

# UK1A/G6-0ESY

cylindrical ultrasonic

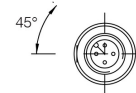
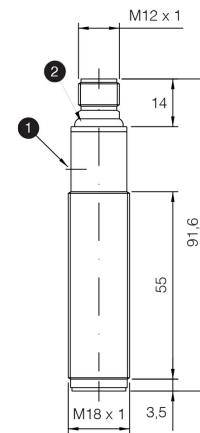


Micro Detectors

Italian Sensors Technology



Indicative image



1 Teach-in

2 LED



## Detection properties

|                                       |                 |
|---------------------------------------|-----------------|
| Nominal sensing distance              | 400mm           |
| Thermal drift of Sr                   | ±2%             |
| Repeat Accuracy                       | 0,50%           |
| Beam angle                            | 10° ± 2°        |
| Resolution                            | ≤3mm            |
| Sensitivity adjustment                | Teach-in button |
| Hysteresis                            | 1%              |
| thermal compensation                  | Yes             |
| Minimum sensing distance (blind zone) | 50mm            |
| Linearity error                       | 1%              |

## Application

Function Principle

Diffuse reflection

## Outputs

|                     |                                 |
|---------------------|---------------------------------|
| Output type         | PNP + 4...20mA                  |
| Output Function     | NO/NC + positive/negative slope |
| Switching frequency | 10Hz                            |

|               |       |
|---------------|-------|
| Response time | 500ms |
|---------------|-------|

## Electrical data

|                                  |                              |
|----------------------------------|------------------------------|
| Operating Voltage                | 10 - 30Vdc                   |
| No-Load supply current           | ≤50mA                        |
| 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 = 91,6mm            |
| Weight                | 70g                             |
| Housing Material      | PBT housing                     |
| Connections           | M12 Plug                        |
| Tightening torque     | 1Nm                             |
| 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                  |

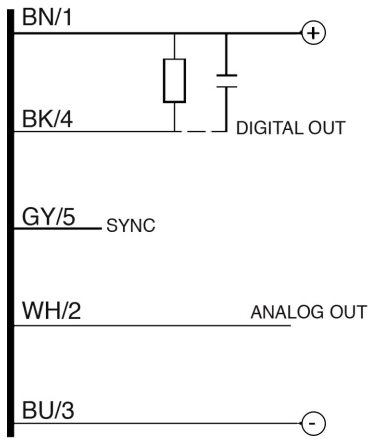
## Accessories

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

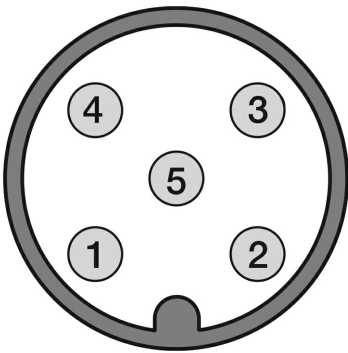
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# ELECTRICAL DIAGRAMS OF THE CONNECTIONS

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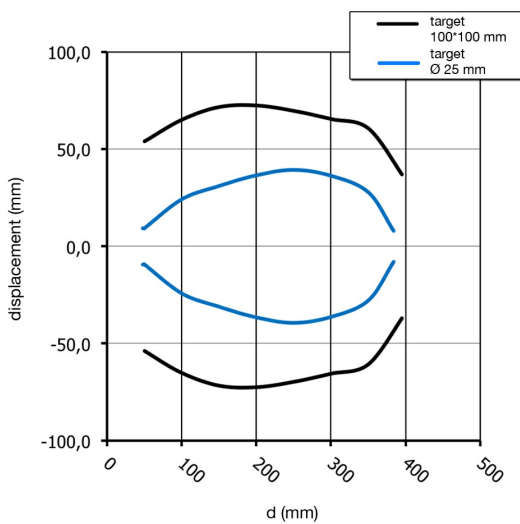


## CONNECTOR



## RESPONSE CURVES

### Disassamento Parallelo



**M.D.Micro Detectors S.p.A.**

Strada S.Caterina, 235

41122 Modena (MO)

Tel. 059 420411

Fax 059 253973

E-mail [info@microdetectors.com](mailto:info@microdetectors.com)

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