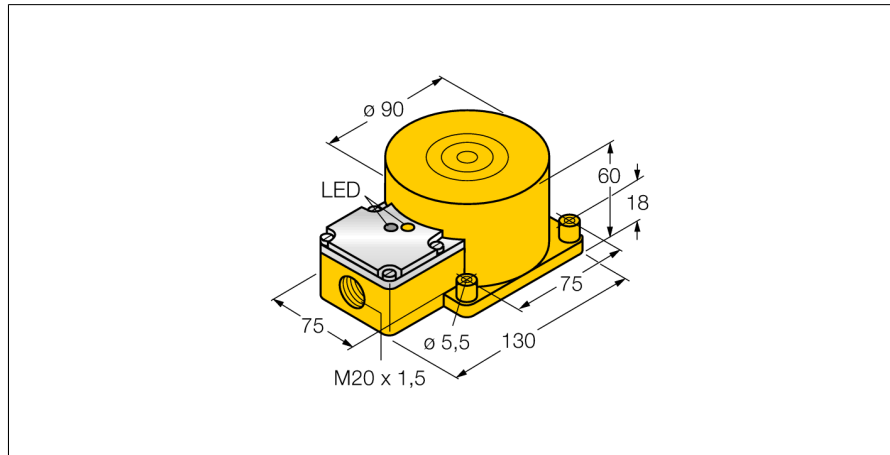
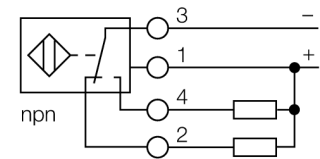


Inductive Sensor NI60-K90SR-VN4X2/F2



- Rectangular, height 60 mm
- Plastic, PBT-GF30-V0
- Large coverage
- Shifted oscillator frequency F2
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN 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	NI60-K90SR-VN4X2/F2
ID	15741
General data	
Rated switching distance S_n	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
Hysteresis	3...15 %
Electrical data	
Operating voltage U_s	10...65 VDC
Ripple $U_{s,r}$	$\leq 10\%$ $U_{s,max}$
DC rated operating current I_s	≤ 200 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_s	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	4-wire, Complementary contact, NPN
Switching frequency	0.06 kHz
Mechanical data	
Design	Rectangular, K90SR
Dimensions	130 x 75 x 60 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm ²
Environmental conditions	
Ambient temperature	-25...+70 °C
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