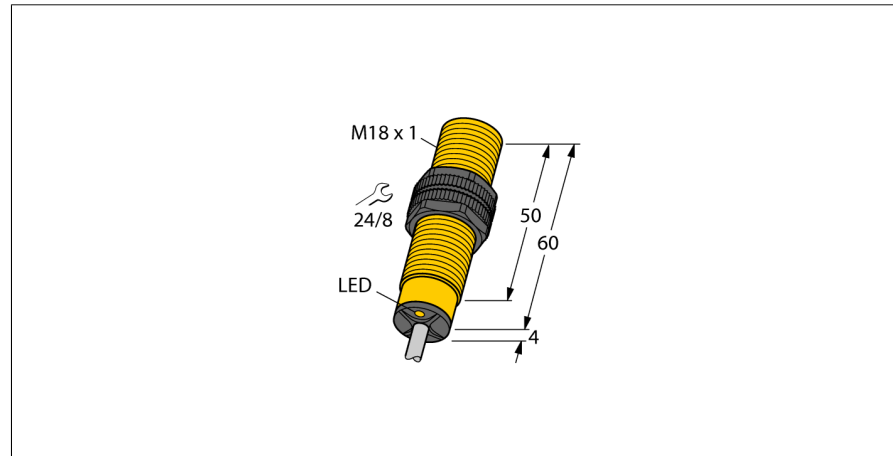
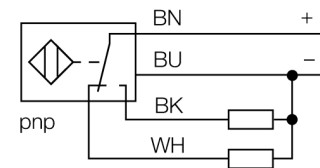


**Inductive sensor  
with extended temperature range  
NI8-S18-VP4X/S97**



- Threaded barrel, M18 x 1
- Plastic, PA12-GF30
- For temperatures up to -40 °C
- 4-wire DC, 10...65 VDC
- Changeover contact, PNP output
- Cable connection

**Wiring diagram**



**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Special versions are available for ambient temperatures between -60°C and +250°C.

<b>Type code</b>	NI8-S18-VP4X/S97
Ident no.	1513512
<b>Rated operating distance Sn</b>	8 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
	≤ ± 20 %, ≤ -25 °C
Hysteresis	3...15 %
Ambient temperature	-40...+70 °C
<b>Operating voltage</b>	10...65VDC
Residual ripple	≤ 10 % U <sub>in</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, PNP
Switching frequency	0.5 kHz
<b>Design</b>	threaded barrel, M18 x 1
Dimensions	64 mm
Housing material	plastic, PA
Material active area	Plastic, PA
End cap	Plastic, EPTR
Max. tightening torque housing nut	2 Nm
Connection	cable
Cable quality	5.2 mm, SiHSi, Silicone, 2 m
Cable cross section	4 x 0.25 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

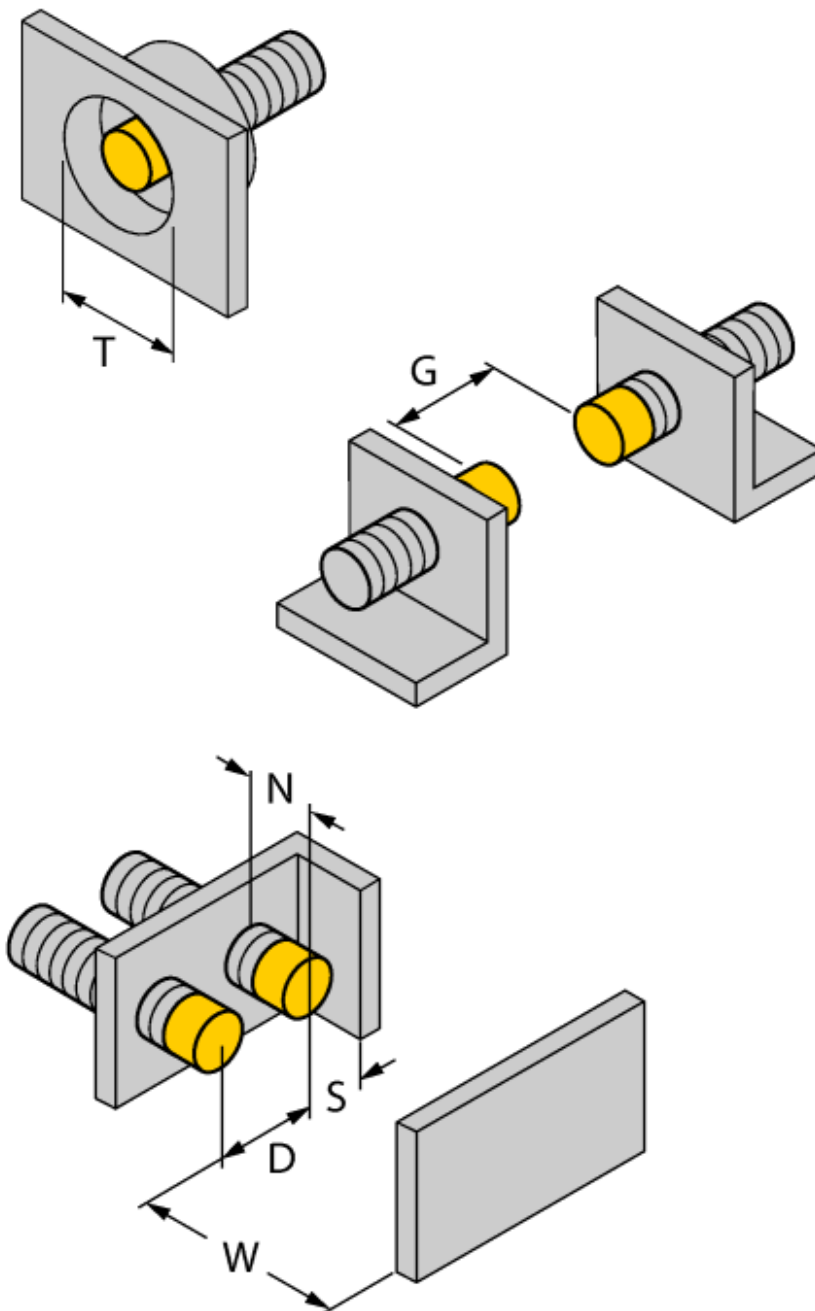
**Inductive sensor  
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Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn

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**Diameter of the active area B**                       $\varnothing$  18 mm



**Inductive sensor  
with extended temperature range  
NI8-S18-VP4X/S97**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
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	