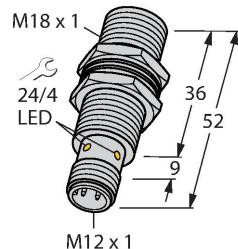


BI8U-MT18-AP6X-H1141/S1589

Inductive Sensor – With WeldGuard™ coating



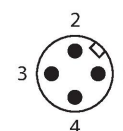
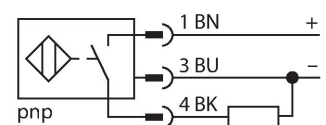
Technical data

Type	BI8U-MT18-AP6X-H1141/S1589
ID	1644789
Special version	S1589 Corresponds to: With Weld-Guard™ Coating
General data	
Rated switching distance	8 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 200 mA
No-load current	≤ 25 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
DC field stability	300 mT
AC field stability	300 mT _{ss}
Switching frequency	1.5 kHz
Mechanical data	
Design	Threaded barrel, M18 x 1

Features

- Threaded barrel, M18 x 1
- Brass with special coating
- Front cap with special coating, very resistant to thermal and mechanical load
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Wiring diagram



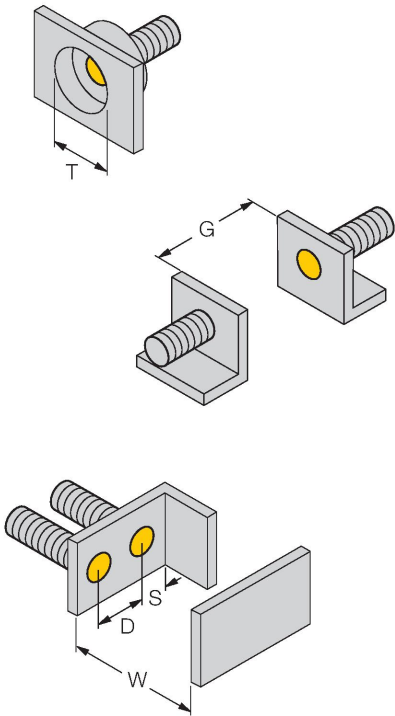
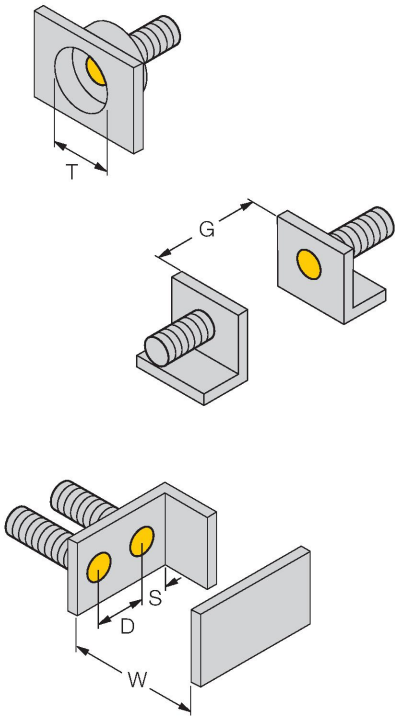
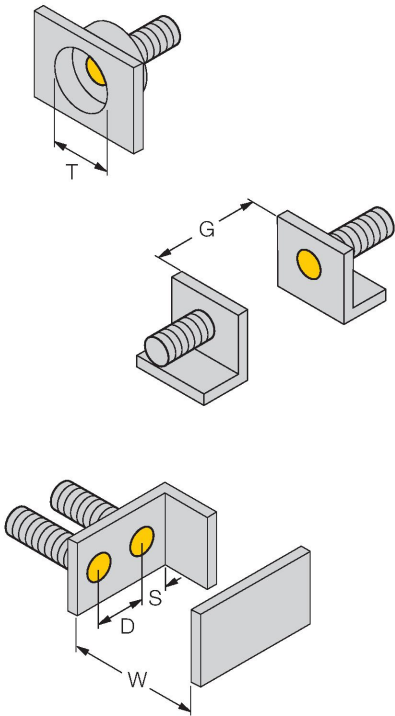
Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Dimensions	52 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, LCP + WeldGuard™, grey
Max. tightening torque of housing nut	15 Nm
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-30...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description	
	Distance D
	36 mm
	Distance W
	3 x Sn
	Distance T
	3 x B
	Distance S
	27 mm
	Distance G
	6 x Sn
	Diameter active area B
	Ø 18 mm

Accessories

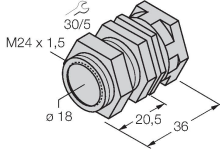
BST-18B 6947214

Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



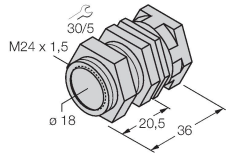
QMT-18 6945104

Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.



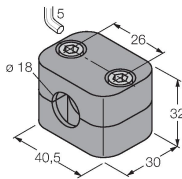
QM-18 6945102

Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.



BSS-18 6901320

Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene



PN-M18 6905310

Protective nut for M18 x 1 threaded barrels; material: Stainless steel A2 1.4305 (AISI 303)

