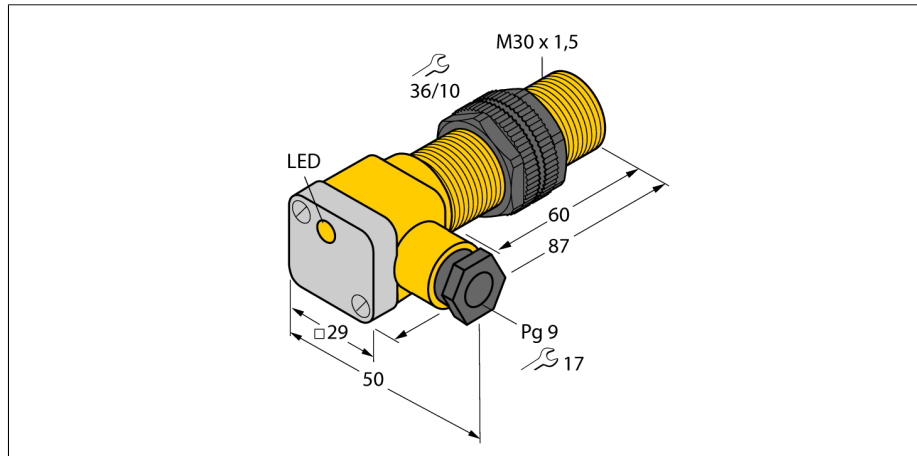


Inductive sensor NI15-P30SK-AP6X

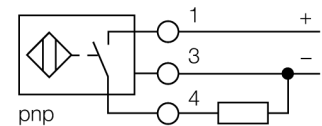
TURCK

Industrial
Automation



- Threaded barrel, M30 x 1.5
- Plastic, PA12-GF30
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Terminal chamber

Wiring diagram



Functional principle

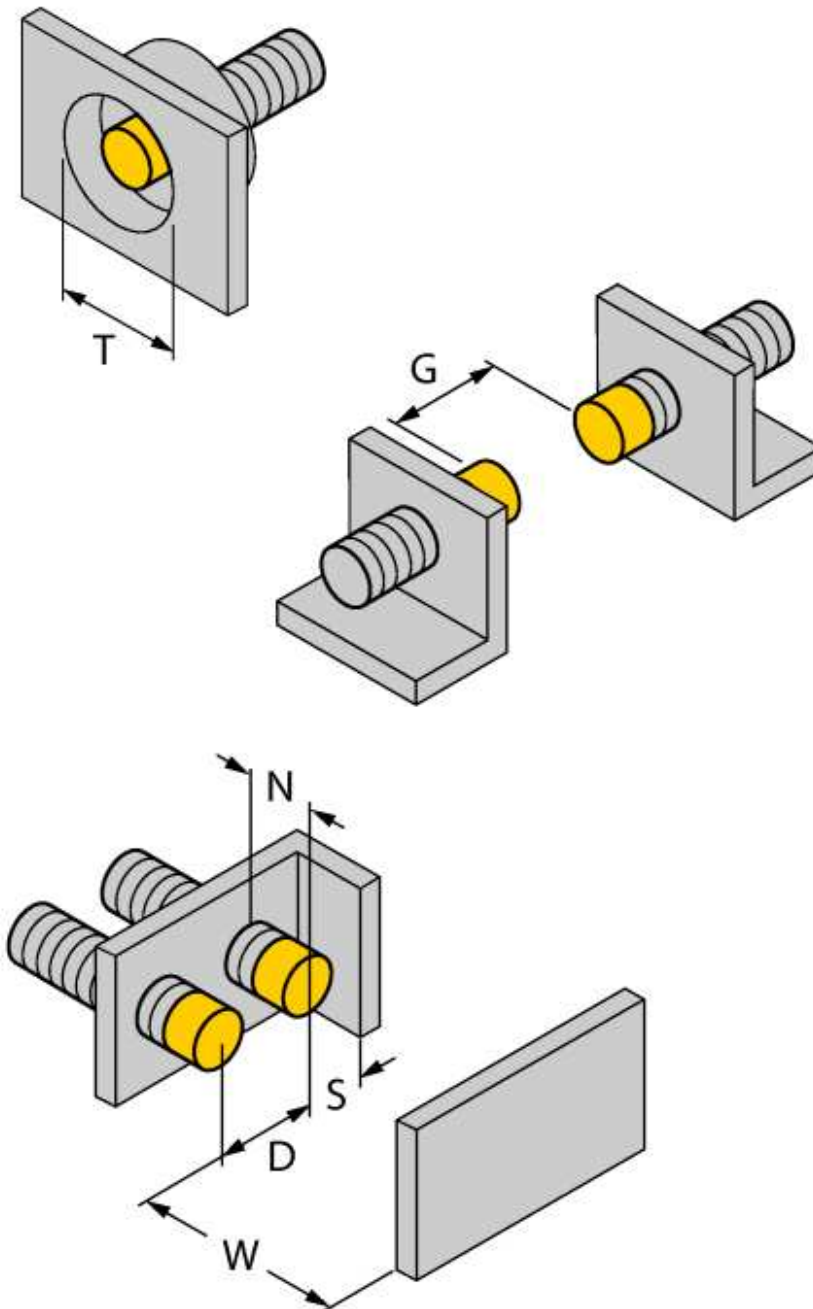
Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Type code	NI15-P30SK-AP6X
Ident no.	46597
Rated operating distance Sn	15 mm
Mounting condition	non-flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 2\%$ of full scale
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I_0	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.5 kHz
Design	threaded barrel, M30 x 1.5
Dimensions	87 mm
Housing material	Plastic, PA
Terminal chamber cover material	plastic, Ultem
Terminal chamber housing material	plastic, plastic, PA12-GF20
Material active face	Plastic, PA
Max. tightening torque housing nut	5 Nm
Connection	Terminal chamber
Clamping ability	≤ 2.5 mm ²
Cable external diameter	4.5...8mm
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	• yellow
Included in scope of supply	cable gland; 2x plastic seals

**Inductive sensor
NI15-P30SK-AP6X**

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	20 mm

Diameter of the active area B \varnothing 30 mm



Accessories

Type code	Ident no.	Description	Dimension drawing
QM-30	6945103	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M36 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
BST-30B	6947216	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
MW-30	6945005	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-30	6901319	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	