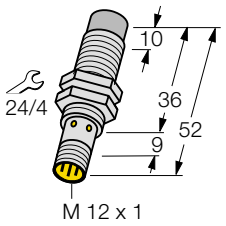
# Inductive Sensor uprox®

## Ni12U-EM18H-AP6X-H1141

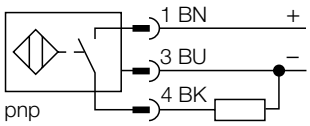



- **Threaded barrel, M18x1**
- **Stainless steel**
- **Duroplast front cap, high mechanical and thermical resistance**
- **Factor 1 for all metals**
- **Degree of protection IP68**
- **Magnetic field immune**
- **Increased temperature range**
- **High switching frequency**

| | |
|---|---|
| **Type** | Ni12U-EM18H-AP6X-H1141 |
| Ident-No. | 1645412 |
| **Rated operating distance Sn** | 12,0 mm |
| Mounting mode | non-flush |
| Hysteresis H | 3...15 % |
| Max. relative temperature drift | ≤ 15 % v.E |
| Min. repeat accuracy | ≤ 2 % v.E |
| Operation temperature | -30...85 °C |
| **Rated operational voltage (DC) $U_e$** | 10...30 VDC |
| Max. ripple | ≤ 10 % $U_{ss}$ |
| Rated operational current (DC) $I_e$ | 200 mA |
| No-load current $I_0$ | ≤ 15,0 mA |
| Max. OFF-state current | ≤ 0,1 mA |
| Max. switching frequency | ≤ 2,0 kHz |
| Rated insulation voltage | 0,5 kV |
| Output function | normally open, PNP |
| Short-circuit protection | yes, cyclic |
| Max. voltage drop at $I_e$ | ≤ 1,8 V |
| Wire brakage and reverse polarity protection | yes, complete |
| Degree of protection / protection class | IP 68; 2 |
| **Housing style** | threaded barrel; EM18H |
| Housing diameter | 18,0 mm |
| Dimensions | 52,0 mm |
| Housing material | stainless steel; V2A 1.4301 |
| Active face | plastic; Duroplast |
| Max. fixing torque of coupling nut | ≤ 25,0 Nm |
| Wiring | connector; M12x1 eurocon |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 x g (11 ms) |
| **Switching status indication** | LED; yellow |

3-wire DC, 10-30VDC
Normally open, PNP-output
Connector, M12x1 eurocon

### Wiring diagram




### Function principles

Inductive sensors serve for wear-free and non contact detection of metal objects. Uprox Factor 1-sensors have considerable advantages because of their patented ferrite-less 3-coil system. They detect all metals with the same operating distance, are magnetic field immune and have high operating distances.

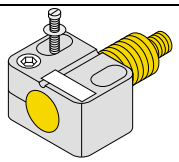
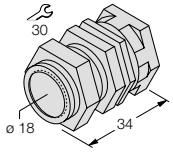
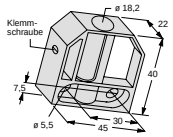
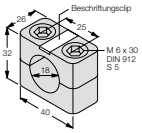
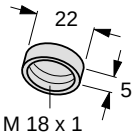


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# Inductive Sensor uprox®

## Ni12U-EM18H-AP6X-H1141

### Mounting accessories

| Typ | Ident-No. | Text | Dimension drawing |
|---|---|---|---|
| BST-18B | 6947214 | Fixing clamps; Material: PA6 |  |
| QM-18 | 6945102 | Fixing clamps; Material: chrome-plated brass |  |
| BS18 | 69471 | Fixing clamps; Material: PA66-GF |  |
| BSN18 | 69472 | Fixing clamps; Material: PA66-GF |  |
| SKN/M18 | 69663 | Protective teflon caps; Material PTFE; For use in welding facilities and grinding machines with strong sparking |  |



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