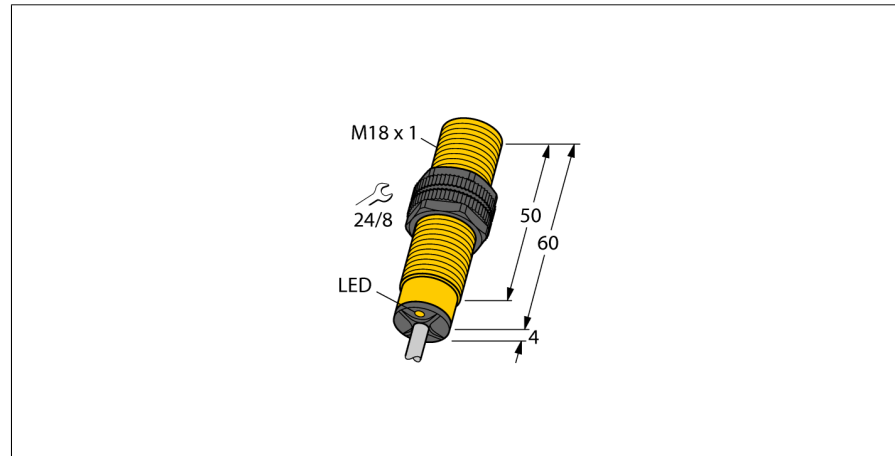
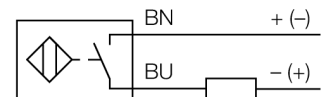


**Inductive sensor  
BI5-S18-AD4X**



- Threaded barrel, M18 x 1
- Plastic, PA12-GF30
- DC 2-wire, 10...65 VDC
- NO contact
- Cable connection

**Wiring Diagram**



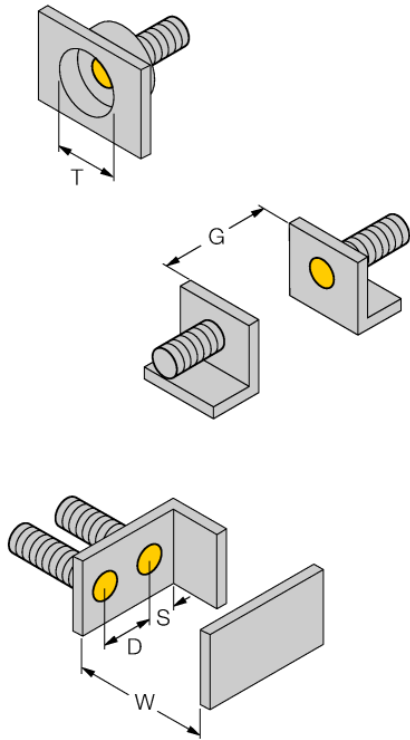
**Functional principle**

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.

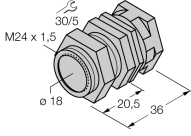
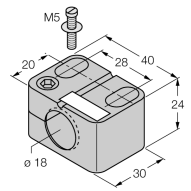
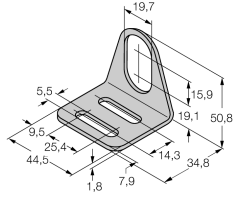
<b>Type designation</b>	BI5-S18-AD4X
Ident no.	44560
<b>Rated switching distance S<sub>n</sub></b>	5 mm
Mounting conditions	flush
Assured switching distance	≤ (0,81 x S <sub>n</sub> ) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	1...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10... 65VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
Residual current	≤ 0.6 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>s</sub>	≤ 5 V
Smallest operating current I <sub>m</sub>	≥ 3 mA
Switching frequency	1 kHz
<b>Construction</b>	Threaded barrel, M18 x 1
Dimensions	64 mm
Housing material	Plastic, PA12-GF30
Active area material	Plastic, PA12-GF30
End cap	Plastic, EPTR
Max. tightening torque housing nut	2 Nm
Electrical connection	cable
Cable quality	5.2 mm, LifYY, PVC, 2m
Cable cross section	2 x 0.34 mm <sup>2</sup>
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
<b>Switching state</b>	LED yellow

**Inductive sensor  
BI5-S18-AD4X**

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
<hr/>	
Diameter of the active area B	Ø 18 mm



Accessories

Type code	Ident no.	Description	
QM-18	6945102	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M24 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	