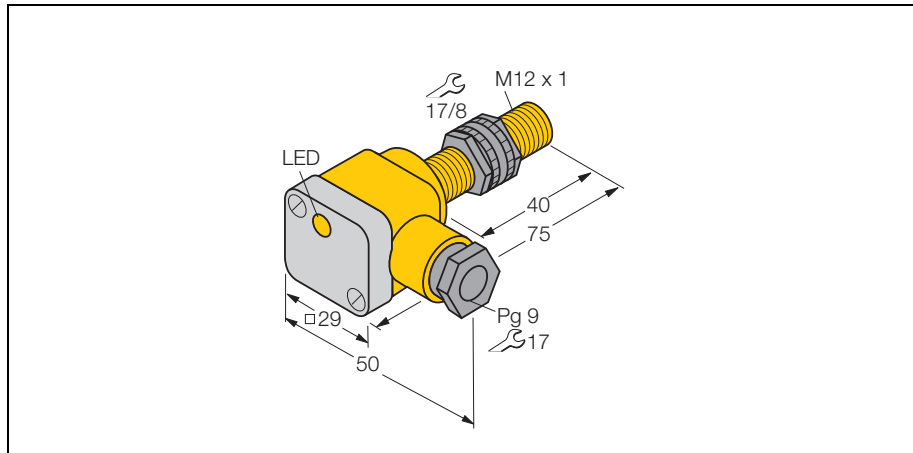
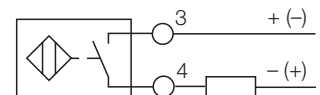


## Inductive sensor with extended temperature range Bi2-P12SK-AD4X/S80



- threaded barrel, M12 x 1
- plastic, PA12-GF30
- for temperatures up to +80°C
- 2-wire DC, 10...65 VDC
- normally open
- Terminal chamber

### Wiring diagram



### Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose 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. Special inductive sensors versions can be used at temperatures of -40°C up to +250°C.

<b>Type</b>	Bi2-P12SK-AD4X/S80
Ident-No.	4453051
<b>Rated operating distance <math>S_n</math></b>	2 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Temperature drift	$\leq \pm 10 \%$ $\leq \pm 20 \%, \geq +70 \text{ °C}$
Hysteresis	1... 15 %
Repeatability	$\leq 2 \%$
Ambient temperature	-25...+ 80 °C
<b>Operating voltage</b>	10... 65VDC
Residual ripple	$\leq 10 \%$ $U_{SS}$
DC rated operational current	$\leq 100$ mA
Residual current	$\leq 0.6$ mA
Rated insulation voltage	$\leq 0.5$ kV
Short-circuit protection	yes / cyclic
Voltage drop at $I_e$	$\leq 5$ V
Output function	2-wire, normally open
Smallest operating current $I_m$	$\geq 3$ mA
Switching frequency	$\leq 1$ kHz
<b>Housing</b>	threaded barrel, M12 x 1
Dimensions	75 x 12 mm
Housing material	plastic, PA12-GF30
Material active face	plastic, PA12-GF30
Tightening torque of housing nut	1 Nm
Connection	Terminal chamber
Clamping ability	$\leq 2.5$ mm <sup>2</sup>
Cable external diameter	4.5... 8 mm
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
<b>Display switch state</b>	LED yellow
Included in scope of supply	cable gland; 2x plastic seals