

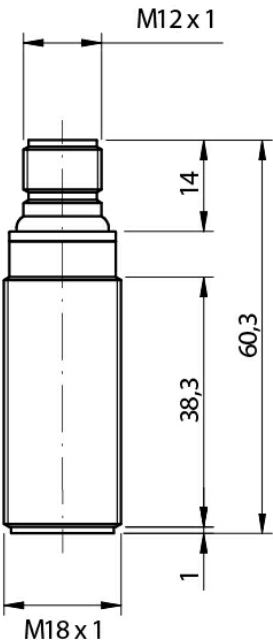


Indicative image



**M18 CYLINDRICAL SHORT BODY DIRECT DIFFUSE & RETRO-REFLECTIVE ULTRASONIC SENSOR UK6 WITH TEACH-IN BUTTON**

- M18 diffuse sensors with short housing
- Digital output
- Analogue output



**Detection properties**

|                                       |                 |
|---------------------------------------|-----------------|
| Nominal sensing distance              | 300mm           |
| Thermal drift of Sr                   | ≤2%             |
| Repeat Accuracy                       | 0,50%           |
| Beam angle                            | 7° ± 2°         |
| Resolution                            | ≤2mm            |
| Sensitivity adjustment                | Teach-in button |
| Hysteresis                            | 1%              |
| thermal compensation                  | Yes             |
| Minimum sensing distance (blind zone) | 40mm            |
| Linearity error                       | 1%              |

**Application**

|                    |                    |
|--------------------|--------------------|
| Function Principle | Diffuse reflection |
|--------------------|--------------------|

**Outputs**

|             |     |
|-------------|-----|
| Output type | PNP |
|-------------|-----|

|                     |       |
|---------------------|-------|
| Output Function     | NO/NC |
| Switching frequency | 8Hz   |
| Response time       | 400ms |

#### Electrical data

|                                  |                              |
|----------------------------------|------------------------------|
| Operating Voltage                | 10 – 30Vdc                   |
| No-Load supply current           | ≤35mA @Val = 30V             |
| Load current                     | 100mA                        |
| Leakage current                  | 10µA @ 30Vcc                 |
| Output voltage drop              | 2,2Vmax. @ IL=100 mA         |
| Max ripple content               | 5%                           |
| LED indicators                   | green: echo – yellow: output |
| Time delay before availability   | ≤300ms                       |
| Short-circuit protection         | Yes                          |
| Reverse Polarity Protection      | Yes                          |
| Impulsive Overvoltage Protection | Yes                          |

#### Mechanical data

|                       |                                 |
|-----------------------|---------------------------------|
| Dimensions            | M18 x 1 / L = 60,3mm            |
| Weight                | 80g                             |
| Housing Material      | stainless steel AISI 316L       |
| Connections           | M12 Plug                        |
| Tightening torque     | 50Nm                            |
| Operating temperature | - 20°C...+ 70°C                 |
| Storage temperature   | - 35°C...+ 80° C without freeze |
| Transducer Frequency  | 300kHz                          |
| Diameter/Dimension    | M18                             |

#### Test/Approvals

|                       |                       |
|-----------------------|-----------------------|
| Approvals             | CE cULus              |
| EMC compatibility     | IEC 60947-5-2         |
| Shocks and vibrations | IEC EN60947-5-2 / 7.4 |
| Degree of protection  | IP67                  |

#### Accessories

|                      |                              |
|----------------------|------------------------------|
| Supplied Accessories | 2 nuts M18x1, 2 washers Ø 18 |
|----------------------|------------------------------|

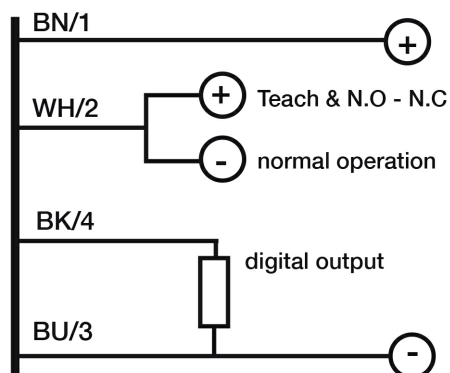
#### Generical Data

|                       |                      |
|-----------------------|----------------------|
| Dimensions            | M18 x 1 / L = 60,3mm |
| Operating Temperature | - 20°C...+ 70°C      |
| Mechanical Protection | IP67                 |

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## ELECTRICAL DIAGRAMS OF THE CONNECTIONS

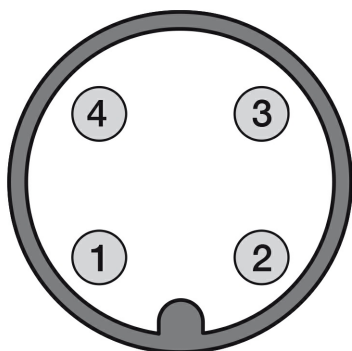
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## CONNECTOR

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## RESPONSE CURVES

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Parallel offset



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