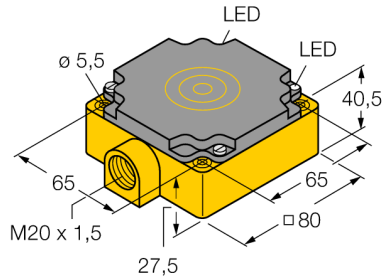
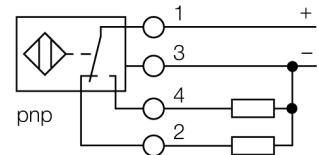


**Inductive sensor  
with extended switching distance  
NI75U-CP80-VP4X2**



- Rectangular, height 41 mm
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Magnetic field immune
- Large detection range
- Extended temperature range
- High switching frequency
- 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. Due to the patented ferrite-less 3-coil system, *uprox®* factor 1 sensors have distinct advantages compared to conventional sensors. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

|   |   |
|---|---|
| <b>Type code</b>                            | NI75U-CP80-VP4X2                          |
| Ident no.                                   | 1540800                                   |
| <b>Rated operating distance Sn</b>          | 75 mm                                     |
| Mounting condition                          | non-flush                                 |
| Assured sensing range                       | ≤ (0,81 x Sn) mm                          |
| Repeatability                               | ≤ 2 % of full scale                       |
| Temperaturdrift                             | 10 %                                      |
| Hysteresis                                  | ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C             |
| Ambient temperature                         | 3...15 %<br>-30...+85 °C                  |
| <b>Operating voltage</b>                    | 10...65VDC                                |
| Residual ripple                             | ≤ 10 % U <sub>s</sub>                     |
| DC rated operational current                | ≤ 200 mA                                  |
| No-load current I <sub>0</sub>              | ≤ 15 mA                                   |
| Residual current                            | ≤ 0.1 mA                                  |
| Rated insulation voltage                    | ≤ 0.5 kV                                  |
| Short-circuit protection                    | yes                                       |
| Voltage drop at I <sub>0</sub>              | ≤ 1.8 V                                   |
| Wire breakage / Reverse polarity protection | yes/ complete                             |
| Output function                             | 4-wire, changover contact, PNP            |
| Protection class                            | ☐   |
| Switching frequency                         | 0.25 kHz                                  |
| <b>Design</b>                               | rectangular, CP80                         |
| Dimensions                                  | 80x 80x 41 mm                             |
| Housing material                            | Plastic, PBT                              |
| 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  | 874 years acc. to SN 29500 (Ed. 99) 40 °C |
| <b>Operating voltage</b>                    | LED green                                 |
| Switching state                             | ● yellow                                  |

**Inductive sensor  
with extended switching distance  
NI75U-CP80-VP4X2**

|                            |         |
|----------------------------|---------|
| 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 of the active face B | 80 mm   |

