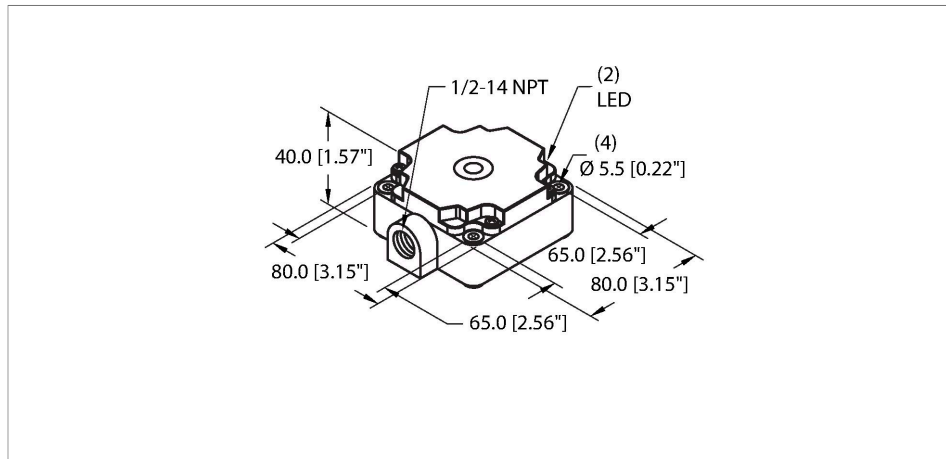


# NI75U-CP80-FDZ30X2/S10

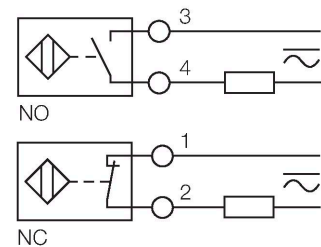
## Inductive Sensor – With Increased Switching Distance



### Features

- Rectangular, height 41 mm
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Resistant to magnetic fields
- Large coverage
- Extended temperature range
- High switching frequency
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NC/NO programmable
- Terminal chamber

### Wiring diagram

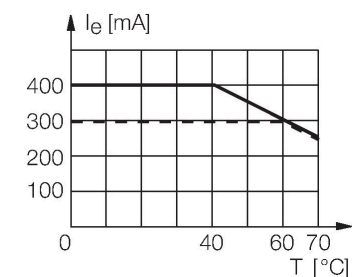


### Technical data

Type	NI75U-CP80-FDZ30X2/S10
Ident. no.	4280901
Special version	S10 corresponds to: Mounting base with 1/2-14NPT thread
Rated switching distance	75 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2$ % of full scale
Temperature drift	$\leq \pm 10$ % $\leq \pm 15$ %, $\leq -25$ °C v $\geq +70$ °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	20...250 VAC
Operating voltage	10...300 VDC
AC rated operational current	$\leq 400$ mA
DC rated operational current	$\leq 300$ mA
Frequency	$\geq 50$ ... $\leq 60$ Hz
Residual current	$\leq 1.7$ mA
Isolation test voltage	$\leq 1.5$ kV
Surge current	$\leq 3$ A ( $\leq 20$ ms max. 5 Hz)
Short-circuit protection	yes / Latching
Voltage drop at $I_o$	$\leq 6$ V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	2-wire, Connection programmable

### Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. Approx Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

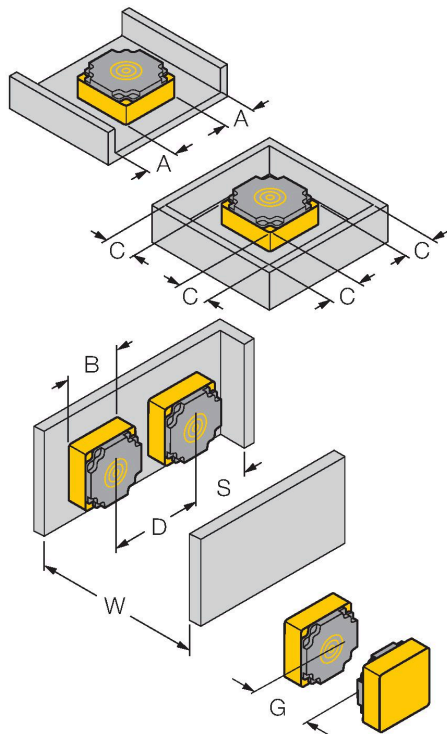


## Technical data

Smallest operating current	$\geq 3 \text{ mA}$
Insulation class	□
Switching frequency	0.01 kHz
<b>Design</b>	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	$\leq 2.5 \text{ mm}^2$
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
<b>Power-on indication</b>	LED, Green
Switching state	LED, Yellow

## Mounting instructions

### Mounting instructions/Description



Distance D	4 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