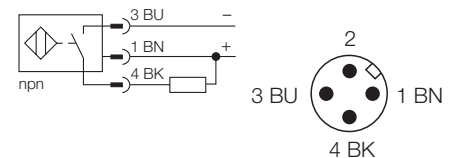


- threaded barrel, M30 x 1.5
- stainless steel, 1.4301
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- high switching distance
- integrated predamping protection
- small metal-free zones
- 3-wire DC, 10...30 VDC
- normally open npn output
- connector, M12 x 1

|   |  |
|---|--|
| <b>Type</b>                                 | Ni30U-EM30-AN6X-H1141  |
| Ident-No.                                   | 1644636  |
| <b>Rated operating distance Sn</b>          | 30 mm  |
| Mounting condition                          | non-flush  |
| Assured sensing range                       | $\leq (0,81 \times S_n)$ mm  |
| Repeatability                               | $\leq 2 \%$  |
| Temperature drift                           | $\leq \pm 10 \%$   |
|   | $\leq \pm 15 \%, \leq -25^\circ\text{C} \vee \geq +70^\circ\text{C}$ |
| Hysteresis                                  | 3... 15 %  |
| Ambient temperature                         | -30...+ 85 °C  |
| <b>Operating voltage</b>                    | 10... 30VDC  |
| Residual ripple                             | $\leq 10 \%$ $U_{SS}$  |
| DC rated operational current                | $\leq 200$ mA  |
| No-load current $I_0$                       | $\leq 15$ mA   |
| Residual current                            | $\leq 0.1$ mA  |
| Rated insulation voltage                    | $\leq 0.5$ kV  |
| Short-circuit protection                    | yes / cyclic   |
| Voltage drop at $I_e$                       | $\leq 1.8$ V   |
| Wire breakage / Reverse polarity protection | yes / complete   |
| Output function                             | 3-wire, normally open, npn   |
| Insulation class                            | □  |
| Switching frequency                         | $\leq 0.5$ kHz   |
| <b>Housing</b>                              | threaded barrel, M30 x 1.5   |
| Dimensions                                  | 62 mm  |
| Housing material                            | metal, AISI 304  |
| Material active face                        | plastic, LCP-GF30  |
| Tightening torque of housing nut            | 75 Nm  |
| Connection                                  | Connectors, M12 x 1  |
| Vibration resistance                        | 55 Hz (1 mm)   |
| Shock resistance                            | 30g (11 ms)  |
| Degree of protection                        | IP68   |
| <b>Display switch state</b>                 | LED yellow   |

#### Wiring diagram



#### Functional principle

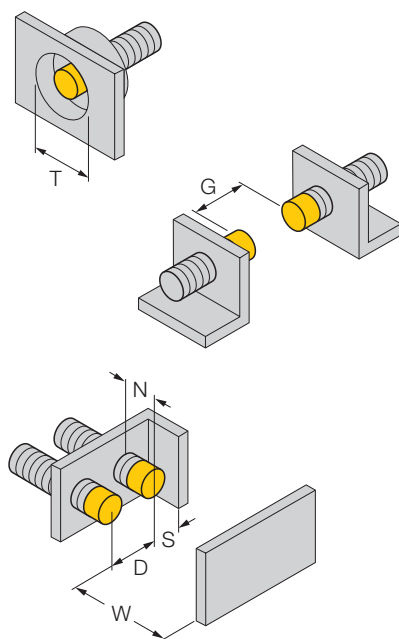
Inductive sensors are designed for wear-free and non-contact detection of metal objects. uprox+ sensors have considerable advantages due to their patented multi-coil system. They excel in highest switching distances, maximum flexibility and operational reliability as well as efficient standardisation.

**Mounting instructions**

|            | minimum distances |
|------------|-------------------|
| Distance D | 90 mm             |
| Distance W | 90 mm             |
| Distance T | 90 mm             |
| Distance S | 45 mm             |
| Distance G | 180 mm            |
| Distance N | 30 mm             |

**Diameter of the active area B**

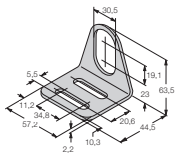
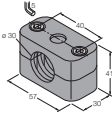
Ø 30 mm



All non-flush mountable uprox+ threaded barrel switches allow embedded mounting up to the upper edge of the thread. Thus safe operation with a maximum reduction of the switching distance of 20 % is guaranteed.

When installing in an aperture plate a clearance of  $X = 140 \text{ mm}$  must be observed.

# Accessories

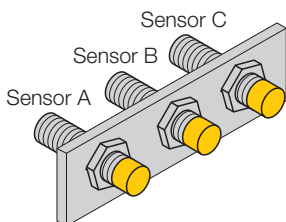
| Type code | Ident-No. | Short text   | Dimension drawing   |
|-----------|-----------|--|---|
| MW-30     | 6945005   | mounting bracket; material: stainless steel A2 1.4301 (AISI 304) |   |
| BSS-30    | 6901319   | fixing clamp; material: polypropylene                            |   |

### MINIMUM DISTANCES BETWEEN NON-FLUSH SENSORS

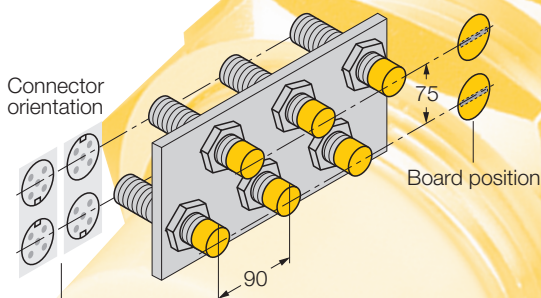
**uprox®+**

[www.turck.com](http://www.turck.com)

### Approved Minimum Distances for non-flush sensors **uprox®+**

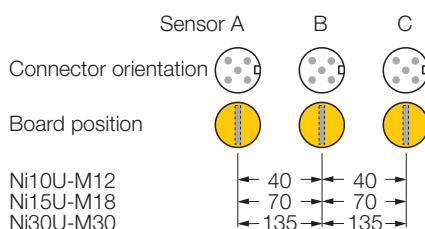


Connector  
orientation

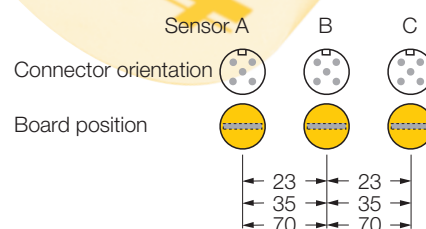


The guide bars have to be directed opposed  
or towards each other!

#### Position under high interference



#### Position under low interference



All dimensions in mm.

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