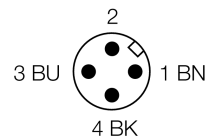
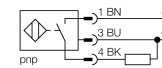


- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Sensor housing GD-ALSI 12
- Plastic, PA6-GF30
- Factor 1 for all metals
- Magnetic field immune
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 connector

Wiring diagram



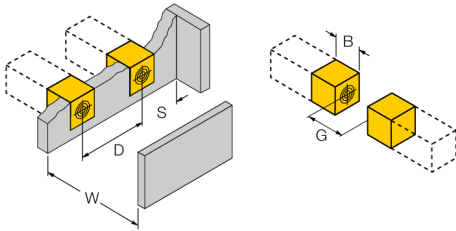
Functional principle

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.

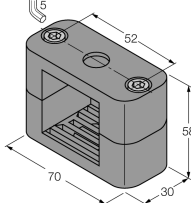
| | |
|---|--|
| Type | BI20U-CA40-AP6X2-H1141 |
| Ident-No. | 1627200 |
| Rated operating distance Sn | 20 mm |
| Mounting condition | flush |
| Assured sensing range | ≤ (0,81 x Sn) mm |
| Repeatability | ≤ 2 % |
| Temperaturdrift | 10 % |
| Hysteresis | 3...15 % |
| Ambient temperature | 0...+70 °C |
| Operating voltage | 10...30VDC |
| Residual ripple | ≤ 10 % U _{is} |
| DC rated operational current | ≤ 200 mA |
| No-load current I ₀ | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Rated insulation voltage | ≤ 0.5 kV |
| Short-circuit protection | yes/ cyclic |
| Voltage drop at I ₀ | ≤ 1.8 V |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 3-wire, NO contact, PNP |
| Protection class | □ |
| Switching frequency | 0.25 kHz |
| Design | rectangular, CA40 |
| Dimensions | 48x 40x 40 mm variable orientation of active face in 5 directions |
| Housing material | Metal, GD-ALSi 12 |
| Connection | male, M12 x 1 |
| 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 |
| Operating voltage | LED green |
| Switching state | • yellow |
| Included in scope of supply | BS1-CK40 |

| Mounting instructions | minimum distances |
|-----------------------|-------------------|
| Distance D | 2 x B |
| Distance W | 3 x Sn |
| Distance S | 1 x B |
| Distance G | 6 x Sn |

| | |
|-----------------------------------|-------|
| Width of the active face B | 40 mm |
|-----------------------------------|-------|



Accessories

| Type code | Ident-No. | Description | Dimension drawing |
|-----------|-----------|--|---|
| BSS-CP40 | 6901318 | Mounting bracket for rectangular devices; material: Polypropylene |  |