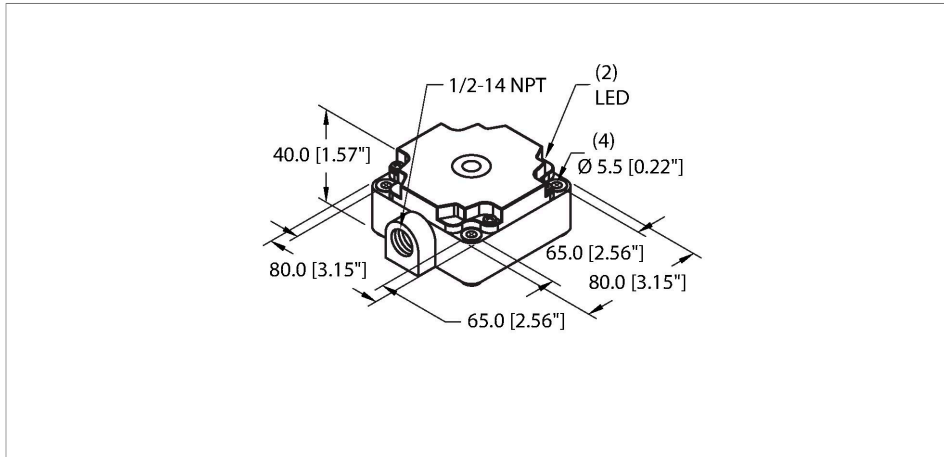


NI75U-CP80-VN4X2/S10

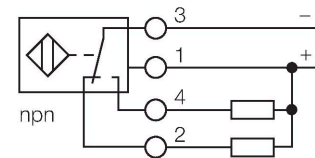
Inductive Sensor – With Increased Switching Distance



Features

- Rectangular, height 41 mm
- Plastic, PBT-GF30-V0
- Thread, 1/2-14 NPT
- Factor 1 for all metals
- Protection class IP67
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- 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. Due to the 3-coil system without ferrite core, uprox®+ factor 1 sensors have significant advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

Technical data

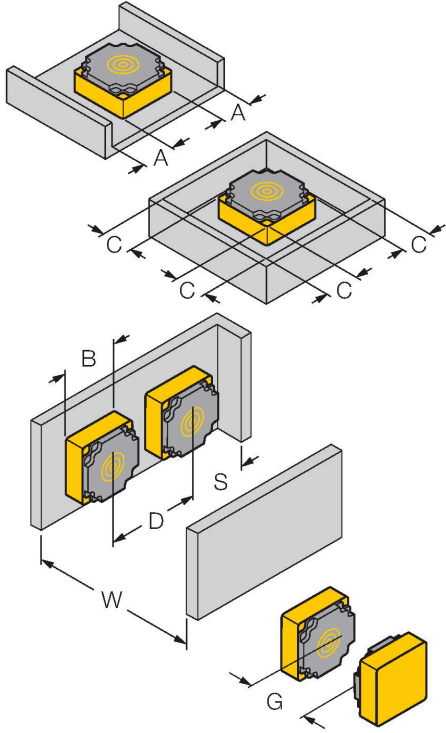
Type	NI75U-CP80-VN4X2/S10
ID	1540811
Special version	S10 corresponds to: Mounting base with 1/2-14NPT thread
General data	
Rated switching distance	75 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ % $\leq \pm 15$ %, ≤ -25 °C v $\geq +70$ °C
Hysteresis	3...15 %
Electrical data	
Operating voltage	10...65 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current	15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, Complementary contact, NPN
DC field stability	300 mT

Technical data

AC field stability	300 mT _{ss}
Insulation class	□
Switching frequency	0.25 kHz
Mechanical data	
Design	Rectangular, CP80
Dimensions	80 x 80 x 41 mm
Housing material	Plastic, PBT-GF30-V0
Active area material	PBT-GF30-V0
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm ²
Environmental conditions	
Ambient temperature	-30...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description



Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance A	$1 \times B$
Distance C	$1 \times B$
Width active area B	80 mm