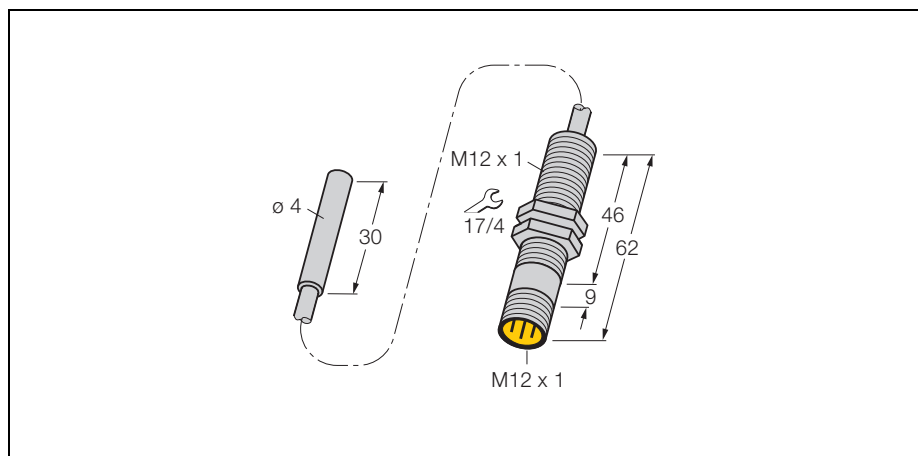


## Inductive sensor with analogue output Bi1,5-EH04-0,3-M12-SiU-H1141



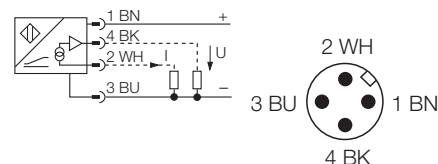
|                                 |                                                         |
|---------------------------------|---------------------------------------------------------|
| <b>Type</b>                     | Bi1,5-EH04-0,3-M12-SiU-H1141                            |
| Ident-No.                       | 1533001                                                 |
| <b>Measuring range [A...B]</b>  | 0,1... 1,5 mm                                           |
| Mounting mode                   | flush                                                   |
| Min. repeat accuracy            | $\leq 1\%$ of measuring range   A - B                   |
| Reproducibility                 | $\leq 0,5\%$ , after a heating period of 0,5 h          |
| Max. relative temperature drift | $\leq 14\ \mu\text{m}$                                  |
| Operating temperature           | $\leq 7\ \mu\text{m}$ , after a heating period of 0,5 h |
|                                 | $\leq \pm 0,06\ \text{‰/°C}$                            |
|                                 | -10 ... + 70 °C                                         |

|                                                        |                            |
|--------------------------------------------------------|----------------------------|
| <b>Rated operational voltage (DC) <math>U_B</math></b> | 15... 30 VDC               |
| Max. ripple                                            | $\leq 10\%$ $U_{pp}$       |
| No-load current $I_0$                                  | $\leq 8\ \text{mA}$        |
| Rated insulation voltage                               | $\leq 0,5\ \text{kV}$      |
| Output function                                        | 4-wire, analogue output    |
| Short-circuit protection                               | yes                        |
| Wire breakage / reverse polarity protection            | yes / complete             |
| Voltage output                                         | 0... 10 V                  |
| Current output                                         | 0... 20 mA                 |
| Voltage output load resistance                         | $\geq 4,7\ \text{k}\Omega$ |
| Current output load resistance                         | $\leq 0,4\ \text{k}\Omega$ |
| Reading rate frequency                                 | 200 Hz                     |
| Recovery time on output                                | $\leq 12\ \text{ms}$       |

|                      |                                          |
|----------------------|------------------------------------------|
| <b>Housing style</b> | smooth barrel; 4 mm                      |
| Dimensions           | 30 mm                                    |
| Housing material     | metal, A2 1.4301 (AISI 304)              |
| Active face          | plastic, PA12-GF20                       |
| Wiring               | connector, M12 x 1                       |
| Cable                | $\varnothing 2,4$ , shielded, PVC, 0,3 m |
| Cable cross section  | 1 x 0,08 mm <sup>2</sup>                 |
| Vibration resistance | 55 Hz (1 mm)                             |
| Shock resistance     | 30 x g (11 ms)                           |
| Degree of protection | IP67                                     |

- smooth barrel, 4 mm diameter
- stainless steel 1.4301
- large measuring range: analog+
- non-linear measuring range
- analogue output (current and voltage)
- 4-wire, 15...30 VDC
- connector, M12 x 1

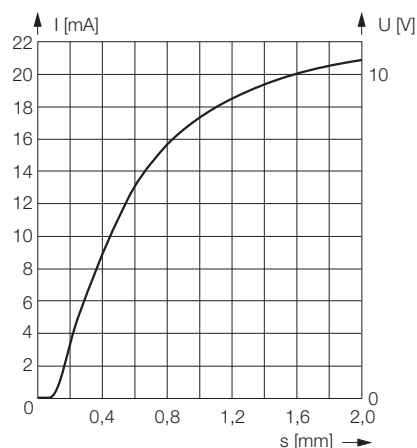
### Wiring diagram



### Function principles

Simple control tasks can be accomplished with inductive TURCK sensors with analogue output. They provide a current, voltage or frequency signal that is proportional to the target's distance.

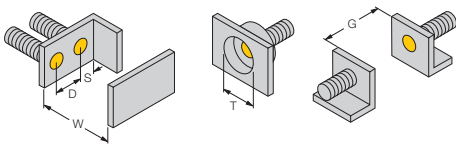
### Measuring range



**Inductive sensor  
with analogue output  
Bi1,5-EH04-0,3-M12-SiU-H1141**

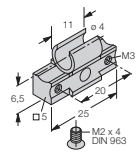
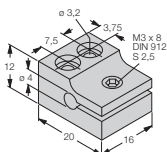
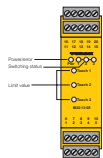
| Mounting instructions | minimum gap |
|-----------------------|-------------|
| Gap D                 | 8 mm        |
| Gap W                 | 4,5 mm      |
| Gap T                 | 3 x B       |
| Gap S                 | 6 mm        |
| Gap G                 | 9 mm        |

|                                  |        |
|----------------------------------|--------|
| <b>Diameter of active face B</b> | Ø 4 mm |
|----------------------------------|--------|



## Inductive sensor with analogue output Bi1,5-EH04-0,3-M12-SiU-H1141

### Accessories

| Typ        | Ident-No. | Description                                                                                                                                                                                                                                                                                                                                                                             | Dimension drawing                                                                                                                                                                                                                                            |
|------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BS540      | 69475     | fixing clamp; material mounting block: anodized aluminium; clamp sleeve: steel                                                                                                                                                                                                                                                                                                          |    |
| MBS40      | 69477     | fixing clamp; material mounting block: anodized aluminium                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                              |
| IM43-13-SR | 7540041   | limit value monitor; single channel; input 0/4...20 mA or 0/2...10 V; supply of 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one normally open contact each; removeable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further limit value monitors are described in our "Interface Technology" catalogue. |                                                                                                                                                                                                                                                              |