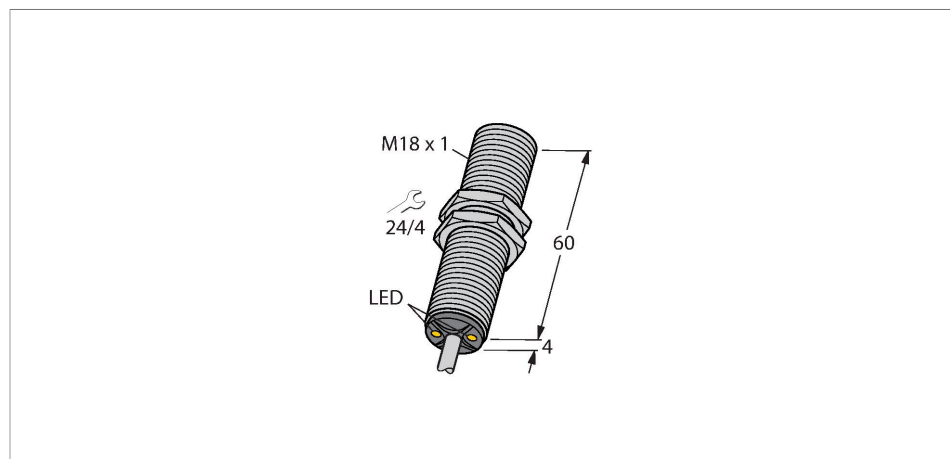


# BI5-GT18-ADZ30X2

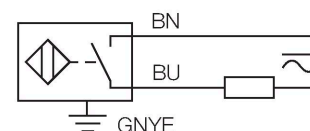
## Inductive sensor



### Features

- Threaded barrel, M18 x 1
- Short version
- Brass, PTFE-coated
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NO contact
- Cable connection

### Wiring diagram

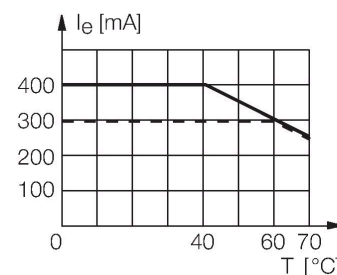


### Technical data

|   |   |
|---|---|
| <b>Type</b>                               | BI5-GT18-ADZ30X2                                    |
| Ident. no.                                | 4255090   |
| Rated switching distance                  | 5 mm  |
| Mounting conditions                       | Flush   |
| Secured operating distance                | $\leq (0,81 \times S_n)$ mm                         |
| Correction factors                        | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy                           | $\leq 2\%$ of full scale                            |
| Temperature drift                         | $\leq \pm 10\%$                                     |
| Hysteresis                                | 3...15 %  |
| Ambient temperature                       | -25...+70 °C  |
| <b>Operating voltage</b>                  | 20...250 VAC  |
| Operating voltage                         | 10...300 VDC  |
| AC rated operational current              | $\leq 400$ mA                                       |
| DC rated operational current              | $\leq 300$ mA                                       |
| Frequency                                 | $\geq 50 \dots \leq 60$ Hz                          |
| Residual current                          | $\leq 1.7$ mA                                       |
| Isolation test voltage                    | $\leq 1.5$ kV                                       |
| Surge current                             | $\leq 3$ A ( $\leq 20$ ms max. 5 Hz)                |
| Short-circuit protection                  | yes / Latching                                      |
| Voltage drop at                           | $\leq 6$ V  |
| Wire breakage/Reverse polarity protection | yes / Complete                                      |
| Output function                           | 2-wire, NO contact                                  |
| Smallest operating current                | $\geq 3$ mA   |
| Switching frequency                       | 0.02 kHz  |

### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

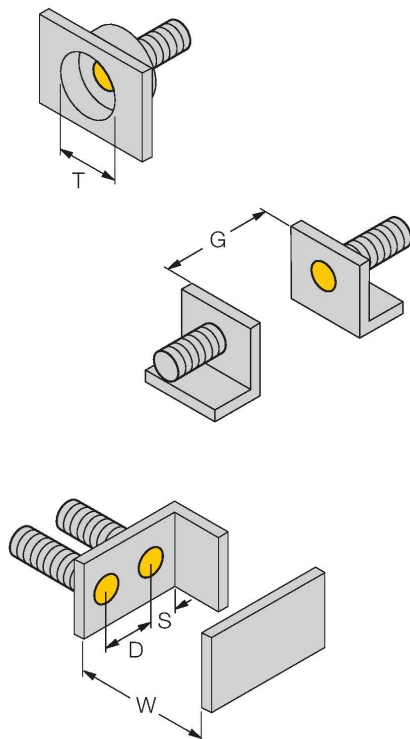


## Technical data

|                                    |  |
|------------------------------------|--|
| <b>Design</b>                      | Threaded barrel, M18 x 1                   |
| Dimensions                         | 64 mm                                      |
| Housing material                   | Metal, CuZn, PTFE-coated                   |
| Active area material               | Plastic, PA12-GF30, PTFE-coated            |
| End cap                            | Plastic, EPTR                              |
| Max. tightening torque housing nut | 25 Nm                                      |
| Electrical connection              | Cable                                      |
| Cable quality                      | 2 m  |
| 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>Power-on indication</b>         | LED, Green                                 |
| Switching state                    | LED, Yellow                                |

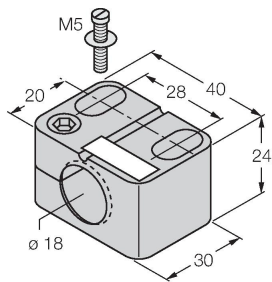
## Mounting instructions

### Mounting instructions/Description

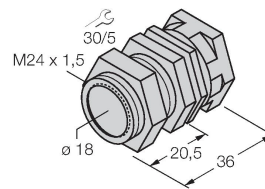


|                        |         |
|------------------------|---------|
| Distance D             | 2 x B   |
| Distance T             | 3 x B   |
| Diameter active area B | Ø 18 mm |

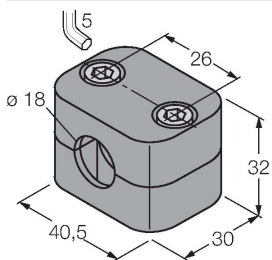
## Accessories

**BST-18B**
**6947214**


Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

**QMT-18**
**6945104**


Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M24 x 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

**BSS-18**
**6901320**


Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene



# SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

# [www.scatts.co.uk](http://www.scatts.co.uk)