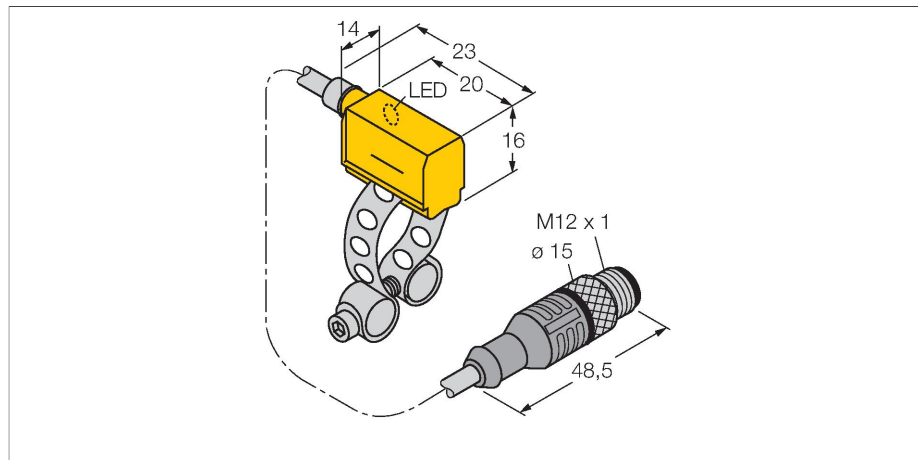


BIM-PST-Y1X-0.2-RS4.21T W/KLP80

Magnetic Field Sensor – for pneumatic cylinders



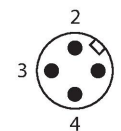
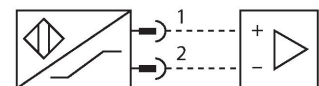
Features

- Rectangular, height 16 mm
- Front active face
- Plastic, PA12-GF30
- Magnetic-inductive sensor
- DC 2-wire, nom. 8.2 VDC
- Output according DIN EN 60947-5-6 (NAMUR)
- Pigtail with male end, 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-PST-Y1X-0.2-RS4.21T W/KLP80
Ident. no.	1057095
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.) / inductance (L.)	150 nF / 150 µH
Device marking	II 2 G Ex ia IIC T6 Gb / II 1 D Ex ia IIIC T95 °C Da (max. U_i = 20 V, I_i = 60 mA, P_i = 130 mW)
Design	Rectangular, PST
Dimensions	23 x 14 x 16 mm
Housing material	Plastic, PA12-GF30
Active area material	Plastic, PA12-GF30
Electrical connection	Cable with connector, M12 x 1
Cable quality	Ø 4 mm, Blue, LifYY-11Y, PUR, 0.2 m
Core cross-section	2 x 0.25 mm ²
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

Wiring diagram



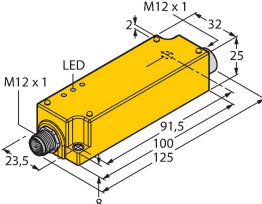
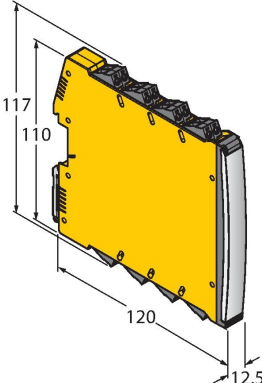
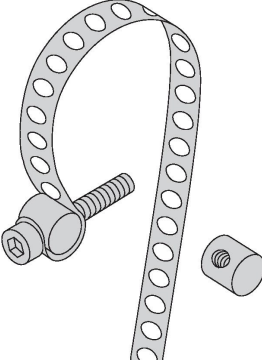
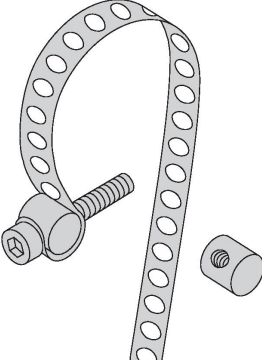
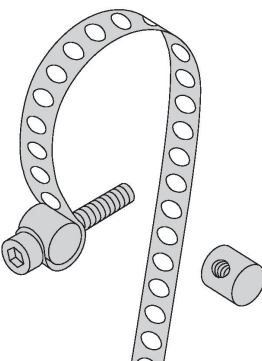
Functional principle

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

Mounting on the following profiles	.
Cylindrical design	○
Switching state	LED, Yellow
Included in delivery	KLP80

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
KLP 25 MONTAGESET 	69653 Mounting on round cylinders; cylinder diameter 8...25 mm; material: Metal CuZn; two tie bolts (material: Metal CuZn), cylinder screw M3 x 20	KLP 80-VA 	69654 Mounting on round cylinders; cylinder diameter 25...80 mm; material: Metal A2 1.4301 (AISI 304); two tie bolts (material: Metal CuZn, alternatively metal A2 1.4301 / AISI 304) cylinder screw M3 x 20; (DIN 912-A20)
KLP 200-VA 	6965302 Mounting on round cylinders; cylinder diameter 80...200 mm material: Metal A2 1.4301 (AISI 304); two tie bolts (material: Metal CuZn, alternatively metal A2 1.4301 / AISI 304) cylinder screw M3 x 20; (DIN 912-A20)		