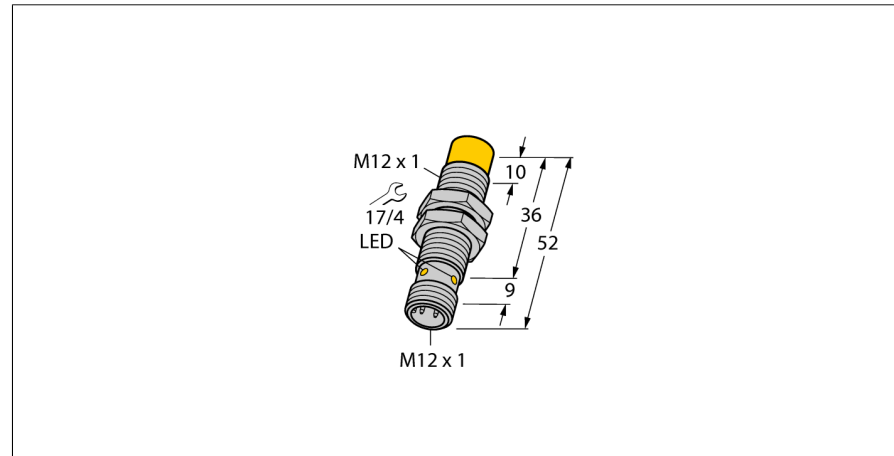
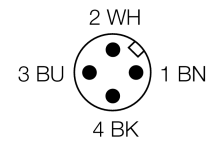
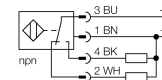


**Inductive sensor  
with extended switching distance  
Ni8-M12-VN6X-H1141**



- Threaded barrel, M12 x 1
- Chrome-plated brass
- Large detection range
- DC 4-wire, 10...30 VDC
- Changeover contact, NPN output
- M12 x 1 connector

**Wiring diagram**



**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

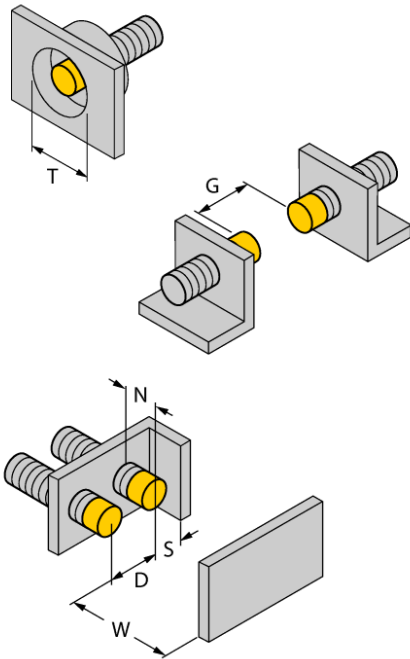
|   |   |
|---|---|
| <b>Type</b>                                 | Ni8-M12-VN6X-H1141                                  |
| Ident-No.                                   | 4611323   |
| <b>Rated operating distance Sn</b>          | 8 mm  |
| Mounting condition                          | non-flush   |
| Assured sensing range                       | ≤ (0,81 x Sn) mm                                    |
| Correction factors                          | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeatability                               | ≤ 2 %   |
| Temperaturdrift                             | 10 %  |
| Hysteresis                                  | 3...15 %  |
| Ambient temperature                         | -25...+70 °C  |
| <b>Operating voltage</b>                    | 10...30VDC  |
| Residual ripple                             | ≤ 10 % U <sub>ss</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/ cyclic   |
| Voltage drop at I <sub>e</sub>              | ≤ 1.8 V   |
| Wire breakage / Reverse polarity protection | yes/ complete                                       |
| Output function                             | 4-wire, changover contact, NPN                      |
| Switching frequency                         | 2 kHz   |
| <b>Design</b>                               | threaded barrel, M12 x 1                            |
| Dimensions                                  | 52 mm   |
| Housing material                            | Metal, CuZn, chrome-plated                          |
| Material active face                        | Plastic, PA   |
| Max. tightening torque housing nut          | 10 Nm   |
| Connection                                  | male, M12 x 1                                       |
| Vibration resistance                        | 55 Hz (1 mm)  |
| Shock resistance                            | 30 g (11 ms)  |
| Protection class                            | IP67  |
| MTTF  | 2283 years acc. to SN 29500 (Ed. 99) 40 °C          |
| <b>Switching state</b>                      | ● yellow  |

**Inductive sensor  
with extended switching distance  
Ni8-M12-VN6X-H1141**

| Mounting instructions | minimum distances |
|-----------------------|-------------------|
| Distance D            | 3 x B             |
| Distance W            | 3 x Sn            |
| Distance T            | 3 x B             |
| Distance S            | 1.5 x B           |
| Distance G            | 6 x Sn            |
| Distance N            | 2 x Sn            |

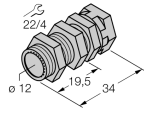
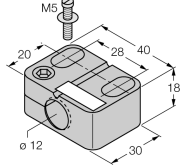
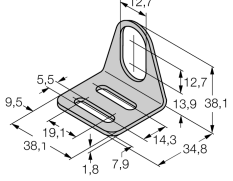
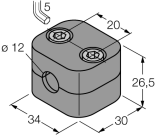
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|                                      |         |
|--------------------------------------|---------|
| <b>Diameter of the active area B</b> | Ø 12 mm |
|--------------------------------------|---------|

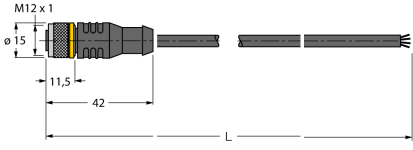


**Inductive sensor  
with extended switching distance  
Ni8-M12-VN6X-H1141**

**Accessories**

| Type code | Ident-No. | Description  | Dimension drawing   |
|-----------|-----------|--|---|
| QM-12     | 6945101   | Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M16 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets. |    |
| BST-12B   | 6947212   | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6  |    |
| MW-12     | 6945003   | Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)   |  |
| BSS-12    | 6901321   | Mounting bracket for smooth and threaded barrel devices; material: Polypropylene   |  |

**Wiring accessories**

| Type code     | Ident-No. | Description  | Dimension drawing   |
|---------------|-----------|--|---|
| RKC4.4T-2/TEL | 6625013   | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |  |