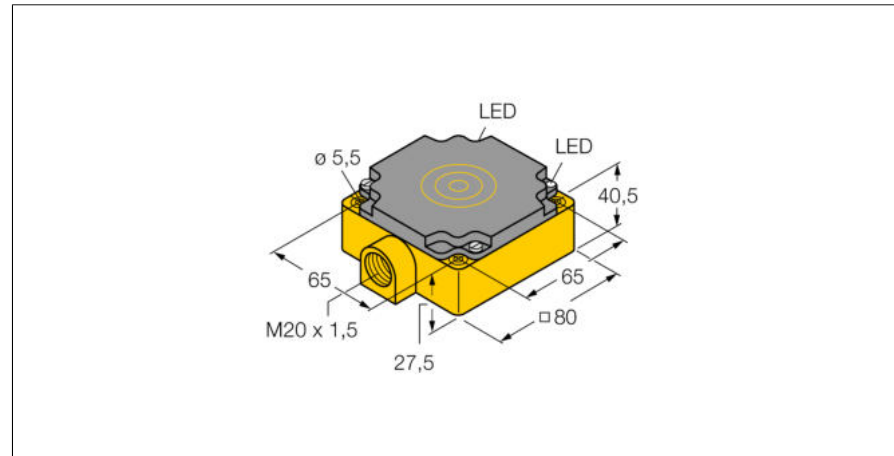
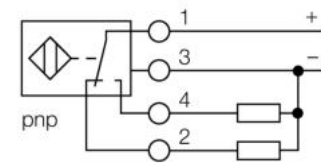


**Inductive sensor**  
**With extended temperature range**  
**NI40-CP80-VP4X2/S100**



- 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**

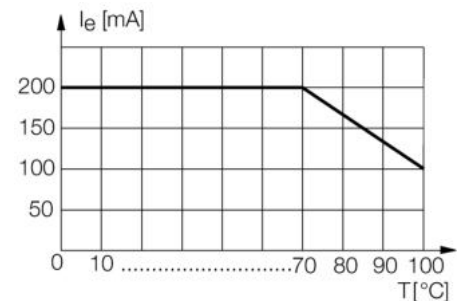


**Functional principle**

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**



<b>Type designation</b>	NI40-CP80-VP4X2/S100
Ident no.	15095
<b>Rated switching distance Sn</b>	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
<b>Operating voltage</b>	10...65 VDC
Residual ripple	≤ 10 % U <sub>s</sub>
DC rated operational current	≤ 200 mA
Rated operational current	See derating curve
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	4-wire, Complementary contact, PNP
Switching frequency	0.1 kHz
<b>Design</b>	Rectangular,CP80
Dimensions	80 x 80 x 41 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 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>Power-on indication</b>	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
<b>Width active area B</b>	<b>80 mm</b>

