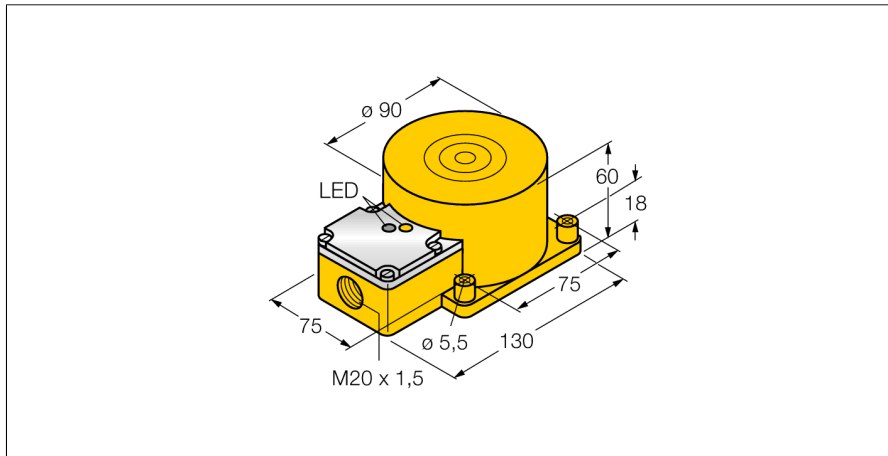


Inductive sensor NI60-K90SR-VP4X2

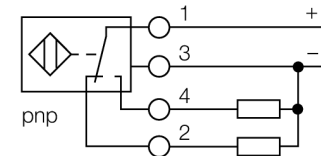
TURCK

Industrial
Automation



- Rectangular, height 60 mm
- Plastic, PBT-GF30-V0
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- Terminal chamber

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.

Type designation	NI60-K90SR-VP4X2
Ident no.	15640
Rated switching distance Sn	60 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	$\leq \pm 20\%$, $\leq -25\text{ }^\circ\text{C}$
Ambient temperature	-40...+70 °C
Operating voltage	10...65 VDC
Residual ripple	$\leq 10\% U_{s\text{}}$
DC rated operational current	$\leq 200\text{ mA}$
No-load current I_0	$\leq 15\text{ mA}$
Residual current	$\leq 0.1\text{ mA}$
Isolation test voltage	$\leq 0.5\text{ kV}$
Short-circuit protection	yes
Voltage drop at I_0	$\leq 1.8\text{ V}$
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	4-wire, Complementary contact, PNP
Reverse polarity protection	Complete
Switching frequency	0.06 kHz
Design	Rectangular, K90SR
Dimensions	130 x 75 x 60 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Terminal chamber
Clamping ability	$\leq 2.5\text{ mm}^2$
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
Power-on indication	LED green
Switching state	LED yellow
Included in delivery	cable gland

**Inductive sensor
NI60-K90SR-VP4X2**

Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance A	1 x Sn
Distance C	2 x Sn
Width active area B	90 mm

