

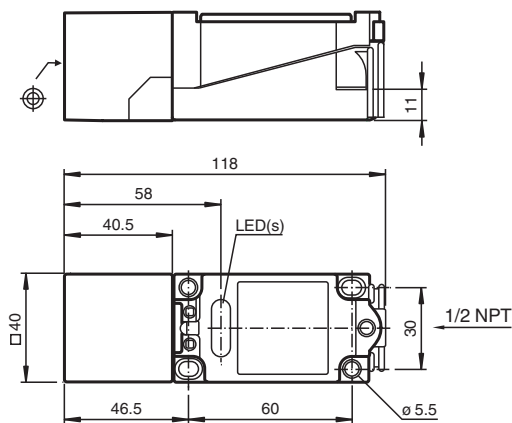


## Inductive sensor NJ20P+U4+A2

- Only for non-ferrous metals
- 20 mm non-flush
- 4-wire DC



### Dimensions



### Technical Data

#### General specifications

|                              |       |                            |
|------------------------------|-------|----------------------------|
| Switching function           |       | complementary              |
| Output type                  |       | PNP                        |
| Rated operating distance     | $s_n$ | 20 mm                      |
| Installation                 |       | non-flush                  |
| Output polarity              |       | DC                         |
| Assured operating distance   | $s_a$ | 1 ... 16.2 mm              |
| Reduction factor $r_{Al}$    |       | 1                          |
| Reduction factor $r_{Cu}$    |       | 1                          |
| Reduction factor $r_{Si37}$  |       | 0                          |
| Reduction factor $r_{Brass}$ |       | 1 (Minimum distance: 2 mm) |

#### Nominal ratings

|                             |       |                            |
|-----------------------------|-------|----------------------------|
| Operating voltage           | $U_B$ | 10 ... 30 V                |
| Switching frequency         | $f$   | 0 ... 200 Hz               |
| Hysteresis                  | $H$   | typ. 5 %                   |
| Reverse polarity protection |       | reverse polarity protected |

Release date: 2020-03-20 Date of issue: 2020-03-30 Filename: 017022\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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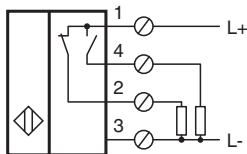
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**PEPPERL+FUCHS**

## Technical Data

|                                                 |       |                                                                                                                                            |
|-------------------------------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Short-circuit protection                        |       | pulsing                                                                                                                                    |
| Voltage drop                                    | $U_d$ | $\leq 3 \text{ V}$                                                                                                                         |
| Operating current                               | $I_L$ | 0 ... 200 mA                                                                                                                               |
| No-load supply current                          | $I_0$ | $\leq 20 \text{ mA}$                                                                                                                       |
| Time delay before availability                  | $t_v$ | $\leq 10 \text{ ms}$                                                                                                                       |
| Operating voltage indicator                     |       | LED, green                                                                                                                                 |
| Switching state indicator                       |       | LED, yellow                                                                                                                                |
| <b>Compliance with standards and directives</b> |       |                                                                                                                                            |
| Standard conformity                             |       |                                                                                                                                            |
| Standards                                       |       | EN 60947-5-2:2007<br>IEC 60947-5-2:2007                                                                                                    |
| <b>Approvals and certificates</b>               |       |                                                                                                                                            |
| UL approval                                     |       | cULus Listed, General Purpose                                                                                                              |
| CSA approval                                    |       | cCSAus Listed, General Purpose                                                                                                             |
| CCC approval                                    |       | CCC approval / marking not required for products rated $\leq 36 \text{ V}$                                                                 |
| <b>Ambient conditions</b>                       |       |                                                                                                                                            |
| Ambient temperature                             |       | $-25 \dots 70 \text{ }^\circ\text{C}$ ( $-13 \dots 158 \text{ }^\circ\text{F}$ )                                                           |
| <b>Mechanical specifications</b>                |       |                                                                                                                                            |
| Connection type                                 |       | terminal compartment                                                                                                                       |
| Information for connection                      |       | A maximum of two conductors with the same core cross section may be mounted on one terminal connection!<br>tightening torque 1.2 Nm + 10 % |
| Core cross-section                              |       | up to $2.5 \text{ mm}^2$                                                                                                                   |
| Minimum core cross-section                      |       | without wire end ferrule $0.5 \text{ mm}^2$ , with connector sleeves $0.34 \text{ mm}^2$                                                   |
| Maximum core cross-section                      |       | without wire end ferrule $2.5 \text{ mm}^2$ , with connector sleeves $1.5 \text{ mm}^2$                                                    |
| Housing material                                |       | PBT                                                                                                                                        |
| Sensing face                                    |       | PBT                                                                                                                                        |
| Housing base                                    |       | metal                                                                                                                                      |
| Degree of protection                            |       | IP68                                                                                                                                       |

## Connection



## Accessories

|                                                                                     |               |                          |
|-------------------------------------------------------------------------------------|---------------|--------------------------|
|  | <b>MHW 01</b> | Modular mounting bracket |
|-------------------------------------------------------------------------------------|---------------|--------------------------|