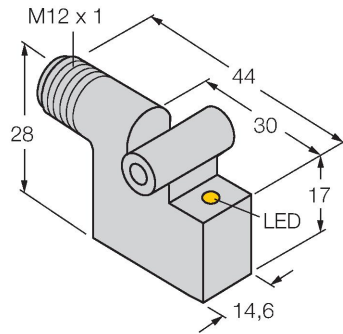


BIM-IKE-Y1X-H1141 W/KLI3
Magnetic Field Sensor – For Pneumatic Cylinders



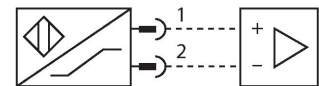
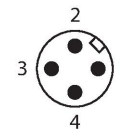
Features

- Rectangular, height 28 mm
- Metal, GD-Zn
- Magnetic-inductive sensor
- DC 2-wire, nom. 8.2 VDC
- Output acc. to DIN EN 60947-5-6 (NAMUR)
- Male connector M12 x 1
- ATEX category II 2 G, Ex zone 1
- ATEX category II 1 D, Ex zone 20
- SIL2 (Low Demand Mode) acc. to IEC 61508, PL c acc. to ISO 13849-1 at HFT0
- SIL3 (All Demand Mode) acc. to IEC 61508, PL e acc. to ISO 13849-1 with redundant configuration HFT1

Technical data

Type	BIM-IKE-Y1X-H1141 W/KLI3
Ident. no.	1056690
Pass speed	≤ 10 m/s
Repeatability	≤ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
Ambient temperature	-25...+70 °C
Output function	2-wire, NAMUR
Switching frequency	1 kHz
Voltage	Nom. 8.2 VDC
Current consumption non-actuated	≤ 1.2 mA
Actuated current consumption	≥ 2.1 mA
Approval acc. to	KEMA 02 ATEX 1090X
Internal capacitance (C _i)/inductance (L _i)	150 nF/150 µH
Device marking	⊕ II 2 G Ex ia IIC T6 Gb / II 1 D Ex ia IIC T115 °C Da
	(max. U _i = 20 V, I _i = 20 mA, P _i = 200 mW)
Design	Rectangular, IKE
Dimensions	30 x 14.6 x 28 mm
Housing material	Metal, GD-Zn
Active area material	Plastic, PA12-GF30
Electrical connection	Connectors, M12 × 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	6198 years acc. to SN 29500 (Ed. 99) 40 °C
Mounting on the following profiles	.
Cylindrical design	⊙ # #

Wiring diagram

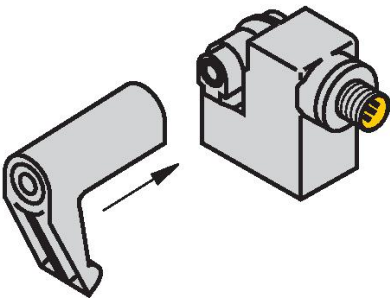
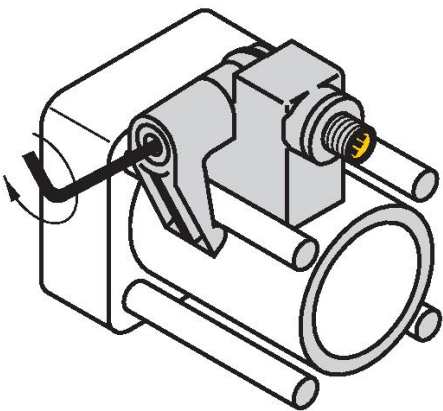


Functional principle

Magnetic field sensors are activated by magnetic fields and are especially suited for piston position detection in pneumatic cylinders. Based on the fact that magnetic fields can permeate non-magnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminium wall of the cylinder.

Technical data

Switching state	LED, Yellow
Included in delivery	KLI3



Mounting instructions

Mounting instructions/Description

Accessories

IMC-DI-22EX-PNO/24VDC

7560003

2-channel isolating switching amplifier with M12x1 males, for peripheral use, IP67, zones 2/22, input circuits II(1) Ex ia, PNP transistor output NO

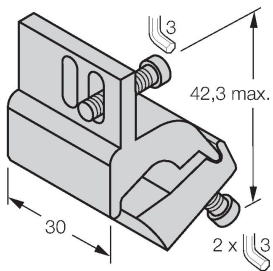
IMX12-DI01-2S-2T-0/24VDC

7580020

Isolating switching amplifier, 2-channel; SIL2 acc. to IEC 61508; Ex-proof version; 2 transistor outputs; input Namur signal; ON/OFF switchable monitoring of wire-break and short-circuit; toggle between NO/NC mode; signal doubling; removable screw terminals; 12.5 mm wide; 24 VDC power supply

KLI5Z

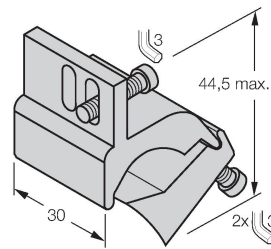
6971803



Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32...63 mm; material: Aluminum

KLI6Z

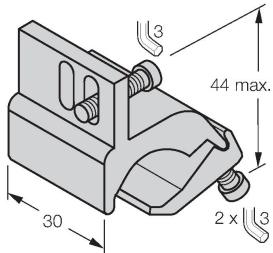
6971806



Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 50...125 mm; material: Aluminum

KLI6

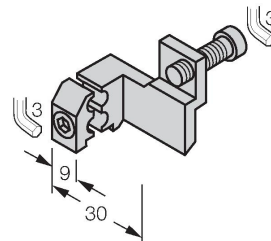
6971805



Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 50...100 mm; material: Aluminum

KLI7

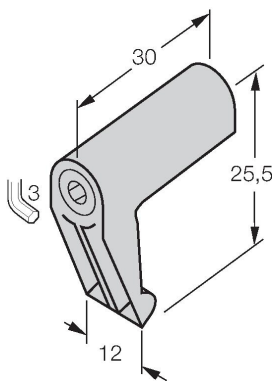
6971810



Mounting bracket for mounting magnetic field sensors on profile cylinders with external dovetail guide; cylinder diameter: 32...200 mm; material: Aluminum

KLI1

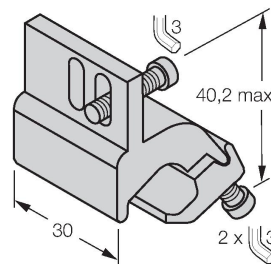
69710



Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32...100 mm; material: Die-cast Zinc

KLI5

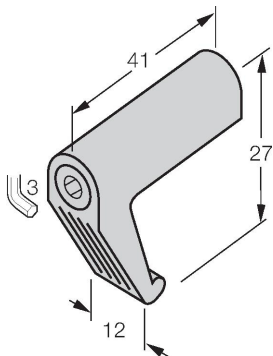
6971802



Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 32...50 mm; material: Aluminum

KLI3

69712



Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 63...160 mm; material: Die-cast Zinc