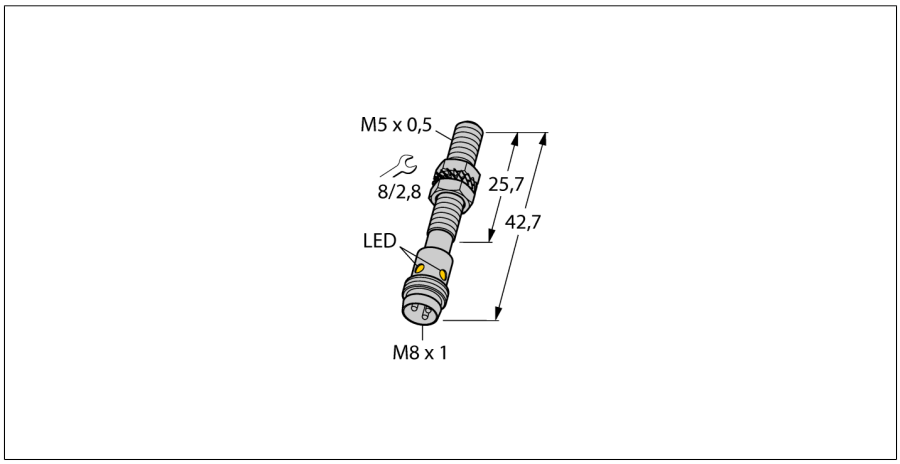
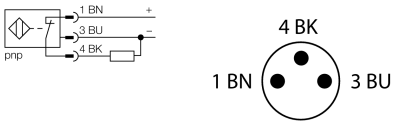
Inductive sensor
BI1-EG05-RP6X-V1331



- **Threaded barrel, M5 x 0.5**
- **Stainless steel, 1.4427 SO**
- **DC 3-wire, 10…30 VDC**
- **NC contact, PNP output**
- **M8 x 1 male connector**

Wiring Diagram



Type designation	BI1-EG05-RP6X-V1331
Ident-No.	4609752
Rated switching distance Sn	1 mm
Mounting conditions	Flush
Secured operating distance	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3…15 %
Ambient temperature	-25…+70 °C
Operating voltage	10…30 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 100 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I_e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NC contact, PNP
Switching frequency	3 kHz
Design	Threaded barrel,M5 × 0.5
Dimensions	42.7 mm
Housing material	Stainless steel, 1.4427 SO
Max. tightening torque housing nut	5 Nm
Electrical connection	Connector, M8 × 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED,Yellow

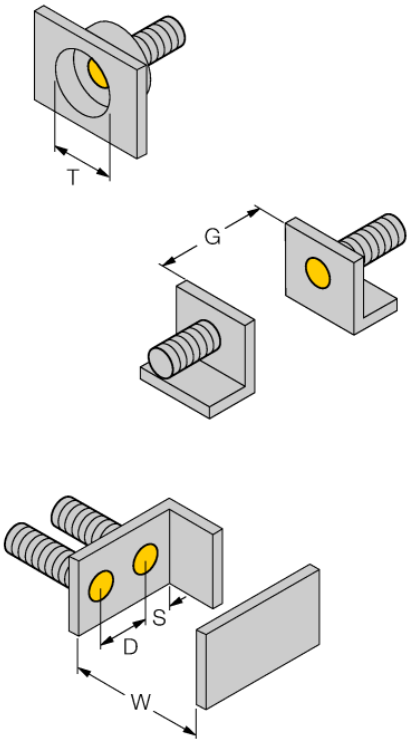
Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

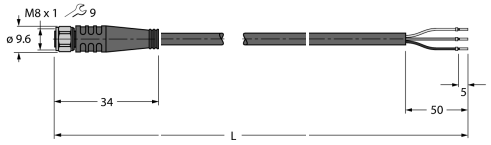
Edition • 2018-04-24T17:59:21+02:00

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter active area B	Ø 5 mm



Wiring accessories

Type code	Ident-No.	Description	
PKGV3M-2/TEL	6625385	Connection cable, female M8, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	

Edition • 2018-04-24T17:59:21+02:00