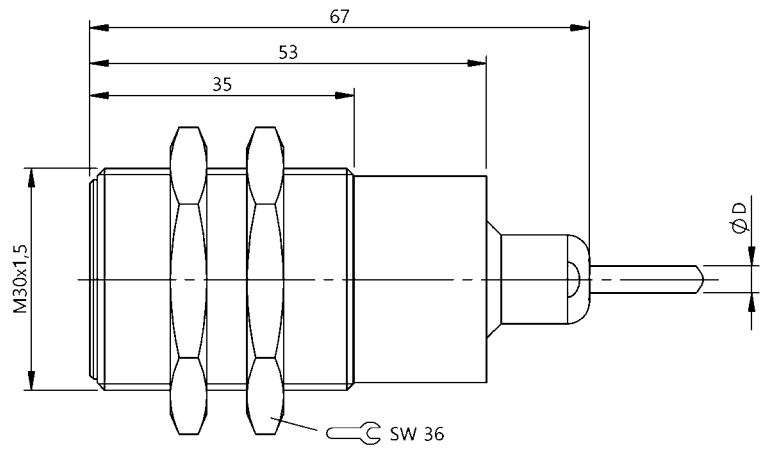


Inductive Sensors  
BES M30MH2-GNX10B-BT02-EXA  
Order Code: BES05NK



Basic features

|                     |                                                                                                                     |
|---------------------|---------------------------------------------------------------------------------------------------------------------|
| Approval/Conformity | CE<br>IECEX<br>ATEX<br>WEEE                                                                                         |
| Basic standard      | EN 60079-0<br>EN 60079-11<br>IEC 60947-5-6                                                                          |
| Ex marking          | ATEX: Ex II 1G Ex ia IIC T6 Ga<br>Ex II 1D Ex ia IIIC T145 °C Da<br>IECEX: Ex ia IIC T6 Ga<br>Ex ia IIIC T145 °C Da |

Display/Operation

|                 |    |
|-----------------|----|
| Power indicator | no |
|-----------------|----|

Electrical connection

|                             |                      |
|-----------------------------|----------------------|
| Conductor cross-section     | 0.34 mm <sup>2</sup> |
| Connection type             | Cable, FEP           |
| Polarity reversal protected | no                   |
| Short-circuit protection    | no                   |

Electrical data

|                                  |             |
|----------------------------------|-------------|
| Current consumption max., damped | 1 mA        |
| Operating voltage Ub             | 7.7...9 VDC |
| Rated insulation voltage Ui      | 12.6 V DC   |
| Rated operating voltage Ue DC    | 8.2 V       |
| Rated series resistance Rv       | 1000 Ohm    |

Environmental conditions

|                         |                                       |
|-------------------------|---------------------------------------|
| Ambient temperature     | -20...60 °C, depending on Ex category |
| EN 60068-2-27, Shock    | Half-sinus, 30 g <sub>n</sub> , 11 ms |
| EN 60068-2-6, Vibration | 55 Hz, amplitude 1 mm, 3x30 min       |
| IP rating               | IP68                                  |

Functional safety

|              |        |
|--------------|--------|
| MTTF (40 °C) | 4110 a |
|--------------|--------|

Interface

|           |       |
|-----------|-------|
| Interface | NAMUR |
|-----------|-------|

Material

|                          |                 |
|--------------------------|-----------------|
| Housing material         | Stainless steel |
| Material jacket          | FEP             |
| Material sensing surface | PEEK            |

Mechanical data

|                   |                    |
|-------------------|--------------------|
| Dimension         | Ø 30 x 68 mm       |
| Installation      | for flush mounting |
| Mounting length   | 36.00 mm           |
| Size              | M30x1.5            |
| Tightening torque | 40 Nm              |

Range/Distance

|                                  |       |
|----------------------------------|-------|
| Rated operating distance Sn      | 10 mm |
| Repeat accuracy max. (% of Sr)   | 5.0 % |
| Temperature drift max. (% of Sr) | 10 %  |
| Tolerance Sr                     | ±10 % |

## Wiring Diagrams

