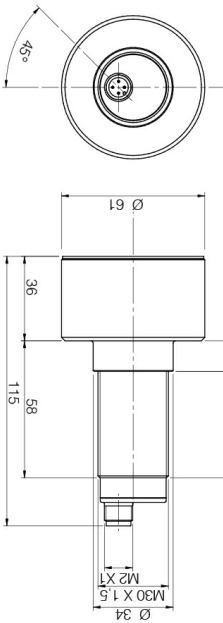




**M30 CYLINDRICAL DIRECT DIFFUSE & RETRO-REFLECTIVE  
ULTRASONIC SENSOR WITH TEACH-IN BUTTON**

- M30 ultrasonic sensor with standard housing and with large front with high performances and high sensing distances
- Adjustable hysteresis function: models with double digital programmable output specific for level detection
- Models with voltage or current output: programmable slope to optimize resolution
- Adjustable working area (window mode or object mode) by Teach-in button on all models for a quick and easy installation
- Two multifunction LEDs: orange LED for adjustment procedure and output type and green LED for target alignment
- Plastic and AISI 316L stainless steel housing, plug M12 or cable exit 4 pin



**Detection properties**

|                          |                      |
|--------------------------|----------------------|
| Nominal sensing distance | 8000mm               |
| Thermal drift of Sr      | ±5%                  |
| Repeat Accuracy          | 1% valore fondoscala |
| Beam angle               | 10° ± 2°             |
| Resolution               | 1% valore fondoscala |
| Sensitivity adjustment   | Teach-In cable       |
| Hysteresis               | 1% valore fondoscala |

|                                       |                      |
|---------------------------------------|----------------------|
| thermal compensation                  | Si                   |
| Minimum sensing distance (blind zone) | 600mm                |
| Linearity error                       | 1% valore fondoscala |

## Application

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

## Outputs

|                     |                                 |
|---------------------|---------------------------------|
| Output type         | PNP + 4...20mA                  |
| Output Function     | NO/NC + positive/negative slope |
| Switching frequency | 1Hz                             |
| Response time       | 1s                              |

## Electrical data

|                                  |                             |
|----------------------------------|-----------------------------|
| Operating Voltage                | 10 - 30Vdc                  |
| No-Load supply current           | 25mA                        |
| Load current                     | 100mA                       |
| Leakage current                  | ≤ 10µA @ 30Vdc              |
| Output voltage drop              | 2,2V max @ IL=100mA         |
| Max ripple content               | 5%                          |
| LED indicators                   | Verde: Eco - Giallo: Uscita |
| Time delay before availability   | ≤400ms                      |
| Short-circuit protection         | Si                          |
| Reverse Polarity Protection      | Si                          |
| Impulsive Overvoltage Protection | Si                          |

## Mechanical data

|                       |                    |
|-----------------------|--------------------|
| Dimensions            | ø 61mm / L = 115mm |
| Weight                | 400g               |
| Housing Material      | AISI316L           |
| Connections           | M12 Plug           |
| Tightening torque     | 100Nm              |
| Operating temperature | -20°C...+70°C      |
| Storage temperature   | -30°C...+80°C      |
| Transducer Frequency  | 40KHz              |
| Diameter/Dimension    | M30                |

## Test/Approvals

|                       |                        |
|-----------------------|------------------------|
| Approvals             | CE cULus               |
| EMC compatibility     | IEC 60947-5-2          |
| Shocks and vibrations | IEC EN 60947-5-2 / 7.4 |

|                      |      |
|----------------------|------|
| Degree of protection | IP67 |
|----------------------|------|

#### Accessories

|                      |                  |
|----------------------|------------------|
| Supplied Accessories | 2 x M30x1,5 dadi |
|----------------------|------------------|

#### Generical Data

|            |                    |
|------------|--------------------|
| Dimensions | Ø 61mm / L = 115mm |
|------------|--------------------|

|                       |               |
|-----------------------|---------------|
| Operating Temperature | -20°C...+70°C |
|-----------------------|---------------|

|                       |      |
|-----------------------|------|
| Mechanical Protection | IP67 |
|-----------------------|------|

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