 6

HK Serisi Hareketli Kablo Taşıma Kanalı

* Güvenilir
* Sessiz
* Aşınmaya dayanıklı
* Montajı kolay

HK *Series Cable Carrier*

** Reliable*
** Silent*
** Wear resistant*
** Easy assembly and snap open chain*

Hareketli Kablo Taşıma Kanalı Seçim Tablosu

Cable Carriers Selection Table

Seri	Gövde	Yükseklik İçi Ölçüsü	Genişlik İç Ölçüsü	Özellik	Tip
HK	P	015	015	R1	A
Series	*Body*	*Inner Height*	*Inner Width*	*Features*	*Type*

HK Hareketli Kablo Taşıma Kanalı *Cable Carrier*

P Metal *Metal*
M Plastik *Plastic*

015 15 mm *15 mm*
020 20 mm *20 mm*
040 40 mm *40 mm*

015 15 mm *15 mm*
025 25 mm *25 mm*
060 60 mm *60 mm*

R1 Dış Kapaklı Bükülme Yarı Çapı 25 mm *External Bending Radius 25 mm*
R2 Dış Kapaklı Bükülme Yarı Çapı 35 mm *External Bending Radius 35 mm*
R3 Dış Kapaklı Bükülme Yarı Çapı 40 mm *External Bending Radius 40 mm*
R4 Dış Kapaklı Bükülme Yarı Çapı 50 mm *External Bending Radius 50 mm*
R5 Dış Kapaklı Bükülme Yarı Çapı 75 mm *External Bending Radius 75 mm*
R6 Dış Kapaklı Bükülme Yarı Çapı 100 mm *External Bending Radius 100 mm*
R7 Dış Kapaklı Bükülme Yarı Çapı 150 mm *External Bending Radius 150 mm*
R8 Dış Kapaklı Bükülme Yarı Çapı 200 mm *External Bending Radius 200 mm*
R9 Dış Kapaklı Bükülme Yarı Çapı 300 mm *External Bending Radius 300 mm*
ZD Bağlantı İç *Female Bracket*
ZE Bağlantı Dış *Male Bracket*
ZK Üst Kapak *Clamp*
S1 İç Kapaklı Bükülme Yarı Çapı 25 mm *Internal Bending Radius 25 mm*
S2 İç Kapaklı BükülmeYarı Çapı 35 mm *Internal Bending Radius 35 mm*
S3 İç Kapaklı Bükülme Yarı Çapı 40 mm *Internal Bending Radius 40 mm*
S4 İç Kapaklı Bükülme Yarı Çapı 50 mm *Internal Bending Radius 50 mm*

A Açık Tip *Open Type*
Y Yarı Açık Tip *Half Open Type*
K Kapalı Tip *Closed Type*

Hareketli Kablo Taşıma Kanalı
Cable Carriers

Ürün Kodu	Malzeme	Yükseklik İçi Ölçüsü	Genişlik İç Ölçüsü	Bükülme Yarı Çapı	Tip	Kutu Adedi
Code	*Material*	*Inner Height*	*Inner Width*	*Bending Radius*	*Type*	*Box/Pcs*
HKP015015R1A	Plastik / *Plastic*	15 mm	15 mm	25 mm	Open	1 x 1 m
HKP020025R3A	Plastik / *Plastic*	20 mm	25 mm	40 mm	Open	1 x 1 m

HKP015015R1A

HKP020025R3A

Ürün Kodu	Malzeme	Yükseklik İçi Ölçüsü	Genişlik İç Ölçüsü	Özellik	Kutu Adedi
Code	*Material*	*Inner Height*	*Inner Width*	*Features*	*Box/Pcs*
HKP015015ZDA	Plastik / *Plastic*	15 mm	15 mm	Bağlantı İç / *Internal Connection*	10
HKP015015ZEA	Plastik / *Plastic*	15 mm	15 mm	Bağlantı Dış / *External Connection*	10
HKP015015ZKA	Plastik / *Plastic*	15 mm	15 mm	Üst Kapak / *Clamp*	100
HKP020025ZDA	Plastik / *Plastic*	20 mm	25 mm	Bağlantı İç / *Internal Connection*	10
HKP020025ZEA	Plastik / *Plastic*	20 mm	25 mm	Bağlantı Dış / *External Connection*	10
HKP020025ZKA	Plastik / *Plastic*	20 mm	25 mm	Üst Kapak / *Clamp*	100

HKP015015ZDA

HKP015015ZEA

HKP015015ZKA

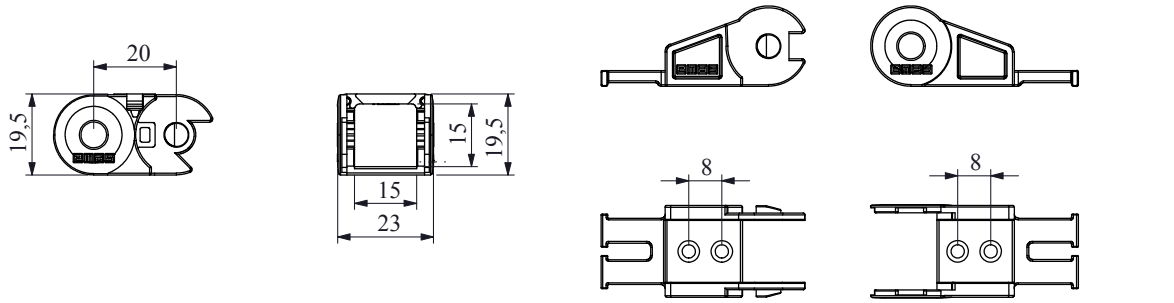
HKP020025ZDA

HKP020025ZEA

HKP020025ZKA

MONTAJ ŞEKLİ / *ASSEMBLY*

HKP015015R1A



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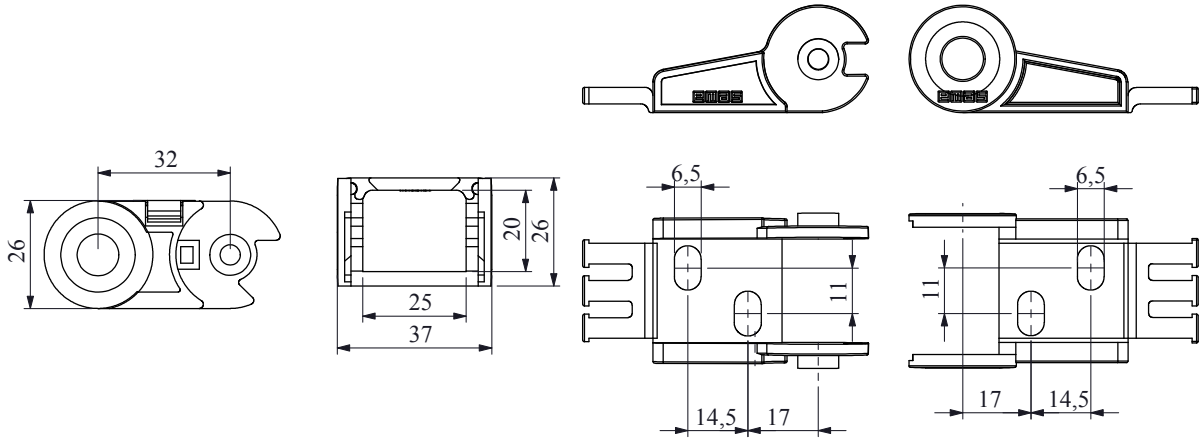

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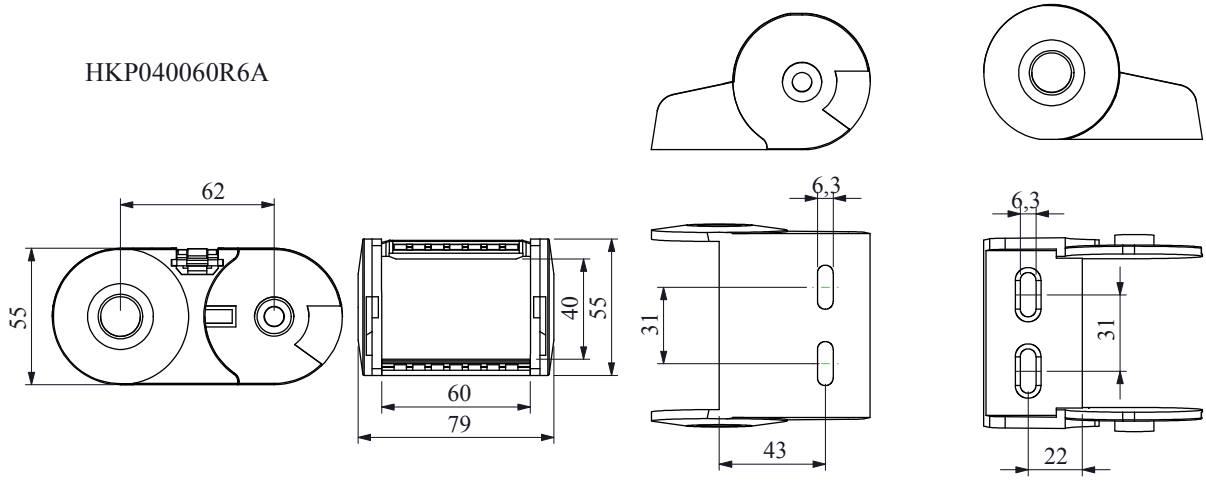
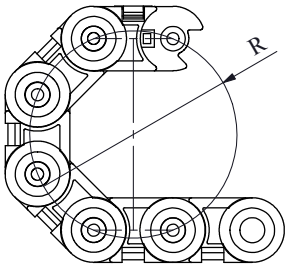


BÜKÜLME YARIÇAPI



R1	25 mm		R6	75 mm
R2	35 mm		R7	150 mm
R3	40 mm		R8	200 mm
R4	50 mm		R9	300 mm
R5	60 mm			

Kontaktörler

Contactors

L

HR Serisi Kontaktörler

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Genel Şema 04
HR Serisi Kontaktör Tipleri 05
HR Serisi Kontaktör Aksesuarları 06

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JA25 Serisi Termik Röleler 08
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HN Serisi Kontaktörler

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HN Series Contactors

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Dimensions 18

HR *Serisi Kontaktörler*

- 9 - 55 A orası 3 farklı boyutta akım taşıma özelliği
- Üstün anahtarlama kapasitesi
- Titreşime karşı dirençli, güvenli ve kolay kablo bağlantısı sağlayan terminaller
- Sıcaklığa karşı kompanze edilmiş
- Yüksek koruma sağlayan sistemle tam uyumlu termik röle
- 35 mm'lik montaj rayına hızlı ve basit montaj özelliği
- Geniş aksesuar seçenekleri ile kullanıcıların tüm ihtiyaçlarına cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	: 10 milyon açma-kapama min.
Elektriksel Ömür	: Grafiğe bakınız
Çalışma Sıcaklığı	: min./maks. ˚C -5/+40
Anma İşletme Gerilimi (Ue)	: 380/415 V AC
Anma İşletme Akımı (Ie)	: 9-55 A arası
Anma Termik Akımı (Ith)	: 25- 110 A arası
Yalıtım Gerilimi (Ui)	: 660 V
İzolasyon Gerilimi	: 2.500 V AC
Kısa Devre Kesme Kapasitesi	: 50 kA
Standart	: TS EN 60947-4-1

HR *Series Contactors*

- *To be used from 9A to 55A with 3 different sizes*
- *High switching capacity*
- *Terminals resistant against vibration, reliable and enabling easy cable connection*
- *Temperature compensated*
- *Thermal relay in conformity with high protection system*
- *Fast and simple mounting feature to 35 mm mounting rail*
- *Product variety with wide accessories fulfilling all applications of the user*

Technical Information

Mechanical Life	*: 10 million operations min.*
Electrical Life	*: See graphics*
Operating Temperature	*: min./max. ˚C -5/+40*
Rated Operating Voltage (Ue)	*: 380/415 V AC*
Rated Operating Current (Ie)	*: 9-55 A*
Rated Thermal Current (Ith)	*: 25-110 A*
Insulation Voltage (Ui)	*: 660 V*
Insulation Voltage	*: 2.500 V AC*
Short circuit breaking capacity	*: 50 kA*
Standard	*: TS EN 60947-4-1*

Genel Şema / *General Scheme*

Kutu
Insulated enclosure

Bobin
Coil

Kilit / Yan tarafa monte edilir
Mechanical Interlock / Side Mounting

Termik Röle / Alt tarafa monte edilir
Thermal Relay / Bottom Assembly

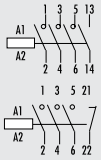
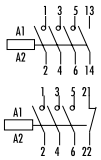
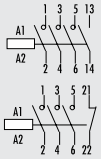
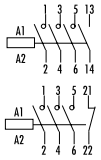
Yardımcı Kontak Bloklar / Üst tarafa monte edilir
Auxiliary Contact Blocks / Fix to the top of the contactor

HR Serisi Kontaktör Tipleri
Series Contactors Types

Merkezler arasındaki vida montaj mesafesi EN 50003 veya 35 mm metal raya EN 50022-3'e uygundur
Screw mounting distance between centres to EN 50003 or 35 mm metal rail conforms to EN 50022-3

HR0910N*

HR1701N*

Ürün Kodu	Kontak Diyagram	Anlık Termik Akımı Ith	Anma Akımı AC3 380V ~ Ie	3 Fazlı motorlarda kontrol edilebilen güç (sınıf AC2-AC3)			
Code	*Contact Diagram*	*Rated Thermal Current Ith*	*Rated Current in AC3 380V ~ Ie*	*Controllable powers of three-phase motors in category AC2-AC3*			
				220-240V	380-415V	440V	660V
HR0910N* HR0901N*		25 A	9 A	2.2 kW 3 HP	4 kW 5.5 HP	4.5 kW 6 HP	4.5 kW 6 HP
HR1310N* HR1301N*		25 A	13 A	3.2 kW 4.5 HP	6 kW 8 HP	6.5 kW 8.8 HP	6.5 kW 8.8 HP
HR1710N* HR1701N*		40 A	17 A	4 kW 5.5 HP	7.5 kW 10.5 HP	8.5 kW 11.5 HP	8.5 kW 11.5 HP
HR2510N* HR2501N*		40 A	25 A	6 kW 8 HP	11 kW 15 HP	12.5 kW 17 HP	12.5 kW 17 HP
HR33N*		72 A	33 A	7.5 kW 10 HP	15 kW 20 HP	18.5 kW 25 HP	22 kW 30 HP
HR40N*		72 A	40 A	11 kW 15 HP	18.5 kW 25 HP	20 kW 27 HP	30 kW 40 HP
HR46N*		90 A	46 A	15 kW 20 HP	22 kW 20 HP	25 kW 34 HP	37 kW 50 HP
HR55N*		110 A	55 A	18.5 kW 25 HP	30 kW 40 HP	33 kW 45 HP	45 kW 60 HP

*** Gerilim bobin seçimi için yıldız yerine aşağıdaki harf kodlarından birini kullanınız.**
** For voltage control coil selection please use the codes written below, instead of asterix.*

Bobin Seçim Tablosu
Coil Selection Table

BOBİN

Frekans *Frequency*	F	G	D	U	X	C	W	B	Z
50 HZ	24V	48V	110V	220V	220V 240V	366V	380V	440V	480V 500V
60 HZ		58V	115V	230V		440V	400V	528V	

HR Serisi Kontaktör Aksesuarları

Accessories For HR Series Contactors

IR13

IR02

I85

Yardımcı Kontak Bloklar (Kontaktörün üst kısmına montajlanır)

Auxiliary Contact Blocks (to fix to the top of the contactors)

Ürün Kodu	Kontak Diyagram	Anlık Termik Akımı Ith	Anma Akımı le AC15 EN 60947 -5-1 IEC947-5-1		
Code	*Contact Diagram*	*Rated Thermal Current Ith*	*Rated Current le EN 60947 -5-1 IEC947-5-1*		
			220V 240V	380V 415V	500V
IR02	21 31 / 22 32	10 A	3 A	1.5 A	1 A
IR11	21 33 / 22 34	10 A	3 A	1.5 A	1 A
IR22	21 31 43 53 / 22 32 44 54	10 A	3 A	1.5 A	1 A
IR13	21 31 41 53 / 22 32 42 54	10 A	3 A	1.5 A	1 A
IR31	21 33 43 53 / 22 34 44 54	10 A	3 A	1.5 A	1 A

Mekanik Kilitleme Aparatı (Yan tarafa montajlanır)

Mechanical Interlock (side mounting)

Ürün Kodu	Açıklama
Code	*Description*
I85	Farklı ölçülerde dahil olmak üzere iki kontaktörün yan yana montajını sağlar. *Enabling side by side mounting of two contactors even of different sizes.*

JA25 *Serisi Termik Röleler*

- Tek ve üç fazda aşırı akıma karşı koruma sağlamak için kullanılır.
- Tek fazda aşırı akımlarda üç bimetalin de ısınmasını sağlamak için termik rölenin kutupları seri bağlanır.
- HR serisi kontaktörlere direk montaj
- Çevre sıcaklığına karşı otomatik kompanzasyon
- Faz hatasına karşı koruma
- 1NA + 1NK yardımcı kontak
- Manuel veya otomatik reset
- Hata simülasyon butonu

Teknik Bilgiler

Çalışma sıcaklığı	: -5˚C; +50˚C
Saklama sıcaklığı	: -25˚C; +60˚C
Max. nem	: %95 (+40˚C)
Anma yalıtım gerilimi (Ui)	: 660 V~
Standartlar	: VDE 0660 IEC 947-4-1

JA25 *Series Thermal Relays*

- *With single phase and three phase protection against overload.*
- *For single phase overloads; The poles of the thermal relay is connected in series to achieve heating of three bimetals.*
- *Direct mounting on HR contactors*
- *Automatic compensation of ambient temperature*
- *Protection against phase failure*
- *Auxiliary contacts 1NO + 1 NC*
- *Manual or automatic reset*
- *Trigger simulation button*

Technical Information

Operating temperature from	*: -5˚C to; +50˚C*
Storage temperature from	*: -25˚C; +60˚C*
Max. humidity from	*: 95% (+40˚C)*
Rated insulation voltage (Ui)	*: 660 V~*
Standards and Approvals	*: VDE 0660 IEC 947-4-1*

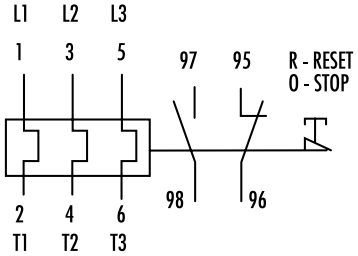
JA25 Serisi Termik Röleler
Series Thermal Relays

Kullanımı / *Usage*

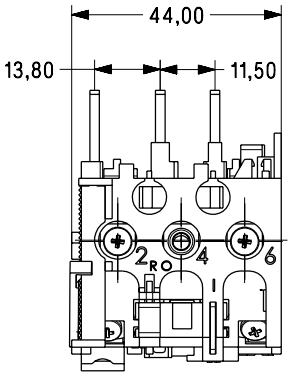
- **Tek ve üç fazda aşırı akıma karşı koruma sağlamak için kullanılır.**
- *With single phase and three phase protection against overload.*

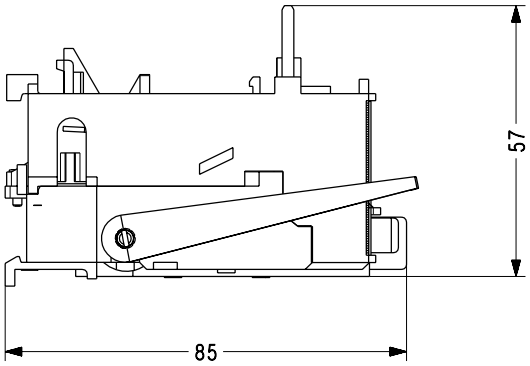
- **Tek fazda aşırı akımlarda üç bimetalin de ısınmasını sağlamak için termik rölenin kutupları seri bağlanır.**
- *For single phase overloads; The poles of the thermal relay is connected in series to achieve heating of three bimetals.*

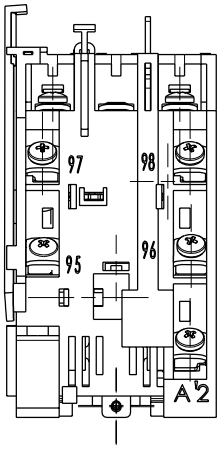
JA25*

Tipi *Type*	Terminal diyagramı ve numaralandırma *Terminal diagram and numbering*
JA25*	

***: İstenilen akım ayar aralığı için yandaki tablodan seçim yapınız.**
**: For selection of current calibration interval, please use the table*







JA25 Serisi Termik Röle Tipleri
Series Thermal Relay Types

Ürün Kodu *Code*	Akım Ayar Aralığı *Current Calibration Interval*	Seçilen Motorun Güç ve İşletme Akım Değerleri / *Power and Operation Current Values Of The Motor*																								Önerilen Kontaktör ve Sigorta *Recommended Contactor and Fuse*		
		220V			240V			380V			415V			440V			500V			600V			660V			Kontaktör *Contactor*	Sigorta/ *Fuses*	
		kW	HP	A	kW	HP	A	kW	HP	A	kW	HP	A	kW	HP	A	kW	HP	A	kW	HP	A	kW	HP	A		aM	gl
JA25A	0.15 - 0.25A													0.06	0.08	0.19	0.06	0.08	0.16	0.09	0.12	0.21	0.09	0.12	0.19		0.5	-
JA25A	0.15 - 0.25A																0.09	0.12	0.24								0.5	-
JA258	0.22 - 0.33A																										0.5	-
JA258	0.22 - 0.33A													0.09	0.12	0.28				0.12	0.16	0.27	0.12	0.16	0.25		0.5	-
JA258	0.22 - 0.33A							0.09	0.12	0.33							0.12	0.16	0.33								0.5	-
JA25C	0.3 - 0.45A																										1	2
JA25C	0.3 - 0.45A	0.06	0.08	0.38	0.06	0.08	0.35							0.12	0.16	0.37				0.18	0.24	0.4	0.18	0.24	0.35		1	2
JA25C	0.3 - 0.45A							0.12	0.16	0.42																	1	2
JA25D	0.42 - 0.63A																										1	2
JA25D	0.42 - 0.63A	0.09	0.12	0.55	0.09	0.12	0.5							0.18	0.24	0.55	0.18	0.24	0.55	0.18	0.24	0.46	0.25	0.34	0.55			
JA25D	0.42 - 0.63A																0.250	34	0.6								1	2
JA25E	0.6 - 0.9A																										2	0.12
JA25E	0.6 - 0.9A	0.16	0.75	0.12	0.16	0.68	0.18	0.24	0.64				0.25	0.34	0.75				0.37	0.5	0.77	0.37	0.5	0.7			2	4
JA25E	0.6 - 0.9A							0.25	0.34	0.8							0.37	0.5	0.9				0.55	0.75	0.9		2	4
JA25F	0.85 - 1.27 A																										2	0.18
JA25F	0.85 -1.27A	0.24	1.10	0.18	0.24	1							0.37	0.5	1.06				0.55	0.75	1	0.75	1	1.1		HR09	2	4
JA25F	0.85 - 1.27A							0.37	0.5	1.2				0.55	0.75	1.25	0.55	0.75	1.2	0.75	1	1.2				HR13	2	4
JA25G	1.2 - 1.75A																										2	4
JA25G	1.2 - 1.75A	0.25	0.34	1.4	0.25	0.34	1.38	0.55	0.75	1.5				0.75	1	1.65	0.75	1	1.5	1.1	1.5	1.65	1.1	1.5	1.5		2	4
JA25H	1.7 - 2.6A	0.37	0.5	2	0.37	0.5	1.9	0.75	1	2	0.75	1	2	1.1	1.5	2.3	1.1	1.5	2	1.5	2	2.2	1.5	2	2		4	6
					0.55	0.75	2.3	32	23.4	50	25	17	32	20														
JA25H	1.7 - 2.6A							1.1	1.5	2.6	1.1	1.5	2.5				1.5	2	2.6								4	6
JA251	2.5 - 3.7A																										6	10
JA251	2.5 - 3.7A	0.55	0.75	2.7	0.75	1	3	1.5	2	3.5	1.5	2	3.5	1.5	2	3.1				2.2	3	3.1	2.2	3	2.9		6	10
		0.75	1	3.3																			3	4	3.5			
JA25I	3.6 - 5.4A	1.1	1.5	4.5	1.1	1.5	4	2.2	3	5	2.2	3	5	2.2	3	4.3	2.2	3	3.8	3	4	4.2	4	5.5	4.9		8	16
JA25I	3.6 - 5.4A																3	4	5								8	16
JA25M	5.3 - 7.5A																10	20										
JA25M	5.3 - 7.5A	1.5	2	6	1.5	2	5.5	3	4	6.6	3	4	5.5	3	4	5.8	4	5.5	6.5	4	5.5	5.5	5.5	5.7	6.7		10	20
JA25M	5.3 - 7.5A																			5.5	7.5	7.5					10	20
JA25N	7.3 - 10.2A																										12	20
JA25N	7.3 -10.2A	2.2	3	8.7	2.2	3	7.9	4	5.5	8.5	4	5.5	8.5	4	5.5	7.6	5.5	7.5	9				7.5	10	9		12	20
JA25N	7.3 -10.2A																			7.5	10	10				HR13	12	20
JA250	10 -15A																										16	25
JA250	10 -15A	3	4	11.5	3	4	10.5	5.5	7.5	11.5	5.5	7.5	11	5.5	7.5	10.3	7.5	10	12				11	15	13	HR13	16	25
					4	5.5	14				7.5	10	14	7.5	10	13.5				11	15	14				HR17		
JA25P	13.5 - 20A	4	5.5	15	5.5	7.5	19	7.5	10	15.5				11	15	19	11	15	17	15	20	19	15	20	17.5	HR17	25	50
																										HR25		
JA25Q	18 - 26A	5.5	7.5	21	7.5	10	24.5	11	15	22	11	15	21				15	20	23	18.5	25	23.5	18.5	25	21	HR25	40	63
	20 - 33A																									HR33	40	63

Not: **Termik rölenin akım ayarlığı ve sigorta değerleri seçilirken motor üzerindeki etiketi dikkate alınız.**
Yüksek frekanslı anahtarlama için yüksek güçlü kontaktör tavsiye edilir.

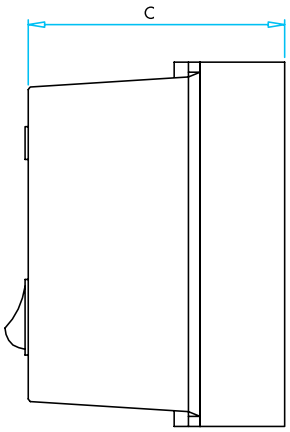
Note: *To select thermal relay calibration and fuse value, refer to the ratings plate of the motor.*
For high switching frequency, it is advisable to select the contactor with higher power.

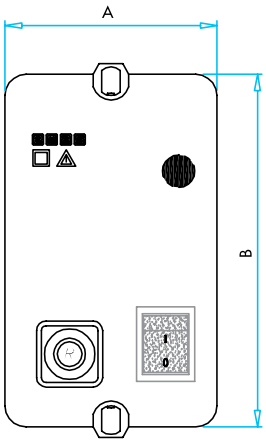
Kontaktörlü ve Termik Röleli Direkt Yol Vericiler (IP65)

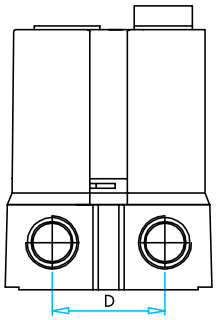
Direct Starters With Contactor and Thermal Relay (IP65)

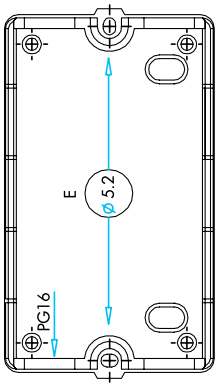
HJ12

Ürün Kodu *Code*	Açıklama *Description*
HJ11	HR09 - HR13 Serileri için resel butonlu ve anahtarlı, sinyalli kutu (1. BOY) *Enclosure with Reset button for HR09 - HR13 Series*
HJ21	HR17 - HR25 Serileri için reset butonlu ve anahtarlı, sinyalli kutu (2. BOY) *Enclosure with Reset button for H17 - HR25 Series*
HJ12	HR09 - HR13 Serileri için start-stop/reset butonlu kutu (3. BOY) *Enclosure with start-stop / Reset button for HR09 - HR13 Series*
HJ22	HR17 - HR25 Serileri için start-stap/reset butonlu kutu (4. BOY) *Enclosure with start-stop / Reset button for HR17 - HR25 Series*

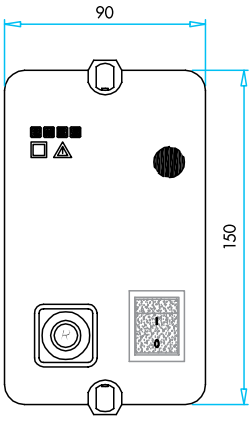




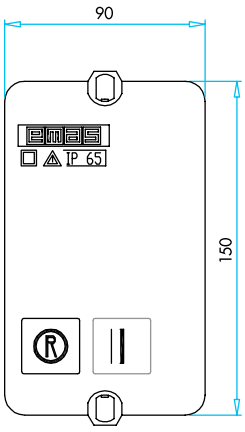




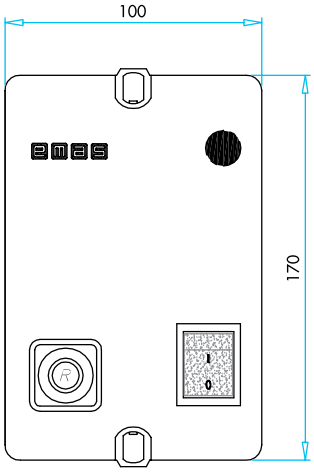
Tip / *Type*	A	B	C	D	E
HJ11	90	150	98	50	140
HJ12	90	150	120	50	140
HJ21	100	170	110	52	165
HJ22	100	170	138	52	165



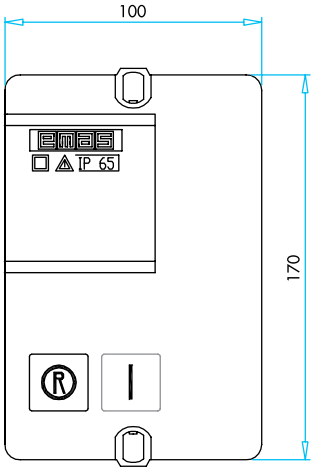
HJ11



HJ12



HJ21



HJ22

Kontaktörlü ve Termik Röleli Direkt Yol Vericiler

Direct Starters With Contactor and Thermal Relay

HJ11A09UG

Ürün Kodu	Termik Akım Ayar Sahası (A)	Kontaktör Anma Akımı (A) 380V	Güç (kW) 380-415V	Kutu Ebatı
Code	*Thermal Current Calibration Field*	*Contactor Rated Current*	*Power*	*Box Size*
HJ11A09UG	1.20 - 1.75	9	0.55	I.BOY
HJ11A09UH	1.70 - 2.60	9	1.10	I.BOY
HJ11A09UI	2.50 - 3.70	9	1.50	I.BOY
HJ11A09UL	3.60 - 5.40	9	2.20	I.BOY
HJ11A09UM	5.30 - 7.50	9	3.00	I.BOY
HJ11A13UN	7.30 - 10.20	13	4.00	I.BOY
HJ21A17UO	10.00 - 15.00	17	5.50	2.BOY
HJ21A25UP	13.50 - 20.00	25	7.50	2.BOY
HJ21A25UQ	18.00 - 26.00	25	11.00	2.BOY

Not : Standart olarak kutuda reset butonu, ışıklı aç-kapa anahtarı ve bir adet Ø 10 mm kablolu sinyal lambası montajlı olarak mevcuttur.
Note : Reset button, illuminated on-off switch and signal with Ø 10 mm cable are mounted on the standard box

Not : Standart ışıklı aç-kapa anahtarı rengi yeşil; Ø 10 mm kablolu sinyal lambası rengi de kırmızıdır.
Note : The colour of the illuminated on-off switch is green, where by the colour of the Ø 10 mm cable is red.

HJ12X09UA

Ürün Kodu	Termik Akım Ayar Sahası (A)	Kontaktör Anma Akımı (A) 380V	Güç (kW) 380-415V	Kutu Ebatı
Code	*Thermal Current Calibration Field*	*Contactor Rated Current*	*Power*	*Box Size*
HJ12X09UA	0.15 - 0.25	9	0.06	3.BOY
HJ12X09UB	0.22 - 0.33	9	0.09	3.BOY
HJ12X09UC	0.30 - 0.45	9	0.12	3.BOY
HJ12X09UD	0.42 - 0.63	9	0.15	3.BOY
HJ12X09UE	0.60 - 0.90	9	0.24	3.BOY
HJ12X09UF	0.85 - 1.27	9	0.37	3.BOY
HJ12X09UG	1.20 - 1.75	9	0.55	3.BOY
HJ12X09UH	1.70 - 2.60	9	1.10	3.BOY
HJ12X09UI	2.50 - 3.70	9	1.50	3.BOY
HJ12X09UL	3.60 - 5.40	9	2.20	3.BOY
HJ12X09UM	5.30 - 7.50	9	3.00	3.BOY
HJ22X13UN	7.30 - 10.20	13	4.00	4.BOY
HJ22X17UO	10.00 - 15.00	17	5.50	4.BOY
HJ22X25UP	13.50 - 20.00	25	7.50	4.BOY
HJ22X25UQ	18.00 - 26.00	25	11.00	4.BOY

Not : Standart olarak kutuda start ve reset butonu montajlı olarak mevcuttur.
Note : Start and reset buttons are mounted on box as standard.

Teknik Özellikler / *Technical Specifications*

			HR09	HR13	HR17	HR25
Anma Yalıtım Gerilimi IEC Ui / *Rated insulation voltage IEC Ui*		V~	660	660	660	660
Anma Termik Gerilimi IEC Ith / *Rated thermal voltage IEC Ith*		A	25	25	40	25
Anma İşletim Akımı 380V~AC-1-Ie / *Rated operating current at 380V ~in AC-1-Ie*		A	22	22	35	22
Anma İşletim Akımı 380V~AC-3-Ie / *Rated operating current at 380V ~in AC-3-Ie*		A	9	13	17	13
Mekanik Ömür / *Mechanical life (cl. IV 1200man/h)*		millions of cvcles	20	20	20	20
AC-3 Katagorisine göre kontrol edilebilen güç (3 faz) / *CONTROLLABLE POWERS IN*	220 - 240 V~	kW (HP)	2.2 (3)	3.2 (4.5)	4 (5.5)	6 (8)
OPERATING CATEGORY AC-3 Three Phase	380 - 415 V~	kW (HP)	4 (5.5)	6 (8)	5.5 (7.5)	11 (15)
IEC 947-4-1 IEC EN 60947-4-1 / *IEC 947-4-1 IEC EN 60947-4-1*	500 V~	kW (HP)	5.5 (7.5)	8 (11)	7.5 (10)	15 (20)
Standardına göre kontrol edilebilen güç	120 V~	HP	1	1.5	2	3
	220 - 240 V~	HP	2	3	5	7.5
CONTROLLABLE POWERS IN	440 - 480 V~	HP	5	7.5	10	15
According to Standards	550 - 600 V-	HP	7.5	10	15	120
	Ie	A	9	11	17	22
Standardına göre kontrol edilebilen güç	220 - 240 V~	HP	3	5	7.5	20
	440 - 480 V-	HP	7.5	10	15	10
CONTROLLABLE POWERS IN	550 - 600 V-	HP	7.5	10	15	20
According to Standards / Rated operating current at 600 V~	Ie	A	25	25	25	25

			HR09	HR13	HR17	HR25
Anma Yalıtım Gerilimi IEC Ui / *Rated insulation voltage IEC Ui*		V-	660	660	660	660
Anma Termik Gerilimi IEC Ith / *Rated thermal voltage IEC Ith*		A	72	72	90	110
Anma İşletim Akımı 380V AC-1-Ie / *Rated operating current at 380V ~in AC-1-Ie*		A	64	64	80	100
Anma İşletim Akımı 380V AC-3-Ie/ *Rated operating current at 380V ~in AC-3-Ie*		A	33	40	46	55
Mekanik Ömür / *Mechanical Life (cl. IV 1200man/h)*		millions ol cvcles	10	10	10	10
AC-3 Katagorisine göre kontrol edilebilen güç (3 faz) / *CONTROLLABLE POWERS IN*	220 - 240 V~	kW (HP)	7.5 (10)	11 (15)	15 (10)	18.5 (15)
OPERATING CATEGORY AC-3 Three Phase	380 - 415 V~	kW (HP)	15 (20)	18.5 (25)	22 (30)	30 (40)
IEC 947-4-1 IEC EN 60947-4-1/ *IEC 947-4-1 IEC EN 60947-4-1*	500 V~	kW (HP)	20 (27)	22 (30)	30 (37)	37 (50)
Standardına göre kontrol edilebilen güç	120 V~	HP	5	7.5	10	15
	220 - 240 V~	HP	10	15	20	25
CONTROLLABLE POWERS IN	440 - 480 V~	HP	20	25	30	40
According to Standards	550 - 600 V~	HP	25	30	40	40
	Ie	A	40	50	70	90
Standardına göre kontrol edilebilen güç	120 V~	HP	5	7.5	10	15
	220 - 240 V~	HP	10	15	20	25
CONTROLLABLE POWERS IN	440 - 480 V~	HP	20	25	30	40
According to Standards / Rated operating current at 600 V~	440 - 480 V~	HP	25	30	40	40
	Ie	A	40	50	70	90

Kontrol Bobini / *Control Coil*			HR09-13	HR17-25	HR33-55
Alternatif Akım Çekimi / *Alternating current absorption*	anlık / *instantaneous*	VA	60	80	90
	sürekli / *continuous*	VA	7	7	9
Doğru Akım Çekimi / *Direct current absorption*	anlık /*instantaneous*	W	80	130	130
	sürekli /*continuous*	W	5	8	8
Minimum ve Maksimum Besleme voltajı / *Minimum and maximum supply voltage*		Un	0.85 - 1.1	0.85 - 1.1	0.85 - 11
Anma Geriliminde Anahtarlama Zamanı / *Switching times at rated voltage*	anlık /*instantaneous*	ms	20 - 25	20 - 30	20 - 25
	sürekli /*continuous*	ms1	13 - 18	17 - 22	15 - 20
Bobin Yalıtımı / *Coil insulation*		Sınıfı /*Class*	F	F	F

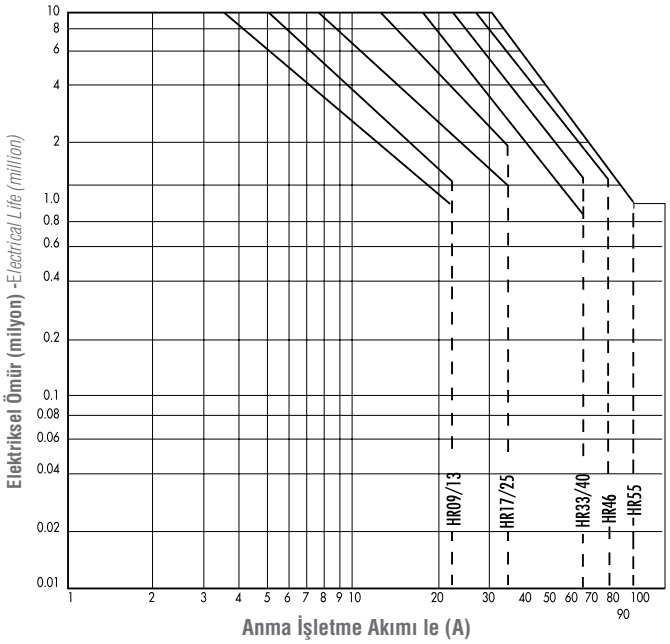
Yardımcı Kontaklar / *Instantaneous Auxiliary Contacts*				
Anma Termik Akımı /Rated thermal current a.c.		Ith	A	10
AC15 Kategorisinde Anma İşletim Akımı		220/240V~	A	3
RATED OPERATING CURRENT IN	AC-15	380/415V~	A	1.5
CATEGORY		500V~	A	1
IEC947-5-1 IEC EN 60947-5-1	DC-13	110V c.c.	A	1
		230V c.c.	A	0.5
Standardına göre *According to*		classif. A600	A	1.5

Teknik Özellikler / *Technical Specifications*

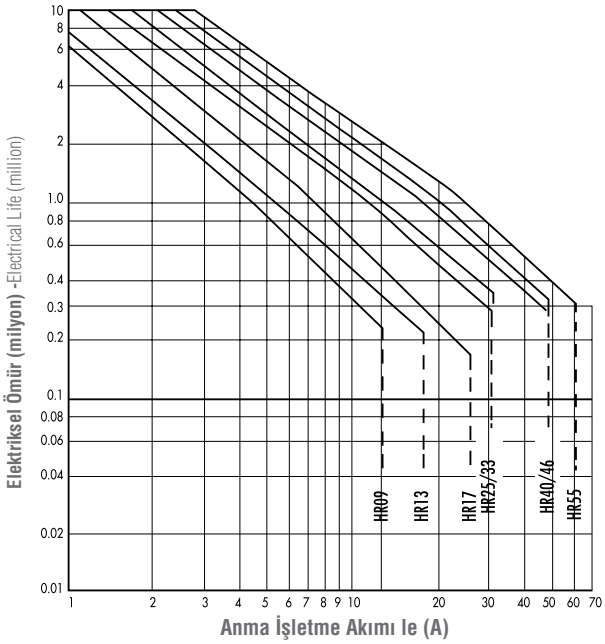
HR Serisi Üç Kutuplu Kontaktörlerin Elektriksel Ömrü / *Electrical Life Of HR Series Three Poles Contactors*

Kontakların Anma İşletim Akımına Göre Elektriksel Ömür Diyagramı
Diagram of the Electrical Life of Contactor According to Nominal Operating Current

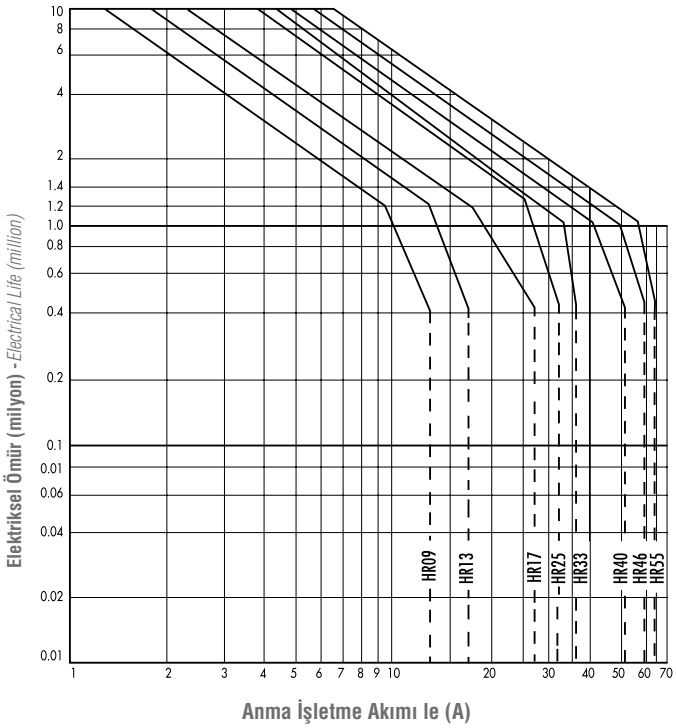
Kategori AC-1
Category AC-1



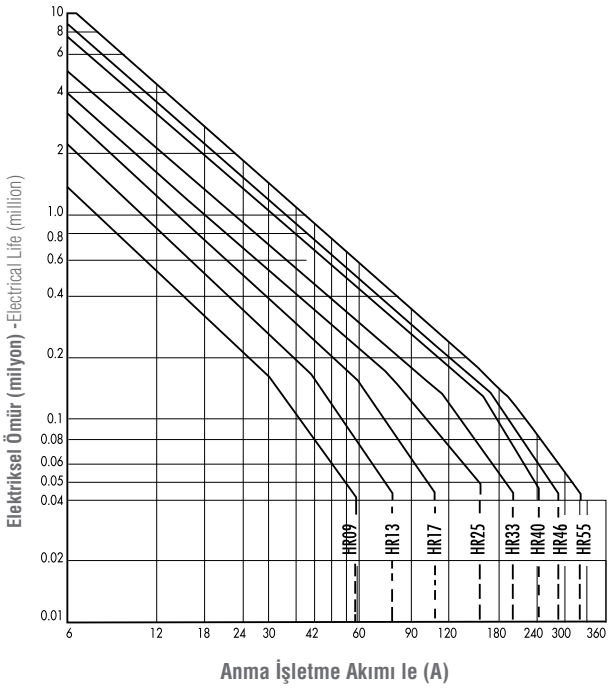
Kategori AC-2
Category AC-2



Kategori AC-3
Category AC-3

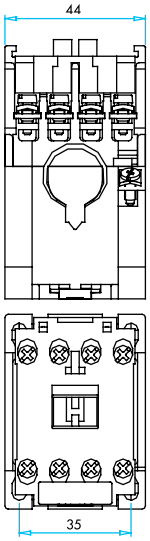


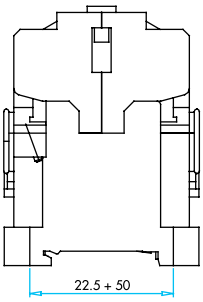
Kategori AC-4
Category AC-4



BOYUTLAR (mm) / *DIMENSIONS (mm)*

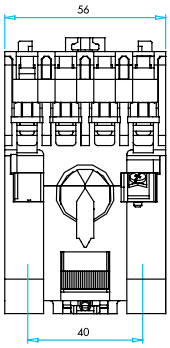
HR0910N*

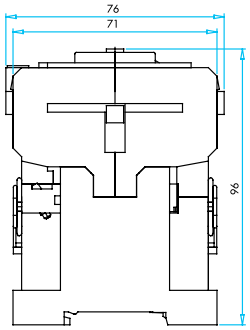




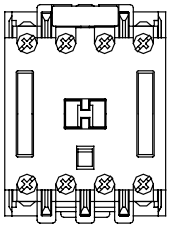
HR09-HR13
Kablo Seçimi / *Cable Selection*
HR09 / 2x2.5 mm²
HR13 / 2x2.5 mm²

HR1701N*

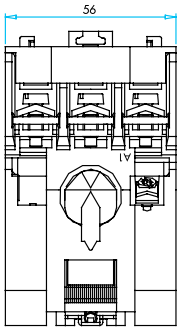


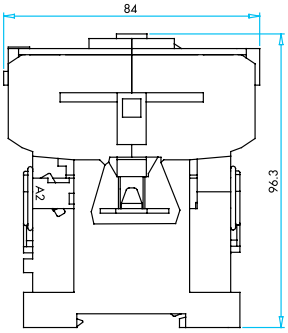


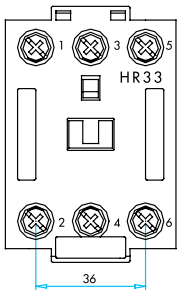
HR17-HR25
Kablo Seçimi / *Cable Selection*
HR17/ 2x6 mm²
HR25 / 2x6 mm²



HR33N*







HR33-HR55
Kablo Seçimi / *Cable Selection*
HR33 / 2x10 mm²
HR40 / 2x10 mm²
HR46 / 25 mm²
HR55 / 25 mm²

HN *Serisi Kontaktörler*

- 9-400 A arası 7 farklı boyutta akım taşıma özelliği
- Üstün anahtarlama kapasitesi
- Titreşime karşı dirençli, güvenli ve kolay kablo bağlantısı sağlayan terminaller
- Sıcaklığa karşı kompanze edilmiş
- Yeni estetik tasarım
- Yüksek koruma sağlayan sistemle tam uyumlu termik röle
- 35 mm'lik montaj rayına hızlı ve basit montaj özelliği
- Geniş aksesuar seçenekleri ile kullanıcıların tüm ihtiyaçlarına cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	: 10 milyon açma-kapama min.
Elektriksel Ömür	: Grafiğe bakınız (Bkz. HR serisi kontaktör)
Çalışma Sıcaklığı	: min./maks. ˚C -5/+40
Anma İşletme Gerilimi (Ue)	: 380/415 V AC
Anma İşletme Akımı (Ie)	: 9-400 A arası
Anma Termik Akımı (Ith)	: 25-120 A arası
Yalıtım Gerilimi (Ui)	: 660 V
İzolasyon Gerilimi	: 2.500 V AC
Kısa Devre Kesme Kapasitesi	: 50 kA
Standart	: TS EN 60947-4-1

HN *Series Contactors*

- *To be used from 9A to 400A with 7 different sizes*
- *High switching capacity*
- *Terminals resistant against vibration, reliable and enabling easy cable connection*
- *Temperature compensated*
- *Thermal relay in conformity with high protection system*
- *New aesthetic design*
- *Fast and simple mounting feature to 35 mm mounting rail*
- *Product variety with wide accessories fulfilling all applications of the user*

Technical Information

Mechanical Life	*: 10 million operations min.*
Electrical Life	*: See graphics (See HR series contactor)*
Operating Temperature	*: min./max. ˚C -5/+40*
Rated Operating Voltage (Ue)	*: 380/415 V AC*
Rated Operating Current (Ie)	*: 9-400 A*
Rated Thermal Current (Ith)	*: 25-120 A*
Insulation Voltage (Ui)	*: 660 V*
Insulation Voltage	*: 2.500 V AC*
Short circuit breaking capacity	*: 50 kA*
Standard	*: TS EN 60947-4-1*

HN Serisi Kontaktör Tipleri
Series Contactor Types

Merkezler arasındaki vida montaj mesafesi EN 50003 veya 35 mm metal raya EN 50022-3'e uygundur.
Screw mounting distance between centres to EN 50003 or 35 mm metal rail conforms to EN 50022-3.

HN0610N*

HN0910N*

HN46N*

Ürün Kodu *Code*	Kontak Diyagram *Contact Diagram*	Yardımcı Kontaklar *Auxiliary Contacts*	Anlık Termik Akımı Ith *Rated Thermal Current Ith*	Anma Akımı AC3 380V ~ Ie *Rated Current in AC3 380V ~ Ie*	3 Fazlı motorlarda kontrol edilebilen güç (sınıf AC2-AC3) *Controllable powers of three-phase motors in category AC2-AC3*		
					220-240V	380-415V	660V
HN061ON*		1 NA 1NO	20 A	6 A	1.5 kW 2 HP	3 kW 4 HP	4 kW 5.5 HP
HN0601N*		1 NK 1NC					
HN091ON*		1 NA 1NO	20 A	9 A	2.2 kW 3 HP	4 kW 5.5 HP	4.5 kW 6 HP
HN0901N*		1 NK 1NC					
HN1310N*		1 NA 1NO	20 A	13 A	3.2 kW 4.5 HP	6 kW 8 HP	6.5 kW 8.8 HP
HN1301N*		1 NK 1NC					
HN1710N*		1 NA 1NO	30 A	17 A	4 kW 5.5 HP	7.5 kW 10.5 HP	8.5 kW 11.5 HP
HN1701N*		1 NK 1NC					
HN2510N*		1 NA 1NO	30 A	25 A	6 kW 8 HP	11 kW 15 HP	12.5 kW 17 HP
HN2501N*		1 NK 1NC					
HN33N*		- -	45 A	33 A	7.5 kW 10.2 HP	15 kW 20.5 HP	18.5 kW 25.2 HP
HN40N*		- -	45 A	40 A	11 kW 15 HP	22 kW 29.9 HP	30 kW 41 HP
HN46N*		- -	60 A	46 A	15 kW 20.4 HP	22 kW 30 HP	25 kW 34 HP
HN55N*		- -	65 A	55 A	17 kW 23 HP	30 kW 40 HP	33 kW 45 HP
HN65N*		- -	80 A	65 A	18.5 kW 30 HP	35 kW 47 HP	45 kW 60 HP

***: Gerilim seçimi için yıldız yerine yan sayfadaki harf kodlarından birini kullanınız.**
**: For voltage selection please use the codes written in the next page, instead of asterix.*

Bobin Seçim Tablosu
Coil Selection Table

BOBİN

Frekans / *Frequency*	F	G	G1	D	U	X	C	W	B	Z
50 HZ	24V	48V	42V	110V	220V	220V 240V	366V	380V	440V	480V 500V
60 HZ		58V	42V	115V	230V		440V	400V	528V	

Not 1 : **HR serisi kontaktörlerdeki teknik özellikler HN serisi kontaktörlerde de geçerlidir.**
Note 1 : *The technical specifications of HR series contactors are valid for the HN series contactors.*

Not 2 : **JA25 serisi termik röleler ve HJ serisi kontaktör kutuları HN9-13 ve HN17-25 tipi kontaktörler içinde kullanılabilir.**
Note 2 : *JA25 series thermal relays and HJ series contactor boxes can be used for HN9-13 and HN17-25 types contactors, too.*

HN Serisi Kontaktör Aksesuarları
Accessories For HN Series Contactors

HNYU40

Yardımcı Kontak Bloklar
Auxiliary Contact Blocks

Ürün Kodu / *Code*	Kontak Diyagram / *Contact Diagram*	Anlık Termik Akımı Ith / *Rated Thermal Current Ith*	Anma Akımı le AC15 EN 60947 -5-1 IEC947-5-1 / *Rated Current le EN 60947 -5-1 IEC947-5-1* 220V 240V	380V 415V	500V
HNYU04	21 31 41 51 / 22 32 42 52	10 A	3 A	1.5 A	1 A
HNYU40	23 33 43 53 / 24 34 44 54	10 A	3 A	1.5 A	1 A
HNYU22	21 31 43 53 / 22 32 44 54	10 A	3 A	1.5 A	1 A
HNYU13	21 31 41 53 / 22 32 42 54	10 A	3 A	1.5 A	1 A
HNYU31	21 33 43 53 / 22 34 44 54	10 A	3 A	1.5 A	1 A
*HNYYB11	21 33 / 22 34	10 A	6 A	4 A	1.5 A

Not : **Yardımcı kontak bloklar üstten montajlanır.**
Note : *Auxiliary contact blocks are mounted on top of the contactor.*

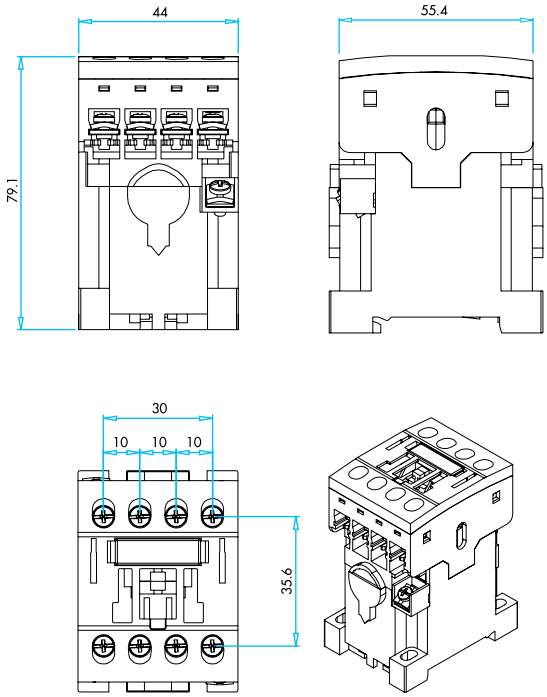
***Not** : **HNYYB11 17-65 A arası kontaktörlere uygundur**
**Note* : *Suitable for 17-65 A Contactors*

HNMK1

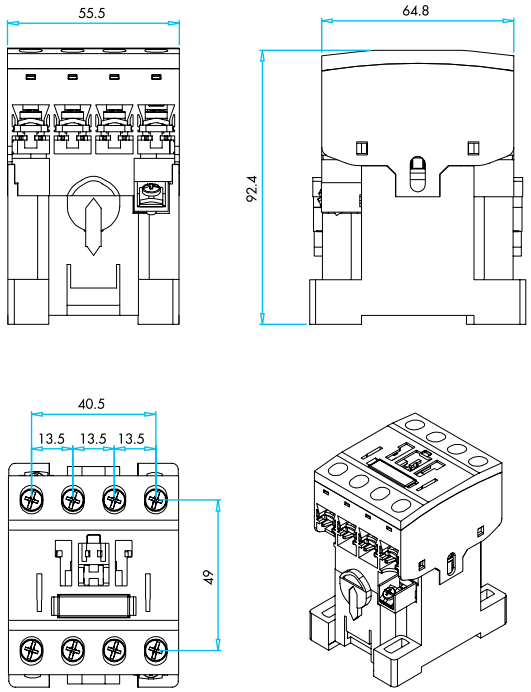
Mekanik Kilitleme Aparatı
Mechanical Interlock

Sipariş Kodu / *Order Code*	Açıklama / *Description*
HNMK1	Mekanik kilitleme aparatı (Yan tarafa montajlanır) 9-13A Arası *Mechanical interlock (side mounting)*

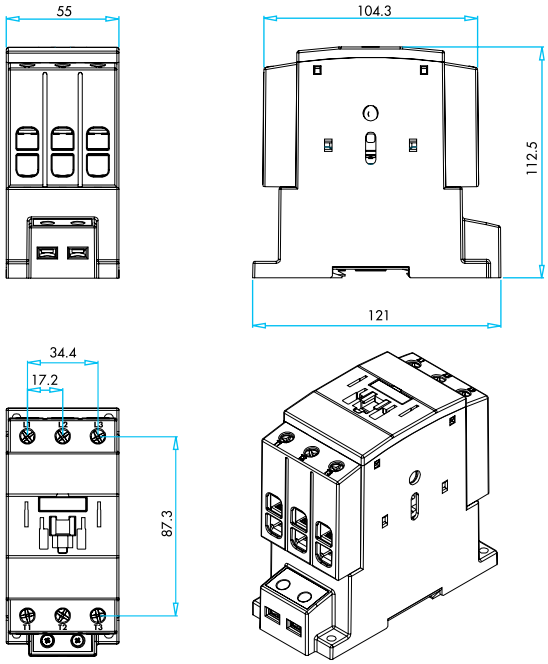
BOYUTLAR (mm) / *DIMENSIONS (mm)*



HN09/13



HN17/25



HN46/65

Kumanda Kutuları

Control Boxes

B

Kumanda Kutuları

Genel Özellikler ve Teknik Bilgiler 3
Kumanda Kutuları Seçim Tablosu 4
Kumanda Kutuları Kod Kombinasyonu Tablosu 5
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Tekli Kumanda Kutuları 7
İkili Plastik Kumanda Kutuları 8
Üçlü Plastik Kumanda Kutuları 9
Dörtlü Plastik Kumanda Kutuları 10
Altılı Plastik Kumanda Kutuları 11
Boyutlar 12

Control Boxes

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Control Boxes Selection Table 4
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General Scheme 6
Single Cut-Out Control Boxes 7
Plastic Two Cut-Out Control Boxes 8
Plastic Three Cut-Out Control Boxes 9
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Plastic Six Cut-Out Control Boxes 11
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CEKP Çift El Kontrol Paneli

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Çift El Kontrol Panelleri 14
Boyutlar 14

CEKP Two Hand Control Panel

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Two Hand Control Panels 14
Dimensions 14

Kumanda Kutuları

- Ø22 mm çaplı butonlara uygun
- Cam elyaf katkılı plastik gövde sayesinde mekanik darbelere tam dayanım
- Farklı boyutlarda 5 gövde tipi
- Renkli butonlar sayesinde kullanım kolaylığı
- Koruma sınıfının yüksek olması nedeniyle çevre şartlarına maksimum dayanım

Teknik Bilgiler

Çalışma Sıcaklığı : min./maks. ˚C -5/+85
Koruma Sınıfı : Uygun butonlarla IP65
Standart : TS EN 60947-5-1 VDE 0660 UL508

Butonlar

Not: Kumanda kutularının içinde kullanılan kontak blokların teknik özellikleri için bakınız sayfa A 21.

Control Boxes

- *Suitable for Ø22 mm buttons*
- *Strong resistance against mechanical strokes through glass fibre reinforced plastic body*
- *5 body types in different dimensions*
- *Usage facility with coloured buttons*
- *Maximum strength for environmental conditions with waterproof body*

Technical Information

Operating Temperature : min./max. ˚C -5/+85
Protection Degree : IP65 with suitable buttons
Standard : TS EN 60947-5-1 VDE 0660 UL508

Buttons

Notes: See page A 21 to see the technical specifications of the contact blocks mounted in the control boxes.

Kumanda Kutuları Seçim Tablosu

Control Boxes Selection Table

Seri	1. Delik	2. Delik	3. Delik	4. Delik	5. Delik	6. Delik	Etiket
PY3	56B	07C	08H	-	-	-	A
Series	*1. Cut-Out*	*2. Cut-Out*	*3. Cut-Out*	*4. Cut-Out*	*5. Cut-Out*	*6. Cut-Out*	*Label*

Seri
Series

- **P1C** — **Tek Gözlü Plastik Kumanda Kutusu Siyah-Gri** *Black-Grey Plastic Control Box (single cut-out)*
- **P1EC** — **Tek Gözlü Plastik Kumanda Kutusu Sarı-Siyah** *Yellow-Black Plastic Control Box (single cut-out)*
- **PY1** — **Tek Gözlü Plastik Yüksek Kumanda Kutusu Siyah-Gri** *Black-Grey Plastic High Control Box (single cut-out)*
- **M1C** — **Tek Gözlü Alüminyum Yüksek Kumanda Kutusu Sarı-Gri** *Yellow-Grey Aluminium High Control Box (single cut-out)*
- **P2** — **Iki Gözlü Plastik Kumanda Kutusu Siyah-Gri** *Black-Grey Plastic Control Box (two cut-out)*
- **PY2** — **Iki Gözlü Plastik Yüksek Kumanda Kutusu Siyah-Gri** *Black-Grey Plastic High Control Box (two cut-out)*
- **P3** — **Üç Gözlü Plastik Kumanda Kutusu Siyah-Gri** *Black-Grey Plastic Control Box (three cut-out)*
- **P3EC** — **Üç Gözlü Plastik Kumanda Kutusu Sarı-Siyah** *Black-Grey Plastic Control Box (three cut-out)*
- **PY3** — **Üç Gözlü Plastik Yüksek Kumanda Kutusu Siyah-Gri** *Yellow-Black Plastic Control Box (three cut-out)*
- **P4** — **Dört Gözlü Plastik Kumanda Kutusu Siyah-Gri** *Black-Grey Plastic Control Box (four cut-out)*
- **PY4** — **Dört Gözlü Plastik Yüksek Kumanda Kutusu Siyah-Gri** *Black-Grey Plastic High Control Box (four cut-out)*
- **P6** — **Altı Gözlü Plastik Kumanda Kutusu Siyah-Gri** *Black-Grey Plastic Control Box (six cut-out)*
- **PY6** — **Altı Gözlü Plastik Yüksek Kumanda Kutusu Siyah-Gri** *Black-Grey Plastic High Control Box (six cut-out)*

YAN SAYFADAKİ P KUTU KOD KOMBİNASYONU TABLOSUNDAN RAKAM VE HARFLERİNİ KULLANARAK ÖZEL KUTU SİPARİŞ KODUNUZU YARATABİLİRSİNİZ.

YOU CAN MAKE YOUR SPECIAL BOX ORDER CODE FROM P BOX CODE COMBINATION TABLE IN NEXT PAGE.

Etiket
Label

- **Etiketsiz** *Without Label*
- **A** — **BET08** *BET08*
- **B** — **BET18** *BET18*
- **C** — **BET08 - Start** *BET08 - Start*
- **D** — **BET08 - Stop** *BET08 - Stop*
- **E** — **BET08-01** *BET08-01*
- **F** — **BET08-01 OK** *BET08-01 OK*
- **G** — **BET08-201** *BET08-201*
- **H** — **BET08-201 OK** *BET08-201 OK*
- **I** — **BET08-201 OK 2** *BET08-201 OK 2*
- **K** — **BET60P Kalıptan Kapalı Kutu İçin** *BET60P Closed Boxes*
- **L** — **BET60A** *BET60A*
- **M** — **Özel Etiket** *Special Label*

Örnek: **PY3-56B07C58L-A Kodu PY3 tipi kutu 1. delikte 56. satır B sutununa denk gelen buton kodumuz 2. Delikte 07. satır C sütununa denk gelen buton kodu ve 3. Delikte 58. Satır L sütunundaki kodu sonunda da A tipi Etiketi ifade etmektedir.**

Buton Kodlarına buton bölümümüzden veya kodlama tablolarından bakabilirsiniz P serisi Kutularda kontak blok ve duyar bloklar C serisinden gelecektir.

Not: P, PY ve M kodlu kutularımızdan vereceğiniz özel siparişler için seçim tablosunu kullanabilirsiniz.
Seçim tablosundan oluşturduğunuz özel kodlu ürünlerde siparişiniz 50 adetin altında ise demonte olarak teslim edilir.

Example: *PY3-56B07C58L-A Code means :Box type is PY3 series, 1st Hole is push button where is 56. line and B coloum in the next page, 2nd Hole is push button where is 7. line and C coloum in the next page, 3rd Hole push button where is 58. line and L coloum in the next page, Label A means BET08*

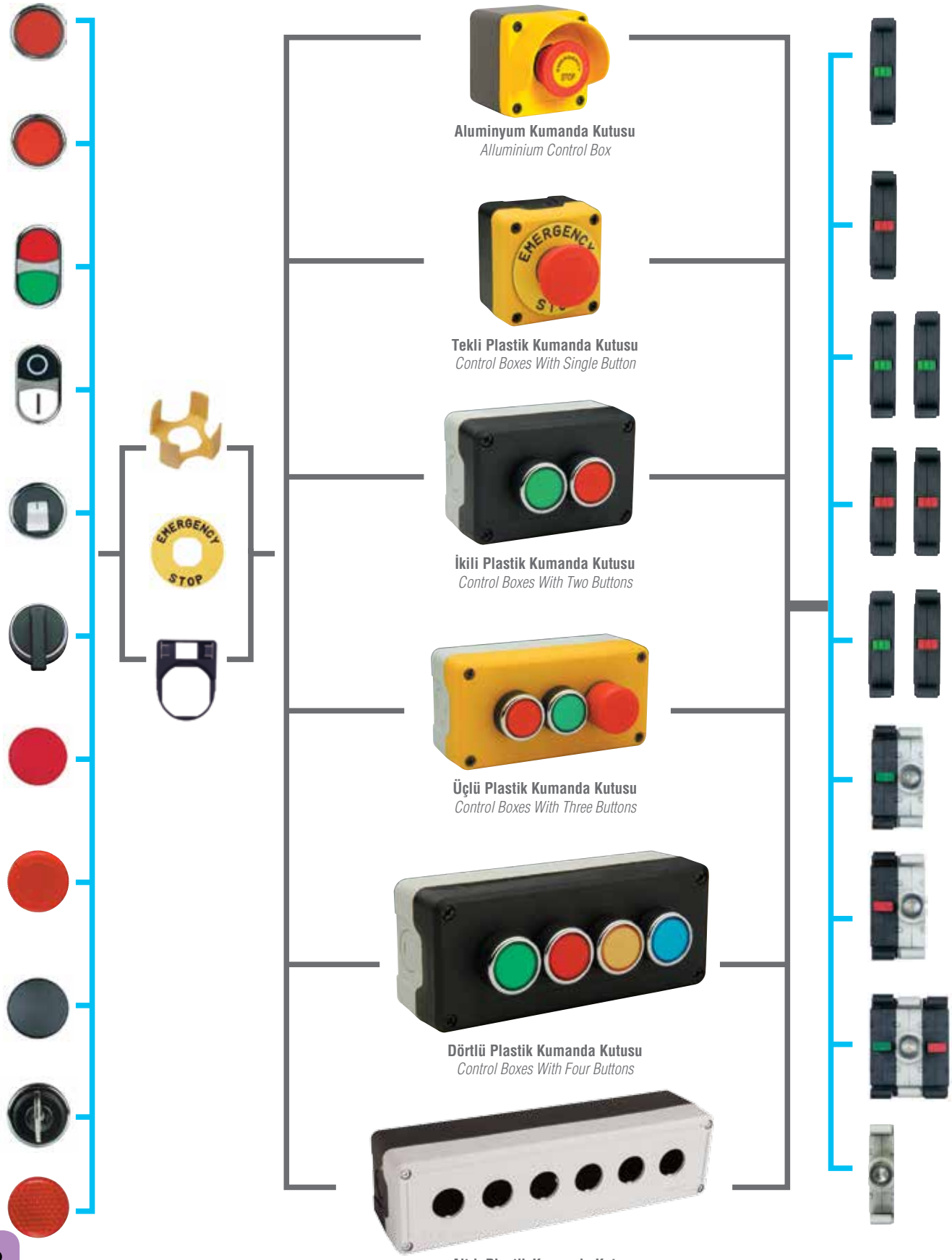
You can find all Push Button Codes from Push Button parts or P Type Box Code Combination Table,

Note: You can use Selection Table for your P, PY and M Boxes orders
Special orders from the Selection Table will be delivered as dismounted if the quantity is less than 50 pcs.

Kutu Kod Kombinasyonu Tablosu / *Box Code Combination Table*

	B BUTON SERİSİ / *B BUTTON SERIES*				C BUTON SERİSİ / *C BUTTON SERIES*				MB BUTON SERİSİ / *MB BUTTON SERIES*			
	A	B	C	D	E	F	G	H	I	J	K	L
01	B100DB	B100S20	B100E	B030XB	CM100DB	CM100S20	CM100E	CM050XB	MB100DB	MB100S20	MB100E	MBSD024B
02	B100DB-1	B100S21	B100E30	B030XK	CM100DB-OO	CM100S21	CM200E	CM060XK	MB100DB-OD	MB100S21	MB102E	MBSD024K
03	B100DB-2	B100S30	B100MH	B030XM	CM100DB-OY	CM101S30	CM200EG	CM070XM	MB100DH	MB101S30	MB102MK	MBSD024M
04	B100DB-L	B100SL20B	B100MK	B030XS	CM100DH	CM101S31	CM200MK	CM080XS	MB100DK	MB101S31	MB200E	MBSD024S
05	B100DB-OD	B100SL20H	B100MS	B030XY	CM100DH-OO	CM101S32	CM200MY	CM090XY	MB100DM	MB101S32	MB200MK	MBSD024Y
06	B100DB-OY	B100SL20K	B100MS-Z	B050XB	CM100DK	CM102S30	CP100E	CM0B0XB	MB100DS	MB102S20		MBSD220B
07	B100DB-Z	B100SL20M	B100MY	B050XY	CM100DM	CM303S30	CP100M72H	CM0K0XK	MB100DY			MBSD220K
08	B100DH	B100SL20S	B102E	B060XK	CM100DS	CP100S20	CP100MK	CM0M0XM	MB100FY			MBSD220M
09	B100DH-OD	B100SL20Y	B102E30	B070XM	CM100DY	CP100S21	CP100MY	CM0S0XS	MB100MY			MBSD220S
10	B100DH-OY	B100SL21B	B102E60	B080XS	CM101DH	CP100S30	CP101ES30	CM0Y0XY	MB101DH			MBSD220Y
11	B100DK	B100SL21K	B102MH	B090XY	CM101DK	CP100S31	CP200E	CM101DJ20	MB101DK			MBSP024B
12	B100DM	B100SL21Y	B102MK	B0B0XB	CM101DM	CP100S32	CP200E30	CM101DJ21	MB101DM			MBSP024K
13	B100DS	B100SL30K	B102MY	B0K0XK	CM101DS	CP101S20	CP200EA30	CP050XB	MB101DY			MBSP024M
14	B100DS-Z	B101S20	B200E	B0M0XM	CM101DY	CP101S21	CP200ECN	CP060XK	MB102DB			MBSP024S
15	B100DY	B101S21	B200E30	B0S0XS	CM101K20YY-OK	CP101S30	CP200ECN30	CP070XM	MB102DB-OD			MBSP024Y
16	B100DY-1	B101S30	B200E60	B0Y0XY	CM102DB	CP101S31	CP200ECS30	CP080XS	MB102DH			MBSP220B
17	B100DY-2	B101S31	B200E-E	B100AA20	CM102DK	CP101S32	CP200EP	CP090XY	MB102DK			MBSP220K
18	B100DY-OD	B101S32	B200MH	B100AA21	CM102DM	CP102S30	CP200ES30	CP0B0XB	MB102DM			MBSP220M
19	B100DY-OY	B101SL20B	B200MK	B100AC20	CM102DS	CP303S30	CP200MK	CP0K0XK	MB102DS			MBSP220S
20	B100HB	B101SL20H	B200MS	B100AC30	CM102DY	CP304S20	CP200MY	CP0M0XM	MB102DY			MBSP220Y
21	B100HH	B101SL20K	B200MY	B100C	CM102K20HB	CP305S30	CP202E	CP0S0XS	MB200DB			MBZS024A0
22	B100HK	B101SL20M	B202E-E	B100FB	CM102K20HB-10		CP220E	CP0Y0XY	MB200DH			MBZS220A0
23	B100HM	B101SL20S		B100FH	CM102K20HH			CP101DJ20	MB200DK			MBZX024A0
24	B100HS	B101SL20Y		B100FK	CM102K20KY			CP101DJ21	MB200DM			MBZX220A0
25	B100HY	B101SL30B		B100FM	CM102K21HB			CM101A31	MB200DS			
26	B101DB-OD	B101SL30K		B100FS	CM102K21KY			CM100A20	MB200DY			
27	B101DH	B101SL30M		B100FY	CM200DH-O			CM100A21	MB200FK			
28	B101DM	B101SL30S		B101AA30	CM200DK			CM100A30	MB202DK			
29	B101DY	B101SL30Y		B101AA32	CM200DY			CM101A20				
30	B101DY-OD	B101SL31K		B101AC30	CM202DK			CM101A21				
31	B101HY	B101SL31Y		B101K20BB-12	CM305DY			CM101A30				
32	B102DB	B101SL32B		B101K20HB	CP100DB			CP200AC20				
33	B102DB-OD	B101SL32K		B101K20HH	CP100DB-OD			CP102AA20				
34	B102DH	B101SL32S		B101K20HH-OK	CP100DB-OY			CP102AA30				
35	B102DK	B101SL32Y		B101K20SS-12	CP100DH			CP102AC30				
36	B102DM	B101T20		B101K20YY-12	CP100DH-OD			CP101AA20				
37	B102DS	B101T20-1		B101K20YY-OK	CP100DH-OY			CP101AA30				
38	B102DY	B102S20		B102AA20	CP100DK			CP101AC20				
39	B102HB	B102S30		B102AA30	CP100DM			CP101AC30				
40	B102HH	B102S32		B102AC20	CP100DS			CP100AA20				
41	B102HK	B102SL20K		B102AC30	CP100DY			CP100AC20				
42	B102HM	B102SL20Y		B102C	CP101DK			CP100AC30				
43	B102HS	B102SL32Y		B102K20HB	CP101DY			CM102A20				
44	B102HY	B102T20		B102K20KY	CP101K20HB			CM102A21				
45	B130DB	B111S20		B102K20KY-10	CP102DB			CM102A30				
46	B130DH	B121R30		B102K20SH	CP102DH			CM102A31				
47	B130DK	B121R30-1		B102K20SH-10	CP102DK							
48	B130DM	B130SL20B		B102K20SYH-10	CP102DM							
49	B130DS	B130SL20K		B102K21HB	CP102DS							
50	B130DY	B130SL20M		B102K21KY	CP102DY							
51	B130HY	B130SL20S		B132K20HB	CP102K20HB							
52	B131DY	B130SL20Y		B132K20KY	CP102K20HS							
53	B132DK	B130SL21B		B132K21HB	CP102K20KY							
54	B132DS	B130SL21K		B132K21KY	CP102K21HB							
55	B132DY	B130SL21Y		B151K20HH-OK	CP102K21KY							
56	B170DM	B131SL20K		B191K20HB-S	CP200DB							
57	B180DS	B131SL20S		B192K21HB	CP200DK							
58	B190DY	B131SL20Y		B200C	CP200DM							
59	B200DH	B131SL30B			CP200DS							
60	B200DH-O	B131SL30K			CP200DY							
61	B200DK	B131SL30M			CP202DK							
62	B200DK-O	B131SL30S			CP303DY							
63	B200DM	B131SL30Y			CP305DY							
64	B200DS-L	B131SL31B										
65	B200DS-Z	B131SL31K										
66	B200DY	B131SL31Y										
67	B200FK	B131SL32B										
68	B200HK	B131SL32K										
69	B200HY	B131SL32Y										
70	B202DK	B132SL30B										
71	B202HK	B132SL30K										
72	B230DK	B132SL30M										
73	B230DY	B132SL30S										
74	B230HK	B132SL30Y										
75	B232DK	B132SL32K										
76	B232DY	B132SL32Y										
77		B160SL20K										
78		B161SL30K										
79		B180SL20S										
80		B190SL20Y										
81		B191SL30Y										
82		B191SL32Y										
83		B1K1SL30K										
84		B1S1SL30S										
85		B1Y1SL30Y										
86		B1Y1SL32Y										

Genel Şema / *General Scheme*



Kumanda Kutuları
Control Boxes

Tekli Kumanda Kutuları / *Control Boxes For One Unit*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Buton Tipi *Button Type*	Kutu Rengi *Box Colour*	Etiket *Plate*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
P1C300D*	1	-	Düz / *Flush*	Siyah-Gri / *Black-Grey*	
P1C400D*	-	1	Düz / *Flush*	Siyah-Gri / *Black-Grey*	
P1C304D*	1	1	Düz / *Flush*	Siyah-Gri / *Black-Grey*	
P1C300M*	1	-	Mantar / *Mushroom*	Siyah-Gri / *Black-Grey*	
P1C400M*	-	1	Mantar / *Mushroom*	Siyah-Gri / *Black-Grey*	
P1C304M*	1	1	Mantar / *Mushroom*	Siyah-Gri / *Black-Grey*	
P1C400E30	-	1	Acil Stop Ø30 mm / *Emergency Stop Ø30 mm*	Siyah-Gri / *Black-Grey*	
P1C304E30	1	1	Acil Stop Ø30 mm / *Emergency Stop Ø30 mm*	Siyah-Gri / *Black-Grey*	
P1C400E40	-	1	Acil Stop Ø40 mm / *Emergency Stop Ø40 mm*	Siyah-Gri / *Black-Grey*	
P1C304E40	1	1	Acil Stop Ø40 mm / *Emergency Stop Ø40 mm*	Siyah-Gri / *Black-Grey*	
P1C304K20	1	1	Çiftli, Düz / *Double Headed*	Siyah-Gri / *Black-Grey*	
P1C300S20	1	-	Seçici / *Selector*	Siyah-Gri / *Black-Grey*	
P1C303S30	2	-	Seçici / *Selector*	Siyah-Gri / *Black-Grey*	
P1C300A20	1	-	Anahtarlı / *Key Operated*	Siyah-Gri / *Black-Grey*	
P1C303A30	2	-	Anahtarlı / *Key Operated*	Siyah-Gri / *Black-Grey*	
P1EC400E30K	-	1	Acil Stop Ø30 mm / *Emergency Stop Ø30 mm*	Sarı-Siyah / *Yellow-Black*	BET60P
P1EC400E40K	-	1	Acil Stop Ø30 mm / *Emergency Stop Ø30 mm*	Sarı-Siyah / *Yellow-Black*	BET60P
P1CBOS	-	-	Boş Kutu / *Empty Box*	Siyah-Gri / *Black-Grey*	-
P1ECBOS	-	-	Boş Kutu / *Empty Box*	Sarı-Siyah / *Yellow-Black*	-
P1C400M72	-	1	Mantar / *Mushroom*	Siyah-Gri / *Black-Grey*	-
P1C400E72	-	1	Mantar / *Mushroom*	Siyah-Gri / *Black-Grey*	-

Tekli Metal Kutuları / *Metal Control Boxes For One unit*

Ürün Kodu *Code*	Kontak Blok Tipi *Contact Block Type*		Buton Tipi *Button Type*	Kutu Rengi *Box Colour*	Etiket *Plate*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
M1C400EE	-	1	Acil Stop Ø40 mm / *Emergency Stop Ø40 mm*	Sarı-Gri / *Yellow-Grey*	-
M1CBOS	-	-	Boş Kutu / *Empty Box*	Sarı-Gri / *Yellow-Grey*	-

*** Renk kodlaması için seçim tablosuna bakınız.** *See the selection table for colour coding.*

P1C300DY

P1C304E30

P1EC400E40K

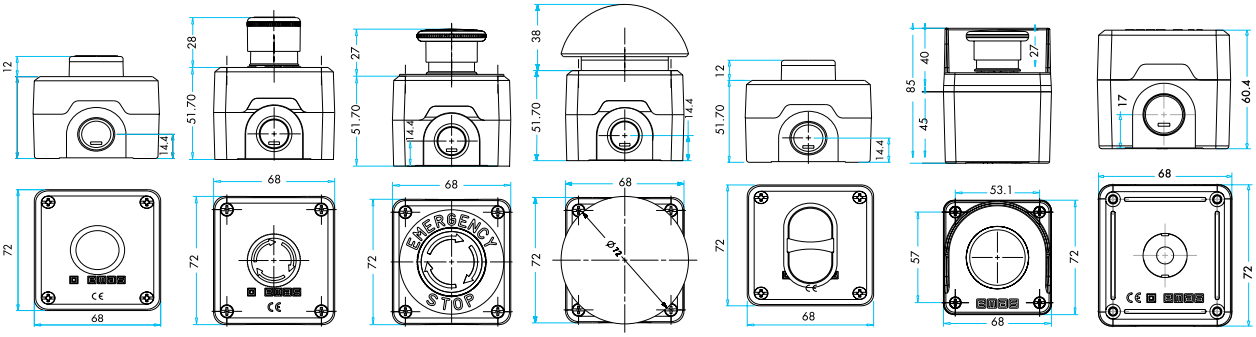
P1C400M72

P1C304K20

M1C400EE

PY1BOS

BOYUTLAR (mm) / *DIMENSIONS (mm)*



Kumanda Kutuları
Control Boxes

İkili Plastik Kutuları / Control Boxes For Two Units

Ürün Kodu *Code*	1.Buton Kontak Tipi *1. Button Contact Type*		2.Buton Kontak Tipi *2. Button Contact Type*		1. Buton Tipi *1. Button Type*	2. Buton Tipi *2. Button Type*	Etiket *Plate*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
P2AB	1	-	-	1	Düz / *Flush*	Düz / *Flush*	-
P2ABM	1	-	-	1	Düz / *Flush*	Mantar *Mushroom*	-
P2ABE30	1	-	-	1	Düz / *Flush*	Acil Stop Ø30 mm *Emergency Stop Ø30 mm*	-
P2ABE40	1	-	-	1	Düz / *Flush*	Acil Stop Ø40 mm *Emergency Stop Ø40 mm*	-
P2CC	1	1	1	1	Düz / *Flush*	Düz / *Flush*	-
P2CCM	1	1	1	1	Düz / *Flush*	Mantar *Mushroom*	-
P2CCE30	1	1	1	1	Düz / *Flush*	Acil Stop Ø30 mm *Emergency Stop Ø30 mm*	-
P2CCE40	1	1	1	1	Düz / *Flush*	Acil Stop Ø40 mm *Emergency Stop Ø40 mm*	-
P2AC	1	-	1	1	Düz / *Flush*	Düz / *Flush*	-
P2ACM	1	-	1	1	Düz / *Flush*	Mantar *Mushroom*	-
P2ACE30	1	-	1	1	Düz / *Flush*	Acil Stop Ø30 mm *Emergency Stop Ø30 mm*	-
P2ACE40	1	-	1	1	Düz / *Flush*	Acil Stop Ø40 mm *Emergency Stop Ø40 mm*	-
P2BC	-	1	1	1	Düz / *Flush*	Düz / *Flush*	-
P2BCM	-	1	1	1	Düz / *Flush*	Mantar *Mushroom*	-
P2BCE30	-	1	1	1	Düz / *Flush*	Acil Stop Ø30 mm *Emergency Stop Ø30 mm*	-
P2BCE40	-	1	1	1	Düz / *Flush*	Acil Stop Ø40 mm *Emergency Stop Ø40 mm*	-
P2ACS30	1	-	1	1	Düz / *Flush*	Seçici *Selector*	-
P2AAA21	1	-	1	-	Düz / *Flush*	Anahtarlı *Key Operated*	-
P2ABCD	1	-	-	1	Düz / *Flush*	Düz / *Flush*	-
P2BOS	-	-	-	-	Boş Kutu / *Empty Box*	-	-
PY2BOS	-	-	-	-	Boş Kutu / *Empty Box*	-	-

P2AB

P2CCM

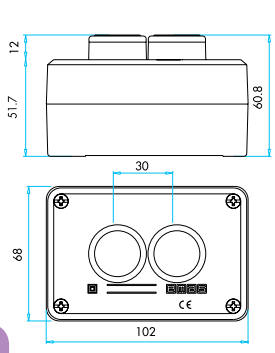
P2ABE40

P2ACS30

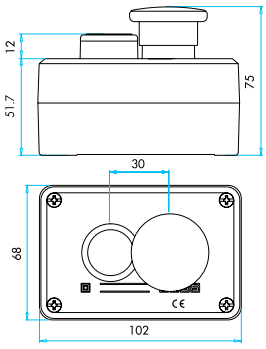
P2AAA21

PY2BOS

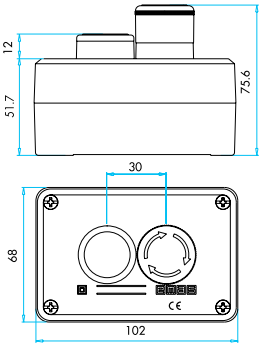
BOYUTLAR (mm) / *DIMENSIONS (mm)*



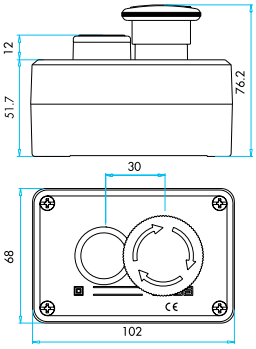
P2AB



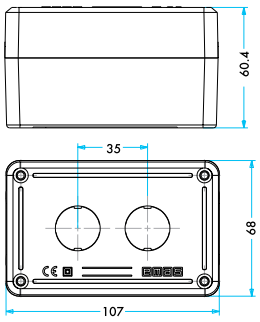
P2ACM



P2ABE30



P2CCE40



PY2BOS

Kumanda Kutuları
Control Boxes

Üçlü Plastik Kumanda Kutuları / *Control Boxes For Three Units*

Ürün Kodu *Code*	Buton Kontak Tipi *Button Contact Type*		Buton Tipleri *Button Types*	Kutu Rengi *Box Colour*	Etiket *Plate*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
P33A1B	3	1	Üç Düz / *Three Flush*	Siyah-Gri / *Black-Grey*	-
P33C	3	3	Üç Düz / *Three Flush*	Siyah-Gri / *Black-Grey*	-
*P32C1B	2	3	Üç Düz / *Three Flush*	Gri-Siyah / *Grey-Black*	-
*P3EC1A2BE30	1	2	İki Düz - Bir Acil Stop Ø30 mm *Two Flush; One Emergency Stop Ø30 mm*	Sarı-Gri / *Yellow-Grey*	-
P3BOŞ	-	-	Boş Kutu / *Empty Box*	Siyah-Gri / *Black-Grey*	-
P3ECBOS	-	-	Boş Kutu / *Empty Box*	Sarı-Siyah / *Yellow-Black*	-
PY3BOS	-	-	Boş Kutu / *Empty Box*	Gri-Siyah / *Grey-Black*	-

*** Özel sipariş olarak kutu rengi standart dışı yapılmıştır.**
** As special order box colour is shown as non standard.*

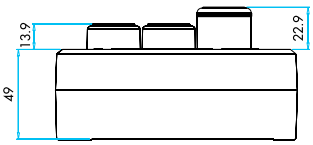
P3EC1A2BE30

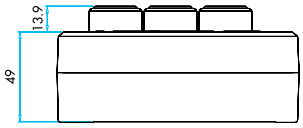
P32C1B

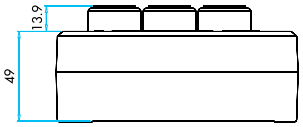
P33A1B

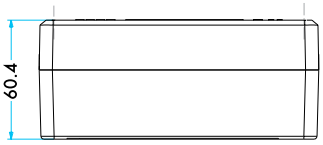
PY3BOS

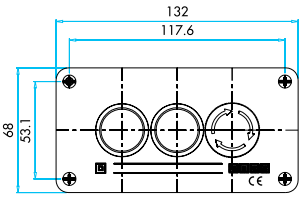
BOYUTLAR (mm) / *DIMENSIONS (mm)*

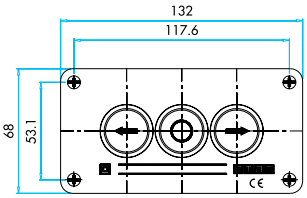


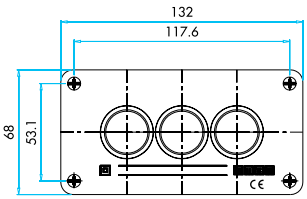


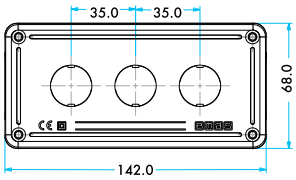












Kumanda Kutuları
Control Boxes

Dörtlü Plastik Kumanda Kutuları / *Control Boxes For Four Units*

Ürün Kodu *Code*	Buton Kontak Tipi *Button Contact Type*		Buton Tipleri *Button Types*	Kutu Rengi *Box Colour*	Etiket *Plate*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
P44A	4	-	Dört Düz / *Four Flush*	Siyah-Gri / *Black-Grey*	-
P44B	-	4	Dört Düz / *Four Flush*	Siyah-Gri / *Black-Grey*	-
P44C	4	4	Dört Düz / *Four Flush*	Siyah-Gri / *Black-Grey*	-
P43A1B	3	1	Dört Düz / *Four Flush*	Siyah-Gri / *Black-Grey*	-
P43A1BM	3	1	Üç Düz - Bir Mantar *Three Flush - One Mushroom*	Siyah-Gri / *Black-Grey*	-
P43A1BE30	3	1	Üç Düz - Bir Acil Stop Ø 30 mm *Three Flush - One Emergency Stop 030 mm*	Siyah-Gri / *Black-Grey*	-
P43A1BE40	3	1	Üç Düz - Bir Acil Stop Ø 40 mm *Three Flush - One Emergency Stop 040 mm*	Siyah-Gri / *Black-Grey*	-
P43A1CA30	4	1	Üç Düz - Bir Anahtarlı *Three Flush - One Key Operated*	Siyah-Gri / *Black-Grey*	-
P43A1CS30	4	1	Üç Düz - Bir Seçici *Three Flush - One Selector*	Siyah-Gri / *Black-Grey*	-
P4BOS	-	-	Boş Kutu / *Empty Box*	Siyah-Gri / *Black-Grey*	-
P41A2BE40K	1	2	İki Düz - Bir Acil Stop Ø 40 mm *Two Flush - One Emergency Stop 040 mm*	Siyah-Gri / *Black-Grey*	BET60P
PY4BOS	-	-	Boş Kutu / *Empty Box*	Siyah-Gri / *Black-Grey*	-

P43A1B

P43A1BE40

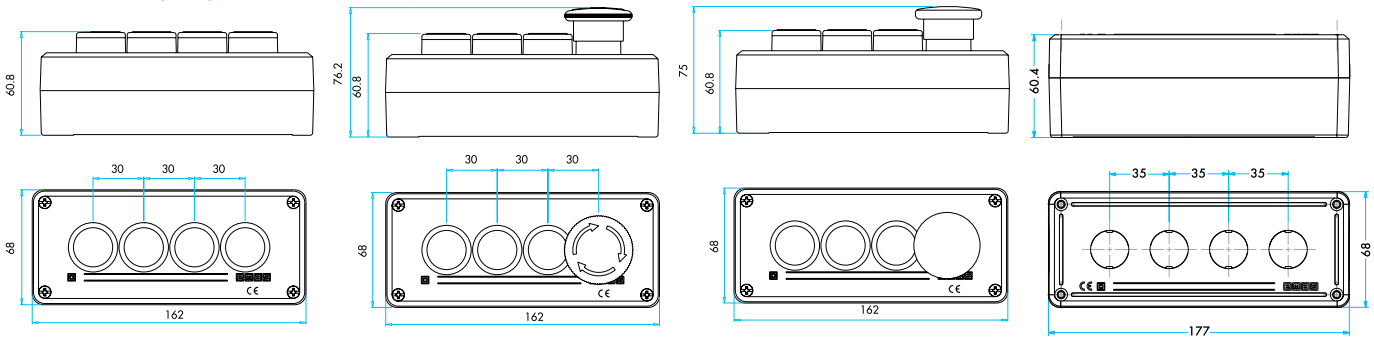
PY4BOS

P43A1BM

P43A1CS30

P41A2BE40K

BOYUTLAR (mm) / *DIMENSIONS (mm)*



P43A1B **P43A1BE40** **P43A1BM** **PY4BOŞ**

Altılı Plastik Kumanda Kutuları / *Control Boxes For Six Units*

Ürün Kodu *Code*	Buton Kontak Tipi *Button Contact Type*		Buton Tipleri *Button Types*	Kutu Rengi *Box Colour*	Etiket *Plate*
	Normal Açık *Normally Open*	Normal Kapalı *Normally Closed*			
P66A	6	-	Altı Düz / *Six Flush*	Siyah-Gri *Black-Grey*	-
P66B	-	6	Altı Düz / *Six Flush*	Siyah-Gri *Black-Grey*	-
P66C	6	6	Altı Düz / *Six Flush*	Siyah-Gri *Black-Grey*	-
P65A1B	5	1	Beş Düz / *Five Flush*	Siyah-Gri *Black-Grey*	-
P65A1BM	5	1	Beş Düz - Bir Mantar *Five Flush - One Mushroom*	Siyah-Gri *Black-Grey*	-
P65A1BE30	5	1	Beş Düz - Bir Acil Stop Ø 30 mm *Five Flush - One Emergency Stop 030 mm*	Siyah-Gri *Black-Grey*	-
P65A1BE40	5	1	Beş Düz - Bir Acil Stop Ø 40 mm *Five Flush - One Emergency Stop 040 mm*	Siyah-Gri *Black-Grey*	-
P65A1CA30	6	1	Beş Düz - Bir Anahtarlı *Five Flush - One Key Operated*	Siyah-Gri *Black-Grey*	-
P65A1C-S30	6	1	Beş Düz - Bir Seçici *Five Flush - One Selector*	Siyah-Gri *Black-Grey*	-
P6BOS	-	-	Boş Kutu / *Empty Box*	Siyah-Gri *Black-Grey*	-
P65A2BE40E	5	2	Beş Düz - Bir Acil Stop Ø 40 mm Etiketli *Five Flush - One Emergency Stop 040 mm With Label*	Siyah-Gri *Black-Grey*	-
PY6BOS	-	-	Boş Kutu / *Empty Box*	Siyah-Gri *Black-Grey*	-

P65A1B

P65A1BE40

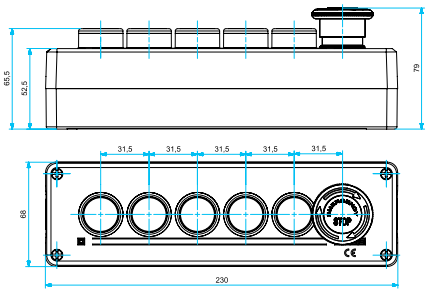
P64A2BE40E

PY6BOS

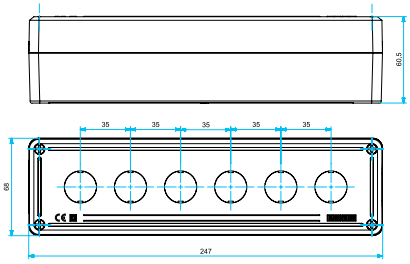
P65A1BM

P65A1CS30

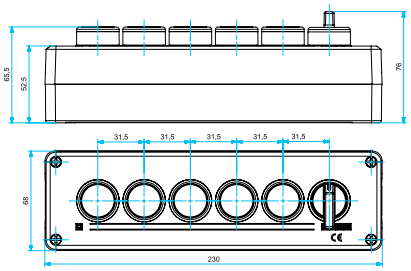
BOYUTLAR (mm) / *DIMENSIONS (mm)*



P65A2BE40E



PY6BOS



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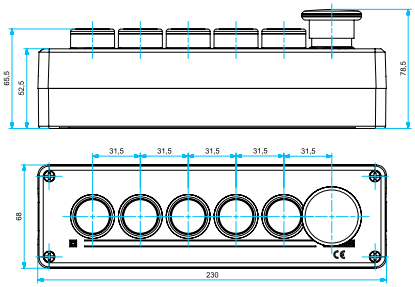

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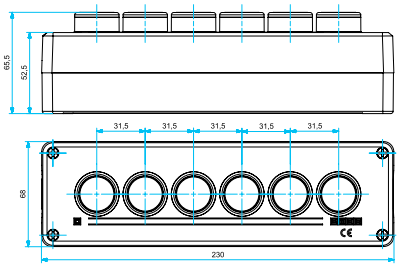

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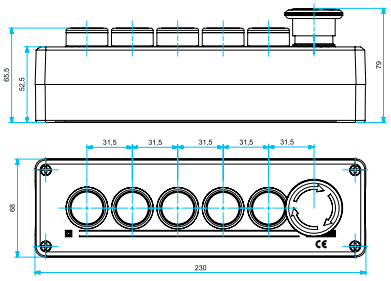


P65A1BE40

CEKP *Çift El Kontrol Paneli*

- Metal muhafaza
- Masa ve duvar montajı mümkün
- Ø40 mm çaplı acil stop butonu
- 2 adet çalışma butonu
- 3 ya da 5 delik alternatifli

Teknik Bilgiler

Koruma Sınıfı	:	IP65
Nominal İzolasyon Gerilimi Ui	:	660 V
Termal Test Akımı	:	10 A
Kullanım Kategorisi	:	AC-15 250 V / 4 A
Bağlantı Tipi	:	Vida bağlantısı
Gövde Malzemesi	:	Aluminyum
Ağırlık	:	4.000 g
Boyutlar	:	Genişlik 425 mm, Derinlik 130 mm, Yükseklik 187 mm
Standart	:	IEC/EN60947-5-5, EN ISO 13850, EN574

CE

CEKP *Two Hand Control Panel*

- *Metal protection*
- *Suitable for mounting on the wall or table*
- *Ø40 mm emergency stop button*
- *2 operation buttons*
- *3 or 5 holes alternatives*

Technical Information

Protection Degree	:	*IP65*
Nominal Isolation Voltage Ui	:	*660 V*
Thermal Test Current	:	*10 A*
Category of Use	:	*AC-15 250 V / 4 A*
Connection Type	:	*Screw connection*
Body Material	:	*Aluminium*
Weight	:	*4.000 g*
Dimentions	:	*Width 425 mm, Depth 130 mm, Height 187 mm*
Standard	:	*IEC/EN60947-5-5, EN ISO 13850, EN574*

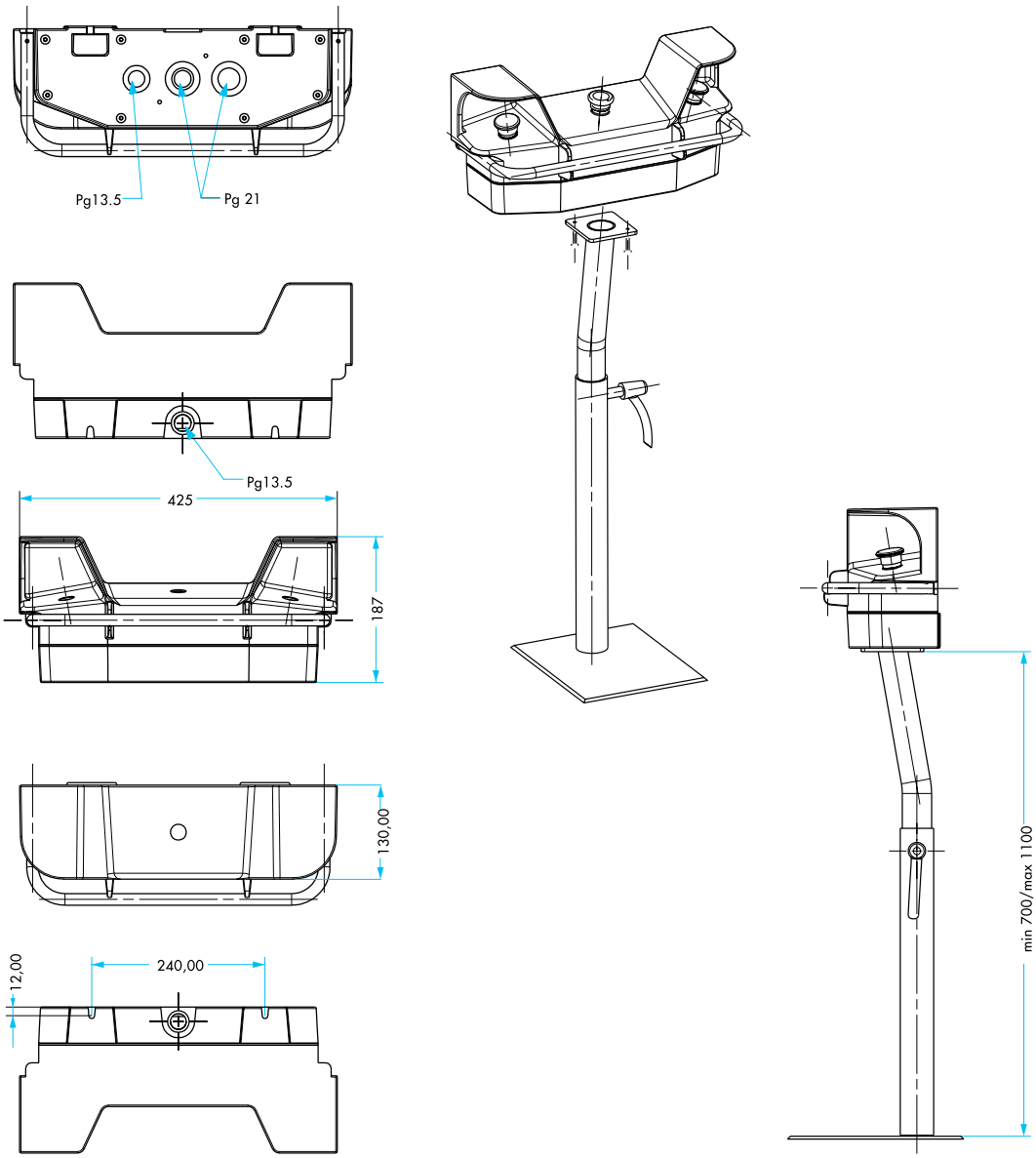
CE

CEKPB

Ürün Kodu *Code*	Buton *Button*	Ayak *Pedestal*
CEKP3	3 Delikli / *3 Cut-Out*	
CEKP3G	3 Delikli, Gri / *3 Cut-Out, Grey*	
CEKP 5	5 Delikli / *5 Cut-Out*	
CEKPA	3 Delikli / *3 Cut-Out*	√
CEKPB	1 adet CP200E (orta), 2 adet CM200MY (2 yan) *1 x CP200E (middle), 2 x CM200MY (2 sides)*	
CEKPAB	1 adet CP200E (orta), 2 adet CM200MY (2 yan) *1 x CP200E (middle), 2 x CM200MY (2 sides)*	√

Ürün Kodu *Code*	Aksesuar *Accessory*
CEKA	Çift El Kontrol Paneli İçin Ayarlanabilir Ayak *Adjustable Pedestal For Two Hand Control Panel*

BOYUTLAR (mm) / *DIMENSIONS (mm)*



Vinç Grubu Ürünler

Crane Products

Vinç Grubu Ürünler
Crane Products

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PV Serisi Plastik Vinç Kumanda Kutuları

- ABS katkılı malzeme sayesinde estetik görünüm, ergonomik kullanım ve yüksek darbe mukavemeti
- Aynı anlarda zıt yönlerde çalışmayı engelleyen mekanik koruma
- Koruma sınıfı yüksek gövde ve etanj butonlar sayesinde çevre şartlarına maksimum dayanım
- Oklu etiketler sayesinde yön tespit kolaylığı
- Tek ve iki kademeli hız fonksiyonları
- Esnek kablo borusu

Teknik Bilgiler

Çalışma Sıcaklığı	:	min./maks. °C -5/+85
Koruma Sınıfı	:	IP65
Kablo Ölçüsü	:	Ø8-Ø17 mm

Kontak Bloklar

Mekanik Ömür	:	500.000 açma-kapama min. (50 dev/dk)
Elektriksel Ömür	:	100.000 açma-kapama min. (20 dev/dk)
Çalışma Gerilimi (Ue)	:	250 V AC
Çalışma Akımı (Ie)	:	4 A
Yalıtım Gerilimi Ui	:	300 V
Darbe Dayanım Gerilimi (Uimp)	:	2.5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
İzolasyon Direnci	:	10 MΩ min. (500 V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1500 V AC (1 dakika için)
Bağlantı Kablo Kesiti	:	1.5 - 2.5 mm2
Standart	:	UL 508 TS EN 60947-5-1 VDE0660 IEC 60947-5-1

Kontak Blok

PV *Series Plastic Control Boxes For Crane*

- *Aesthetic look and ergonomic usage with assistance of ABS reinforced material*
- *Mechanical protection preventing operation in opposite direction at same moment*
- *Maximum resistance to environment conditions with waterproof body and buttons*
- *Speed function with 2 grades*
- *Flexible cable pipe*

Technical Information

Operating Temperature	:	*min./max. °C -5/+85*
Protection Degree	:	*IP65*
	:	*Ø8-Ø17 mm*

Contact Blocks

Mechanical Life	:	*500.000 operations min. (50 cyc/min)*
Electrical Life	:	*100.000 operations min. (20 cyc/min)*
Operating Voltage (Ue)	:	*250 V AC*
Operating Current (Ie)	:	*4 A*
Insulation Voltage (Ui)	:	*300 V*
Impact Resistance (Uimp)	:	*2.5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1500 V AC (for 1 minute)*
Cable Section	:	*1.5 - 2.5 mm2*
Standard	:	*UL 508 TS EN 60947-5-1 VDE0660 IEC 60947-5-1*

Contact Block

PV Serisi Plastik Vinç Kumanda Kutuları Seçim Tablosu

PV Series Plastic Control Boxes Selection Table

Seri	Buton Yuva Sayısı	1. Göz Buton Tipi	1. Göz Butonun Kontak Blok Tipi	Vinç Kumandası Butonların Kontak Blok Kombinasyonu 1. Grup	2. Grup	3. Grup	4. Grup
PV	5	E40	C	2	2		
Series	*Number of Button Places*	*1. Button Type*	*Contact Block Combination*	*1. Group*	*2. Group*	*3. Group*	*4. Group*

Contact Block Combination

PV — **PV Serisi Kumanda Kutusu Sarı-Siyah**
PV Series Control Boxes Yellow-Black

2	İki Gözlü	*Two Ways*
3	Üç Gözlü	*Three Ways*
4	Dört Gözlü	*Four Ways*
5	Beş Gözlü	*Five Ways*
6	Altı Gözlü	*Six Ways*
7	Yedi Gözlü	*Seven Ways*
8	Sekiz Gözlü	*Eight Ways*
9	Dokuz Gözlü	*Nine Ways*

	Göz Kalıptan Kapalı	*Blanked Space in Mould*
T1	Tıpa ve Somun	*Stopper and Nut*
M	Mantar Ø 40 mm	*Mushroom Ø 40 mm*
AA20	Anahtarlı, 2 Pozisyonlu (0-I)	*Key Operated, 2 Position (0-I)*
S20	Seçici, 2 Pozisyonlu (0-I)	*Selector Switch, 2 Position (0-I)*
E30	Acil Stop, Silindirik Kafalı Ø 30 mm	*Emergency Stop, Cylindrical Head Ø 30 mm*
E40	Acil Stop Ø 40 mm	*Emergency Stop Ø 40 mm*

Kontak Blok Tipi
Contact Block Type

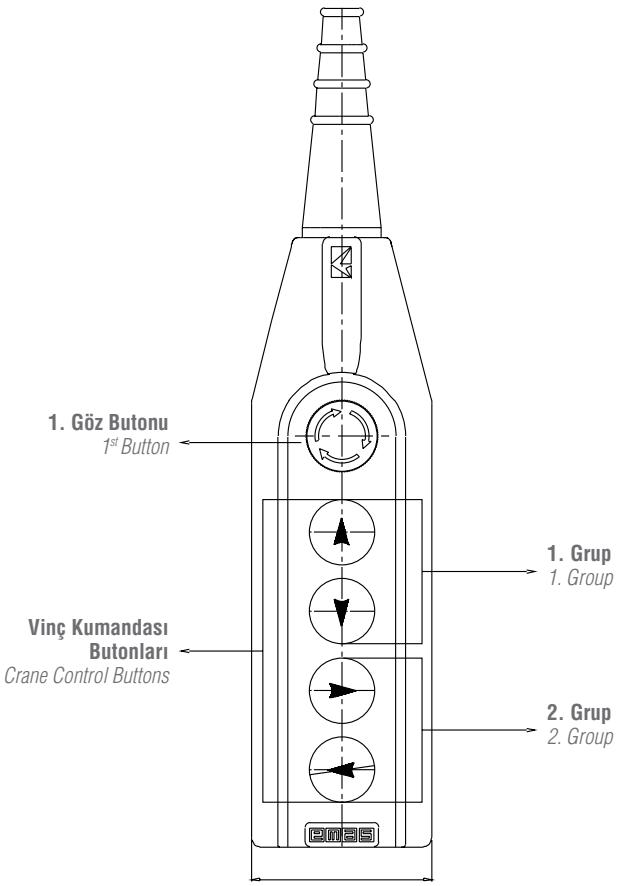
X	Kontak Blok Yok	*Without Contact Block*
A	Start	*Start*
B	Stop	*Stop*
C	Start-Stop	*Start-Stop*
D	Start-Start	*Start-Start*
E	Stop-Stop	*Stop-Stop*
F	Stop-Stop-Stop	*Stop-Stop-Stop*
G	Start-Start-Start	*Start-Start-Start*

Kontak Blok Kombinasyonu Bir Kademeli Fonksiyon
Contact Block Combination Single Speed

1	Start Kontak Blok Start Kontak Blok	*Start Contact Block* *Start Contact Block*
2	Start Kontak Blok+Stop Kontak Blok Start Kontak Blok+Stop Kontak Blok	*Start Contact Block+Stop Contact Blok* *Start Contact Block+Stop Contact Blok*

İki Kademeli Fonksiyon
Double Speed

3	Start Kontak Blok+Start Kontak Blok Start Kontak Blok+Start Kontak Blok	*Start Contact Block+Start Contact Block* *Start Contact Block+Start Contact Block*
4	Start Kontak Blok+Start Kontak Blok+Stop Kontak Blok Start Kontak Blok+Start Kontak Blok+Stop Kontak Blok	*Start Contact Block+Start Contact Block+Stop Contact Block* *Start Contact Block+Start Contact Block+Stop Contact Block*



PV Serisi Plastik Vinç Kumanda Kutuları

PV Series Plastic Control Boxes for Crane

PV3E30B4

PV5E30B22

PV7E30B444

PV9E30B2222

PV9E30B222AA20

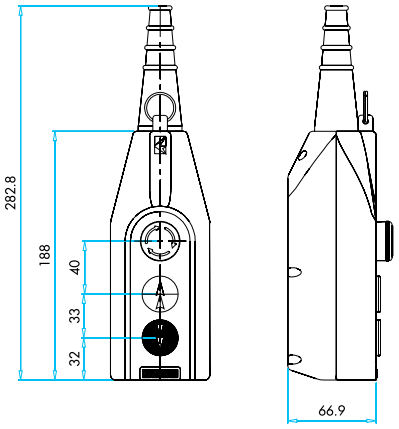
Ürün Kodu *Code*	Buton Yuva Sayısı *Number of Holes*	1. Göz Butonu *1st Button*	1. Göz Butonu Kontak Tipi *1st Button Contact Type*	Bir Kademeli ► *Single Speed ►*				İki Kademeli ►► *Double Speed ►►*			
				1.Grup *1.Group*	2.Grup *2.Group*	3.Grup *3.Group*	4.Grup *4.Group*	1.Grup *1.Group*	2.Grup *2.Group*	3.Grup *3.Group*	4.Grup *4.Group*
PV3E30B2	3	Ø 30 mm Acil Stop Butonu *Ø 30 mm Emergency Stop Button*	1 NK / *1 NC*	√	-	-	-	-	-	-	-
PV3E30B4	3	Ø 30 mm Acil Stop Butonu *Ø 30 mm Emergency Stop Button*	1 NK / *1 NC*	-	-	-	-	√	-	-	-
PV3T1X2	3	Tıpa ve Somun *Stopper and Nut*	-	√	-	-	-	-	-	-	-
PV3T1X4	3	Tıpa ve Somun *Stopper and Nut*	-	-	-	-	-	√	-	-	-
PV5E30B22	5	Ø 30 mm Acil Stop Butonu *Ø 30 mm Emergency Stop Button*	1 NK / *1 NC*	√	√	-	-	-	-	-	-
PV5E30B42	5	Ø 30 mm Acil Stop Butonu *Ø 30 mm Emergency Stop Button*	1 NK / *1 NC*	-	√	-	-	√	-	-	-
PV5E30B44	5	Ø 30 mm Acil Stop Butonu *Ø 30 mm Emergency Stop Button*	1 NK / *1 NC*	-	-	-	-	√	√	-	-
PV5T1X22	5	Tıpa ve Somun *Stopper and Nut*	-	√	√	-	-	-	-	-	-
PV5T1X42	5	Tıpa ve Somun *Stopper and Nut*	-	-	√	-	-	√	-	-	-
PV5T1X44	5	Tıpa ve Somun *Stopper and Nut*	-	-	-	-	-	√	√	-	-
PV7E30B222	7	Ø 30 mm Acil Stop Butonu *Ø 30 mm Emergency Stop Button*	1 NK / *1 NC*	√	√	√	-	-	-	-	-
PV7E30B444	7	Ø 30 mm Acil Stop Butonu *Ø 30 mm Emergency Stop Button*	1 NK / *1 NC*	-	-	-	-	√	√	√	-
PV7T1X222	7	Tıpa ve Somun *Stopper and Nut*	-	√	√	√	-	-	-	-	-
PV7T1X444	7	Tıpa ve Somun *Stopper and Nut*	-	-	-	-	-	√	√	√	-
PV9E30B2222	9	Ø 30 mm Acil Stop Butonu *Ø 30 mm Emergency Stop Button*	1 NK / *1 NC*	√	√	√	√	-	-	-	-
PV9E30B4444	9	Ø 30 mm Acil Stop Butonu *Ø 30 mm Emergency Stop Button*	1 NK / *1 NC*	-	-	-	-	√	√	√	√
PV9T1X2222	9	Tıpa ve Somun *Stopper and Nut*	-	√	√	√	√	-	-	-	-
PV9T1X4444	9	Tıpa ve Somun *Stopper and Nut*	-	-	-	-	-	√	√	√	√

PV Serisi Plastik Vinç Kumanda Kutuları Yedekleri

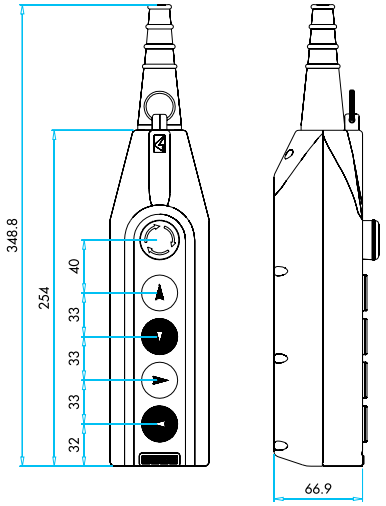
Accessories of PV Series Crane Control Boxes

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*	Vinç Kumandası Buton Rengi *Crane Control Button Colour*	Kademe Fonksiyonu / *Speed Function* Bir Kademeli ► *Single Speed ►*	İki Kademeli ►► *Double Speed ►►*
PVB1	1 NA / *1 NO*	-	-	-
PVB2	1 NK / *1 NC*	-	-	-
PVÇHBD	-	Beyaz / *White*	-	√
PVÇHSD	-	Siyah / *Black*	-	√
PVTHBB	-	Beyaz / *White*	√	-
PVTHSD	-	Siyah / *Black*	√	-
TIPASOM	-	-	-	-

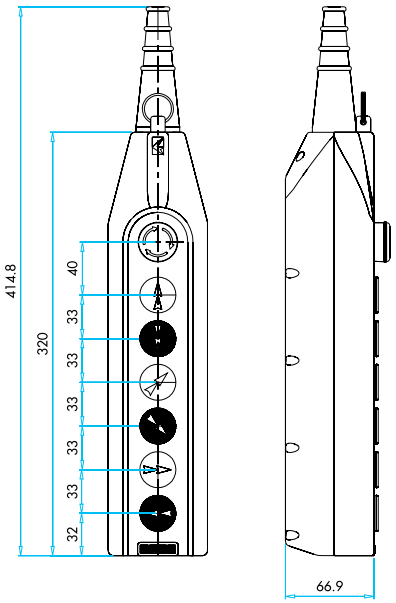
BOYUTLAR (mm) / *DIMENSIONS (mm)*



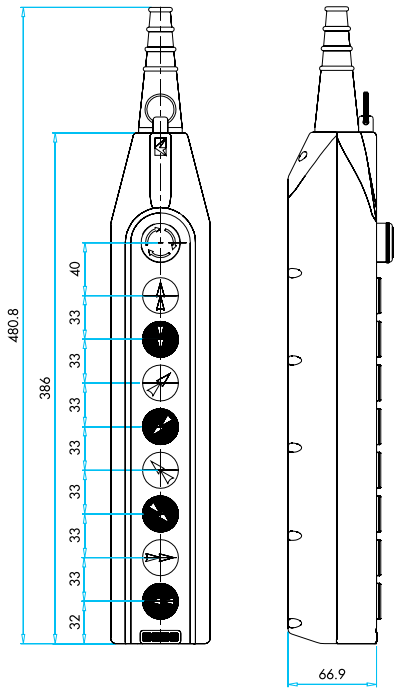
PV3E



PV5E



PV7E



PV9E

PVK Serisi Plastik Vinç Kumanda Kutuları

- Ø22 mm çaplı butonlara uygun
- Cam Elyaf katkılı plastik gövde sayesinde mekanik darbelere tam dayanım
- Oklu etiketler sayesinde yön tespit kolaylığı
- Koruma sınıfı yüksek gövde ve etanj butonlar sayesinde çevre şartılrına maksimum daynım
- Esnek kablo borusu

Teknik Bilgiler

Çalışma Sıcaklığı	:	min./maks. °C -5/+85
Koruma Sınıfı	:	IP65
Kablo Ölçüsü	:	Ø8-Ø17 mm

Kontak Bloklar

Mekanik Ömür	:	500.000 açma-kapama min. (50 dev/dk)
Elektriksel Ömür	:	100.000 açma-kapama min. (20 dev/dk)
Anma işletme Gerilimi (Ue)	:	220 V AC
Anma işletme Akımı (Ie)	:	4 A
Yalıtım Gerilimi (Ui)	:	300 V
Darbe Dayanım Gerilimi (Uimp)	:	2.5 kV
Anma Kesme Kapasitesi AC 15	:	1 kA
İzolasyon Direnci	:	10 MΩ min. (500 V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1500 V AC (1 dakika için)
Bağlantı Kablo Kesiti	:	1.5 - 2.5 mm2
Standart	:	UL 508 TS EN 60947-5-1 VDE0660 IEC 60947-5-1

PVK *Series Plastic Control Boxes For Crane*

- *Ø22 mm control units*
- *Glass fiber reinforced plastic body, mechanical impact resistance*
- *Arrow labeled buttons*
- *High protection class and body strength, waterproof buttons*
- *Flexible conduit*

Technical Information

Operating Temperature	:	*min./max. °C -5/+85*
Protection Degree	:	*IP65*
	:	*Ø8-Ø17 mm*

Contact Blocks

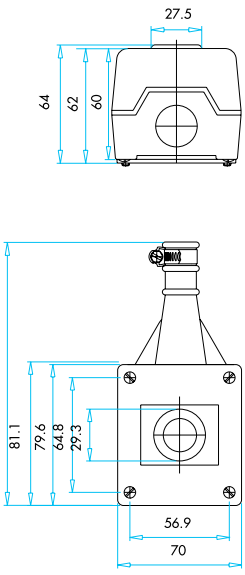
Mechanical Life	:	*500.000 operations min. (50 cyc/min)*
Electrical Life	:	*100.000 operations min. (20 cyc/min)*
Operating Voltage (Ue)	:	*220 V AC*
Operating Current (Ie)	:	*4 A*
Insulation Voltage (Ui)	:	*300 V*
Impact Resistance (Uimp)	:	*2.5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1500 V AC (1 for minute)*
Cable Section	:	*1.5 - 2.5 mm2*
Standard	:	*UL 508 TS EN 60947-5-1 VDE0660 IEC 60947-5-1*

Vinç Grubu Ürünler
Crane Products

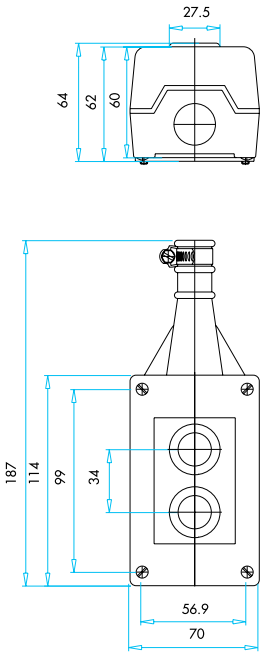
Ürün Kodu	Buton Sayısı	Buton Tipi	Buton Rengi	Kutu Rengi	Buton Kontak Tipi
Code	*Number of Button*	*Button Type*	*Button Colour*	*Box Colour*	*Button Contact Type*
PVK1E	1	Etanj, Düz,Yuvarlak *Waterproof, Round*	Sarı / *Yellow*	Sarı-Siyah *Yellow-Black*	1NA+1NK / *1NO+1NC*
PVK2E	2	Etanj, Düz,Yuvarlak *Waterproof, Round*	Sarı / *Yellow*	Sarı-Siyah *Yellow-Black*	2NA+2NK / *2NO+2NC*
PVK3E	3	Etanj, Düz,Yuvarlak *Waterproof, Round*	Sarı / *Yellow*	Sarı-Siyah *Yellow-Black*	3NA+3NK / *3NO+3NC*
PVK4E	4	Etanj, Düz,Yuvarlak *Waterproof, Round*	Sarı / *Yellow*	Sarı-Siyah *Yellow-Black*	4NA+4NK / *4NO+4NC*
PVK5E	5	Etanj, Düz,Yuvarlak *Waterproof, Round*	Sarı / *Yellow*	Sarı-Siyah *Yellow-Black*	5NA+5NK / *5NO+5NC*
PVK6E	6	Etanj, Düz,Yuvarlak *Waterproof, Round*	Sarı / *Yellow*	Sarı-Siyah *Yellow-Black*	6NA+6NK / 6*NO+6NC*
PVK7E	7	Etanj, Düz,Yuvarlak *Waterproof, Round*	Sarı / *Yellow*	Sarı-Siyah *Yellow-Black*	7NA+7NK / *7NO+7NC*
PVK8E	8	Etanj, Düz,Yuvarlak *Waterproof, Round*	Sarı / *Yellow*	Sarı-Siyah *Yellow-Black*	8NA+8NK / *8NO+8NC*
PVK10E	10	Etanj, Düz,Yuvarlak *Waterproof, Round*	Sarı / *Yellow*	Sarı-Siyah *Yellow-Black*	10NA+10NK / *10NO+10NC*
PVK1BOŞ	-	-	-	Sarı-Siyah *Yellow-Black*	-
PVK2BOŞ	-	-	-	Sarı-Siyah *Yellow-Black*	-
PVK4BOŞ	-	-	-	Sarı-Siyah *Yellow-Black*	-
PVK6BOŞ	-	-	-	Sarı-Siyah *Yellow-Black*	-

PVK4E

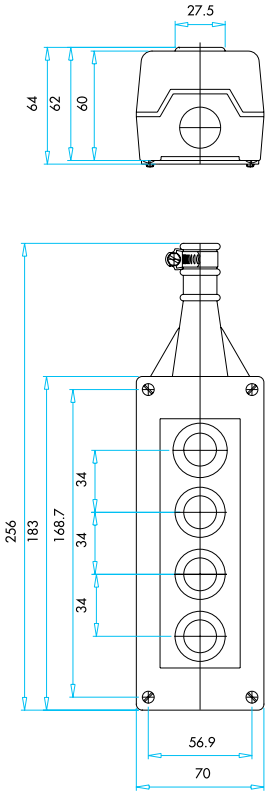
BOYUTLAR (mm) / *DIMENSIONS (mm)*



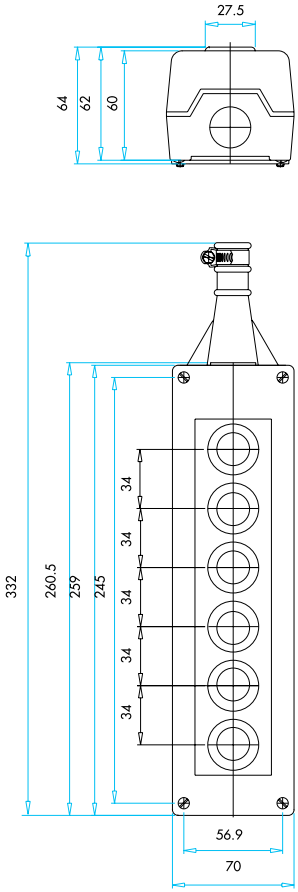
PVK1E



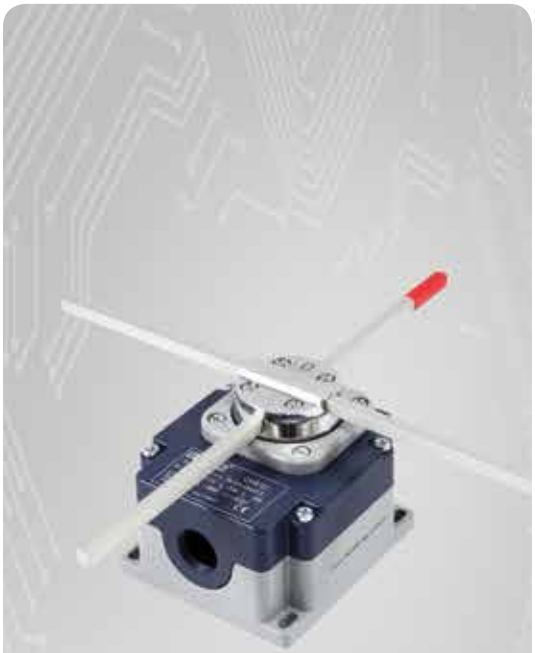
PVK2E



PVK3E/PVK4E



PVK5E/PVK6E



CSM Serisi Metal Gövdeli, Çapraz Sınır Şalterleri

- Metal gövde ve kapak
- PG13,5 rekor
- Bağlantı delikleri dışarıda

Teknik Bilgiler

Çalışma Sıcaklığı	:	min./maks. °C -5/+40
Koruma Sınıfı	:	IP65

Kontak Bloklar

Mekanik Ömür	: 100.000 açma-kapama min. (20 dev/dk)
Elektriksel Ömür	: 50.000 açma-kapama min. (20 dev/dk)
Çalışma Gerilimi (Ue)	: 400 V AC
Çalışma Akımı (Ie)	: 20 A
Yalıtım Gerilimi (Ui)	: 690 V
Darbe Dayanım Gerilimi (Uimp)	: 4 kV
Kısa Devre Kesme Kap. (Icn)	: 6 kA
İzolasyon Direnci	: 10 MΩ min. (500 V DC)
Kullanım Sınıfı	: AC1 - AC21
Dielektrik Mukavemeti	: 1.890 V AC (1 dakika için)
Bağlantı Kablo Kesiti	: 1.5 - 2.5 mm2
Standart	: TS EN 60947-3

CSM *Series Cross Limit Switches With Metallic Body*

- *Metallic housing and cover*
- *PG13,5 cable entry*
- *External connection holes*

Technical Information

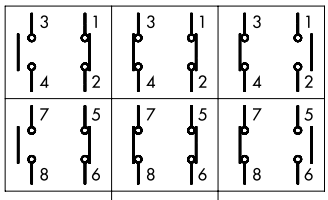
Operating Temperature	:	*min./max. °C -5/+40*
Protection Degree	:	*IP65*

Contact Blocks

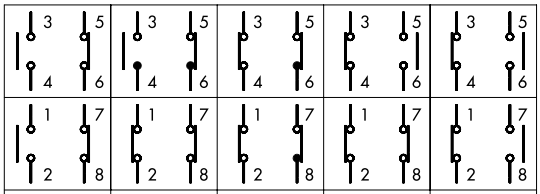
Mechanical Life	: *100.000 operations min. (20 cyc/min)*
Electrical Life	: *50.000 operations min. (20 cyc/min)*
Operating Voltage (Ue)	: *400 V AC*
Operating Current (Ie)	: *20 A*
Insulation Voltage (Ui)	: *690 V*
Impact Resistance (Uimp)	: *4 kV*
Short Circuit Breaking Capacity (Icn)	: *6 kA*
Insulation Resistance	: *10 MΩ min. (500 V DC)*
Utilization Category	: *AC1 - AC21*
Dielectric Strength	: *1.890 V AC (for 1 minute)*
Cable Section	: *1.5 - 2.5 mm2*
Standard	: *TS EN 60947-3*

CSM Serisi Metal Gövdeli, Çapraz Sınır Şalterleri
CSM Series Cross Limit Switches With Metal Body

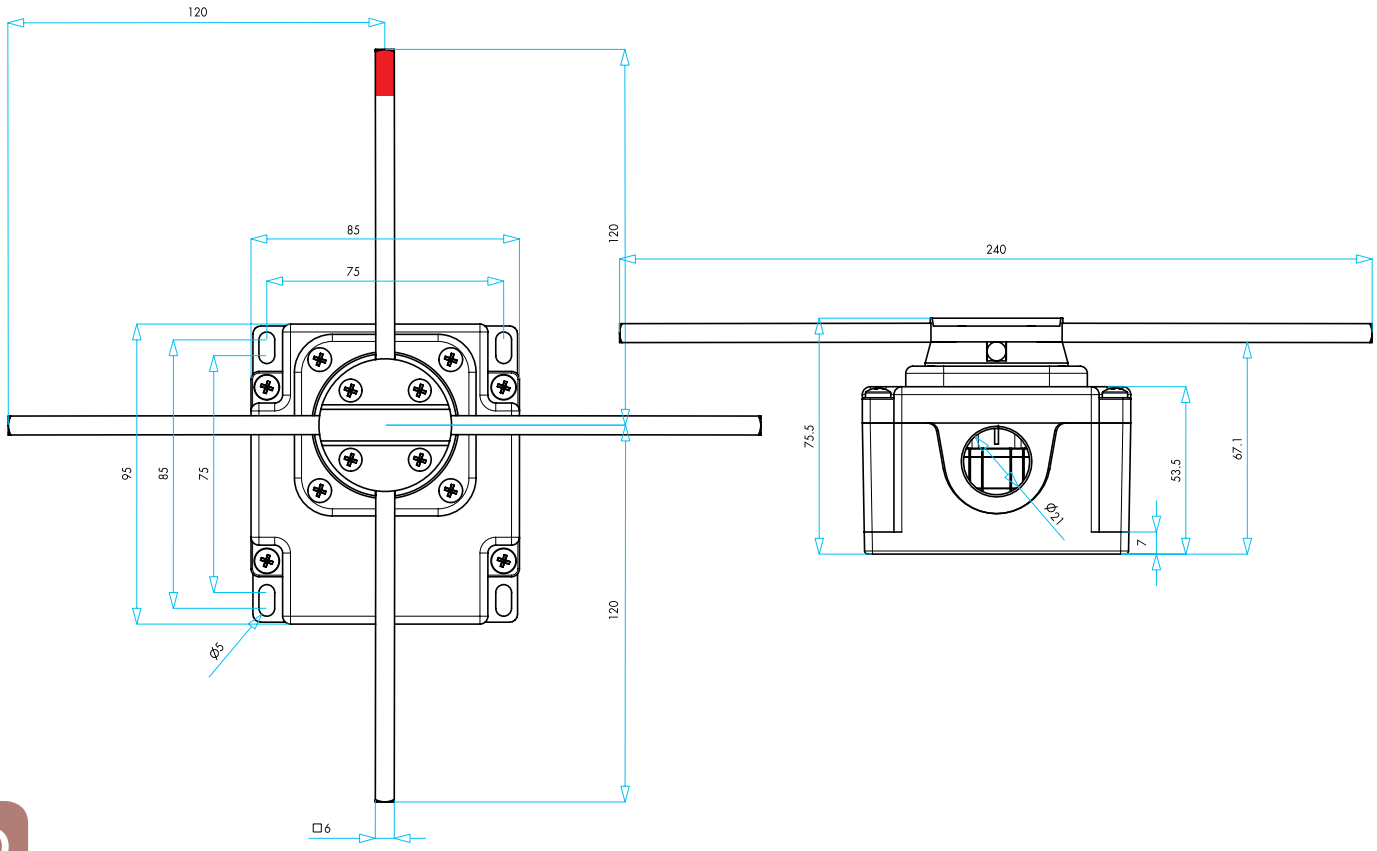
Metal Gövdeli,
Çapraz Sınır Şalterleri
Cross Limit Switches
With Metal Body

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*		
CSM02 **1 ileri 1 geri kademe** *1 forward 1 reverse steps*			
	-90°	0°	+90°

Metal Gövdeli,
Çapraz Sınır Şalterleri
Cross Limit Switches
With Metal Body

Ürün Kodu *Code*	Kontak Yapısı *Contact Type*				
CSM04 **2 ileri 2 geri kademe** *2 forward 2 reverse steps*					
	-180°	-90°	0°	+90°	+180°

BOYUTLAR (mm) / *DIMENSIONS (mm)*



VT *Serisi Tur Siviç*

- ABS katkılı malzeme ve sayesinde yüksek darbe mukavemeti
- Kolay kablo montajı
- Ürün güvenirliliğini arttıran V0 özellikli ve uzun ömürlü Mikro siviç
- Standart

Teknik Bilgiler

Çalışma Sıcaklığı	: min./maks. °C -20/+60
Koruma Sınıfı	: IP67
Kablo Giriş Rakoru	: PG9
Maksimum Dönüş Hızı	: 800 Dev/Dak
Standart	: TS EN 60204-1 ,TS EN 60529

Kontak Bloklar

Mekanik Ömür	: 10.000.000 açma-kapama min. (60 dev/dk)
Elektriksel Ömür	: 100.000 açma-kapama min. (30dev/dk)
Çalışma Gerilimi (Ue)	: 250V AC
Çalışma Akımı (Ie)	: 10 (4) A
Yalıtım Gerilimi (Ui)	: 660V
Darbe Dayanım Gerilimi (Uimp)	: 2.5 kV
Kısa Devre Kesme Kap. (Icn)	: 1 kA
İzolasyon Direnci	: 10 MΩ min. (500 V DC)
Kullanım Sınıfı	: AC15 - AC3
Dielektrik Mukavemeti	: 1.500 V AC (1 dakika için)
Kirlenme Derecesi	: 3
Standart	: TS EN 60947-5-1

VT *Series Rotational Limit Switch*

- *High impact strength with containing ABS additive*
- *Easy cable assembly*
- *V0 and Long Life Micro Switches*
- *Standard*

Technical Information

Operating Temperature	*: min./max. °C -20/+60*
Protection Degree	*: IP67*
	: PG9
	: 800 Cycle/Min
Standard	*: TS EN 60204-1, TS EN 60529*

Contact Blocks

Mechanical Life	*: 10.000.000 operations min. (60 cyc/min)*
Electrical Life	*: 100.000 operations min. (30 cyc/min)*
Operating Voltage (Ue)	*: 250 V AC*
Operating Current (Ie)	*: 10 (4) A*
Insulation Voltage (Ui)	*: 660V*
Impact Resistance (Uimp)	*: 2.5 kV*
Short Circuit Breaking Capacity (Icn)	*: 1 kA*
Insulation Resistance	*: 10 MΩ min. (500 V DC)*
Utilization Category	*: AC15 - AC3*
Dielectric Strength	*: 1.500 V AC (for 1 minute)*
Pollution Degree	*: 3*
Standard	*: TS EN 60947-5-1*

Tur Sivici Seçim Tablosu

Rotational Limit Switch Selection Table

Seri	Siviç Sayısı	Tur Oranı	Kam Açısı
VT	**2**	**075**	**B**
Series	*Switch Quantity*	*Round Turn Rates*	*Cam Angle*

VT — Tur Sivici / *Rotational Limit Switch*

- **2** — 2 Siviçli / *2 Switches*
- **3** — 3 Siviçli / *3 Switches*
- **4** — 4 Siviçli / *4 Switches*

- **050** — 1:50 Tur Oranı / *1:50 Round Turn Rate*
- **075** — 1:75 Tur Oranı / *1:75 Round Turn Rate*
- **100** — 1:100 Tur Oranı / *1:100 Round Turn Rate*
- **150** — 1:150 Tur Oranı / *1:150 Round Turn Rate*
- **200** — 1:200 Tur Oranı / *1:200 Round Turn Rate*
- **300** — 1:300 Tur Oranı / *1:300 Round Turn Rate*

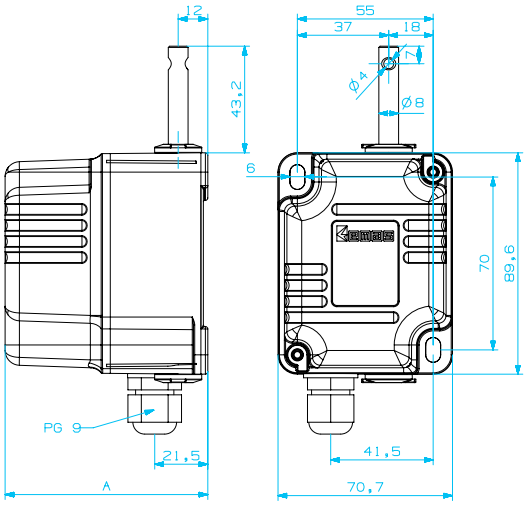
- 20 Derece / *20 Degree*
- **B** — 30 Derece / *30 Degree*
- **C** — 45 Derece / *45 Degree*
- **D** — 60 Derece / *60 Degree*
- **E** — 75 Derece / *75 Degree*
- **F** — 90 Derece / *90 Degree*

Ürün Kodu *Code*	Siviç Sayısı *Number of Switches*	Tur Oranı *Round Turn Rate*
VT2050	2	1/50
VT2075	2	1/75
VT2100	2	1/100
VT2150	2	1/150
VT2200	2	1/200
VT2300	2	1/300
VT3050	3	1/50
VT3075	3	1/75
VT3100	3	1/100
VT3150	3	1/150
VT3200	3	1/200
VT3300		1/300
VT4050	4	1/50
VT4075	4	1/75
VT4100	4	1/100
VT4150	4	1/150
VT4200	4	1/200
VT4300	4	1/300

VT2050

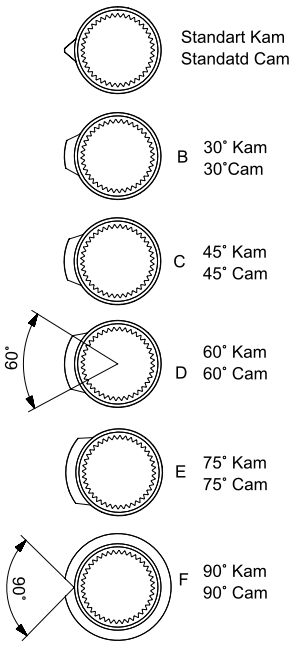
VT4300

BOYUTLAR (mm) / *DIMENSIONS (mm)*



VT Siviç Sayısı *VT Number of Switches*	A
VT 2 Siviçli	82
VT 3 Siviçli	82
VT 4 Siviçli	92

KAMLAR / CAMS



VTKAPLIN

Elektronik Ürünler

Electronic Products

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SSR *Serisi Solid State Röleler*

- Kompakt boyutlar
- Hızlı ve sessiz anahtarlama
- Hareketli parça içermediğinden uzun ömürlüdür
- Sıfır geçiş anahtarlamalı
- Lojik seviyede tetiklemeye uygun
- Kablo pabucuna uygun terminaller
- Parmak korumalı tasarım
- Giriş gerilimi için LED gösterge
- Panel montajlı
- 12-25-40-50-70-100-120A AC yük akımı

SSR *Series Solid State Relays*

- *Compact design*
- *Fast and silent switching*
- *Long life thanks to the absence of any moving mechanical components*
- *Zero cross switching*
- *TTL Logic compatibility*
- *Cable lug compatible terminals*
- *Finger proof design*
- *LED status indicator for input voltage*
- *Panel mount*
- *12-25-40-50-70-100-120A AC current*

Teknik Bilgiler
Technical Information

SSR Serisi Solid State Röleler / *SSR Series Solid State Relays*

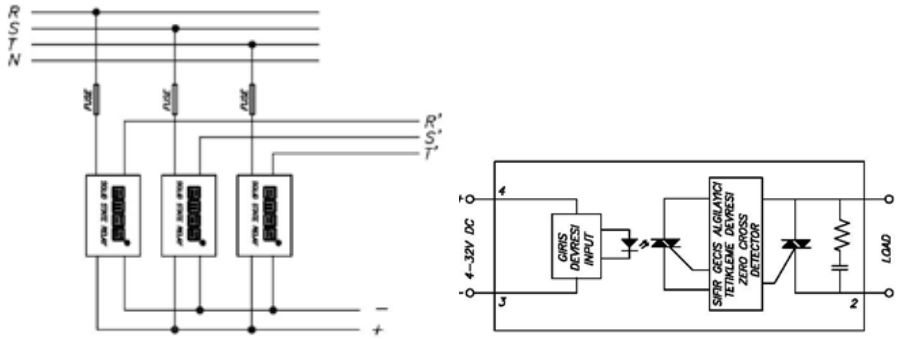
Genel Özellikler *General Specifications*	SSRP1DA012	SSRP1DA025	SSRP1DA040	SSRP1DB012	SSRP1DB025	SSRP1DB040	SSRP1DC050	SSRP1DC070	SSRP1DC100	SSRP1DC120
Çalışma Sıcaklığı *Operating Temperature*	-25 / +70 °C (Yoğuşma veya buzlanma olmadan / *With no condensation or icing*)									
Saklama Sıcaklığı *Storage Temperature*	-30 / +100 °C (Yoğuşma veya buzlanma olmadan / *With no condensation or icing*)									
Koruma Sınıfı *Protection Degree*	IP20									
Kablo Sıkma Momenti *Terminal Screw Torque*	Kontrol hattı için; 1,2Nm / *Input Terminal Screw* Yük hattı için; 2,2Nm / *Load*									
Bağlantı Kablo Kesiti *Wire cross-section* Giriş / *Input*	1,5 mm²									
Bağlantı Kablo Kesiti *Wire cross-section* Yük / *Load*	1,5 mm²	4 mm²	6 mm²	1,5 mm²	4 mm²	6 mm²	10 mm²	16 mm²	25 mm²	25 mm²
İzolasyon Gerilimi (Giriş-Çıkış arasında) *Insulation Voltage* *(between input and output)*	2500Vrms									
Montaj *Mounting*	*Panel Mount* (*with M4 screw*) / Panele montaj (M4 vida ile)									
Çıkış Özellikleri *Output Specifications*										
Max Yük Akımı (RMS) (AC51) *Max Load Current*	12A	25A	40A	12A	25A	40A	50A	70A	100A	120A
Yük Gerilimi (RMS) *Load Voltage*	24-320V AC			50-480V AC			50-640V AC			
Frekans *Frequency*	50/60Hz									
İletimdeki Tekrarlanmayan Tepe Akımı F=50Hz, t=10ms, Tj=25°C *Non Repetitive Surge Peak* *On-State Current*	120A	250A	400A	120A	230A	350A	450A	1000A	1500A	2000A
İletimdeki Max. Voltaj Düşümü *Max. On-state Voltage Drop*	1,55V			1,8V			1,8V			
Min Yük Akımı *Min. Load Current*	100mA	100mA	160mA	200mA	200mA	200mA	300mA	400mA	500mA	500mA
Sigorta İçin I^2t (Max. 0,5 peryot için,Tj=25 °C) *Max. 1/2 Cycle I^2t for Fusing*	78 A²sec	340 A²sec	1000 A²sec	72 A²sec	265 A²sec	610 A²sec	1000 A²sec	5000 A²sec	11250 A²sec	20000 A²sec
Giriş Özellikleri *Input Specifications*										
Kontrol Gerilimi *Control Voltage Range*	4-32V DC									
Min. Açma Gerilimi *Min. Turn-On Voltage*	4V DC									
Min. Kapama Gerilimi Min. *Turn-Off Voltage*	3.0V DC									
Min. Giriş Akımı *Min. Input Current (for on-state)*	5mA						6mA			
Max. Giriş Akımı *Max. Input Current*	15mA									
LED Gösterge *LED Status Indicator*	√									

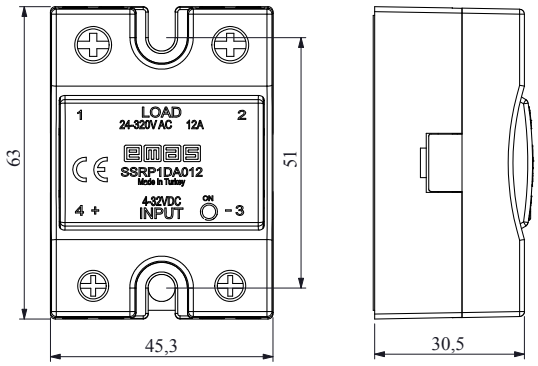
SSRP1DB040

SSRP1DA025

SSR Serisi Solid State Röleler / *SSR Series Solid State Relays*

Ürün Kodu *Code*	Kontrol Gerilimi *Control Voltage*	Montaj *Mounting*	Faz *Phase*	Yük Gerilimi *Load Voltage Range*	Yük Akımı *Max Load Current*	Kutu Adedi *Box/Pcs*
SSRP1DA012	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	24-320V AC	12A	1
SSRP1DA025	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	24-320V AC	25A	1
SSRP1DA040	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	24-320V AC	40A	1
SSRP1DB012	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	50-480V AC	12A	1
SSRP1DB025	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	50-480V AC	25A	1
SSRP1DB040	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	50-480V AC	40A	1
SSRP1DC050	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	50-640V AC	50A	1
SSRP1DC070	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	50-640V AC	70A	1
SSRP1DC100	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	50-640V AC	100A	1
SSRP1DC120	4 - 32 VDC	Panel Montaj / *Base Mount*	1 Faz / *1 Phase*	50-640V AC	120A	1





SSS1X

SSS5X

SSS5F

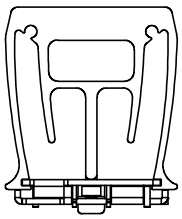
SSS Serisi Solid State Soğutucular / *SSS Series Solid State Heat Sinks*

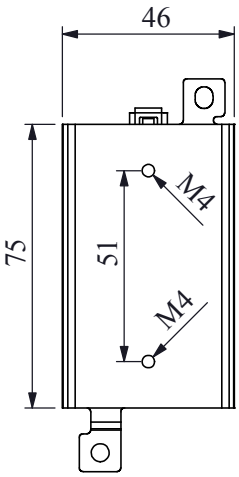
Ürün Kodu *Code*	Montaj *Installation*	Boyut *Dimension*	Özellik *Feature*	Kutu Adedi *Box/Pcs*
SSS1X	Ray Tipi / *DIN, Rail Type*	45 x 75 mm	Fansız / *W/O Fan*	1
SSS2X	Ray Tipi / *DIN, Rail Type*	45 x 100 mm	Fansız / *W/O Fan*	1
SSS2F	Ray Tipi / *DIN, Rail Type*	45 x 100 mm	Fanlı / With Fan	1
SSS5X	Ray Tipi / *DIN, Rail Type*	100 x 100 mm	Fansız / *W/O Fan*	1
SSS5F	Ray Tipi / *DIN, Rail Type*	100 x 100 mm	Fanlı / *With Fan*	1

Öneri Tablosu / *Suggestions*

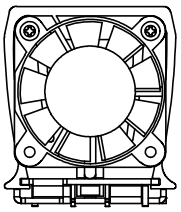
SSR	Birincil Soğutucu Önerileri *Primary Cooler Suggestions*		İkincil Soğutucu Önerileri *Secondary Cooler Suggestions*	
	Kod *Code*	Ölçü *Measure*	Kod *Code*	Ölçü *Measure*
12A	SSS1X	46x75		
25A	SSS2X	46x100		
40A	SSS2F	46x100 Fanlı / *With Fan*	SSS4X	100x75
50A	SSS4F	100x75 Fanlı / *With Fan*	SSS5X	100x100
70A	SSS5F	100x100 Fanlı / *With Fan*		
100A	SSS5F	100x100 Fanlı / *With Fan*		
120A	SSS5F	100x100 Fanlı / *With Fan*		

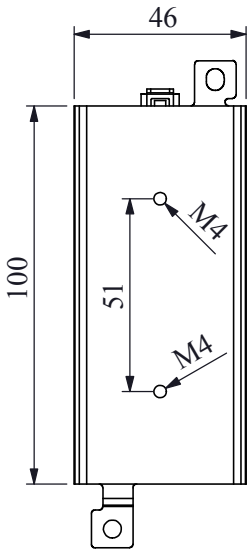
SSS1X



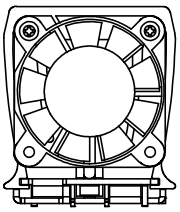


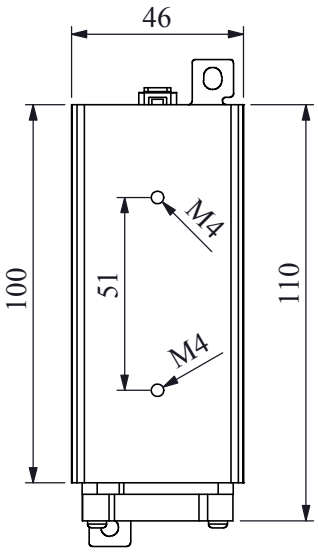
SSS2X



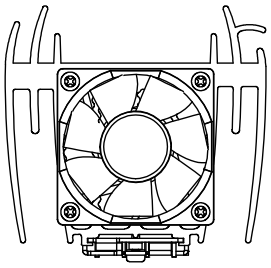


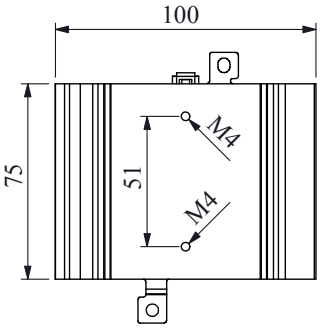
SSS2F



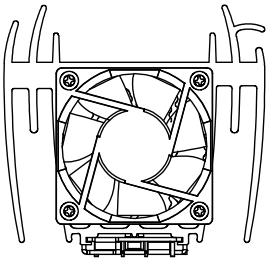


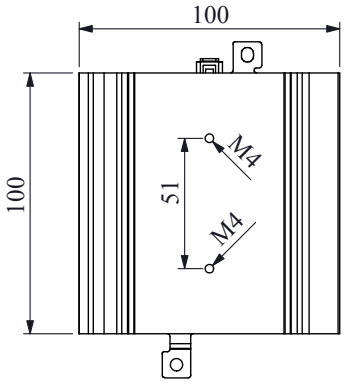
SSS4X





SSS5X





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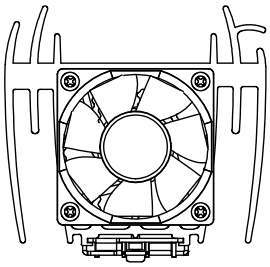
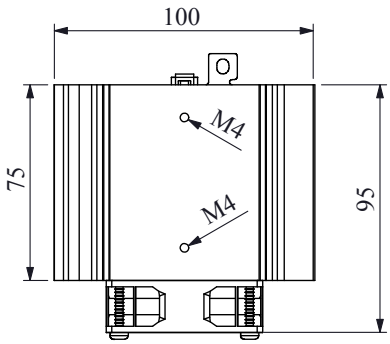
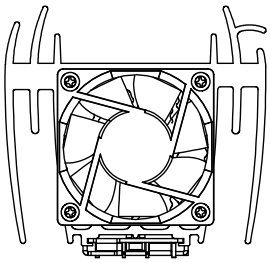
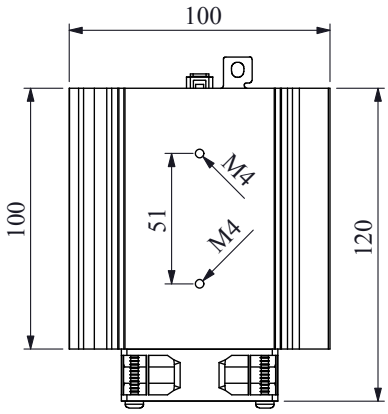




SSS5F





RR Serisi Ray Tipi Elektronik Röleler

- Kompakt Dizayn
- TH 35 Tipi Raya Monte Edilebilir

Teknik Bilgiler

Mekanik Ömür	: 10.000.000 açma-kapama min.
Elektriksel Ömür	: 100.0000 açma -kapama min.
Maksimum Anahtarlama Akımı	: 10A (Rezistif)
Maksimum Anahtarlama Gerilimi	: 250 V AC
Yalıtım Gerilimi (Ui)	: 300 V
Yalıtım Direnci	: Min. 10 MΩ
Minimum Anahtarlama Kapasitesi	: 5 V DC(100 mA)
Kontak Malzemesi	: AgNi
Koruma Sınıfı	: IP 20

CE

RR *Series DIN Rail Type Electronic Relays*

- *Compact Design*
- *TH 35 DIN rail installation*

Technical Information

Mechanical Life	*: 10.000.000 operations min.*
Electrical Life	*: 100.0000 operations min.*
Maximum Switching Current	*: 10A (Resistive)*
Maximum Switching Voltage	*: 250 V AC*
Insulation Voltage (Ui)	*: 300 V*
Insulation Resistance	*: Min. 10 MΩ*
Minimum Switching Capacity	*: 5 V DC(100 mA)*
Contact Material	*: AgNi*
Protection Degree	*: IP 20*

CE

Ray Tipi Elektronik Röleler / *DIN Rail Type Electronic Relays*
Zaman Röleleri / *Time Relays*

RR3ZTS30

Ürün Kodu *Code*	Besleme Gerilimi *Operating Voltage*	Zaman Aralığı *Time Range*	Fonksiyon *Function* F1	F2	F3	F4	Kontrol Çıkışı *Control Output*	Kutu Adedi *Box/Pcs*
RR3ZTC01	24 VDC/VAC-220VAC	0,06 sn. - 30 saat *0,06 sec. - 30 hour*	√	√	√	√	1 enversör röle 10A/250V AC *1 Changeover Relay 10A/250V AC*	10
RR3ZTC02*		0,6 sn. - 10 saat *0,6 sec. - 10 hour*			√*	√*	1 enversör röle 10A/250V AC *1 Changeover Relay 10A/250V AC*	10
RR3ZTS30		0,1-30 sn.ayarlı *0,1-30 sec.adj*	√				1 enversör röle 10A/250V AC *1 Changeover Relay 10A/250V AC*	10
RR3ZTS60		0,1-60 sn.ayarlı *0,1-60 sec.adj*	√				1 enversör röle 10A/250V AC *1 Changeover Relay 10A/250V AC*	10

F1.Çekmede gecikme / F2. Bırakmada Gecikme / F3. Açık başlangıçlı Flaşör / F4. Kapalı başlangıçlı Flaşör *Açık ve kapalı süreleri ayrı ayrı ayarlanabilir.

F1.Delay ON Function / F2. Delay OFF Function / F3. ON Flasher Function / F4. OFF Flasher Function / F5. Bypass
**In this model on-off times are seperately adjustable.*

RR3ZTC01
Çok Fonksiyonlu Zaman Röleleri / *Multifunctional Timer*

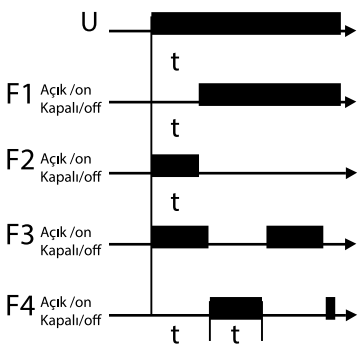
- Mikroişlemcili Hassas Zaman Ayarı / *Precision Time Setting with Microcontroller*
- LED Gösterge / *LED Indicator*
- Çekmede gecikme fonksiyonu (*Delay On*)
- Bırakmada gecikme fonksiyonu (*Delay Off*)
- "AÇIK" başlangıçlı Flaşör fonksiyonu (*Equal ON/OFF time ON START FLASHER*)
- "KAPALI" başlangıçlı Flaşör fonksiyonu (*Equal ON/OFF time OFF START FLASHER*)
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*
- 24V AC/DC ve 220V AC gerilim seçeneği / *24V AC/DC and 220V AC voltage options*

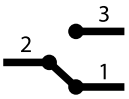
Zaman Aralığı *Time Range*		
Kademe (Range)	Min. Çarpan = 0,01	Max. Çarpan =1
6 sn/s	0,06 sn/s	6 sn/s
30 sn/s	0,3 sn/s	30 sn/s
60 sn/s	0,6 sn/s	60 sn/s
10 dk/m	0,1 dk/m	10 dk/m
60 dk/m	0,6 dk/m	60 dk/m
6 sa/h	0,06 sa/h	6 sa/h
30 sa/h	0,3 sa/h	30 sa/h

Not: F3 ve F4 fonksiyonlarında rölenin "açık" ve "kapalı" süreleri eşir ayarlanır.

Note: "on" and "off" time ranges are equal for F3 and F4 functions

Fonksiyon Şeması / *Function Scheme*





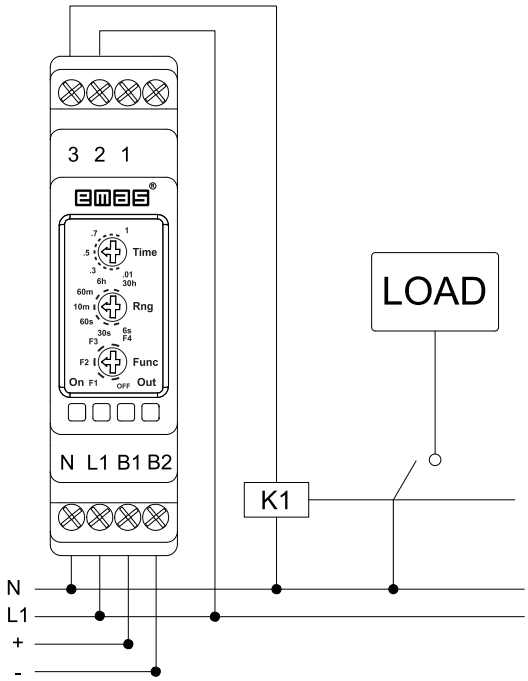
Açık / On
Kapalı / Off

Röle Kontakları / Relay Contacts

t : Ayarlanan Süre / Adjusted Time

U : Besleme Gerilimi / Supply Voltage

Bağlantı Şemaları
Connection Diagram
RR3ZTC01



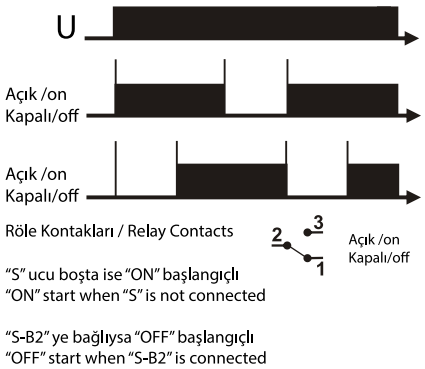
Teknik Özellikler / *Technical Specifications*

- Çalışma Voltajı / *Operating Voltage : 220 V AC or (veya) 24 V AC/DC*
- Çalışma Frekansı / *Operating Frequency : 50/60 Hz*
- Çalışma Sıcaklığı / *Operating Temperature : -5 ˚C...+55˚C*
- Çıkış Tipi / *Output Type :* 1 adet enversör röle / *1 piece changeover relay*
- Güç Tüketimi / *Power Consumption* : <7 VA
- Max. Anahtarlama Akımı / *Max. Switching Current :* 10 A Rezistif / *Resistive*
- Max. Anahtarlama Gerilimi : 250 V AC / *Max. Switching Voltage 250 V AC*

RR3ZTC02
Çok Kademeli Flaşör Rölesi / *Multifunctional Flashing Relay*

- Mikroişlemcili Hassas Zaman Ayarı / *Precision Time Setting with Microcontroller*
- Açık ve kapalı süreleri ayrı ayrı ayarlanabilir / *ON-OFF times are seperately adjustable*
- Açık ve kapalı başlangıç durumu seçilebilir / *ON Start and OFF Start selectable*
- LED Gösterge / *LED Indicator*
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*
- 24V AC/DC ve 220V AC gerilim seçeneği / *24V AC/DC and 220V AC voltage options*

Fonksiyon Şeması / *Function Scheme*



Kademe *Range*	Max. Süreler *Max. Times*	Zaman Ayarı *Time Adjustment*	
	ON / OFF	*ON*	*OFF*
A	60 sn/s - 60 sn/s	k1 x 60 sn/s	k2 x 60 sn/s
B	10 dk/m - 60 sn/s	k1 x 10 dk/m	k2 x 60 sn/s
C	60 dk/m - 60 sn/sn	k1 x 60 dk/m	k2 x 60 sn/s
D	10 dk/m - 10 dk/m	k1 x 10 dk/m	k2 x 10 dk/m
E	60 dk/m - 60 dk/m	k1 x 60 dk/m	k2 x 60 dk/m
F	10 sa/h - 10 sa/h	k1 x 10 sa/h	k2 x 10 sa/h

Örnek: C kademesi seçilmişse "On" süresi 0,6 dk - 60 dk arası ayarlanabilir. "Off" süresi ise 0,6 sn - 60 sn arası ayarlanabilir.
Example: C Range is choosen "On" time can be adjusted beetwen 0,6 s - 60 m , "Off" time can be adjusted 0,6 sec - 60 sec.

Not: Kademe değişiminin algılanabilmesi için enerjinin kesilip yeniden verilmesi gereklidir. "t on" ve "t off", zaman ayarı ise çalışırken yapılabilir.
Note: For range recognition relay should be re - energized, " t on" , "t off" adjustment can be done during the usage

Teknik Özellikler / *Technical Specifications*

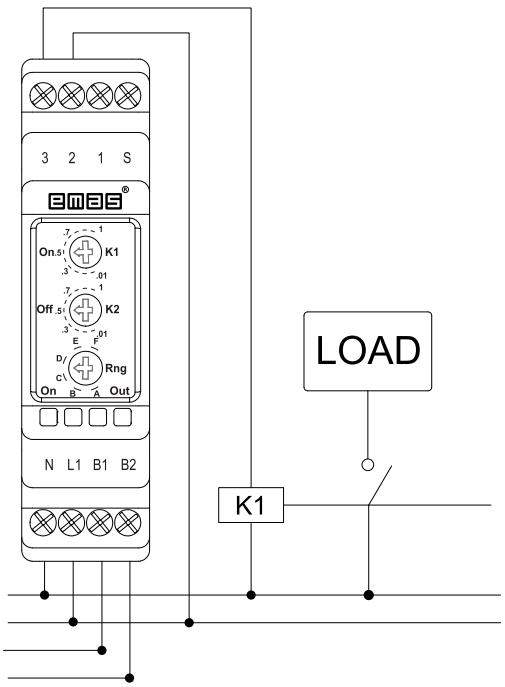
- Çalışma Voltajı / *Operating Voltage : 220 V AC or (veya) 24 V AC/DC*
- Çalışma Frekansı / *Operating Frequency : 50/60 Hz*
- Çalışma Sıcaklığı / *Operating Temperature : -5 °C...+55 °C*

Kademeler (*Ranges***) :**

- A: 60sn *(sec) / 60sn (sec)*
- B: 10dk *(min) / 60sn (sec)*
- C: 60dk *(min) / 60sn (sec)*
- D:10dk *(min) / 10dk (min)*
- E: 60dk *(min) / 60dk (min)*
- F: 10sa *(h) / 10sa (h)*

- Çıkış Tipi / *Output Type :* 1 adet enversör röle / *1 piece changeover relay*
- Güç Tüketimi / *Power Consumption : <7* VA

Bağlantı Şemaları
Connection Diagram



RR3ZTS30/RR3ZTS60
Zaman Rölesi / *Time Relay*

- Mikroişlemcili Hassas Zaman Ayarı / *Precision Time Setting with Microcontroller*
- Çekmede gecikme özelliği / *Delay On*
- LED Gösterge / *LED Indicator*
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*
- 24V AC/DC ve 220V AC gerilim seçeneği / *24V AC/DC and 220V AC voltage options*

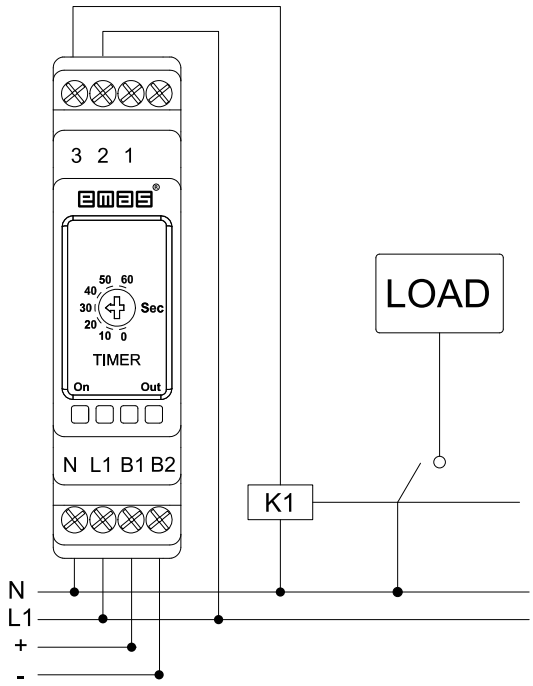
Tip *Type*	Zaman Aralığı *Time Interval*	Elektriksel Bağlantı *Electrical Connection*	Ağırlık (kg) *Weight (kg)*
RR3ZTS30	0,1...30sn / *sec*	PCB Klemens / *PCB Clamp*	0,09
RR3ZTS60	0,1...60sn / *sec*	PCB Klemens / *PCB Clamp*	0,09

Teknik Özellikler / *Technical Specifications*

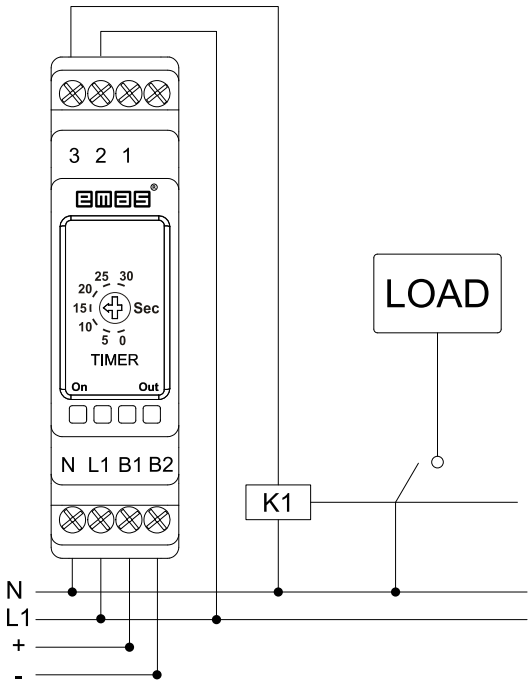
- Çalışma Voltajı / *Operating Voltage* : 220 V AC or(veya) 24 V AC/DC
- Çalışma Frekansı / *Operating Frequency* : 50/60 Hz
- Çalışma Sıcaklığı / *Operating Temperature* : -5 °C...+55 °C
- Çıkış Tipi / *Output Type* : 1 adet enversör röle / *1 piece changeover relay*
- Güç Tüketimi / *Power Consumption* : <7 VA

Bağlantı Şemaları / *Connection Diagram*

RR3ZTS60



RR3ZTS30



RR3VP01

Gerilim Koruma / Voltage Protection

Ürün Kodu *Code*	Besleme Gerilimi *Operating Voltage*	Bırakmada Gecikme *Time Delay Adjustment*	Aşırı Gerilim Koruması *Over Voltage Protection Level*	Düşük Gerilim Koruması *Under Voltage Protection Level*	Faz Sırası ve Faz Kaybı Koruması *Phase Sequence & Phase Loss Protection*	Kontrol Çıkışı *Control Output*	Kutu Adedi *Box/Pcs*
RR3VP01	220 VAC	0,1 - 20 sn. ayarlı *0,1 - 20 sec. Adj*	230-300 VAC arası ayarlı *230-300 VAC adjustable*	150-210 VAC arası ayarlı *150-210 VAC adjustable*	Monofaze *Monophase*	1 env röle 10A/250V AC *1 Changeover Relay 10A/250VAC*	10
RR3VP02					Trifaze *Threephase*	1 env röle 10A/250V AC *1 Changeover Relay 10A/250VAC*	10

RR3VP01-RR3VP02
Aşırı ve Düşük Gerilim Koruma Rölesi / Over and Under Current Protection Relay

- Yüksek Hassasiyet / *High Precision*
- Tek faz ve üç faz modelleri / *One phase and three phase models*
- Faz Sırası Koruması / *Phase Error Protection*
- Faz Yokluğu Koruması / *Phase Sequence Protection*
- Yüksek ve düşük voltaj koruma / *Over and under voltage protection*
- Ayarlanabilir gerilim koruma seviyeleri / *Adjustable voltage levels*
- Ayarlanabilir devreden çıkma süresi / *Adjustable time delay*
- LED Gösterge / *LED Indicator*
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*
- RR3VP01 Tek Faz (*Single Phase*) / RR3VP02 Üç Faz (*Three Phase*)

Cihaz Işıklarının Anlamları / Device Leds

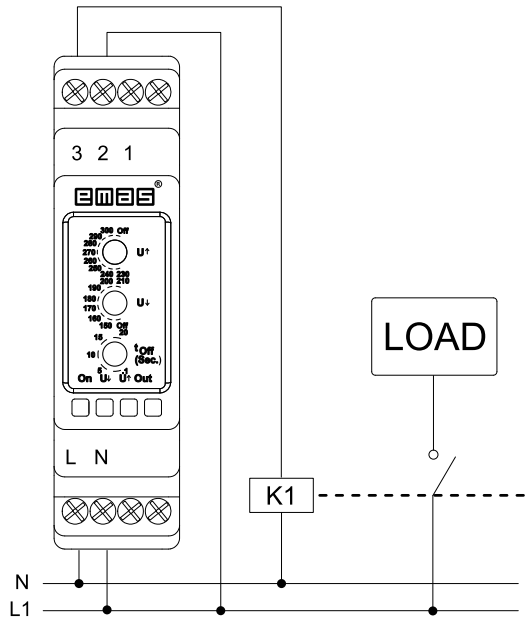
On	Umim (U↓)	Umax (U↑)	Out	(☀ LED YANIK / *LED ON*) (◐ FLAŞÖR / *FLASH*) (⊗ LED SÖNÜK / *LED OFF*)
⊗	⊗	⊗	⊗	N veya L1 fazı (besleme fazı) bağlı değil veya kopuk / *N or L1 (supply line) is not connected or corrupted*
☀	⊗	⊗	☀	Gerilimler ayarlanan sınırlar içerisinde / *Voltages are adjusted value*
☀	◐	⊗	☀	Geçici düşük gerilim uyarısı / *Temporarly under voltage warning*
☀	☀	⊗	⊗	Sürekli düşük gerilim uyarısı / *Continuosly under voltage warning*
☀	⊗	◐	☀	Geçici aşırı gerilim uyarısı / *Temporarly over voltage warning*
☀	⊗	☀	⊗	Sürekli aşırı gerilim uyarısı / *Continuosly over voltage warning*
☀	◐	◐	☀	Sırayla yanıyor ise geçici aşırı ve düşük gerilim uyarısı / *Respectively flash: temporarly over and under voltage warning*
☀	☀	☀	⊗	Sürekli aşırı ve düşük gerilim uyarısı / *Continuosly over and under voltage warning*
☀	◐	◐	⊗	Birlikte yanıp birlikte sönüyorlar ise faz sırası uyarısı / *LEDS flash together phase sequence fault*
☀	⊗	⊗	⊗	(HIZLI FLAŞÖR) faz yokluğu uyarısı / *(FAST FLASHER) phase fault warning*

Teknik Özellikler / Technical Specifications

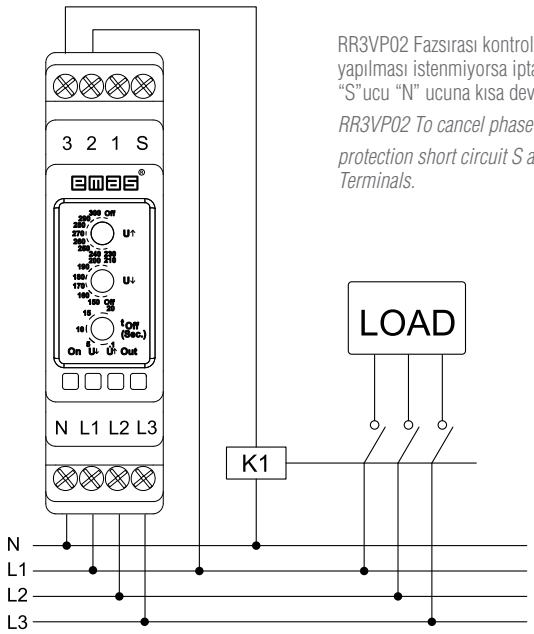
- Çalışma Voltajı / *Operating Voltage* : 220 V AC
- Çalışma Frekansı / *Operating Frequency* : 50/60 Hz
- Çalışma Sıcaklığı / *Operating Temperature* : -5 °C...+55 °C
- Alt Gerilim Ayarı / *Under Voltage Setting* : 210V,150V ayarlanabilir/*adjustable.*
- Üst Gerilim Ayarı / *Over Voltage Setting* : 230V,300V *adjustable.*
- Hysteresis / *Histerisiz* : 5V (Çekmede / *on the delay on*)
- Bırakmada Gecikme : (t-off) 0,1 sn...20sn ayarlanabilir *(t-off) 0,1 sec...20 sec adjustable.*
- Çıkış Tipi / *Output Type* : 1 adet enversör röle / *1 piece changeover relay*
- Güç Tüketimi / *Power Consumption* : <7 VA
- Max. Anahtarlama Akımı / *Max. Switching Current* : 10 A Rezistif / *Resistive*
- Max. Anahtarlama Gerilimi : 250 V AC / *Max. Switching Voltage 250 V AC*

Bağlantı Şemaları / Connection Diagram

RR3VP01



RR3VP02



RR3VP02 Fazsırası kontrolünün yapılması istenmiyorsa iptal etmek için "S"ucu "N" ucuna kısa devre edilir.

RR3VP02 To cancel phase sequence protection short circuit S and N Terminals.

RR3LL01

Sıvı Seviye Kontrol / Liquid Level Control

Ürün Kodu	Besleme Gerilimi	Elektrot	Hassasiyet Ayarı(kΩ)	Kontrol Çıkışı	Kutu Adedi
Code	*Operating Voltage*	*Electrode*	*Adjustment Sensitivity(kΩ)*	*Control Output*	*Box/Pcs*
RR3LL01	220 VAC	taban, alt, üst *base, bottom, top*	2 - 50	1 enversör röle 10A/250V AC *1 Changeover Relay 10A/250VAC*	10

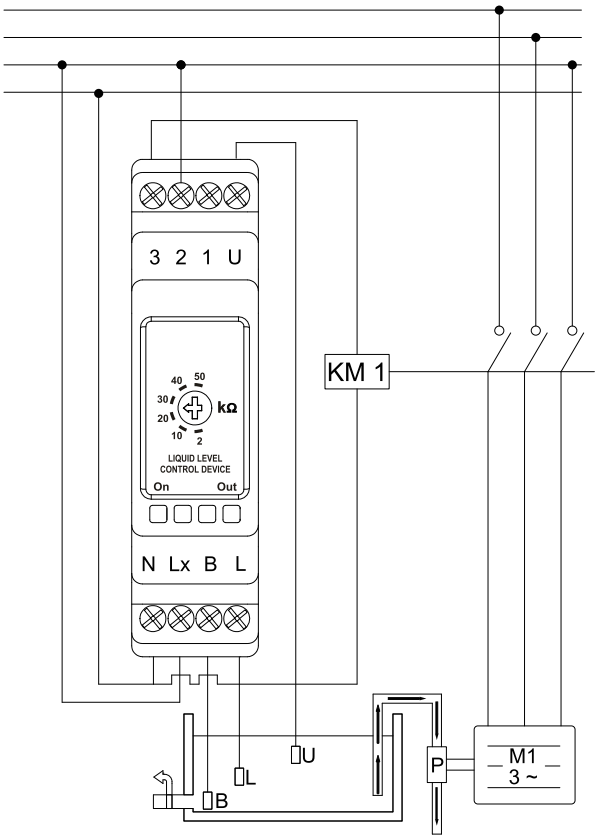
RR3LL01
Sıvı Seviye Rölesi / Liquid Level Control Device

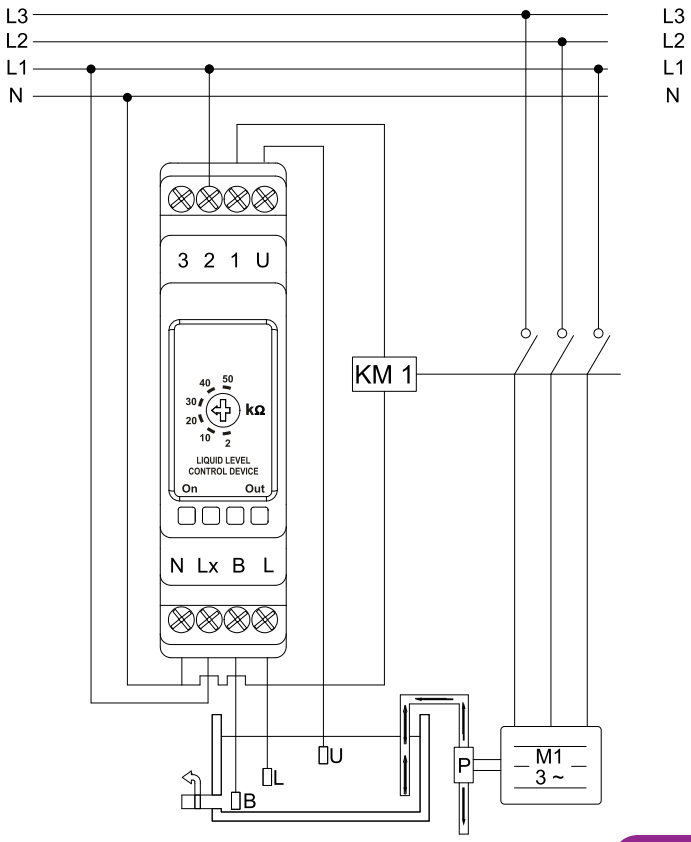
- Hassasiyet Ayarı / *Adjustable Sensitivity*
- 3 Elektrod bağlama imkanı / *3 probes connection facility*
- Ergonomik Tasarım / *Ergonomic Design*
- TH35 DIN Raya Montaj / *TH35 DIN Rail Installation*

Teknik Özellikler / Technical Specifications

- Çalışma Voltajı / *Operating Voltage* : 220 V AC or(veya) 24 V AC/DC
- Çalışma Frekansı / *Operating Frequency* : 50/60 Hz
- Çalışma Sıcaklığı / *Operating Temperature* : -5 °C...+55 °C
- Çıkış Tipi / *Output Type* : 1 adet enversör röle / *1 piece changeover relay*
- Hassasiyet Ayarı / *Sensivity Adjusment* : 2...50kΩ
- Güç Tüketimi / *Power Consumption* : <1 VA
- Max. Anahtarlama Akımı / *Max. Switching Current* : 10 A Rezistif / *Resistive*
- Max. Anahtarlama Gerilimi : 250 V AC / *Max. Switching Voltage 250 V AC*

Bağlantı Şemaları / Connection Diagram





RR3FR01

Fotosel Rölesi / Photocell Relay

Ürün Kodu *Code*	Besleme Gerilimi *Operating Voltage*	Lux Ayarı *Lux Scale*	Gecikme *Time delay*	Kumanda *Control*	Koruma *Protection*	Kontrol Çıkışı *Control Output*	Kutu Adedi *Box/Pcs*
RR3FR01	220 VAC	1-10 LUX	25s-40s	Otomatik / *Automatic*	-	1 env röle 10A/250V AC *1 change over Relay 10A/250V AC*	10
RR3FR02		1-10 LUX	25s-40s	Otomatik veya manuel *Automatic or Manual*	Sigorta *Fuse*	1 env röle 10A/250V AC *1 change over Relay 10A/250V AC*	10

Fotosel Rölesi / Photocell Relay

- Işık Şiddeti Ayarı / *Adjustable Lumunisity* (1-10 lux)
- Çevresel faktörlerden etkilenmeme için gecikmeli çalışma / *Delay time not to be affected by sudden light sources*
- Manuel Kontrol / *Manuel control* (RR3FR02)
- LED Gösterge / *LED Indicator*
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*

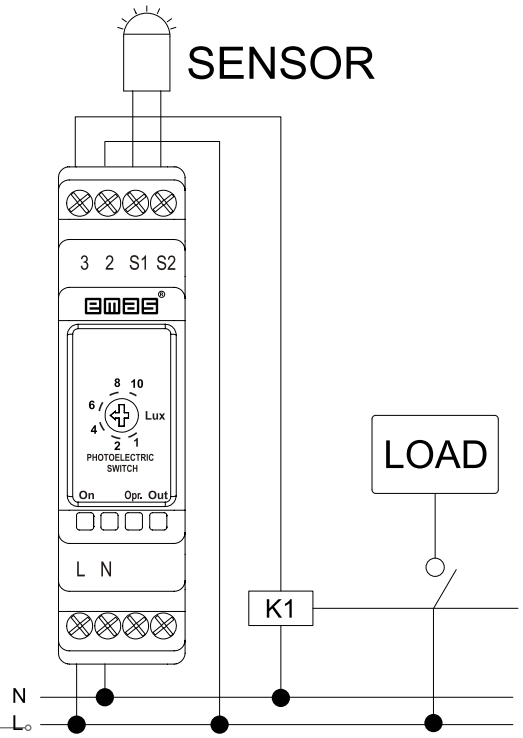
Ürün Kodu *Code*	Işık Şiddeti Ayarı *Adjustable Lumunisity*	Çıkış *Output*	Kontrol *Control*	Koruma *Protection*	Elektriksel Bağlantı *Electrical Connection*	Ağırlık (kg) *Weight(kg)*
RR3FRS30	1...10 Lux	Relay	Automatic		PCB Klemens/ *PCB Clamp*	0,13
RR3FRS60	1...10 Lux	Relay	Auto. / *Manual*	Sigorta / *Fuse*	PCB Klemens/ *PCB Clamp*	0,13

Teknik Özellikler / Technical Specifications

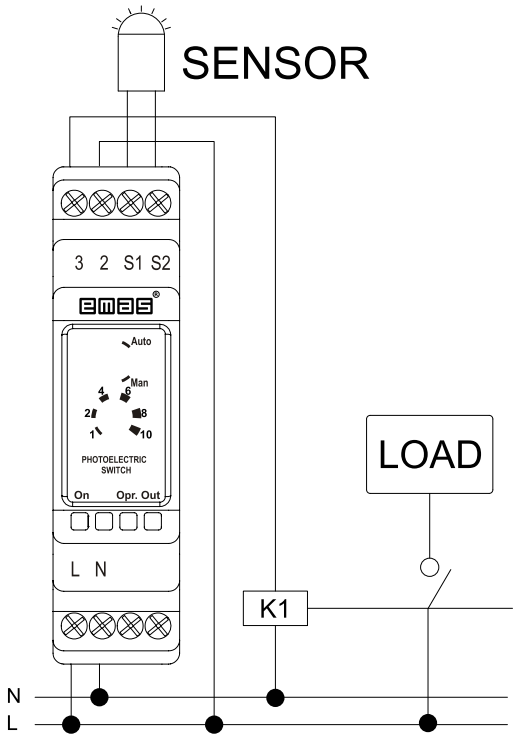
- Çalışma Voltajı / *Operating Voltage* : 220 V AC
- Çalışma Frekansı / *Operating Frequency* : 50/60 Hz
- Çalışma Sıcaklığı / *Operating Temperature* : -5 °C...+55 °C
- Fotosel Sensor / *Photocell Sensor* : LDR
- Çıkış Tipi / *Output Type* : 1 adet enversör röle / *1 piece changeover relay*
- Güç Tüketimi / *Power Consumption* : <1 VA
- Max. Anahtarlama Akımı / *Max. Switching Current* : 10 A Rezistif / *Resistive*
- Max. Anahtarlama Gerilimi : 250 V AC / *Max. Switching Voltage 250 V AC*

Bağlantı Şemaları / Connection Diagram

RR3FR01



RR3FR02



RR3MP1N

Motor Koruma / *Motor Protection*

Ürün Kodu *Code*	Besleme Gerilimi (AC) *Operating Voltage*	Gerilim Dengesizliği *Voltage Asymmetry*	Faz Kaybı, Faz sırası *Phase Loss / Phase sequence*	Sıcaklık Koruması *Thermal Protection*	Kontrol Çıkışı *Control Output*	Kutu Adedi *Box/Pcs*
RR3MP1N	220V AC	%20	√		1 enversör röle 10A/250V AC / *1 Changeover Relay 10A/250VAC*	10
RR3MP2N		%40	√		1 enversör röle 10A/250V AC / *1 Changeover Relay 10A/250VAC*	10
RR3MP2F		%40	√	√	1 enversör röle 10A/250V AC / *1 Changeover Relay 10A/250VAC*	10
RR3MP2FP		%40	√	√	√ 1 enversör röle 10A/250V AC / *1 Changeover Relay 10A/250VAC*	10
RR3MP4F		%5-15	√	√	1 enversör röle 10A/250V AC / *1 Changeover Relay 10A/250VAC*	10
RR3MP4FP		%5-15	√	√	√ 1 enversör röle 10A/250V AC / *1 Changeover Relay 10A/250VAC*	10

RR3MP1N-RR3MP2N
Motor (FAZ) Koruma Rölesi / *Motor (Phase) Protection Relay*

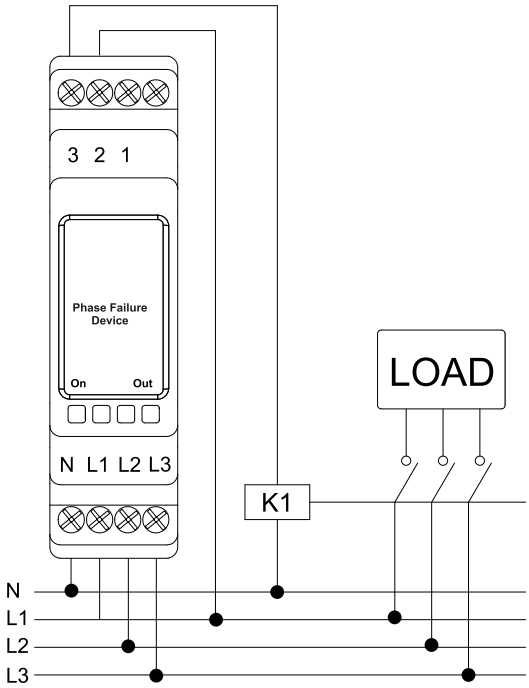
- Yüksek Hassasiyet / *High Precision*
- Faz Hatası Koruması / *Phase Error Protection*
- Faz Dengesizliği Koruması / *Phase Asymmetry Protection*
- LED'li Gösterge / *LED Indicator*
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*

Ürün Kodu *Code*	Faz Hatası *Phase Error*	Gerilim Dengesizliği *Asymmetry*	Elektriksel Bağlantı *Electrical Connection*	Ağırlık (kg) *Weight (kg)*
RR3MP1N	•	20%	PCB Klemens / *PCB Clamp*	0,09
RR3MP2N	•	40%	PCB Klemens / *PCB Clamp*	0,09

Teknik Özellikler / *Technical Specifications*

- Çalışma Voltajı / *Operating Voltage* : 220 V AC
- Çalışma Frekansı / *Operating Frequency* : 50/60 Hz
- Çalışma Sıcaklığı / *Operating Temperature* : -5 °C...+55 °C
- Çıkış Tipi / *Output Type* : 1 adet enversör röle / *1 piece changeover relay*
- Güç Tüketimi / *Power Consumption* : <7 VA
- Max. Anahtarlama Akımı / *Max. Switching Current* : 10 A Rezistif / *Resistive*
- Max. Anahtarlama Gerilimi : 250 V AC / *Max. Switching Voltage 250 V AC*

Bağlantı Şemaları / *Connection Diagram*



RR3MP1F-RR3MP2F-RR3MP1FP-RR3MP2FP
Motor (FAZ) Koruma Rölesi / *Motor (Phase) Protection Relay*

- Yüksek Hassasiyet / *High Precision*
- Faz Hatası Koruması / *Phase Error Protection*
- Faz Sırası Koruması / *Phase Sequence Protection*
- PTC ile sıcaklık koruması / *Temperature Protection*
- Faz Dengesizliği Koruması / *Phase Asymmetry Protection*
- LED Gösterge / *LED Indicator*
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*

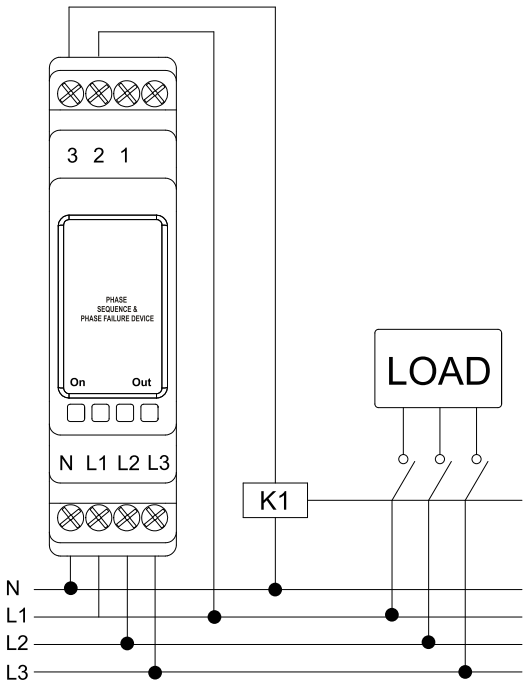
Ürün Kodu *Code*	Faz Hatası *Phase Error*	Faz Hatası *Phase Error*	Gerilim Dengesizliği *Asymmetry*	Elektriksel Bağlantı *Electrical Connection*	Ağırlık (kg) *Weight (kg)*
RR3MP1F	•		20%	PCB Klemens / *PCB Clamp*	0,09
RR3MP2F	•		40%	PCB Klemens / *PCB Clamp*	0,09
RR3MP1FP	•	•	20%	PCB Klemens / *PCB Clamp*	0,09
RR3MP2FP	•	•	40%	PCB Klemens / *PCB Clamp*	0,09

Teknik Özellikler / *Technical Specifications*

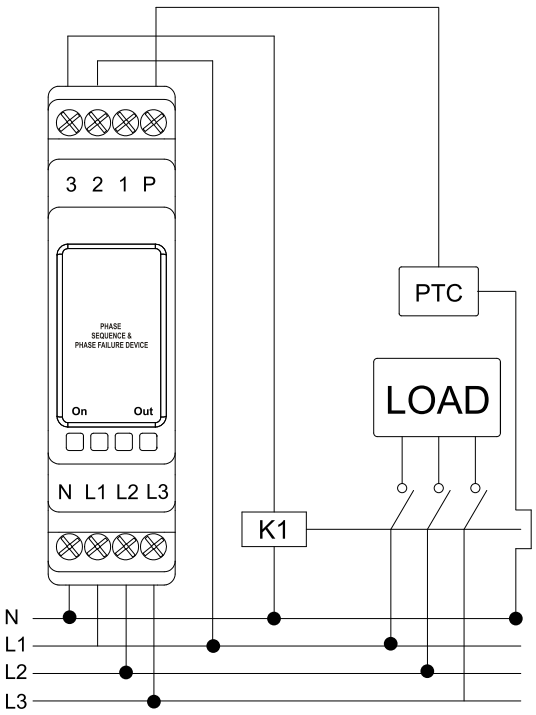
- Çalışma Voltajı / *Operating Voltage* : 220 V AC
- Çalışma Frekansı / *Operating Frequency* : 50/60 Hz
- Çalışma Sıcaklığı / *Operating Temperature* : -5 °C...+55 °C
- PTC Değeri / *PTC Value*: 2 kΩ
- Çıkış Tipi / *Output Type* : 1 adet enversör röle / *1 piece changeover relay*
- Güç Tüketimi / *Power Consumption* : <7 VA
- Max. Anahtarlama Akımı / *Max. Switching Current* : 10 A Rezistif / *Resistive*
- Max. Anahtarlama Gerilimi : 250 V AC / *Max. Switching Voltage 250 V AC*

Bağlantı Şemaları / *Connection Diagram*

RR3MP1F - RR3MP2F



RR3MP1FP - RR3MP2FP



RR3MP4F-RR3MP4FP
Faz Sıralı Motor Koruma Rölesi / *Phase Sequence Motor Protection Relay*

- Yüksek Hassasiyet / *High Precision*
- Faz Hatası Koruması / *Phase Error Protection*
- Faz Sırası Koruması/ *Phase Sequence Protection*
- PTC ile sıcaklık koruması/ *Temperature Protection*
- Ayarlanabilir Faz Dengesizliği Koruması/*Adjustable Phase Asymmetry Protection*
- Ayarlanabilir Gecikme Süresi / *Adjustable Delay Time*
- LED Gösterge / *LED Indicator*
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*

Ürün Kodu *Code*	Faz Hatası *Phase Error*	Sıcaklık Koruması *Temperature Protection*	Gerilim Dengesizliği *Asymmetry*	Elektriksel Bağlantı *Electrical Connection*	Ağırlık (kg) *Weight (kg)*
RR3MP4F	•		%5-15	PCB Klemens / *PCB Clamp*	0,09
RR3MP4FP	•	•	%5-15	PCB Klemens / *PCB Clamp*	0,09

Cihaz Hata Işıklarının Anlamları / *Device Error Meaning of Lights*

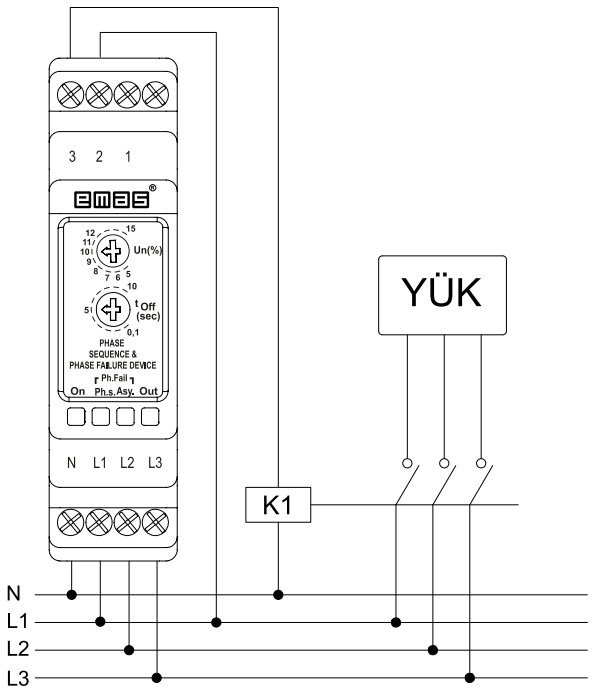
On	P.sq	Asym.	Out	(☀ LED YANIK / *LED ON*) (⊗ LED SÖNÜK / *LED OFF*)
⊗	⊗	⊗	⊗	L1 fazı (besleme fazı) bağlı değil veya kopuk / *L1 (supply line) is not connected or corrupted*
☀	⊗	⊗	☀	Gerilimler ayarlanan sınırlar içerisinde / *Voltages are adjusted value*
☀	⊗	☀	☀	Geçici aşırı veya düşük gerilim uyarısı / *Temporarly excessive or low voltage warning*
☀	⊗	☀	⊗	Sürekli aşırı veya düşük gerilim uyarısı / *Continuosly excessive or low voltage warning*
☀	☀	⊗	⊗	Faz sırası hata uyarısı / *Phase Sequence Alarm*
☀	☀	☀	⊗	Faz yokluğu uyarısı / *Phase failure warning*

Teknik Özellikler / *Technical Specifications*

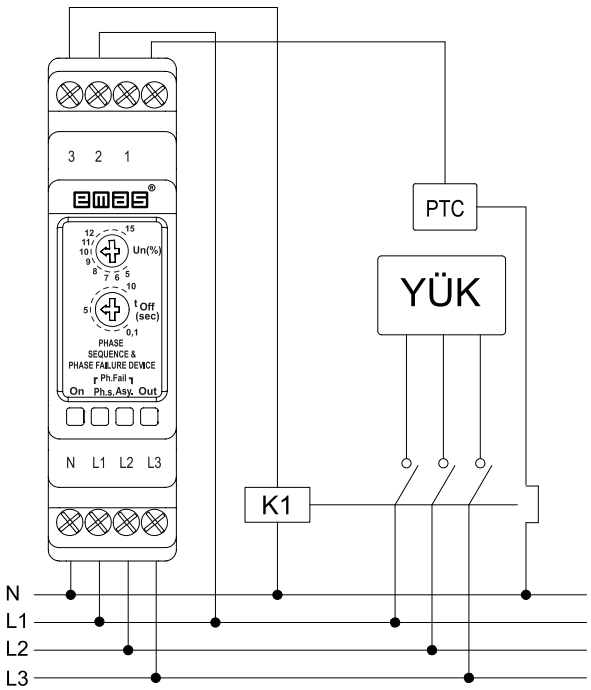
- Çalışma Voltajı / *Operating Voltage* : 220 V AC
- Çalışma Frekansı / *Operating Frequency* : 50/60 Hz
- Dengesizlik Ayarı /*Imbalance Adjusment* : %5...%15 (Fazlar Arası / *Between Phases*)
- Histerisiz / *Hysteresis*: Dengesizlik x %20 (*Asymmetry x %20*)
- Gecikme Zamanı / *Delay Time* : 0,1sn(*sec*)...10sn*(sec)*
- Çalışma Sıcaklığı / *Operating Temperature* : 0 °C...+60 °C
- PTC Değeri / *PTC Value:* 2 kΩ
- Çıkış Tipi / *Output Type* : 1 adet enversör röle / *1 piece changeover relay*
- Güç Tüketimi / *Power Consumption* : <7 VA
- Max. Anahtarlama Akımı / *Max. Switching Current* : 10 A Rezistif/*Resistive*
- Max. Anahtarlama Gerilimi : 250 V AC / *Max. Switching Voltage 250 V AC*

Bağlantı Şemaları / *Connection Diagram*

RR3MP4F



RR3MP4FP



RR3YU02

Yıldız Üçgen / Star Delta Relay

Ürün Kodu *Code*	Besleme Gerilimi *Operating Voltage*	Zaman Aralığı *Time Range*	Fonksiyon *Function*	Kontrol Çıkışı *Control Output*	Kutu Adedi *Box/Pcs*
RR3YU01	220V AC	Yıldız:3-30s, Geçiş:50-500ms *Star:3-30s, Star->Delta:50-500m*	Yıldız Üçgen *Star Delta*	2NA kontak 10A/250V AC *2NO relay 10A/250VAC*	10
RR3YU02		Yıldız:3-30s,Geçiş:50-500ms, Sağ-Sol:0.6s-5dk *Star:3-30s,Star-Delta:50-500ms, Right-Left:0.6s-5min*	Yıldız Üçgen, Sağ sol rölesi *Star Delta & Right Left Relay*	2NA kontak 10A/250V AC *2NO relay 10A/250VAC*	10

RR3YU01
Yıldız Üçgen Rölesi / Star Delta Relay

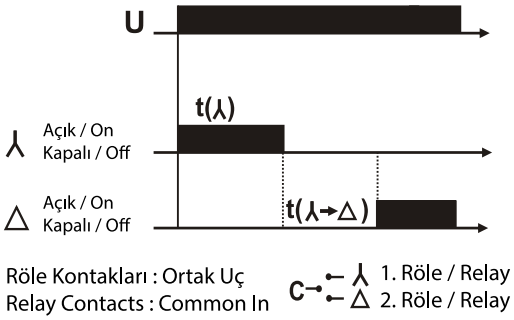
- Mikroişlemcili Hassas Zaman Ayarı / *Precision Time Setting with Microcontroller*
- Ayarlanabilir yıldız çalışma süresi / *Adjustable star mode working time*
- Ayarlanabilir yıldızdan üçgene geçiş süresi / *Adjustable star delta transfer time*
- LED Gösterge / *LED Indicator*
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*

Fonksiyon Şeması / Function Schemes

U : Besleme Gerilimi / *Supply Voltage*
t(λ) : Yıldız Çalışma Zamanı / *Star Working Time*
t(λ→△) : Yıldız - Üçgen Geçiş Zamanı / *Star - Delta Transfer Time*
λ : Yıldız Bağlantı / *Star Connection*
△ : Üçgen Bağlantı / *Delta Connection*

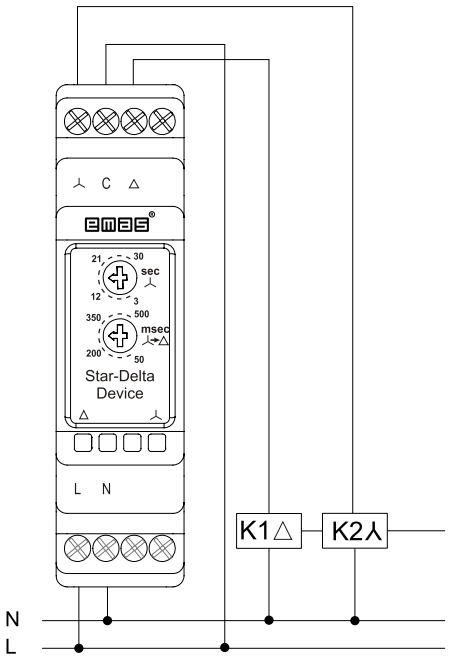
Teknik Özellikler / Technical Specifications

- Çalışma Voltajı / *Operating Voltage* : 220 V AC
- Çalışma Frekansı / *Operating Frequency* : 50/60 Hz
- Çalışma Sıcaklığı / *Operating Temperature* : -5 oC...+55oC
- Yıldız Çalışma Zamanı / *Star Working Time* : 3sn...30sn
- Yıldız-Üçgen Gecikme Zamanı / *Star-Delta Delay Time*: 50ms...500ms
- Çıkış Tipi / *Output Type* : 2 adet NA röle / *2 pieces NO relay*
- Güç Tüketimi / *Power Consumption* : <7 VA
- Elektriksel Bağlantı / *Electrical Connection*: PCB Klemens / *PCB Clamp*
- Max. Anahtarlama Akımı / *Max. Switching Current* : 10 A Rezistif / *Resistive*
- Max. Anahtarlama Gerilimi : 250 V AC / *Max. Switching Voltage 250 V AC*



Bağlantı Şemaları / Connection Diagram

RR3YU01



RR3YU02
Yıldız Üçgen ve Sağ-Sol Rölesi / *Star Delta and Right-Left Relay*

- Mikroişlemcili Hassas Zaman Ayarı / *Precision Time Setting with Microcontroller*
- Sağ-sol çalışma için zaman ayarı / *Adjustable left - right working time*
- Yıldız-üçgen çalışma için zaman ayarı / *Adjustable star delta transfer time*
- LED Gösterge / *LED Indicator*
- Ergonomik Tasarım / *Ergonomic Design*
- Raya Montaj TH35 / *TH35 DIN Rail Installation*

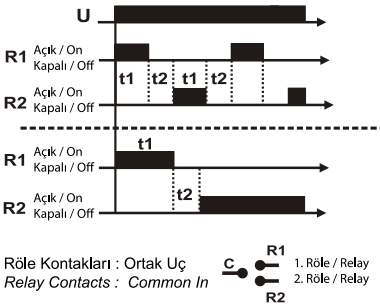
Teknik Özellikler / *Technical Specifications*

- Çalışma Voltajı / *Operating Voltage* : 220 V AC
- Çalışma Frekansı / *Operating Frequency* : 50/60 Hz
- Çalışma Sıcaklığı / *Operating Temperature* : -5 °C...+55 °C

Fonksiyonlar / *Functions:*
- A1:Sağ-Sol Rölesi *(Right-Left Relay)*
- A2:Sağ-Sol Rölesi *(Right-Left Relay)*
- B:Yıldız Üçgen Rölesi *(Star-Delta Relay)*

- Çıkış Tipi / *Output Type* : 2 adet NA röle / *2 pieces NO relay*
- Güç Tüketimi / *Power Consumption* : <7 VA
- Elektriksel Bağlantı / *Electrical Connection*: PCB Klemens / *PCB Clamp*
- Max. Anahtarlama Akımı / *Max. Switching Current* : 10 A Rezistif / *Resistive*
- Max. Anahtarlama Gerilimi : 250 V AC / *Max. Switching Voltage 250 V AC*

Fonksiyon Şeması / *Function Schemes*



A1, A2
U : Besleme Gerilimi / *Supply Voltage*
t1: Çalışma Süresi / *Working Time*
t2: Durma Süresi / *Stop Time*
R1: Sağ Bağlantı / *Right Connection*
R2: Sol Bağlantı / *Left Connection*

B
1: Yıldız Çalışma Zamanı / *Star Working Time*
t2: Yıldız - Üçgen Geçiş Zamanı / *Star - Delta Transfer Time*
R1: Yıldız Bağlantı / *Star Connection*
R2: Üçgen Bağlantı / *Delta Connection*

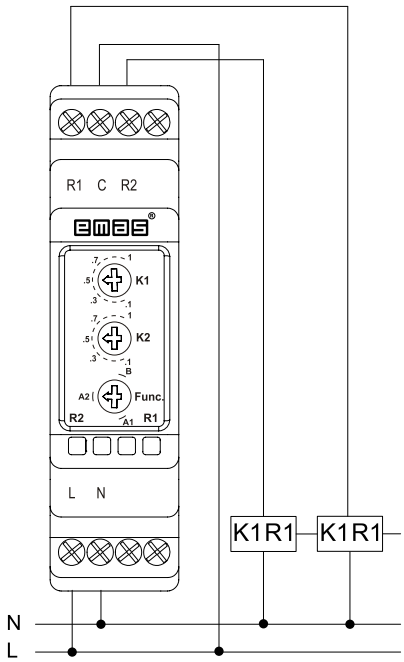
	Max. Süreler *Max. Times*	Zaman Ayarı *Time Adjustment*	
Fonksiyon *Function*	*t1 / t2*	*t1*	*t2*
A1	60 sn/s - 60 sn/s	k1 x 60 sn/s	k2 x 60 sn/s
A2	5 dk/m - 5 dk/m	k1 x 5 dk/m	k2 x 5 dk/m
B	30 sn/s - 0,5 sn/s	k1 x 30 sn/s	k2 x 0,5 sn/s

NOT : Fonksiyon değişiminin algılanabilmesi için enerjinin kesilip yeniden verilmesi gereklidir. Zaman ayarı ise çalışırken yapılabilir.

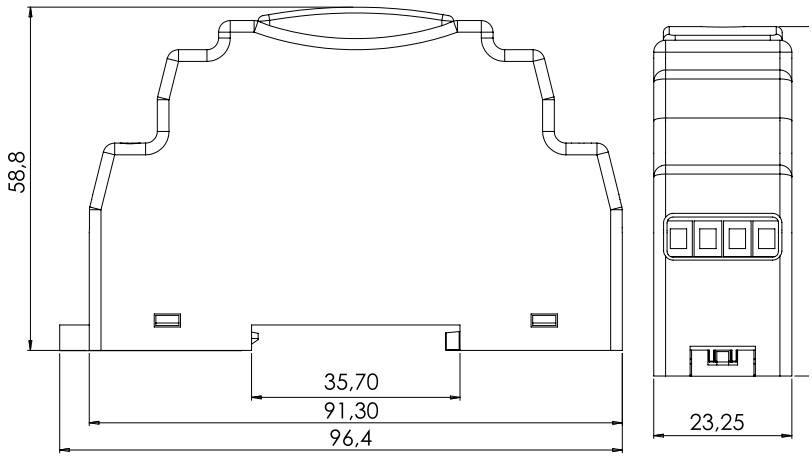
NOT : Functions can be changed only with de-energizing the relay

Bağlantı Şemaları / *Connection Diagram*

RR3YU02



***BOYUTLAR** / DIMENSIONS*



RZ1A Serisi Analog Zaman Röleleri

- 9 ayrı zaman aralığında ürün seçebilme imkanı
- Klips ile panel montajı veya soket ile 35 mm'lik raya montaj
- Çekmede gecikme ve/veya bırakmada gecikme
- Arıza anlarında makina durma zamanını minimuma indiren pinli bağlantı
- Pano boyutlarından tasarruf ettiren küçük hacim
- Güçlü ve estetik LED'ler ile durum takip kolaylığı

Teknik Bilgiler

Mekanik Ömür	: 10.000.000 açma-kapama min.
Elektriksel Ömür	: 100.000 açma-kapama min.
Çalışma Sıcaklığı	: -5/+40 ˚C
Koruma Sınıfı	: IP30
Çalışma Sıklığı	: 6000 açma-kapama/saat (yüksüz)
Çalışma Gerilimi	: 12-24 V AC/DC, 220 V AC
Nominal Kontak Akımı	: 5 A
Maksimum Gerilim	: 250 V AC
Maksimum Kontak Gücü	: 1250 VA
Çalışma Frekansı	: 50-60 Hz
Çalışma Gücü	: AC 2 VA maks./DC 2 W maks.
Tekrarlama Hassasiyeti	: ± %2
Voltajdan Etkilenme	: < %1
Maksimum Reset Zamanı	: ≤ 100 ms
Gerilim Değişimi	: (0.85-1.1)* Ue
Standart Kontak Malzemesi	: AgNi
Ağırlık	: 60± 3 gr.

RZ1A *Series Analog Time Relays*

- *Special feature to select product in nine separate time intervals*
- *Panel assembly with special flexible connection clip or 35 mm rail assembly with 8 pin socket*
- *On Delay and/or Off Delay functions*
- *Minimum machine stop time due to easy pin connection*
- *Small dimensions*
- *Status follow up possibility with powerful and aesthetic LED's*

Technical Information

Mechanical Life	*: 10.000.000 operations min.*
Electrical Life	*: 100.000 operations min.*
Operating Temperature	*: -5/+40 ˚C*
Protection Degree	*: IP30*
Operating Frequency	*: 6000 operations/hour (without load)*
Rated Operating Voltage Ue	*: 12-24 V AC/DC,220 V AC*
Rated Operating Current Ie	*: 5 A*
Max. Voltage	*: 250 V AC*
Max. Contact Power	*: 1250 VA*
Operating Frequency	*: 50-60 Hz*
Operating Power	*: AC 2 VA max./DC 2 W max.*
Repeat Sensitivity	*: ± 2%*
Voltage Effect	*: < 1%*
Max. Reset Time	*: ≤ 100 ms*
Voltage Range	*: (0.85-1.1)* Ue*
Standard Contact Material	*: AgNi*
Weight	*: 60± 3 gr.*

Tek Röleli / *Single Relay*

Ürün Kodu *Code*	Fonksiyon *Function Type*	Zaman Aralığı *Time Range*	Çalışma Gerilimi *Operating Voltage*	Kontak Sayısı *Number Of Contacts*
RZ1A1B30S-25	Bırakmada Gecikme / *Delay Off*	3 - 30 san/*sec*	24V AC/DC - 220V AC	1 CO
RZ1A1B60S-25	Bırakmada Gecikme / *Delay Off*	6 - 60 san/*sec*	24V AC/DC - 220V AC	1 CO
RZ1A1A03M-1	Çekmede Gecikme / *Delay On*	0.3 - 3 dak/*min*	12V AC/DC	1 CO
RZ1A1A03M-25	Çekmede Gecikme / *Delay On*	0.3 - 3 dak/*min*	24V AC/DC - 220V AC	1 CO
RZ1A1A03S-1	Çekmede Gecikme / *Delay On*	0.3 - 3 san/*sec*	12V AC/DC	1 CO
RZ1A1A03S-25	Çekmede Gecikme / *Delay On*	0.3 - 3 san/*sec*	24V AC/DC - 220V AC	1 CO
RZ1A1A06M-1	Çekmede Gecikme / *Delay On*	0.6 - 6 dak/*min*	12V AC/DC	1 CO
RZ1A1A06M-25	Çekmede Gecikme / *Delay On*	0.6 - 6 dak/*min*	24V AC/DC - 220V AC	1 CO
RZ1A1A06S-1	Çekmede Gecikme / *Delay On*	0.6 - 6 san/*sec*	12V AC/DC	1 CO
RZ1A1A06S-25	Çekmede Gecikme / *Delay On*	0.6 - 6 san/*sec*	24V AC/DC - 220V AC	1 CO
RZ1A1A12M-1	Çekmede Gecikme / *Delay On*	1.2 - 12 dak/*min*	12V AC/DC	1 CO
RZ1A1A12M-25	Çekmede Gecikme / *Delay On*	1.2 -12 dak/*min*	24V AC/DC - 220V AC	1 CO
RZ1A1A12S-1	Çekmede Gecikme / *Delay On*	1.2 - 12 san/*sec*	12V AC/DC	1 CO
RZ1A1A12S-25	Çekmede Gecikme / *Delay On*	1.2 -12 san/*sec*	24V AC/DC - 220V AC	1 CO
RZ1A1A30M-1	Çekmede Gecikme / *Delay On*	3 - 30 dak/*min*	12V AC/DC	1 CO
RZ1A1A30M-25	Çekmede Gecikme / *Delay On*	3 - 30 dak/*min*	24V AC/DC - 220V AC	1 CO
RZ1A1A30S-1	Çekmede Gecikme / *Delay On*	3 - 30 san/*sec*	12V AC/DC	1 CO
RZ1A1A30S-25	Çekmede Gecikme / *Delay On*	3 - 30 san/*sec*	24V AC/DC - 220V AC	1 CO
RZ1A1A60S-1	Çekmede Gecikme / *Delay On*	6 - 60 san/*sec*	12V AC/DC	1 CO
RZ1A1A60S-25	Çekmede Gecikme / *Delay On*	6 - 60 san/*sec*	24V AC/DC - 220V AC	1 CO
RZ1A1B03M-1	Bırakmada Gecikme / *Delay Off*	0.3 - 3 dak/*min*	12V AC/DC	1 CO
RZ1A1B03M-25	Bırakmada Gecikme / *Delay Off*	0.3 - 3 dak/*min*	24V AC/DC - 220V AC	1 CO
RZ1A1B03S-1	Bırakmada Gecikme / *Delay Off*	0.3 - 3 san/*sec*	12V AC/DC	1 CO
RZ1A1B03S-25	Bırakmada Gecikme / *Delay Off*	0.3 - 3 san/*sec*	24V AC/DC - 220V AC	1 CO
RZ1A1B06M-1	Bırakmada Gecikme / *Delay Off*	0.6 - 6 dak/*min*	12V AC/DC	1 CO
RZ1A1B06M-25	Bırakmada Gecikme / *Delay Off*	0.6 - 6 dak/*min*	24V AC/DC - 220V AC	1 CO
RZ1A1B06S-1	Bırakmada Gecikme / *Delay Off*	0.6 - 6 san/*sec*	12V AC/DC	1 CO
RZ1A1B06S-25	Bırakmada Gecikme / *Delay Off*	*0.6 - 6 san/sec*	24V AC/DC - 220V AC	1 CO
RZ1A1B12M-1	Bırakmada Gecikme / *Delay Off*	1.2 - 12 dak/*min*	12V AC/DC	1 CO
RZ1A1B12M-25	Bırakmada Gecikme / *Delay Off*	1.2 -12 dak/*min*	24V AC/DC - 220V AC	1 CO
RZ1A1B12S-1	Bırakmada Gecikme / *Delay Off*	1.2 -12 san/*sec*	12V AC/DC	1 CO
RZ1A1B12S-25	Bırakmada Gecikme / *Delay Off*	1.2 - 12 san/*sec*	24V AC/DC - 220V AC	1 CO
RZ1A1B30M-1	Bırakmada Gecikme / *Delay Off*	3 - 30 dak/*min*	12V AC/DC	1 CO
RZ1A1B30M-25	Bırakmada Gecikme / *Delay Off*	3 - 30 dak/*min*	24V AC/DC - 220V AC	1 CO
RZ1A1B30S-1	Bırakmada Gecikme / *Delay Off*	3 - 30 san/*sec*	12V AC/DC	1 CO
RZ1A1B60S-1	Bırakmada Gecikme / *Delay Off*	6 - 60 san/*sec*	12V AC/DC	1 CO

Not : Tüm elektronik röleler RS1P08 soketle birlikte kullanılmaktadır.
Note : All electronic relays must be used together with RS1P08 sockets.

RZ1A1A12S-25

Çift Röleli / *Double Relay*

Ürün Kodu *Code*	Fonksiyon *Function Type*	Zaman Aralığı *Time Range*	Çalışma Gerilimi *Operating Voltage*	Kontak Sayısı *Number Of Contacts*
RZ1A2C03S-1	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.3 - 3 san/*sec*	12V AC/DC	1 CO + 1 NO
RZ1A2C03M-1	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.3 - 3 dak/*min*	12V AC/DC	1 CO + 1 NO
RZ1A2C03M-2	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.3 - 3 dak/*min*	24V AC/DC	1 CO + 1 NO
RZ1A2C03M-5	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.3 - 3 dak/*min*	220V AC	1 CO + 1 NO
RZ1A2C03S-2	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.3 - 3 san/*sec*	24V AC/DC	1 CO + 1 NO
RZ1A2C03S-5	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.3 - 3 san/*sec*	220V AC	1 CO + 1 NO
RZ1A2C06M-1	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.6 - 6 dak/*min*	12V AC/DC	1 CO + 1 NO
RZ1A2C06M-2	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.6 - 6 dak/*min*	24V AC/DC	1 CO + 1 NO
RZ1A2C06M-5	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.6 - 6 dak/*min*	220V AC	1 CO + 1 NO
RZ1A2C06S-1	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.6 - 6 san/*sec*	12V AC/DC	1 CO + 1 NO
RZ1A2C06S-2	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.6 - 6 san/*sec*	24V AC/DC	1 CO + 1 NO
RZ1A2C06S-5	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	0.6 - 6 san/*sec*	220V AC	1 CO + 1 NO
RZ1A2C12M-1	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	1.2 -12 dak/*min*	12V AC/DC	1 CO + 1 NO
RZ1A2C12M-2	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	1.2 -12 dak/*min*	24V AC/DC	1 CO + 1 NO
RZ1A2C12M-5	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	1.2 -12 dak/*min*	220V AC	1 CO + 1 NO
RZ1A2C12S-1	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	1.2 -12 san/*sec*	12V AC/DC	1 CO + 1 NO
RZ1A2C12S-2	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	1.2 -12 san/*sec*	24V AC/DC	1 CO + 1 NO
RZ1A2C12S-5	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	1.2 -12 san/*sec*	220V AC	1 CO + 1 NO
RZ1A2C30M-1	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	3 - 30 dak/*min*	12V AC/DC	1 CO + 1 NO
RZ1A2C30M-2	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	3 - 30 dak/*min*	24V AC/DC	1 CO + 1 NO
RZ1A2C30M-5	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	3 - 30 dak/*min*	220V AC	1 CO + 1 NO
RZ1A2C30S-1	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	3 - 30 san/*sec*	12V AC/DC	1 CO + 1 NO
RZ1A2C30S-2	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	3 - 30 san/*sec*	24V AC/DC	1 CO + 1 NO
RZ1A2C30S-5	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	3 - 30 san/*sec*	220V AC	1 CO + 1 NO
RZ1A2C60S-1	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	6 - 60 san/*sec*	12V AC/DC	1 CO + 1 NO
RZ1A2C60S-2	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	6 - 60 san/*sec*	24V AC/DC	1 CO + 1 NO
RZ1A2C60S-5	Çekmede ve Bırakmada Gecikme / *Delay On & Delay Off*	6 - 60 san/*sec*	220V AC	1 CO + 1 NO

Not : Tüm elektronik röleler RS1P08 soketle birlikte kullanılmaktadır.
Note : All electronic relays must be used together with RS1P08 sockets.

RZ1A2C06S-2

Analog Zaman Rölesi Çap 22 mm / *Analogue Time Relays 22 mm*

Ürün Kodu *Code*	Fonksiyon *Function*	Zaman Aralığı *Time Range*	Çalışma Gerilimi **Operating Voltage**	Kontak Sayısı *Number of Contact*	Kutu Adedi *Box/Pcs*
RZ3A1A30S3	Çekmede Gecikme / *Delay On*	0,1-30 sec	10-30V DC	PNP Transistör Çıkış / *Transistor Output*	1
RZ3A1A60S3	Çekmede Gecikme / *Delay On*	0,1-60 sec	10-30V DC	PNP Transistör Çıkış / *Transistor Output*	1

RZ3A1A60S3

RZ3A1A30S3

RZ1D Serisi Dijital Zaman Röleleri

- Çok fonksiyonlu
- 3 farklı zaman modu ile 0.1 sn ile 99.59 sn arasında ayar yapabilme imkanı
- Kolay programlama özelliği
- Start girişini takip LED'i
- Ön panelden start özelliği
- Set değerlerini çalışma esnasında ekranda görme imkanı
- 1/1000 hassasiyet
- 4 dijitlik display
- t1 ve t2 sürelerini ayrı ayrı set edebilme imkanı
- Klips ile ponel montojı veya soket ile 35 mm'lik roya montaj

Teknik Bilgiler

Mekanik Ömür	: 10.000.000 açma-kapama min.
Elektriksel Ömür	: 100.000 açma-kapama min.
Çalışma Sıcaklığı	: -5/+40 ˚C
Koruma Sınıfı	: IP30
Çalışma Sıklığı	: 6000 açma-kapama/saat (yüksüz)
Çalışma Gerilimi	: 12-24 V AC/DC, 220 V AC
Nominal Kontak Akımı	: 2 A
Maksimum Gerilim	: 250 V AC
Maksimum Kontak Gücü	: 500 VA
Çalışma Frekansı	: 50-60 Hz
Çalışma Gücü	: 2 W
Hassasiyet	: ± %0.1
Standart Kontak Malzemesi	: AgNi
Ağırlık	: 52±3 gr.

RZ1D *Series Digital Time Relays*

- *Multifunctional*
- *Feature make an adjustment between 0,1 second and 99,59 hours with 3 different time modes*
- *Easily programmable*
- *Follow up the start input, output and time mode with LED's*
- *Start possibility from control panel*
- *Follow up the set values on screen*
- *1/1000 sensitivity*
- *4 digits display*
- *Feature to set the time of t1 and t2 separately*
- *Panel assembly with elips or 35 mm. rail assembly with socket*

Technical Information

Mechanical Life	*: 10.000.000 operations min.*
Electrical Life	*: 100.000 operations min.*
Operating Temperature	*: -5/+40 ˚C*
Protection Degree	*: IP30*
Operating Frequency	*: 6000 operations/hour (without load)*
Rated Operating Voltage (Ue)	*: 12-24 V AC/DC,220 V AC*
Rated Operating Current (Ie)	*: 2 A*
Max. Voltage	*: 250 V AC*
Max. Contact Power	*: 500 VA*
Operating Frequency	*: 50-60 Hz*
Operating Power	*: AC 2 VA max./DC 2 W max.*
Repeat Sensitivity	*: ± % 0.1*
Standard Contact Material	*: AgNi*
Weight	*: 52 ± 3 gr.*

RZ1D1
Dijital Zaman Rölesi
Digital Time Relay

Ürün Kodu *Code*	Çalışma Gerilimi *Operating Voltage*	Kontak Sayısı *Number of Contacts*	Fonksiyon *Function*
RZ1D1S-1	12 V AC/DC	1DK / *1CO*	A,B,F1,F2,S1,S2,S3,S4,P
RZ1D1S-2	24 V AC/DC	1DK / *1CO*	A,B,F1,F2,S1,S2,S3,S4,P
RZ1D1S-5	220 V AC	1DK / *1CO*	A,B,F1,F2,S1,S2,S3,S4,P
RZ1D1B-1	12 V AC/DC	1DK / *1CO*	A,B,F1,F2,S1,S2,S3,S4,I,P
RZ1D1B-2	24 V AC/DC	1DK / *1CO*	A,B,F1,F2,S1,S2,S3,S4,I,P
RZ1D1B-5	220 V AC	1DK / *1CO*	A,B,F1,F2,S1,S2,S3,S4,I,P
RZ1D1R-1	12 V AC/DC	1DK / *1CO*	A,B,F1,F2,S1,S2,S3,S4,R,P
RZ1D1R-2	24 V AC/DC	1DK / *1CO*	A,B,F1,F2,S1,S2,S3,S4,R,P
RZ1D1R-5	220 V AC	1DK / *1CO*	A,B,F1,F2,S1,S2,S3,S4,R,P

FONKSİYONLAR / *FUNCTIONS*

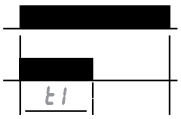
A : Çekmede gecikme / *Delay on*

Besleme / *Supply*
Çıkış / *Output*

Zaman rölesi enerjilenince; zaman saymaya başlar ve ayarlanan t_1 süresi sonunda kontağını çeker, çıkış konumu değişir.
As the time relay is energized, time starts to cycle and at the end of the adjusted t_1 time pulls its contact, output position changes.

B : Bırakmada gecikme / *Delay off*

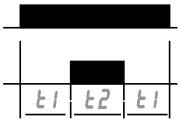
Besleme / *Supply*
Çıkış / *Output*



Zaman rölesi enerjilenince; kontağını çeker, çıkış konumu değişir ve ayarlanan t_1 süresi sonunda bırakır.
As the time relay is energized pulls its contact, output position changes and releases at the end of the adjusted t_1 time.

F1: Çekmede gecikmeli flaşör / *Flasher with delay on energy*

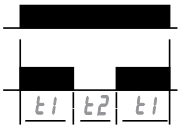
Besleme / *Supply*
Çıkış / *Output*



Zaman rölesi enerjilenince; ayarlanan t_1 süresi sonunda kontağını çeker, çıkış konumu değişir ve ayarlanan t_2 süresi sonunda bırakır; enerjili kaldığı süre boyunca bu işlemi tekrarlar. t_1 ve t_2 süreleri birbirinden ayrı olarak istenilen değerlere ayarlanabilir.
As the time relay is energized, pulls its contact at the end of the adjusted t_1 time, output position changes and releases at the end of the adjusted t_2 time. It repeats this process throughout it remains energized. t_1 and t_2 times are adjusted for requested values.

F2: Bırakmoda gecikmeli flaşör / *Delay off*

Besleme / *Supply*
Çıkış / *Output*



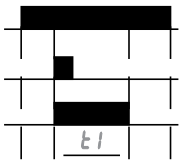
Zaman rölesi enerjilendiğinde; kontağını çeker, ayarlanan t_1 süresi sonunda bırakır ve ayarlanan t_2 süresi sonunda; tekrar çeker; enerjili kaldığı süre boyunca bu işlemi tekrarlar. t_1 ve t_2 süreleri birbirinden ayrı olarak istenilen değerlere ayarlanabilir.
As the time relay is energized, pulls its contact, releases at the end of the adjusted t_1 time, and repulls at the end of the adjusted t_2 time. It repeats this process throughout it remains energized. t_1 and t_2 times are adjusted for requested values.

S1: Start girişi ile bırakmada gecikme / *Timing on energy with start input*

Besleme / *Supply*

Start / *Start*

Çıkış / *Output*



Zaman rölesi enerjilendiğinde; kontağında bir değişiklik olmaz. Start girişi verildiğinde röle kontağını çeker, ayarlanan t_1 süresi sonunda bırakır. Start girişinin kesilmesi rölenin çalışmasını etkilemez, ancak rölenin tekrar çalışabilmesi için ayarlanan süre sonunda start girişinin yeniden verilmesi gerekir.

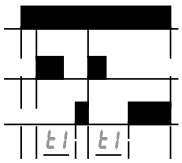
As the time relay is energized, no alteration occurs on its contact. As start input is applied, relay pulls its contact and releases at the end of the adjusted t1 time. Disconnecting start input does not effect the operation of the relay but in order to reoperate the relay, start input should be applied again at the end of the adjusted time.

S2: Start girişi ile çekmede gecikme / *Delay on energy with start input*

Besleme / *Supply*

Start / *Start*

Start / *Start*

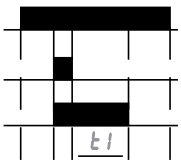


Zaman rölesi enerjilendiğinde; kontağında bir değişiklik olmaz. Start girişi verildiğinde; röle ayarlanan t_1 süresi sonunda kontağını çeker çıkış konumu değişir. Start girişinin kesilmesi rölenin çalışmasını etkilemez, ancak rölenin tekrar çalışabilmesi için ayarlanan süre sonunda start girişinin yeniden verilmesi gerekir.

As the time relay is energized, no alteration occurs on its contact. As start input is applied, relay pulls its contact and releases at the end of the adjusted t1 time. Output position changes. Disconnecting start input does not effect the operation of the relay but in order to reoperate the relay, start input should be applied again at the end of the adjusted time.

S3: Start girişinin kesilmesi ile bırakmada gecikme / *Timing on energy with start input break*

Besleme / *Supply*



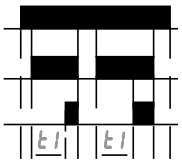
Zaman rölesi enerjilendiğinde; kontağında bir değişiklik olmaz. Start girişi verildiğinde; röle kontağını çeker, çıkış konumu değişir ve startın kesilmesinden itibaren ayarlanan t_1 süresi sonunda bırakır. Start girişinin kesilmesi rölenin çalışmasını etkilemez, ancak rölenin tekrar çalışabilmesi için ayarlanan süre sonunda start girişinin yeniden verilip kesilmesi gerekir.

As the time relay is energized, no alteration occurs on its contact. As start input is applied, relay pulls its contact, output position changes and it releases at the end of the adjusted t1 time. As from disconnecting start. Disconnecting start input does not effect the operation of the relay but in order to reoperate the relay, start input should be applied again and disconnected at the end of the adjusted time.

S4: Start girişi ile çekmede gecikme (Start girişine bağlı) / *Delay on energy with start input (Start input connection)*

Besleme / *Supply*

Çıkış / *Output*



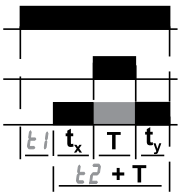
Zaman rölesi enerjilendiğinde; kontağında bir değişiklik olmaz. Start girişi verildiğinde; röle kontağını ayarlanan t1 süresi sonunda çeker, çıkış konumu değişir ve bu durum startın kesilmesine kadar devam eder. Start girişi kesildiğinde röle kontağını bırakır, çıkış konumuda değişir. Startın tekrar verilmesiyle röle yeniden çalışır. Bu fonksiyonlu çalışması tamamen start girişinin verilip kesilmesine bağlıdır.

As the time relay is energized, no alteration occurs on its contact. As start input is applied, relay pulls its contact at the end of t1 time and output position changes and this situation goes on till disconnecting start, as start input is disconnected. The relay releases its contact, output position changes. As start is applied again, the relay reoperates. The functional operation exactly depends on applying and disconnecting of start.

I: Bekletme (İnhibit) / *Waiting (Inhibit)*

Besleme / *Supply*

İnhibit / *Inhibit*



Zaman rölesi çıkış konumunu korurken, dışarıdan girilen T süresi kadar yine aynı konumunu devam ettirir, fakat bu süreyi ayarlanan sürenin dışında tutar. Bu özellik sayesinde tüm modlarda zaman eklenebilir.
As the time relay keeps its output position. It keeps up its same position as T time entered Çıkış / Output from outside but the relay keeps this time out of the adjusted time. The time can be added in all modes through this specification.

P: Ön panelden start imkanı / *Start possibility from front panel*

Besleme / *Supply*

Start / *Start*

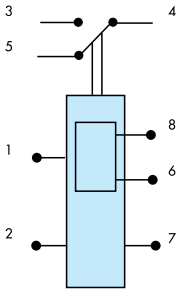
Çıkış / *Output*

Tüm modlarda ve zamanlarda ön panelden start verebilme imkanı sağlar.
It enables start possibility from front panel in all modes and time.

R: Rezerv / *Reserve*

Rezerv özelliği ile tüm fonksiyonlarda enerji kesilip geldiğinde kaldığı zamandan devam eder.
Continues from remained time as electricity cuts off during operating process with reserve feature.

BAĞLANTI UÇLARI VE İÇ ŞEMA / *TERMINAL MARKINGS AND INTERNAL LAYOUT*



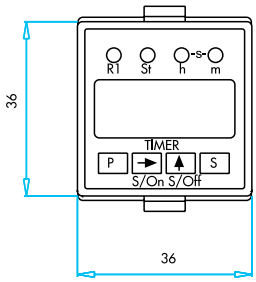
2-7 : **Besleme** / *Supply*
1-6 : **İnhibit girişi** / *Inhibit input*
1-8 : **Start girişi** / *Start input*
3-4-5 : **Zamana bağlı çıkış kontakları** / *Timed relay output*

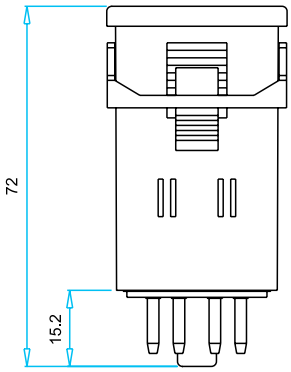
Not: Dijital zaman röleleri RS1P08 tipi röle soketiyle kullanıma uygundur.
Note: Digital time relays can be used with RS1P08 type sockets.

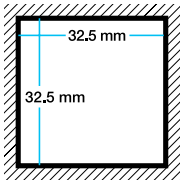
MONTAJ ŞEKLİ VE BOYUTLAR (mm) / *MOUNTING AND DIMENSIONS (mm)*

Standart boyut 36x36x72 mm.
Özel adaptörü ile 48x48x72 mm.
Standard size 36x36x72 mm.
With special adapter 48x48x72 mm.

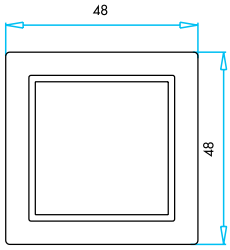
Özel klipsi ile panel montajı veya 8 pinli soket ile taban montajı.
Panel mounted by special elip or base mounting with 8 pin socket.







Montaj yuvası
Mounting hole

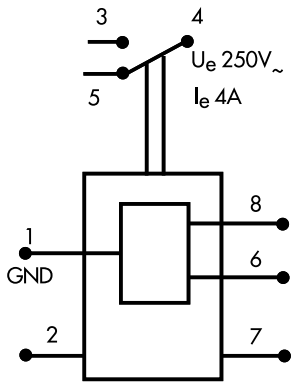


Adaptör
Adapter

Ürün Kodu	Çalışma Gerilimi	Kontak Sayısı	Sayma Girişi	Reset Girişi
Code	*Operating Voltage*	*Number of Contacts*	*Counter Entry*	*Reset Entry*
RZ1D1C-5	220/230 V AC	1DK / *1CO*	12-30 V DC Pals.	12-30 V DC Pals.

RZ1D1C-5
Dijital Sayıcı
Digital Counter

BAĞLANTI UÇLARI VE İÇ ŞEMA / *TERMINAL MARKINGS AND INTERNAL LAYOUT*



1-8 Sayma Girişi / *Counter Entry*
(12-30V DC lik Puls) / *(12-30 V DC Pulse)*

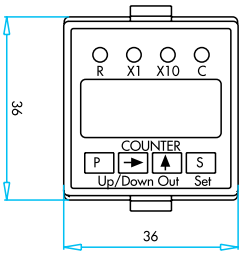
1-6 Reset Girişi *(Reset Entry)*
(12-30V DC lik Puls min 10 ms)
(12-30 V DC Pulse min 10 ms)
2-7 220V AC

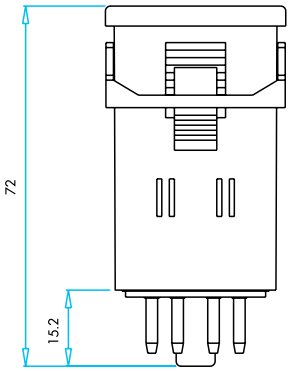
Not : Dijital sayıcı RS1P08 tipi röle soketiyle kullanıma uygundur.
Note : Digital counter can be used with RS1P08 type sockets.

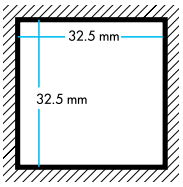
MONTAJ ŞEKLİ VE BOYUTLAR (mm) / *MOUNTING AND DIMENSIONS (mm)*

Standart boyut 36x36x80 mm.
Özel adaptörü ile 48x48x80 mm.
Standard size 36x36x80 mm.
With special adapter 48x48x80 mm.

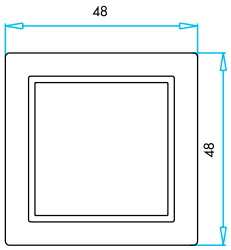
Özel klipsi ile panel montajı veya 8 pinli soket ile taban montajı.
Panel mounted by special clip or base mounting with 8 pin socket.







Montaj yuvası
Mounting hole



Adaptör
Adapter

RD *Serisi Dijital Panelmetreler*

- Minimum ve maksimum değerleri set edebilme imkanı
- Çıkış kontağını 0-99,9 sn arasında geciktirebilme özelliği
- Şifre fonksiyonu sayesinde set edilen değerlerin korunması
- Set değerlerini çalışma esnasında ekranda görme imkanı
- Minimum ve maksimum değerleri set edebilme imkanı
- Çıkış kontağını 0-99,9 sn arasında geciktirebilme özelliği
- Şifre fonksiyonu sayesinde set edilen değerlerin korunması
- Set değerlerini çalışma esnasında ekranda görme imkanı

Teknik Bilgiler

Mekanik Ömür	: 10.000.000 açma-kapama min.
Elektriksel Ömür	: 100.000 açma-kapama min.
Çalışma Sıcaklığı	: -5/+40 °C
Koruma Sınıfı	: IP30
Çalışma Gerilimi	: 220/230 V AC
Nominal Kontak Akımı	: 3 A
Maksimum Gerilim	: 250 V AC
Maksimum Kontak Gücü	: 750 VA
Çalışma Frekansı	: 50-60 Hz
Çalışma Gücü	: maks. 2 W
Röle Açma Gecikmesi dt	: 0-99.9 sn.
Akım Trafosu Çevirme Oranı	: .../5 A
Standart Kontak Malzemesi	: AgNi
Standart	

RD *Series Digital Panelmeters*

- *Feature to set minimum and maximum values*
- *Feature to delay output contact between 99,9 seconds*
- *Protection of set values with assistance of password function*
- *Follow up the set values on screen*
- *Panel assembly with special flexible connection clip or 35 mm rail assembly with 8 pin socket*
- *Pin connection reducing machine stop time to a minimum by failures*
- *Small volume with spare function from panel dimensions*
- *Status follow up possibility with powerful and aesthetic LED's*
- *3 digit display*

Technical Information

Mechanical Life	*: 10.000.000 operations min.*
Electrical Life	*: 100.000 operations min.*
Operating Temperature	*: -5/+40 °C*
Protection Degree	*: IP30*
Rated Operating Voltage Ue	*: 220/230 V AC*
Rated Operating Current Ie	*: 3 A*
Max. Voltage	*: 250 V AC*
Max. Contact Power	*: 750 VA*
Operating Frequency	*: 50-60 Hz*
Operating Power	*: max. 2 W*
Relay Switching Delay dt	*: 0-99.9 sec*
Current Transformer Reversion Ratio	*: .../5 A*
Standard Contact Material	*: AgNi*
Standard	

RDH1A

Dijital Frekansmetre / Digital Frequencymeter

Ürün Kodu	Çalışma Gerilimi	Kontak Sayısı	Ölçme Girişi
Code	*Operating Voltage*	*Number of Contacts*	*Measuring Input*
RDH1A	220/230 V AC	1DK / *1CO*	100...250 V AC/30-70 Hz

RDV1A

Dijital Voltmetre / Digital Voltmeter

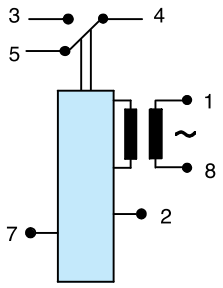
Ürün Kodu	Çalışma Gerilimi	Kontak Sayısı	Ölçme Girişi
Code	*Operating Voltage*	*Number of Contacts*	*Measuring Input*
RDV1A	220/230 V AC	1DK / *1CO*	0...600 V AC

RDA1A

Dijital Ampermetre / Digital Ammeter

Ürün Kodu	Çalışma Gerilimi	Kontak Sayısı	Ölçme Girişi
Code	*Operating Voltage*	*Number of Contacts*	*Measuring Input*
RDA1A	220/230 V AC	1DK / *1CO*	0...5 A

BAĞLANTI UÇLARI VE İÇ ŞEMA / *TERMINAL MARKINGS AND INTERNAL LAYOUT*



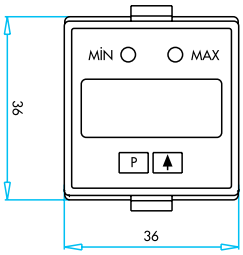
2-7: Besleme (220 V AC) / *Supply (220 V AC)*
3-4: Çıkış kontakları / *Relay output*
1-8: Ölçme girişi / *Measuring input*

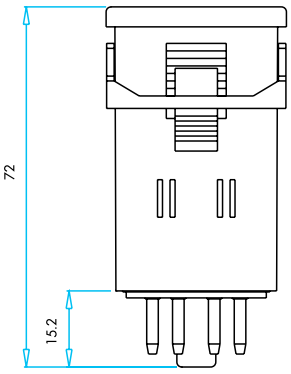
Not : Dijital panelmetreler RS1P08 tipi röle soketiyle kullanıma uygundur.
Note : Digital panelmeters can be used with RS1P08 type sockets.

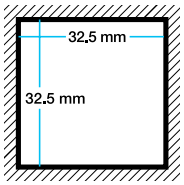
MONTAJ ŞEKLİ VE BOYUTLAR (mm) / *MOUNTING AND DIMENSIONS (mm)*

Standart boyut 36x36x72 mm.
Özel adaptörü ile 48x48x72 mm.
Standard size 36x36x72 mm.
With special adapter 48x48x72 mm.

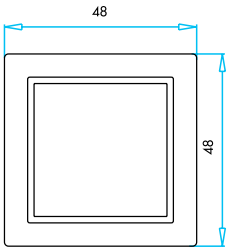
Özel klipsi ile panel montajı veya 8 pinli soket ile taban montajı.
Panel mounted by special elip or base mounting with 8 pin socket.







Montaj yuvası
Mounting hole



Adaptör
Adapter

RAM Serisi Motor (Faz) Koruma Rölesi

- Faz eksikliğine karşı gecikmesiz olarak koruma
- Faz sırası koruması
- Fazlar arasındaki ±%18 gerilim dengesizliğine karşı koruma
- Güçlü ve estetik uyarı LED'i ile kontrol kolaylığı
- Pano boyutlarından tasarruf ettiren küçük hacim
- Klips ile panel montajı veya soket ile 35 mm'lik raya montaj
- Arıza anlarında makina durma zamanını minimuma indiren pinli bağlantı

Teknik Bilgiler

Mekanik Ömür	: 1.000.000 açma-kapama min.
Elektriksel Ömür	: 100.000 açma-kapama min.
Çalışma Sıcaklığı	: -5/+40 °C
Koruma Sınıfı	: IP30
Çalışma Gerilimi	: 3x380 V AC
Nominal Kontak Akımı	: 5 A
Maksimum Gerilim	: 250 V AC
Maksimum Kontak Gücü	: 1250 VA
Çalışma Frekansı	: 50-60 Hz
Çalışma Gücü	: maks. 2 W
Gerilim Değişimi	: (0.85-1.1)* Un
Standart Kontak Malzemesi	: AgNi
Ağırlık	: 60±3 gr.
Standart	

RAM *Series Motor (Phase) Protection Relay*

- *Protection without delay against lack of phase*
- *Protection line of phase*
- *Protection against ±%18 voltage imbalance between phases*
- *Status follow up possibility with powerful and aesthetic LED's*
- *Small volume with spare function from panel dimensions*
- *Panel assembly with special flexible connection clip or 35 mm rail assembly with 8 pin socket*
- *Pin connection reducing machine stop time to minimum by failures*

Technical Information

Mechanical Life	*: 1.000.000 operations min.*
Electrical Life	*: 100.000 operations min.*
Operating Temperature	*: -5/+40 °C*
Protection Degree	*: IP30*
Operating Voltage	*: 3x380 V AC*
Nominal Contact Current	*: 5 A*
Maximum Voltage	*: 250 V AC*
Maximum Contact Power	*: 1250 VA*
Operating Frequency	*: 50-60 Hz*
Operating Power	*: max. 2 W*
Voltage Range	*: (0.85-1.1)* Un*
Standard Contact Material	*: AgNi*
Weight	*: 60±3 gr.*
Standard	

RAM1S

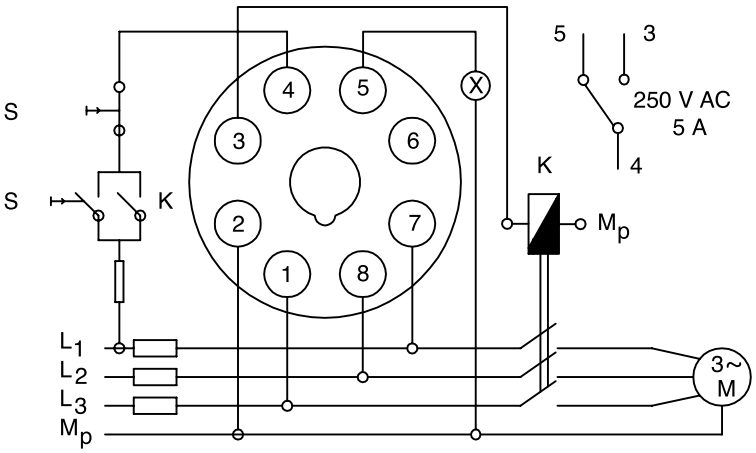
Motor (Faz) Koruma Rölesi / *Motor (Phase) Protection Relay*

Ürün Kodu	Çalışma Gerilimi	Kontak Sayısı
Code	*Operating Voltage*	*Number of Contacts*
RAM1S	3 x 380 V AC	1DK / *1CO*

BAĞLANTI UÇLARI VE İÇ ŞEMA / *TERMINAL MARKINGS AND INTERNAL LAYOUT*

1-2-8-7: Besleme / *Supply*
3-4-5: Çıkış kontakları / *Relay output*

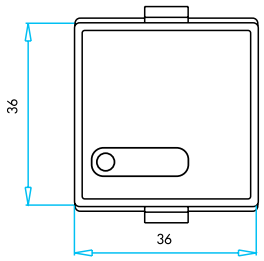
Not : Motor (faz) koruma rölesi RS1P08 tipi röle soketiyle kullanıma uygundur.
Note : Motor (phase) protection relay can be used with RS1P08 type sockets.

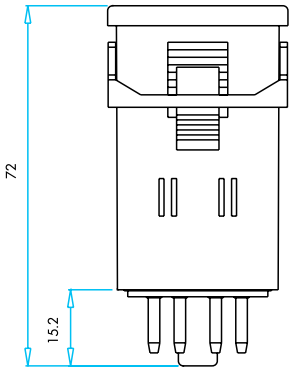


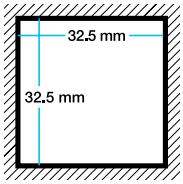
MONTAJ ŞEKLİ VE BOYUTLAR (mm) / *MOUNTING AND DIMENSIONS (mm)*

Standart boyut 36x36x72 mm.
Özel adaptörü ile 48x48x72 mm.
Standard size 36x36x72 mm.
With special adapter 48x48x72 mm.

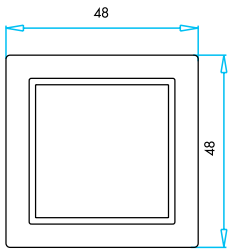
Özel klipsi ile panel montajı veya 8 pinli soket ile taban montajı.
Panel mounted by special elip or base mounting with 8 pin socket.







Montaj yuvası
Mounting hole



Adaptör
Adapter

ECKR *Elektrikli Cihazları Koruma Röleleri*

- Elektrik kesintileri sonrasında yaşanan voltaj değişikliklerine karşı koruma
- Yüksek enerji piklerine karşı koruma
- Düşük (<150V) ve Yüksek (>260V) gerilim seviyelerine karşı koruma
- Ayarlanabilir açılış gecikmesi (10-99 sn)
- 2 koruma modu
- Çıkış ve koruma modu takip ledleri
- 3 dijit display (ECKR1D)
- 35 mm'lik raya montaj edilebilir

Teknik Bilgiler

Mekanik Ömür	: 500.000
Elektronik Ömür	: 10.000
Çalışma Sıcaklığı	: -5/+40 °C
Koruma Sınıfı	: IP 20
Çalışma Gerilimi	: 150-260V AC
Nominal Kontak Akımı	: 40 A
Minimum, Maksimum Gerilim	: 150-260V AC
Maksimum Kontak Gücü	: 10.500 VA
Çalışma Frekansı	: 50 Hz
Çalışma Gücü	: 2 W
Maksimum Peak Akım	: 4500 A
Maksimum Peak Gerilim	: 6000 V
Ağırlık	: ECKR1D 147±5 gr. / ECKR1A 140±5 gr.
Cevaplama Süresi	: 8 - 20 µs
Clamping Gerilim	: 775 V
Clamping Akım	: Ip 50 Amp.
Koruma Kapasitesi	: 125 J (joules)
Standart	: TS EN 60255

ECKR *Electrical Device Protection Relay*

- *Protection against voltage changes after power cuts.*
- *Protection against high energy peaks.*
- *Protection against Low (<150V) and High (>260V) voltage levels.*
- *Adjustable operation delay (10-99 sec.)*
- *2 protection modes*
- *With LED display for output and protection mode*
- *3 digit display (ECKR1D)*
- *Mountable to 35 mm rail*

Technical Information

Mechanical Life	*: 500.000*
Electrical Life	*: 10.000*
Operating Temperature	*: -5/+40 °C*
Protection Degree	*: IP 20*
Operating Voltage	*: 150-260V AC*
Nominal Contact Current	*: 40 A*
Minimum, Maximum Voltage	*: 150-260V AC*
Maximum Contact Power	*: 10.500 VA*
Operating Frequency	*: 50 Hz*
Operating Power	*: 2W*
Maximum Peak Current	*: 4500 A*
Maximum Peak Voltage	*: 6000 V*
Weight	*: ECKR1D 147±5 gr. / ECKR1A 140±5 gr.*
Response Time	*: 8 - 20 µs*
Clamping Voltage	*: 775 V*
Clamping Current	*: Ip 50 Amp.*
Protection Capacity	*: 125 J (joules)*
Standard	*: TS EN 60255*

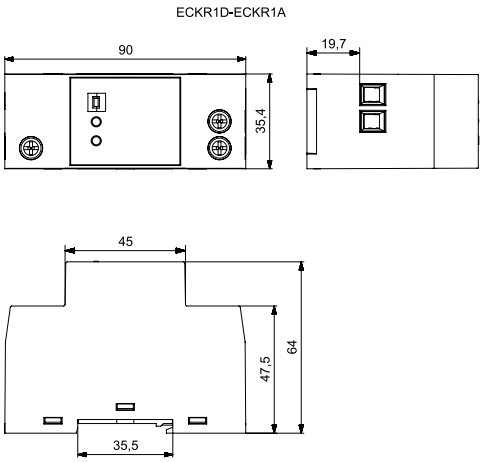
ECKR Elektrikli Cihazları Koruma Röleleri
Electrical Device Protection Relay

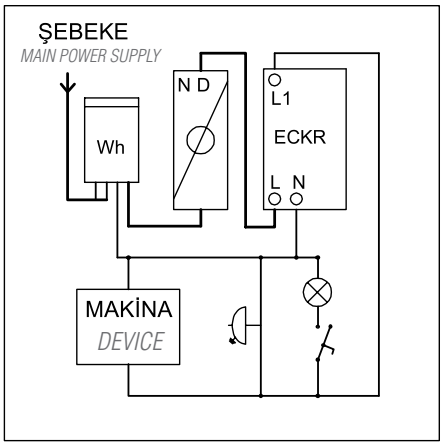
Ürün Kodu *Code*	Özellik *Features*	Nominal Gerilim *Nominal Voltage*	Kutu Adedi *Box/Pcs*
ECKR1A	Analog *Analogue*	220V AC	1
ECKR1D	Dijital (Gerilim göstergeli) *Digital (With voltage display)*	220V AC	1

ECKR1D

ECKR1A

Uygulama Şeması
Application Scheme





Pedallar

Foot Switches

C

PDK, PPK, PDN
Serisi Pedallar

Genel Özellikler ve Teknik Bilgiler	**3**
PDK, PPK, PDN Serileri Pedalların Seçim Tablosu	**4**
PDK, PPK, PDN Serileri Pedallar & Aksesuarları	**5**
Boyutlar	**6**

PDK, PPK, PDN
Series Foot Switches

General Specifications and Technical Information	*3*
PDK, PDK, PDN Series Foot Switches Selection Table	*4*
PDK, PDK, PDN Series Foot Switches and Accesories	*5*
Dimensions	*6*

PD *Serisi Pedallar*

Genel Özellikler ve Teknik Bilgiler	**7**
PD Serisi Pedalların Seçim Tablosu	**8**
PD Serisi Pedallar	**9**
Boyutlar	**9**

PD *Series Foot Switches*

General Specifications and Technical Information	*7*
PD Series Foot Switches Selection Table	*8*
PD Series Foot Switches	*9*
Dimensions	*9*

PDK, PPK, PDN

Serisi Pedallar

- Plastik veya metal seçenek
- Tek veya iki kademe
- Sarı, gri ve turuncu renk seçeneği
- Ayak kilitleme sistemi

Teknik Bilgiler

Mekanik Ömür	:	1.000.000 Açma-kapama (30 dev/dk)
Elektriksel Ömür	:	100.000 Açma-kapama (30 dev/dk)
Çalışma Sıcaklığı	:	-5 / +60 °C
Koruma Sınıfı	:	IP65
Çalışma Gerilimi (Ue)	:	250V
Çalışma Akımı (Ie)	:	3 A
Yalıtım Gerilimi (Ui)	:	300V
Darbe Dayanım Gerilimi (Uimp)	:	2,5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 - 60 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V (1 dk için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1,5 mm²
Standart	:	TS EN 60947-5-1

Kontak Bloklar

PDK, PPK, PDN

Series Foot Switches

- *Plastic and metal options*
- *Single or double steps*
- *Yellow, grey and orange colour options*
- *With latching system*

Technical Information

Mechanical Life	:	*1.000.000 operations min. (30 cyc/min)*
Electrical Life	:	*100.000 operations min. (30 cyc/min)*
Operating Temperature	:	*-5 / +60 °C*
Protection Degree	:	*IP65*
Operating Voltage (Ue)	:	*250V*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*300V*
Impact Resistance (Uimp)	:	*2,5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 - 60 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1,5 mm²*
Standard	:	*TS EN 60947-5-1*

Contact Blocks

PDK Serisi Pedalların Seçim Tablosu

PDK Series Foot Switches Selection Table

Seri	Aksesuar Durumu	Kapak Sayısı	Pedal Sayısı	1. Pedalın Kontak Blok Sayısı	2. Pedalın Kontak Blok Sayısı	Kademe	Kalıcılık	Renk
PDK	S	1	1	B	X	1	0	G
Series	*Accessory Status*	*Number of Cover*	*Number of Foot Switches*	*Number of Contact Block of 1. Foot Switches*	*Number of Contact Block of 2. Foot Switches*	*Speed*	*Fixation*	*Colour*

Seri

- **PDK** — **PDK Serisi Metal Koruma Kapaklı Pedal** *PDK Series Foot Switches With Metal Cover*
- **PPK** — **PPK Serisi Plastik Koruma Kapaklı Pedal** *PPK Series Foot Switches With Plastic Cover*
- **PDN** — **PDN Serisi Koruma Kapaksız Pedal** *PDN Series Foot Switches w/o Cover*

Aksesuar Durumu

- **S** — **Standart (Aksesuar Takılamaz)** *Standard (No Accessory)*
- **A** — **Aksesuar Takılabilir** *Accessory Applicable*

Kapak Sayısı

- **1** — **Bir Kapaklı** *Single Cover*
- **2** — **İki Kapaklı** *Double Covers*

Pedal Sayısı

- **1** — **Bir Pedallı** *Single Foot Switch*
- **2** — **İki Pedallı** *Double Foot Switches*

1. Pedalın Kontak Blok Sayısı

- **0** — **Kontak Bloksuz** *W/O Contact Block*
- **B** — **Bir Adet Kontak Blok** *Single Contact Block*
- **G** — **İki Adet Kontak Blok** *Double Contact Blocks*
- **U** — **Üç Adet Kontak Blok** *Three Contact Blocks (1+2)*
- **V** — **Üç Adet Kontak Blok** *Three Contact Blocks (2+1)*
- **P** — **Potansiyemetre** *Potentiometre*

2. Pedalın Kontak Blok Sayısı

- **X** — **Bir Pedal varsa** *Single Pedal*
- **B** — **1 Adet Kontak Blok** *Single Contact Block*
- **G** — **İki Adet Kontak Blok** *Double Contact Blocks*
- **U** — **Üç Adet Kontak Blok** *Three Contact Blocks (1+2)*
- **V** — **Üç Adet Kontak Blok** *Three Contact Blocks (2+1)*

Kademe

- **1** — **Bir Kademeli** *Single Speed*
- **2** — **İki Kademeli** *Double Speed*

Kalıcılık

- **0** — **Yok** *Without*
- **1** — **Kalıcı** *Stay Put*
- **2** — **Resetli** *With Reset*

Renk

- **(boş)** — **Sarı** *Yellow*
- **G** — **Gri** *Grey*
- **T** — **Turuncu** *Orange*
- **O** — **Özel** *Special*

Örnek: **PDKS11BX10 ⟶ PDK serisi tekli, korumalı bir kademeli pedal seçilmiştir.**

Example: *PDKS11BX10 ⟶ PDK series single, foot switch with protection cover has been selected*

PDK, PPK, PDN Serileri, Pedallar / *PDK, PPK, PDN Series Foot Stwitches*

PDNS11BX10

PDKS11BX10

PPKS11BX10

PDKS11BX30

PDKS11BX10T

PDABE

PDKA11GX10

PDABE

PDKA22BB10

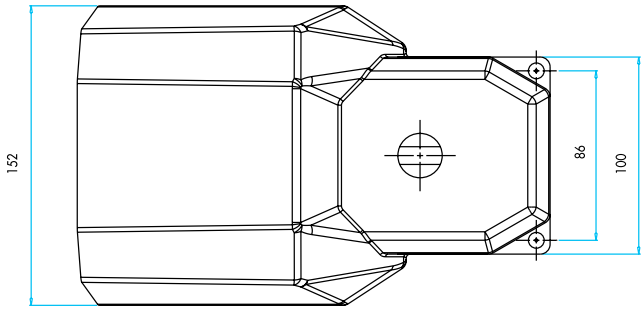
Ürün Kodu *Code*	Kontak Tipi *Contact Type*	Malzeme *Material*	Kademe / *Speed* Bir Kademeli *Single Speed*	İki Kademeli *Double Speed*	Aksesuarları *Accessories*
PDNS11BX10	1NA+1NK *1NO+1NC*	Plastik-Plastik *Plastic-Plastic*	√	-	Yok *Without*
PDNS11GX10	2*(1NA+1NK) *2*(1NO+1NC)*	Plastik-Plastik *Plastic-Plastic*	√	-	Yok *Without*
PDKS11BX10	1NA+1NK *1NO+1NC*	Alüminyum-Plastik *Aluminium-Plastic*	√	-	Metal Koruma Kapaklı *Metal Protection Cover*
PDKS11GX10	2*(1NA+1NK) *2*(1NO+1NC)*	Alüminyum-Plastik *Aluminium-Plastic*	√	-	Metal Koruma Kapaklı *Metal Protection Cover*
PDKS11GX20	2*(1NA+1NK) *2*(1NO+1NC)*	Alüminyum-Plastik *Aluminium-Plastic*	-	√	Metal Koruma Kapaklı *Metal Protection Cover*
PDKS11UX20	1*(1NK+1NA) + 2*(1NA+1NK) *1*(1NC+1NO) +2*(1NO+1NC)*	Alüminyum-Plastik *Aluminium-Plastic*	-	√	Metal Koruma Kapaklı *Metal Protection Cover*
PPKS11BX10*	1NA+1NK *1NO+1NC*	Plastik-Plastik *Plastic-Plastic*	√	-	Plastik Koruma Kapaklı *Plastic Protection Cover*
PPKS11BX11*	1NA+1NK *1NO+1NC*	Plastik-Plastik *Plastic-Plastic*	√	-	Plastik Koruma Kapaklı *Plastic Protection Cover*
PDKA11BX10	1NA+1NK *1NO+1NC*	Alüminyum-Plastik *Aluminium-Plastic*	√	-	Takılabilir *Suitable*
PDKA11GX10	2*(1NA+1NK) *2*(1NO+1NC)*	Alüminyum-Plastik *Aluminium-Plastic*	√	-	Takılabilir *Suitable*
PDKA11GX20	2*(1NA+1NK) *2*(1NO+1NC)*	Alüminyum-Plastik *Aluminium-Plastic*	-	√	Takılabilir *Suitable*
PDKA22BB10	(1NA+1NK)+(1NA+1NK) *(1NO+1NC)+(1NO+1NC)*	Alüminyum-Plastik *Aluminium-Plastic*	√	-	Takılabilir *Suitable*
PDKA22BG10	(1NA+1NK)+2*(1NA+1NK) *(1NO+1NC)+2*(1NO+1NC)*	Alüminyum-Plastik *Aluminium-Plastic*	√	-	Takılabilir *Suitable*
PDKA22GG20	2*(1NA+1NK)+2*(1NA+1NK) *2*(1NO+1NC)+2*(1NO+1NC)*	Alüminyum-Plastik *Aluminium-Plastic*	-	√	Takılabilir *Suitable*

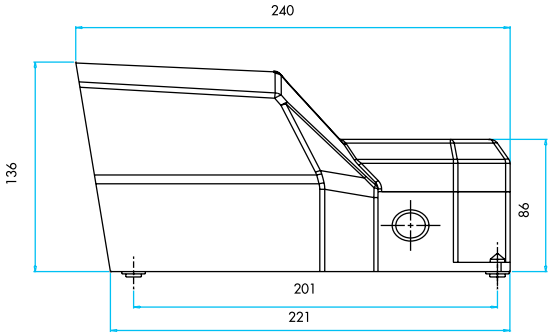
*** PDKS11BX11* Tip Ayaklı Pedal Kalıcılı Tipdir.**
** PDKS11BX11* Type Foot Switch is Latched Type*
*** PDKS Serisinde Kodun Sonuna Gelen T Harfi Turuncu Rengi İfade Eder.**
** Only for PDKS Series please add T letter to end of the code for Orange Colour.*

PDK Serisi Pedalların Aksesuarları
Accessories of PDK Series Foot Switches

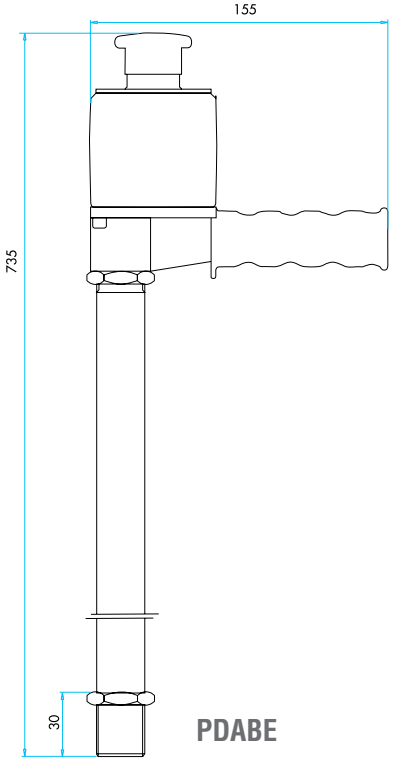
Ürün Kodu *Code*	Açıklama *Description*
PDABT	PDK Taşıma Kolu / *PDK Metal Carry Bar*
PDABE	PDK Emniyetli Taşıma Kolu / *PDK Metal Carry Bar With Emergency*

BOYUTLAR (mm) / *DIMENSIONS (mm)*

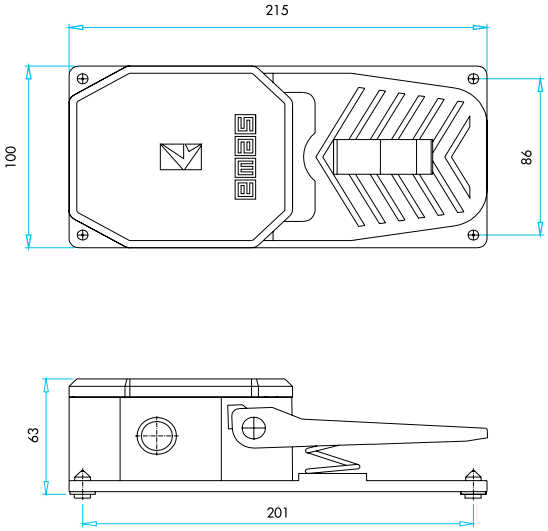




PDKS - PPKS



PDABE



PDNS

PD *Serisi Pedallar*

- Plastik veya metal seçenek
- Tek kademe

Teknik Bilgiler

Mekanik Ömür	:	1.000.000 Açma-kapama (30 dev/dk)
Elektriksel Ömür	:	100.000 Açma-kapama (30 dev/dk)
Çalışma Sıcaklığı	:	-5 / +60°C
Koruma Sınıfı	:	IP20
Çalışma Gerilimi (Ue)	:	250V
Çalışma Akımı (Ie)	:	4 A
Yalıtım Gerilimi (Ui)	:	660V
Darbe Dayanım Gerilimi (Uimp)	:	2,5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 - 60 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V (1 dk için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1,5 mm²
Standart	:	TS EN 60947-5-1

Siviç : TS EN 60947-5-1

Kontak Blok : TS EN 60947-5-1 (PDA/PD)

PD *Series Foot Switches*

- *Plastic and metal versions*
- *Single step*

Technical Information

Mechanical Life	:	*1.000.000 operations min. (30 cyc/min)*
Electrical Life	:	*100.000 operations min. (30 cyc/min)*
Operating Temperature	:	*-5 / +60°C*
Protection Degree	:	*IP20*
Operating Voltage (Ue)	:	*250V*
Operating Current (Ie)	:	*4 A*
Insulation Voltage (Ui)	:	*660V*
Impact Resistance (Uimp)	:	*2,5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 - 60 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1,5 mm²*
Standard	:	*TS EN 60947-5-1*

Switch : TS EN 60947-5-1

Contact Block : TS EN 60947-5-1 (PDA/PD)

PD Serisi Pedalların Seçim Tablosu

PD Series Foot Switches Selection Table

Seri	Tip	Kontak Tipi	Kablo Uzunluğu
PD	**M**	**1**	**1**
Series	*Type*	*Contact Type*	*Cable Length*

PD — **PD Serisi Pedal** *PD Series Foot Switches*

- **P** — **Plastik Seri** *Plastic, Mini*
- **A** — **Alüminyum** *Aluminium*
- **M** — **Mini Plastic** *Plastic, Mini*

- **1** — **NA Start** *No Start*
- **2** — **2* NA Start** *2* NO Start*

Kablo Yok *w/o Cable*

- **1** — **1 Metre** *1 Meter*
- **2** — **2 Metre** *2 Meters*

Pedallar
Foot Switches

PDA2

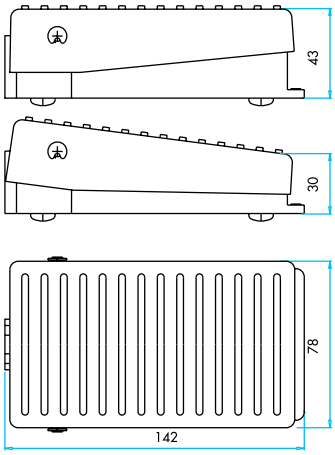
PDM11

PDP1

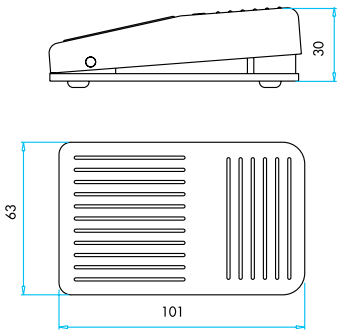
Ürün Kodu *Code*	Kontak Tipi *Contact Type*	Özellik *Features*	Malzeme *Material*
PDA1	1NA *1NO*		Alüminyum *Aluminium*
PDA2	2NA *2NO*		Alüminyum *Aluminium*
PDM1	1DK *1CO*		Plastik *Plastic*
PDM11	1DK *1CO*	1m Kablo *1m Cable*	Plastik *Plastic*
PDP1	1NA *1NO*		Plastik *Plastic*
PDP2	2NA *2NO*		Plastik *Plastic*

DK / CO = **Değişebilen Kontak** / *Changeover Contact*
NA / NO = **Normalde Açık** / *Normally Open*
NK / NC = **Normalde Kapalı** / *Normally Closed*

BOYUTLAR (mm) / *DIMENSIONS (mm)*



PDP1/PDP2
PDA1/PDA2



PDM1

Endüstriyel Fiş ve Prizler

Industrial Plugs & Sockets

H

EB Serisi Endüstriyel Fişler ve Prizler

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METAL SERİ	5
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6 Kontaklı, 16 A (PG 16)	5
10 Kontaklı, 16 A (PG 16)	6
16 Kontaklı, 16 A (PG 21)	6
24 Kontaklı, 16 A (PG 21)	7
32 Kontaklı, 16 A (PG 21)	7
48 Kontaklı, 16 A (PG 29)	8
6 Kontaklı, 35 A (PG 21)	8
12 Kontaklı, 35 A (PG 21)	8
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6 Poles, 16 A (PG 16)	*5*
10 Poles, 16 A (PG 16)	*6*
16 Poles, 16 A (PG 21)	*6*
24 Poles, 16 A (PG 21)	*7*
32 Poles, 16 A (PG 21)	*7*
48 Poles, 16 A (PG 29)	*8*
6 Poles, 35 A (PG 21)	*8*
12 Poles, 35 A (PG 21)	*8*
6 Poles (4 x 80A + 2 x 16A) (PG21)	*9*
12 Poles, 2 x (4 x 80A + 2 x 16A) (PG 21)(PG21)	*9*
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EPR, EKS Series Plugs & Sockets

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EB Serisi Endüstriyel Tip Fişler ve Prizler

- Geniş ürün yelpazesi
- Kapalı konumda IP65 sızdırmazlık
- Düşmeyen vida ile kolay montaj
- Modüler yapı gövde ve çekirdek
- Makaralı ve çift mandallı kilitleme
- Elektrostatik toz boya

Teknik Bilgiler

		10A	16A	35A	80A
		4P+E	06P-10P-16P-24P+PE 32P (2x16P)+PE 48P (2x24P)+PE	6P-12P+PE	6P (4X80A+2X16A)+PE 12P 2x(4x80A + 2x16A)+PE
Mekanik Ömür	:	≥500	≥500	≥500	≥500
Elektriksel Ömür	:	≥500	≥500	≥500	≥500
Çalışma Sıcaklığı	:	-40 / +125°	-40 / +125°	-40 / +125°	-40 / +125°
Koruma Sınıfı	:	IP50	IP50	IP50	IP50
Çalışma Gerilimi (Ue)	:	250V	400V	400V	400V
Çalışma Akımı (Ie)	:	10A	16A	35A	80A
Yalıtım Gerilimi (Ui)	:	690V	690V	690V	690V
Darbe Dayanım Gerilimi (Uimp)	:	2,5kV	6kV	6kV	6kV
Kısa Devre Kesme Kap. (Icn)	:	1kA	1kA	1kA	1kA
Çalışma Frekansı (f)	:	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
İzolasyon Direnci	:	10 MΩ min. (500V DC)	10 MΩ min. (500V DC)	10 MΩ min. (500V DC)	10 MΩ min. (500V DC)
Kullanım Sınıfı	:	AC15	AC15	AC15	AC15
Dielektrik Mukavemeti	:	2000V AC	3000V AC	3000V AC	3000V AC
Kirlenme Derecesi	:	1	2	3	3
Bağlantı Kablo Kesiti	:	1.5 mm²	2.5 mm²	4 mm²	10mm²
Standart	:	TS EN 61984-1 UL 508			

EB *Series Industrial Type Plugs & Sockets*

- *Wide product variety*
- *IP65 in closed position*
- *Easy assembly with retained screws*
- *Modular type body and inserts*
- *Body with roller and double handle*
- *Powercoated finish*

Technical Information

		10A	*16A*	*35A*	*80A*
		4P+E	*06P-10P-16P-24P+PE* *32P (2x16P)+PE* *48P (2x24P)+PE*	*6P-12P+PE*	*6P (4X80A+2X16A)+PE* *12P 2x* *(4x80A + 2x16A)+PE*
Mechanical Life	:	*≥500*	*≥500*	*≥500*	*≥500*
Electrical Life	:	*≥500*	*≥500*	*≥500*	*≥500*
Operating Temperature	:	*-40 / +125°*	*-40 / +125°*	*-40 / +125°*	*-40 / +125°*
Protection Degree	:	*IP50*	*IP50*	*IP50*	*IP50*
Operating Voltage (Ue)	:	*250V*	*400V*	*400V*	*400V*
Operating Current (Ie)	:	*10A*	*16A*	*35A*	*80A*
Insulation Voltage (Ui)	:	*690V*	*690V*	*690V*	*690V*
Impact Resistance (Uimp)	:	*2,5kV*	*6kV*	*6kV*	*6kV*
Short Circuit Breaking Capacity (Icn)	:	*1kA*	*1kA*	*1kA*	*1kA*
Operating Frequency (f)	:	*50-60 Hz*	*50-60 Hz*	*50-60 Hz*	*50-60 Hz*
Insulation Resistance	:	*10 MΩ min. (500V DC)*	*10 MΩ min. (500V DC)*	*10 MΩ min. (500V DC)*	*10 MΩ min. (500V DC)*
Utilization Category	:	*AC15*	*AC15*	*AC15*	*AC15*
Dielectric Strength	:	*2000V AC*	*3000V AC*	*3000V AC*	*3000V AC*
Pollution Degree	:	*1*	*2*	*3*	*3*
Cable Section	:	*1.5 mm²*	*2.5 mm²*	*4 mm²*	*10mm²*
Standard	:	*TS EN 61984-1 UL 508*			

Endüstriyel Fişler ve Prizlerin Seçim Tablosu

Industrial Plug & Sockets Selection Table

Seri	Gövde Malzemesi	Kontak Sayısı	Tipi	Girişi	Kilitleme	Ek Özellik
EB	M	10	FM	4	4	H
Series	*Body Material*	*Number Of Contacts*	*Type*	*Entry*	*Locking*	*Features*

EB — **EB Serisi Endüstriyel Tip Fişler ve Prizler**
EB Series Industrial Type Plugs & Sockets

Gövde Malzemesi
Body Material

M	Metal	*Metal*
P	Plastik	*Plastic*
0	Çekirdek	*Insert*

Kontak Sayısı
Number Of Contacts

5	5 Kontaklı (10 Amper)	*5 Poles (10 Ampere)*
6	6 Kontaklı (16 Amper)	*6 Poles (16 Ampere)*
10	10 Kontaklı (16 Amper)	*10 Poles (16 Ampere)*
16	16 Kontaklı (16 Amper)	*16 Poles (16 Ampere)*
24	24 Kontaklı (16 Amper)	*24 Poles (16 Ampere)*
32	32 Kontaklı (16 Amper)	*32 Poles (16 Ampere)*
48	48 Kontaklı (16 Amper)	*48 Poles (16 Ampere)*
606	6 Kontaklı (35 Amper)	*6 Poles (35 Ampere)*
612	12 Kontaklı (35 Amper)	*12 Poles (35 Ampere)*
806	4x80 Amper, 2x16 Amper	*4x80 Ampere, 2x16 Ampere*
812	8x80 Amper, 4x16 Amper	*8x80 Ampere, 4x16 Ampere*

Tipi
Type

FU	Fiş Uzatma	*Hood With Male Insert*
FM	Fiş Makina	*Housing With Male Insert*
FD	Fiş Duvar	*Housing With Male Insert (Surface Mounting)*
PU	Priz Uzatma	*Hood With Female Insert*
PM	Priz Makina	*Housing With Female Insert*
PD	Priz Duvar	*Housing With Female Insert (Surface Mounting)*
PE	Priz Eğik	*Female Insert (Sloping)*
CF	Çekirdek Fiş	*Male Insert*
CP	Çekirdek Priz	*Female Insert*
GU	Gövde Boş Uzatma	*Hood Only*
GM	Gövde Boş Makina	*Housing*
GD	Gövde Boş Duvar	*Housing (Surface Mounting)*
GE	Gövde Boş Eğik	*Housing (Sloping)*
XU	Fiş Yay Baskılı Uzatma	*Plug Spring Clamped Extension*
XM	Fiş Yay Baskılı Makine	*Plug Spring Clamped Machine*
XD	Fiş Yay Baskılı Duvar	*Plug Spring Clamped Surface*
ZU	Priz Yay Baskılı Uzatma	*Socket Spring Clamped Extension*
ZM	Priz Yay Baskılı Makine	*Socket Spring Clamped Machine*
ZD	Priz Yay Baskılı Duvar	*Socket Spring Clamped Surface*
ZE	Priz Yay Baskılı Eğik	*Socket Spring Clamped Sloping*
CF	Çekirdek Fiş	*Male Insert*
CP	Çekirdek Priz	*Female Insert*
CX	Çekirdek Fiş Yay Baskılı	*Male Insert Spring Clamped*
CZ	Çekirdek Priz Yay Baskılı	*Female Insert Spring Clamped*

Kilitleme
Locking

0	Yok	*Without*
1	Bir Mandallı	*One Handle*
2	İki Mandallı Makaralı	*Two Handle Roller*
4	Dört Mandallı, Makaralı	*Four Handle Roller*
6	Metal Açmalı (Tek Kol)	*Metal Opening (Single Arm)*
7	Metal Mandallı	*Metal Handle*
8	Metal Açmalı (Çift Kol)	*Metal Opening (Double Arm)*

Giriş
Entry

0	Yok	*No Entry*
1	Yandan Girişli	*Side Entry*
2	İki Yandan Girişli	*Double Side Entry*
3	Üstten Girişli	*Top Entry*
4	Alttan Girişli	*Bottom Entry*
5	Alttan ve Yandan Girişli	*Bottom & Side Entry*

Ek Özellik
Features

H	Siyah	*Black*
PG21	Giriş PG21	*PG21 Entry*
PG29	Giriş PG29	*PG29 Entry*

Örnek: EBM10FM44 → EB Serisi, Metal, 10 Kontaklı, alttan girişli, 4 mandal makaralı, kilitlemeli, makina fişi seçilmiştir.

EBM10FM44 → EB Series, Metal, 10 pin, bottom entry, 4 handle roller, male

PLASTİK SERİ / *MULTIPOLE PLASTIC CONNECTORS*

5 Kontaklı, 10 A (PG 11) / *5 Poles, 10 A (PG 11)*

EBP05FU30

EBP05PU30

EBP05PU36

EBP05PE41

EBA05TK

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB005CF00	Çekirdek Fiş / *Male Insert*		
EB005CP00	Çekirdek Priz / *Female Insert*		
EBP05GU30*	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	
EBP05GM41*	Makine Boş Gövde / *Hood for bulkhead mounting*	Alttan / *Bottom*	√
EBP05GE41*	Eğik Makine Boş Gövde / *Hood for bulkhead mounting*	Alttan / *Bottom*	√
EBP05FU30*	Uzatma Fişi / *Hood with male insert*	Üstten / *Top*	
EBP05PU30*	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	
EBP05PM41*	Makine Prizi / *Bulkhead mounting, female insert*	Alttan / *Bottom*	√
EBP05FE41*	Makine Eğik Fiş / *Sloped hood with male insert*	Alttan / *Bottom*	√
EBP05PE41*	Makine Eğik Priz / *Sloped hood with female insert*	Alttan / *Bottom*	√
EBP05PU31*	Uzatma Priz Mandallı / *Hood with female insert*	Üstten / *Top*	√
EBA05TK	Telli Kapak / *Cap*		

Ürün gri renklidir, ürün kodunun sonuna "H" eklendiğinde siyah renklidir. Metal mandallı modellerde son rakam "1" yerine "6" olmalıdır.
Product is Grey colour. Please add H to end of the code in order to change the colour to Black. For Metal Handle, replace 1 at the end with 6.

METAL SERİ / *MULTIPOLE METAL CONNECTORS*

5 Kontaklı, 10 A (PG 11) / *5 Poles, 10 A (PG 11)*

EBM05FU30

EBM05PU30

EBM05PU36

EBM05PE41

EBA05TK

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB005CF00	Çekirdek Fiş / *Male Insert*		
EB005CP00	Çekirdek Priz / *Female Insert*		
EBM05GU30	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	
EBM05GU36	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	√
EBM05GM46	Makine Boş Gövde / *Hood for bulkhead mounting*	Alttan / *Bottom*	√
EBM05GE46	Eğik Boş Gövde / *Sloped hood*	Alttan / *Bottom*	√
EBM05FU10	Uzatma Fişi / *Hood with male insert*	Üstten / *Top*	
EBM05FU30	Uzatma Fişi / *Hood with male insert*	Yandan / *Side*	
EBM05PU30	Uzatma Prızi / *Hood with female insert*	Üstten / *Top*	
EBM05PU36	Uzatma Prızi / *Hood with female insert*	Üstten / *Top*	√
EBM05PM46	Makine Prizi / *Bulkhead mounting, Housing with female insert*	Alttan / *Bottom*	√
EBM05FE46	Makine Eğik Fiş / *Sloped hood with male insert*	Alttan / *Bottom*	√
EBM05PE46	Makine Eğik Priz / *Sloped hood with female insert*	Alttan / *Bottom*	√
EBM05PU10	Uzatma Prizi / *Hood with female insert*	Yandan / *Side*	
EBM05PE56	Makine Eğik Priz / *Sloped hood with female insert*	Alttan + Yandan *Bottom+ Side*	√
EBA05TK	Telli Kapak / *Cap*		

Plastik mandallı modellerde son rakam "6" yerine "1" olmalıdır.
For Plastic handle models, replace "1" instead of "6".

6 Kontaklı, 16 A (PG 16) / *6 Poles, 16 A (PG 16)*

EBM06FU30

EBM06FM42

EBM06PU32

EBM06PU30

EBA06TK

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB006CF00	Çekirdek Fiş / *Male Insert*		
EB006CP00	Çekirdek Priz / *Female Insert*		
EBM06GU10	Uzatma Boş Gövde / *Hood*	Yandan / *Side*	
EBM06GU30	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	
EBM06GU32	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	√
EBM06GM42	Makine Boş Gövde / *Hood for bulkhead mounting*	Alttan / *Bottom*	√
EBM06FU10	Uzatma Fişi / *Hood with male insert*	Yandan / *Side*	
EBM06FU30	Uzatma Fişi / *Hood with male insert*	Üstten / *Top*	
EBM06PU10	Uzatma Prizi / *Hood with female insert*	Yandan / *Side*	
EBM06PU30	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	
EBM06PU32	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	√
EBM06FM42	Makine Fişi / *Bulkhead mounting, Housing with Male Insert*	Alttan / *Bottom*	√
EBM06PM42	Makine Prizi / *Bulkhead mounting, Housing with Female Insert*	Alttan / *Bottom*	√
EBM06FD12	Duvar Fişi / *Surface mounting, Housing with Male Insert*	Yandan / *Side*	√
EBM06PD12	Duvar Prizi / *Surface mounting, Housing with Female Insert*	Yandan / *Side*	√
EBA06TK	Telli Kapak / *Cap*		

*Metal Mandallı modellerde son rakam "2" yerine "6" olmalıdır.
** For Metal Handle, replace "2" at the end with "6"*

EBM10PU10

EBM10PU30

EBM10FD24

EBM10PM44

EBM10PM47

EBM10PD27

EBA10TK

10 Kontaklı, 16 A (PG 16) / 10 Poles, 16 A (PG 16)

Ürün Kodu *Code*	Tip *Type*	Opsiyon *Option*	Giriş *Entry*	Kilitleme *Handle*
EB010CF00	Çekirdek Fiş / *Male Insert*			
EB010CP00	Çekirdek Priz / *Female Insert*			
EBM10GU10	Uzatma Boş Gövde / *Hood*		Yandan / *Side*	
EBM10GU30	Uzatma Boş Gövde / *Hood*	**	Üstten / *Top*	
EBM10GU34*	Uzatma Boş Gövde / *Hood*		Üstten / *Top*	√
EBM10GM44*	Makine Boş Gövde / *Hood for bulkhead mounting*		Alttan / *Bottom*	√
EBM10GD14*	Duvar Boş Gövde / *Surface Mounting Head*		Yandan / *Side*	√
EBM10GD24*	Duvar Boş Gövde / *Surface Mounting Head*		İki Yandan / *Both Side*	√
EBM10FU10	Uzatma Fişi / *Hood with male insert*	**	Yandan / *Side*	
EBM10FU30	Uzatma Fişi / *Hood with male insert*		Üstten / *Top*	
EBM10PU10	Uzatma Prizi / *Hood with female insert*	**	Yandan / *Side*	
EBM10PU14	Uzatma Prizi / *Hood with female insert*		Yandan / *Side*	
EBM10PU30	Uzatma Prizi / *Hood with female insert*		Üstten / *Top*	
EBM10PU34*	Uzatma Prizi / *Hood with female insert*		Üstten / *Top*	√
EBM10FM44*	Makine Fişi / *Bulkhead Mounting, Housing with Male Insert*		Alttan / *Bottom*	√
EBM10PM44*	Makine Prizi / *Bulkhead Mounting, Housing with Female Insert*		Alttan / *Bottom*	√
EBM10FD14*	Duvar Fişi / *Surface mounting, Housing with Male Insert*		Yandan / *Side*	√
EBM10FD24*	Duvar Fişi / *Surface mounting, Housing with Male Insert*		İki Yandan / *Both Side*	√
EBM10PD14*	Duvar Prizi / *Surface mounting, Housing with Female Insert*		Yandan / *Side*	√
EBM10PD24*	Duvar Prizi / *Surface mounting, Housing with Female Insert*	**	İki Yandan / *Both Side*	√
EBM10PD27	Duvar Prizi / *Surface mounting, Housing with female insert*		İki Yandan / *Both Side*	√
EBA10TK	Telli Kapak / *Cap*			

*Metal Mandallı modellerde son rakam "4" yerine "7" olmalıdır. **İsteğe bağlı PG21 delik için, ürün kodu sonuna PG21 ibaresi eklenmelidir.
** For Metal Handle, replace "4" at the end with "7". Standard PG16, please add PG21 to the end of the code in order to order PG21 hole.*

EB016CP00

EB016CF00

EBM16FU10

EBM16FM44

EBM16PD14

EBM16FD24

EBA16TK

16 Kontaklı, 16 A (PG 21) / 16 Poles, 16 A (PG 21)

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB016CF00	Çekirdek Fiş / *Male Insert*		
EB016CP00	Çekirdek Priz / *Female Insert*		
EBM16GU10	Uzatma Boş Gövde / *Hood*	Yandan / *Side*	
EBM16GU30	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	
EBM16GU34*	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	√
EBM16GM44*	Makine Boş Gövde / *Hood for bulkhead mounting*	Alttan / *Bottom*	√
EBM16GD14*	Duvar Boş Gövde / *Surface mounting hood*	Yandan / *Side*	√
EBM16GD24*	Duvar Boş Gövde / *Surface mounting hood*	İki Yandan / *Both Side*	√
EBM16FU10	Uzatma Fişi / *Hood with male insert*	Yandan / *Side*	
EBM16FU30	Uzatma Fişi / *Hood with male insert*	Üstten / *Top*	
EBM16PU10	Uzatma Prizi / *Hood with female insert*	Yandan / *Side*	
EBM16PU30	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	
EBM16PU34*	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	√
EBM16FM44*	Makine Fişi / *Bulkhead Mounting, Housing with Male Insert*	Alttan / *Bottom*	√
EBM16PM44*	Makine Prizi / *Bulkhead Mounting, Housing with Female Insert*	Alttan / *Bottom*	√
EBM16FD14*	Duvar Fişi / *Surface mounting, Housing with Male Insert*	Yandan / *Side*	√
EBM16FD24*	Duvar Fişi / *Surface mounting, Housing with Male Insert*	İki Yandan / *Both Side*	√
EBM16PD14*	Duvar Prizi / *Surface mounting, Housing with Female Insert*	Yandan / *Side*	√
EBM16PD24*	Duvar Prizi / *Surface mounting, Housing with Female Insert*	İki Yandan / *Both Side*	√
EBM16PD27	Duvar Prizi / *Surface mounting, Housing with Female Insert*	Alttan / *Bottom*	√
EBM16TABAN	Taban / *Base*		
EBA16TK	Telli Kapak / *Cap*		

*Metal Mandallı modellerde son rakam "4" yerine "7" olmalıdır.
** For Metal Handle, replace "4" at the end with "7".*

EB024CP00

EB024CF00

EBM24FU10

EBM24PU10

EBM24FD24

EBM24PM44

EBA24TK

24 Kontaklı, 16 A (PG 21) / 24 Poles, 16 A (PG 21)

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB024CF00	Çekirdek Fiş / *Male Insert*		
EB024CP00	Çekirdek Priz / *Female Insert*		
EBM24GU10	Uzatma Boş Gövde / *Hood*	Yandan / *Side*	
EBM24GU30	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	
EBM24GU34*	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	√
EBM24GM44*	Makine Boş Gövde / *Hood for bulkhead mounting*	Alttan / *Bottom*	√
EBM24GD14*	Duvar Boş Gövde / *Surface mounting hood*	Yandan / *Side*	√
EBM24GD24*	Duvar Boş Gövde / *Surface mounting hood*	İki Yandan / *Both Side*	√
EBM24FU10	Uzatma Fişi / *Hood with male insert*	Yandan / *Side*	√
EBM24FU30	Uzatma Fişi / *Hood with male insert*	Üstten / *Top*	
EBM24PU10	Uzatma Prizi / *Hood with female insert*	Yandan / *Side*	
EBM24PU30	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	
EBM24PU34*	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	√
EBM24FM44*	Makine Fişi / *Bulkhead Mounting, Housing with Male* Insert	Alttan / *Bottom*	√
EBM24PM44*	Makine Prizi / *Bulkhead Mounting, Housing with Female* Insert	Alttan / *Bottom*	√
EBM24PM47	Makine Prizi / *Bulkhead mounting, Housing with female* insert	Alttan / *Bottom*	√
EBM24FD14*	Duvar Fişi / *Surface mounting, Housing with Male Insert*	Yandan / *Side*	√
EBM24FD24*	Duvar Fişi / *Surface mounting, Housing with Male Insert*	İki Yandan / *Both Side*	√
EBM24PD14*	Duvar Prizi / *Surface mounting, Housing with Female* Insert	Yandan / *Side*	√
EBM24PD24*	Duvar Prizi / *Surface mounting, Housing with Female* Insert	İki Yandan / *Both Side*	√
EBA24TK	Telli Kapak / *Cap*		

*Metal Mandallı modellerde son rakam "4" yerine "7" olmalıdır.
** For Metal Handle, replace "4" at the end with "7".*

EBM32FU10

EBM32PU10

EBM32PM44

EBM32FM44

EBA32TK

32 Kontaklı, 16 A (PG 21) / 32 Poles, 16 A (PG 21)

Ürün Kodu *Code*	Tip *Type*	Opsiyon *Option*	Giriş *Entry*	Kilitleme *Handle*
EB016CF00	Çekirdek Fiş (1-16) / *Male Insert (1-16)*			
EB016CP00	Çekirdek Priz (1-16) / *Female Insert (1-16)*			
EB032CF00	Çekirdek Fiş (17-32) / *Male Insert (17-32)*			
EB032CP00	Çekirdek Priz (17-32) / *Female Insert (17-32)*			
EBM32GU10	Uzatma Boş Gövde / *Hood*	**	Yandan / *Side*	
EBM32GU30	Uzatma Boş Gövde / *Hood*	**	Üstten / *Top*	
EBM32GM44*	Makine Boş Gövde / *Hood for bulkhead mounting*		Alttan / *Bottom*	√
EBM32FU10	Uzatma Fişi / *Hood with male insert*	**	Yandan / *Side*	
EBM32FU30	Uzatma Fişi / *Hood with male insert*	**	Üstten / *Top*	
EBM32PU10	Uzatma Prizi / *Hood with female insert*	**	Yandan / *Side*	
EBM32PU30	Uzatma Prizi / *Hood with female insert*	**	Üstten / *Top*	
EBM32FM44*	Makine Fişi / *Bulkhead Mounting, Housing with Male Insert*		Alttan / *Bottom*	√
EBM32PM44*	Makine Prizi / *Bulkhead Mounting, Housing with Female Insert*		Alttan / *Bottom*	√
EBM32PU14	Uzatma Prizi / *Hood with female insert*		Yandan / *Side*	√
EBM32PU34	Uzatma Prizi / *Hood with female insert*		Üstten / *Top*	
EBM32TABAN	Taban / *Base*			
EBA32TK	Telli Kapak / *Cap*			

*Metal Mandallı modellerde son rakam "4" yerine "8" olmalıdır. **İsteğe bağlı PG29 delik için, ürün kodu sonuna PG29 ibaresi eklenmelidir.
** For Metal Handle, replace "4" at the end with "8". Standard PG21, please add PG29 to the end of the code in order to order PG29 hole.*

48 Kontaklı, 16 A (PG 29) / *48 Poles, 16 A (PG 29)*

EBM48PU10

EBM48FU10

EBM48FU30

EBM48PM44

EBA48TK

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB024CF00	Çekirdek Fiş (1-24) / *Male Insert (1-24)*		
EB024CP00	Çekirdek Priz (1-24) / *Female Insert (1-24)*		
EB048CF00	Çekirdek Fiş (25-48) / *Male Insert (25-48)*		
EB048CP00	Çekirdek Priz (25-48) / *Female Insert (25-48)*		
EBM48GU10	Uzatma Boş Gövde / *Hood*	Yandan / *Side*	
EBM48GU30	Uzatma Boş Gövde / *Hood*	Üstten / *Top*	
EBM48GM44*	Makine Boş Gövde / *Hood for bulkhead mounting*	Alttan / *Bottom*	
EBM48FU10	Uzatma Fişi / *Hood with male insert*	Yandan / *Side*	
EBM48FU30	Uzatma Fişi / *Hood with male insert*	Üstten / *Top*	
EBM48PU10	Uzatma Prizi / *Hood with female insert*	Yandan / *Side*	
EBM48PU30	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	
EBM48FM44*	Makine Fişi / *Bulkhead Mounting, Housing with Male* Insert	Alttan / *Bottom*	√
EBM48PM44*	Makine Prizi / *Bulkhead Mounting, Housing with* Female Insert	Alttan / *Bottom*	√
EBM48PU14	Uzatma Prizi / *Hood with female insert*	Yandan / *Side*	√
EBM48PU34	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	√
EBM48TABAN	Taban / *Base*		
EBA48TK	Telli Kapak / *Cap*		

*Metal Mandallı modellerde son rakam "4" yerine "8" olmalıdır.
** For Metal Handle, replace "4" at the end with "8".*

6 Kontaklı, 35 A (PG 21) / *6 Poles, 35 A (PG 21)*

EB0606CP00

EB0606CF00

EBM606FU10

EBM606PD14

EBA16TK

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB0606CF00	Çekirdek Fiş / *Male Insert*		
EB0606CP00	Çekirdek Priz / *Female Insert*		
EBM606FU10	Uzatma Fişi / *Hood with male insert*	Yandan / *Side*	
EBM606FU30	Uzatma Fişi / H*ood with male insert*	Üstten / *Top*	
EBM606PU10	Uzatma Prizi / *Hood with female insert*	Yandan / *Side*	
EBM606PU30	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	
EBM606PU34*	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	√
EBM606FM44*	Makine Fişi / *Bulkhead Mounting, Housing with Male Inse*rt	Alttan / *Bottom*	√
EBM606PM44*	Makine Prizi / *Bulkhead Mounting, Housing with Female Insert*	Alttan / *Bottom*	√
EBM606FD14*	Duvar Fişi / *Surface mounting, Housing with Male Insert*	Yandan / *Side*	√
EBM606FD24*	Duvar Fişi / *Surface mounting, Housing with Male Insert*	İki Yandan / *Both Side*	√
EBM606PD14*	Duvar Prizi / *Surface mounting, Housing with Female Insert*	Yandan / *Side*	√
EBM606PD24*	Duvar Prizi / *Surface mounting, Housing with Female Insert*	İki Yandan / *Both Side*	√
EBA16TK	Telli Kapak / *Cap*		

*Metal Mandallı modellerde son rakam "4" yerine "7" olmalıdır.
** For Metal Handle, replace "4" at the end with "7".*

12 Kontaklı, 35 A (PG 21) / *12 Poles, 35 A (PG 21)*

EBM612PU10

EBM612PM44

EBA32TK

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB0606CF00	Çekirdek Fiş (1-6) / *Male Insert (1-6)*		
EB0606CP00	Çekirdek Priz (1-6) / *Female Insert (1-6)*		
EB0612CF00	Çekirdek Fiş (7-12) / *Male Insert (7-12)*		
EB0612CP00	Çekirdek Priz (7-12) / *Female Insert (7-12)*		
EBM612FU10	Uzatma Fişi / *Hood with male insert*	Yandan / *Side*	
EBM612FU30	Uzatma Fişi / *Hood with male insert*	Üstten / *Top*	
EBM612PU10	Uzatma Prizi / *Hood with female insert*	Yandan / *Side*	
EBM612PU30	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	
EBM612FM44*	Makine Fişi / *Bulkhead Mounting, Housing with Male Insert*	Alttan / *Bottom*	√
EBM612PM44*	Makine Prizi / *Bulkhead Mounting, Housing with Female Insert*	Alttan / *Bottom*	√
EBA32TK	Telli Kapak / *Cap*		

*Metal Mandallı modellerde son rakam "4" yerine "8" olmalıdır.
** For Metal Handle, replace "4" at the end with "8".*

EB0806CF00

EB0806CP00

EBM806FU10

EBM806PD14

EBA16TK

6 Kontaklı (4 x 80A + 2 x 16A) (PG 21) / *6 Poles (4 x 80A + 2 x 16A) (PG21)*

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB0806CF00	Çekirdek Fiş / *Male Insert*		
EB0806CP00	Çekirdek Priz / *Female Insert*		
EBM806FU10	Uzatma Fişi / *Hood with male insert*	Yandan / *Side*	
EBM806FU30	Uzatma Fişi / *Hood with male insert*	Üstten / *Top*	√
EBM806FM44	Makina Fişi 4 Mandal Makaralı Kilitleme *Bulkhead mounting, housing with male insert with 4 roller handle*	Alttan / *Bottom*	√
EBM806FD14	Duvar Fişi / *Surface mounting, housing with male insert*	*Yandan* / Side	
EBM806FD24	Duvar Fişi / *Surface mounting, housing with male insert*	İki Yandan / *Both Side*	√
EBM806PM44	Makina Prizi Giriş 4 Mandal Makaralı Kilitleme *Bulkhead mounting, housing with female insert with 4 roller handle*	Alttan / *Bottom*	
EBM806PU10	Uzatma Prizi / *Hood with female insert*	Yandan / *Side*	
EBM806PU30	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	
EBM806PD14	Duvar Prizi / *Surface mounting, housing with male insert*	Yandan / *Side*	
EBM806PD24	Duvar Prizi / *Surface mounting, housing with female insert*	İki Yandan / *Both Side*	
EBA16TK	Duvar Prizi / *Cap*		

*Metal Mandallı modellerde son rakam 4 yerine 7 olmalıdır.
** For Metal Handle, replace "4" at the end with "7".*

EBM812FU30

EBM812PM44

EBA32TK

12 Kontaklı, 2 x (4 x 80A + 2 x 16A) (PG 21)
12 Poles, 2 x (4 x 80A + 2 x 16A) (PG 21)(PG21)

Ürün Kodu *Code*	Tip *Type*	Giriş *Entry*	Kilitleme *Handle*
EB0806CF00	Çekirdek Fiş (1-6) / *Male Insert (1-6)*		
EB0806CP00	Çekirdek Priz (1-6) / *Female Insert (1-6)*		
EB0812CF00	Çekirdek Fiş (7-12) / *Male Insert (7-12)*		
EB0812CP00	Çekirdek Priz (7-12) / *Female Insert (7-12)*		
EBM812FU10	Uzatma Fişi / *Hood with male insert*	Yandan / *Side*	
EBM812FU30	Uzatma Fişi / *Hood with male insert*	Üstten / *Top*	√
EBM812FM44	Makina Fişi 4 Mandal Makaralı Kilitleme *Bulkhead Mounting, Housing with Male Insert with 4 Roller Handle*	Alttan / *Bottom*	√
EBM812PM44	Makina Prizi Giriş 4 Mandal Makaralı Kilitleme Bulkhead Mounting, Housing with Female Insert with 4 Roller Handle	Alttan / *Bottom*	
EBM812PU10	Uzatma Prizi / *Hood with male insert*	Yandan / *Side*	
EBM812PU30	Uzatma Prizi / *Hood with female insert*	Üstten / *Top*	
EBA32TK	Telli Kapak / *Cap*		

*Metal Mandallı modellerde son rakam 4 yerine 7 olmalıdır.
** For Metal Handle, replace "4" at the end with "7".*

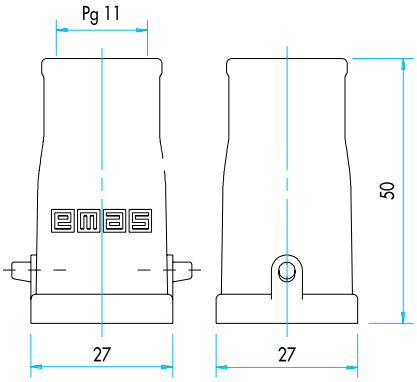
EBMKE

EBMKD

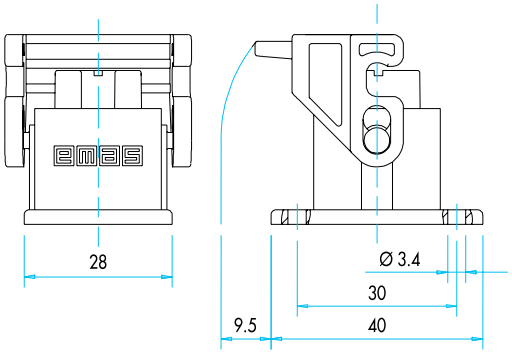
Aksesuarlar / *Accessories*

Ürün Kodu *Code*	Özellik *Features*
EBMKD	Markalama Dişi / *Marking Pin - Female*
EBMKE	Markalama Erkek / *Marking Pin - Male*

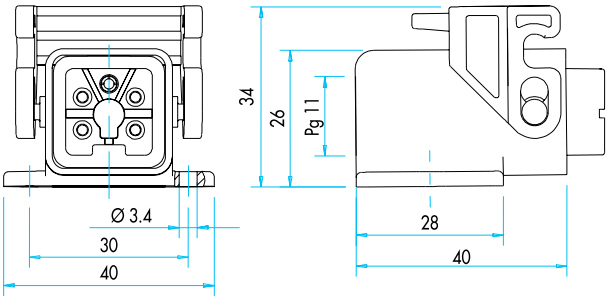
BOYUTLAR (mm) / *DIMENSIONS (mm)*



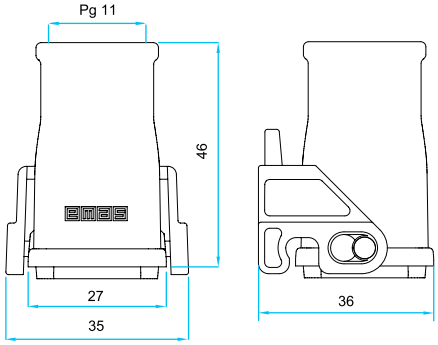
Uzatma Fiş / Priz
Hood with male and female insert



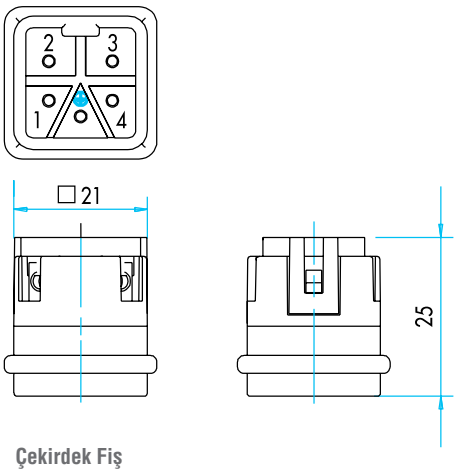
Makine Prizi / Fişi
Housing With Female / Male Insert
(Bulkhead Mounting)



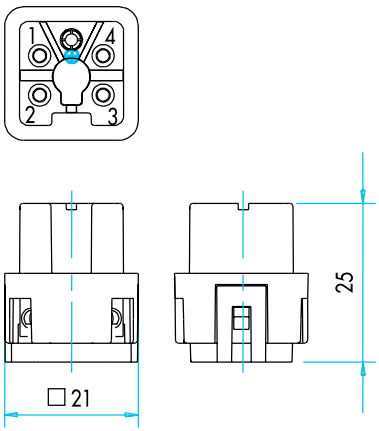
Eğik Priz
Female Insert (Sloping)



Uzatma Priz Mandallı
Hood With Female Insert



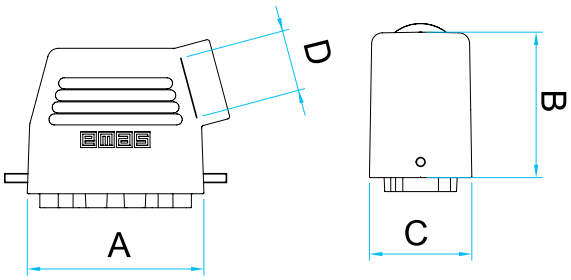
Çekirdek Fiş
EBM05CF00
Male Insert



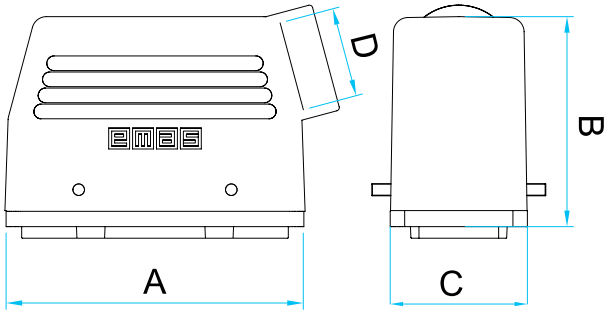
B

Çekirdek Priz
EBM0SCP00
Female Insert

BOYUTLAR (mm) / *DIMENSIONS (mm)*



6 P + PE



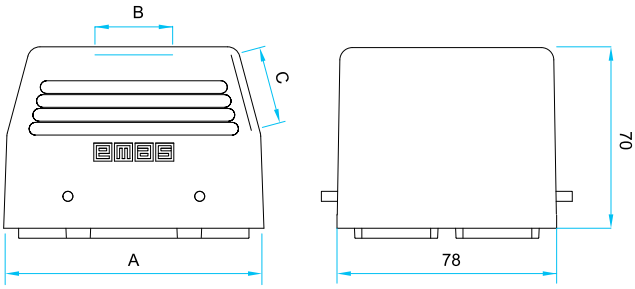
10 P + PE / 16 P + PE / 24 P + PE

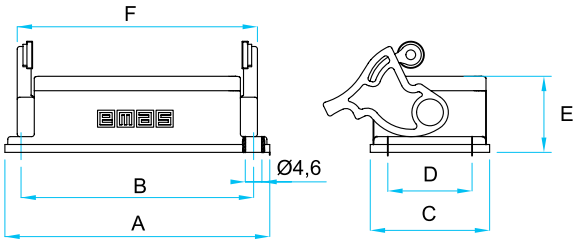
Kontak Sayısı *Number Of Contacts*	A	B	C	D
6 P + PE	60	45	42,5	Pg16
10 P + PE	73	60	42,5	Pg16-Pg21
16 P + PE	93	60	42,5	Pg21
24 P+P E	120	60	42,5	Pg21

Uzatma Fiş / Priz
Hood With Male / Female Insert

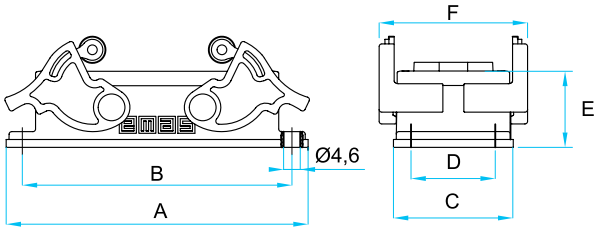
Kontak Sayısı *Number Of Contacts*	A	B	C
32 P + PE (Üst / *Top*) 9	93	Pg29	-
32 P + PE (Yan / *Side*) 9	93		Pg29
48 P + PE (Üst / *Top*)	119.5	Pg29	-
48 P+ PE (Yan / *Side*)	119.5		Pg29

Uzatma Fiş / Priz
Hood With Male / Female Insert





6 P + PE



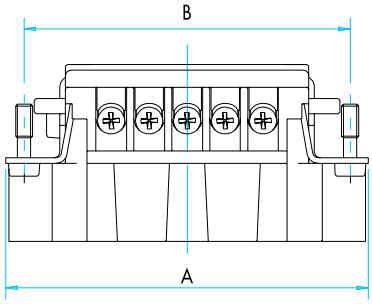
10 P + PE / 16 P + PE / 24 P + PE / 32 P + PE / 48 P + PE

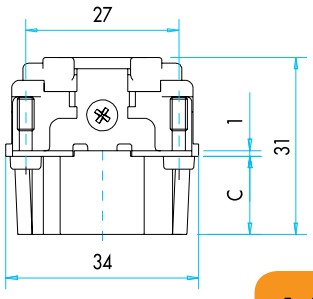
Kontak Sayısı *Number Of Contacts*	A	B	C	D	E	F
6 P + PE	82	70	45.5	32	29	76
10 P + PE	95	83	45.5	32	29	56
16 P + PE	115	103	45.5	32	29	56
24 P+ PE	142	130	45.5	32	29	56
32 P + PE	115	103	81	67.5	32	92
48 P + PE	142	130	81	67.5	32	92

Makine Fiş / Priz
Housing With Male / Female Insert (Bulkhead Mounting)

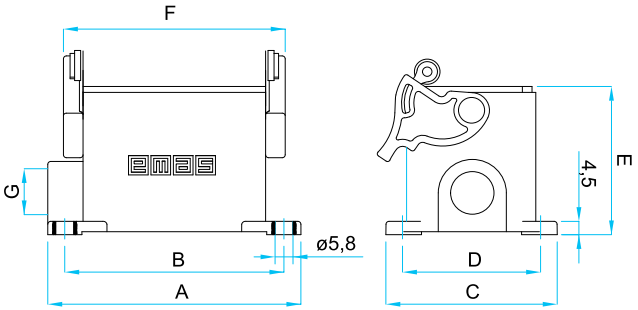
Kontak Sayısı *Number Of Contacts*	A	B	C	
			Fiş / *Plug*	Priz / *Socket*
6 P + PE	50	44.5	13.8	16.5
10 P + PE	64	57.5	13.8	16.5
16 / 32 P + PE	84	78	13.8	16.5
24 / 48 P + PE	111	104	13.8	16.5

Fiş / Priz Çekirdek
Male / Female Insert

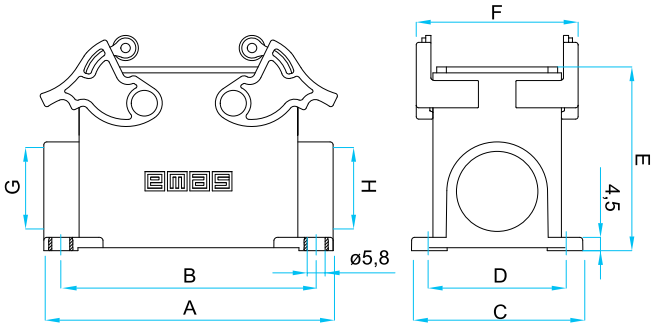




BOYUTLAR (mm) / *DIMENSIONS (mm)*



6 P + PE



10 P + PE / 16 P + PE / 24 P + PE

Kontak Sayısı *Number Of Contacts*	A	B	C	D	E	F	G	H
6 P + PE (Tek Giriş/*One Entry*)	81	70	57	45	53.5	76	Pg 16	-
10 P + PE (Tek Giriş/*One Entry*)	97	85	57	45	65.5	56	Pg 21	-
10 P+ PE (Çift Giriş/*Two Entries*)	97	85	57	45	65.5	56	Pg 21	Pg 21
16 P + PE (Tek Giriş/*One Entry*)	117	105	57	45	65.5	56	Pg 21	-
16 P + PE (Çift Giriş/*Two Entries*)	117	105	57	45	65.5	56	Pg 21	Pg 21
24 P+ PE (Tek Giriş/*One Entry*)	144	132	57	45	65.5	56	Pg 21	-
24 P + PE (Çift Giriş/*Two Entries*)	144	132	57	45	65.5	56	Pg 21	Pg 21

Duvar Fiş / Priz
Housing With Male / Female Insert (Surface Mounting)

EPR, EKS *Serileri Fiş ve Prizler*

- Kadameli kablo girişi
- Estetik tasarım
- Grup prizlerde tek parça kontak yapısı ve ayrılmış bağlantı

Teknik Bilgiler

Kontak Sayısı		2P+E	3P+E
Mekanik Ömür	:	≥5.000	≥5.000
Elektriksel Ömür	:	≥1.000	≥1.000
Çalışma Sıcaklığı	:	-25 / +125°	-25 / +125°
Koruma Sınıfı	:	IP44 (Birlestirilmiş Fiş-Priz)	IP44 (Birlestirilmiş Fiş-Priz)
Çalışma Gerilimi (Ue)	:	250V	440V
Çalışma Akımı (Ie)	:	16 A	25 A
Yalıtım Gerilimi (Ui)	:	500V	500V
Darbe Dayanım Gerilimi (Uimp)	:	2 kV	2 kV
Çalışma Frekansı (f)	:	50-60 Hz	50-60 Hz
İzolasyon Direnci	:	10 MΩ min. (500V DC)	
Kullanım Sınıfı	:	AC15	
Dielektrik Mukavemeti	:	2.000V AC	2.000V AC
Bağlantı Kablo Kesiti	:	1.5 mm²	2.5 mm²
Standart	:	TS IEC 60884-1+A1+A2	

EPR, EKS *Series Plugs & Sockets*

- *Graded cable entry*
- *Aesthetic design*
- *Monoblock contact structure and seperated connection in group sockets*

Technical Information

		2P+E	*3P+E*
Mechanical Life	:	*≥5.000*	*≥5.000*
Electrical Life	:	*≥1.000*	*≥1.000*
Operating Temperature	:	*-25 / +125°*	*-25 / +125°*
Protection Degree	:	*IP44 (Jointed Plug-Socket)*	*IP44 (Jointed Plug-Socket)*
Operating Voltage (Ue)	:	*250V*	*440V*
Operating Current (Ie)	:	*16 A*	*25 A*
Insulation Voltage (Ui)	:	*500V*	*500V*
Impact Resistance (Uimp)	:	*2 kV*	*2 kV*
Operating Frequency (f)	:	*50-60 Hz*	*50-60 Hz*
Insulation Resistance	:	*10 MΩ min. (500V DC)*	
Utilization Category	:	*AC15*	
Dielectric Strength	:	*2.000V AC*	*2.000V AC*
Cable Section	:	*1.5 mm²*	*2.5 mm²*
Standard	:	*TS IEC 60884-1+A1+A2*	

Pano Tipi Priz / *Panel Type Sockets*

Ürün Kodu *Code*	Özellik *Features*	Renk *Colour*
EPREU1M	Pano Prizi, Avrupa Schuko Tip 1 / *European Schuko Type 1*	
EPRUS1H	Amerikan, Tip1 / *American, Type1*	
EPREU2G	Ray Tipi / *Rail Types*	
EPREU2GL	Ray Tipi, Ledli / *Rail Types, with LED*	

EPREU1M

EPRUS1H

EPREU2G

EPREU2GL

Kauçuk Serisi Fiş Priz / *Rubber Type Plugs & Sockets*

Ürün Kodu *Code*	Tip *Type*	Özellik *Features*
EKS116F	Düz Fiş / *Plug*	1 x 16 A
EKS116P	Uzatma Priz / *Socket*	1 x 16 A
EKS116PG1	Duvar Prizi / *Wall Socket*	1 x 16 A
EKS116PG3	Grup Priz Üçlü / *Group Socket - 3 Way*	3x (1 x 16 A)
EKS325F	Düz Fiş / *Plug*	3 x 25 A
EKS325P	Uzatma Priz / *Socket*	3 x 25 A
EKS325PGP30	Grup Priz Üçlü / *Group Socket - 3 Way*	3 x (3 x 25) A
EKS325PG21	Grup Priz Üçlü / *Group Socket - 3 Way*	2 x (3x25) A + 1 (1x16) A
EKS325PG12	Grup Priz Üçlü / *Group Socket - 3 Way*	1 x (3x25) A + 2 (1x16) A

EKS116P

EKS116PG3

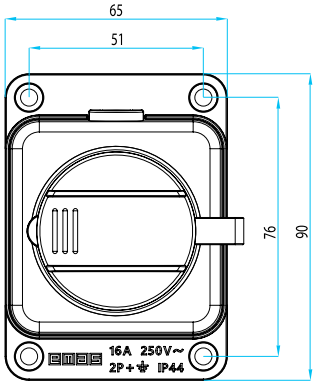
EKS325F

EKS116F

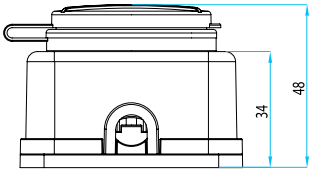
EKS116PG1

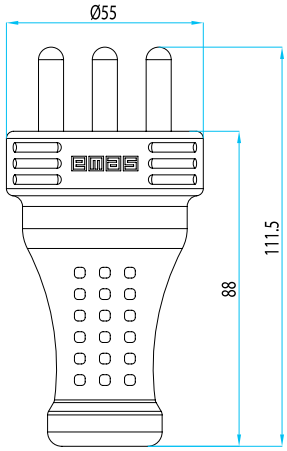
BOYUTLAR (mm) / *DIMENSIONS (mm)*

EKS Serisi Kauçuk Seris Fiş ve Priz / *EKS Series Rubber Plugs & Sockets*

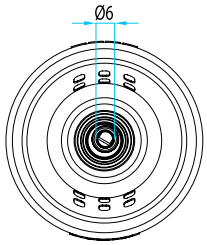


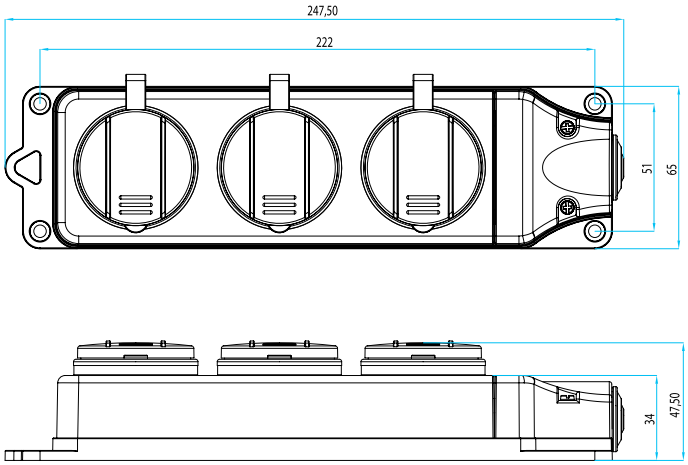
16x1 Duvar Prizi
16x1 Housing Female Insert (Surface Mounting)



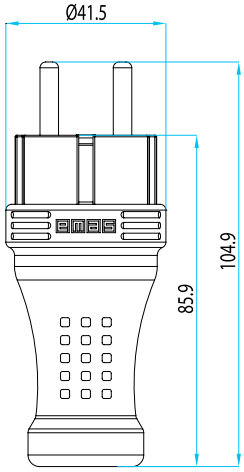


25x3 Uzatma Fiş
25x3 Hood with male insert

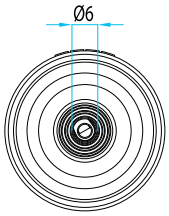




16x3 Grup Priz
16x3 Group Socket

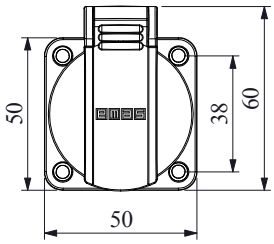


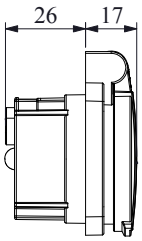
16x1 Uzatma Fiş
16x1 Hood with male insert



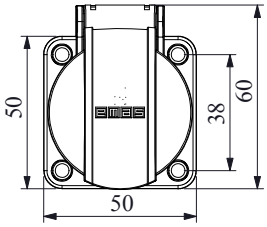
EPR Serisi Kauçuk Seris Fiş ve Priz / *EPR Series Rubber Plugs & Sockets*

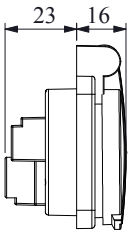
EPREU1M



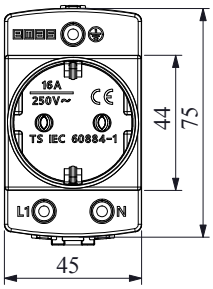


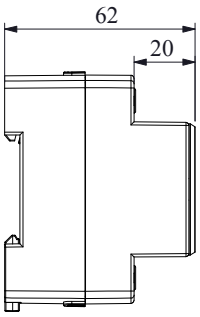
EPRUS1H





EPREU2G





Endüstriyel Fiş ve Prizler
Industrial Plugs & Sockets

EBP05FU30

EBP05PU30

EBP05PU36

EBP05PE41

EBA05TK

EBM05FU30

EBM05PU30

EBM05PU36

EBM05PE41

EBM06FU30

EBM06FM42

EBM06PU32

EBM06PU30

EBA06TK

EBM10PU10

EBM10PU30

EBM10FD24

EBM10PM44

EBM10PM47

EBM10PD27

EBA10TK

EB016CF00

EB016CP00

EBM16FU10

EBM16FM44

EBM16PD14

EBM16FD24

EBA24TK

EBA16TK

EB024CP00

EB024CF00

EBM24FU10

EBM24PU10

EBM24FD24

EBM24PM44

EBM32FU10

EBM32PU10

EBM32PM44

EBM32FM44

EBA48TK

EBA32TK

EBM48PU10

EBM48FU10

EBM48FU30

EBM48PM44

EB0606CP00

EB0606CF00

EBM606FU10

EBM606PD14

EBM612PU10

EBM612PM44

EB0806CF00

EB0806CP00

EBM806FU10

EBM806PD14

EBM812FU30

EBM812PM44

EBMKE

EBMKD

Endüstriyel Röleler ve Soketler

Industrial Relays & Sockets

M

Endüstriyel Röleler ve Soketler
Industrial Relays & Sockets

RE *Serisi Endüstriyel Röleler*

Genel Özellikler ve Teknik Bilgiler 03
Endüstriyel Röle Tipleri 04

RE *Series Industrial Relays*

General Specifications and Technical Information 03
Industrial Relay Types 04

RS *Serisi Röle Soketleri*

Genel Özellikler ve Teknik Bilgiler 05
Röle Soket Tipleri 06

RS *Series Relay Sockets*

General Specifications and Technical Information 05
Relay Socket Types 06

RE *Serisi Endüstriyel Röleler*

- PA6.6 bazlı alev gecikmeli gövde
- 8 ve 11 pinli soket ile 35 mm'lik raya montaj
- Çabuk ve hatasız montajı sağlayan gövde tasarımı ve bağlantı uçları
- Kod yazımı için geniş etiketlerne alanı
- Test butonu ve kontrol göstergesi

Teknik Bilgiler

Mekanik Ömür	:	10.000.000 açma-kapoma min.
Elektriksel Ömür	:	100.000 açma-kapama min.
Çalışma Sıcaklığı	:	min./maks. ˚C -5/+40
Koruma Sınıfı	:	IP40
Çalışma Sıklığı	:	Yüksüz 18.000 açma-kapama/saat
	:	Yükte 600 açma-kapama/saat
Çalışma Bobin Gerilim	:	12, 24, 48, 110 AC/DC ve 230 V AC
Çalışma Bobin Gücü	:	AC 1.5 VA, DC 1 W
İşletme Frekansı	:	50Hz
Nominal Kontak Akımı	:	10 A
Maksimum Kesme Gerilimi	:	250 V
Anma Kesme Kapasitesi AC1	:	2.500 VA
Bobin Gerilim Değişimi	:	(0.85-1.1)* Ue
Kullanma Sınıfı	:	AC15
Kirlilik Derecesi	:	3
İzolasyon Direnci	:	min. 10 MΩ (500 V DC)
Dielektrik Dayanım	:	Bobin-Kontak 2.000 V
		Açık Kontak 1.500 V - Kutup-Kutup 2.000 V
Standart Kontak Malzemesi	:	AgNi
Ağırlık	:	80±5 gr.
Standart	:	TS EN 61810-1

RE *Series Industrial Relays*

- *PA6.6 base non-flammable body*
- *35 mm rail assembly with 8 and 11 pins socket*
- *Special body design and contact tips assuring quick and faultless assembly*
- *Wide label field for code spelling*
- *Test button and control indicator*

Technical Information

Mechanical Life	:	*10 million operations min.*
Electrical Life	:	*100.000 operations min.*
Operating Temperature	:	*min./max. ˚C -5/+40*
Protection Degree	:	*IP40*
Operating Frequency	:	*Without load 18.000 operations/hour*
		At full load 600 operations/hour
Rated Operating Voltage Ue	:	*12, 24, 48, 110 AC/DC and 230 V AC*
Operating Coil Power	:	*AC 1.5 VA, DC 1 W*
Operating Frequency	:	*50Hz*
Rated Operating Current Ie	:	*10 A*
Max. Switching Voltage	:	*250 V*
Max. Switching Power	:	*2.500 VA*
Coil Voltage Range	:	*(0.85-1.1)* Ue*
Range of Use	:	*AC15*
Dirty Degree	:	*3*
Insulation Resistance	:	*10 MΩ min. (500 V DC)*
Dielectrical Strength	:	*Between coil-contact 2.000 V*
		Open contact 1.500 V A C - Pole-pole 2.000 V
Standard Contact Material	:	*AgNi*
Weight	:	*80±5 gr.*
Standard	:	*TS EN 61810-1*

Endüstriyel Röle Tipleri
Industrial Relay Types

Ürün Kodu	Bobin Gerilimi	Pin Sayısı	Kontak Sayısı
Code	*Coil Voltage*	*Number of Pins*	*Number of Contacts*
RE1P08AC012	12 V AC (50 Hz)	8	2
RE1P08AC024	24 V AC (50 Hz)	8	2
RE1P08AC048	48 V AC (50 Hz)	8	2
RE1P08AC110	110 V AC (50 Hz)	8	2
RE1P08AC220	230 V AC (50 Hz)	8	2
RE1P08DC012	12 V DC	8	2
RE1P08DC024	24 V OC	8	2
RE1P08DC048	48 V DC	8	2
RE1P08DC110	110 V DC	8	2
RE1P11AC012	12 V AC (50 Hz)	11	3
RE1P11AC024	24 V AC (50 Hz)	11	3
RE1P11AC048	48 V AC (50 Hz)	11	3
RE1P11AC110	110 V AC (50 Hz)	11	3
RE1P11AC220	230 V AC (50 Hz)	11	3
RE1P11DC012	12 V DC	11	3
RE1P11DC024	24 V DC	11	3
RE1P11DC048	48 V OC	11	3
RE1P11DC110	110 V DC	11	3

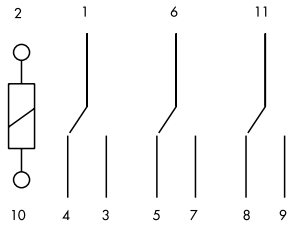
RE1P11AC
Endüstriyel Röle 11 Pinli
Industrial Relay With 11 Pins

RE1P08DC
Endüstriyel Röle 8 Pinli
Industrial Relay With 8 Pins

RE1P11DC
Endüstriyel Röle 11 Pinli
Industrial Relay With 11 Pins

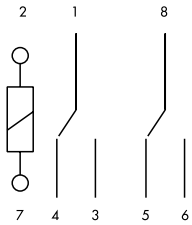
BAĞLANTI UÇLARI VE İÇ ŞEMA / *TERMINAL MARKINGS AND INTERNAL LAYOUT*

2-10 : Besleme / *Supply*
1-3-4 / 6-7-5 / 11-9-8 : Çıkış kontakları
Relay output



RE1P11

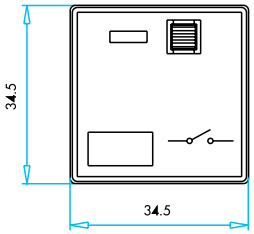
2-7 : Besleme / *Supply*
1-3-4 / 8-6-5 : Çıkış kontakları
Relay output

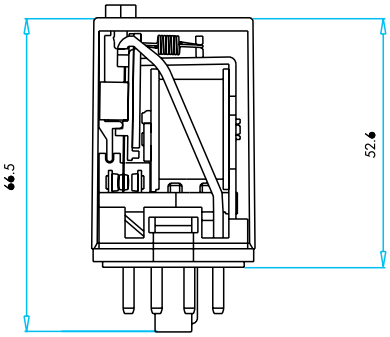


RE1P08

BOYUTLAR (mm) / *DIMENSIONS (mm)*

Standart boyut 35x35x70 mm
Standard size 35x35x70 mm





RS *Serisi Röle Soketleri*

- Ürün güvenilirliğini arttıran V0 PA 6.6 malzeme
- Kod yazımı için özel etiketleme alanı
- Endüstriyel ve elektronik röleler ile kusursuz uyum
- 35 mm'lik montaj rayına hızlı ve basit montaj

Teknik Bilgiler

Çalışma Gerilim	: 250 V AC
Çalışma Akım	: 10 A
Çalışma Sıcaklığı	: -5/+40 °C
Koruma Sınıfı	: IP40
Ağırlık	: 80±5 gr.
Standart	: TS EN 61984

RS *Series Relays Sockets*

- *Maximum product reliability with V0 PA6.6 material*
- *Wide label area for code spelling*
- *Perfect adaptation with industrial and electronic relays*
- *Quick and basic assembly suitable for 35 mm rail*

Technical Information

Rated Operating Voltage Ue	*: 250 V AC*
Rated Operating Current Ie	*: 10 A*
Operating Temperature	*: -5/+40 °C*
Protection Degree	*: IP40*
Weight	*: 80±5 gr.r*
Standard	*: TS EN 61984*

Röle Soket Tipleri
Relay Socket Types

RS1P08M1
Röle Soketi 8 Pinli
Relay Socket With 8 Pins

RS1P11M1
Röle Soketi 11 Pinli
Relay Socket With 11 Pins

Ürün Kodu *Code*	Pin Sayısı *Number of Pins*	Renk *Colour*
RS1P08G1	8	Gri / *Grey*
RS1P08H1	8	Siyah / *Black*
RS1P08M1	8	Mavi / *Blue*

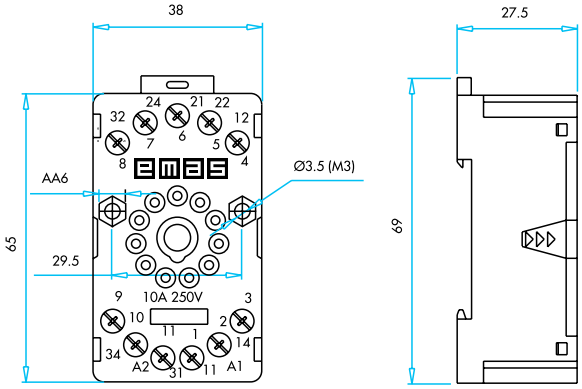
RS1P11G1
Röle Soketi 11 Pinli
Relay Socket With 11 Pins

RS1P11H1
Röle Soketi 11 Pinli
Relay Socket With 11 Pins

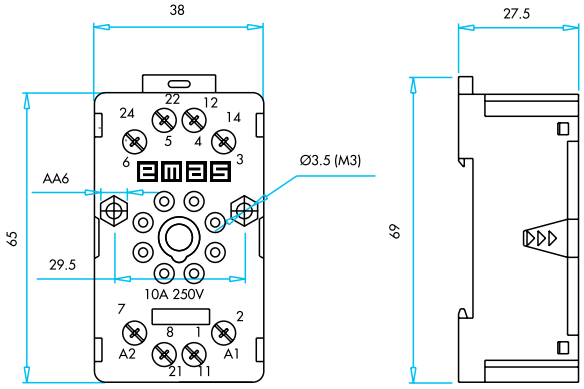
Ürün Kodu *Code*	Pin Sayısı *Number of Pins*	Renk *Colour*
RS1P11G1	11	Gri / *Grey*
RS1P11H1	11	Siyah / *Black*
RS1P11M1	11	Mavi / *Blue*

BOYUTLAR (mm) / *DIMENSIONS (mm)*

35 mm raya (EN 50022) uygun montaj
Suitable mounting to 35 mm rail (EN50022)



RS1P11



RS1P08

Seviye Kontrol Flatörleri

Level Control Float Switches

K

Seviye Kontrol Flatörleri
Level Control Float Switches

SKF Serisi Seviye Kontrol Flatörleri

Genel Özellikler ve Teknik Bilgiler	3
Kobra Kafalı	4
Ampul Kafalı	5
Boyutlar	5

SKF Series Level Control Float Switches

General Specifications and Technical Information	*3*
Cobra	*4*
Bulb	*5*
Dimensions	*5*

SK5 Serisi Seviye Kontrol Flatörleri

Genel Özellikler ve Teknik Bilgiler	6
Siviç Hareketli	7
Boyutlar	7

SK5 Series Level Control Float Switches

General Specifications and Technical Information	*6*
Switch Actuated	*7*
Dimensions	*7*

SKF *Serisi Seviye Kontrol Flatörleri*

- Basit montaj ve kullanım kolaylığı
- İstenilen çalışma mesafesini ağırlık parçası ile ayarlayabilme imkanı
- Özgün tasarımı ile suya karşı tamamen izole edilmiş
- Mikro siviçli kontak yapısı
- Farklı kablo uzunluğunda ürün temin edebilme imkanı

Teknik Bilgiler

Mekanik Ömür	: 30.000 açma-kapama min.
Elektriksel Ömür	: 10.000 açma-kapama min.
Çalışma Sıcaklığı	: maks. °C +85
Koruma Sınıfı	: SKF IP68
	SKF1A IP68
Anma İşletme Gerilimi Ue	: 250 V AC
Anma İşletme Akımı Ie	: 10 (4) A
Çalışma Basıncı	: maks. 3 Bar
İzolasyon Gerilimi	: 2.750 V AC
İzolasyon Direnci	: 10 MΩ min.
Standart (Kontak Blok)	: TS EN 60947-5-1

SKF *Series Level Control Float Switches*

- *Simple assembly and easy to use*
- *Feature to adjust the requested operation interval with heavy part*
- *Completely waterproof with special design*
- *With Micro switch contact*
- *Possibility to provide the product with different cable length*

Technical Information

Mechanical Life	*: 30.000 operations min.*
Electrical Life	*: 10.000 operations min.*
Operating Temperature	*: max. °C +85*
Protection Degree	*: SKF IP68*
	SKF1A IP68
Rated Operating Voltage Ue	*: 250 V AC*
Rated Operating Current Ie	*: 10 (4) A*
Operating Pressure	*: max. 3 Bar*
Insulation Voltage	*: 2.750 V AC*
Insulation Resistance	*: 10 MΩ min.*
Standard (Contact Block)	*: TS EN 60947-5-1*

SKF1A
Seviye Kontrol Flatörü-Çift İzolasyonlu
Level Control Float Switch-Double Insulated

Kobra Kafalı / *Cobra*

Ürün Kodu *Code*	Kontak Tipi *Contact Type*	Kontak Yapısı *Contact Body*	Kablo Uzunlugu (m) *Cable Length (m)*
SKF1A *	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	1.75
SKF1A-3*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	3
SKF1A-5*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	5
SKF1A-10*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	10
SKF1A-15*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	15
SKF1A-20*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	20
SKF1A-30*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	30

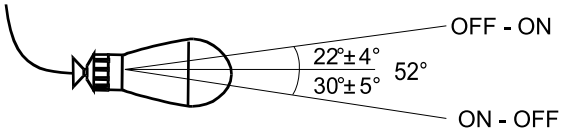
*** Kodun sonuna "N" harfi gelirse Neoprene kablo ile tedarik edilir.**
** For Neoprene cable, please add "N" alphabet to end of the code*

Dalgalanmalardan Etkilenmeyen Patentli Ürün

İçerisinde yer alan patenti firmamıza ait mekanizma sayesinde yandaki şekilde görülen yukarı 22˚ ± 4˚, aşağı 30˚ ± 5˚ açısal hareketlerini aşmadığı sürece dalgalanmadan dolayı kontak açma - kapama ihtimali yoktur. Bu sayede dalgalanmalarda meydana gelebilecek istenmeyen açma - kapamaların önüne geçilmiş olur.

Patented Product Not Effected By Waves

Thanks to EMAS patented mechanism placed inside, there will be no undesired on-off's due to the waves, provided that the anguler displacement does not exceed upwards 22˚ ± 4˚ and downwards 30˚ ± 5˚ as seen in the illustration on the right. Therefore undesired interruptions will be avoided.



T.C.
TÜRK PATENT ENSTİTÜSÜ
TR 2003 00630 Y

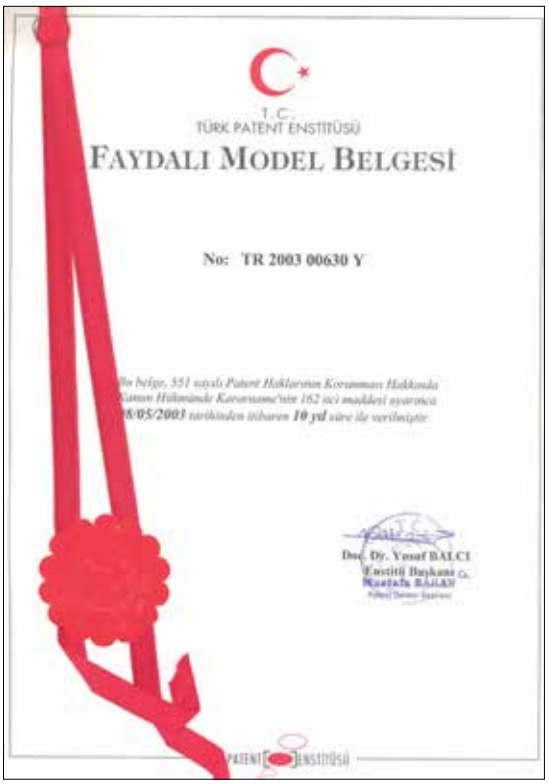
Faydalı Model Belgesi

G01F 23/00

EMAS ELEKTROTEKNİK MAKİNA SAN. VE TİC. A.Ş.

Sıvı seviye tespit tertibatında yenilik

TR 2003 00630 Y


T.C.
TÜRK PATENT ENSTİTÜSÜ

FAYDALI MODEL BELGESİ

No: TR 2003 00630 Y

Doç. Dr. Yusuf BALCI
Enstitü Başkanı
Mustafa BALKI

Seviye Kontrol Flatörleri
Level Control Float Switches

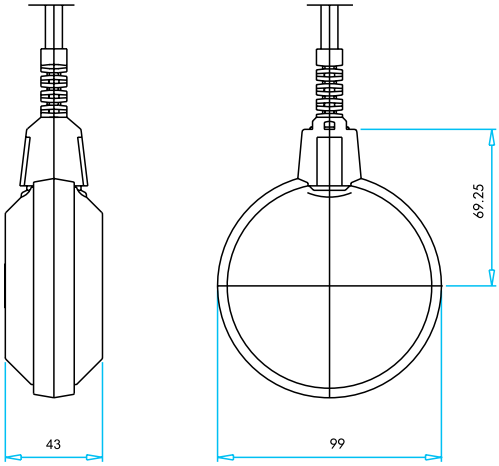
SKF
Seviye Kontrol Flatörü
Çift İzolasyonlu
Level Control Float Switch
Double Insulated

Ampul Kafalı / *Bulb*

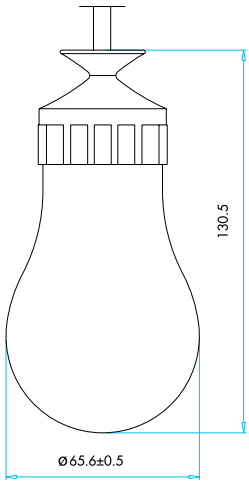
Ürün Kodu *Code*	Kontak Tipi *Contact Type*	Kontak Yapısı *Contact Body*	Kablo Uzunlugu (m) *Cable Length (m)*
SKF-0.5*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	0.50
SKF*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	1.75
SKF-3*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	3
SKF-5*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	5
SKF-10*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	10
SKF-15*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	15
SKF-20*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	20
SKF-25*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	25
SKF-30*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	30
SKF-35*	Mikro Siviç / *Micro Switch*	1 Değişebilen Kontak / *1 CO*	35

*** Kodun sonuna "N" harfi gelirse Neoprene kablo ile tedarik edilir.**
** For Neoprene cable, please add "N" alphabet to end of the code*

BOYUTLAR (mm) / *DIMENSIONS (mm)*



SKF



SKF1A

SK5 *Serisi Seviye Kontrol Flatörleri*

- Elektrikli kısımlar suyun içinde olmadığından emniyetli ve güvenli
- İstenilen çalışma mesafesini ağırlık parçası ile ayarlayabilme imkanı
- Kurulumu kolay ve basit
- Limit siviçli kontak yapısı

Teknik Bilgiler

Mekanik Ömür	: 1.000.000 açma-kapama min.
Elektriksel Ömür	: 100.000 açma-kapama min.
Çalışma Sıcaklığı	: -5/ + 40 °C
Koruma Sınıfı	: IP65
Anma İşletme Gerilimi (Ue)	: 240 V AC
Anma İşletme Akımı (Ie)	: 3 A
Yalıtım Gerilimi (Ui)	: 300 V
Standart	: TS EN 60947-5-1

Sınır Şalter

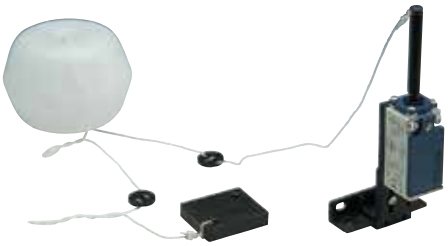
SK5 *Series Level Control Float Switches*

- *As electrical parts are not in the water, safe and reliable*
- *Operation distance adjustable with gravity part*
- *Simple assembly*
- *Limit switch contact block configuration*

Technical Information

Mechanical Life	*: 1.000.000 on-off min.*
Electrical Life	*: 100.000 on-off min.*
Operating Temperature	*: -5/ + 40 °C*
Production Degree	*: IP65*
Rated Operating Voltage (Ue)	*: 240 V AC*
Rated Operating Current (Ie)	*: 3 A*
Insulation Voltage (Ui)	*: 300 V*
Standard	*: TS EN 60947-5-1*

Limit Switch

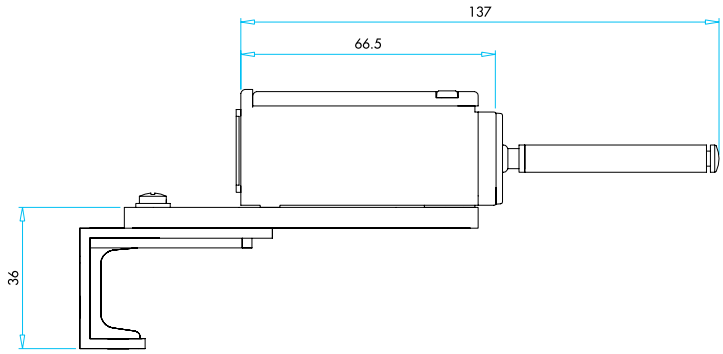


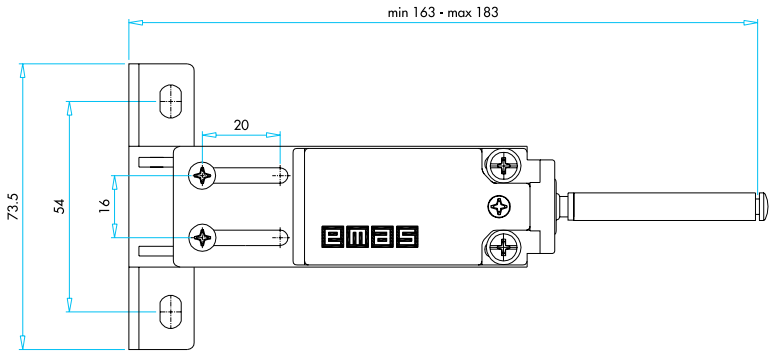
SK5P
Seviye Kontrol Flatörlü-Limit Siviçli
Level Control Switch-With Limit Switch

Siviç Hareketli / *Switch Actuated*

Ürün Kodu	Kontak Tipi	Kontak Yapısı	Şamandıra Malzemesi
Code	*Contact Type*	*Contact Body*	*Float Material*
SK5P	Limit Siviç *Limit Switch*	1 NA + 1 NK Ani Hareketli *1 NO + 1NC* *Snap Action*	Plastik *Plastic*
SK5B	Limit Siviç *Limit Switch*	1 NA + 1 NK Ani Hareketli *1 NO + 1NC* *Snap Action*	Paslanmaz Çelik *Stainless Steel*

BOYUTLAR (mm) / *DIMENSIONS (mm)*





SKF1A

SKF

SK5P

Asansör Grubu Ürünler

Lift Products

P

PA Serisi Asansör Revizyon Kutuları

Genel Özellikler ve Teknik Bilgiler 3
Asansör Revizyon Kutu Tipleri 4
Boyutlar 5

PA Series Lift Control Station

General Specifications and Technical Information 3
Lift Control Station Types 4
Dimensions 5

Z Serisi Asansör Kapı Siviçleri

Z Serisi Asansör Kapı Siviçleri 6
Boyutlar 6

Z Series Elevator Door Switches

Z Series Elevator Door Switches 6
Dimensions 6

PA *Serisi Asansör Revizyon Kutuları*

- Ø22 mm çaplı butonlara uygun
- ABS katkılı malzeme sayesinde estetik görünüm, ergonomik kullanım ve yüksek darbe mukavemeti
- Koruma sınıfı yüksek gövde ve etanj butonlar sayesinde çevre şartlarına maksimum dayanım
- Oklu etiketler sayesinde yön tespit kolaylığı
- Montaj kolaylığı
- Tehlike anında kolay kullanım acil stop butonu

Teknik Bilgiler

Çalışma Sıcaklığı	:	min./maks. ˚C -5/+85
Koruma Sınıfı	:	IP65 (Uygun butonlarla)
Kablo Ölçüsü	:	Ø8 - Ø17
Standar	:	TS EN 60947-5-1 VDE 0660 UL508

Butonlar

PA *Series Lift Control Station*

- *Suitable for Ø22 mm control units*
- *Aesthetic look and ergonomic usage with assistance of ABS reinforced material*
- *Maximum resistance to environment conditions with waterproof body and buttons*
- *Easy assembly*
- *Emergency Push Button for usage in dangerous situations*

Technical Information

Operating Temperature	:	*min./max. ˚C -5/+85*
Protection Degree	:	*IP65 (With suitable buttons)*
Cable Dimensions	:	*Ø8 - Ø17*
Standard	:	*TS EN 60947-5-1 VDE 0660 UL508*

Buttons

Asansör Grubu Ürünler
Lift Products

Ürün Kodu	Delik Sayısı	Buton Tipi	Kutu Rengi
Code	*Number of Holes*	*Button Type*	*Box Colour*
PY4ASM1	4	2 oklu buton, 1 acil stop (Ø40 mm), 1 seçici, 4 kontak (monoblok) *2 arrow symbol button, 1 emergency stop (Ø40 mm), 1 selector, 4 contact (monoblock)*	Sarı-Siyah *Yellow-Black*
PY4ASM2	4	2 oklu buton, 1 acil stop (Ø40 mm), 1 seçici, 7 kontak (monoblok) *2 arrow symbol button, 1 emergency stop (Ø40 mm), 1 selector, 7 contact (monoblock)*	Sarı-Siyah *Yellow-Black*
PY4ASB	4	2 oklu buton, 1 acil stop (Ø30 mm), 1 seçici, 8 kontak (B tipi) *2 arrow symbol button, 1 emergency stop (Ø30 mm), 1 selector, 8 contact (B type)*	Sarı-Siyah *Yellow-Black*
PARKBOŞ	3	-	Sarı-Siyah *Yellow-Black*
PARK4SB*	4	2 oklu buton, 1 acil stop, 1 seçici (B tipi) *2 arrow symbol button, 1 emergency stop, 1 selector (B type)*	Sarı-Siyah *Yellow-Black*
PARK4SİB*	3	2 oklu buton, 1 acil stop, 1 sinyal lambası (10mm) *2 arrow symbol button, 1 emergency stop, 1 signal lamp (10mm)*	Sarı-Siyah *Yellow-Black*
PARK4B*	3	2 oklu buton, 1 acil stop *2 arrow symbol button, 1 emergency stop*	Sarı-Siyah *Yellow-Black*
PA3E40K20P1	2	1 acil stop (Ø40 mm), 1 çiftli (düz), 1 priz *1 emergency stop (Ø40 mm) 1 double (flat), 1 socket*	Sarı-Gri *Yellow-Grey*
PA9E40P2	9	2 priz,1 acil stop(Ø40 mm),2 oklu,1düz yuvarlak mavi, 1düz yuvarlak yeşil, 1 düz yuvarlak siyah,1seçici *2 sockets, 1 emergency stop(Ø40 mm), 2 arrow symbol button,1 flush blue, 1 flush green, 1 flush black, 1 selector*	Sarı-Siyah *Yellow-Black*
PA4-01	4	1acil stop(Ø40 mm), 1 düz yuvarlak, 1 çiftli düz, 1pako *1 emergency stop(Ø40 mm),1 flush, 1 double flush , 1 cam switch*	Sarı-Siyah *Yellow-Black*
PA5-01	5	2 oklu buton, 1 acil stop(Ø40 mm),1sinyal lambası,1 pako,1 priz(kutu yanı) *2 arrow symbol button, 1 emergency stop(Ø40 mm),1signal lamp, 1 cam switch,1 socket (side on box)*	Sarı-Siyah *Yellow-Black*
PA6-01	6	1 acil stop(Ø40 mm),1 çiftli düz ,2seçici,1 pako,1düz yuvarlak *1 emergncy stop(Ø40 mm), 1 double flush, 2 selector,1cam switch,1flush*	Sarı-Siyah *Yellow-Black*
PA8-01	8	2 oklu buton,1düz yuvarlak,1pako,1 çiftli düz,2seçici,1 acil stop(Ø40 mm) *2 arrow symbol button,1 flush,1 cam switch, 2 double flush, 1 emergency stop(Ø40 mm)*	Sarı-Siyah *Yellow-Black*

PA401

PA501

PA601

PA801

PA3E40K20P1

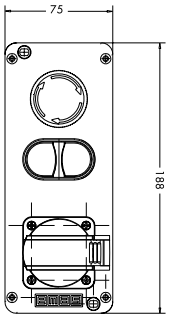
PY4ASM1
PY4ASM2

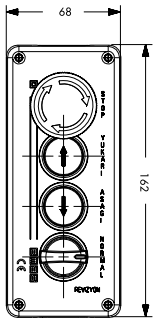
PY4ASB

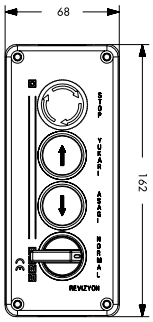
PARK4SB

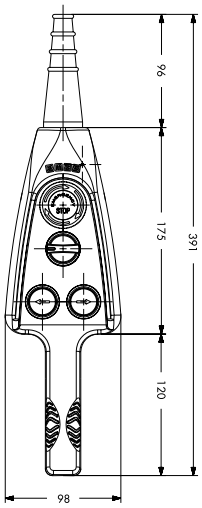
PA9E40P2

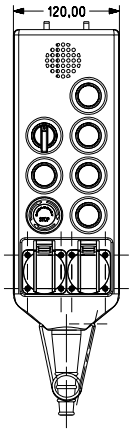
BOYUTLAR (mm) / *DIMENSIONS (mm)*

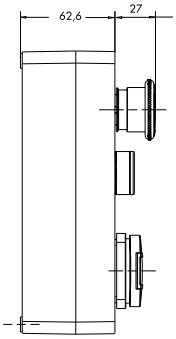












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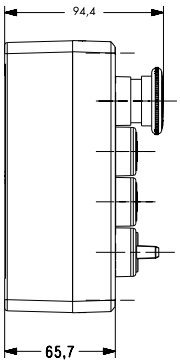
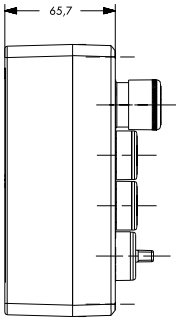


PY4ASM1
PY4ASM2



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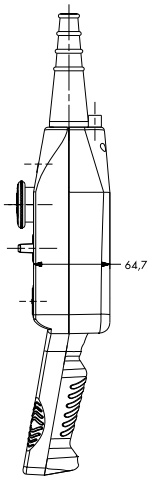

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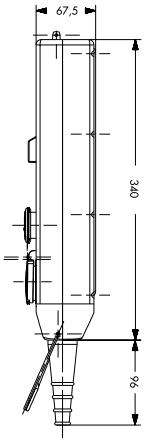

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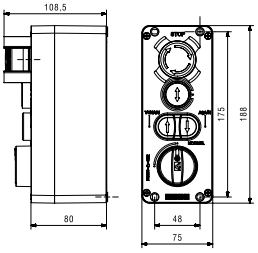
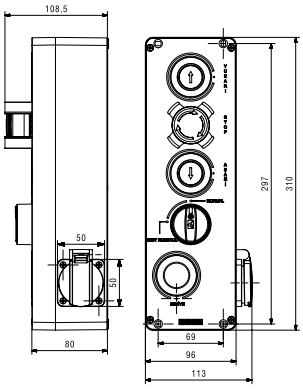


PA401



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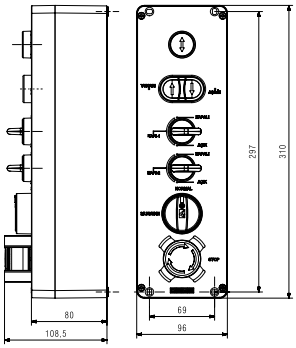
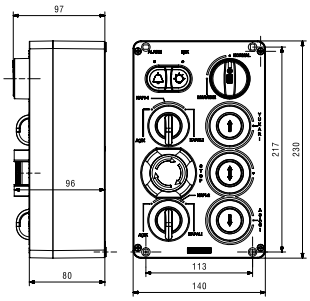


PA601



PA801

Z Serisi Asansör Kapı Siviçleri / Z Series Elevator Door Switches

Ürün Kodu *Code*	Açıklamalar *Descriptions*
Z70	Asansör Anahtarı (Fiş) *Elevator Key (Plug)*
Z71	Asansör Anahtarı Tek Giriş (Priz) *Elevator Key One Entry (Socket)*
Z72	Asansör Anahtarı Çift Giriş (Priz) *Elevator Key Two Entries (Socket)*
Z73	Asansör Anahtarı Tek Giriş (Fiş) *Elevator Key One Entry (Plug)*
Z74	Asansör Anahtarı (Priz) *Elevator Key (Socket)*

Z70

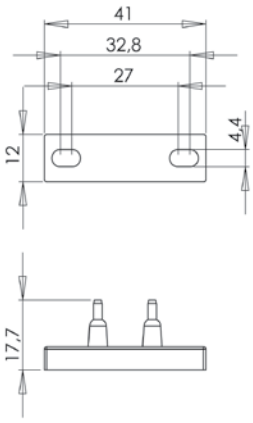
Z71

Z72

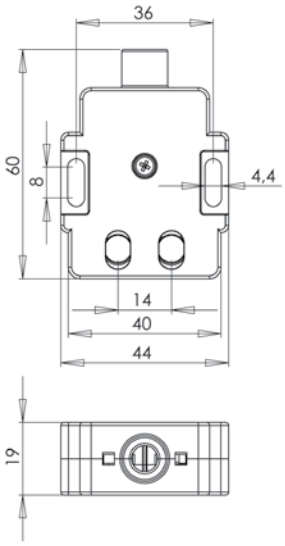
Z73

Z74

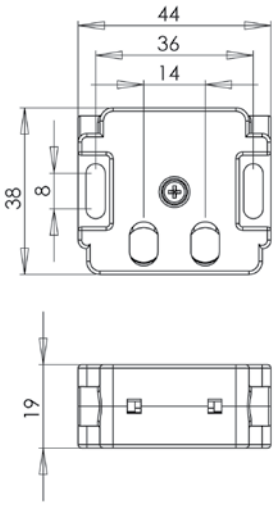
BOYUTLAR (mm) / *DIMENSIONS (mm)*



Z70



Z71



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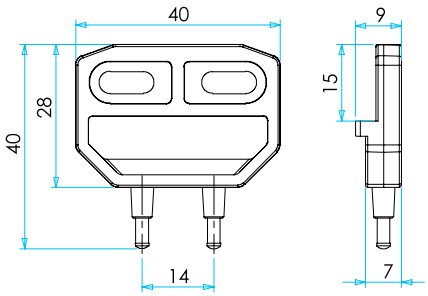

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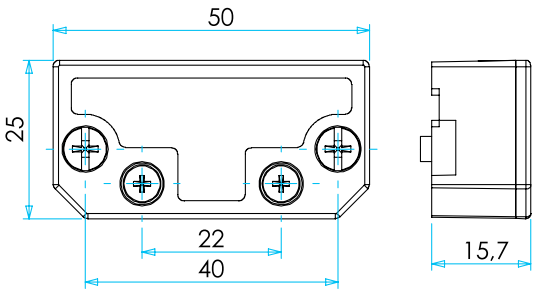


Z74

Sınır Şalterler

Limit Switches

D

Sınır Şalterler

Sınır Şalterleri Seçim Tablosu	3
Genel Şema	4
L1 Serisi Sınır Şalterleri	5
L2 Serisi Sınır Şalterleri	11
L3 Serisi Sınır Şalterleri	18
L5 Serisi Sınır Şalterleri	25
L51 Serisi Sınır Şalterleri	38
L52 Serisi Sınır Şalterleri	50
L53 Serisi Sınır Şalterleri	62
L54 Serisi Sınır Şalterleri	73
L61-L66 Serisi Sınır Şalterleri	79

Limit Switches

Limit Switch Selection Table	*3*
General Scheme	*4*
L1 Series Limit Switches	*5*
L2 Series Limit Switches	*11*
L3 Series Limit Switches	*18*
L5 Series Limit Switches	*25*
L51 Series Limit Switches	*38*
L52 Series Limit Switches	*50*
L53 Series Limit Switches	*62*
L54 Series Limit Switches	*73*
L61-L66 Series Limit Switches	*79*

Sınır Şalterler Seçim Tablosu
Limit Switches Selection Table

Seri	Kutu Tipi	Kontak Hareketi	Kontak Tip	Uç Elemanı Tipi	Duyar Blok Hareketi	Uç Eleman Malzemesi	Tip No	Reset
L	1	K1	3	M	I	P	211	R
Series	*Housing Type*	*Contact Mode*	*Contact Type*	*End Unit Type*	*Action Unit*	*End Unit Material*	*Type Number*	*Reset*

L Sınır Şalterler *Limit Switches*

1 Serisi *Series*
2 Serisi *Series*
4 Serisi *Series*
5 Serisi *Series*
51 Serisi *Series*
52 Serisi *Series*
53 Serisi *Series*
54 Serisi *Series*
61 Serisi *Series*
66 Serisi *Series*
67 Serisi *Series*

K1 Ani Hareketli Eş Zamanlı *Snap Action Overlap*
K2 Yavaş Hareketli Eş Zamanlı *Slow Action Overlap*
K3 Yavaş Hareketli Sıralı *Slow Action Overlap*

1 Start-Start (NA+NA) *Start-Start (NO+NO)*
2 Stop-Stop (NK+NK) *Stop-Stop (NC+NC)*
3 Stop-Start (NK+NA) *Stop-Start (NC+NO)*
4 Start-Stop (NA+NK) *Start-Stop (NO+NC)*
5 Çift Stop-Start (2NK+NA) *Double Stop-Start (2NC+NO)*
6 Çift Start - Çift Stop 2 (NK+NA) *Double Stop-Double Start (2NC+NO)*
7 Çift Start-Stop (2NA+NK) *Double Start-Stop (2NO+NC)*
8 Çift Start-Çift Stop 2 (NA+NK) *Double Start-Double Stop2 (NO+NC)*
9 Stop-Start Bindirmeli *Stop-Start Overlapped*

M Makara *Roller*
P Pim *Plunger*
S Spiral *Spiral*
F Fleksibl Çubuk *Flexible Rod*
R Rijit Çubuk *Rigid Rod*
L Menteşe *Hinge*
H Çekmeli *Pull-Wire*
B Döner Uç *Rot Point*
CPDE 40mm Emniyet *40mm Emergency*

I Açısal Hareket 1 Yön *Angular Action. Single Direction*
E Açısal Hareket 2 Yön *Angular Action. DoubleDirection*
0 Açısal Hareket Çok Yön *Angular Action.Multiple Direction*
U Doğrusal Hareket *Linear Action*

111
121
122
123
124
211
311
321
323
324
331
332
411
412
511
621
622

P Plastik *Plastic*
M Metal *Metal*
L Lastik *Rubber*
F Fiber *Fiber*

Standart *Standard*
R Reset *Reset*
A Ayarlı Kol *Adjustable Lever*
RA Resetli ve Ayarlı Kol *Adjustable Lever with Reset*
T Kol Ters Takılı *Opposite Mounted Lever*
Y Kol Yumuşak Yaylı *Lever with Soft Spring*
3 3 Metre Kablo *3 meter Cable*

Örnek: L1K13MIP211R → L1 Serisi Ani, Eş Zamanlı Hareketli, Stop-Start (NK+NA) Kontaklı, Makaralı,211 Tipli Açısal Plastik Uç Elemanlı sınır şalter seçilmiştir.

Example: *L1K13MIP211R → L1 Series, Snap Action Overlap Contact Mode, with Stop-Start (NK+NA) Contact, Angular Action. Single Direction 211 Type Roller End Unit has been selected.*

Genel Şema / *General Scheme*

Kontak Bloklar / *Contact Blocks*

LK11K13

LK10K13

LK20K12

LK20K15

LK20K19

LK20K13

LK20K23

LK20K25

LK20K27

LK20K29

Gövdeler / *Bodies*

L1

L2

L3

L4

L5

L51

L52

L53

L61

L66

L1 *Serisi Sınır Şalterler*

- Klasik alüminyum gövde ve kapak
- PG13,5 kablo rekorlu
- 3 kablo girişi
- Gövde içi standart montaj ve ayar delikleri
- Geniş duyar blok seçenekleri ile tüm uygulamalara cevap verecek ürün çeşitliliği
- Değişebilen kontak bloklu

Teknik Bilgiler

Mekanik Ömür	:	10.000.000 Açma-kapama (50 dev/dk)
Elektriksel Ömür	:	1.000.000 Açma-kapama (20 dev/dk)
Çalışma Sıcaklığı	:	-5 / +40 °C
Koruma Sınıfı	:	IP65 (MIP111, MIM111 Hariç)
Çalışma Gerilimi (Ue)	:	240V AC
Çalışma Akımı (Ie)	:	3 A
Yalıtım Gerilimi (Ui)	:	500V
Darbe Dayanım Gerilimi (Uimp)	:	6 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 - 60 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V (1 dk için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1,5 mm²
Standart	:	"TS EN 60947-5-1'e göre pozitif açmalı güvenlik fonksiyonu TS EN 60947-5-1 UL508 VDE 0660"

Kontak Bloklar

L1 *Series Limit Switches*

- *Classic aluminium housing and cover*
- *PG13,5 cable entry*
- *3 cable entries*
- *Standard fitting and setting holes are internal*
- *Various product options with wide sensitive contact block alternatives for all kind of applications*
- *External connection holes*

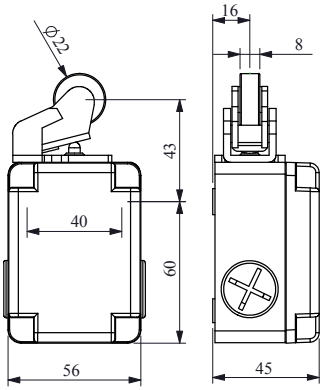
Technical Information

Mechanical Life	:	*10.000.000 operations min. (50 cyc/min)*
Electrical Life	:	*1.000.000 operations min. (20 cyc/min)*
Operating Temperature	:	*-5 / +40 °C*
Protection Degree	:	*IP65 (Except MIP111, MIM111)*
Operating Voltage (Ue)	:	*240V*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*500V*
Impact Resistance (Uimp)	:	*6 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 - 60 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1,5 mm²*
Standard	:	*"Positive break operation, safety function according to TS EN 60947-5-1 TS EN 60947-5-1 UL508 VDE 0660"*

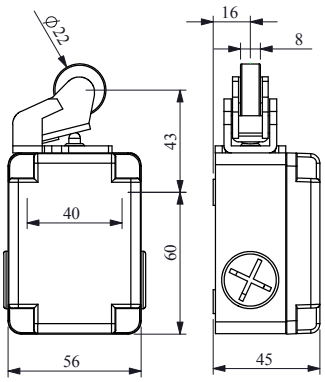
Contact Blocks

Sınır Şalterler
Limit Switches

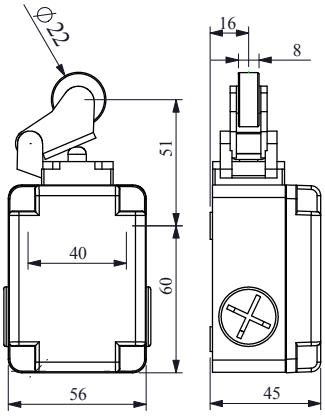
Gövde Malzemesi : Metal
Housing Material : Metal



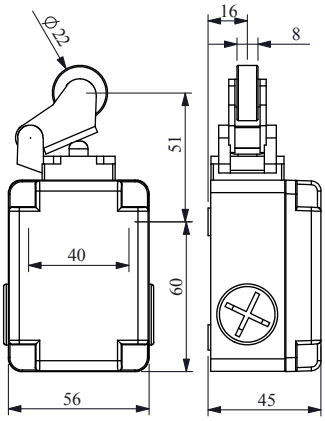
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MIP111	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L1K23MIP111	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MIP111	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MIP111	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MIP111	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L1K29MIP111	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MIM111	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L1K23MIM111	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MIM111	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MIM111	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MIM111	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L1K29MIM111	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MIP211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L1K23MIP211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MIP211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MIP211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MIP211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L1K29MIP211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

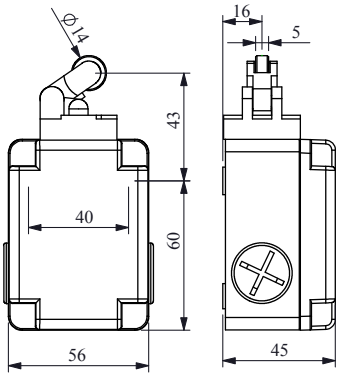


Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MIM211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L1K23MIM211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MIM211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MIM211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MIM211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L1K29MIM211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

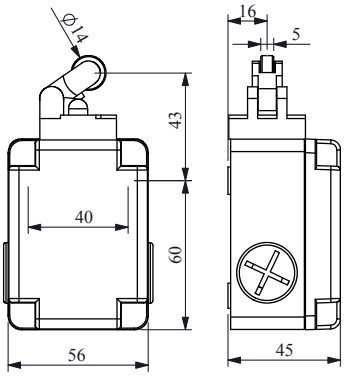
POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Sınır Şalterler
Limit Switches

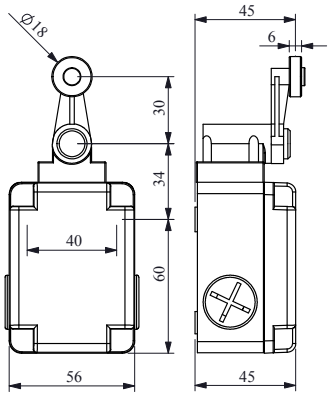
Gövde Malzemesi : Metal
Housing Material : Metal



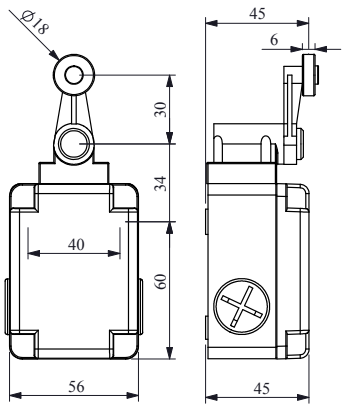
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MIP311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L1K23MIP311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MIP311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MIP311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MIP311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L1K29MIP311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MIM311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L1K23MIM311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MIM311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MIM311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MIM311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L1K29MIM311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MEP121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L1K23MEP121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MEP121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L1K29MEP121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

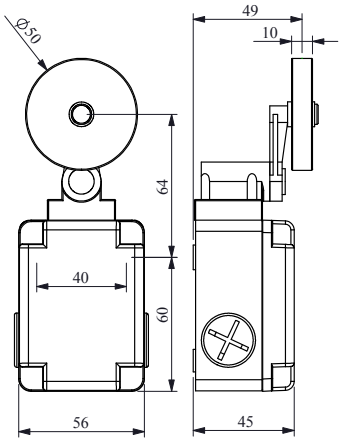


Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MEM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L1K23MEM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MEM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L1K29MEM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

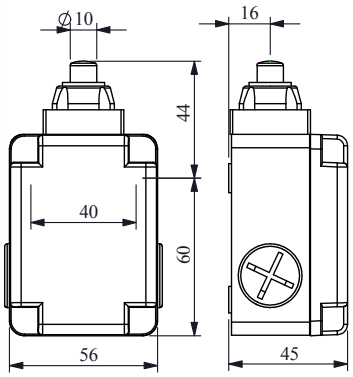
POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Sınır Şalterler
Limit Switches

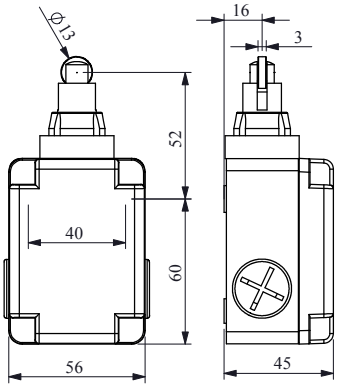
Gövde Malzemesi : Metal
Housing Material : Metal



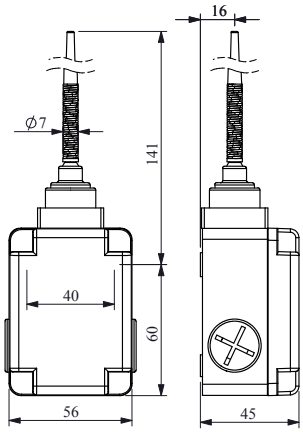
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MEL121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L1K23MEL121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MEL121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L1K29MEL121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13PUM211	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L1K23PUM211	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12PUM211	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L1K29PUM211	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13MUM331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L1K23MUM331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12MUM331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L1K29MUM331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

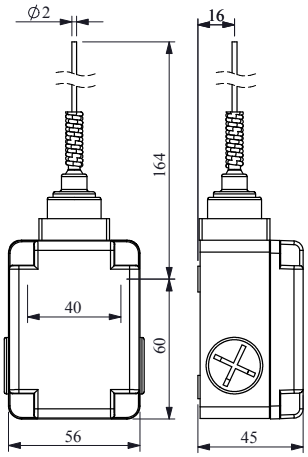


Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13SOP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L1K23SOP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12SOP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L1K29SOP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

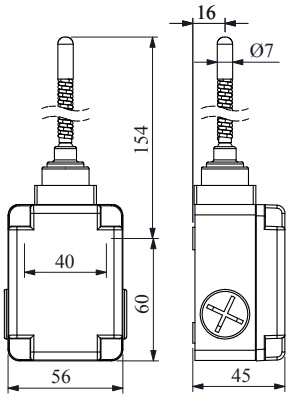
POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Sınır Şalterler
Limit Switches

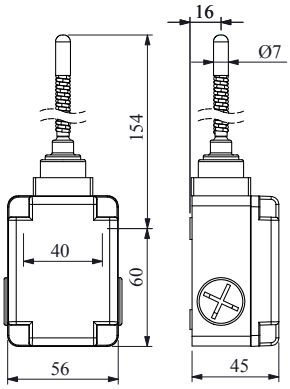
Gövde Malzemesi : Metal
Housing Material : Metal



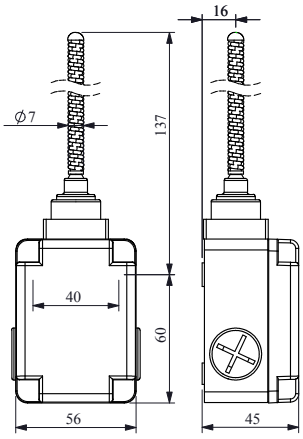
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13SOM101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L1K23SOM101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12SOM101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L1K29SOM101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13SOP102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L1K23SOP102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12SOP102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L1K29SOP102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13SOM102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L1K23SOM102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12SOM102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L1K29SOM102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

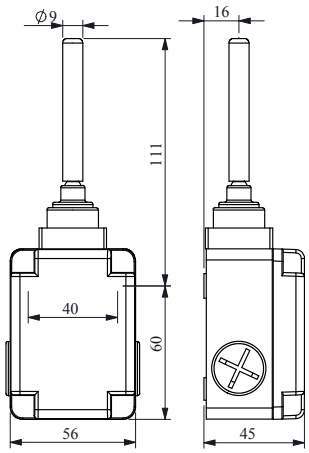


Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L1K13SOP103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L1K23SOP103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12SOP103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L1K29SOP103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Sınır Şalterler
Limit Switches

Gövde Malzemesi : Metal
Housing Material : Metal



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L1K13ROP101	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L1K23ROP101	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L1K25ROP101	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L1K27ROP101	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L1K12ROP101	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L1K29ROP101	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

L2 *Serisi Sınır Şalterler*

- Tırnaklı alüminyum gövde ve plastik kapak
- PG13,5 kablo rekorlu
- 3 kablo girişi
- Gövde dışı standart montaj ve ayar delikleri
- Geniş duyar blok seçenekleri ile tüm uygulamalara cevap verecek ürün çeşitliliği
- Değişebilen kontak bloklu

Teknik Bilgiler

Mekanik Ömür	:	10.000.000 Açma-kapama (50 dev/dk)
Elektriksel Ömür	:	1.000.000 Açma-kapama (20 dev/dk)
Çalışma Sıcaklığı	:	-5 / +40 °C
Koruma Sınıfı	:	IP65
Çalışma Gerilimi (Ue)	:	240V AC
Çalışma Akımı (Ie)	:	3 A
Yalıtım Gerilimi (Ui)	:	500V
Darbe Dayanım Gerilimi (Uimp)	:	6 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 - 60 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V (1 dk için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1,5 mm²
Standart	:	"TS EN 60947-5-1'e göre pozitif açmalı güvenlik fonksiyonu TS EN 60947-5-1 UL508 VDE 0660"

Kontak Bloklar

L2 *Series Limit Switches*

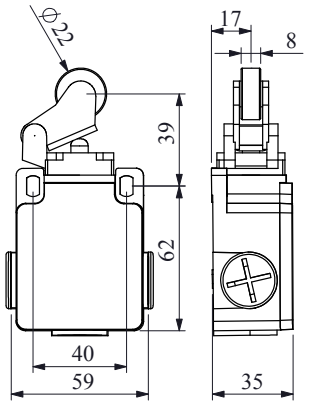
- *Hooked up aluminium body and plastic cover*
- *PG13,5 cable entry*
- *3 cable entries*
- *Standard fitting and setting holes are external*
- *Various product options with wide sensitive contact block alternatives for all kind of applications*
- *External connection holes*

Technical Information

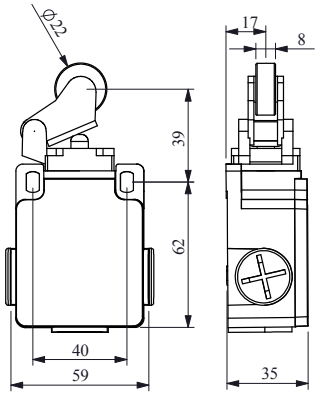
Mechanical Life	:	*10.000.000 operations min. (50 cyc/min)*
Electrical Life	:	*1.000.000 operations min. (20 cyc/min)*
Operating Temperature	:	*-5 / +40 °C*
Protection Degree	:	*IP65*
Operating Voltage (Ue)	:	*240V*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*500V*
Impact Resistance (Uimp)	:	*6 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 - 60 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1,5 mm²*
Standard	:	*"Positive break operation, safety function according to TS EN 60947-5-1 TS EN 60947-5-1 UL508 VDE 0660"*

Contact Blocks

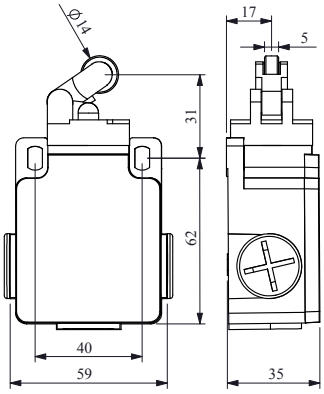
Gövde Malzemesi : Metal
Housing Material : Metal



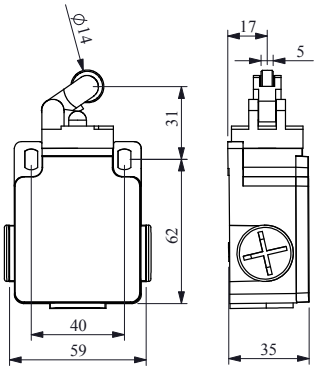
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MIP211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23MIP211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MIP211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MIP211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MIP211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L2K29MIP211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MIM211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23MIM211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MIM211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MIM211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MIM211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L2K29MIM211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



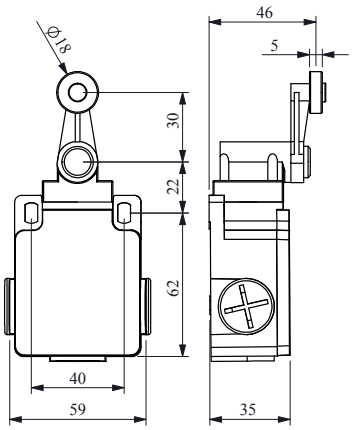
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MIP311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23MIP311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MIP311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MIP311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MIP311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L2K29MIP311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



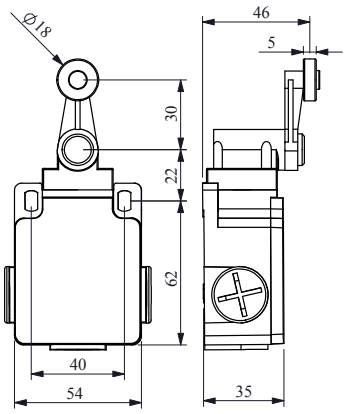
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MIM311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23MIM311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MIM311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MIM311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MIM311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L2K29MIM311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

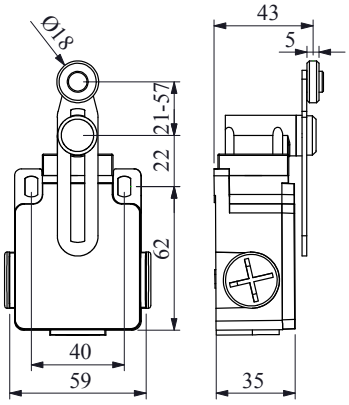
Gövde Malzemesi : Metal
Housing Material : Metal



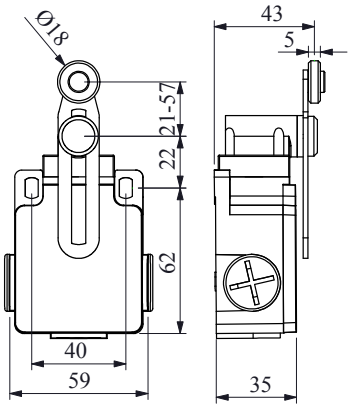
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MEP121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23MEP121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MEP121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29MEP121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MEM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23MEM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MEM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29MEM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MEP122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23MEP122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MEP122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29MEP122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

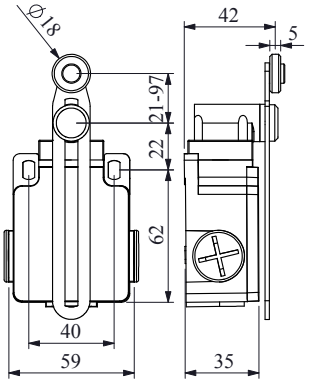


Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MEM122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23MEM122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MEM122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29MEM122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

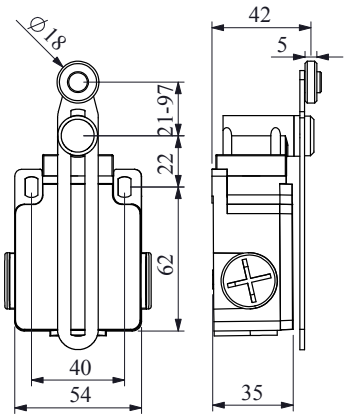
POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Sınır Şalterler
Limit Switches

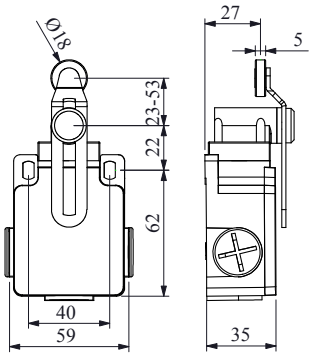
Gövde Malzemesi : Metal
Housing Material : Metal



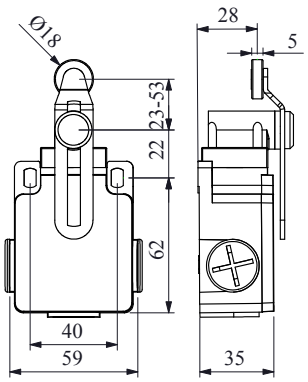
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MEP123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23MEP123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MEP123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29MEP123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MEM123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23MEM123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MEM123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29MEM123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



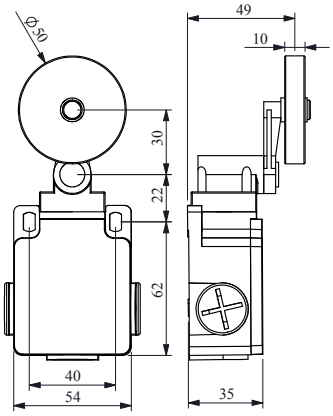
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MEP124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23MEP124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MEP124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29MEP124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



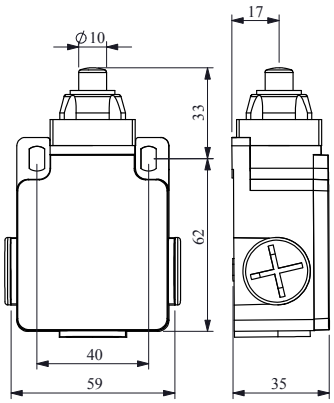
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MEM124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23MEM124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MEM124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29MEM124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

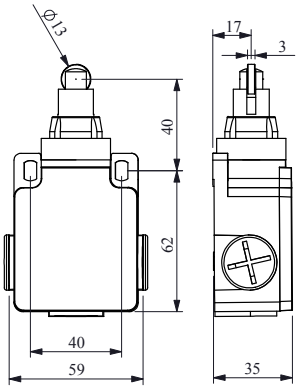
Gövde Malzemesi : Metal
Housing Material : Metal



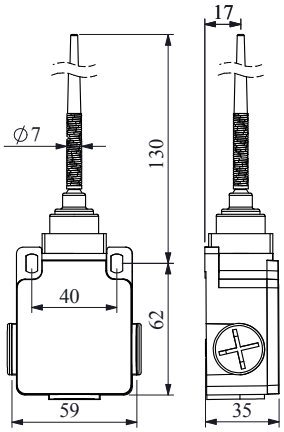
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MEL121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L2K23MEL121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MEL121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29MEL121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13PUM211	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23PUM211	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12PUM211	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L2K29PUM211	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



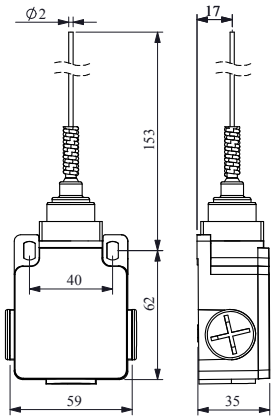
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13MUM331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23MUM331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12MUM331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L2K29MUM331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



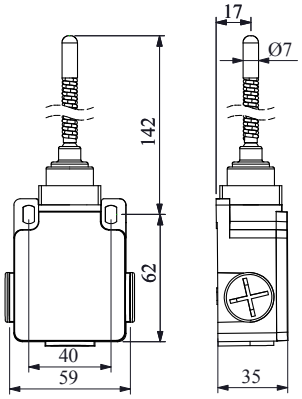
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13SOP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23SOP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12SOP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29SOP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

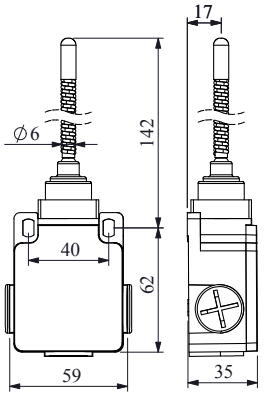
Gövde Malzemesi : Metal
Housing Material : Metal



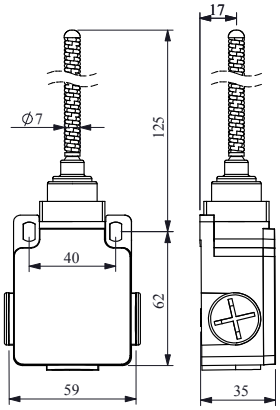
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L2K13SOM101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23SOM101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12SOM101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29SOM101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L2K13SOP102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23SOP102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12SOP102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29SOP102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



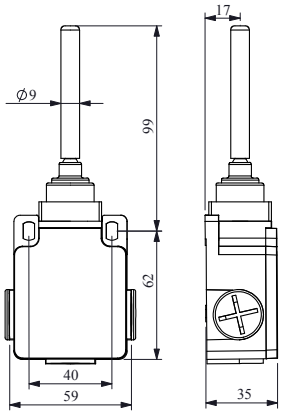
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L2K13SOM102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L2K23SOM102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12SOM102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29SOM102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

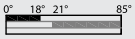
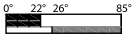
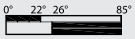
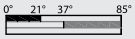


Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L2K13SOP103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23SOP103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12SOP103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L2K29SOP103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Gövde Malzemesi : Metal
Housing Material : Metal



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L2K13ROP101		Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L2K23ROP101		Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L2K25ROP101		Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L2K27ROP101		Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L2K12ROP101		Ani / *Snap* - 2NK / *2NC*	
L2K29ROP101		Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

L3 *Serisi Sınır Şalterler*

- Prizmatik plastik gövde ve kapak
- Çift yalıtım
- PG13,5 kablo rakorlu
- Değişebilen kontak bloklu
- 1 kablo girişi
- Gövde dışı montaj ve ayar delikleri dışarıda
- Geniş duyar blok seçenekleri ile tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	:	10.000.000 Açma-kapama (50 dev/dk)
Elektriksel Ömür	:	1.000.000 Açma-kapama (20 dev/dk)
Çalışma Sıcaklığı	:	-5 / +40 °C
Koruma Sınıfı	:	IP65
Çalışma Gerilimi (Ue)	:	240V AC
Çalışma Akımı (Ie)	:	3 A
Yalıtım Gerilimi (Ui)	:	500V
Darbe Dayanım Gerilimi (Uimp)	:	6 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 - 60 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V (1 dk için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1,5 mm²
Standart	:	"TS EN 60947-5-1'e göre pozitif açmalı güvenlik fonksiyonu TS EN 60947-5-1 UL508 VDE 0660"

Kontak Bloklar

L3 *Series Limit Switches*

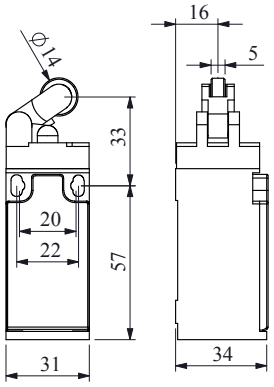
- *Prismatic plastic housing and cover*
- *Double insulated*
- *PG13,5 cable entry*
- *Changeable contact blocks*
- *1 cable entry*
- *Standard fitting and setting holes are external*
- *Various product options with wide sensitive contact block alternatives for all kind of applications*

Technical Information

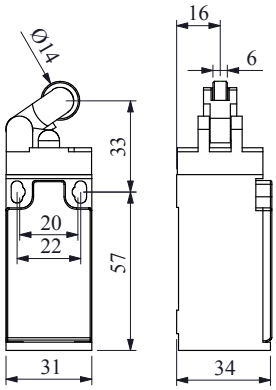
Mechanical Life	:	*10.000.000 operations min. (50 cyc/min)*
Electrical Life	:	*1.000.000 operations min. (20 cyc/min)*
Operating Temperature	:	*-5 / +40 °C*
Protection Degree	:	*IP65*
Operating Voltage (Ue)	:	*240V*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*500V*
Impact Resistance (Uimp)	:	*6 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 - 60 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1,5 mm²*
Standard	:	*"Positive break operation, safety function according to TS EN 60947-5-1 TS EN 60947-5-1 UL508 VDE 0660"*

Contact Blocks

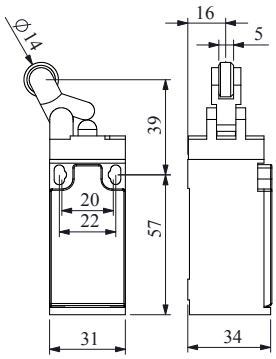
Gövde Malzemesi : Plastik
Housing Material : Plastic



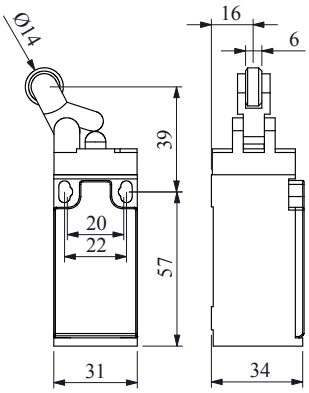
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13MIP311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L3K23MIP311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MIP311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MIP311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MIP311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L3K29MIP311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13MIM311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L3K23MIM311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MIM311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MIM311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MIM311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L3K29MIM311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



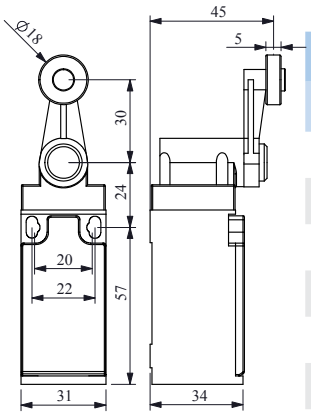
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13MIP411	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L3K23MIP411	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MIP411	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MIP411	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MIP411	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L3K29MIP411	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



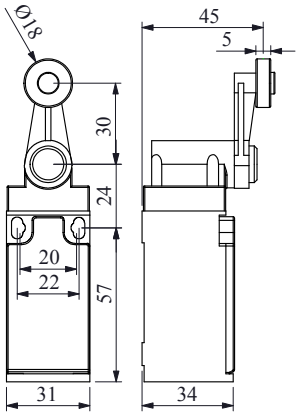
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13MIM411	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L3K23MIM411	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MIM411	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MIM411	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MIM411	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L3K29MIM411	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

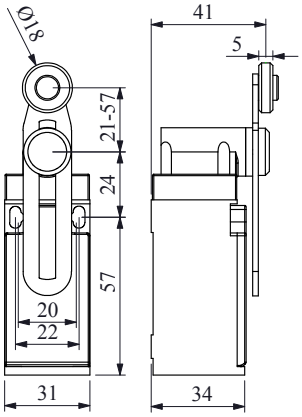
Gövde Malzemesi : Plastik
Housing Material : Plastic



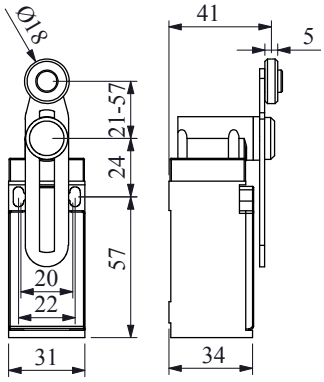
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L3K13MEP121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik / *Plastic*
L3K23MEP121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEP121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEP121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L3K13MEM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal / *Metal*
L3K23MEM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



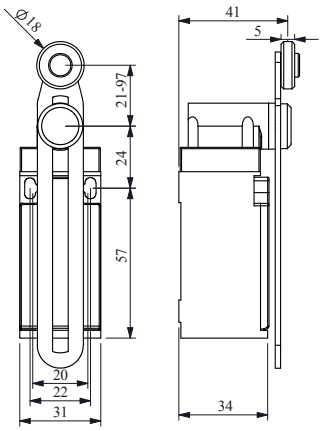
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L3K13MEP122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik / *Plastic*
L3K23MEP122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEP122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEP122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



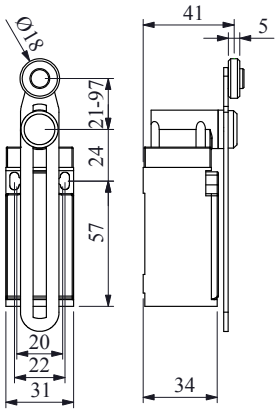
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L3K13MEM122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal / *Metal*
L3K23MEM122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEM122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEM122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

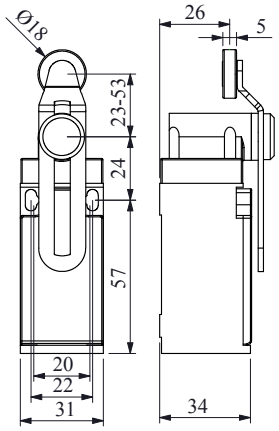
Gövde Malzemesi : Plastik
Housing Material : Plastic



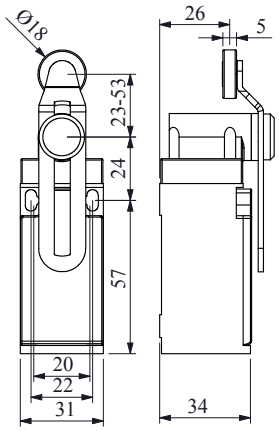
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L3K13MEP123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L3K23MEP123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEP123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEP123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L3K13MEM123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L3K23MEM123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEM123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEM123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



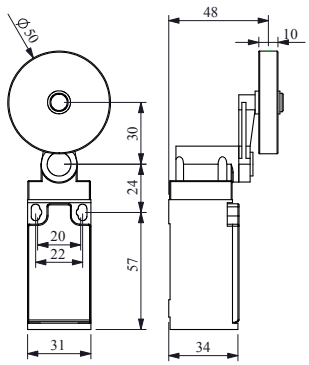
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L3K13MEP124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L3K23MEP124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEP124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEP124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



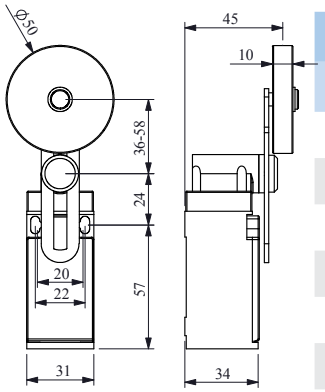
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L3K13MEM124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L3K23MEM124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEM124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEM124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

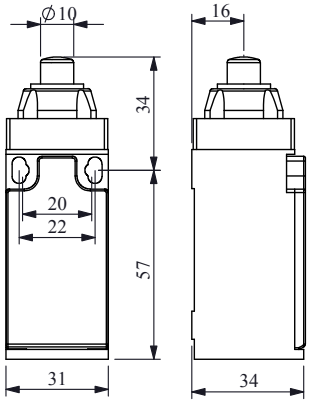
Gövde Malzemesi : Plastik
Housing Material : Plastic



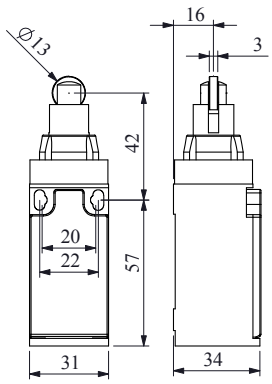
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13MEL121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L3K23MEL121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEL121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEL121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13MEL122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L3K23MEL122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MEL122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29MEL122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

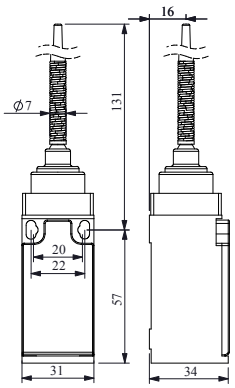


Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13PUM211	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L3K23PUM211	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12PUM211	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L3K29PUM211	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

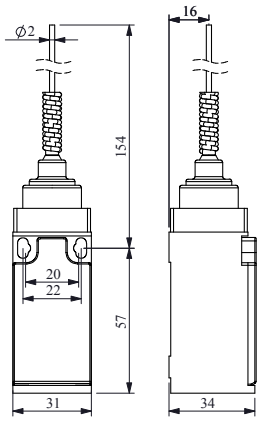


Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13MUM331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L3K23MUM331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12MUM331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L3K29MUM331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

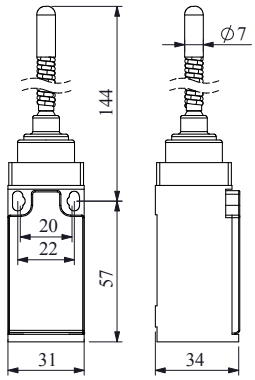
POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION



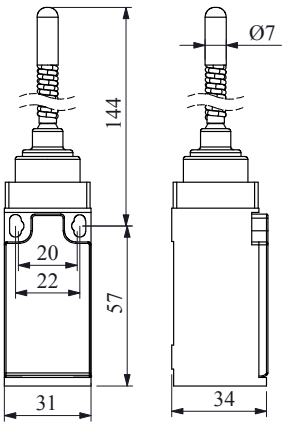
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13SOP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L3K23SOP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12SOP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29SOP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13SOM101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L3K23SOM101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12SOM101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29SOM101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



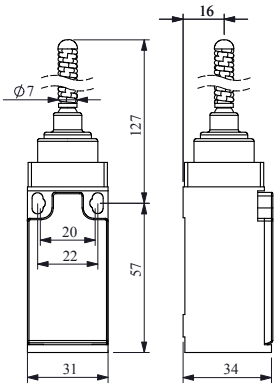
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13SOP102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L3K23SOP102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12SOP102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29SOP102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



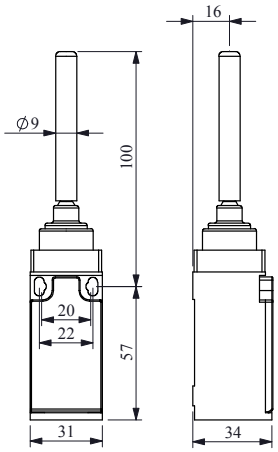
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13SOM102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L3K23SOM102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12SOM102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29SOM102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

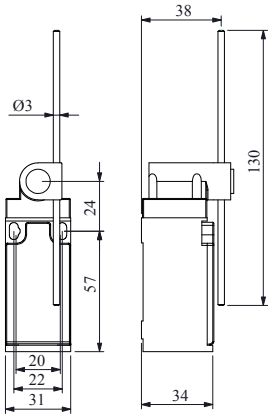
Gövde Malzemesi : Plastik
Housing Material : Plastic



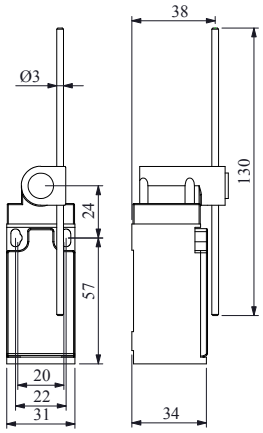
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13SOP103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L3K23SOP103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12SOP103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29SOP103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13ROP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L3K23ROP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12ROP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29ROP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13REF121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Fiber *Fiber*
L3K23REF121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K23REF121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27REF121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12REF121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29REF121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L3K13REM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L3K23REM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L3K25REM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L3K27REM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L3K12REM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L3K29REM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

L5 *Serisi Sınır Şalterler*

- Prizmatik plastik gövde ve kapaklı
- Çift yalıtım
- PG13,5 veya M20x1,5 kablo rakorlu
- Değişebilen kontak bloklu
- 1 kablo girişi
- Bağlantı delikleri dışarıda
- Geniş duyar blok seçenekleri ile tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	:	10.000.000 Açma-kapama (50 dev/dk)
Elektriksel Ömür	:	1.000.000 Açma-kapama (20 dev/dk)
Çalışma Sıcaklığı	:	-5 / +40 °C
Koruma Sınıfı	:	IP65
Çalışma Gerilimi (Ue)	:	240V AC
Çalışma Akımı (Ie)	:	3 A
Yalıtım Gerilimi (Ui)	:	300V
Darbe Dayanım Gerilimi (Uimp)	:	2,5 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 - 60 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V (1 dk için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1,5 mm²
Standart	:	"TS EN 60947-5-1'e göre pozitif açmalı güvenlik fonksiyonu TS EN 60947-5-1 UL508 VDE 0660"

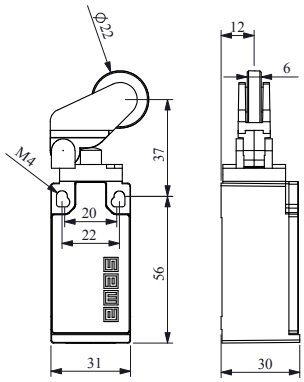
L5 *Series Limit Switches*

- *Prismatic plastic housing and cover*
- *Double insulated*
- *PG13,5 or M20x1,5 cable entry*
- *Changeable contact blocks*
- *1 cable entry*
- *External connection holes*
- *Various product options with wide sensitive contact block alternatives for all kind of applications*

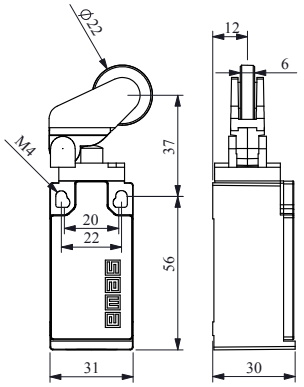
Technical Information

Mechanical Life	:	*10.000.000 operations min. (50 cyc/min)*
Electrical Life	:	*1.000.000 operations min. (20 cyc/min)*
Operating Temperature	:	*-5 / +40 °C*
Protection Degree	:	*IP65*
Operating Voltage (Ue)	:	*240V*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*300V*
Impact Resistance (Uimp)	:	*2,5 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 - 60 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1,5 mm²*
Standard	:	*"Positive break operation, safety function according to TS EN 60947-5-1 TS EN 60947-5-1 UL508 VDE 0660"*

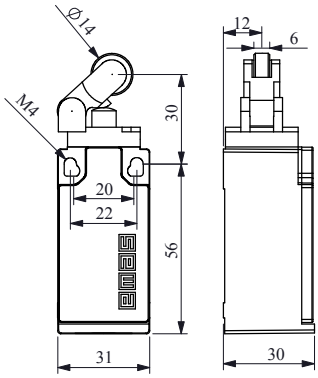
Gövde Malzemesi : Plastik
Housing Material : Plastic



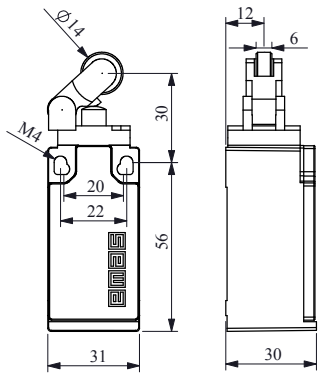
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13MIP211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23MIP211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MIP211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MIP211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MIP211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29MIP211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13MIM211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23MIM211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MIM211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MIM211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MIM211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29MIM211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



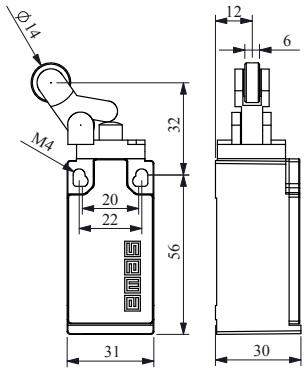
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13MIP311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23MIP311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MIP311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MIP311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MIP311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29MIP311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



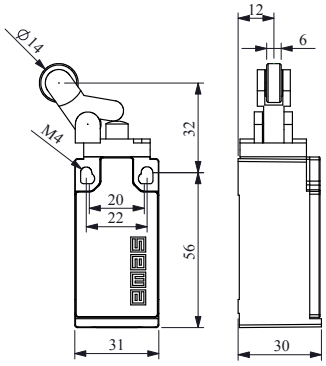
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13MIM311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23MIM311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MIM311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MIM311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MIM311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29MIM311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

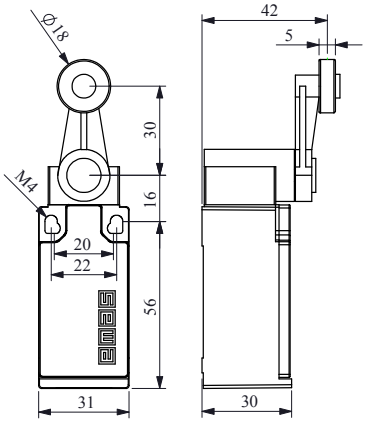
Gövde Malzemesi : Plastik
Housing Material : Plastic



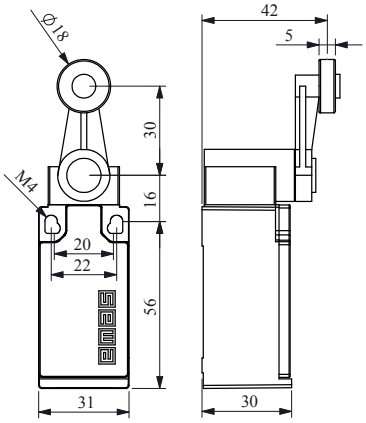
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13MIP411	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23MIP411	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MIP411	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MIP411	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MIP411	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29MIP411	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13MIM411	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23MIM411	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MIM411	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MIM411	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MIM411	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29MIM411	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



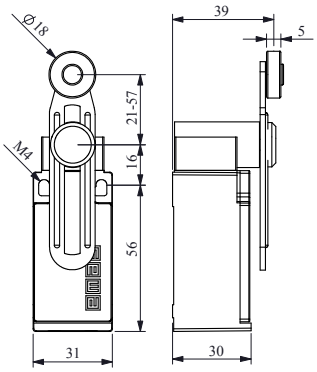
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13MEP121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23MEP121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEP121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEP121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



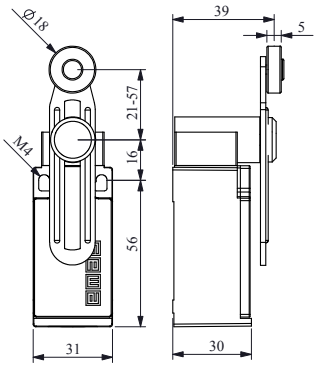
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13MEM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23MEM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

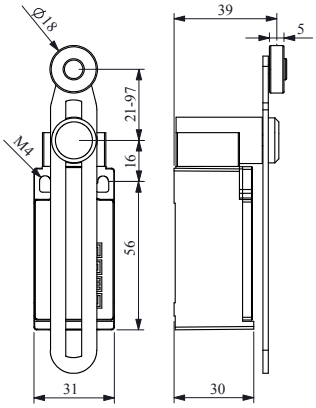
Gövde Malzemesi : Plastik
Housing Material : Plastic



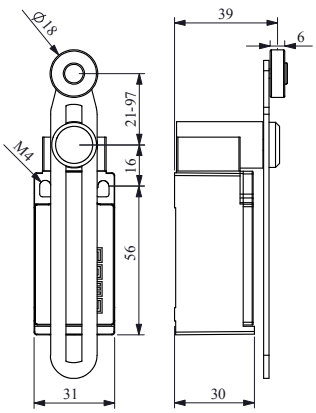
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MEP122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik / *Plastic*
L5K23MEP122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEP122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEP122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MEM122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal / *Metal*
L5K23MEM122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEM122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEM122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



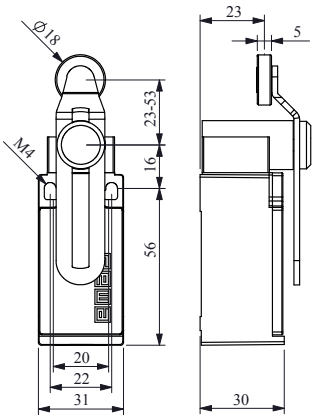
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MEP123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik / *Plastic*
L5K23MEP123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEP123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEP123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



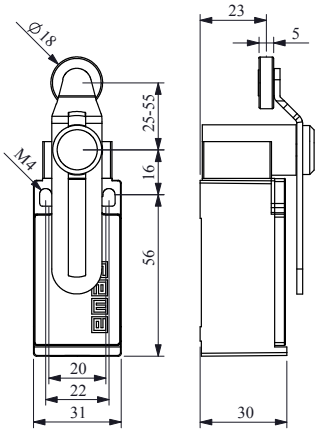
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MEM123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal / *Metal*
L5K23MEM123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEM123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEM123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

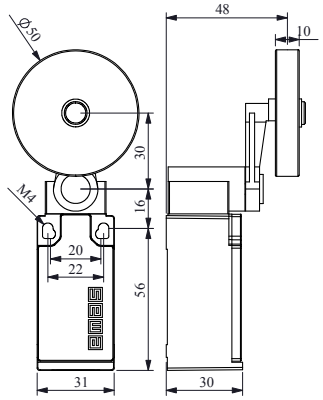
Gövde Malzemesi : Plastik
Housing Material : Plastic



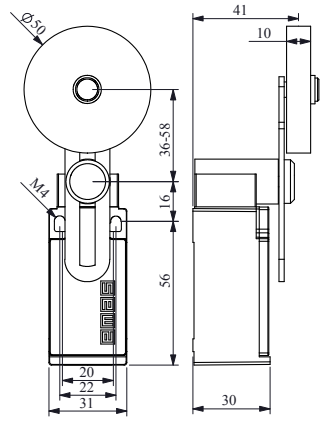
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13MEP124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23MEP124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEP124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEP124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13MEM124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23MEM124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEM124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEM124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



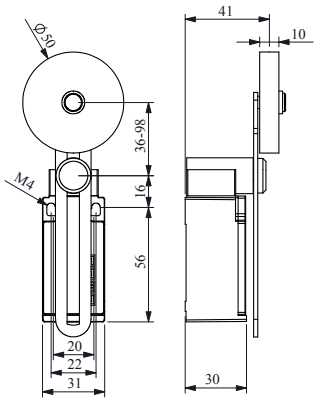
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13MEL121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L5K23MEL121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEL121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEL121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



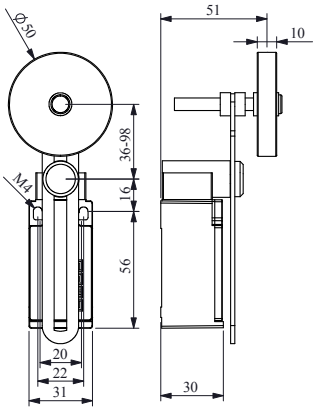
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13MEL122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L5K23MEL122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEL122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEL122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

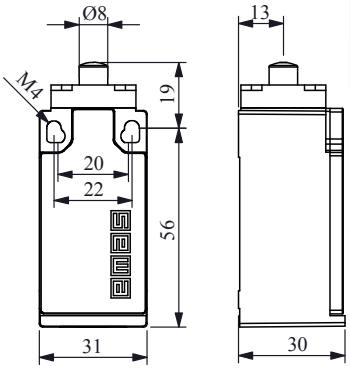
Gövde Malzemesi : Plastik
Housing Material : Plastic



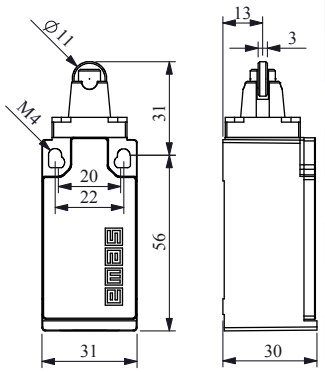
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MEL123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L5K23MEL123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEL123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEL123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEL123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEL123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MEL123A	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L5K23MEL123A	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MEL123A	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MEL123A	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MEL123A	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29MEL123A	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



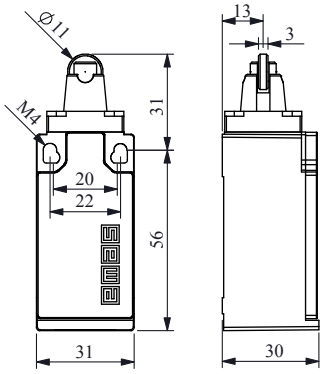
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13PUM211	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23PUM211	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12PUM211	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29PUM211	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



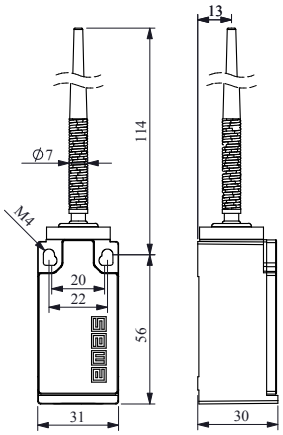
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MUP331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23MUP331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MUP331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MUP331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MUP331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29MUP331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

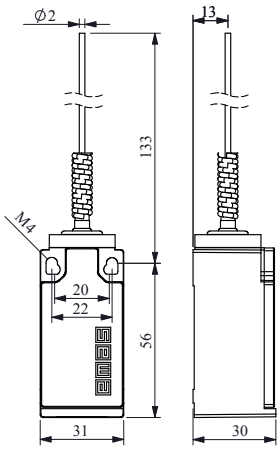
Gövde Malzemesi : Plastik
Housing Material : Plastic



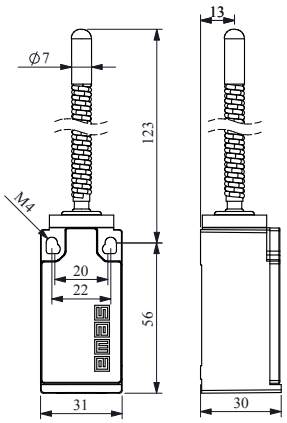
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13MUM331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23MUM331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12MUM331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29MUM331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13SOP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K13SOP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12SOP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29SOP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



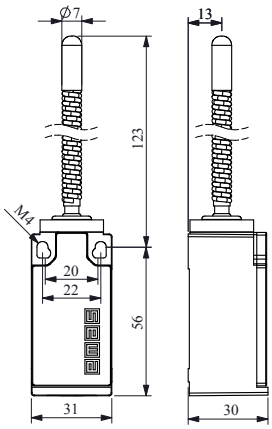
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13SOM101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23SOM101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12SOM101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29SOM101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



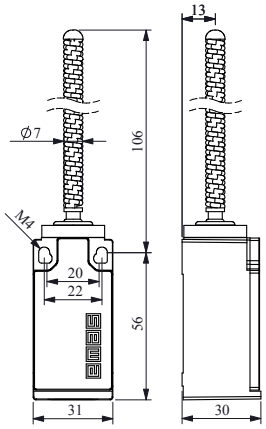
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13SOP102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23SOP102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12SOP102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29SOP102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

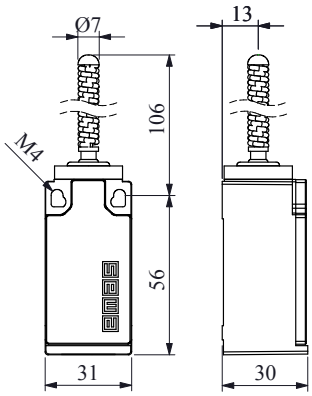
Gövde Malzemesi : Plastik
Housing Material : Plastic



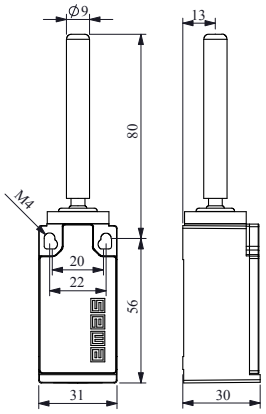
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13SOM102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23SOM102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12SOM102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29SOM102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13SOP103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23SOP103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12SOP103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29SOP103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



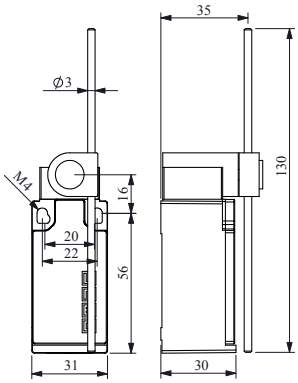
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13SOM103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23SOM103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25SOM103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27SOM103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12SOM103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29SOM103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



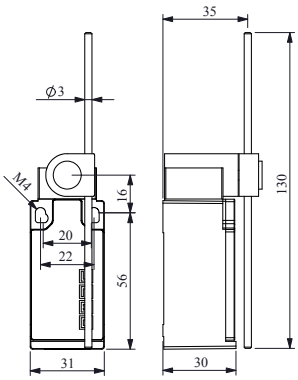
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13ROP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23ROP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12ROP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29ROP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

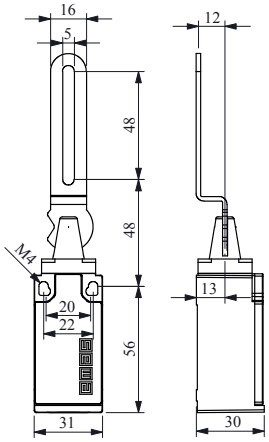
Gövde Malzemesi : Plastik
Housing Material : Plastic



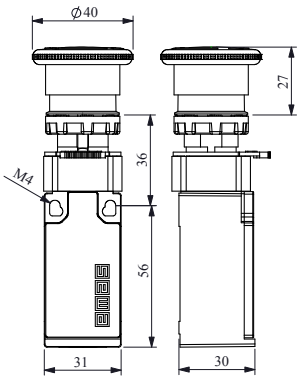
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13REF121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Fiber *Fiber*
L5K23REF121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25REF121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27REF121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12REF121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29REF121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13REM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23REM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25REM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27REM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12REM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L5K29REM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



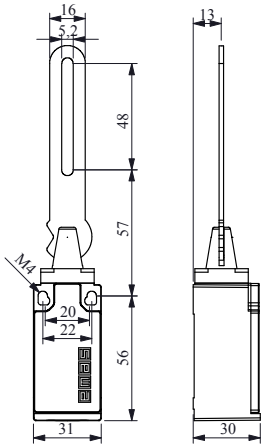
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13LEM411	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27LEM411	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12LEM411	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L5K29LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



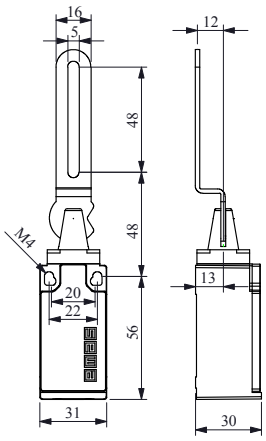
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13CPDE	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23CPDE	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25CPDE	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27CPDE	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12CPDE	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L5K29CPDE	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

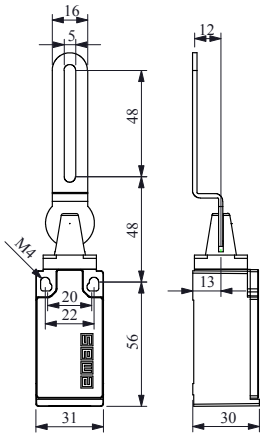
Gövde Malzemesi : Plastik
Housing Material : Plastic



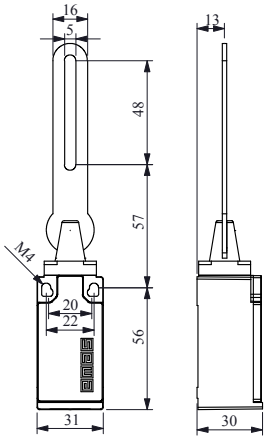
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13LEM412	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27LEM412	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12LEM412	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L5K29LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13LEM511	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27LEM511	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12LEM511	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L5K29LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



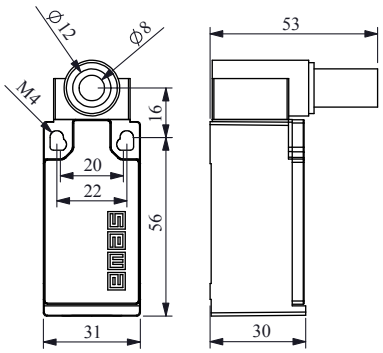
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13LEM621	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27LEM621	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12LEM621	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L5K29LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



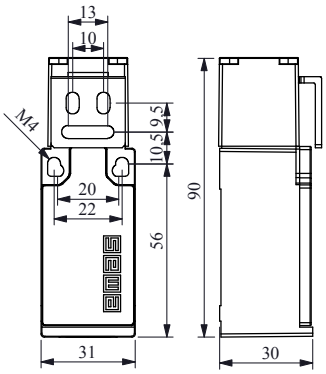
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L5K13LEM622	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27LEM622	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12LEM622	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L5K29LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

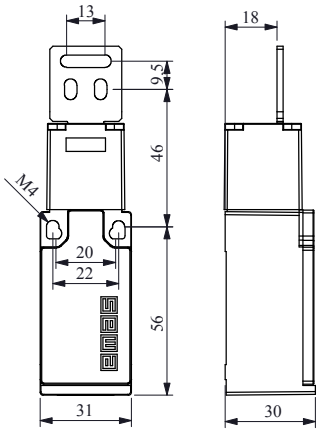
Gövde Malzemesi : Plastik
Housing Material : Plastic



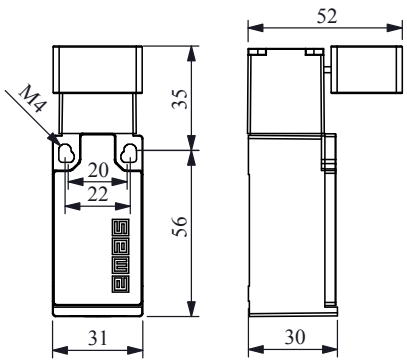
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13BEM621	0 ±32° ±180	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23BEM621	0 ±45° ±42° ±45° ±180	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25BEM621	0 ±45° ±36° ±45° ±180	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27BEM621	0 ±45° ±36° ±45° ±180	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12BEM621	0 ±32° ±180	Ani / *Snap* - 2NK / *2NC*	
L5K29BEM621	0 ±60° ±39° ±60° ±180	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13LUM321	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27LUM321	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12LUM321	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L5K29LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



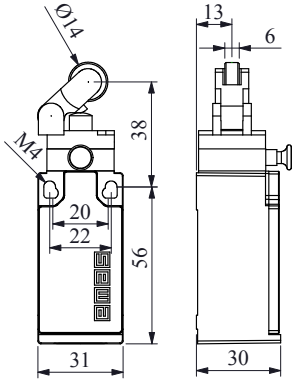
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13LUM322	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27LUM322	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12LUM322	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L5K29LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



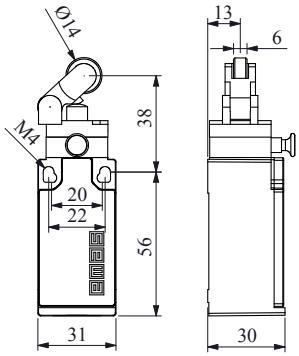
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13LUM323	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27LUM323	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12LUM323	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L5K29LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

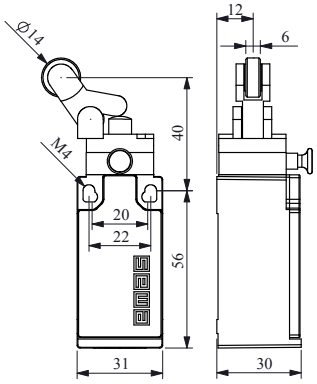
Gövde Malzemesi : Plastik
Housing Material : Plastic



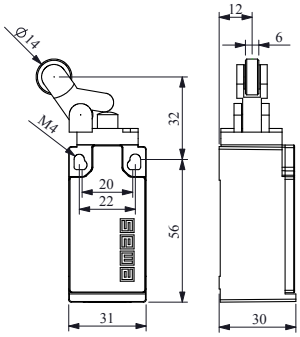
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MIP311R	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23MIP311R	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K12MIP311R	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	



Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MIM311R	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23MIM311R	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K12MIM311R	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	



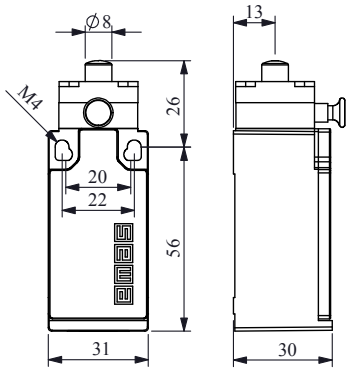
Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MIP411R	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L5K23MIP411R	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K12MIP411R	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	

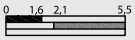
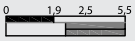
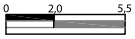


Ürün Kodu / *Product Code*	Akış Diagramı / *Flow Chart*	Kontak Blok / *Contact Block*	Uç Eleman Malzemesi / *Actuator End Unit Material*
L5K13MIM411	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23MIM411	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K12MIM411	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Gövde Malzemesi : Plastik
Housing Material : Plastic



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L5K13PUM211R		Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L5K23PUM211R		Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L5K25PUM211R		Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L5K27PUM211R		Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L5K12PUM211R		Ani / *Snap* - 2NK / *2NC*	
L5K29PUM211R		Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

L51 *Serisi Sınır Şalterler*

- Prizmatik metal gövde ve kapaklı
- PG13,5 veya M20x1,5 kablo rakorlu
- Değişebilen kontak bloklu
- 1 kablo girişi
- Bağlantı delikleri dışarıda
- Geniş duyar blok seçenekleri ile tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	:	10.000.000 Açma-kapama (50 dev/dk)
Elektriksel Ömür	:	1.000.000 Açma-kapama (20 dev/dk)
Çalışma Sıcaklığı	:	-5 / +40 °C
Koruma Sınıfı	:	IP65
Çalışma Gerilimi (Ue)	:	240V AC
Çalışma Akımı (Ie)	:	3 A
Yalıtım Gerilimi (Ui)	:	500V
Darbe Dayanım Gerilimi (Uimp)	:	6 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 - 60 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V (1 dk için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1,5 mm²
Standart	:	"TS EN 60947-5-1'e göre pozitif açmalı güvenlik fonksiyonu TS EN 60947-5-1 UL508 VDE 0660"

Kontak Bloklar

L51 *Series Limit Switches*

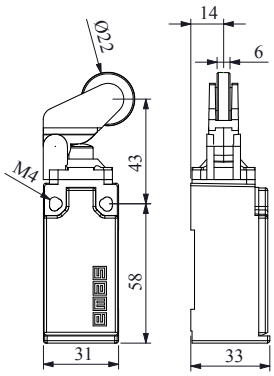
- *Prismatic metallic housing and cover*
- *PG13,5 or M20x1,5 cable entry*
- *Changeable contact blocks*
- *1 cable entry*
- *External connection holes*
- *Various product options with wide sensitive contact block alternatives for all kind of applications*

Technical Information

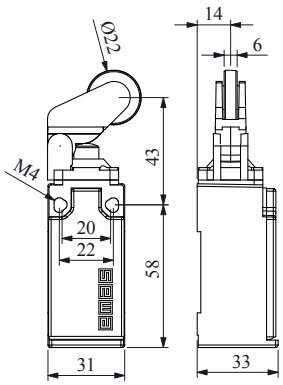
Mechanical Life	:	*10.000.000 operations min. (50 cyc/min)*
Electrical Life	:	*1.000.000 operations min. (20 cyc/min)*
Operating Temperature	:	*-5 / +40 °C*
Protection Degree	:	*IP65*
Operating Voltage (Ue)	:	*240V*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*500V*
Impact Resistance (Uimp)	:	*6 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 - 60 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1,5 mm²*
Standard	:	*"Positive break operation, safety function according to TS EN 60947-5-1 TS EN 60947-5-1 UL508 VDE 0660"*

Contact Blocks

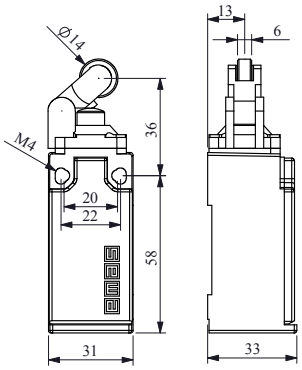
Gövde Malzemesi : Metal
Housing Material : Metal



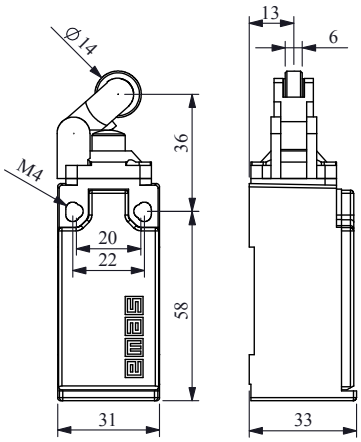
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13MİP211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23MİP211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MİP211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MİP211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MİP211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29MİP211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13MİM211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23MİM211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MİM211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MİM211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MİM211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29MİM211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



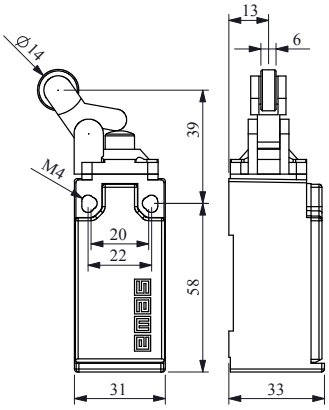
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13MİP311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23MİP311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MİP311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MİP311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MİP311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29MİP311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



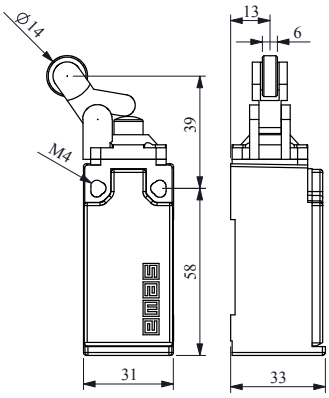
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13MİM311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23MİM311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MİM311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MİM311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MİM311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29MİM311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

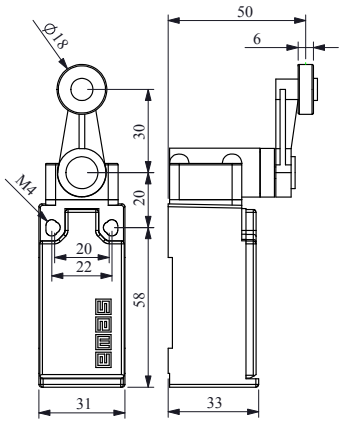
Gövde Malzemesi : Metal
Housing Material : Metal



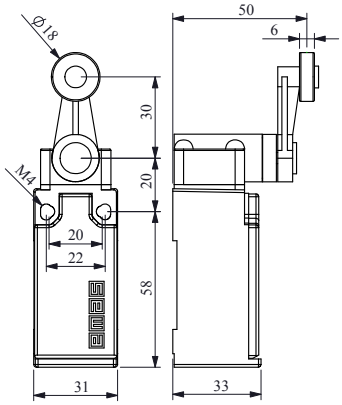
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MİP411	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23MİP411	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MİP411	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MİP411	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MİP411	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29MİP411	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MİM411	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23MİM411	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MİM411	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MİM411	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MİM411	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29MİM411	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



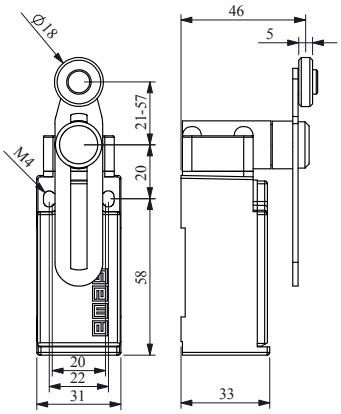
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEP121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23MEP121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEP121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEP121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



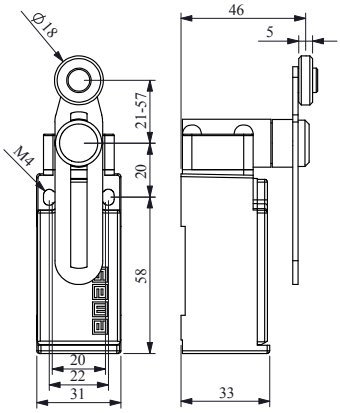
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23MEM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

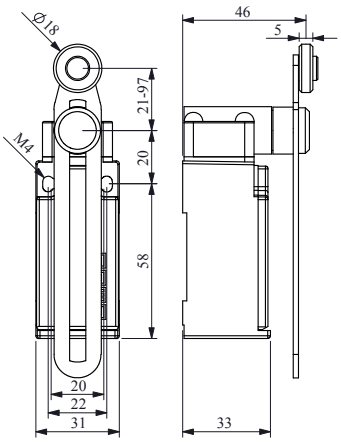
Gövde Malzemesi : Metal
Housing Material : Metal



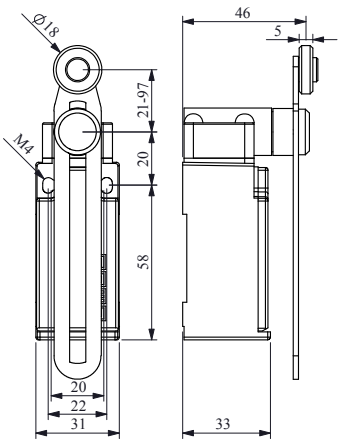
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEP122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23MEP122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEP122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEP122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEM122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23MEM122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEM122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEM122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



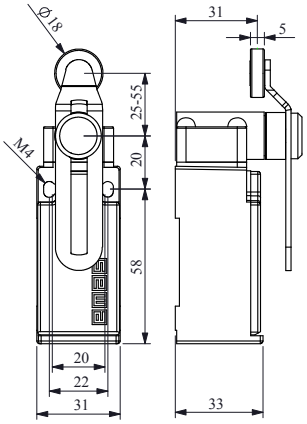
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEP123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23MEP123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEP123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEP123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



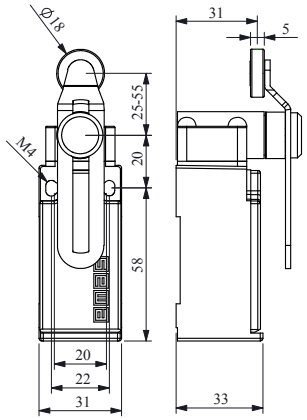
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEM123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23MEM123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEM123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEM123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

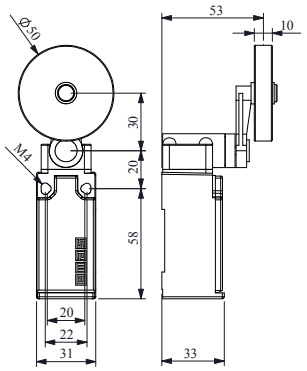
Gövde Malzemesi : Metal
Housing Material : Metal



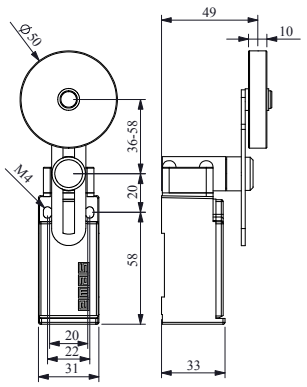
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEP124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23MEP124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEP124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEP124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEM124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23MEM124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEM124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEM124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



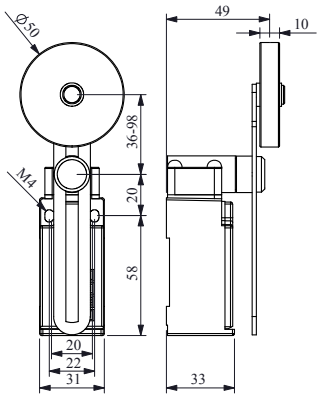
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEL121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L51K23MEL121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEL121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEL121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



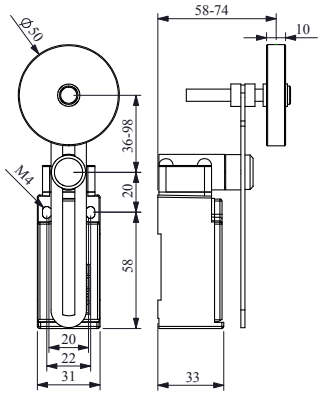
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEL122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L51K23MEL122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEL122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEL122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

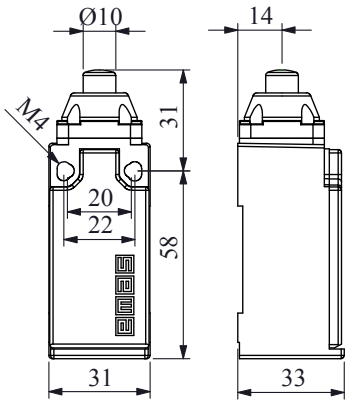
Gövde Malzemesi : Metal
Housing Material : Metal



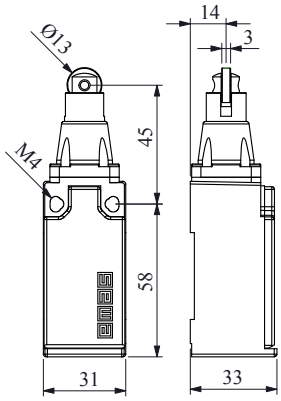
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEL123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L51K23MEL123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEL123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEL123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEL123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEL123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Dia-gramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MEL123A	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L51K23MEL123A	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MEL123A	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MEL123A	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MEL123A	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29MEL123A	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



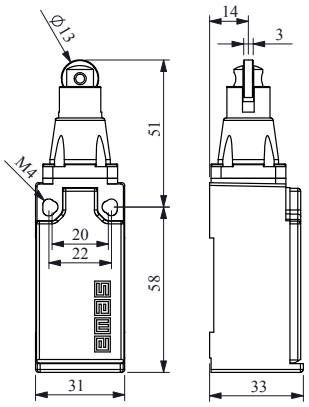
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13PUM211	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23PUM211	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12PUM211	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29PUM211	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



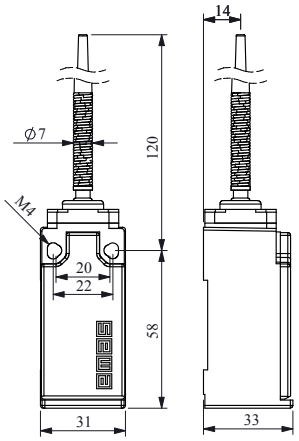
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13MUP331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23MUP331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MUP331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MUP331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MUP331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29MUP331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

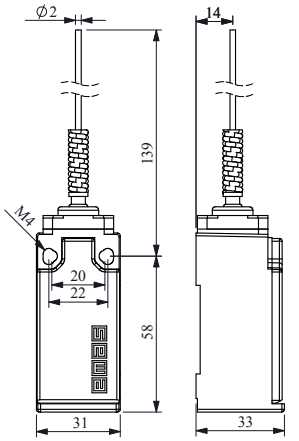
Gövde Malzemesi : Metal
Housing Material : Metal



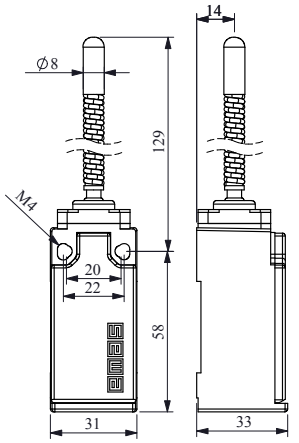
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13MUM331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23MUM331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12MUM331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29MUM331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13SOP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23SOP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12SOP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29SOP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



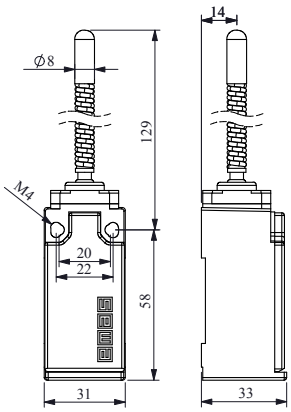
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13SOM101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23SOM101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12SOM101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29SOM101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



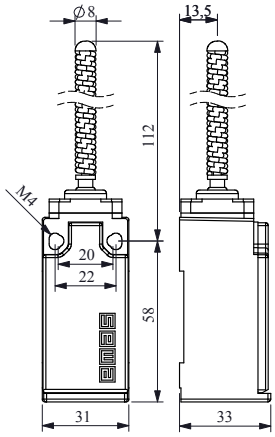
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13SOP102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23SOP102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12SOP102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29SOP102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

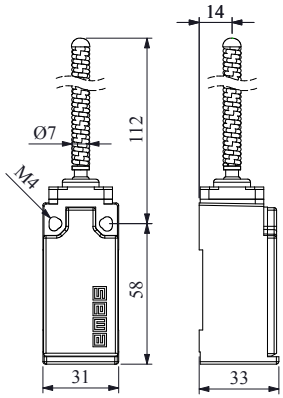
Gövde Malzemesi : Metal
Housing Material : Metal



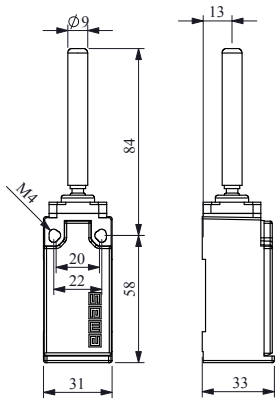
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13SOM102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23SOM102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12SOM102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29SOM102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13SOP103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23SOP103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12SOP103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29SOP103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



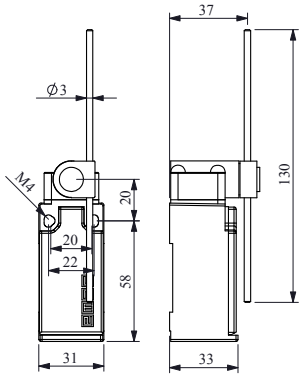
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13SOM103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23SOM103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25SOM103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27SOM103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12SOM103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29SOM103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



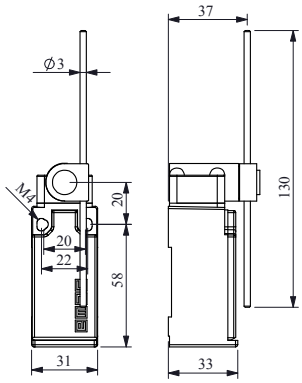
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13ROP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23ROP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12ROP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29ROP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

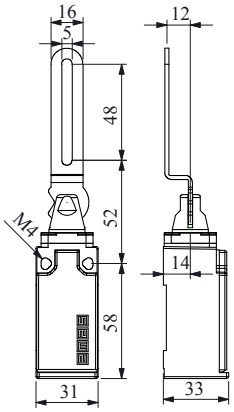
Gövde Malzemesi : Metal
Housing Material : Metal



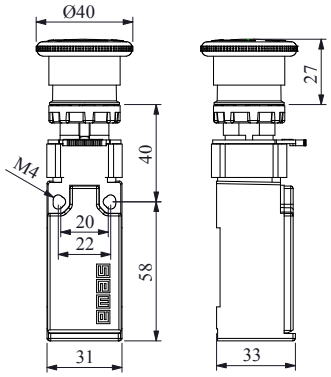
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13REF121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Fiber *Fiber*
L51K23REF121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25REF121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27REF121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12REF121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29REF121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13REM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23REM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25REM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27REM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12REM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L51K29REM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



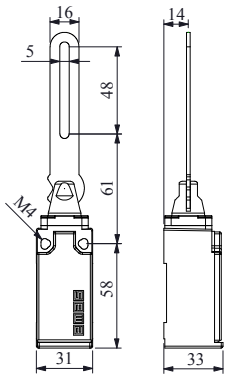
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13LEM411	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27LEM411	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12LEM411	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L51K29LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



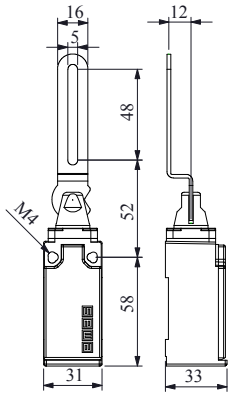
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13CPDE	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L51K23CPDE	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25CPDE	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27CPDE	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12CPDE	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29CPDE	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

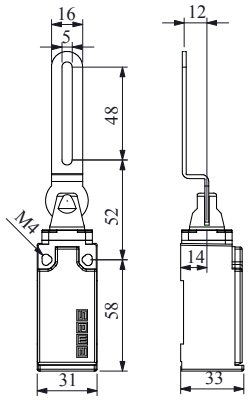
Gövde Malzemesi : Metal
Housing Material : Metal



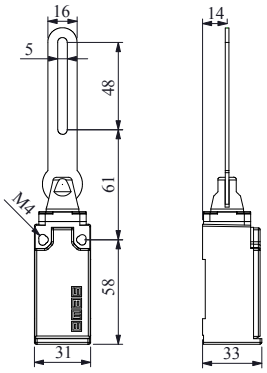
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13LEM412	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27LEM412	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12LEM412	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L51K29LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13LEM511	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27LEM511	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12LEM511	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L51K29LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



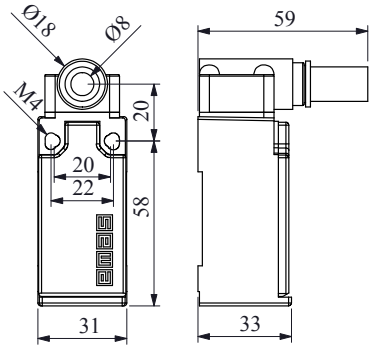
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13LEM621	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27LEM621	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12LEM621	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L51K29LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



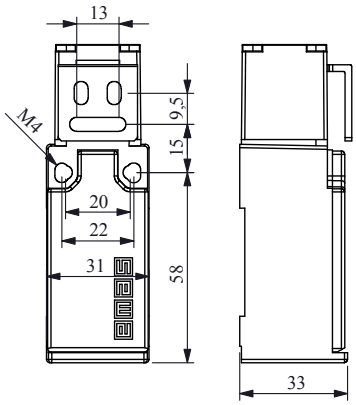
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13LEM622	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27LEM622	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12LEM622	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L51K29LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

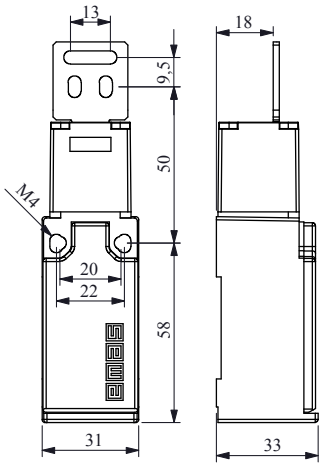
Gövde Malzemesi : Metal
Housing Material : Metal



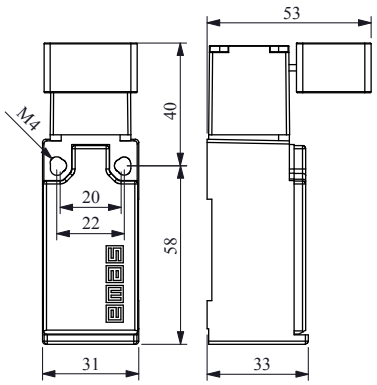
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13BEM621	0 ±32° ±180	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23BEM621	0 ±45° ±42° ±45° ±180	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25BEM621	0 ±45° ±36° ±45° ±180	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27BEM621	0 ±45° ±36° ±45° ±180	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12BEM621	0 ±32° ±180	Ani / *Snap* - 2NK / *2NC*	
L51K29BEM621	0 ±60° ±39° ±60° ±180	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13LUM321	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27LUM321	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12LUM321	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L51K29LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



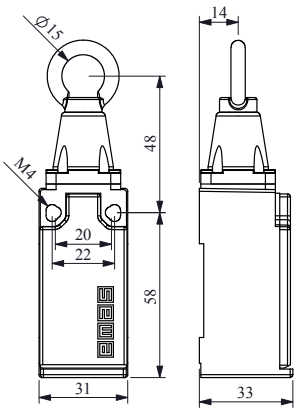
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13LUM322	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27LUM322	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12LUM322	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L51K29LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



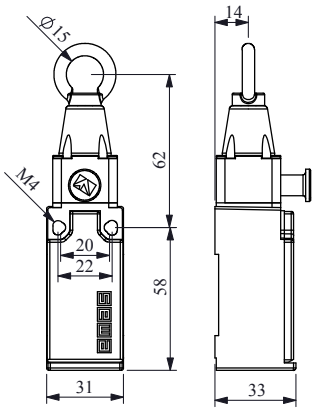
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L51K13LUM323	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27LUM323	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12LUM323	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L51K29LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Gövde Malzemesi : Metal
Housing Material : Metal



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13HUM111	0 3,6 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23HUM111	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25HUM111	0 3,6 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27HUM111	0 3,6 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12HUM111	0 3,6 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29HUM111	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L51K13HUM112	0 3,6 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L51K23HUM112	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L51K25HUM112	0 3,6 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L51K27HUM112	0 3,6 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L51K12HUM112	0 3,6 5,5	Ani / *Snap* - 2NK / *2NC*	
L51K29HUM112	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

L52 *Serisi Sınır Şalterler*

- Prizmatik metal gövde ve kapaklı
- PG13,5 veya M20x1,5 kablo rakorlu
- Değişebilen kontak bloklu
- 1 kablo girişi
- Bağlantı delikleri dışarıda
- Geniş duyar blok seçenekleri ile tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	: 10.000.000 Açma-kapama (50 dev/dk)
Elektriksel Ömür	: 1.000.000 Açma-kapama (20 dev/dk)
Çalışma Sıcaklığı	: -5 / +40 °C
Koruma Sınıfı	: IP65
Çalışma Gerilimi (Ue)	: 240V AC
Çalışma Akımı (Ie)	: 3 A
Yalıtım Gerilimi (Ui)	: 500V
Darbe Dayanım Gerilimi (Uimp)	: 6 kV
Kısa Devre Kesme Kap. (Icn)	: 1 kA
Çalışma Frekansı (f)	: 50 - 60 Hz
Yalıtım Direnci	: 10 MΩ (500V DC)
Kullanım Sınıfı	: AC15
Dielektrik Mukavemeti	: 1.500V (1 dk için)
Kirlenme Derecesi	: 3
Bağlantı Kablo Kesiti	: 1,5 mm²
Standart	: "TS EN 60947-5-1'e göre pozitif açmalı güvenlik fonksiyonu TS EN 60947-5-1 UL508 VDE 0660"

Kontak Bloklar

L52 *Series Limit Switches*

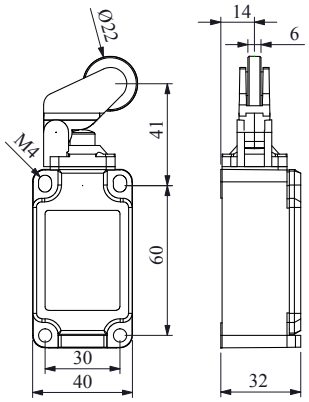
- *Prismatic metallic housing and cover*
- *PG13,5 or M20x1,5 cable entry*
- *Changeable contact blocks*
- *1 cable entry*
- *External connection holes*
- *Various product options with wide sensitive contact block alternatives for all kind of applications*

Technical Information

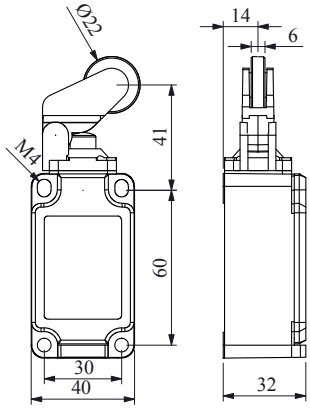
Mechanical Life	: *10.000.000 operations min. (50 cyc/min)*
Electrical Life	: *1.000.000 operations min. (20 cyc/min)*
Operating Temperature	: *-5 / +40 °C*
Protection Degree	: *IP65*
Operating Voltage (Ue)	: *240V*
Operating Current (Ie)	: *3 A*
Insulation Voltage (Ui)	: *500V*
Impact Resistance (Uimp)	: *6 kV*
Short Circuit Breaking Capacity (Icn)	: *1 kA*
Operating Frequency (f)	: *50 - 60 Hz*
Insulation Resistance	: *10 MΩ (500V DC)*
Utilization Category	: *AC15*
Dielectric Strength	: *1.500V (for 1 minute)*
Pollution Degree	: *3*
Cable Section	: *1,5 mm²*
Standard	: *"Positive break operation, safety function according to TS EN 60947-5-1 TS EN 60947-5-1 UL508 VDE 0660"*

Contact Blocks

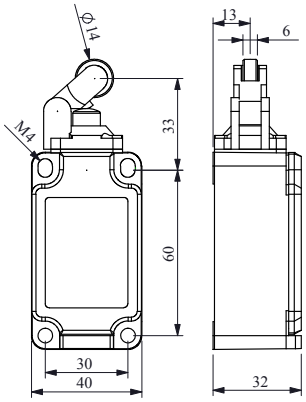
Gövde Malzemesi : Metal
Housing Material : Metal



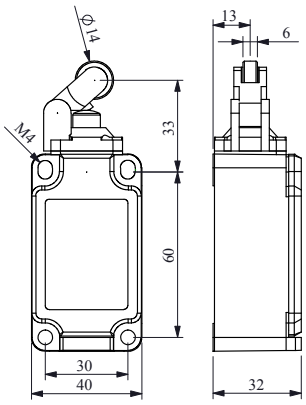
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13MİP211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23MİP211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MİP211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MİP211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MİP211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29MİP211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13MİM211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23MİM211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MİM211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MİM211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MİM211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29MİM211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



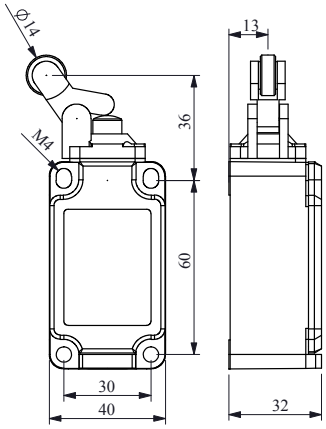
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13MİP311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23MİP311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MİP311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MİP311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MİP311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29MİP311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



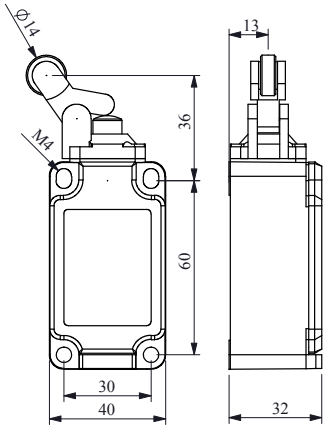
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13MİM311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23MİM311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MİM311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MİM311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MİM311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29MİM311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

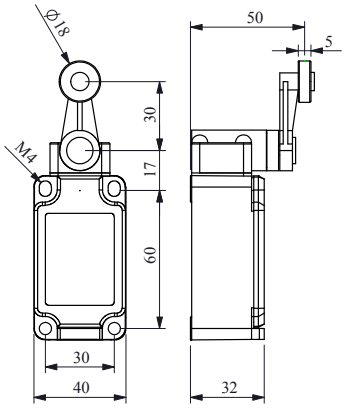
Gövde Malzemesi : Metal
Housing Material : Metal



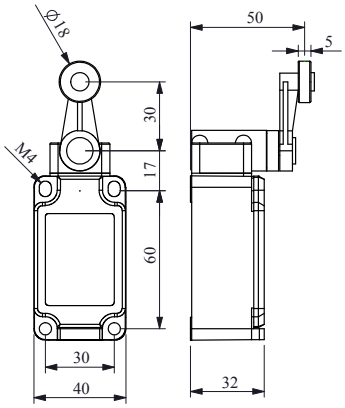
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MİP411	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23MİP411	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MİP411	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MİP411	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MİP411	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29MİP411	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MİM411	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23MİM411	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MİM411	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MİM411	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MİM411	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29MİM411	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



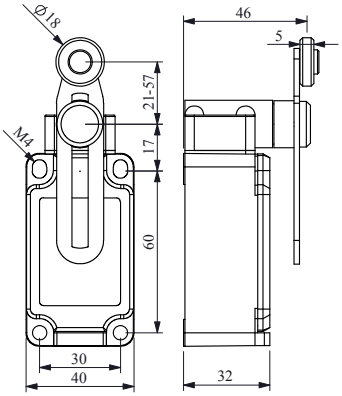
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEP121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23MEP121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEP121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEP121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



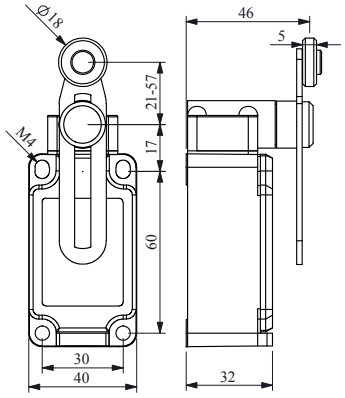
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23MEM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

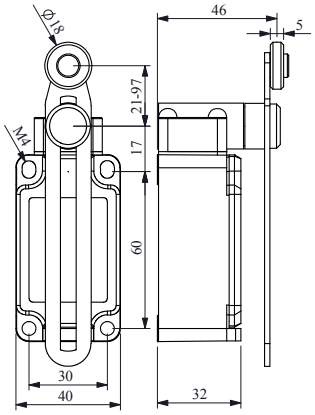
Gövde Malzemesi : Metal
Housing Material : Metal



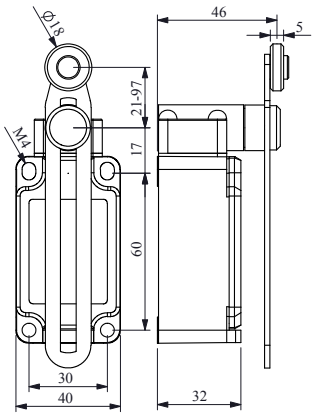
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MİP211	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23MİP211	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MİP211	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MİP211	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MİP211	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MİP211	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEM122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23MEM122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEM122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEM122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEM122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



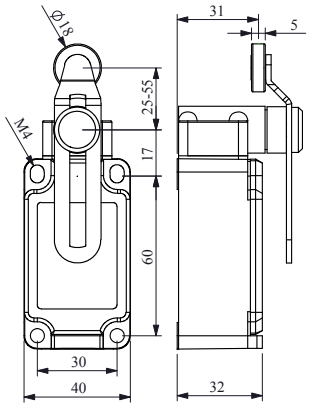
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEP123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23MEP123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEP123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEP123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



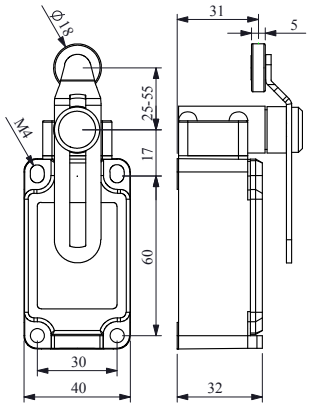
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEM123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23MEM123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEM123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEM123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

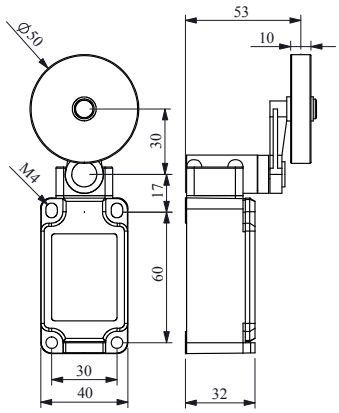
Gövde Malzemesi : Metal
Housing Material : Metal



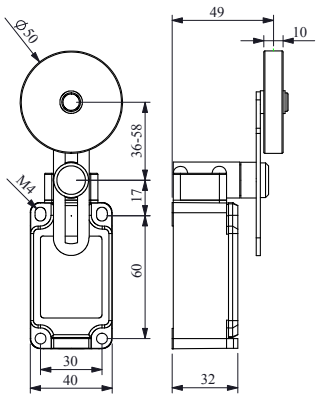
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEP124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23MEP124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEP124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEP124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEM124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23MEM124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEM124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEM124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



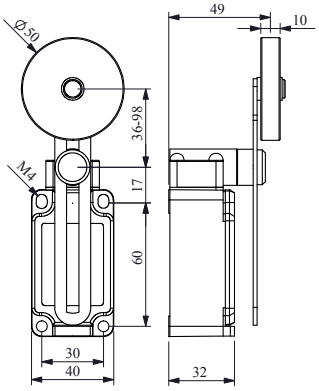
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEL121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L52K23MEL121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEL121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEL121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



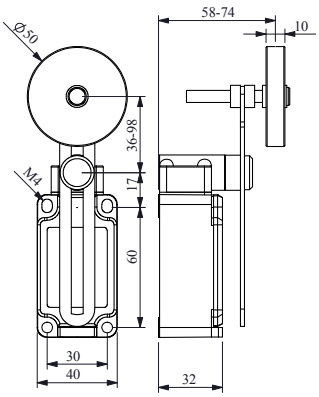
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEL122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L52K23MEL122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEL122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEL122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

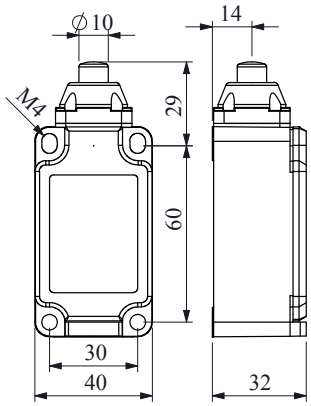
Gövde Malzemesi : Metal
Housing Material : Metal



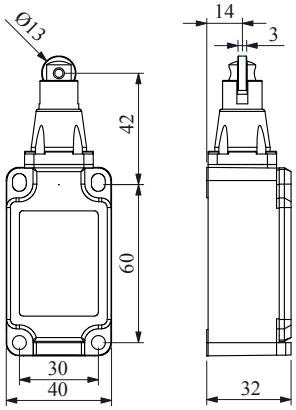
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEL123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L52K23MEL123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEL123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEL123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEL123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEL123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Dia-gramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MEL123A	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L52K23MEL123A	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MEL123A	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MEL123A	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MEL123A	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29MEL123A	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



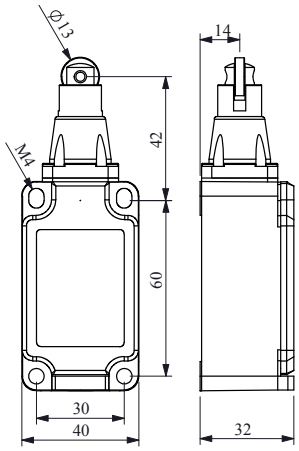
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13PUM211	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23PUM211	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12PUM211	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29PUM211	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



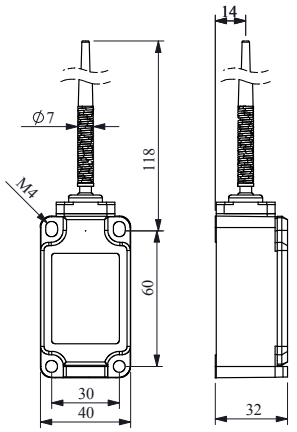
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MUP331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23MUP331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MUP331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MUP331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MUP331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29MUP331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

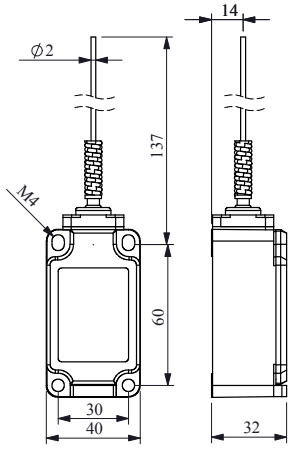
Gövde Malzemesi : Metal
Housing Material : Metal



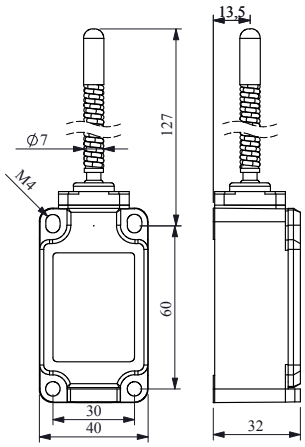
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13MUM331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23MUM331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12MUM331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29MUM331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13SOP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23SOP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12SOP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29SOP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



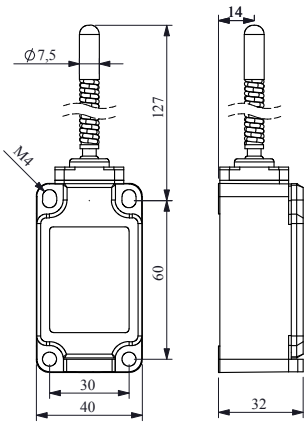
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13SOM101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23SOM101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12SOM101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29SOM101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



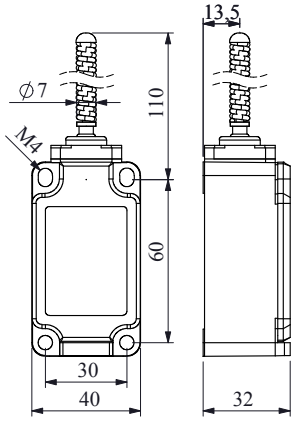
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13SOP102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23SOP102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12SOP102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29SOP102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

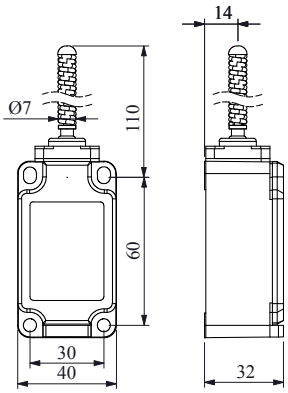
Gövde Malzemesi : Metal
Housing Material : Metal



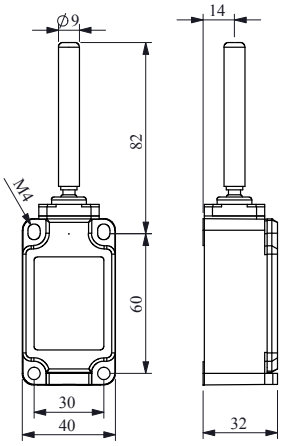
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13SOM102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23SOM102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12SOM102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29SOM102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13SOP103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23SOP103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12SOP103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29SOP103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



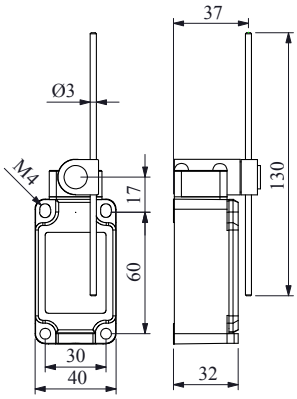
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13SOM103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23SOM103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25SOM103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27SOM103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12SOM103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29SOM103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



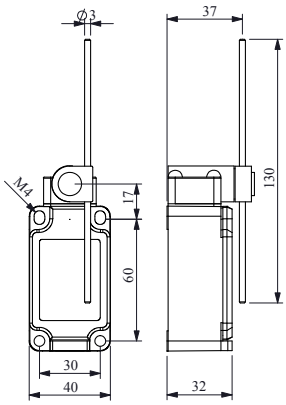
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13ROP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23ROP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12ROP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29ROP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

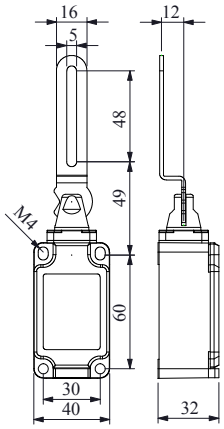
Gövde Malzemesi : Metal
Housing Material : Metal



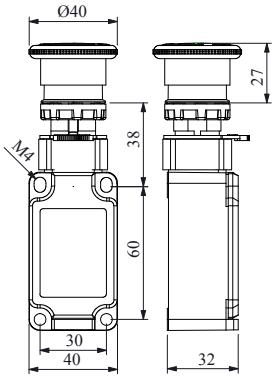
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13REF121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Fiber *Fiber*
L52K23REF121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25REF121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27REF121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12REF121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29REF121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13REM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23REM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25REM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27REM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12REM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29REM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



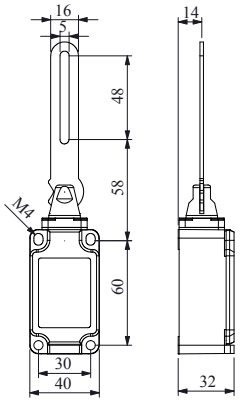
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13LEM411	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27LEM411	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12LEM411	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L52K29LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



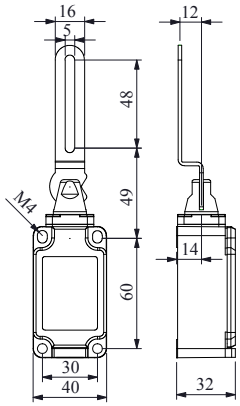
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L52K13CPDE	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23CPDE	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25CPDE	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27CPDE	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12CPDE	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29CPDE	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

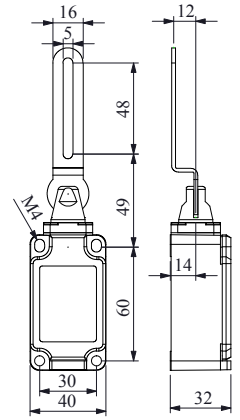
Gövde Malzemesi : Metal
Housing Material : Metal



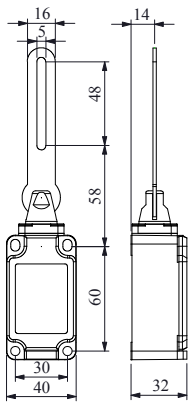
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13LEM412	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27LEM412	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12LEM412	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L52K29LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Dia-gramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13LEM511	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27LEM511	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12LEM511	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L52K29LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



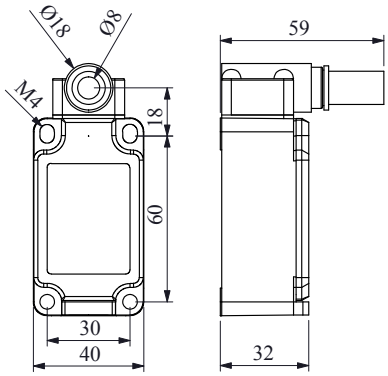
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13LEM621	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27LEM621	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12LEM621	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L52K29LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



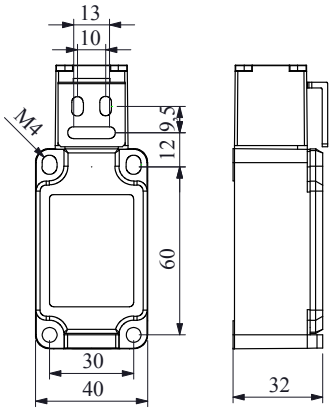
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13LEM622	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27LEM622	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12LEM622	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L52K29LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

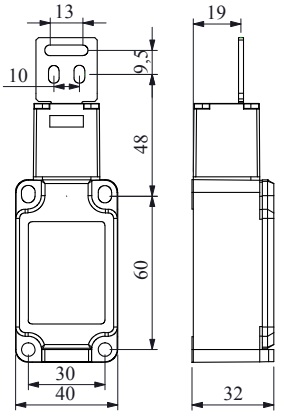
Gövde Malzemesi : Metal
Housing Material : Metal



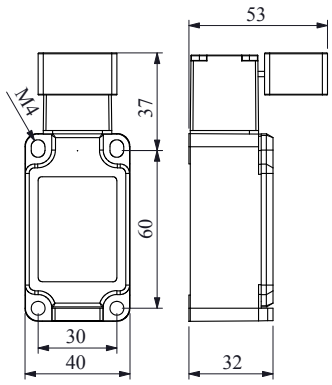
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13BEM621	0 ±32° ±180	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Fiber *Fiber*
L52K23BEM621	0 ±45° ±42° ±45° ±180	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25BEM621	0 ±45° ±36° ±45° ±180	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27BEM621	0 ±45° ±36° ±45° ±180	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12BEM621	0 ±32° ±180	Ani / *Snap* - 2NK / *2NC*	
L52K29BEM621	0 ±60° ±39° ±60° ±180	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13LUM321	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27LUM321	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12LUM321	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L52K29LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



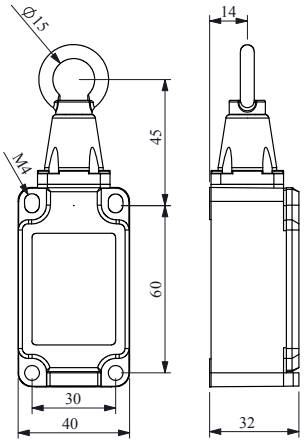
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13LUM322	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27LUM322	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12LUM322	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L52K29LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



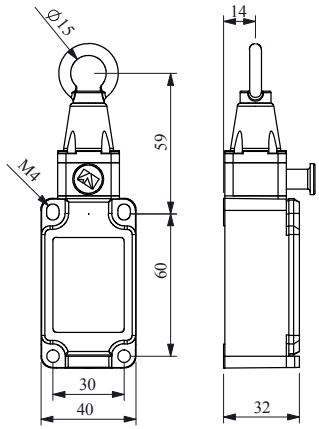
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13LUM323	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27LUM323	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12LUM323	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L52K29LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Gövde Malzemesi : Metal
Housing Material : Metal



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13HUM111	0 3,6 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23HUM111	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25HUM111	0 3,6 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27HUM111	0 3,6 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12HUM111	0 3,6 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29HUM111	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13HUM112	0 3,6 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L52K23HUM112	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25HUM112	0 3,6 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27HUM112	0 3,6 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12HUM112	0 3,6 5,5	Ani / *Snap* - 2NK / *2NC*	
L52K29HUM112	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

L53 *Serisi Sınır Şalterler*

- Metal gövde ve kapak
- PG13,5
- Değişebilen kontak bloklu
- 3 kablo girişi
- Bağlantı delikleri dışarıda
- Geniş duyar blok seçenekleri ile tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	:	10.000.000 Açma-kapama (50 dev/dk)
Elektriksel Ömür	:	1.000.000 Açma-kapama (20 dev/dk)
Çalışma Sıcaklığı	:	-5 / +40 °C
Koruma Sınıfı	:	IP65
Çalışma Gerilimi (Ue)	:	240V AC
Çalışma Akımı (Ie)	:	3 A
Yalıtım Gerilimi (Ui)	:	500V
Darbe Dayanım Gerilimi (Uimp)	:	6 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 - 60 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V (1 dk için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1,5 mm²
Standart	:	"TS EN 60947-5-1'e göre pozitif açmalı güvenlik fonksiyonu TS EN 60947-5-1 UL508 VDE 0660"

Kontak Bloklar

L53 *Series Limit Switches*

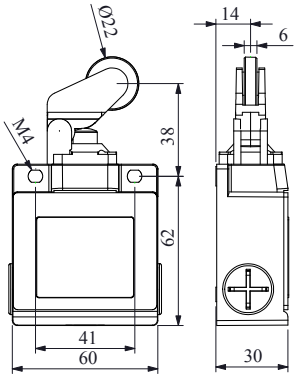
- *Metalic housing and cover*
- *PG13,5*
- *Changeable contact blocks*
- *3 cable entry*
- *External connection holes*
- *Various product options with wide sensitive contact block alternatives for all kind of applications*

Technical Information

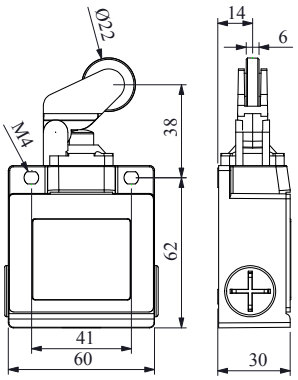
Mechanical Life	:	*10.000.000 operations min. (50 cyc/min)*
Electrical Life	:	*1.000.000 operations min. (20 cyc/min)*
Operating Temperature	:	*-5 / +40 °C*
Protection Degree	:	*IP65*
Operating Voltage (Ue)	:	*240V*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*500V*
Impact Resistance (Uimp)	:	*6 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 - 60 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1,5 mm²*
Standard	:	*"Positive break operation, safety function according to TS EN 60947-5-1 TS EN 60947-5-1 UL508 VDE 0660"*

Contact Blocks

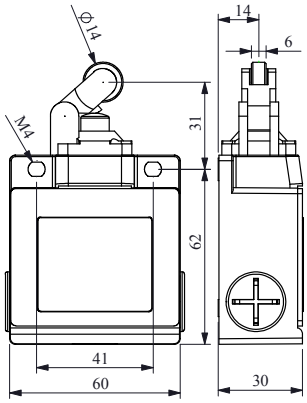
Gövde Malzemesi : Metal
Housing Material : Metal



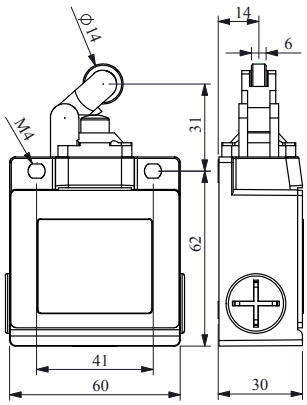
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MİP211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23MİP211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MİP211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MİP211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MİP211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29MİP211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Dia-gramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MİM211	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23MİM211	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MİM211	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MİM211	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MİM211	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29MİM211	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



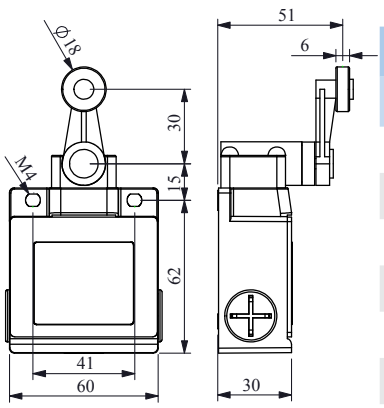
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MİP311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23MİP311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MİP311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MİP311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MİP311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29MİP311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



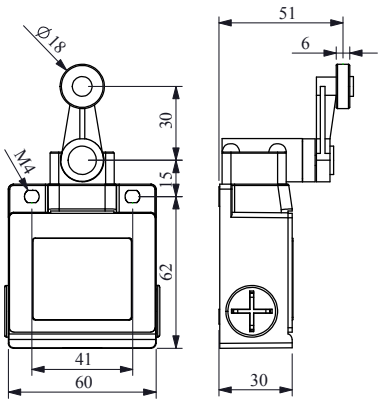
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MİM311	0 3,1 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23MİM311	0 2,9 3,7 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MİM311	0 3 3,9 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MİM311	0 3 3,9 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MİM311	0 3,1 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29MİM311	0 3,2 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

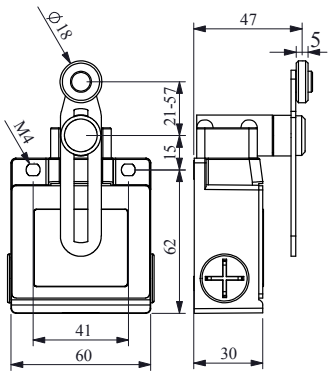
Gövde Malzemesi : Metal
Housing Material : Metal



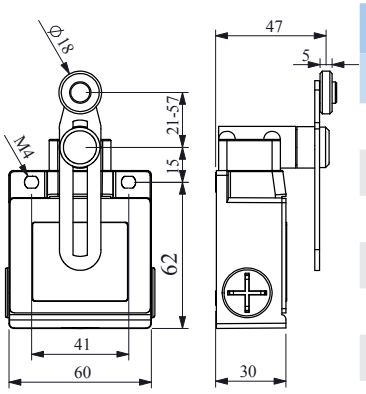
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13MEP121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23MEP121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEP121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEP121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEP121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13MEM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23MEM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



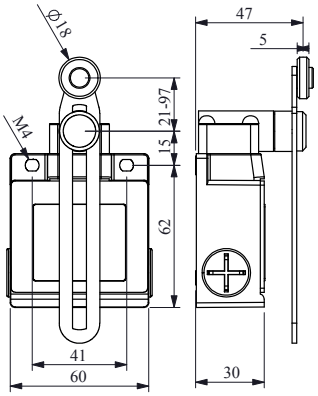
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L52K13LEM411	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L52K23LEM411	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L52K25LEM411	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L52K27LEM411	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L52K12LEM411	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L52K29LEM411	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



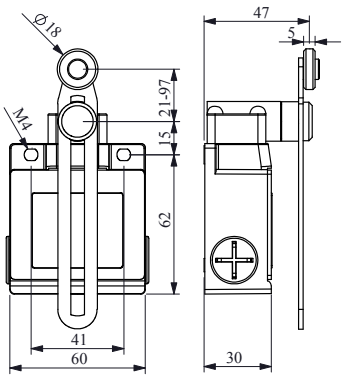
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13MEP122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23MEP122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEP122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEP122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEP122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

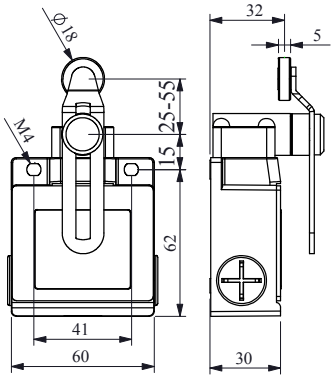
Gövde Malzemesi : Metal
Housing Material : Metal



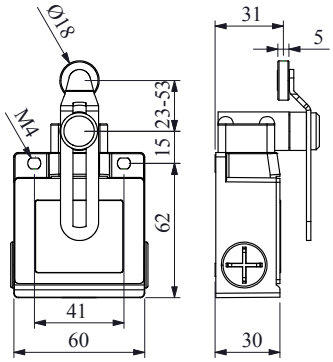
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MEP123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23MEP123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEP123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEP123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEP123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Dia-gramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MEM123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23MEM123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEM123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEM123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEM123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



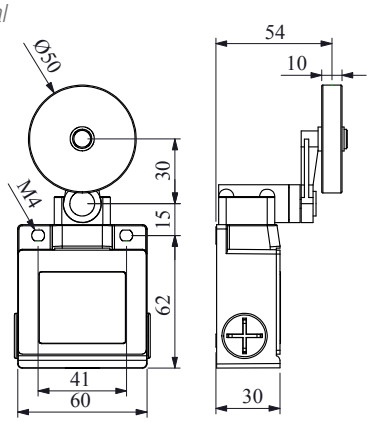
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MEP124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23MEP124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEP124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEP124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEP124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



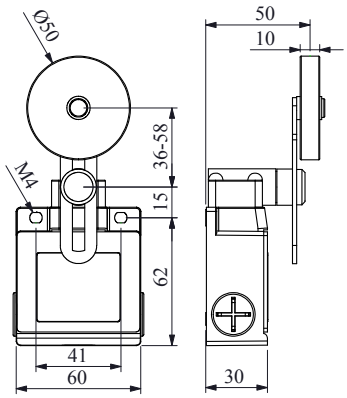
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MEM124	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23MEM124	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEM124	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEM124	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEM124	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

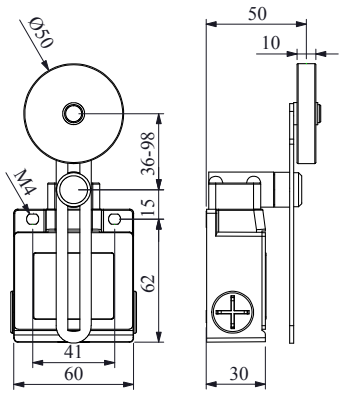
Gövde Malzemesi : Metal
Housing Material : Metal



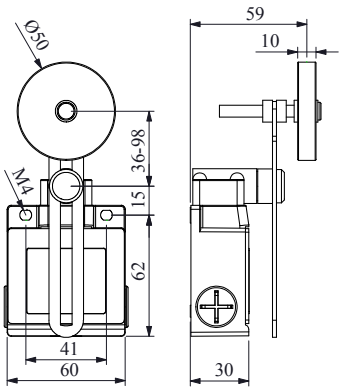
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13MEL121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L53K23MEL121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEL121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEL121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEL121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13MEL122	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L53K23MEL122	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEL122	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEL122	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEL122	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



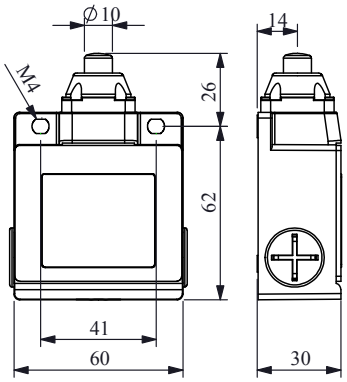
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13MEL123	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L53K23MEL123	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEL123	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEL123	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEL123	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEL123	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



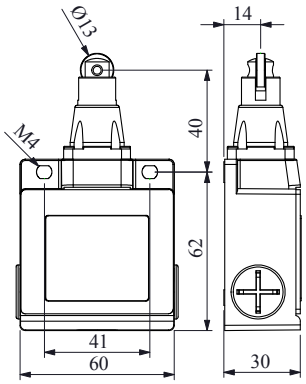
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13MEL123A	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Lastik *Rubber*
L53K23MEL123A	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MEL123A	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MEL123A	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MEL123A	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29MEL123A	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

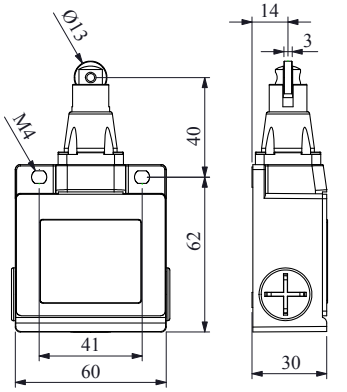
Gövde Malzemesi : Metal
Housing Material : Metal



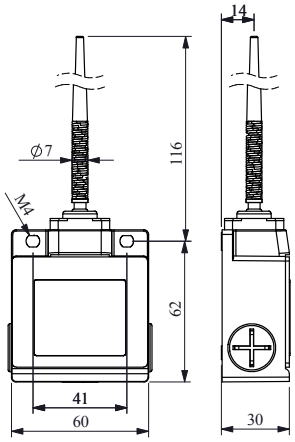
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13PUM211	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23PUM211	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27PUM211	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12PUM211	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29PUM211	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MUP331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23MUP331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MUP331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MUP331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MUP331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29MUP331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



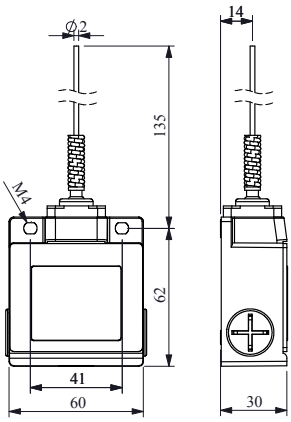
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13MUM331	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23MUM331	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27MUM331	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12MUM331	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29MUM331	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



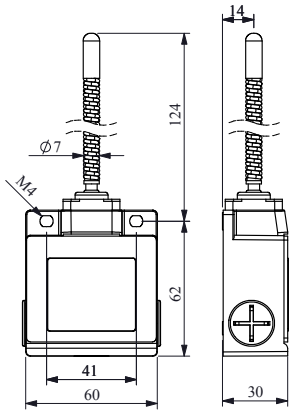
Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K13SOP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23SOP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27SOP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12SOP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29SOP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

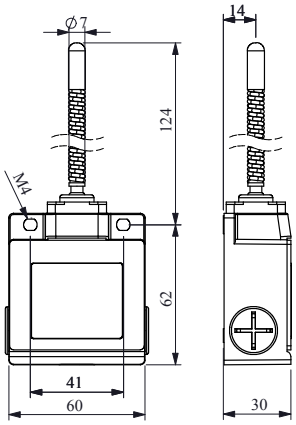
Gövde Malzemesi : Metal
Housing Material : Metal



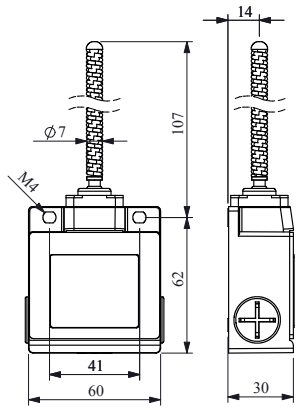
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13SOM101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23SOM101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27SOM101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12SOM101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29SOM101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13SOP102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23SOP102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27SOP102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12SOP102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29SOP102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



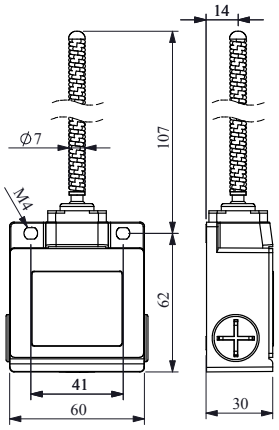
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13SOM102	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23SOM102	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27SOM102	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12SOM102	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29SOM102	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



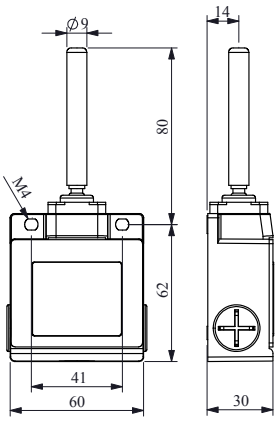
Ürün Kodu	Akış Dia-gramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13SOP103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23SOP103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27SOP103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12SOP103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29SOP103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

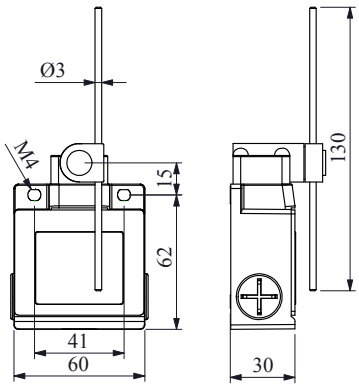
Gövde Malzemesi : Metal
Housing Material : Metal



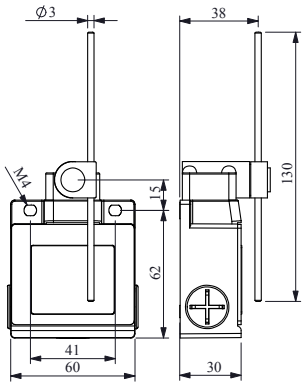
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13SOM103	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23SOM103	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25SOM103	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27SOM103	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12SOM103	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29SOM103	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13ROP101	0° 19° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23ROP101	0° 18° 21° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27ROP101	0° 22° 26° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12ROP101	0° 19° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29ROP101	0° 21° 37° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



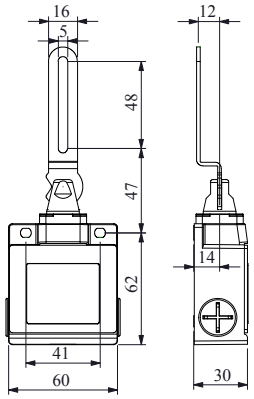
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13REF121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Fiber *Fiber*
L53K23REF121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25REF121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27REF121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12REF121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29REF121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



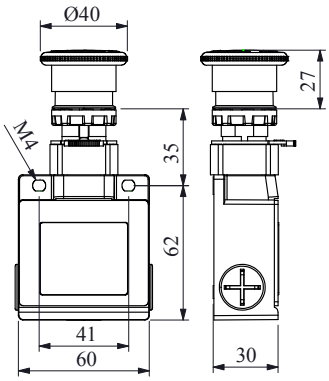
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13REM121	0° 32° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23REM121	0° 36° 45° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25REM121	0° 42° 45° 85°	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27REM121	0° 42° 45° 85°	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12REM121	0° 32° 85°	Ani / *Snap* - 2NK / *2NC*	
L53K29REM121	0° 39° 60° 85°	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

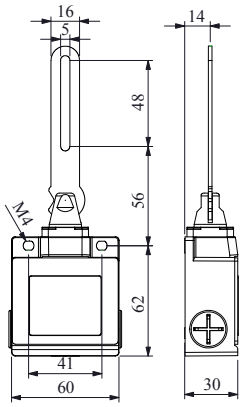
Gövde Malzemesi : Metal
Housing Material : Metal



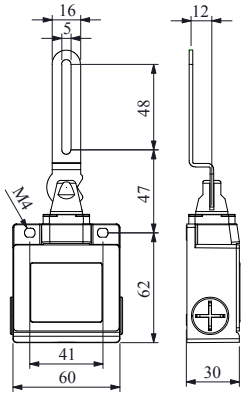
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13LEM411	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27LEM411	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12LEM411	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L53K29LEM411	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13CPDE	0 2 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*
L53K23CPDE	0 1,6 2,1 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25CPDE	0 1,9 2,5 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27CPDE	0 1,9 2,5 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12CPDE	0 2,0 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29CPDE	0 1,8 3,3 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



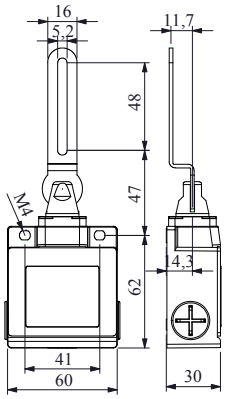
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13LEM412	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27LEM412	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12LEM412	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L53K29LEM412	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



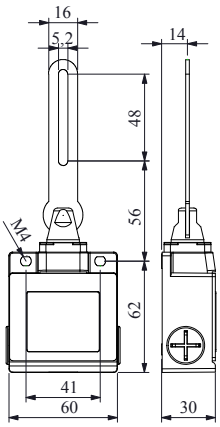
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13LEM511	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27LEM511	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12LEM511	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L53K29LEM511	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

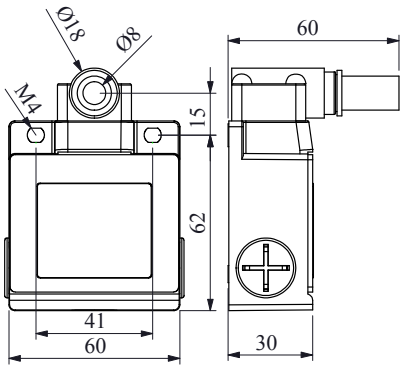
Gövde Malzemesi : Metal
Housing Material : Metal



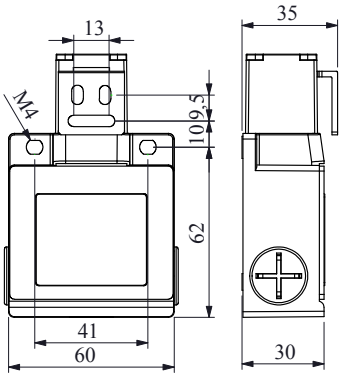
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13LEM621	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27LEM621	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12LEM621	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L53K29LEM621	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13LEM622	-90 0 +90	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27LEM622	-90 0 +90	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12LEM622	-90 0 +90	Ani / *Snap* - 2NK / *2NC*	
L53K29LEM622	-90 0 +90	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



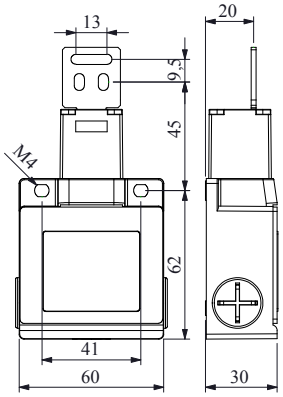
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13BEM621	0 ±32° ±180	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23BEM621	0 ±45° ±42° ±45° ±180	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25BEM621	0 ±45° ±36° ±45° ±180	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27BEM621	0 ±45° ±36° ±45° ±180	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12BEM621	0 ±32° ±180	Ani / *Snap* - 2NK / *2NC*	
L53K29BEM621	0 ±60° ±39° ±60° ±180	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



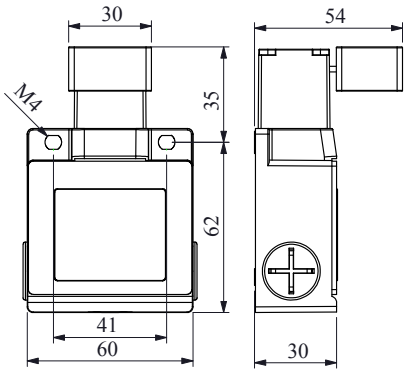
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13LUM321	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27LUM321	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12LUM321	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L53K29LUM321	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

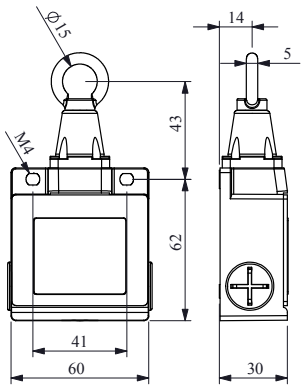
Gövde Malzemesi : Metal
Housing Material : Metal



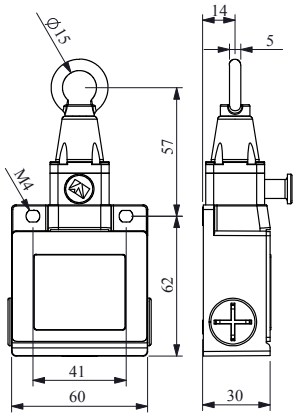
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13LUM322	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27LUM322	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12LUM322	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L53K29LUM322	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13LUM323	OPEN/CLOSE	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27LUM323	OPEN/CLOSE	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12LUM323	OPEN/CLOSE	Ani / *Snap* - 2NK / *2NC*	
L53K29LUM323	OPEN/CLOSE	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13HUM111	0 3,6 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23HUM111	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25HUM111	0 3,6 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27HUM111	0 3,6 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12HUM111	0 3,6 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29HUM111	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L53K13HUM112	0 3,6 5,5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*
L53K23HUM112	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	
L53K25HUM112	0 3,6 5,5	Yavaş / *Slow* - 1NA+2NK / *1NO+2NC*	
L53K27HUM112	0 3,6 5,5	Yavaş / *Slow* - 2NA+1NK / *2NO+1NC*	
L53K12HUM112	0 3,6 5,5	Ani / *Snap* - 2NK / *2NC*	
L53K29HUM112	0 3,6 5,5	Yavaş / *Slow* - 1NA+1NK / *1NO+1NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

L54 Serisi Sınır Şalterler

- Metal gövde ve kapak
- PG13,5
- Değişebilen yan yan iki kontak bloklu
- 3 kablo girişi
- Bağlantı delikleri dışarıda
- Geniş duyar blok seçenekleri ile tüm uygulamalara cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	:	10.000.000 Açma-kapama (50 dev/dk)
Elektriksel Ömür	:	1.000.000 Açma-kapama (20 dev/dk)
Çalışma Sıcaklığı	:	-5 / +40 °C
Koruma Sınıfı	:	IP65
Çalışma Gerilimi (Ue)	:	240V AC
Çalışma Akımı (Ie)	:	3 A
Yalıtım Gerilimi (Ui)	:	500V
Darbe Dayanım Gerilimi (Uimp)	:	6 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 - 60 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	1.500V (1 dk için)
Kirlenme Derecesi	:	3
Bağlantı Kablo Kesiti	:	1,5 mm²
Standart	:	"TS EN 60947-5-1'e göre pozitif açmalı güvenlik fonksiyonu TS EN 60947-5-1 UL508 VDE 0660"

Kontak Bloklar

L54 *Series Limit Switches*

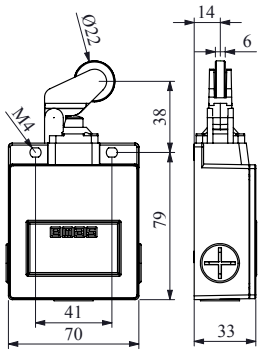
- *Metalic housing and cover*
- *PG13,5*
- *Changeable double contact blocks*
- *3 cable entry*
- *External connection holes*
- *Various product options with wide sensitive contact block alternatives for all kind of applications*

Technical Information

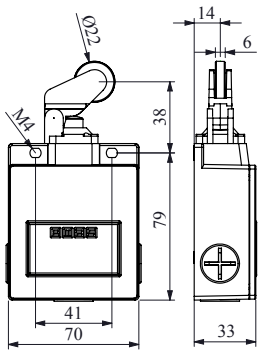
Mechanical Life	:	*10.000.000 operations min. (50 cyc/min)*
Electrical Life	:	*1.000.000 operations min. (20 cyc/min)*
Operating Temperature	:	*-5 / +40 °C*
Protection Degree	:	*IP65*
Operating Voltage (Ue)	:	*240V*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*500V*
Impact Resistance (Uimp)	:	*6 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 - 60 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*1.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Section	:	*1,5 mm²*
Standard	:	*"Positive break operation, safety function according to TS EN 60947-5-1 TS EN 60947-5-1 UL508 VDE 0660"*

Contact Blocks

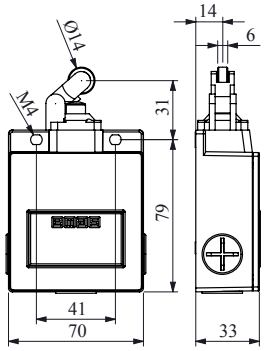
Gövde Malzemesi : Metal
Housing Material : Metal



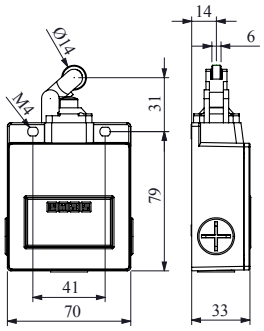
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MIP211	0 3,1 5,5 x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Plastik *Plastic*
L54K26MIP211	0 2,9 3,7 5,5 x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MIM211	0 3,1 5,5 x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Metal *Metal*
L54K26MIM211	0 2,9 3,7 5,5 x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



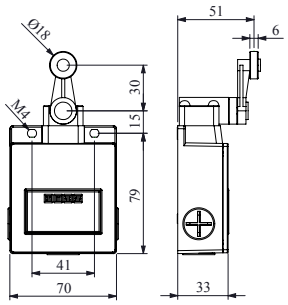
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MIP311	0 3,1 5,5 x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Plastik *Plastic*
L54K26MIP311	0 2,9 3,7 5,5 x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



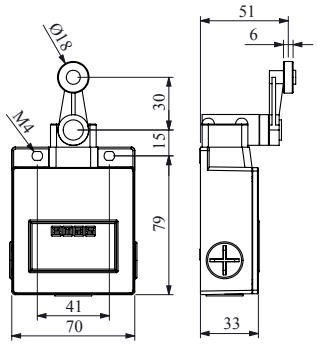
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MIM311	0 3,1 5,5 x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Metal *Metal*
L54K26MIM311	0 2,9 3,7 5,5 x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

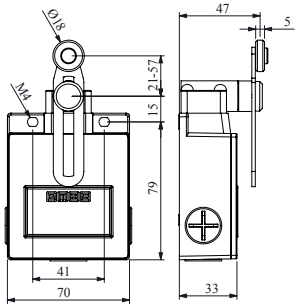
Gövde Malzemesi : Metal
Housing Material : Metal



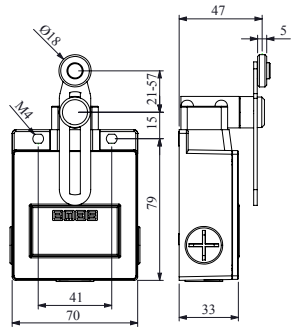
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEP121	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Plastik *Plastic*
L54K26MEP121	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEM121	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Metal *Metal*
L54K26MEM121	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



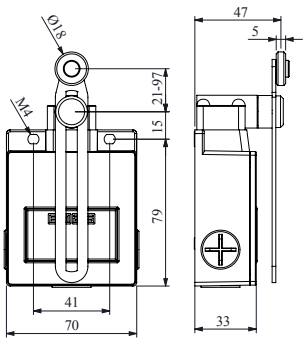
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEP122	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Plastik *Plastic*
L54K26MEP122	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



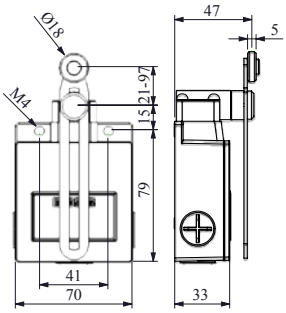
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEM122	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Metal *Metal*
L54K26MEM122	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

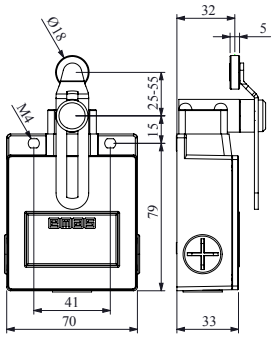
Gövde Malzemesi : Metal
Housing Material : Metal



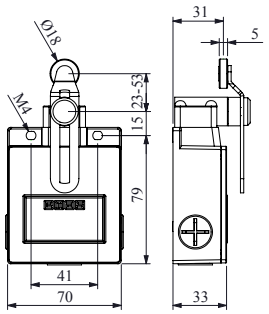
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEP123	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Plastik *Plastic*
L54K26MEP123	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEM123	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Metal *Metal*
L54K26MEM123	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



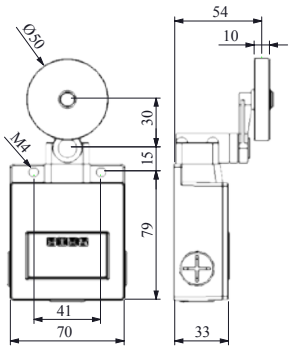
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEP124	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Plastik *Plastic*
L54K26MEP124	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



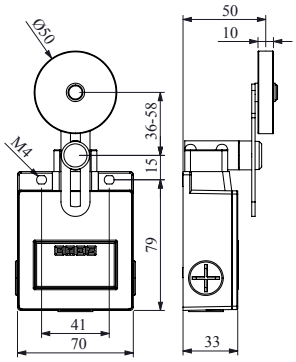
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEM124	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Metal *Metal*
L54K26MEM124	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

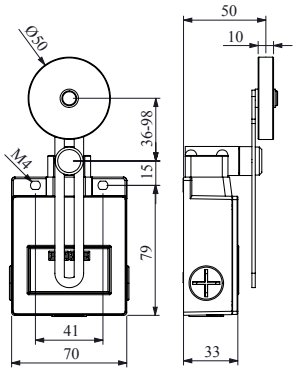
Gövde Malzemesi : Metal
Housing Material : Metal



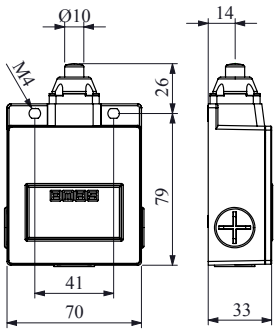
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEL121	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Lastik *Rubber*
L54K26MEL121	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEL122	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Lastik *Rubber*
L54K26MEL122	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



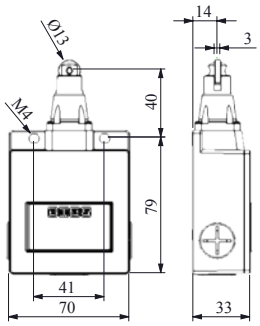
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16MEL123	0° 32° 85° x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Lastik *Rubber*
L54K26MEL123	0° 36° 45° 85° x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L54K16PUM211	0 2 5,5 x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Metal *Metal*
L54K26PUM211	0 1,6 2,1 5,5 x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Gövde Malzemesi : Metal
Housing Material : Metal



Ürün Kodu *Product Code*	Akış Diagramı *Flow Chart*	Kontak Blok *Contact Block*	Uç Eleman Malzemesi *Actuator End Unit Material*
L53K16MUM331	0 2 5,5 x 2	Ani / *Snap* - 2NA+2NK / *2NO+2NC*	Metal *Metal*
L54K26MUM331	0 1,6 2,1 5,5 x 2	Yavaş / *Slow* - 2NA+2NK / *2NO+2NC*	

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

L61-L66 *Serisi Sınır Şalterler*

- Kompakt dizayn
- Ağır şartlara dirençli prizmatik aliminyum yekpare gövde (L61)
- Plastik yekpare gövde (L66)
- Kendi kablosu ile kolay bağlantı
- Topraklama hattı ile arttırılmış güvenlik (L61)
- Yön sorunu olmadan bağlantı imkanı
- Suya karşı üstün yalıtım

Teknik Bilgiler

Mekanik Ömür	:	10.000.000 Açma-kapama (50 dev/dk)
Elektriksel Ömür	:	1.000.000 Açma-kapama (20 dev/dk)
Çalışma Sıcaklığı	:	-25 / +70 °C
Koruma Sınıfı	:	IP67
Çalışma Gerilimi (Ue)	:	240V AC
Çalışma Akımı (Ie)	:	3 A
Yalıtım Gerilimi (Ui)	:	500V
Darbe Dayanım Gerilimi (Uimp)	:	6 kV
Kısa Devre Kesme Kap. (Icn)	:	1 kA
Çalışma Frekansı (f)	:	50 Hz
Yalıtım Direnci	:	10 MΩ (500V DC)
Kullanım Sınıfı	:	AC15
Dielektrik Mukavemeti	:	2.500V (1 dk için)
Kirlenme Derecesi	:	3
Kablo Ölçüsü	:	2m (uzunluk), 5x0,75 mm²
Standart	:	"TS EN 60947-5-1'e göre pozitif açmalı güvenlik fonksiyonu TS EN 60947-5-1 UL508 VDE 0660"

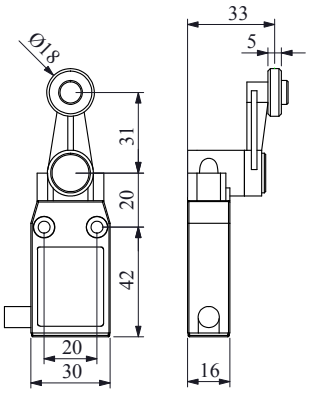
L61-L66 *Series Limit Switches*

- *Compact design*
- *Resistant to heavy application with prismatic aluminium single body (L61)*
- *Plastic single body (L66)*
- *Easy connection with prewired cable*
- *Increased safety with earthing (L66)*
- *Connection possibility without direction problem*
- *Superior insulation against water*

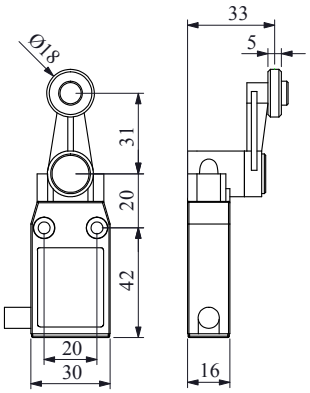
Technical Information

Mechanical Life	:	*10.000.000 operations min. (50 cyc/min)*
Electrical Life	:	*1.000.000 operations min. (20 cyc/min)*
Operating Temperature	:	*-25 / +70 °C*
Protection Degree	:	*IP67*
Operating Voltage (Ue)	:	*240V*
Operating Current (Ie)	:	*3 A*
Insulation Voltage (Ui)	:	*500V*
Impact Resistance (Uimp)	:	*6 kV*
Short Circuit Breaking Capacity (Icn)	:	*1 kA*
Operating Frequency (f)	:	*50 Hz*
Insulation Resistance	:	*10 MΩ (500V DC)*
Utilization Category	:	*AC15*
Dielectric Strength	:	*2.500V (for 1 minute)*
Pollution Degree	:	*3*
Cable Dimension	:	*2m length, 5x0,75 mm²*
Standard	:	*"Positive break operation, safety function according to TS EN 60947-5-1 TS EN 60947-5-1 UL508 VDE 0660"*

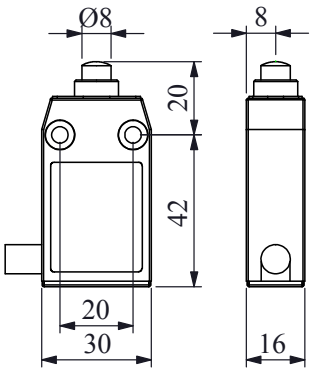
Gövde Malzemesi : Metal
Housing Material : Metal



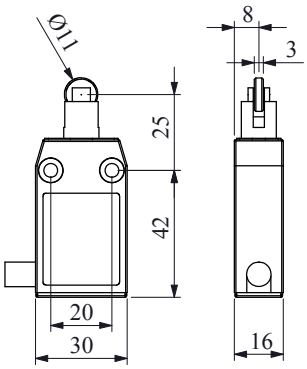
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L61K13MEP121	0° 40° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L61K13MEM121	0° 40° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*



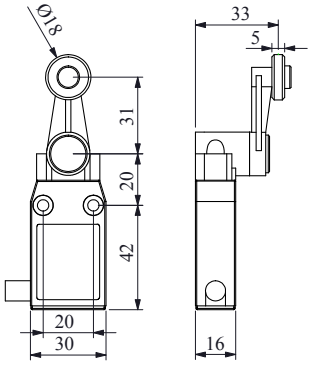
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L61K13PUM211	0 2,8 5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*



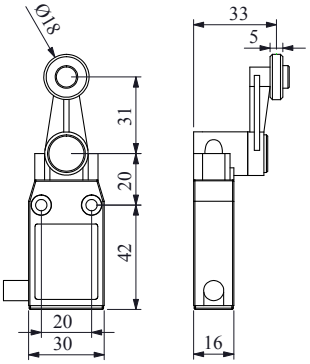
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L61K13MUM331	0 2,8 5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

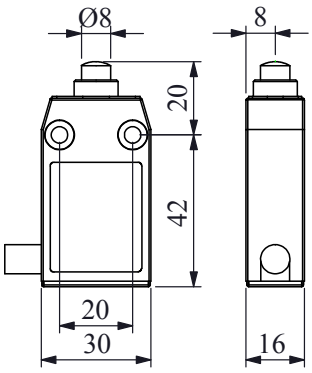
Gövde Malzemesi : Metal
Housing Material : Metal



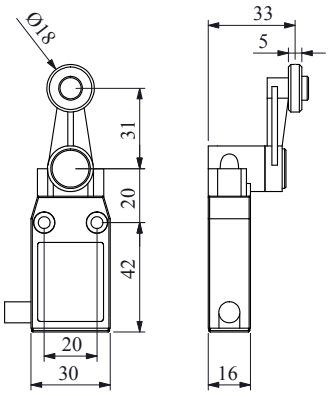
Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L66K13MEP121	0° 40° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Plastik *Plastic*



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L66K13MEM121	0° 40° 85°	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L66K13PUM211	0 2,8 5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*



Ürün Kodu	Akış Diagramı	Kontak Blok	Uç Eleman Malzemesi
Product Code	*Flow Chart*	*Contact Block*	*Actuator End Unit Material*
L66K13MUM331	0 2,8 5	Ani / *Snap* - 1NA+1NK / *1NO+1NC*	Metal *Metal*

POZİTİF AÇMA ÖZELLİKLİ
POSITIVE OPENING FUNCTION

Motor Koruma Şalterleri

Motor Protection Circuit Breakers

J

Motor Koruma Şalterleri
Motor Protection Circuit Breakers

MKS Serisi Motor Koruma Şalterleri

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MKS Series Motor Protection Circuit Breakers

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TS Serisi Motor Koruma Şalterleri

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TS Series Motor Protection Circuit Breakers

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MKS Serisi Motor Koruma Şalterleri

- 0.1- 25 A arasında ayarlanabilen 1 kademeli aşırı akım koruyucusu
- Sabit olarak ayarlanmış kısa devre koruması 12xIe
- Kısa devre açma kapasitesi minimum 6 kA / 400 V 6.3 A'e kadar sigortasız kullanabilme
- Sıcaklığa karşı kompanze edilmiş
- Faz eksikliğine karşı koruma
- İzolasyon ve ana şalter fonksiyonu IEC 204-1
- 35 mm'lik montaj rayına hızlı ve basit montaj özelliği
- Geniş aksesuar seçenekleri ile kullanıcıların tüm ihtiyaçlarına cevap verecek ürün çeşitliliği

Teknik Bilgiler

Mekanik Ömür	: 100.000 açma-kapama min.
Elektriksel Ömür	: 100.000 açma-kapama min.
Çalışma Sıcaklığı	: min./maks. ˚C -5/+40
Çalışma Sıklığı	: 30 açma-kapama/saat
Çalışma Gerilimi (Ue)	: 400 V AC
Yalıtım Gerilimi (Ui)	: 690 V AC
Çalışma Akımı (Ie)	: 0.1-25 A arası termik ayar aralığı
Anma Termik Akımı (Ithmax)	: 32 A
Darbe Dayanım Gerilimi (Uimp)	: 6 kV
Kısa Devre Kesme Kapasitesi	: 6 kA
Bağlantı Kablo Kesiti	: 1,5 - 4 mm^2
Dielektrik Dayanımı	: 1500 V AC (1 dakika için)
Koruma Sınıfı	: IP40 - Kutuda IP65
Kullanma Sınıfı	: AC3
Açma Sınıfı	: 10 A
Yalıtım Direnci	: 10 MΩ (500V DC)
Standart	: TS EN 60947-4-1

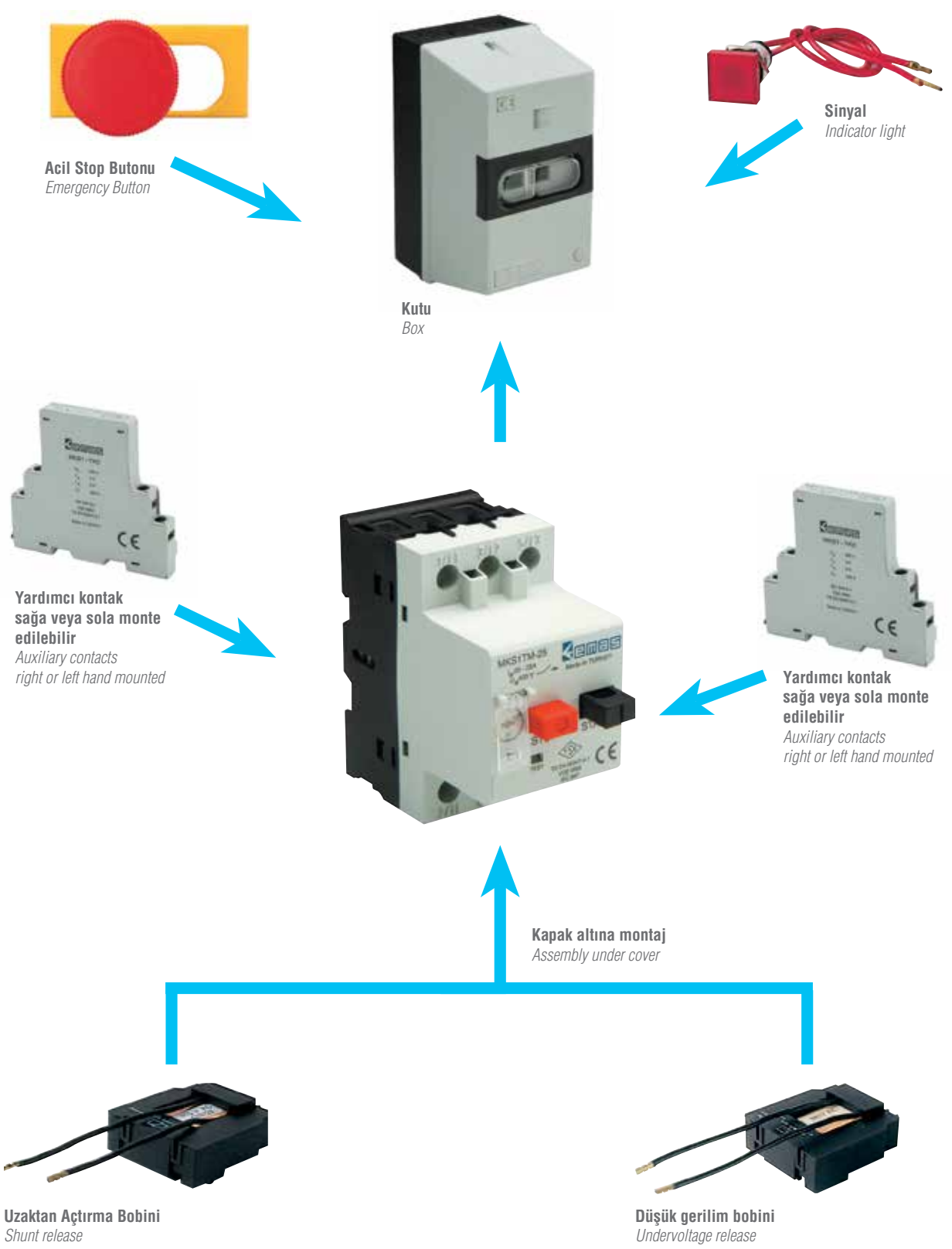
MKS *Series Motor Protection Circuit Breakers*

- *Adjustable overload release 13 ranges between 0.1-25 A*
- *Short circuit release factor set at 12xIe*
- *Short circuit switching capacity minimum 6 kA / 400 V*
- *Self protected up to 6.3 A*
- *Temperature compensated*
- *Phase failure protection*
- *Isolating and main switch function IEC 204-1*
- *Fast and simple mounting feature to 35 mm mounting roil Product variety with wide accessories fulfilling of applications*

Technical Information

Mechanical Life	*: 100.000 operations min.*
Electrical Life	*: 100.000 operations min.*
Operating Temperature	*: min./max. ˚C -5/+40*
Operating Density	*: 30 operations/hour*
Operating Voltage (Ue)	*: 400 V AC*
Insulation Voltage (Ui)	*: 690 V AC*
Operating Current (Ie)	*: 0.1-25 A thermic adjustment range*
Operating Thermic Current (Ithmax)	*: 32 A*
Impact Resistance (Uimp)	*: 6 kV*
Short Circuit Breaking Capacity	*: 6 kA*
Cable Section	*: 1,5 - 4 mm^2*
Dielectric Strength	*: 1500V AC (for 1 min.)*
Protection Degree	*: IP40 - In box IP65*
Range of Use	*: AC3*
Open of Use	*: 10 A*
Insulation Resistance	*: 10 MΩ (500V DC)*
Standard	*: TS EN 60947-4-1*

Genel Şema / *General Scheme*



MKS

Serisi Motor Koruma Şalterleri ve Aksesuarları

Series Motor Protection Circuit Breakers and Accesories

Motor Koruma Şalteri

- Anma işletme akımı Ie = 0.1-25 A
- Kısa devre açma kapasitesi 6 kA / 400V
- 6,3 A' e kadar sigortasız kullanılabilme
- Faz eksikliğine karşı koruma
- 0,1...25 A arasında ayarlanabilen 13 grup aşırı akım koruyucusu
- Kısa devre koruması 12 x Ie
- Sıcaklığa karşı kompanze edilmiş
- Asma kilit özelliği
- İzolasyon ve ana şalter fonksiyonu IEC 204-1

Motor Protection Device

- *Rated operational current Ie = 0.1-25 A*
- *Short circuit switching capacity 6 kA / 400V*
- *Self protected up to 6,3 A*
- *Protection against phase failure*
- *Adjustable overload release 13 ranges between 0,1 ... 25 A*
- *Short circuit release 12 x Ie*
- *Temperature compensated*
- *Padlock facility*
- *Isolating and main switch function IEC 204-1*

Yandan monte edilebilen yardımcı kontak
Early make early break Auxiliary contacts laterally mounted

Yardımcı Kontaklar

- Maks. konvensiyonel termik akımı Ith 6A
- Anma işletme akımı Ie (AC15 için) 250 V - 3A
- 6 yardımcı kontağa kadar
- DIN 19240'a göre elektronik devrelere uygun
- Kapalı / Açık / Açtırıldı sinyalleri ve kilitlemeler

Auxiliary Contacts

- *Max. current (with free air circulation) 3A*
- *Rated operational current (for AC15 duty)*
- *Up to 6 auxiliary contacts*
- *Suitable for use with electronic circuits according to DIN 19240*
- *On / Off / Tripped indication, interlocks*

Açma Bobinleri

- Kendi kendine kontrolsüz yol vermeleri önlemek için düşük gerilim bobini
- Uzaktan kumanda için açma bobinleri

Voltage Releases

- *Undervoltage release prevents automatic restart*
- *Shunt release for remote tripping*

Düşük gerilim bobini
Undervoltage release

Uzaktan Açtırma Bobini
Shunt release

Kutu / *Box*

Kutular

- Koruma sınıfı IP 65

Boxes

- *Protection degree IP 65*

AKSESUARLAR / *ACCESSORIES*

Yardımcı Kontak	Uzaktan Açtırma Bobini	Düşük Gerilim Bobini
Auxiliary Contact	*Shunt Release*	*Undervoltage Release*
MKS1-YKD00 MKS1-YKD01 MKS1-YKD11	MKS1-AR-5 MKS1-AR-6	MKS1-DGR-5 MKS1-DGR-6
•	•	•

AKSESUARLAR / *ACCESSORIES*

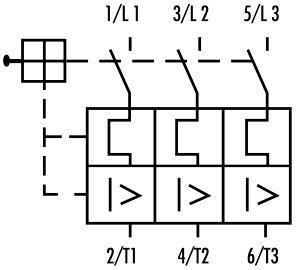
Silindirik Kafalı Acil Stop Butonu	Acil Stop Butonu	Nötr Bağlantı İletkeni	İkaz Sinyali
Cylindrical Head Emergency Button	*Emergency Button*	*N-Terminal*	*Indicator Light*
MKS1-E30	MKS1-E	MKS1-N	MKS1-S
•	•	•	•

MKS Serisi Motor Koruma Şalter Tipleri
Series Motor Protection Circuit Breaker Types

Termik & Manyetik Korumalı / *Thermic & Magnetic Protection*

Ürün Kodu *Code*	Maksimum Anma Gücü *Maximum Rating* [kW] AC 3 3 FAZ					Termik Akım Ayar Aralığı *Thermal Current Calibration Interval*	Aşırı Akım Koruyucusu *Overload Release Setting Range*	Kısa Devre Koruyucusu *Response Current of Short-Circuit Release*
	220 V	380 V	440 V	500 V	600 V	[A]	[A]	[A]
	230 V	400 V			690			
	240 V	415 V						
MKS1TM - 0.16	-	0.02	-	-	0.06	0.10 - 0.16	0.16	1.92
MKS1TM - 0.25	-	0.06	0.06	0.06	0.12	0.16 - 0.25	0.25	3
MKS1TM - 0.40	0.06	0.09	0.12	0.12	0.18	0.25 - 0.40	0.4	4.8
MKS1TM - 0.63	0.09	0.12	0.18	0.25	0.25	0.40 - 0.63	0.63	7.6
MKS1TM - 1.00	0.12	0.25	0.25	0.37	0.55	0.63 - 1.00	1	12
MKS1TM - 1.60	0.25	0.55	0.55	0.75	1.1	1.00 - 1.60	1.6	19.2
MKS1TM - 2.50	0.37	0.75	1.1	1.1	1.5	1.60 - 2.50	2.5	30
MKS1TM - 4.00	0.75	1.5	1.5	2.2	3	2.50 - 4.00	4	48
MKS1TM - 6.30	1.1	2.2	3	3	4	4.00 - 6.30	6.3	75.6
MKS1TM - 10.00	2.2	4	5	5.5	7.5	6.30 - 10.00	10	120
MKS1TM - 16.00	4	7.5	9	9	12.5	10.00 - 16.00	16	192
MKS1TM - 20.00	5.5	9	11	12.5	15	16.00 - 20.00	20	240
MKS1TM - 25.00	7.5	12.5	12.5	15	22	20.00 - 25.00	25	300

Aşırı akım ve kısa devre koruyuculu, DIN VDE 0660 / 102, IEC 947-4-1'e göre faz eksikliğine karşı duyarlı
With overload and short circuit releases, phase failure sensitivity according to IEC 947 - 4 - 1 (DIN VDE 0660)



Termik Manyetik Korumalı Kutulu / Thermic & Magnetic Protection Boxes

TSP-Kutulu Tip / MKS-Box Type

MKS1-K

Ürün Kodu *Code*	Akım Ayar Aralığı (A) *Current Calibration Interval (A)*	Montaj Tipi *Mounting*	Buton Kılıfı *Button Case*	Kutu Adedi *Box/Pcs*
MKS1TMK-0.16	0.10 - 0.16	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-0.25	0.16 - 0.25	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-0.40	0.25 - 0.40	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-0.63	0.40 - 0.63	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-1	0.63 -1.00	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-1.6	1.00 - 1.60	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-2.5	1.60 - 2.50	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-4	2.50 - 4.00	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-6.3	4.00 - 6.30	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-10	6.30 - 10.0	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-16	10.0 -16.0	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-20	16.0 - 20.0	Sıva Üstü / *Surface*	Etanj / *Etange*	1
MKS1TMK-25	20.0 - 25.0	Sıva Üstü / *Surface*	Etanj / *Etange*	1

MKS Serisi Motor Koruma Şalteri Aksesuarları

Series Motor Protection Switches Accessories

MKS1-KES

MKS1-KE

Ürün Kodu *Code*	Kontak Yapısı *Contact Form*	Açıklamalar *Description*
MKS1-YKD00	1NK / *1 NC* - 1NK / *1 NC*	Yardımcı Kontak / *Auxiliary Contact* Her motor koruma şalterine en fazla 2 yardımcı kontak sağa veya sola monte edilebilir. *One or two auxiliary contact units per motor protective circuit breaker fitted on left and right side of the device.*
MKS1-YKD01	1NK / *1 NC* - 1NA / *1 NO*	
MKS1-YKD11	1NA / *1 NO* - 1NA / *1 NO*	
MKS1-AR-5		Uzaktan Açtırma Bobini / *Remote Control Coil* (220 - 230 V, 50 Hz) Alternatif gerilim için / *For AC voltage* Bağlantı kablosu ile kapak altına monte edilebilir. *Connecting conductor mountable underneath the cover.*
MKS1-AR-6		Uzaktan Açtırma Bobini / *Remote Control Coil* (380 - 415 V, 50 Hz) Alternatif gerilim için / *For AC voltage* Bağlantı kablosu ile kapak altına monte edilebilir. *Connecting conductor mountable underneath the cover.*
MKS1-DGR-5		Düşük Gerilim Bobini / *Undervoltage Release* (220 - 230 V, 50 Hz) Alternatif gerilim için / *For AC voltage* Bağlantı kablosu ile kapak altına monte edilebilir. *Connecting conductor mountable underneaıh the cover.*
MKS1-DGR-6		Düşük Gerilim Bobini / *Undervoltage Release* (380 - 415 V, 50 Hz) Alternatif gerilim için / *For AC voltage* Bağlantı kablosu ile kapak altına monte edilebilir. *Connecting conductor mountable underneaıh the cover.*
MKS1-K MKS1-KE MKS1-KES		Kutu / *Box* Motor koruma şalterinin pano dışında da kullanımını sağlayan muhafazadır. Koruma sınıfı IP65'tir. *Enclosure for using the motor protection switch outside the panel.* *Protection degree is IP65.*

Kontak / *Contact*
NA: Normalde Açık / *NO: Normally Open*
NK: Normalde Kapalı / *NC: Normally Close*

Teknik Özellikler / *Technical Specifications*

Standartlara uygunluk / *Conformity with the standards*	:	DIN VDE, IEC, EN, UL, CSA
Darbe dayanımı / *Resistance*	:	5 g / 10 ms
Montaj pozisyonu	:	Her türlü, IP 41 muhafazalarda düşey
Mounting position	:	*Normally any, in IP 41 enclosure vertical*
Bağlantı civatalarının sıkma momenti		
Tightening torque for terminal screws		
- Ana iletken / *Main terminals*	:	1,2 Nm
- Yardımcı iletken / *Auxiliary terminals*	:	1,0 Nm
Aşırı gerilim kategorisi / Kirlenme derecesi	:	III / 3
Over voltage category / Pollution level		
Frekans / *Rated frequency*	:	40...60 Hz
Akımdan dolayı ısınma kayıpları (Toplam 3 akım yolu)	:	6,0 W
Heating losses due to the current (Total 3 current ways)		

Anahtarlama Zamanları Kısa Devrelerde / *Switching Times At Short Circuit*		
Minimum Kumanda Zamanı / *Minimum Command Time*	:	2 ms
Açma Gecikmesi / *Opening Delay*	:	2 ms
Açma Zamanı / *Opening Time*	:	7 ms

Kısa devre kesme kapasitesi	:	6kA
Short circuit breaking capacity		
Ayarlanabilir aşırı akım koruyucusu, tüm alan	:	0,1 - 25 A
Adjustable overload releases, all settings		
Kısa devre koruyucusu sabit olarak ayarlanmış (MKS1TM)	:	~ 12 x Iu
Short circuit releases (MKS1TM) factory set at		
Sıcaklık kompanzasyonu (Baz değerler VDE/IEC	:	-5 / + 40 ˚C
Temperature compensation (reference values) (to VDE/IEC)		DIN VDE 0660 Part 102, IEC 947-4-1
Düşük gerilim bobini kayıpları		
(Çekmede % 85 Ue , Bırakmada 70 ... % 35 Ue), (% 100 ED AC)	:	2,7 / 1,8 VA / W
Under voltage release / power losses		
(pick up 85 % Ue, drop out 70 ... 35 % Ue), (100 % ED AC)		
Uzaktan açtırma bobini kayıpları (Çekmede % 70 Ue) (% 100 DF)	:	2,7 / 1,8 VA / W
Shunt trip / power losses (pick up 70 % Ue) (100 % DF)		
Anma darbe dayanım gerilimi Uimp	:	6 kV
Rated impulse withstand voltage		
Anma işletme gerilimi Ue	:	400 V
Rated operational voltage		
Yardımcı kontak maks. konvensiyonel termik akımı Ith	:	6 A
Auxiliary contact max. current (with free air circulation)		
Yardımcı kontak anma işletme le (AC15 için) 250 V	:	3 A
Auxiliary contact rated operational current (for AC15 duty)		
Bağlantı kesitleri / *Cable cross section*		
1 iletken (Tek damarlı veya kablo ucu yüksüklü)	:	1,5 - 4 mm^2
1 conductor (solid or stranded cable)		
2 iletken (Tek damarlı veya kablo ucu yüksüklü)	:	1,5 - 4 mm^2
2 conductors (solid or stranded cable)		

Teknik Özellikler / *Technical Specifications*

Asenkron motorların motor ölçüm akımları ve en küçük kısa devre emniyet tertibatı
Motor measure currents and smallest possible short circuit protection for three phase current motors

- Motor ölçüm akımları normal iç ve yüzeysel soğutulmuş 1500 dev / dk asenkron motorlar için geçerlidir.
  The motor measure currents are valid for normal inside- and surface-cooled three phase current motors with 1500 cy/m.
- Direkt çalışma : Çalışma akımı max. 6 x motor ölçüm akımı, çalışma zamanı max. 5 sn.
  Direct operation: Operation current max. 6 x motor measure current, operation time max. 5 see.
- Y/Δ çalışma : Çalışma akımı max. 2 x motor ölçüm akımı, çalışma zamanı max. 15 sn.
  Y/Δ operation : Operation time max. 2 x motor measure current, operation time max. 15 sec.
- Motor koruma rölesi 0,58 x motor ölçüm akımı değerine ayarlanır.
  Setting motor protection relay (on the rope) to 0,58 x motor measure current.
- Daha yüksek ölçüm çalışma akımında veya daha uzun çalışma zamanında daha büyük emniyetler kullanılmalıdır.
  Protection of higher values are necessary by higher current, measuring, operation current and i or longer operation time.
- Tablo "yavaş" ya da "gL" sigortaları için geçerlidir. (DIN VDE 0636)
  The chart is valid for "slow " or "gL" protection. (DIN VDE 0636)

Motor Güçleri			230 V Motor Akımı	Sigorta		400 V Motor Akımı	Sigorta		500 V Motor Akımı	Sigorta		690 V Motor Akımı	Sigorta	
Motor Powers			*Motor Current*	*Back-up Direct Operotion VI/Δ*		*Motor Current*	*Back-up Direct Operotion VI/Δ*		*Motor Current*	*Back-up Direct Operotion VI/Δ*		*Motor Current*	*Back-up Direct Operotion VI/Δ*	
kW	cos Ø	%	A	A	A	A	A	A	A	A	A	A	A	A
0.06	0.7	58	0.37	2	-	0.21	2	-	0.17	2	-	0.12	2	-
0.09	0.7	60	0.54	2	-	0.31	2	-	0.25	2	-	0.18	2	-
0.12	0.7	60	0.72	4	2	0.41	2	-	0.33	2	-	0.24	2	-
0.18	0.7	62	1.04	4	2	0.6	2	-	0.48	2	-	0.35	2	-
0.25	0.7	62	1.4	4	2	0.8	4	2	0.7	2	-	0.6	2	-
0.37	0.72	62	2	6	4	1.1	4	2	0.9	2	2	0.7	2	-
0.55	0.75	69	2.7	10	4	1.5	4	2	1.2	4	2	0.9	4	2
0.75	0.97	74	3.2	10	4	1.9	6	4	1.5	4	2	1.1	4	2
1.1	0.81	74	4.6	10	6	2.6	6	4	2.1	6	4	1.5	4	2
1.5	0.81	74	6.3	16	10	3.6	6	4	2.9	6	4	2.1	6	4
2.2	0.81	78	8.7	20	10	5	10	6	4	10	4	2.9	10	4
3	0.82	80	11.5	25	16	6.6	16	10	5.3	16	6	3.8	10	4
4	0.82	83	14.8	32	16	8.5	20	10	6.8	16	10	4.9	16	6
5.5	0.82	86	19.6	32	25	11.3	25	16	9	20	16	6.5	16	10
7.5	0.82	87	27.6	50	32	16	32	16	12.1	25	16	8.8	20	10
11	0.84	87	38	80	40	21.7	40	25	17.4	32	20	12.6	25	16
15	0.84	88	51	100	63	29.3	63	32	23.4	50	25	17	32	20
18.5	0.84	88	63	125	80	36	63	40	28.9	50	32	20.9	32	25
22	0.84	92	71	125	80	41	80	50	33	63	32	23.8	50	25
30	0.85	92	96	200	100	55	100	63	44	80	50	32	63	32
37	0.86	92	117	200	125	68	125	80	54	100	63	39	80	50
45	0.86	93	141	250	160	81	160	100	65	125	80	47	80	63
55	0.86	93	173	250	200	99	200	125	79	160	80	58	100	63
75	0.86	94	233	315	250	134	200	160	107	200	125	78	160	100
90	0.86	94	279	400	315	161	250	200	129	200	160	93	160	100
110	0.86	94	342	500	400	196	315	200	157	250	160	114	200	125
132	0.87	95	401	630	500	231	400	250	187	250	200	134	250	160
160	0.87	95	486	630	630	279	400	315	224	315	250	162	250	200
200	0.87	95	607	800	630	349	500	400	279	400	315	202	315	250
250	0.87	95	-	-	-	437	630	500	349	500	400	253	400	315
315	0.87	96	-	-	-	544	800	630	436	630	500	316	500	400
400	0.88	96	-	-	-	683	1000	800	547	800	630	396	630	400
450	0.88	96	-	-	-	769	1000	800	615	800	630	446	630	630
500	0.88	97	-	-	-	-	-	-	-	-	-	491	630	630
560	0.88	97	-	-	-	-	-	-	-	-	-	550	800	630
630	0.88	97	-	-	-	-	-	-	-	-	-	618	800	630

Teknik Özellikler / *Technical Specifications*

Anahtarlama Kapasitesi ve Ön Sigorta Seçimi / *Switching Capacity and Fuse Selection*

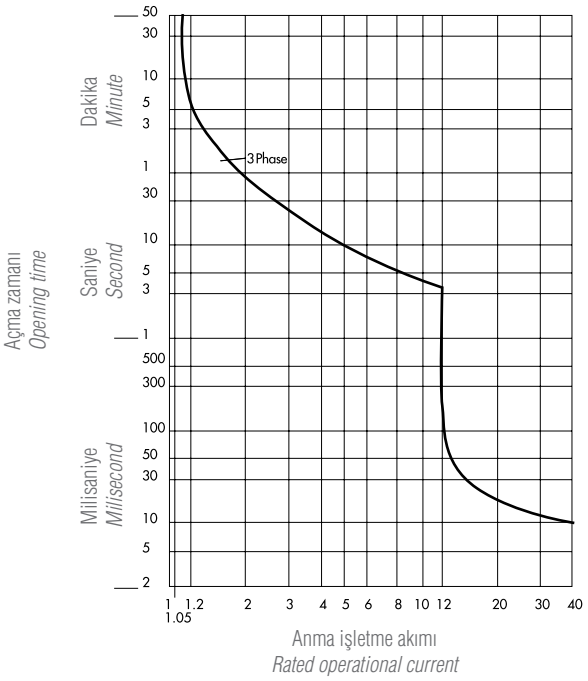
Ürün Kodu *Code*	Ak›m Ayar Aralığı (A) *Current setting (A)*	Ön Sigorta (A) / *Fuse (A)*				Anahtarlama Kapasitesi (kA) *Switching Capacity and fuse selection*				Kutu Adedi *Box pieces*
		230V	400V	500V	690V	230V	400V	500V	690V	
MKS1TM-0.16	0.10 - 0.16	-	-	-	-	100	100	100	100	1
MKS1TM-0.25	0.16 - 0.25	-	-	-	-	100	100	100	100	1
MKS1TM-0.40	0.25 - 0.40	-	-	-	-	100	100	100	100	1
MKS1TM-0.63	0.40 - 0.63	-	-	-	-	100	100	100	100	1
MKS1TM-1	0.63 - 1.00	-	-	-	-	100	100	100	100	1
MKS1TM-1.6	1.00 - 1.60	-	-	-	-	6	3	3	2.5	1
MKS1TM-2.5	1.60 - 2.50	-	-	25	20	6	3	3	2.5	1
MKS1TM-4	2.50 - 4.00	-	-	35	25	6	3	3	2.5	1
MKS1TM-6.3	4.00 - 6.30	-	-	50	35	6	3	2.5	2	1
MKS1TM-10	6.30 - 10.0	-	80	50	35	6	3	2.5	2	1
MKS1TM-16	10.0 - 16.0	80	80	63	35	6	3	2.5	2	1
MKS1TM-20	16.0 - 20.0	80	80	63	50	6	3	2.5	2	1
MKS1TM-25	20.0 - 25.0	80	80	63	50	6	3	2.5	2	1

Kullanma Kategorisi (DIN VDE 0660 Bölüm 102, IEC 947- 4-1) AC-3 max. 690 V / *Utilization Category*

Akım Ayar Araığı *Current Setting [A]*	Ön Sigorta (A) *Fuse (A)*	Akım Ayar Aralığı (A) *Current Setting (A)*	Ön Sigorta (A) *Fuse (A)*	Akım Ayar Aralığı (A) *Current Setting (A)*	Ön Sigorta (A) *Fuse (A)*
0,4 - 0,63	2	2,5 - 4	10	16 - 20	50
0,63 - 1	4	4 - 6,3	16	20 - 25	50
1 - 1,6	6	6,3 - 10	25		
1,6 - 2,5	6	10 - 16	35	-	

Açma Karakteristik Eğrileri / *Tripping Characteristics*

Açma karakteristik eğrileri şalterin reaksiyq.n akımına bağlı olarak açma zamanını gösterir. Bu değerler 20˚-C'deki değerlerin soğur durumdan itibaren ortalama değerleridir. Özel karakteristik eğrileri ihtiyaç halinde firmamızdan istenebilir.
The tripping characteristics show the tripping time in relation to the response current. They show main values of the tolerance range at an ambient temperature of 20°C , starting from cold. The tripping of overload releases at operational temperature is reduced to approximately 1/4 of the shown. Specific characteristics for each individual setting range are available on request.

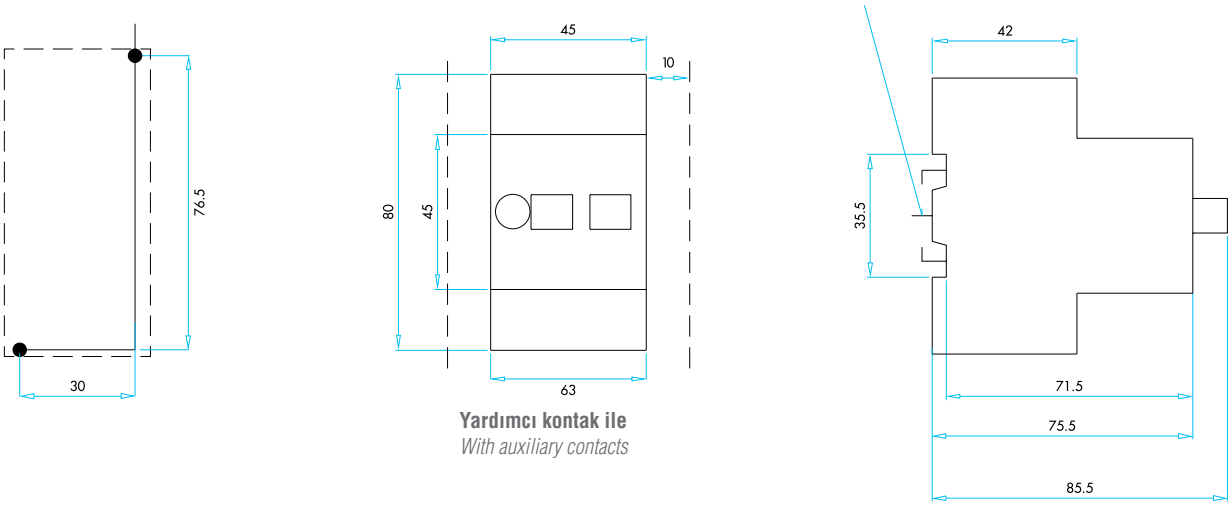


MONTAJ ŞEKLİ / *ASSEMBLY*

MKS1TM

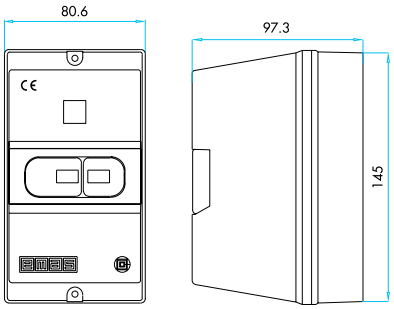
Montaj Ölçüleri
Mounting sizes

DIN rail EN 50022-35

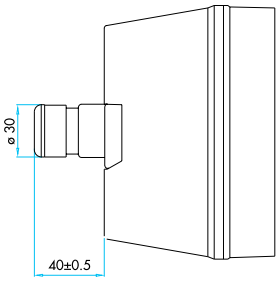


Yardımcı kontak ile
With auxiliary contacts

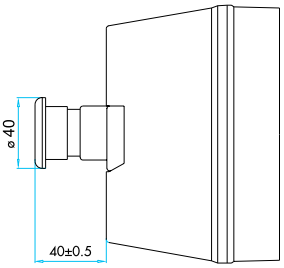
BOYUTLAR (mm) / *DIMENSIONS (mm)*



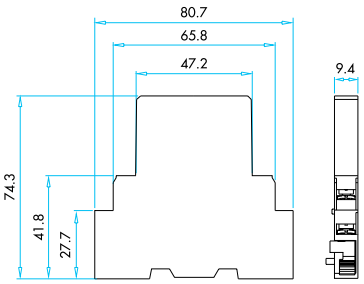
MKS1-K



MKS1-KE30



MKS1-KE



MKS1-YKD

TS Serisi Motor Koruma Şalterleri

- 0.18 -16 A arasında ayarlanabilen 11 kademeli aşırı akım koruyucusu
- Mekanik darbelere tam dayanım
- Etanj özelliği sayesinde çevre şartlarına maksimum dayanım
- Sıva üstü ve ankastre tipler

Teknik Bilgiler

Mekanik Ömür	: 10.000 açma-kapama min.
Elektriksel Ömür	: 10.000 açma-kapama min.
Çalışma Sıcaklığı	: maks. ˚C -5 / +40
Çalışma Gerilimi Ue	: 230-400 V AC
Yalıtım Gerilimi Ui	: 300 V
Çalışma Akımı Ie	: 0,18-16 A
Bağlantı Kablo Kesiti	: 1,5 - 2,5 mm^2
Dielektrik Dayanımı	: 1500 V AC (1 dakika için)
Koruma Sınıfı	: IP41 - IP65 (Koruma Çerçeveli)
Kullanma Sınıfı	: AC3
Açma Sınıfı	: 10 A
Yalıtım Direnci	: 10 MΩ (500V DC)
Standart	: TS EN 60947-4-1

TS *Series Motor Protection Circuit Breakers*

- *Adjustable overload release 11 ranges between 0.18-16A*
- *Maximum strength to mechanical pulses*
- *Maximum strength to environmental conditions with waterproof feature*
- *Flush mounting and enclosure types*

Technical Information

Mechanical Life	*: 10.000 operations min.*
Electrical Life	*: 10.000 operations min.*
Operating Temperature	*: max. ˚C -5 / +40*
Operating Voltage Ue	*: 230 - 400 V AC*
Insulation Voltage Ui	*: 300 V*
Operating Current Ie	*: 0,18 - 16 A*
Cable Section	*: 1,5 - 2,5 mm^2*
Dielectric Strength	*: 1500V AC (for 1 min.)*
Pratection Degree	*: IP41 - IP65 (Protection Frame)*
Range of Use	*: AC3*
Open of Use	*: 10*
Insulation Resistance	*: 10 MΩ (500V DC)*
Standard	*: TS EN 60947-4-1*

TS Serisi Motor Koruma Şalterler Tipleri
Series Motor Protection Circuit Breaker Types

Termik Ayarlı Motor Koruma Şalteri
Motor Protection Circuit Breaker

Termik Korumalı, Kutulu Tip / *Thermic Protection with Box*

Ürün Kodu *Code*	Termik Akım Ayar Aralığı *Range of Ampere*	Montaj Tipi *Mounting Type*	Buton Kılıfı *Water Resistance*	Kutu Rengi *Colour*
TSP-0.32	0.18-0.32	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP-0.55	0.30-0.55	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP-0.70	0.40-0.70	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP-1.00	0.60-1.00	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP- 1.60	0.90- 1.60	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP-2.50	1.50-2.50	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP-3.50	2.40-3.50	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP-5.50	3.20-5.50	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP-8.50	5.00-8.50	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP-13.0	8.00-13.0	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSP-16.0	11.0-16.0	Yüzey *Surface*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*

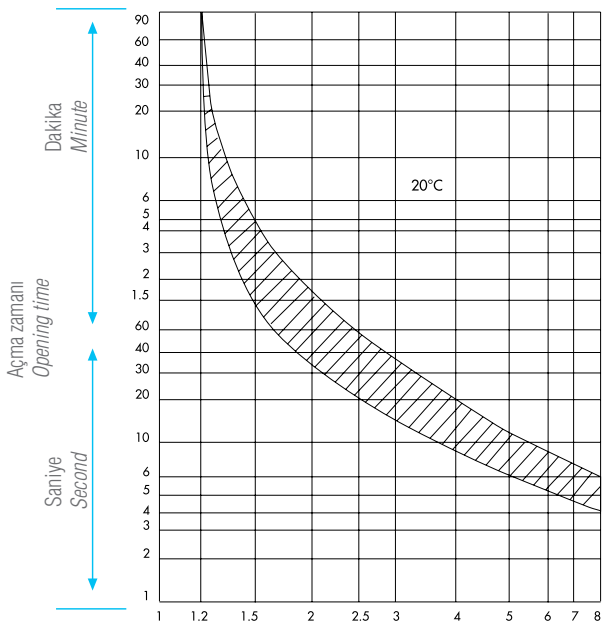
Termik Ayarlı Motor Koruma Şalteri (Ankastre)
Motor Protection Circuit Breaker (Flush Mounting)

Termik Korumalı, Ankastre Tip / *Thermic Protection, Flush Mounting*

Ürün Kodu *Code*	Termik Akım Ayar Aralığı *Range of Ampere*	Montaj Tipi *Mounting Type*	Buton Kılıfı *Water Resistance*	Kutu Rengi *Colour*
TSG-0.32	0.18-0.32	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG-0.55	0.30-0.55	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG-0.70	0.40-0.70	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG-1.00	0.60-1.00	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG- 1.60	0.90- 1.60	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG-2.50	1.50-2.50	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG-3.50	2.40-3.50	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG-5.50	3.20-5.50	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG-8.50	5.00-8.50	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG-13.0	8.00-13.0	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*
TSG-16.0	11.0-16.0	Ankastre *Flush Mounting*	Etanj *Waterproof*	Gri- Siyah *Grey-Black*

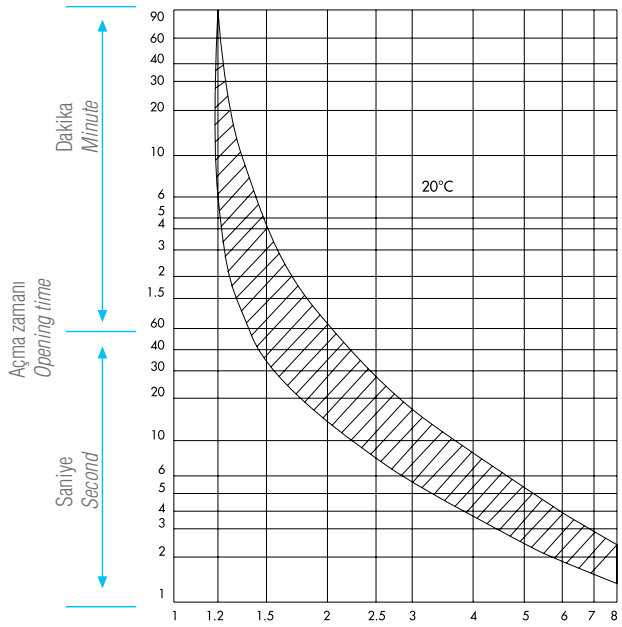
Teknik Özellikler / *Technical Specifications*

Açma Karakteristik Eğrisi / *Tripping Characteristic Graphic*



T1

x Nominal Akım
Nominal current



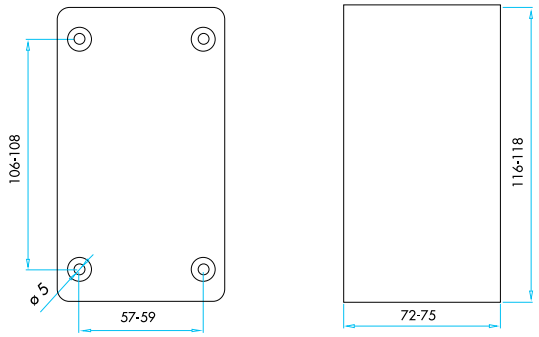
TII

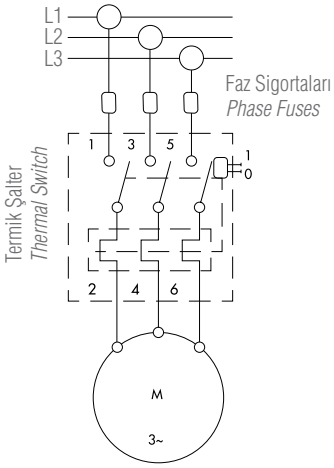
x Nominal Akım
Nominal current

Ön Sigorta Seçim Tablosu / *Fuse Selection Table*

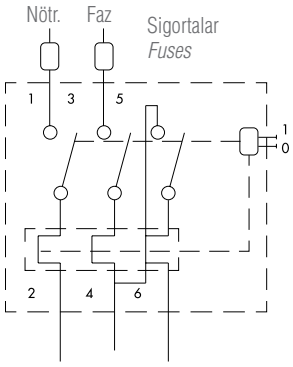
Termik Akım Ayar Aralığı *Thermal Current Adjustment Interval*	Karakteristik Eğri Tipi	Sigorta *Fuse*	
		Gecikmesiz *Without Delay*	Gecikmeli *With Delay*
0.18 - 0.32	TI	1	-
0.30 - 0.55	TI	4	-
0.40 - 0.70	TI	4	-
0.60 - 1.00	TI	6	-
0.90 - 1.60	TI	10	-
1.50-2.50	TI	16	10
2.40-3.50	TI	16	10
3.20-5.50	TII	16	16
5.00 - 8.50	TII	25	20
8.00 - 13.0	TII	35	25
11.0-16.0	TII	35	25
15.0 - 25.0	TII	63	35

MONTAJ ŞEKLİ VE BAĞLANTI ŞEMALARI / *CONNECTION SCHEME*



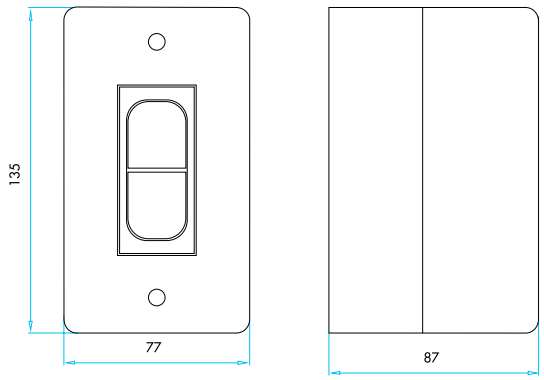


Trifaze Bağlantı
Three Phase Connection

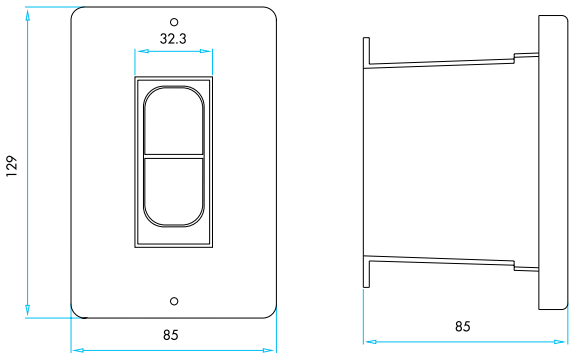


Monofaze Bağlantı
Single-Phase Connection

BOYUTLAR (mm) / *DIMENSIONS (mm)*



TSP



TSG

Pako Şalterler ve Pako Kutuları

Rotary Cam Switches

G

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PS *Serisi Pako Şalterler*

- Yüksek doğruluk
- Geniş uygulama alanları için ürün çeşitliliği
- Uzun ömür
- Yüksek kontak güvenilirliği
- Kompakt tasarım ve sağlamlık
- Parmak ergonomisine uygun tasarım ve kolay fark edilebilen kademeler

Teknik Bilgiler

Mekanik Ömür	: 100.000 açma-kapama min. (15 dev/dk)
Elektriksel Ömür	: 50.000 açma-kapama min. (7,5 dev/dk)
Çalışma Sıcaklığı	: -5 / +40˚C
Koruma Derecesi	: IP54 ve IP65 kutu içinde
Kısa Devre Kesme Kapasitesi	: 6kA
Çalışma Gerilimi (Ue)	: 220 - 400 V
Çalışma Akımı (Ie)	: 10 - 120 A
İzolasyon Direnci	: 10 MΩ min. (500 V DC)
Dielektrik Mukavemeti	: (1 dakika için) 1890 AC
Yalıtım Gerilimi (Ui)	: 690 V
Darbe Dayanım Gerilimi (Uimp)	: 4 kv
Kullanma Sınıfı	: AC21A - AC23A
Çalışma Frekansı	: 50 Hz.
Standart	: TS EN 60947-3

PS *Series Rotary Cam Switches*

- *High precision*
- *Variety of products for wide application fields*
- *Long life time*
- *High contact reliability*
- *Compact design and reliability*
- *Handle designed in conformity with finger ergonomy and easily perceivable grades*

Technical Information

Mechanical Life	*: 100.000 operations min. (15 cycle/min.)*
Electrical Life	*: 50.000 operations min. (7,5 cycle/min.)*
Operating Temperature	*: -5 / +40°C*
Protection Degree	*: IP54 and IP65 (Front Protection)*
Short Circuit Breaking Capacity	*: 6 kA*
Rated Operating Voltage (Ue)	*: 220 - 400 V*
Rated Operating Current (Ie)	*: 10 -120 A*
Insulation Resistance	*: 10 MΩ min. (500 V DC)*
Dielectrical Strength	*: (for 1 minute) 1890 AC*
Insulation Voltage (Ui)	*: 690 V*
Impact Resistance (Uimp)	*: 4 kv*
Utilization Category	*: AC21A - AC23A*
Operating Fregency	*: 50 Hz.*
Standard	*: TS EN 60947-3*

Pako Şalterlerin Seçim Tablosu

Rotary Cam Switches Selection Table

Grup	Terminal Tipi	Nominal Akım	Tip	Kutup / Kademe	Açı	Etiket	Opsiyon
PS	A	010	AK	1	3	1	S
Group	*Terminal Type*	*Nominal Current*	*Type*	*Pole*	*Angle*	*Label*	*Option*

PS Pako Şalterler *Rotary Cam Switches*

A	Vidalı	*Screw*
B	Terminalli	*Terminal*
C	Yay Baskılı	*Spring Clamp*

010	10 Ampere	*10 Ampere*
016	16 Ampere	*16 Ampere*
020	20 Ampere	*20 Ampere*
025	25 Ampere	*25 Ampere*
032	32 Ampere	*32 Ampere*
040	40 Ampere	*40 Ampere*
050	50 Ampere	*50 Ampere*
063	63 Ampere	*63 Ampere*
080	80 Ampere	*80 Ampere*
120	120 Ampere	*120 Ampere*
160	160 Ampere	*160 Ampere*
200	200 Ampere	*200 Ampere*

AK	Aç - Kapa	*On -Off*
KD	Kutup Değiştirici	*Change-Over*
KS	Kademeli Şalter	*Step*
KT	Kademeli Toplamalı	*Multi Step*
MS	Motor Şalteri	*Motor Control*
CD	Çift Devir	*Double Speed Motor Switch*
OK	Ölçü Komutatörü	*Measure Commutator*
Z*	Özel Pako	*Special Cam Switch*

AK KT MS CD ve KD Şalterlerde
For AK KT MS CD and KD Switches

1	1 Kutup	*1 Pole*
2	2 Kutup	*2 Poles*
3	3 Kutup	*3 Poles*
4	4 Kutup	*4 Poles*

KS ve KT Şalterlerde
For KS and KT Switches

2	2 Kademe	*2 Step*
3	3 Kademe	*3 Step*
4	4 Kademe	*4 Step*
5	5 Kademe	*5 Step*
6	6 Kademe	*6 Step*
7	7 Kademe	*7 Step*
8	8 Kademe	*8 Step*
9	9 Kademe	*9 Step*

Z Şalterlerde
For Z Switches

Sıra No

1	30' Açı	*30' Angle*
2	45' Açı	*45' Angle*
3	60' Açı	*60'Angle*
4	90' Açı	*90' Angle*
5	90' Açı (Yaylı Geri Dönüşlü)	*90' Angle (Spring Return)*

S	48X48 Normal	*48X48 Normal*
E	48x48 Emniyet Sarı Kırmızı	*48x48 Emergency Yellow-Red*
B	64x64 Normal	*64x64 Normal*
F	64x64 Emniyet	*64x64 Emergency*
AQ	Anahtarlı Hızlı Montaj	*Key Operated Quick Installation*
K	Tutamaktan Kilit Takılabilen	*Padlockable Handle*
G	48x48 Emniyet Gri Siyah	*48x48 Emergency Grey-Black*
Q	Hızlı Montaj 48X48 Normal	*Quick Installation 48x48 Normal*
P	Hızlı Montaj 48x48 Emniyet Sarı Kırmızı	*Quick Installation 48x48 Emerg.Yellow-Red*

1	
2	
3	
4	
5	
6	
7	

Pako Şalter Grupları
Rotary Cam Switch Groups

48x48 Normal

64x64 Normal

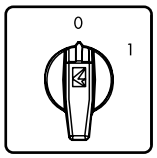
PSK11

PSK12

AQ Anahtarlı Hızlı Montaj
AQ Key Operated Quick Release

K Tutamaktan Kilit Takılabilen
K Padlockable Handle

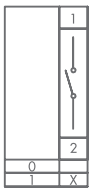
"0 -1" Aç-Kapa Pako Şalterler - 60° / 0 -1 On-Off Cam Switches - 60°



PSA020AK131S

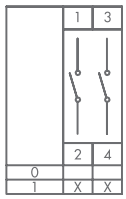
Ürün Kodu / *Code*	Faz Sayısı / *Poles*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*
PSA010AK131S	1 Faz / *Pole*	10	PSK11	√	√
PSA016AK131S	1 Faz / *Pole*	16	PSK11	√	√
PSA020AK131S	1 Faz / *Pole*	20	PSK11	√	√
PSA025AK131S	1 Faz / *Pole*	25	PSK11	√	√
PSA032AK131S	1 Faz / *Pole*	32	PSK21		
PSA040AK131S	1 Faz / *Pole*	40	PSK21		
PSA050AK131S	1 Faz / *Pole*	50	-		
PSA063AK131S	1 Faz / *Pole*	63	-		
PSA080AK131S	1 Faz / *Pole*	80	-		
PSA120AK131S	1 Faz / *Pole*	120	-		

Kontak Şeması / *Scheme*



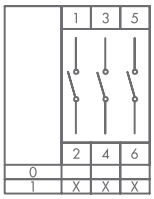
PSA020AK231S

PSA010AK231S	2 Faz / *Poles*	10	PSK11	√	√
PSA016AK231S	2 Faz / *Poles*	16	PSK11	√	√
PSA020AK231S	2 Faz / *Poles*	20	PSK11	√	√
PSA025AK231S	2 Faz / *Poles*	25	PSK11	√	√
PSA032AK231S	2 Faz / *Poles*	32	PSK21		
PSA040AK231S	2 Faz / *Poles*	40	PSK21		
PSA050AK231S	2 Faz / *Poles*	50	-		
PSA063AK231S	2 Faz / *Poles*	63	-		
PSA080AK231S	2 Faz / *Poles*	80	-		
PSA120AK231S	2 Faz / *Poles*	120	-		



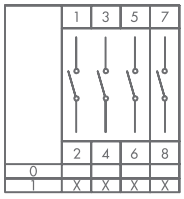
PSA020AK331S

PSA010AK331S	3 Faz / *Poles*	10	PSK11	√	√
PSA016AK331S	3 Faz / *Poles*	16	PSK11	√	√
PSA020AK331S	3 Faz / *Poles*	20	PSK11	√	√
PSA025AK331S	3 Faz / *Poles*	25	PSK11	√	√
PSA032AK331S	3 Faz / *Poles*	32	PSK21		
PSA040AK331S	3 Faz / *Poles*	40	PSK21		
PSA050AK331S	3 Faz / *Poles*	50	-		
PSA063AK331S	3 Faz / *Poles*	63	-		
PSA080AK331S	3 Faz / *Poles*	80	-		
PSA120AK331S	3 Faz / *Poles*	120	-		



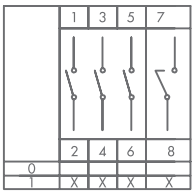
PSA020AK431S

PSA010AK431S	4 Faz / *Poles*	10	PSK11	√	√
PSA016AK431S	4 Faz / *Poles*	16	PSK11	√	√
PSA020AK431S	4 Faz / *Poles*	20	PSK11	√	√
PSA025AK431S	4 Faz / *Poles*	25	PSK11	√	√
PSA032AK431S	4 Faz / *Poles*	32	PSK21		
PSA040AK431S	4 Faz / *Poles*	40	PSK21		
PSA050AK431S	4 Faz / *Poles*	50	-		
PSA063AK431S	4 Faz / *Poles*	63	-		
PSA080AK431S	4 Faz / *Poles*	80	-		
PSA120AK431S	4 Faz / *Poles*	120	-		



PSA020AK831S

PSA010AK831S	3 Faz+Nötr / *Poles+Neutral*	10	PSK11	√	√
PSA016AK831S	3 Faz+Nötr / *Poles+Neutral*	16	PSK11	√	√
PSA020AK831S	3 Faz+Nötr / *Poles+Neutral*	20	PSK11	√	√
PSA025AK831S	3 Faz+Nötr / *Poles+Neutral*	25	PSK11	√	√
PSA032AK831S	3 Faz+Nötr / *Poles+Neutral*	32	PSK21		
PSA040AK831S	3 Faz+Nötr / *Poles+Neutral*	40	PSK21		
PSA050AK831S	3 Faz+Nötr / *Poles+Neutral*	50	-		
PSA063AK831S	3 Faz+Nötr / *Poles+Neutral*	63	-		
PSA080AK831S	3 Faz+Nötr / *Poles+Neutral*	80	-		
PSA120AK831S	3 Faz+Nötr / *Poles+Neutral*	120	-		



- İstendiği takdirde sarı kırmızı kafa ile tedarik edilir. Bu durumda son harf "S" yerine "E" olmalıdır.
- *Could be supplied with Red-Yellow head w/o extra charge, in this case please replace the "S" at the end with "E"*

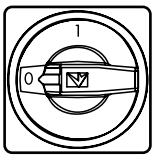
•• İstendiği takdirde, 10-25A bir büyük boy çerçeve ile montaj yapılabilir (64x64), bu durumda sondaki "S" yerine "B" konması gerekmektedir.
•• *10-25A Cam switches could be supplied with big frame (64x64) with extra charge. In this case please replace the "S" at the end with "B".*

••• Anahtarlı sütunda işaretli olan modeller çabuk montajlı Anahtarlı Kafa için uygundur.
••• *Products in the Key Operated column are available for quick release Key Head.*

•••• K tutamaktan kilit takılabilen modellerde sondaki "S" yerine "K" konması gerekmektedir.
•••• *Please replace "S" letter at the end of the code with "K" for Lockable Handle model.*

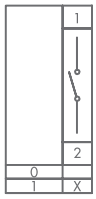
••••• Q Çabuk montajlı modellerde sondaki "S" yerine "Q" konması gerekmektedir.
••••• *Please replace "S" letter at the and of the code with "Q" letter for quick installation model.*

Emniyet Tipi Aç-Kapa Pako Şalterler - 90° / 0-1 Safety On-Off Cam Switches - 90°



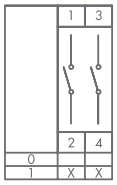
PSA020AK141E

Ürün Kodu	Faz Sayısı	Anma Termik Akımı (A)	Uygun Kutu Kodu	Anahtarlı Kafa Uyarlanabilir	Çabuk Montaj	Kontak Şeması
Code	*Poles*	*Rated Thermal Current (A)*	*Enclosure*	*Key Operated*	*Quick Installation*	*Scheme*
PSA010AK141E	1 Faz / *Pole*	10	PSK11		√	
PSA016AK141E	1 Faz / *Pole*	16	PSK11		√	
PSA020AK141E	1 Faz / *Pole*	20	PSK11		√	
PSA025AK141E	1 Faz / *Pole*	25	PSK11		√	
PSA032AK141E	1 Faz / *Pole*	32	PSK21			
PSA040AK141E	1 Faz / *Pole*	40	PSK21			
PSA050AK141E	1 Faz / *Pole*	50	-			
PSA063AK141E	1 Faz / *Pole*	63	-			
PSA080AK141E	1 Faz / *Pole*	80	-			
PSA120AK141E	1 Faz / *Pole*	120	-			



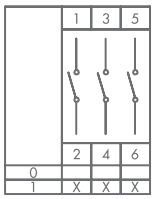
PSA020AK241E

PSA010AK241E	2 Faz / *Poles*	10	PSK11		√	
PSA016AK241E	2 Faz / *Poles*	16	PSK11		√	
PSA020AK241E	2 Faz / *Poles*	20	PSK11		√	
PSA025AK241E	2 Faz / *Poles*	25	PSK11		√	
PSA032AK241E	2 Faz / *Poles*	32	PSK21			
PSA040AK241E	2 Faz / *Poles*	40	PSK21			
PSA050AK241E	2 Faz / *Poles*	50	-			
PSA063AK241E	2 Faz / *Poles*	63	-			
PSA080AK241E	2 Faz / *Poles*	80	-			
PSA120AK241E	2 Faz / *Poles*	120	-			



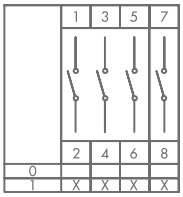
PSA020AK341E

PSA010AK341E	3 Faz / *Poles*	10	PSK11		√	
PSA016AK341E	3 Faz / *Poles*	16	PSK11		√	
PSA020AK341E	3 Faz / *Poles*	20	PSK11		√	
PSA025AK341E	3 Faz / *Poles*	25	PSK11		√	
PSA032AK341E	3 Faz / *Poles*	32	PSK21			
PSA040AK341E	3 Faz / *Poles*	40	PSK21			
PSA050AK341E	3 Faz / *Poles*	50	-			
PSA063AK341E	3 Faz / *Poles*	63	-			
PSA080AK341E	3 Faz / *Poles*	80	-			
PSA120AK341E	3 Faz / *Poles*	120	-			



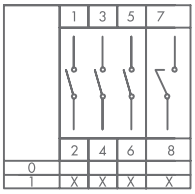
PSA020AK441E

PSA010AK441E	4 Faz / *Poles*	10	PSK11		√	
PSA016AK441E	4 Faz / *Poles*	16	PSK11		√	
PSA020AK441E	4 Faz / *Poles*	20	PSK11		√	
PSA025AK441E	4 Faz / *Poles*	25	PSK11		√	
PSA032AK441E	4 Faz / *Poles*	32	PSK21			
PSA040AK441E	4 Faz / *Poles*	40	PSK21			
PSA050AK441E	4 Faz / *Poles*	50	-			
PSA063AK441E	4 Faz / *Poles*	63	-			
PSA080AK441E	4 Faz / *Poles*	80	-			
PSA120AK441E	4 Faz / *Poles*	120	-			



PSA020AK941E

PSA010AK941E	3 Faz+Nötr / *Poles+Neutral*	10	PSK11		√	
PSA016AK941E	3 Faz+Nötr / *Poles+Neutral*	16	PSK11		√	
PSA020AK941E	3 Faz+Nötr / *Poles+Neutral*	20	PSK11		√	
PSA025AK941E	3 Faz+Nötr / *Poles+Neutral*	25	PSK11		√	
PSA032AK941E	3 Faz+Nötr / *Poles+Neutral*	32	PSK21			
PSA040AK941E	3 Faz+Nötr / *Poles+Neutral*	40	PSK21			
PSA050AK941E	3 Faz+Nötr / *Poles+Neutral*	50	-			
PSA063AK941E	3 Faz+Nötr / *Poles+Neutral*	63	-			
PSA080AK941E	3 Faz+Nötr / *Poles+Neutral*	80	-			
PSA120AK941E	3 Faz+Nötr / *Poles+Neutral*	120	-			

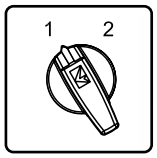


- İstendiği takdirde, 10-25A bir büyük boy çerçeve ile montaj yapılabilir (64x64), bu durumda sondaki "E" yerine "F" konması gerekmektedir.
- *10-25A Cam switches could be supplied with big frame (64x64). In this case please replace the "E" at the end with "F".*

•• Anahtarlı sütunda işaretli olan modeller çabuk montajlı Anahtarlı Kafa için uygundur.
•• *Products in the Key Operated column are available for quick release Key Head.*

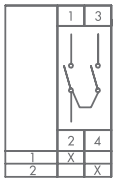
••• Çabuk montajlı modellerde sondaki "E" yerine "P" konması gerekmektedir.
••• *Please replace "E" letter at the and of the code with "P" letter for quick installation model.*

"1-2" Kutup Değiştiriciler - 60° / 1-2 Changeover Cam Switches - 60°

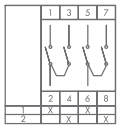


PSA020KD133S

Ürün Kodu / *Code*	Faz Sayısı / *Poles*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*	Kontak Şeması / *Scheme*
PSA010KD133S	1 Faz / *Pole*	10	PSK11		√	
PSA016KD133S	1 Faz / *Pole*	16	PSK11		√	
PSA020KD133S	1 Faz / *Pole*	20	PSK11		√	
PSA025KD133S	1 Faz / *Pole*	25	PSK11		√	
PSA032KD133S	1 Faz / *Pole*	32	PSK21			
PSA040KD133S	1 Faz / *Pole*	40	PSK21			
PSA050KD133S	1 Faz / *Pole*	50	-			
PSA063KD133S	1 Faz / *Pole*	63	-			
PSA080KD133S	1 Faz / *Pole*	80	-			
PSA120KD133S	1 Faz / *Pole*	120	-			

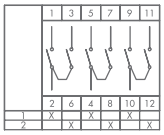


PSA010KD233S	2 Faz / *Poles*	10	PSK11		√	
PSA016KD233S	2 Faz / *Poles*	16	PSK11		√	
PSA020KD233S	2 Faz / *Poles*	20	PSK11		√	
PSA025KD233S	2 Faz / *Poles*	25	PSK11		√	
PSA032KD233S	2 Faz / *Poles*	32	-			
PSA040KD233S	2 Faz / *Poles*	40	-			
PSA050KD233S	2 Faz / *Poles*	50	-			
PSA063KD233S	2 Faz / *Poles*	63	-			
PSA080KD233S	2 Faz / *Poles*	80	-			

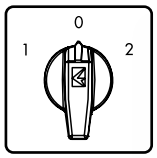


PSA020KD333S

PSA010KD333S	3 Faz / *Poles*	10	PSK12		√	
PSA016KD333S	3 Faz / *Poles*	16	PSK12		√	
PSA020KD333S	3 Faz / *Poles*	20	PSK12		√	
PSA025KD333S	3 Faz / *Poles*	25	PSK12		√	
PSA032KD333S	3 Faz / *Poles*	32	-			
PSA040KD333S	3 Faz / *Poles*	40	-			
PSA050KD333S	3 Faz / *Poles*	50	-			
PSA063KD333S	3 Faz / *Poles*	63	-			
PSA080KD333S	3 Faz / *Poles*	80	-			

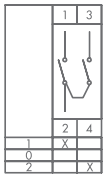


"1-0-2" Kutup Değiştiriciler - 60° / 1-0-2 Changeover Cam Switches - 60°



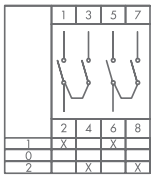
PSA020KD134S

Ürün Kodu / *Code*	Faz Sayısı / *Poles*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*	Kontak Şeması / *Scheme*
PSA010KD134S	1 Faz / *Pole*	10	PSK11	√	√	
PSA016KD134S	1 Faz / *Pole*	16	PSK11	√	√	
PSA020KD134S	1 Faz / *Pole*	20	PSK11	√	√	
PSA025KD134S	1 Faz / *Pole*	25	PSK11	√	√	
PSA032KD134S	1 Faz / *Pole*	32	PSK21			
PSA040KD134S	1 Faz / *Pole*	40	PSK21			
PSA050KD134S	1 Faz / *Pole*	50	-			
PSA063KD134S	1 Faz / *Pole*	63	-			
PSA080KD134S	1 Faz / *Pole*	80	-			
PSA120KD134S	1 Faz / *Pole*	120	-			



PSA020KD234S

PSA010KD234S	2 Faz / *Poles*	10	PSK11	√	√	
PSA016KD234S	2 Faz / *Poles*	16	PSK11	√	√	
PSA020KD234S	2 Faz / *Poles*	20	PSK11	√	√	
PSA025KD234S	2 Faz / *Poles*	25	PSK11	√	√	
PSA032KD234S	2 Faz / *Poles*	32	PSK21			
PSA040KD234S	2 Faz / *Poles*	40	PSK21			
PSA050KD234S	2 Faz / *Poles*	50	-			
PSA063KD234S	2 Faz / *Poles*	63	-			
PSA080KD234S	2 Faz / *Poles*	80	-			
PSA120KD234S	2 Faz / *Poles*	120	-			



- İstendiği takdirde sarı kırmızı kafa ile tedarik edilir. Bu durumda son harf "S" yerine "E" olmalıdır. Fiyat farkı uygulanmamaktadır.
- *Could be supplied with Red-Yellow head w/o extra charge, in this case please replace the "S" at the end with "E"*

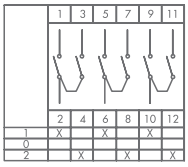
•• İstendiği takdirde, 10-25A bir büyük boy çerçeve ile montaj yapılabilir (64x64), bu durumda sondaki "S" yerine "B" konması gerekmektedir.
•• *10-25A Cam switches could be supplied with big frame (64x64) with extra charge. In this case please replace the "S" at the end with "B".*

••• Anahtarlı sütunda işaretli olan modeller çabuk montajlı Anahtarlı Kafa için uygundur.
••• *Products in the Key Operated column are available for quick release Key Head.*

•••• Q Çabuk montajlı modellerde sondaki "S" yerine "Q" konması gerekmektedir.
•••• *Please replace "S" letter at the and of the code with "Q" letter for quick installation model.*

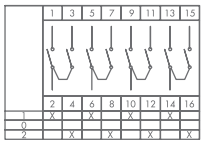
PSA020KD334S

Ürün Kodu / *Code*	Faz Sayısı / *Poles*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*	Kontak Şeması / *Scheme*
PSA010KD334S	3 Faz / *Poles*	10	PSK12	√	√	
PSA016KD334S	3 Faz / *Poles*	16	PSK12	√	√	
PSA020KD334S	3 Faz / *Poles*	20	PSK12	√	√	
PSA025KD334S	3 Faz / *Poles*	25	PSK12	√	√	
PSA032KD334S	3 Faz / *Poles*	32	PSK22			
PSA040KD334S	3 Faz / *Poles*	40	PSK22			
PSA050KD334S	3 Faz / *Poles*	50	-			
PSA063KD334S	3 Faz / *Poles*	63	-			
PSA080KD334S	3 Faz / *Poles*	80	-			
PSA120KD334S	3 Faz / *Poles*	120	-			

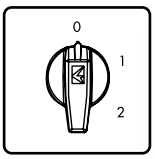


PSA020KD434S

Ürün Kodu / *Code*	Faz Sayısı / *Poles*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*	Kontak Şeması / *Scheme*
PSA010KD434S	4 Faz / *Poles*	10	PSK12	√	√	
PSA016KD434S	4 Faz / *Poles*	16	PSK12	√	√	
PSA020KD434S	4 Faz / *Poles*	20	PSK12	√	√	
PSA025KD434S	4 Faz / *Poles*	25	PSK12	√	√	
PSA032KD434S	4 Faz / *Poles*	32	PSK22			
PSA040KD434S	4 Faz / *Poles*	40	PSK22			
PSA050KD434S	4 Faz / *Poles*	50	-			
PSA063KD434S	4 Faz / *Poles*	63	-			
PSA080KD434S	4 Faz / *Poles*	80	-			
PSA120KD434S	4 Faz / *Poles*	120	-			

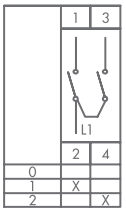


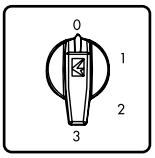
Kademeli Şalterler - 1 Faz / Step Cam Switches - 1 Pole



PSA020KS132S

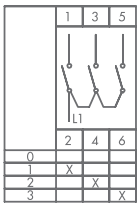
Ürün Kodu / *Code*	Kutup Sayısı / *Steps*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*	Kontak Şeması / *Scheme*
PSA010KS132S	0-2	10	PSK11	√	√	
PSA016KS132S	0-2	16	PSK11	√	√	
PSA020KS132S	0-2	20	PSK11	√	√	
PSA025KS132S	0-2	25	PSK11	√	√	
PSA032KS132S	0-2	32	PSK21			
PSA040KS132S	0-2	40	PSK21			
PSA050KS132S	0-2	50	-			
PSA063KS132S	0-2	63	-			
PSA080KS132S	0-2	80	-			
PSA120KS132S	0-2	120	-			

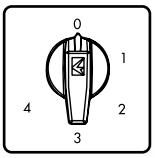




PSA020KS133S

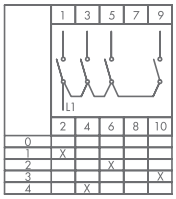
Ürün Kodu / *Code*	Kutup Sayısı / *Steps*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*	Kontak Şeması / *Scheme*
PSA010KS133S	0-3	10	PSK11	√	√	
PSA016KS133S	0-3	16	PSK11	√	√	
PSA020KS133S	0-3	20	PSK11	√	√	
PSA025KS133S	0-3	25	PSK11	√	√	
PSA032KS133S	0-3	32	PSK21			
PSA040KS133S	0-3	40	PSK21			
PSA050KS133S	0-3	50	-			
PSA063KS133S	0-3	63	-			
PSA080KS133S	0-3	80	-			
PSA120KS133S	0-3	120	-			





PSA020KS134S

Ürün Kodu / *Code*	Kutup Sayısı / *Steps*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*	Kontak Şeması / *Scheme*
PSA010KS134S	0-4	10	PSK12	√	√	
PSA016KS134S	0-4	16	PSK12	√	√	
PSA020KS134S	0-4	20	PSK12	√	√	
PSA025KS134S	0-4	25	PSK12	√	√	
PSA032KS134S	0-4	32	PSK22			
PSA040KS134S	0-4	40	PSK22			
PSA050KS134S	0-4	50	-			
PSA063KS134S	0-4	63	-			
PSA080KS134S	0-4	80	-			
PSA120KS134S	0-4	120	-			

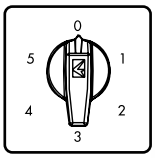


- İstendiği takdirde sarı kırmızı kafa ile tedarik edilir. Bu durumda son harf "S" yerine "E" olmalıdır. Fiyat farkı uygulanmamaktadır.
- *Could be supplied with Red-Yellow head w/o extra charge, in this case please replace the "S" at the end with "E"*

•• İstendiği takdirde, 10-25A bir büyük boy çerçeve ile montaj yapılabilir (64x64), bu durumda sondaki "S" yerine "B" konması gerekmektedir.
•• *10-25A Cam switches could be supplied with big frame (64x64) with extra charge. In this case please replace the "S" at the end with "B".*

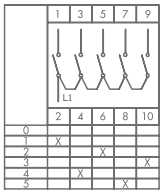
••• Anahtarlı sütunda işaretli olan modeller çabuk montajlı Anahtarlı Kafa için uygundur.
••• *Products in the Key Operated column are available for quick release Key Head.*

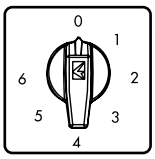
•••• Q Çabuk montajlı modellerde sondaki "S" yerine "Q" konması gerekmektedir.
•••• *Please replace "S" letter at the and of the code with "Q" letter for quick installation model.*



PSA020KS135S

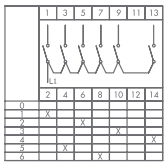
Ürün Kodu *Code*	Kutup Sayısı *Steps*	Anma Termik Akımı (A) *Rated Thermal Current (A)*	Uygun Kutu Kodu *Enclosure*	Anahtarlı Kafa Uyarlanabilir *Key Operated*	Çabuk Montaj *Quick Installation*	Kontak Şeması *Scheme*
PSA010KS135S	0-5	10	PSK12	√	√	
PSA016KS135S	0-5	16	PSK12	√	√	
PSA020KS135S	0-5	20	PSK12	√	√	
PSA025KS135S	0-5	25	PSK12	√	√	
PSA032KS135S	0-5	32	PSK22			
PSA040KS135S	0-5	40	PSK22			
PSA050KS135S	0-5	50	-			
PSA063KS135S	0-5	63	-			
PSA080KS135S	0-5	80	-			
PSA120KS135S	0-5	120	-			

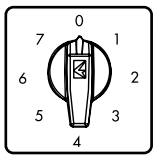




PSA020KS126S

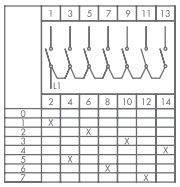
PSA010KS126S	0-6	10	PSK12		√	
PSA016KS126S	0-6	16	PSK12		√	
PSA020KS126S	0-6	20	PSK12		√	
PSA025KS126S	0-6	25	PSK12			
PSA032KS126S	0-6	32	PSK22			
PSA040KS126S	0-6	40	PSK22			
PSA050KS126S	0-6	50	-			
PSA063KS126S	0-6	63	-			
PSA080KS126S	0-6	80	-			
PSA120KS126S	0-6	120	-			



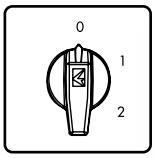


PSA020KS127S

PSA010KS127S	0-7	10	PSK12		√	
PSA016KS127S	0-7	16	PSK12		√	
PSA020KS127S	0-7	20	PSK12		√	
PSA025KS127S	0-7	25	PSK12		√	
PSA032KS127S	0-7	32	PSK22			
PSA040KS127S	0-7	40	PSK22			
PSA050KS127S	0-7	50	-			
PSA063KS127S	0-7	63	-			
PSA080KS127S	0-7	80	-			
PSA120KS127S	0-7	120	-			

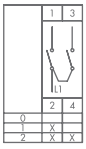


Kademeli Toplamalı Şalterler - 60° / *Step Cam Switches- 60°*



PSA020KT132S

Ürün Kodu *Code*	Kutup Sayısı *Poles*	Anma Termik Akımı (A) *Rated Thermal Current (A)*	Kademe *Steps*	Uygun Kutu Kodu *Enclosure*	Anahtarlı Kafa Uyarlanabilir *Key Operated*	Çabuk Montaj *Quick Installation*	Kontak Şeması *Scheme*
PSA010KT132S	1 Kutup / *Pole*	10	0-1-2	PSK11	√	√	
PSA016KT132S	1 Kutup / *Pole*	16	0-1-2	PSK11	√	√	
PSA020KT132S	1 Kutup / *Pole*	20	0-1-2	PSK11	√	√	
PSA025KT132S	1 Kutup / *Pole*	25	0-1-2	PSK11	√	√	
PSA010KT332S	3 Kutup / *Poles*	10	0-1-2	PSK12	√		
PSA016KT332S	3 Kutup / *Poles*	16	0-1-2	PSK12	√		



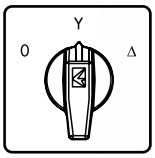
- İstendiği takdirde sarı kırmızı kafa ile tedarik edilir. Bu durumda son harf "S" yerine "E" olmalıdır. Fiyat farkı uygulanmamaktadır.
- *Could be supplied with Red-Yellow head w/o extra charge, in this case please replace the "S" at the end with "E"*

•• İstendiği takdirde, 10-25A bir büyük boy çerçeve ile montaj yapılabilir (64x64), bu durumda sondaki "S" yerine "B" konması gerekmektedir.
•• *10-25A Cam switches could be supplied with big frame (64x64) with extra charge. In this case please replace the "S" at the end with "B".*

••• Anahtarlı sütunda işaretli olan modeller çabuk montajlı Anahtarlı Kafa için uygundur.
••• *Products in the Key Operated column are available for quick release Key Head.*

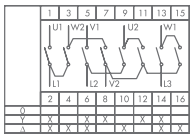
•••• Q Çabuk montajlı modellerde sondaki "S" yerine "Q" konması gerekmektedir.
•••• *Please replace "S" letter at the and of the code with "Q" letter for quick installation model.*

Yıldız Üçgen Kumanda Şalterler - 60° / Star-Delta Cam Switches- 60°

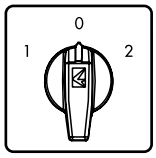


PSA020MS335S

Ürün Kodu	Faz Sayısı	Anma Termik Akımı (A)	Uygun Kutu Kodu	Anahtarlı Kafa Uyarlanabilir	Çabuk Montaj	Kontak Şeması
Code	*Steps*	*Rated Thermal Current (A)*	*Enclosure*	*Key Operated*	*Quick Installation*	*Scheme*
PSA010MS335S	3 Faz / *Phase*	10	PSK12	√	√	
PSA016MS335S	3 Faz / *Phase*	16	PSK12	√	√	
PSA020MS335S	3 Faz / *Phase*	20	PSK12	√	√	
PSA025MS335S	3 Faz / *Phase*	25	PSK12	√	√	
PSA032MS335S	3 Faz / *Phase*	32	PSK22			
PSA040MS335S	3 Faz / *Phase*	40	PSK22			
PSA050MS335S	3 Faz / *Phase*	50	-			
PSA063MS335S	3 Faz / *Phase*	63	-			
PSA080MS335S	3 Faz / *Phase*	80	-			
PSA120MS335S	3 Faz / *Phase*	120	-			

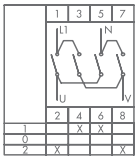


1 Faz Enversor Şalterler "1-0-2" / 1 Pole Changeover Cam Stwitches "1-0-2"

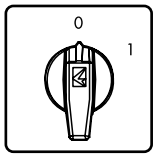


PSA020MS134S

Ürün Kodu	Faz Sayısı	Anma Termik Akımı (A)	Kademe	Uygun Kutu Kodu	Anahtarlı Kafa Uyarlanabilir	Çabuk Montaj	Kontak Şeması
Code	*Poles*	*Rated Thermal Current (A)*	*Steps*	*Enclosure*	*Key Operated*	*Quick Installation*	*Scheme*
PSA010MS134S	1 Faz / *Phase*	10	1-0-2	PSK11	√	√	
PSA016MS134S	1 Faz / *Phase*	16	1-0-2	PSK11	√	√	
PSA020MS134S	1 Faz / *Phase*	20	1-0-2	PSK11	√	√	
PSA025MS134S	1 Faz / *Phase*	25	1-0-2	PSK11	√	√	
PSA032MS134S	1 Faz / *Phase*	32	1-0-2	PSK21			
PSA040MS134S	1 Faz / *Phase*	40	1-0-2	PSK21			
PSA050MS134S	1 Faz / *Phase*	50		-			
PSA063MS134S	1 Faz / *Phase*	63		-			
PSA080MS134S	1 Faz / *Phase*	80		-			
PSA120MS134S	1 Faz / *Phase*	120		-			

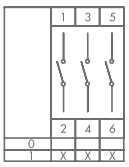


3 Faz Aç-Kapa Şalterler "0-1" / 3 Poles On-Off Cam Switches "0-1"



PSA020MS331S

Ürün Kodu	Faz Sayısı	Anma Termik Akımı (A)	Kademe	Uygun Kutu Kodu	Anahtarlı Kafa Uyarlanabilir	Çabuk Montaj	Kontak Şeması
Code	*Poles*	*Rated Thermal Current (A)*	*Steps*	*Enclosure*	*Key Operated*	*Quick Installation*	*Scheme*
PSA010MS331S	3 Faz / *Phase*	10	0-1	PSK11	√	√	
PSA016MS331S	3 Faz / *Phase*	16	0-1	PSK11	√	√	
PSA020MS331S	3 Faz / *Phase*	20	0-1	PSK11	√	√	
PSA025MS331S	3 Faz / *Phase*	25	0-1	PSK11	√	√	
PSA032MS331S	3 Faz / *Phase*	32	0-1	PSK21			
PSA040MS331S	3 Faz / *Phase*	40	0-1	PSK21			
PSA050MS331S	3 Faz / *Phase*	50		-			
PSA063MS331S	3 Faz / *Phase*	63		-			
PSA080MS331S	3 Faz / *Phase*	80		-			
PSA120MS331S	3 Faz / *Phase*	120		-			



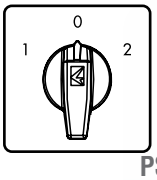
- İstendiği takdirde sarı kırmızı kafa ile tedarik edilir. Bu durumda son harf "S" yerine "E" olmalıdır. Fiyat farkı uygulanmamaktadır.
- *Could be supplied with Red-Yellow head w/o extra charge, in this case please replace the "S" at the end with "E"*

•• İstendiği takdirde, 10-25A bir büyük boy çerçeve ile montaj yapılabilir (64x64), bu durumda sondaki "S" yerine "B" konması gerekmektedir.
•• *10-25A Cam switches could be supplied with big frame (64x64) with extra charge. In this case please replace the "S" at the end with "B".*

••• Anahtarlı sütunda işaretli olan modeller çabuk montajlı Anahtarlı Kafa için uygundur.
••• *Products in the Key Operated column are available for quick release Key Head.*

•••• Q Çabuk montajlı modellerde sondaki "S" yerine "Q" konması gerekmektedir.
•••• *Please replace "S" letter at the and of the code with "Q" letter for quick installation model.*

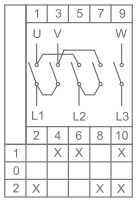
3 Faz Enversor Şalterler "1-0-2" / *3 Phase Changeover Cam Stwitches "1-0-2"*



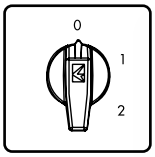
PSA020MS334S

Ürün Kodu / *Code*	Faz Sayısı / *Poles*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Kademe / *Steps*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*
PSA010MS334S	3 Faz / *Phase*	10	1-0-2	PSK12	√	√
PSA016MS334S	3 Faz / *Phase*	16	1-0-2	PSK12	√	√
PSA020MS334S	3 Faz / *Phase*	20	1-0-2	PSK12	√	√
PSA025MS334S	3 Faz / *Phase*	25	1-0-2	PSK12	√	√
PSA032MS334S	3 Faz / *Phase*	32	1-0-2	PSK22		
PSA040MS334S	3 Faz / *Phase*	40	1-0-2	PSK22		
PSA050MS334S	3 Faz / *Phase*	50	1-0-2	-		
PSA063MS334S	3 Faz / *Phase*	63	1-0-2	-		
PSA080MS334S	3 Faz / *Phase*	80	1-0-2	-		
PSA120MS334S	3 Faz / *Phase*	120	1-0-2	-		

Kontak Şeması / *Scheme*



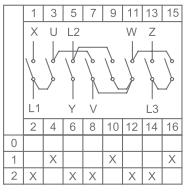
3 Faz Çift Devir Şalterler (0-1-2) / *3 Phase Double Cycle Cam Switches (0-1-2)*



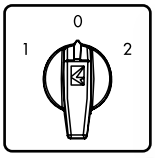
PSA016CD332S

Ürün Kodu / *Code*	Faz Sayısı / *Steps*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*
PSA010CD332S	3 Faz / *Phase*	10	PSK12	√	√
PSA016CD332S	3 Faz / *Phase*	16	PSK12	√	√
PSA020CD332S	3 Faz / *Phase*	20	PSK12	√	√
PSA025CD332S	3 Faz / *Phase*	25	PSK12	√	√
PSA032CD332S	3 Faz / *Phase*	32	PSK22		
PSA040CD332S	3 Faz / *Phase*	40	PSK22		
PSA050CD332S	3 Faz / *Phase*	50	-		
PSA063CD332S	3 Faz / *Phase*	63	-		
PSA080CD332S	3 Faz / *Phase*	80	-		
PSA120CD332S	3 Faz / *Phase*	120	-		

Kontak Şeması / *Scheme*



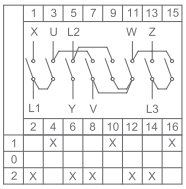
3 Faz Çift Devir Şalterler (1-0-2) / *3 Phase Double Cycle Cam Switches (1-0-2)*



PSA016CD334S

Ürün Kodu / *Code*	Faz Sayısı / *Steps*	Anma Termik Akımı (A) / *Rated Thermal Current (A)*	Uygun Kutu Kodu / *Enclosure*	Anahtarlı Kafa Uyarlanabilir / *Key Operated*	Çabuk Montaj / *Quick Installation*
PSA010CD334S	3 Faz / *Phase*	10	PSK12	√	√
PSA016CD334S	3 Faz / *Phase*	16	PSK12	√	√
PSA020CD334S	3 Faz / *Phase*	20	PSK12	√	√
PSA025CD334S	3 Faz / *Phase*	25	PSK12	√	√
PSA032CD334S	3 Faz / *Phase*	32	PSK22		
PSA040CD334S	3 Faz / *Phase*	40	PSK22		
PSA050CD334S	3 Faz / *Phase*	50	-		
PSA063CD334S	3 Faz / *Phase*	63	-		
PSA080CD334S	3 Faz / *Phase*	80	-		
PSA120CD334S	3 Faz / *Phase*	120	-		

Kontak Şeması / *Scheme*



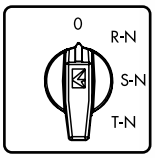
- İstendiği takdirde sarı kırmızı kafa ile tedarik edilir. Bu durumda son harf "S" yerine "E" olmalıdır. Fiyat farkı uygulanmamaktadır.
- *Could be supplied with Red-Yellow head w/o extra charge, in this case please replace the "S" at the end with "E"*

•• İstendiği takdirde, 10-25A bir büyük boy çerçeve ile montaj yapılabilir (64x64), bu durumda sondaki "S" yerine "B" konması gerekmektedir.
•• *10-25A Cam switches could be supplied with big frame (64x64) with extra charge. In this case please replace the "S" at the end with "B".*

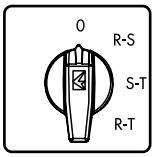
••• Anahtarlı sütunda işaretli olan modeller çabuk montajlı Anahtarlı Kafa için uygundur.
••• *Products in the Key Operated column are available for quick release Key Head.*

•••• Q Çabuk montajlı modellerde sondaki "S" yerine "Q" konması gerekmektedir.
•••• *Please replace "S" letter at the and of the code with "Q" letter for quick installation model.*

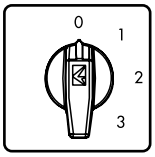
Ölçü Komütatörler - 45° / Measuring Cam Switches - 45°



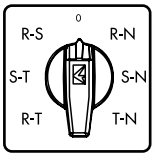
PSA020OK421S



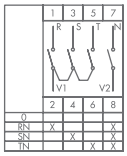
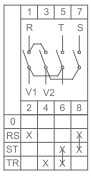
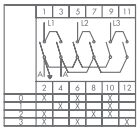
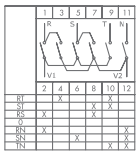
PSA020OK422S



PSA020OK426S



PSA020OK723S

Ürün Kodu *Code*	Tip *Type*	Anma Termik Akımı (A) *Rated Thermal Current (A)*	Pozisyon *Position*	Uygun Kutu Kodu *Enclosure*	Anahtarlı Kafa Uyarlanabilir *Key Operated*	Çabuk Montaj *Quick Installation*	Kontak Şeması *Scheme*
PSA010OK421S	4	10	Voltmetre / *Voltmeter*	PSK11		√	
PSA016OK421S	4	16	Voltmetre / *Voltmeter*	PSK11		√	
PSA020OK421S	4	20	Voltmetre / *Voltmeter*	PSK11		√	
PSA010OK422S	4	10	Faz-Faz Voltmetre *Phase-Phase Voltmeter*	PSK11		√	
PSA016OK422S	4	16	Faz-Faz Voltmetre *Phase-Phase Voltmeter*	PSK11		√	
PSA020OK422S	4	20	Faz-Faz Voltmetre *Phase-Phase Voltmeter*	PSK11		√	
PSA010OK426S	4	10	Ampermetre / *Ammeter*	PSK12		√	
PSA016OK426S	4	16	Ampermetre / *Ammeter*	PSK12		√	
PSA020OK426S	4	20	Ampermetre / *Ammeter*	PSK12		√	
PSA010OK723S	7	20	Ampermetre / *Ammeter*	PSK12		√	
PSA016OK723S	7	20	Ampermetre / *Ammeter*	PSK12		√	
PSA020OK723S	7	20	Voltmetre / *Voltmeter*	PSK12		√	

- Q Çabuk montajlı modellerde sondaki "S" yerine "Q" konması gerekmektedir.

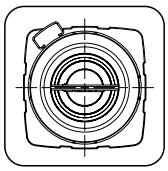
** Please replace "S" letter at the and of the code with "Q" letter for quick installation model.*

Aksesuarlar / Accessories

PSR1

PSR2

Ürün Kodu / *Code*	Tip / *Type*	Özellik / *Features*	Malzeme / *Material*
PSR1	Raya Montaj Aparatı / *Rail Mounting Interface*	Arası / *Between* 10 - 25 A	Plastik / *Plastic*
PSR2	Raya Montaj Aparatı / *Rail Mounting Interface*	Arası / *Between* 32 - 63 A	Plastik / *Plastic*



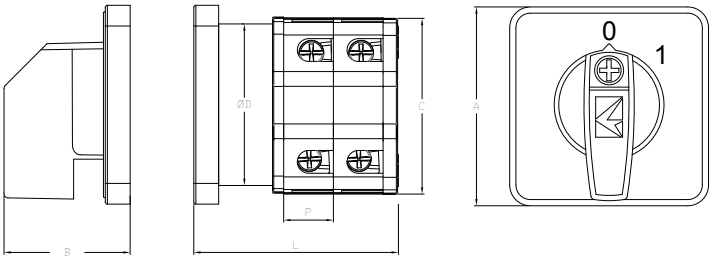
PSA020AK131AQ

PSA010KD134Q

PSA020AK131K

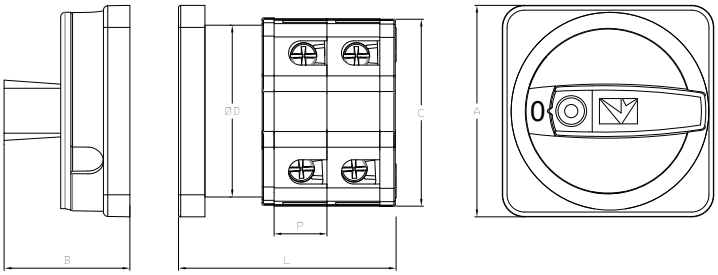
Montaj Şekilleri ve Boyutları (mm) / *Assembly Type and Dimensions (mm)*

STANDART PAKO / *STANDARD CAM SWITCHES*



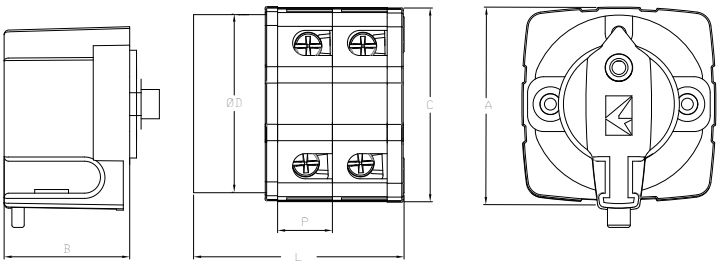
	A	B	C	D
PSA10	48	30,5	42,5	27
PSA16	48	30,5	42,5	27
PSA20	48	30,5	42,5	27
PSA25	48	30,5	42,5	27
PSA32	64	38	55	55
PSA40	64	38	55	55
PSA50	64	38	55	55
PSA63	64	38	55	55
PSA80	85	43	75	75
PSA120	95	43	85	85

EMNİYET PAKO / *SAFETY CAM SWITCHES*



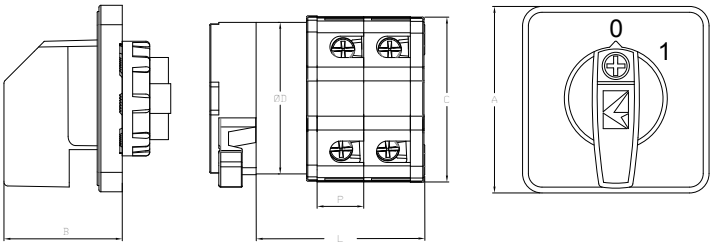
	A	B	C	D
PSA10	48	28,5	42,5	27
PSA16	48	28,5	42,5	27
PSA20	48	28,5	42,5	27
PSA25	48	28,5	42,5	27
PSA32	64	36	55	55
PSA40	64	36	55	55
PSA50	64	36	55	55
PSA63	64	36	55	55
PSA80	85	41	75	75
PSA120	95	41	85	85

TUTAMAKTAN KİLİTLİ PAKO / *PADLOCKABLE HANDLE CAM SWITCHES*



	A	B	C	D
PSA10	48	27,5	42,5	27
PSA16	48	27,5	42,5	27
PSA20	48	27,5	42,5	27
PSA25	48	27,5	42,5	27
PSA32	64	36	55	55
PSA40	64	36	55	55
PSA50	64	36	55	55
PSA63	64	36	55	55
PSA80	85	41	75	75
PSA120	95	41	85	85

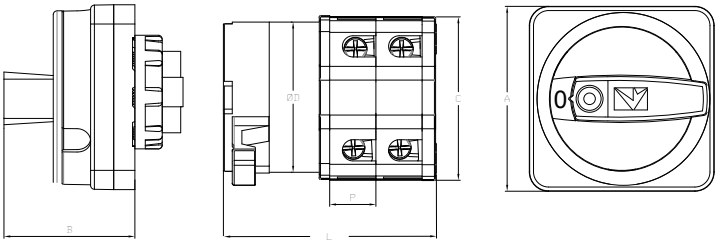
ÇABUK MONTAJ STANDART PAKO / *QUICK INSTALLATION CAM SWITCHES*



	A	B	C	D
PSA10	48	31	42,5	27
PSA16	48	31	42,5	27
PSA20	48	31	42,5	27
PSA25	48	31	42,5	27
PSA32	64	40	55	55
PSA40	64	40	55	55
PSA50	64	40	55	55
PSA63	64	40	55	55
PSA80	85	45	75	75
PSA120	95	45	85	85

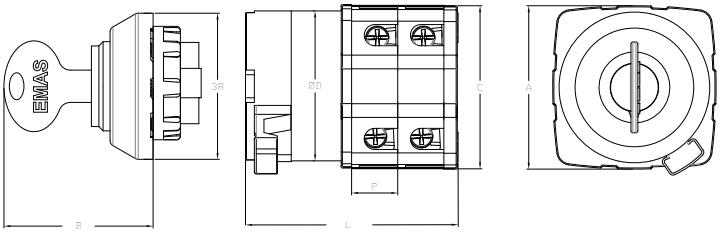
Montaj Şekilleri ve Boyutları (mm) / *Assembly Type and Dimensions (mm)*

ÇABUK MONTAJ EMNİYET PAKO / *QUICK INSTALLATION SAFETY CAM SWITCHES*



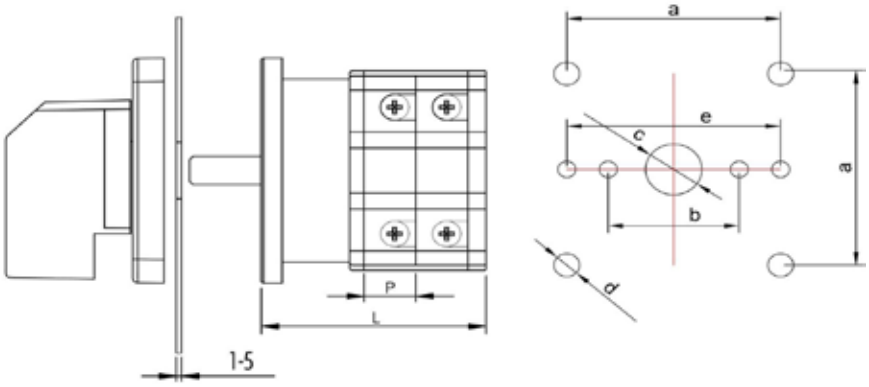
	A	B	C	D
PSA10	48	34	42,5	27
PSA16	48	34	42,5	27
PSA20	48	34	42,5	27
PSA25	48	34	42,5	27
PSA32	64	43	55	55
PSA40	64	43	55	55
PSA50	64	43	55	55
PSA63	64	43	55	55
PSA80	85	48	75	75
PSA120	95	48	85	85

ANAHTARLI PAKO (ÇABUK MONTAJ) / *KEY OPERATED (QUICK INSTALLATION) CAM SWITCHES*



	A	B	C	D
PSA10	48	39,5	42,5	27
PSA16	48	39,5	42,5	27
PSA20	48	39,5	42,5	27
PSA25	48	39,5	42,5	27
PSA32	64	48	55	55
PSA40	64	48	55	55
PSA50	64	48	55	55
PSA63	64	48	55	55
PSA80	85	53	75	75
PSA120	95	53	85	85

BAĞLANTI VE GENEL ÖLÇÜLER / *CONNECTION AND GENERAL DIMENSIONS*



	L								
		Gövde Sayısı / *Contact Block Quantitiy*							
	P	1	2	3	4	5	6	7	8
PSA10	10	33,2	43,2	53,2	63,2	73,2	83,2	93,2	103,2
PSA16	10	33,2	43,2	53,2	63,2	73,2	83,2	93,2	103,2
PSA20	10	33,2	43,2	53,2	63,2	73,2	83,2	93,2	103,2
PSA25	12	35,2	47,2	59,2	71,2	83,2	95,2	107,2	119,2
PSA32	13	39,2	52,2	65,2	78,2	91,2	104,2	117,2	130,2
PSA40	15	41,2	56,2	71,2	86,2	101,2	116,2	131,2	146,2
PSA50	17,5	43,7	61,2	78,7	96,2	113,7	131,2	148,7	166,2
PSA63	21	47,2	68,2	89,2	110,2	131,2	152,2	173,2	194,2
PSA80	26	63	89	115	141	167	193	219	245
PSA120	30	63	93	123	153	183	213	243	273

	b	b		c	d
PSA10	36	30		9,5	4,3
PSA16	36	30		9,5	4,3
PSA20	36	30		9,5	4,3
PSA25	36	30		9,5	4,3
PSA32	48	30	50	10	4,3
PSA40	48	30	50	10	4,3
PSA50	48	30	50	10	4,3
PSA63	48	30	50	10	4,3
PSA80	68	38	50	13	5,2
PSA120	68	38	50	13	5,2

Pako Kutular / *Cam Switch Boxes*

PSK11

PSK21

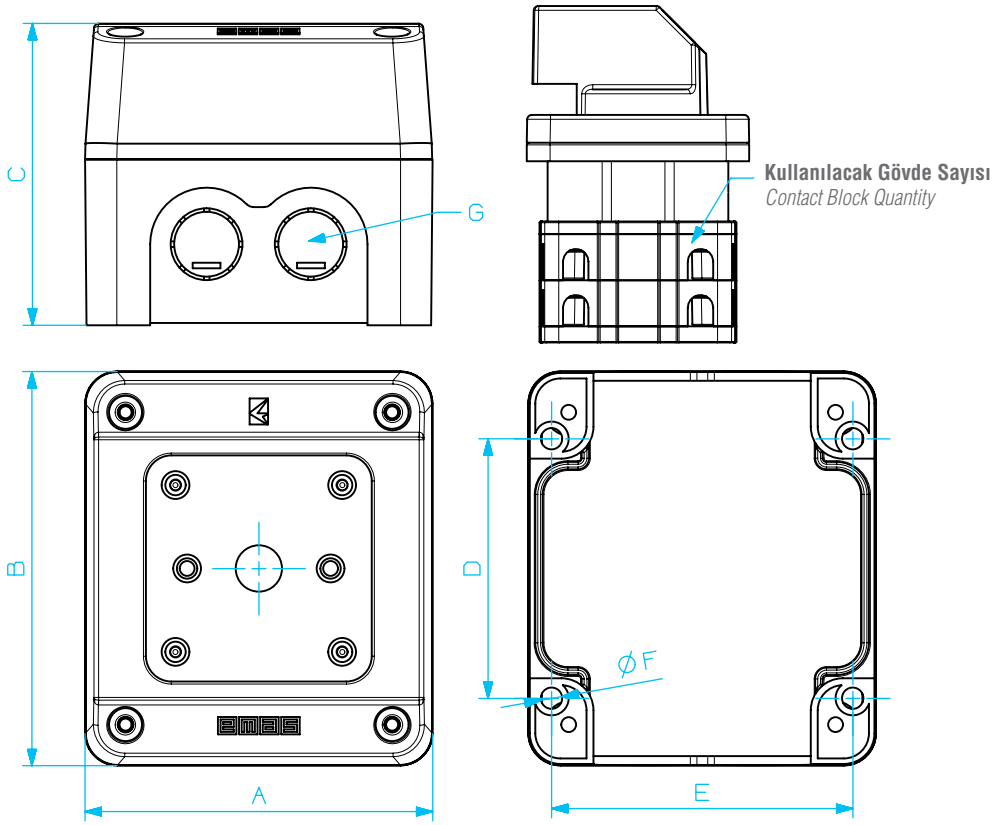
PSK12

PSK22

PAKO Kutuları / *Cam Switch Enclosures*

Ürün Kodu / *Code*	Malzeme / *Material*	Özellik / *Features*
PSK11	Plastik / *Plastic*	IP54
PSK12	Plastik / *Plastic*	IP54
PSK21	Plastik / *Plastic*	IP54
PSK22	Plastik / *Plastic*	IP54
PSK11E	Plastik / *Plastic*	IP65
PSK12E	Plastik / *Plastic*	IP65
PSK21E	Plastik / *Plastic*	IP65
PSK22E	Plastik / *Plastic*	IP65

Montaj Ölçüleri (mm) / *Mounting Dimensions (mm)*



				Montaj Ölçüleri / *Mounting Dimensions*		Rakor / *Cable Gland*	
Ürün Kodu / *Code*	A	B	C	D	E	F	G
PSK11	75	85	65	56	65	4,6	PG9
PSK12	75	85	89	56	65	4,6	PG9
PSK21	91	101	73,5	72	81	4,6	PG11
PSK22	91	101	103,5	72	82	4,6	PG11

Ürün Kodu / *Code*	Kullanılan Pako Gövde Sayısı / *Contact Block Quantity*
PSK11	10A - 25A arası 1 ve 2 gövdeli Pako Şalterler / *For 10 - 25 A Cam Switches and for 1 and 2 contact block*
PSK12	10A - 25A arası 3 ve 4 gövdeli Pako Şalterler / *For 10 - 25 A Cam Switches and for 3 and 4 contact block*
PSK21	32A - 40A arası 1 ve 2 gövdeli Pako Şalterler / *For 32A - 40A Cam Switches and for 1 and 2 contact block*
PSK22	32A - 40A arası 3 ve 4 gövdeli Pako Şalterler / *For 32A - 40A Cam Switches and for 3 and 4 contact block*

Teknik Özellikler / *Technical Specifications*

Siviç Tipi / *Switch Type*			PSA010	PSA016	PSA020	PSA25	PSA32	PSA040	PSA050	PSA063	PSA080
İzolasyon gerilimi Darbe dayanım gerilimi	*Rated Insulation Voltage Ui* *Rated impulse withstand Voltage Uimp*	**k** **kV**	400 4			690 4					
Anlık termal akım	*Rated thermal current Ith*	**A**	16	20	25	32	40	50	50	70	80
Ana Şalter İşletme geriliminin (1) maksimum değeri Darbe dayanım gerilimi	*Main Switch Max. value of rated* *(1) operational voltage* *Rated impulse withstand voltage*	**V** **kV**	480 4								
Kısa devre koruması için max. sigorta boyutu	*Max. fuse size for short circuit* *protection gL 10kA*	**A**	16	20	25	32	40	50	50	70	80
Kısa devre akımına 1 sn. dayan- ma süresi 3 sn. 10 sn. 30 sn. 60 sn.	*Rated short-time 1 sec* *withstand current Icw 3 sec* *10 sec* *30 sec* *60 sec*	**A** **A** **A** **A** **A**	150 100 50 25 20	180 110 60 30 25	200 120 70 40 30	400 250 140 90 70	600 400 240 150 120	800 530 290 200 150	800 700 350 250 150	800 700 350 250 150	1000 800 400 250 160
Anma işletme akımı	*Rated operational current Ie AC1 / AC21*	**A**	10	16	20	25	32	40	50	63	70
Anma işletme akımı	*Rated operational current Ie AC15*										
	110 V	**A**	8	8	10	20	25	40	50	50	63
	220/230 V	**A**	8	8	8	20	25	40	50	50	63
	380/400 V	**A**	4	4	6	16	20	25	40	40	45
	660/690 V	**A**				8	8.5	8.5	10	10	10
Kullanma sınıfı AC3	*Motor switch in* *utilization category* *AC3*										
3 faz	*3 phase 220/230 V*	**kW**	1.5	3	3	5.5	7.5	9	11	11	12
	380/400 V	**kW**	1.6	5	5	7.5	11	15	18.5	18.5	22
	500/690 V	**kW**	4	6	8.5	11	15	19	22	22	28
1 faz 2 kutup	*1 phase 110 V* *2 poles 220/230 V*	**kW** **kW**	0.5 1.5	0.8 2.5	0.8 3	1.5 5.5	2.5 6.5	3 7.5	- -	- -	- -
	380/400 V	**kW**	2	2.5	3	5.5	6.5	7.5	-	-	-
AC23 3 faz	*AC23* *3 phase 220/230 V*	**kW**	3	5	5	6.5	8	9	15	15	18.5
	380/400 V	**kW**	5	7	7.5	11	15	18.5	22	22	32
	500/690 V	**kW**	-	-	-	11	18.5	22	30	30	45
1 faz 2 kutup	*1 phase 110 V* *2 poles 220/230 V*	**kW** **kW**	0.8 1.7	0.8 2.5	0.8 2.5	1.5 3.7	2.5 5	3 6	3.5 9	3.5 9	- -
	380/400 V	**kW**	2.8	3.7	3.7	5.5	7.5	9	15	15	-
AC4 3 faz	*AC4* *3 phase 220/230 V*	**kW**	0.75	1	1.5	2.5	3	5	6	6	7
	380/400 V	**kW**	1	1.5	2	4	5.5	8	11	11	12
	500/690 V	**kW**	-	-	-	4	7.5	8	11	11	12
Mekanik dayanım şalterleme devri	*Mechanical Endurance switching cycles*	**10^5**	1	1	1	1	1	1	1	1	1
Vida bağlantıları	*Terminal Screw*		M3.5	M3.5	M3.5	M3.5	M4	M4	M5	M5	2XM5
Bağlantı kablosu kesiti rijit	*Cable cross section rigid*	**mm²**	2X(1-2.5) 2-4*	2X(1-2.5) 2-4*	2X(1-2.5) 2-4*	2X(1-4) 1-6*	2X(2.5-6) 1-10*	2X (2.5-10)	2X(4-16)	2X(4-16)	10-25
fleksibıl	*flexible*		2X(1-2.5) 2-4*	2X(1-2.5) 2-4*	2X(1-2.5) 2-4*	2X(1-4)	2X(2.5-6) 1-10*	2X (2.5-10)	2X(4-16)	2X(4-16)	6-16 2X(6-10)

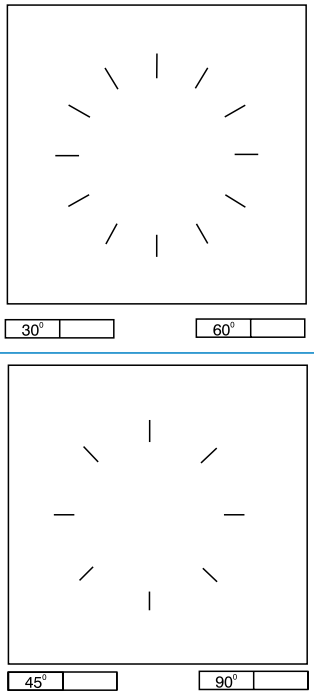
(1) Aşırı gerilim kategorisi III, kirlenme derecesi 3, nötr topraklı sistemler için geçerli.
(1) Valid for neutral earthed systems, overvoltage category III, pollution degree 3.

(*) Dahili bağlantısı olmayan diagramlar için geçerlidir.
(*) Only for diagrams without inside links.

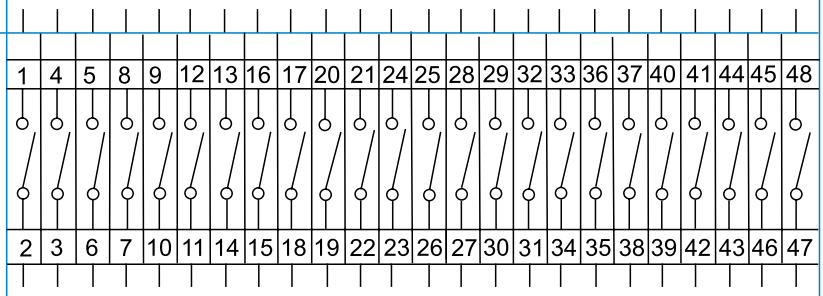
ÖZEL SİPARİŞ FORMU
SPECIAL ORDER FORM

İşletme Gerilimi *Rated Voltage*	V	**Şalter Tipi** *Type of Switch*	PS	**Montaj Formu** *Mounting Form*		**Diyagram No.** *Diagram No.*	
İşletme Akımı *Rated Current*	A	**Kullanma Kategorisi** *Utilization Category*				**Özel Versiyon** *Special Version*	

Bağlantı Diyagramı *Connection Diagram*



Bağlantı Diyagramı *Connection Diagram*



Devre Pozisyonu Düzenleme Tablosu *Arrangement Of Position Marks On Front Plate*

Not:
Note:

Firma Adı/*Company Name* _____

Adres/*Adress* _____

Tel./*Telephone* _____ **Faks**/*Fax* _____ **Bilgi**/*Data* _____

Sensörler

Sensors

E

Sensörler

S Serisi Yaklaşım Anahtarları
Genel Özellikler 3

Endüktif Yaklaşım Anahtarları
Teknik Özellikler 4
Boyutlar 5

Kapasitif Yaklaşım Anahtarları
Teknik Özellikler 6
Boyutlar 6

Fotoelektrik Yaklaşım Anahtarları
Teknik Özellikler 7
Boyutlar 7

Proximity Switches

S Series Proximity Switches
General Specifications 3

Inductive Proximity Switches
Technical Specifications 4
Dimensions 5

Capacitive Proximity Switches
Technical Specifications 6
Dimensions 6

Photoelectric Proximity Switches
Technical Specifications 7
Dimensions 7

S Serisi Yaklaşım Anahtarları

- Hızlı anahtarlama kapasitesi
- Fiziksel temas gerektirmez, hareketli parçaları olmadığından sürtünmeye ve yıpranmaya dayanıklı
- Kolay montaj
- Çıkışlarında mekanik kontak olmadığından sınırsız anahtarlama kapasitesi
- Ağır endüstriyel şartlarda çalışabilme
- Kısa devre ve aşırı yük koruması
- Ters polarite koruması
- Geniş giriş gerilim aralığı
- Düşük tepki süresi
- LED gösterge

Teknik Bilgiler

Standart : TS EN 60947-5-2

CE

S *Series Proximity Switches*

- *Rapid switching capacity*
- *No physical contact required, therefore no moving parts so no friction and wear out*
- *Easy to install*
- *Unlimited number of switching cycles since there are no mechanical contacts*
- *Can work in harsh conditions*
- *Short circuit and overload protection*
- *Reverse polarity protection*
- *Wide supply voltage range*
- *Low response time*
- *LED indicator*

Technical Information

Standard : TS EN 60947-5-2

CE

ENDÜKTİF YAKLAŞIM ANAHTARLARI / *INDUCTIVE PROXIMITY SWITCHES*

SIM30FM1PC2

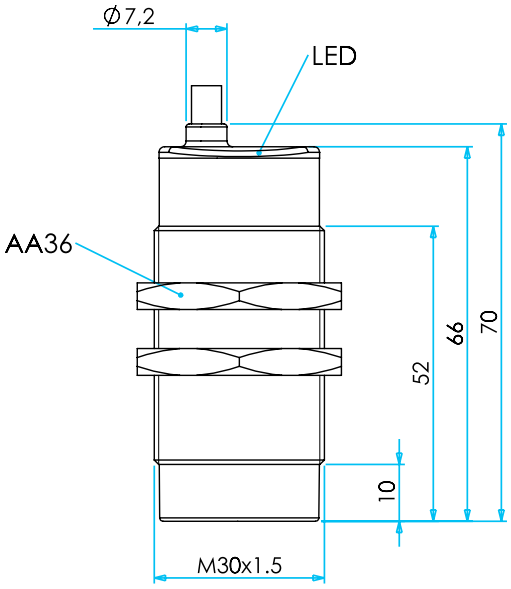
SIM30NM1PC2

Ürün Kodu *Code*	Gövde Şekli *Housing Type*	Gerilim *Voltage*	Montaj Tipi *Mounting Type*	Bağlantı *Connection*	Çıkış *Output*
SIM30NM1RC2	M30	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	PNP-NK / *PNP-NC*
SIM30NM1PC2	M30	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	PNP-NA / *PNP-NO*
SIM30NM1OC2	M30	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	NPN-NK / *NPN-NC*
SIM30NM1NC2	M30	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	NPN-NA / *NPN-NO*
SIM30FM1RC2	M30	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	PNP-NK / *PNP-NC*
SIM30FM1PC2	M30	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	PNP-NA / *PNP-NO*
SIM30FM1OC2	M30	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	NPN-NK / *NPN-NC*
SIM30FM1NC2	M30	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	NPN-NA / *NPN-NO*
SIM18NM1RC2	M18	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	PNP-NK / *PNP-NC*
SIM18NM1PC2	M18	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	PNP-NA / *PNP-NO*
SIM18NM1OC2	M18	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	NPN-NK / *NPN-NC*
SIM18NM1NC2	M18	10-30 V DC	Çıkık / Nonflush	Kablolu / *Wire Connection*	NPN-NA / *NPN-NO*
SIM18FM1RC2	M18	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	PNP-NK / *PNP-NC*
SIM18FM1PC2	M18	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	PNP-NA / *PNP-NO*
SIM18FM1OC2	M18	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	NPN-NK / *NPN-NC*
SIM18FM1NC2	M18	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	NPN-NA / *NPN-NO*
SIM12NM1RC2	M12	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	PNP-NK / *PNP-NC*
SIM12NM1PC2	M12	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	PNP-NA / *PNP-NO*
SIM12NM1OC2	M12	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	NPN-NK / *NPN-NC*
SIM12NM1NC2	M12	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	NPN-NA / *NPN-NO*
SIM12FM1RC2	M12	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	PNP-NK / *PNP-NC*
SIM12FM1PC2	M12	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	PNP-NA / *PNP-NO*
SIM12FM1OC2	M12	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	NPN-NK / *NPN-NC*
SIM12FM1NC2	M12	10-30 V DC	Düz / *Flush*	Kablolu / *Wire Connection*	NPN-NA / *NPN-NO*

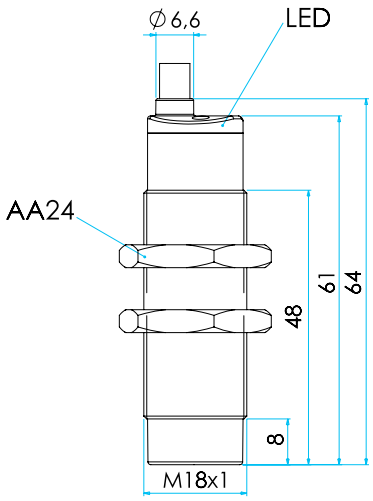
TEKNİK ÖZELLİKLER / *TECHNICAL SPECIFICATIONS*

Boyut *Size*	M30		M18		M12	
Montaj Tipi *Mounting Type*	Düz *Flush*	Çıkık *Nonflush*	Düz *Flush*	Çıkık *Nonflush*	Düz *Flush*	Çıkık *Nonflush*
Algılama Mesafesi (mm) *Sensing Distance (mm)*	10 mm	15 mm	5 mm	8 mm	2 mm	4 mm
Anahtarlama Frekansı (Hz) *Switching Frequency (Hz)*	400	200	800	400	800	400
Çıkış Tipi *Output Type*	NPN, PNP - NA, NK *NPN, PNP - NO, NC*		NPN, PNP - NA, NK *NPN, PNP - NO, NC*		NPN, PNP - NA, NK *NPN, PNP - NO, NC*	
Çalışma Gerilimi *Operating Voltage*	10-30V DC		10-30V DC		10-30V DC	
Maksimum Yük Akımı *Maximum Load Current*	200 m A		200 m A		200 m A	
Hareket Yolu Farkı *Hysteresis*	<15%(Sr)		<15%(Sr)		<15%(Sr)	
Koruma Sınıfı *Protection Degree*	IP65		IP65		IP65	
Kısa Devre Koruma *Short Circuit Protection*	Var *Available*		Var *Available*		Var *Available*	
İlk Açılış Gecikmesi *Time Delay Before Availability*	<100 m s		<100 m s		<100 m s	
Gösterge *Indicator*	LED		LED		LED	
Gövde Malzemesi *Housing Material*	Nikel Kaplamalı Pirinç *Nickel Plated Brass*		Nikel Kaplamalı Pirinç *Nickel Plated Brass*		Nikel Kaplamalı Pirinç *Nickel Plated Brass*	

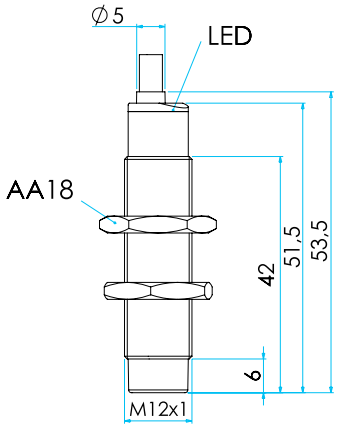
BOYUTLAR (mm) / *DIMENSIONS (mm)*



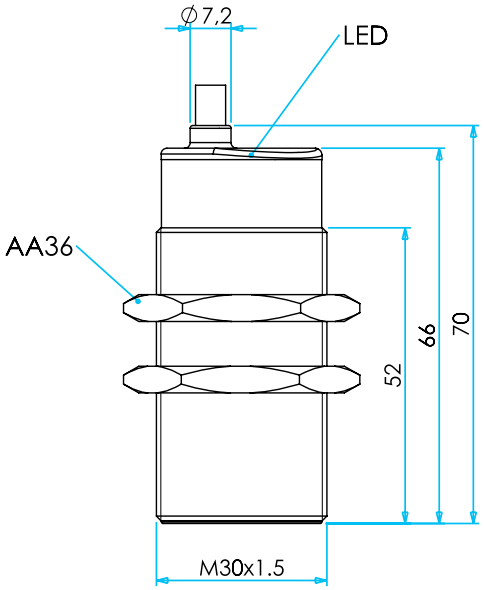
ENDÜKTİF/M30/ÇIKIK
INDUCTIVE/M30/NONFLUSH



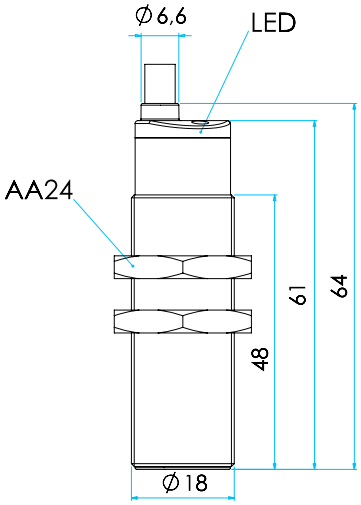
ENDÜKTİF/M18/ÇIKIK
INDUCTIVE/M18/NONFLUSH



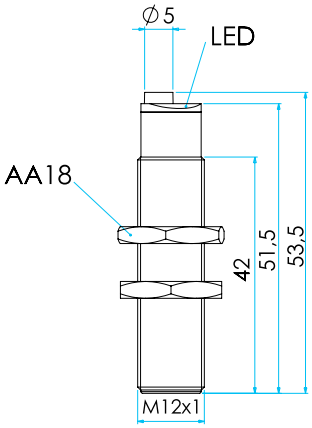
ENDÜKTİF/M12/ÇIKIK
INDUCTIVE/M12/NONFLUSH



ENDÜKTİF/M30/DÜZ
INDUCTIVE/M30/FLUSH



ENDÜKTİF/M18/DÜZ
INDUCTIVE/M18/FLUSH



ENDÜKTİF/M12/DÜZ
INDUCTIVE/M12/FLUSH

KAPASİTİF YAKLAŞIM ANAHTARLARI / *CAPACITIVE PROXIMITY SWITCHES*

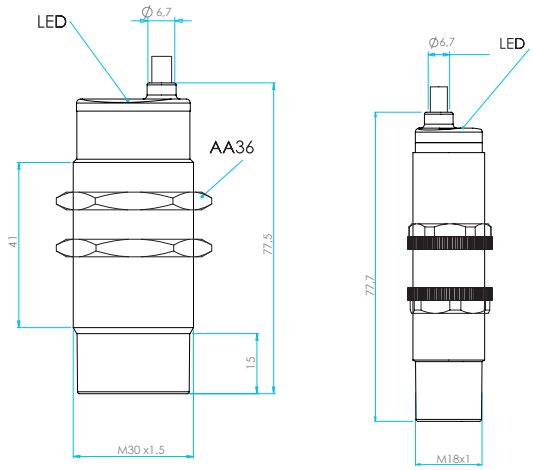
SCM30NP1PC2

Ürün Kodu *Code*	Gövde Şekli *Housing Type*	Gövde Malzemesi *Housing Material*	Gerilim *Voltage*	Montaj Tipi *Mounting Type*	Bağlantı *Connection*	Çıkış *Output*
SCM30NP1RC2	M30	Plastik / *Plastic*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / Wire Connection	PNP-NK / *PNP-NC*
SCM30NP1PC2	M30	Plastik / *Plastic*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	PNP-NA / *PNP-NO*
SCM30NP1OC2	M30	Plastik / *Plastic*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	NPN-NK / *NPN-NC*
SCM30NP1NC2	M30	Plastik / *Plastic*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	NPN-NA / *NPN-NO*
SCM30NM1PC2	M30	Metal / *Metal*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / Wire Connection	PNP-NA / *PNP-NO*
SCM30NM1RC2	M30	Metal / *Metal*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / Wire Connection	PNP-NK / *PNP-NC*
SCM30NM1NC2	M30	Metal / *Metal*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / Wire Connection	NPN-NA / *NPN-NO*
SCM30NM1OC2	M30	Metal / *Metal*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / Wire Connection	NPN-NK / *NPN-NC*
SCM18NP1PC2	M18	Plastik / *Plastic*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / Wire Connection	PNP-NA / *PNP-NO*
SCM18NP1RC2	M18	Plastik / *Plastic*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	PNP-NK / *PNP-NC*
SCM18NP1NC2	M18	Plastik / *Plastic*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	NPN-NA / *NPN-NC*
SCM18NP1OC2	M18	Plastik / *Plastic*	10-30 V DC	Çıkık / *Nonflush*	Kablolu / *Wire Connection*	NPN-NK / *NPN-NO*

TEKNİK ÖZELLİKLER / *TECHNICAL SPECIFICATIONS*

Boyut *Size*	M30	M18
Montaj Tipi *Mounting Type*	Çıkık / *Nonflush*	Çıkık / *Nonflush*
Algılama Mesafesi (mm) *Sensing Distance (mm)*	3 - 15 mm	2 - 10 mm
Tepki Süresi *Response Time*	100 ms Max.	100 ms Max.
Çıkış Tipi *Output Type*	NPN, PNP - NA, NK *NPN, PNP - NO, NC*	NPN, PNP - NA, NK *NPN, PNP - NO, NC*
Çalışma Gerilimi *Operating Voltage*	10-30V DC	10-30V DC
Maksimum Yük Akımı *Maximum Load Current*	200 m A	200 m A
Hareket Yolu Farkı *Hysteresis*	<20%(Sr)	<20%(Sr)
Koruma Sınıfı *Protection Degree*	IP65	IP65
Kısa Devre Koruma *Short Circuit Protection*	Var *Available*	Var *Available*
İlk Açılış Gecikmesi *Time Delay Before Availability*	<100 m s	<100 m s
Gösterge *Indicator*	LED	LED

BOYUTLAR (mm) / *DIMENSIONS (mm)*



KAPASİTİF/M30-M18/ÇIKIK
CAPACITIVE/M30-M18/NONFLUSH

FOTOELEKTRİK YAKLAŞIM ANAHTARLARI / *PHOTOELECTRIC PROXIMITY SWITCHES*

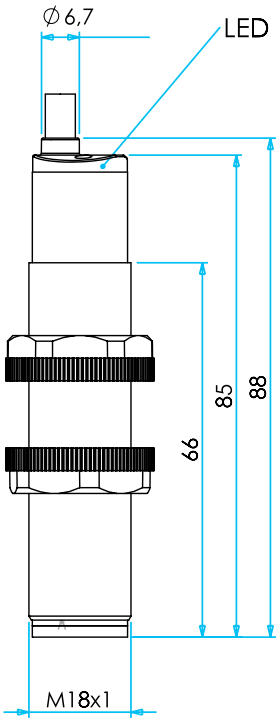
SPM18DP4DC2

Ürün Kodu *Code*	Gövde Şekli *Housing Type*	Gerilim *Voltage*	Montaj Tipi *Mounting Type*	Bağlantı *Connection*	Çıkış *Output*
SPM18DP4DC2	M18	10-30 V DC	Cisimden Yansımalı *Diffuse*	Kablolu *Wire Connection*	1NK+1NA *1NO+1NC*
SPM18DP4EC2	M18	10-30 V DC	Cisimden Yansımalı *Diffuse*	Kablolu *Wire Connection*	1NK+1NA *1NO+1NC*

TEKNİK ÖZELLİKLER / *TECHNICAL SPECIFICATIONS*

Boyut *Size*	**M18**
Montaj Tipi *Mounting Type*	Cisimden Yansımalı *Diffuse*
Algılama Mesafesi (mm) *Sensing Distance (mm)*	400 mm
Gönderici Işık Tipi *Emitter Light Type*	Kızılötesi 850 nm *Infrared 850 nm*
Tepki Süresi *Response Time*	2 ms
Çıkış Tipi *Output Type*	NPN, PNP - NA, NK *NPN, PNP - NO, NC*
Çalışma Gerilimi *Operating Voltage*	10-30V DC
Maksimum Yük Akımı *Maximum Load Current*	200 m A
Hareket Yolu Farkı *Hysteresis*	<%25
Koruma Sınıfı *Protection Degree*	IP65
Kısa Devre Koruma *Short Circuit Protection*	Var *Available*
İlk Açılış Gecikmesi *Time Delay Before Availability*	<100 m s
Gösterge *Indicator*	LED
Gövde Malzemesi *Housing Material*	PBT

BOYUTLAR (mm) / *DIMENSIONS (mm)*



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IK Serisi Işıklı Kolonlar

- Isıya dayanıklı, net görüntü veren poliklarbonat sinyal modülleri
- Modüler Yapı
- Ø50, Ø70 çap seçeneği
- Aparat gerektirmeyen kolay kurulum
- Klemensler aracılığıyla kolay montaj
- Led'li flasörlü Led'li ampul seçeneği
- Makine ya da duvar ağlantı modülleri
- Buzzer seçeneği

Teknik Bilgiler

Mekanik Ömür	:	1000 Takma Sökme
Elektriksel Ömür	:	10.000 saat
Çalışma Sıcaklığı	:	min./maks. °C -5/+40
Çalışma Gerilimi (Ue)	:	24 V AC / DC - 220V AC / DC
Yalıtım Gerilimi (Ui)	:	300 V
Koruma Sınıfı	:	IP65
Çalışma Akımı (Ie)	:	10 (4) A
Frekans (f)	:	50 Hz
Güç tüketimi (modül başına/buzzer)	:	0,6W/1,8W
Ses şiddeti SP	:	90 dB
Standart	:	TS EN 60947-1 TS EN 60947-5-1 TS EN 60947-5-1/A1

CE

IK *Series Signal Towers*

- *Heat resistant, clear vision Polycarbonate signal modules*
- *Modular construction*
- *Ø50, Ø70 diameter options*
- *LED, flashing LED bulb options*
- *Easy and tool free connections*
- *Easy wiring thanks to terminal block*
- *Connection modules for machine and wall*
- *Buzzer Options*

Technical Information

Mechanical Life	:	*1000 assembly cycle*
Electrical Life	:	*10.000 hour*
Operating Temperature	:	*min./max. °C -5/+40*
Operating Voltage (Ue)	:	*24 V AC / DC - 220V AC / DC*
Insulation Voltage (Ui)	:	*300 V*
Protection Degree	:	*IP65*
Operating Current (Ie)	:	*10 (4) A*
Frequency (f)	:	*50 Hz*
Power consumption (per module + buzzer)	:	*0,6W/1,8W*
Volume (SP)	:	*90 dB*
Standard	:	*TS EN 60947-1 TS EN 60947-5-1* *TS EN 60947-5-1/A1*

CE

IK Serisi Işıklı Kolonlar Seçim Tablosu
Series Signal Towers Selection Table

Seri	Çap	Kat	Ampul Tipi	Gerilim	Buzzer	Bağlantı	Etanj
IK	5	3	L	220	X	M03	E
Series	*Diameter*	*Layer*	*Bulb Type*	*Voltage*	*Buzzer*	*Connection*	*Waterproof*

Series

- **IK** Serisi Işıklı Kolonlar *Series Signal Towers*

Diameter

- **5** Ø50 Çap *Ø50 Diameter*
- **7** Ø70 Çap *Ø70 Diameter*

Layer

- **0** 0 Kat *0 Layer*
- **1** 1 Kat *1 Layer*
- **2** 2 Kat *2 Layer*
- **3** 3 Kat *3 Layer*
- **4** 4 Kat *4 Layer*
- **5** 5 Kat *5 Layer*

Bulb Type

- **X** Ampul Yok *None*
- **L** LED'li Ampul *LED Bulb*
- **F** Flaşör Ledli Ampul *Flashing LED Bulb*

Voltage

- **024** 024V AC/DC *024V AC/DC*
- **220** 220V AC *220V AC*

Buzzer

- **X** Buzzersız *Without Buzzer*
- **W** Sese Duyarlı Buzzerlı *Buzzer with Sensitive to Sound*
- **Z** Buzzerlı *With Buzzer*

Connection

- **M01** 100MM Plastik Ayak *100mm Plastic Base*
- **M02** 20mm Alüminyum Ayak *20mm Aluminium Base*
- **M03** 100mm Alüminyum Ayak *100mm Aluminium Base*
- **M04** 500mm Alüminyum Ayak *500mm Aluminium Base*
- **D01** Duvar Bağlantısı *Wall Base*
- **D02** Ayarlanabilir Ayak *Adjustable Base*

Waterproof

- **E** Etanj IP65 *For Waterproof IP65*

Ø 50 mm Komple Işıklı Kolon Tipleri (Buzzer'sız)

Ø 50 mm Complete Signal Tower Types (w/o Buzzer)

IK51L024XM03
Tek Katlı Işıklı Kolon
Single Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK51L024XM03	IK51F024XM03
	220V AC	IK51L220XM03	IK51F220XM03

IK52L024XM03
2 Katlı Işıklı Kolon
2 Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK52L024XM03	IK52F024XM03
	220V AC	IK52L220XM03	IK52F220XM03

IK53L024XM03
3 Katlı Işıklı Kolon
3 Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK53L024XM03	IK53F024XM03
	220V AC	IK53L220XM03	IK53F220XM03

IK54L024XM03
4 Katlı Işıklı Kolon
4 Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK54L024XM03	IK54F024XM03
	220V AC	IK54L220XM03	IK54F220XM03

IK55L024XM03
5 Katlı Işıklı Kolon
5 Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK55L024XM03	IK55F024XM03
	220V AC	IK55L220XM03	IK55F220XM03

Ø 70 mm Komple Işıklı Kolon Tipleri (Buzzer'sız)

Ø 70 mm Complete Signal Tower Types (w/o Buzzer)

IK71L024XM01
Tek Katlı Işıklı Kolon
Single Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK71L024XM01	IK71F024XM01
	220V AC	IK71L220XM01	IK71F220XM01

IK72L024XM01
2 Katlı Işıklı Kolon
2 Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK72L024XM01	IK72F024XM01
	220V AC	IK72L220XM01	IK72F220XM01

IK73L024XM01
3 Katlı Işıklı Kolon
3 Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK73L024XM01	IK73F024XM01
	220V AC	IK73L220XM01	IK73F220XM01

IK74L024XM01
4 Katlı Işıklı Kolon
4 Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK74L024XM01	IK74F024XM01
	220V AC	IK74L220XM01	IK74F220XM01

IK75L024XM01
5 Katlı Işıklı Kolon
5 Stage Signal Tower

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK75L024XM01	IK75F024XM01
	220V AC	IK75L220XM01	IK75F220XM01

Ø 50 mm Komple Işıklı Kolon Tipleri (Buzzer'lı)

Ø 50 mm Complete Signal Tower Types (with Buzzer)

IKM5Z024M03
Tek Katlı Buzzerli Işıklı Kolon
Single Stage Signal Tower With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	
Ürün Kodu *Code*	024V AC/DC	IKM5Z024M03
	220V AC	IKM5Z220M03

IK51F024ZM03
1 Katlı Buzzerli Işıklı Kolon
1 Stage Signal Tower With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK51L024ZM03	IK51F024ZM03
	220V AC	IK51L220ZM03	IK51F220ZM03

IK52F220ZM03
2 Katlı Buzzerli Işıklı Kolon
2 Stage Signal Tower With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK52L024ZM03	IK52F024ZM03
	220V AC	IK52L220ZM03	IK52F220ZM03

IK53F024ZM03
3 Katlı Buzzerli Işıklı Kolon
3 Stage Signal Tower With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK53L024ZM03	IK53F024ZM03
	220V AC	IK53L220ZM03	IK53F220ZM03

IK54F024ZM03
4 Katlı Buzzerli Işıklı Kolon
4 Stage Signal Tower With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK54L024ZM03	IK54F024ZM03
	220V AC	IK54L220ZM03	IK54F220ZM03

Ø 70 mm Komple Işıklı Kolon Tipleri (Buzzer'lı)

Ø 70 mm Complete Signal Tower Types (with Buzzer)

IKM7Z024M01
Tek Katlı Buzzerli Işıklı Kolon
Single Signal Light Tower
With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	
Ürün Kodu *Code*	024V AC/DC	IKM7Z024M01
	220V AC	IKM7Z220M01

IK71L024ZM01
4 Katlı Buzzerli Işıklı Kolon
4 Stage Signal Tower
With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK71L024ZM01	IK71F024ZM01
	220V AC	IK71L220ZM01	IK71F220ZM01

IK72L024ZM01
4 Katlı Buzzerli Işıklı Kolon
4 Stage Signal Tower
With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK72L024ZM01	IK72F024ZM01
	220V AC	IK72L220ZM01	IK72F220ZM01

IK73L024ZM01
4 Katlı Buzzerli Işıklı Kolon
4 Stage Signal Tower
With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK73L024ZM01	IK73F024ZM01
	220V AC	IK73L220ZM01	IK73F220ZM01

IK74L024ZM01
4 Katlı Buzzerli Işıklı Kolon
4 Stage Signal Tower
With Buzzer

Ampul Tipi *Bulb Type*	Gerilim *Voltage*	LED *LED*	Flaşörlü LED *LED Flashing*
Ürün Kodu *Code*	024V AC/DC	IK74L024ZM01	IK74F024ZM01
	220V AC	IK74L220ZM01	IK74F220ZM01

IK Serisi Işıklı Kolon Modülleri
Series Signal Tower Modules

Modüller / *Modules*

Her Işıklı Kolon aşağıdaki birimlerden oluşur,
Each Light Tower consists of below components.

1. Kapak ve ana gövde
1. Body and Cover

2. Sinyal modülü (5 renk, kırmızı, sarı, yeşil, mavi, beyaz)
2. Signal Modules (5 Colour)

3. Buzzer modülü
3. Buzzer module

4. LED, Flaşörlü LED
4. LED, Flashing LED

5. Bağlantı Elemanı
5. Connection

IK Serisi Işıklı Kolon Modülleri
Series Signal Towers Modules

1 Gövde ve Kapak / *Body and Cover*

Ürün Kodu
Code

50 mm

IKM 5G

70 mm

IKM 7G

2 Sinyal Modülleri / *Signal Module*

Ürün Kodu
Code

50 mm

IKM 5 B
IKM 5 K
IKM 5 M
IKM 5 Y
IKM 5 S

70 mm

IKM 7 B
IKM 7 K
IKM 7 M
IKM 7 Y
IKM 7 S

Isıya dayanıklı polikarbonat malzeme. / *Heat resistant polycarbonate material.*

3 Buzzer Modülü / *Buzzer Module*

Ürün Kodu
Code

IKM 5Z 024 - IKM 5Z 220

50 mm Buzzer / 90 dB

IKM 7Z 024 - IKM 7Z 220

70 mm Buzzer / 90 dB

En fazla 5 modul üst üste monte edilebilir. / Maximum 5 signal modules can be mounted.

4 Lambalar / *Light Bulbs*

		Sipariş Kodu / *Order Code*				
LED *LED*	24 V AC/DC	IKM L 024 B	IKM L 024 K	IKM L 024 M	IKM L 024 Y	IKM L 024 S
	230 V AC	IKM L 220 B	IKM L 220 K	IKM L 220 M	IKM L 220 Y	IKM L 220 S
Flaşörlü LED *LED Flashing*	24 V AC/DC	IKM F 024 B	IKM F 024 K	IKM F 024 M	IKM F 024 Y	IKM F 220 S
	230 V AC	IKM F 220 B	IKM F 220 K	IKM F 220 M	IKM F 220 Y	IKM F 220 S

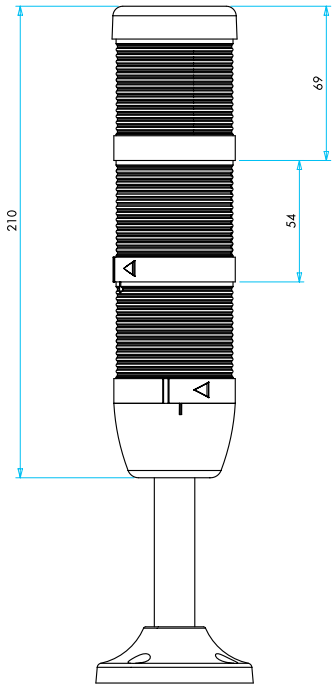
Not: Her Sinyal Modülü için bir lamba ilave edilecek. / *Note: For each signal module, a light bulb should be selected.*

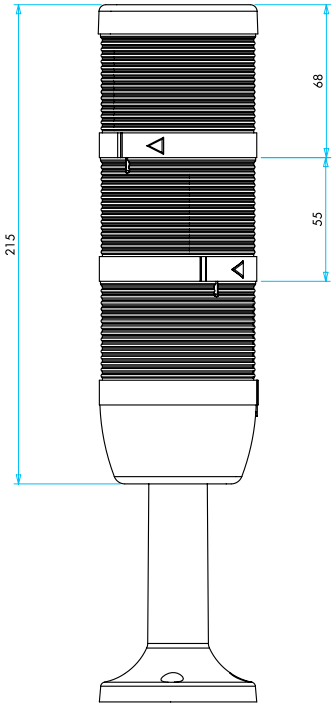
5 Bağlantı Modülü / *Connection Module*

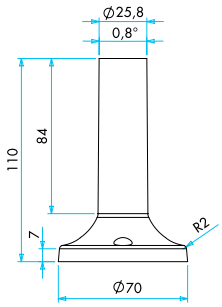
Ürün Kodu
Code

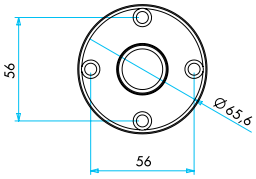
IKA M 01	100 mm plastik ayak (Çap 70'de Standard, Çap 50'ye uygulanamıyor) *100 mm plastic base (Standard for diameter 70, not applicable for diameter 50)*
IKA M 02	20 mm aluminyum ayak *20 mm aluminium base*
IKA M 03	100 mm aluminyum ayak (Çap 50'de Standard) *100 mm aluminium base (Standard for diameter 50)*
IKA M 04	500 mm aluminyum ayak *500 mm aluminium base*
IKA D 01	Duvar bağlantısı 100 mm aluminyum ayak *Wall base 100 mm aluminium*
IKA D 02	Plastik ayarlanabilir ayak *Plastic adjustable base*

BOYUTLAR (mm) / *DIMENSIONS (mm)*

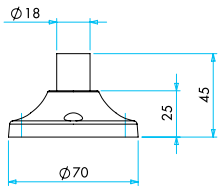




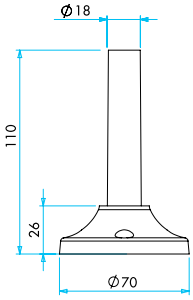




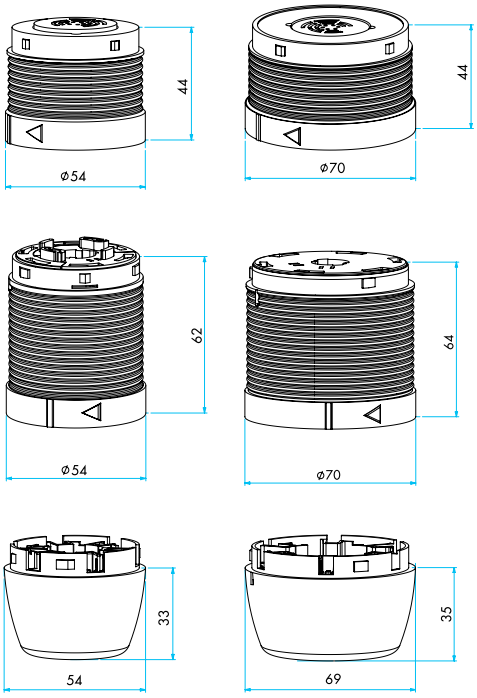
IKAM01

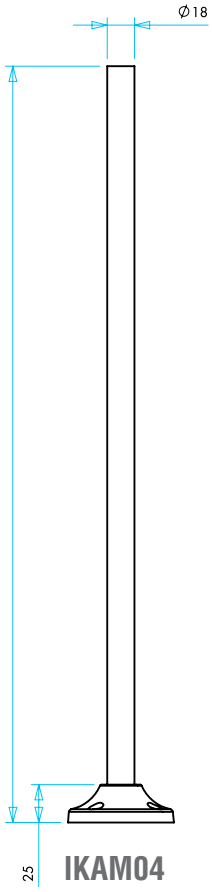


IKAM02

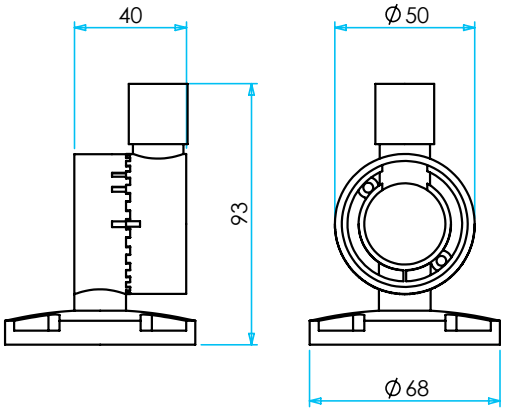


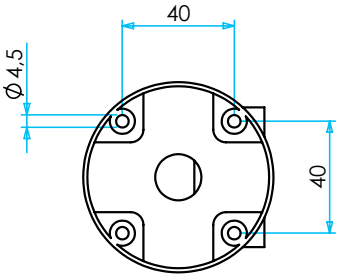
IKAM03





IKAM04





IKAD02

IF Serisi Çok Renkli İkazlar IP65

- Isıyadayanıklı,netgörüntüverenpolikarbonatsinyalmodülleri
- LED
- Aparatgerektirmeyenkolaykurulum
- Kabloyardımıylakolaymontaj
- Buzzerseçeneği
- Ø22mmsomunbağlantılı

Teknik Bilgiler

Mekanik Ömür	: 1000 Takma Sökme
Elektriksel Ömür	: 10.000 saat
Çalışma Sıcaklığı	: min./maks. °C -5/+40
Çalışma Gerilimi (Ue)	: 24 V AC / DC - 220V AC / DC
Yalıtım Gerilimi (Ui)	: 300 V
Koruma Sınıfı	: IP65
Frekans (f)	: 50 Hz
Güç tüketimi (24V/220V)	: 1,5W/3,5W
Ses şiddeti SP	: 80-90 dB
Standart	: TS EN 60947-1 TS EN 60947-5-1 TS EN 60947-5-1/A1

CE

IF *Series Multi Colour Beacons IP65*

- *Heat resistant, clear vision polycarbonate modules*
- *LED*
- *Easy and tool free connection*
- *Easy Wiring*
- *Buzzer option*
- *Ø22mm with nut connection*

Technical Information

Mechanical Life	*: 1000 assembly cycle*
Electrical Life	*: 10.000 hour*
Operating Temperature	*: min./max. °C -5/+40*
Operating Voltage (Ue)	*: 24 V AC / DC - 220V AC / DC*
Insulation Voltage (Ui)	*: 300 V*
Protection Degree	*: IP65*
Frequency (f)	*: 50 Hz*
Power consumption ((24V/220V))	*: 1,5W/3,5W*
Volume (SP)	*: 80-90 d*
Standard	*: TS EN 60947-1 TS EN 60947-5-1 TS EN 60947-5-1/A1*

CE

IF Serisi Çok Renkli İkazlar
Series Multi-Colour Beacons

Seri	Çap	Tip	Gerilim	Buzzer	Bağlantı	Kablo Boyu
IF	5	M	024	X	M03	-1
Series	*Diameter*	*Type*	*Voltage*	*Buzzer*	*Connection*	*Cable Length*

IF Serisi Çok Serisi Çok Renkli İkazlar IP65
Series Multi Colour Beacons IP65

5 Ø55 Çap
Ø55 Diameter

6 Ø65 Çap
Ø65 Diameter

M Çok Fonksiyonlu
Multifunction

P PLC Uyumlu
PLC in sync

R Kırmızı
Red

Y Sarı
Yellow

G Yeşil
Green

W Beyaz
White

B Mavi
Blue

024 024V AC/DC
024V AC/DC

220 220V AC
220V AC

X Buzzersız
w/o Buzzer

W Sese Duyarlı Buzzerlı
Buzzer with Sensitive to Sound

Z Buzzerlı
With Buzzer

M02 20mm Alüminyum Ayak
20mm Aluminium Base

M03 100mm Alüminyum Ayak
100mm AluminiumBase

M04 500mm Alüminyum Ayak
500mm Aluminium Base

M05 M22X1,5 Dişli Bağlantı
M22X1,5 Connection

D01 Duvar Bağlantısı
Wall Base

D02 Ayarlanabilir Ayak
Adjustable Base

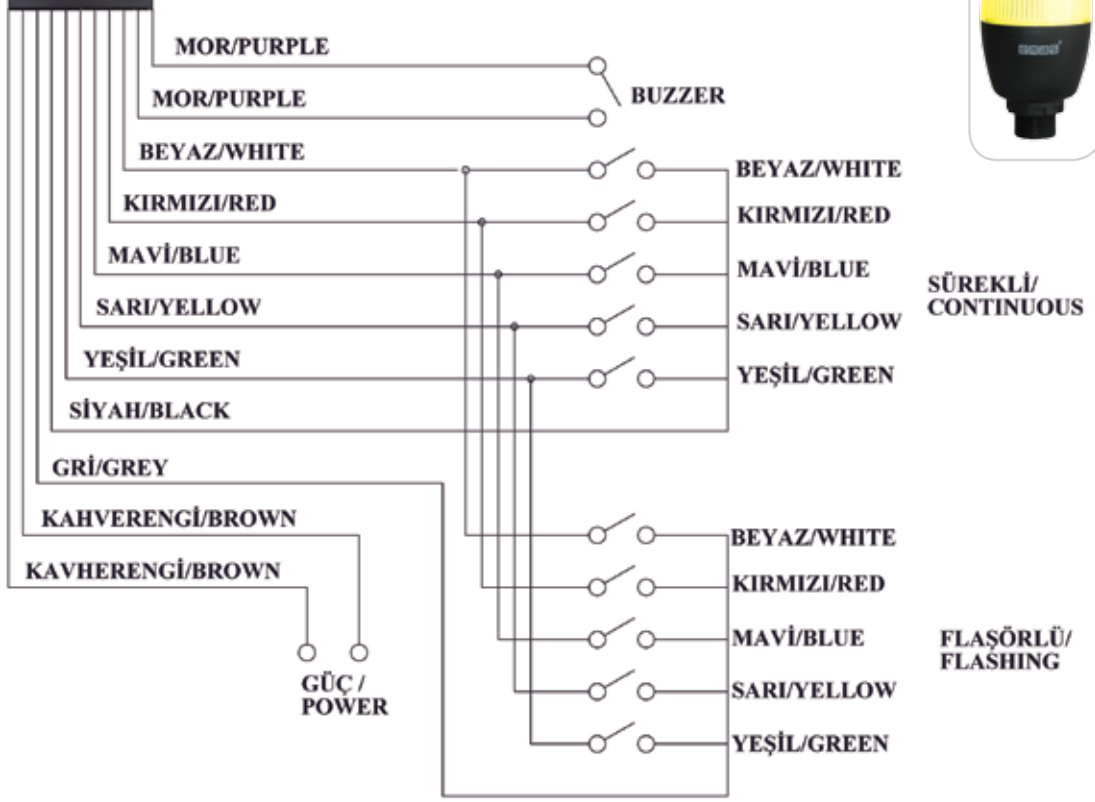
-1 1 Metre Kablo
1 meter Cable

-2 2 Metre Kablo
2 meter Cable

-3 3 Metre Kablo
3 meter Cable

IF Serisi Çok Renkli İkazlar Ø 22 mm Somunlu Bağlantı

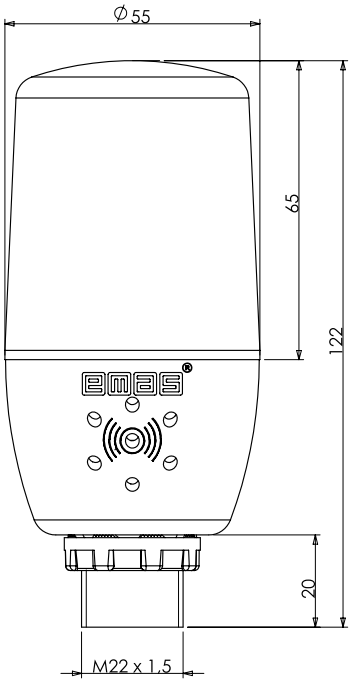
Series Multi-Colour Beacons with Ø 22 mm Connection



IF Serisi Çok Renkli İkaz Tipleri
Series Multi-Colour Beacons Types

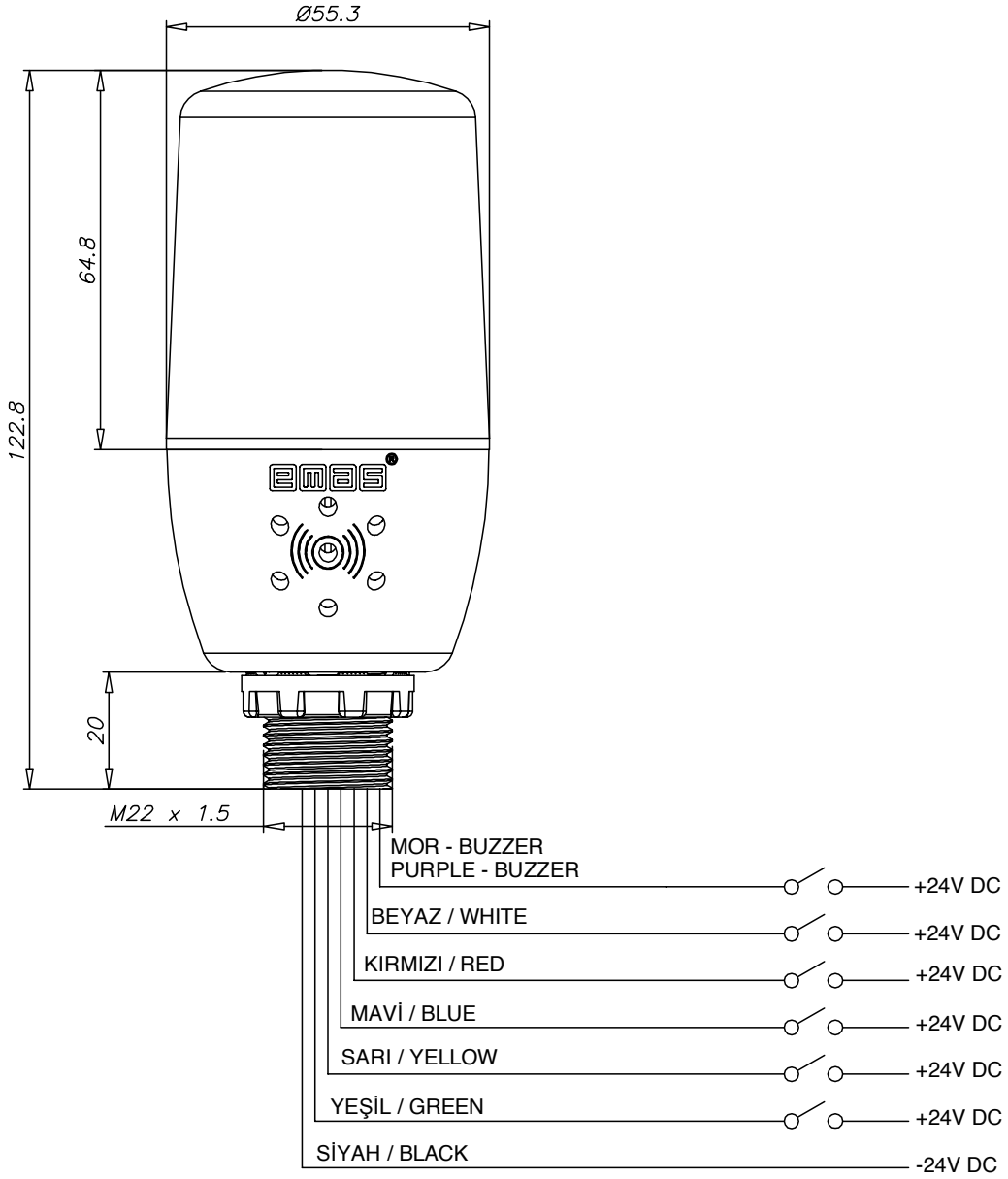
Ürün Kodu	Işık	Özellik	Nominal Gerilim
Code	*Illumination*	*Features*	*Nominal Voltage*
IF5M024ZM05	LED	Buzzerlı / *With Buzzer*	24V AC/DC
IF5M220ZM05	LED	Buzzerlı / *With Buzzer*	220V AC
IF5M024XM05	LED	-	24V AC/DC
IF5M220XM05	LED	-	220V AC
IF5*024X05	LED	Tek Renk / *Single Colour*	24V AC/DC
IF5*024Z05	LED	Tek Renk Buzzerlı / *Single Colour with Buzzer*	24V AC/DC
IF5P024XM05	LED	PLC uyumlu / *PLC Harmonized*	24V DC
IF5P024ZM05	LED	PLC uyumlu + Buzzerlı / *PLC Harmonized + with Buzzer*	24V DC
IFAB01		Ayaklı Adaptasyon Parçası / *Pipe Adaptation Part*	
IKAM06		20 mm alüminyum ayak (IFAB01 ile kullanılır) / *20mm Aluminium with Base (usable with IFAB01)*	

BOYUTLAR (mm) / *DIMENSIONS (mm)*



Boru Bağlantı Aksesuarı
Stand Mounting Adaptor

IF5P (PLC Compatible)



IKAM06

IFAB01

IT Serisi Çok Fonksiyonlu İkazlar

- W0 plastik gövde
- Polikarbonat lens
- Tabana ve duvara montaj edilebilir
- Koruma derecesi IP67
- Su, toz, ısı ve UV ışınlarından etkilenmez
- Hareketli mekanik parçalar içermemesi sebebiyle yıpranmaya karşı dayanıklı
- Uzun Ömürlü
- 8 Farklı çalışma modu

Teknik Bilgiler

Çalışma Gerilimi (Ue)	: 12-24V AC/DC
Çalışma Gücü	: 10W (max.)
Ampül Tipi	: Led
Çalışma Sıcaklığı	: min./maks. °C -20/+50
Yalıtım Gerilimi (Ui)	: 300V
Dielektrik Mukavemeti	: 1.500 V AC (1 dakika için)
Koruma Sınıfı	: IP67
Bağlantı Tipi	: Kablolu
Elektriksel Ömür	: 20 000 Saat

CE

IT *Series Multifunctional Beacons*

- *W0 plasic body*
- *Fireproof plastic body*
- *Polycarbonate lens*
- *Protection Degree IP67*
- *It is unaffected by water, dust, heat and UV rays.*
- *Wear-free due to the absence of any moving components*
- *Long life*
- *8 Different signal effects*

Technical Information

Operating Voltage (Ue)	*: 12-24V AC/DC*
Operating Power	*: 10W (max.)*
Lamp Type	*: LED*
Operating Temperature	*: min./max. °C -20/+50*
Insulation Voltage (Ui)	*: 300V*
Dielectric Strength	*: 1.500 V AC (or 1 minute)*
Protection Degree	*: IP67*
Connection Type	*: With Cable*
Electrical Life	*: 20 000 Hour*

CE

IT Serisi Çok Fonksiyonlu İkazlar
Series Multifunctional Beacons

Seri	Tip	Çap	Renk	Besleme Gerilimi
IT	**L**	**120**	**Y**	**024**
Series	*Type*	*Diameter*	*Colour*	*Voltage*

IT Serisi Çok Fonksiyonlu İkazlar
Series Multifunctional Beacons

L Ledli
With LED

M Motorlu
With Motor

120 Ø120 mm Çap
Ø120 mm Diameter

R Kırmızı
Red

Y Sarı
Yellow

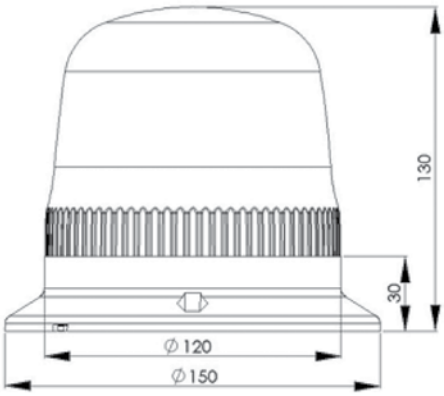
G Yeşil
Green

B Mavi
Blue

024 024V AC/DC
024V AC/DC

110 110V AC
110V AC

220 220V AC
220V AC



	MOD ismi / *name :*		1	2	3	4
	Döner 100 RPM / Rotation 100 RPM	:	↑	↑	↑	X
	Tek Çakar / *One Flash*	:	↑	↑	↓	X
	3 Çakar / *Three Flash*	:	↑	↓	↑	X
	6 Çakar / *Six Flash*	:	↑	↓	↓	X
	Flaşör / *Blink*	:	↓	↑	↑	X
	Sürekli Çakar* / *Continuous Flash**	:	↓	↑	↓	X
	Sağ-Sol Çakar / *Right-Left Flash*	:	↓	↓	↑	X
	Döner 160 RPM / *Rotation 160 RPM*	:	↓	↓	↓	X

X = Yön önemli değil / *Not used*
↑ = Yukarı / *Up*
↓ = Aşağı / *Down*

* 220V AC modellerde bu mod yedek olarak ayrılmıştır.
** In 220V AC models, this mode is off*

Ürün Kodu	Işık	Renk	Nominal Gerilim
Code	*Light*	*Colour*	*Voltage*
ITL120R024	LED / *LED*		12-24V AC/DC
ITL120Y024	LED / *LED*		12-24V AC/DC
ITL120R220	LED / *LED*		220V AC
ITL120Y220	LED / *LED*		220V AC

IK

ø 50 mm Komple Işıklı Kolon Tipleri (Buzzer'sız)
ø 50 mm Complete Signal Tower Types (w/o Buzzer)

ø 70 mm Komple Işıklı İkaz Tipleri (Buzzer'sız)
ø 70 mm Complete Signal Tower Types (w/o Buzzer)

ø 50 mm Komple Işıklı Kolon Tipleri (Buzzer'lı)
ø 50 mm Complete Signal Tower Types (with Buzzer)

ø 70 mm Komple Işıklı Kolon Tipleri (Buzzer'lı)
ø 70 mm Complete Signal Tower Types (with Buzzer)

IF

ø 55 mm Çok Renkli İkaz (Buzzer'lı - Buzzer'sız)
ø 55 mm Multi-Colour Beacons (with Buzzer - w/o Buzzer)

IT

ø 120 mm Çok Fonksiyonlu İkazlar
ø 120 mm Multifunctional Beacons