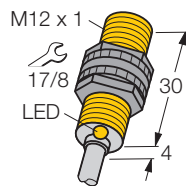


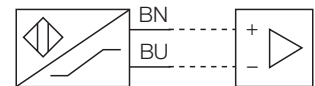
Inductive sensor

Bi2-P12-Y1X



- threaded barrel, M12 x 1
- plastic, PA12-GF30
- 2-wire DC, nom. 8.2 VDC
- output according to DIN EN 60947-5-6 (NAMUR)
- cable connection

Wiring diagram



Function principles

Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Type	Bi2-P12-Y1X
Ident-No.	40300
Rated operating distance S_n	2 mm
Mounting mode	flush
Hysteresis (switching distance)	1... 10 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	-25 ...+ 70 °C
Voltage	nom. 8,2 VDC
Current consumption (off-state)	≥ 2,1 mA
Current consumption (on-state)	≤ 1,2 mA
Max. switching frequency	≤ 5 kHz
Output function	2-wire, NAMUR
Approval according to	KEMA 02 ATEX 1090X
Internal inductivity (L_i) / capacitance (C_i)	150 nF / 150 µH *
	* Value for pre-fixed cable up to 30m
Marking of device	Ⓔ II 2 G EEx ia IIC T6 (max. U_i = 15 V, I_i = 20 mA, P_i = 200 mW)
Housing style	threaded barrel; M12 x 1
Dimensions	34 mm
Housing material	plastic, PA12-GF30
Active face	plastic, PA12-GF30
Max. fixing torque of coupling nut	1 Nm
Wiring	cable
Cable	Ø 5,2, LifYY, PVC, 2 m
Cable cross section	2 x 0,34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Switching status indication	LED yellow

Inductive sensor

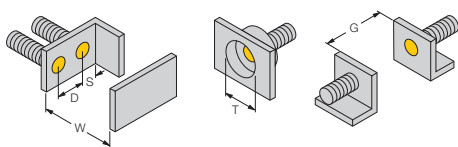
Bi2-P12-Y1X

Mounting instructions

	minimum gap
Gap D	2 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	1,5 x B
Gap G	6 x Sn

Diameter of active face B

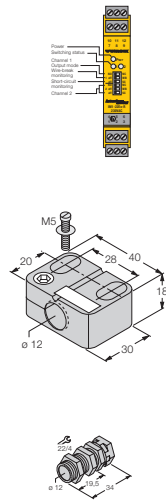
Ø 12 mm



Inductive sensor

Bi2-P12-Y1X

Accessories

Typ	Ident-No.	Description	Dimension drawing
IM1-22EX-R/24VDC	7541210	Isolating switching amplifier, two channels; input for NAMUR signals; optional wire-break and short-circuit monitoring function; selectable normally open or normally closed performance; removeable terminal blocks; 18 mm wide; supply voltage 24 VDC; further isolating switching amplifiers in our "Interface Technology" catalogue.	
BST-12B	6947212	fixing clamp with dead-stop; material: PA6	
QM-12	6945101	quick-mount fixing clamp with dead-stop; material: chrome-plated brass external thread M16 x 1	