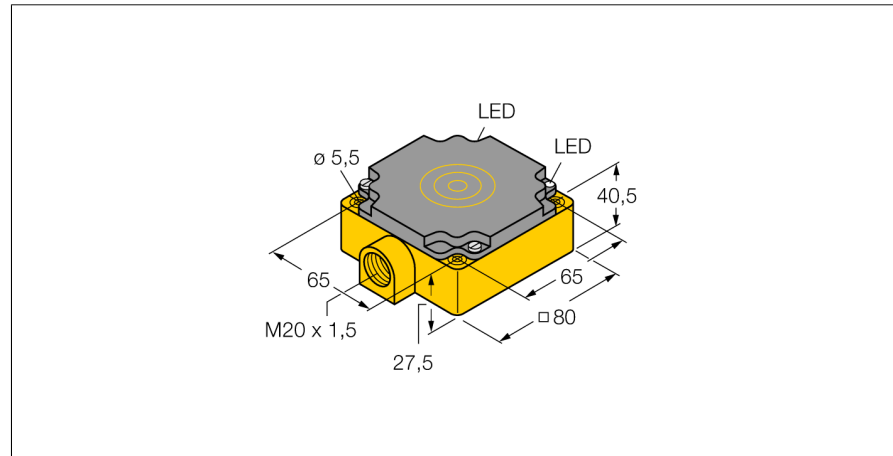
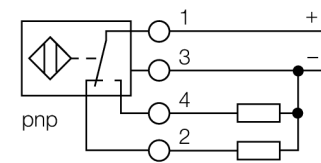


Inductive sensor
With extended temperature range
NI40-CP80-VP4X2/S100



- Rectangular, height 41 mm
- Plastic, PBT-GF30-V0
- Temperatures up to +100 °C
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- Terminal chamber

Wiring Diagram

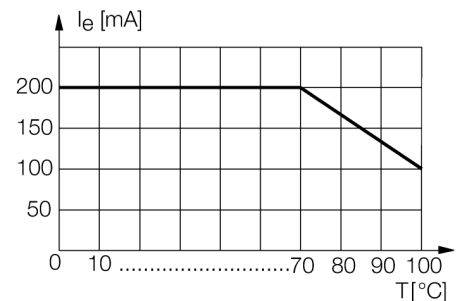


Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this 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.

Derating Curve



Type designation	NI40-CP80-VP4X2/S100
Ident no.	15095
Rated switching distance Sn	40 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 20 %, ≥ +70 °C
Ambient temperature	3...15 %
	-25...+100 °C
Operating voltage	10...65 VDC
Residual ripple	≤ 10 % U _s
DC rated operational current	≤ 200 mA
Rated operational current	See derating curve
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes
Voltage drop at I _e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	4-wire, Complementary contact, PNP
Switching frequency	0.1 kHz
Design	Rectangular,CP80
Dimensions	80 x 80 x 41 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 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

Inductive sensor
With extended temperature range
NI40-CP80-VP4X2/S100

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 B
Distance C	1 x B
Width active area B	80 mm

