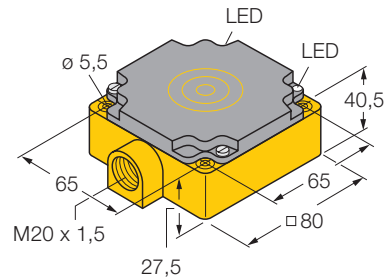
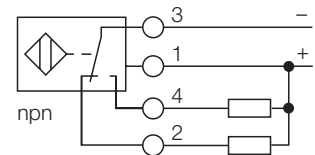


Inductive sensor with extended switching distance Ni75U-CP80-VN4X2



- rectangular, height 41 mm
- plastic, PBT-GF30-V0
- factor 1 for all metals
- magnetic field immune
- extended switching distance
- extended temperature range
- high switching frequency
- 4-wire DC, 10...65 VDC
- SPDT, npn output
- terminal chamber

Wiring diagram



Function principles

Inductive proximity switches are designed for wear-free non-contact detection of metal objects. Due to a ferrite-less 3-coil system, Uprox factor 1 sensor have distinct advantages. The detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

Type	Ni75U-CP80-VN4X2
Ident-No.	1540810
Rated operating distance S_n	75 mm
Mounting mode	non-flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Operating temperature	$\leq \pm 15 \%, \leq -25 \text{ °C} \vee \geq +70 \text{ °C}$ -30 ...+ 85 °C
Rated operational voltage (DC) U_B	10... 65 VDC
Max. ripple	$\leq 10 \% U_{pp}$
Rated operational current (DC) I_e	$\leq 200 \text{ mA}$
No-load current I_0	$\leq 15 \text{ mA}$
Max. OFF-state current	$\leq 0,1 \text{ mA}$
Max. switching frequency	$\leq 0,25 \text{ kHz}$
Rated insulation voltage	$\leq 0,5 \text{ kV}$
Output function	4-wire, complementary, NPN
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	$\leq 1,8 \text{ V}$
Wire breakage / reverse polarity protection	yes / complete
Protection class	IP67
Housing style	rectangular; CP80
Dimensions	80 x 80 x 41 mm
Housing material	plastic, PBT-GF30-V0
Active face	plastic, PBT-GF30-V0
Wiring	terminal chamber
Clamping ability	$\leq 2,5 \text{ mm}^2$
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Supply voltage indication	LED green
Switching status indication	LED yellow

Inductive sensor with extended switching distance Ni75U-CP80-VN4X2

Mounting instructions

Gap D	minimum gap 3 x B
Gap W	3 x Sn
Gap S	1,5 x B
Gap G	6 x Sn
Gap N	1 x B
Gap A	1 x B
Gap C	1 x B

Width of active face B80 mm

