

BI8U-Q08-AP6X2-0.2-RS4T/S1589 Inductive Sensor – With WeldGuard[™] Coating and Increased Switching Distance





Technical data

| - | | | |
|--|--|--|--|
| Туре | BI8U-Q08-AP6X2-0.2-RS4T/S1589 | | |
| ID | 1662083 | | |
| Special version | S1589 corresponds to: With WeldGuard™ Coating | | |
| General data | | | |
| Rated switching distance | 8 mm | | |
| Mounting conditions | Flush | | |
| Secured operating distance | ≤ (0.81 × Sn) mm | | |
| Repeat accuracy | ≤ 2 % of full scale | | |
| Hysteresis | 315 % | | |
| Electrical data | | | |
| Operating voltage | 1030 VDC | | |
| Residual ripple | ≤ 10 % U _{ss} | | |
| DC rated operational current | ≤ 200 mA | | |
| No-load current | 15 mA | | |
| Residual current | ≤ 0.1 mA | | |
| Isolation test voltage | ≤ 0.5 kV | | |
| Short-circuit protection | yes / Cyclic | | |
| Voltage drop at I _e | ≤ 1.8 V | | |
| Wire breakage/Reverse polarity protec- tion | yes / Complete | | |
| Output function | 3-wire, NO contact, PNP | | |
| DC field stability | 300 mT | | |
| AC field stability | 300 mT _{ss} | | |
| Insulation class | | | |
| Switching frequency | 0.25 kHz | | |
| | | | |

Features

| Rectangular, height 8 mm |
|-------------------------------|
| Active face on top |
| Metal, Zamak, nickel-plated |
| Factor 1 for all metals |
| Increased switching distance |
| Protection class IP68 |
| Resistant to magnetic fields |
| Mountable on metal |
| DC 3-wire, 1030 VDC |
| NO contact, PNP output |
| Pigtail with male end M12 x 1 |
| |

Wiring diagram





Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.



Technical data

| Mechanical data | | |
|--------------------------|--|--|
| Design | Rectangular, Q08 | |
| Dimensions | 32 x 20 x 8 mm | |
| Housing material | Metal, Zamak, Nickel Plated | |
| Active area material | Plastic, PP, yellow | |
| Material coupling nut | metal, CuZn, nickel-plated | |
| Electrical connection | Cable with connector, M12 × 1 | |
| Cable quality | Ø 3 mm, Gray, Lif9Y-11Y, PUR, 0.2 m | |
| | Suited for E-ChainSystems® acc. to man- ufacturers declaration H1063M | |
| Core cross-section | 3 x 0.14 mm ² | |
| Environmental conditions | | |
| Ambient temperature | -25+70 °C | |
| Vibration resistance | 55 Hz (1 mm) | |
| Shock resistance | 30 g (11 ms) | |
| Protection class | IP68 | |
| MTTF | 874 years acc. to SN 29500 (Ed. 99) 40 °C | |
| | | |
| Power-on indication | LED, Green | |

Mounting instructions

| Mounting instructions/Descrip | otion | | |
|-------------------------------|------------|------------------------|-------|
| | Distance D | 40 mm | |
| | Distance W | 24 mm | |
| | Distance S | 1 × B | |
| | Distance G | 48 mm | |
| | G | Width active area B | 20 mm |
| | | | |