K* / KM*

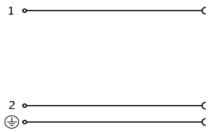
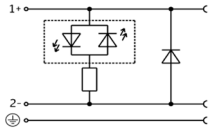
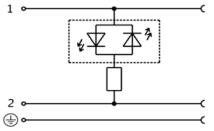
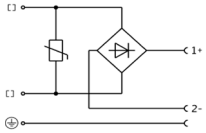
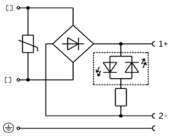


Technical Features

- Connectors according EN 175301-803, form A only
- Durable angled connectors, dust and splash protected (IEC 60529 - IP65)
- Vibration-proof locking using a central screw
- For DC power supply available with optional electronics board with LED and protective diode
- For AC power supply available with optional electronics board with LED, bridge rectifier and varistor
- Common range of cable diameters from 4 mm to 8 mm using different sealings
- Suitable for hydraulic, pneumatic, electromagnetic actuators; e.g. solenoid valves, pressure sensors, flow indicators
- Ground pin contact position adjustable in 90° increments
- Optional terminal box color versions, black, grey and transparent

Functional Description

Electrical connectors provide a fast and reliable interface for connecting/disconnecting to/from hydraulic and pneumatic valves, pressure switches, motor drives and other electrically driven industrial and mobil components. Innovative wire connecting methods and user-friendly assembly allow for easy installation to the electrical device. The connectors are available in many circuit versions to meet the customer's specific application requirements.

Model code	K1 and K5	K2 for voltages up 50 V DC	K2 for voltages over 50 V DC	K3	K4
Circuit diagram					

Technical Data

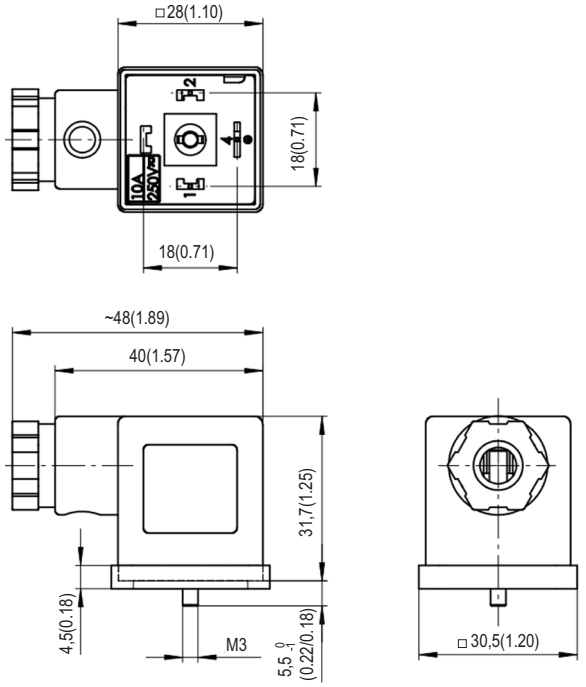
Type	Electronics design	Cable diameter mm (in)	Ambient temperature range °C (°F)	Degree of protection
K1	without electronics	6 - 8 (0.24 - 0.32)	-25 ... +90 (-13 ... +194)	IP65**
K2	LED and protective diode*	6 - 8 (0.24 - 0.32)	-25 ... +85 (-13 ... +185)	
K3	bridge rectifier and varistor	6 - 8 (0.24 - 0.32)	-25 ... +90 (-13 ... +194)	
K4	bridge rectifier, varistor and LED	6 - 8 (0.24 - 0.32)	-25 ... +85 (-13 ... +185)	
K5	without electronics	4 - 6 (0.16 - 0.24)	-25 ... +90 (-13 ... +194)	
* Diode applicable for voltages up to 50 V DC				
** The specified IP rating applies only in the case of correctly connected connectors (male + female) with the corresponding IP rating.				

Cable gland torque	1.8 ± 0.2 Nm (1.33 ± 0.15 ft-lbf)
Contact screw torque	0.2 + 0.1 Nm (0.15 + 0.07 ft-lbf)
Central fixing screw torque	0.4 ± 0.1 Nm (0.30 ± 0.07 ft-lbf)
Wire cross-section	0.5 - 1.5 mm^2 (0.0008 - 0.002 in^2)
Number of PINs	2 poles + Ground

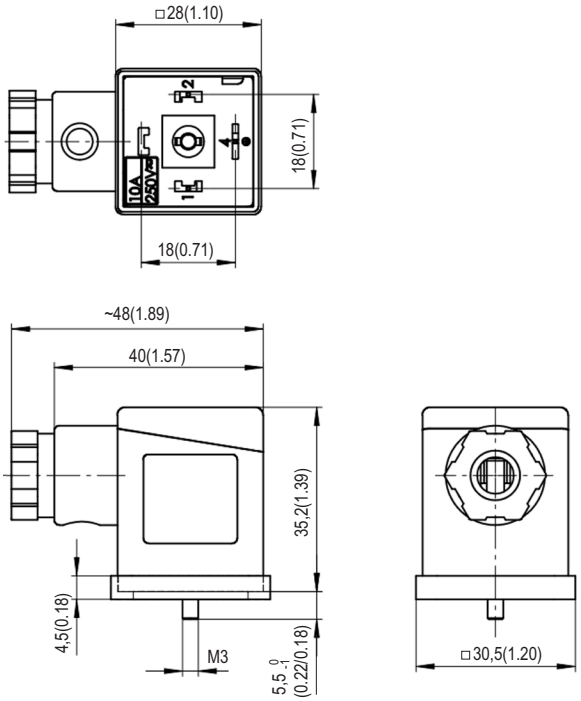
When using stranded wires, it is necessary to fit their ends with sleeves to create a good electrical connection with the clamping contacts in the connector.
The cross-section of the conductor affects its maximum current carrying capacity.

Dimensions in millimeters (in)

Connector type K1, K2 and K5



Connector type K3 and K4



Order numbers and codes

Order code	Order number	Order code	Order number
K1-G250AC/DC-10	16202200	K3-G250AC-1.5	16202400
K1-B250AC/DC-10	16202100	K3-B250AC-1.5	16202300
K2-TG230AC/DC-10	23927800	K4-G230AC-1.5	16203000
K2-TB230AC/DC-10	23927900	K4-B230AC-1.5	16202900
K2-TG110AC/DC-10	23927600	K4-G110AC-1.5	23929200
K2-TB110AC/DC-10	23927700	K4-B110AC-1.5	23929100
K2-TG024DC-1.5	16202800	K4-G024AC-1.5	23929000
K2-TB024DC-1.5	16202700	K4-B024AC-1.5	23928900
K3-G250AC-3	23929400	K5-G250AC/DC-10	16202600
K3-B250AC-3	23929300	K5-B250AC/DC-10	16202500

Ordering Code

□ - □ □ □ - □

Connectors according to EN 175301-803, form A

Design version

Without electronics, cable diameter 6-8 mm (0.24-0.32 in)	**K1**
With LED and protective diode*, cable diameter 6-8 mm (0.24-0.32 in)	**K2**
With bridge rectifier and varistor, cable diameter 6-8 mm (0.24-0.32 in)	**K3**
With bridge rectifier, varistor and LED, cable diameter 6-8 mm (0.24-0.32 in)	**K4**
Without electronics, cable diameter 4-6 mm (0.16-0.24 in)	**K5**

*Diode applicable for voltages up to 50 V DC

Housing color

grey	**G**
black	**B**
transparent milky color (body); gray bushing	**TG**
transparent milky color (body); black bushing	**TB**

Maximal current

1.5	1.5 A
3	3 A
10	10 A

Type of power supply

AC	AC only
DC	DC only
AC/DC	AC or DC

Supply voltage range

012	12 V ± 15 %
024	24 V ± 15 %
110	110 V ± 15 %
230	230 V ± 15 %
250	max. 250 V

The order code is for illustrative purposes only and serves to describe the product properties.
For available combinations see the table of common, prefered available versions.
For other versions contact our technical support for their identification, feasibility and availibility.

KM*

Connector type KM4-A-B
KM5-A-B



Connector type KM4-S-B
KM5-S-B



Connector type KM4-A-B-C1
KM4-A-B-C2

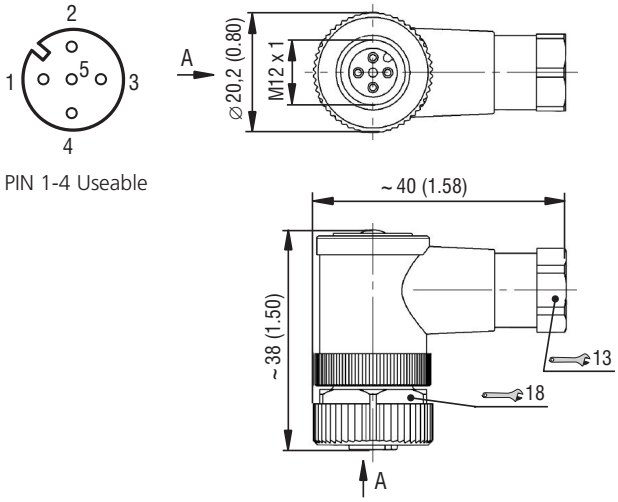


Technical Data

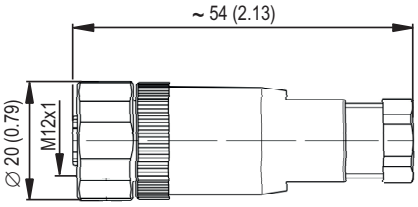
Type	Connector type	Cable diameter mm (in)	Ambient temperature range °C (°F)	Degree of protection
KM4-A-B	M12x1, 4-PIN black, angeled (250 V AC/DC)	6 - 8 (0.24 - 0.32)	-25 ... +90 (-13 ... +194)	IP67
KM4-S-B	M12x1, 4-PIN black, straight (250 V AC/DC)			
KM4-A-B-C1	M12x1, 4-PIN black, angeled, 2m cable (10 ... 36 V DC)	4.3 mm (0.17)	-25 ... +90 (-13 ... +194)	IP65 / IP67 / IP68* / IP69K
KM4-A-B-C2	M12x1, 4-PIN black, angeled, 5m cable (10 ... 36 V DC)			
KM5-A-B	M12x1, 5-PIN black, angeled (30 V AC/DC)	4 - 6 (0.16 - 0.24)	-25 ... +85 (-13 ... +185)	IP67
KM5-S-B	M12x1, 5-PIN black, straight	6 - 8 (0.24 - 0.32)	-40 ... +100 (-40 ... +212)	IP67
* IP68 test condition: 1 m water depth for 7 days				

Rozměry in milimetrech (in)

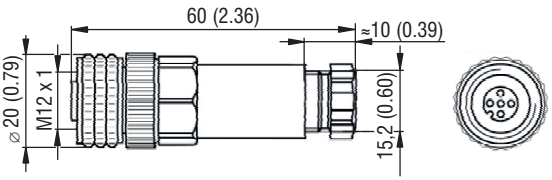
Connector type KM5-A-B



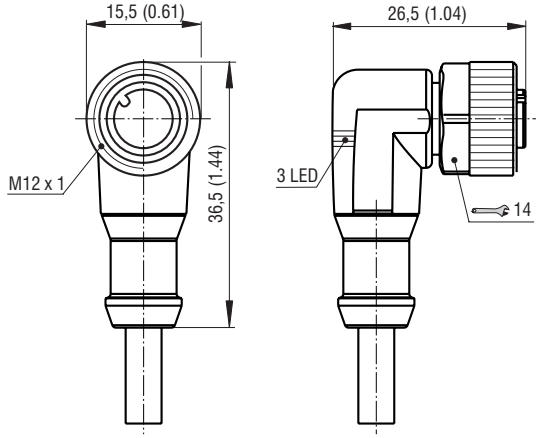
Connector type KM5-S-B



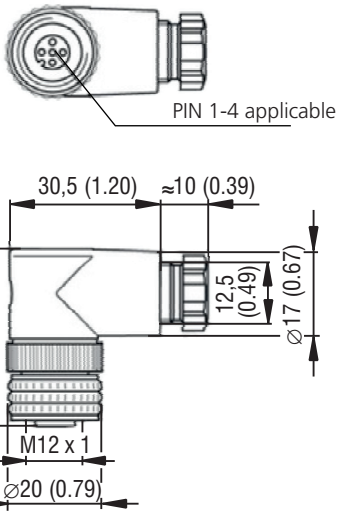
Connector type KM4-S-B



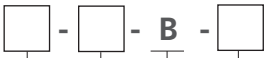
Connector type KM4-A-B-C1 and KM4-A-B-C2



Connector type KM4-A-B



Ordering Code



Metric connectors M12x1

Connector design

M12x1, 4-PIN	**KM4**
M12x1, 5-PIN	**KM5**

Design version

Angeled	**A**
Straight	**S**

Cable option

No designation	without cable
C1	2 m long cable
C2	5 m long cable

Color
black

Available design versions	Order number
KM4-A-B	27940900
KM4-S-B	15634200
KM5-A-B	41349600
KM5-S-B	31614900
KM4-A-B-C1	41582300
KM4-A-B-C2	41825200

For other versions contact our technical support for their identification, feasibility and availibility.