

# FARN/BP-0E

cylindrical photosensors

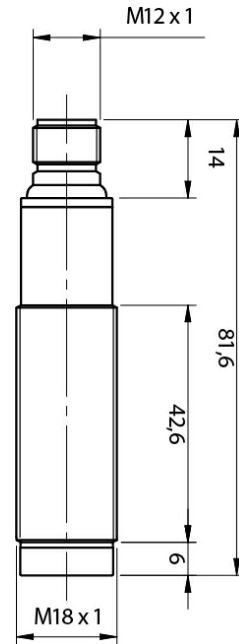


Micro Detectors

Italian Sensors Technology



Indicative image



## Detection properties

|                          |               |
|--------------------------|---------------|
| Nominal sensing distance | 4m with RL110 |
| Thermal drift of Sr      | ≤10% Sr       |
| Repeat Accuracy          | 5%            |
| Sensitivity adjustment   | Trimmer       |

## Application

|                    |           |
|--------------------|-----------|
| Function Principle | Polarized |
| Optic position     | Axial     |

## Outputs

|                     |       |
|---------------------|-------|
| Output type         | PNP   |
| Output Function     | NO+NC |
| Switching frequency | 250Hz |

## Electrical data

|                                |  |
|--------------------------------|--|
| Operating Voltage              | 10...30Vdc                                       |
| No-Load supply current         | ≤30mA  |
| Load current                   | ≤100mA   |
| Leakage current                | ≤10μA  |
| Output voltage drop            | 2V max. IL =100 mA                               |
| Max ripple content             | 10%  |
| LED indicators                 | Yellow (output state)                            |
| Time delay before availability | ≤200ms   |
| Short-circuit protection       | Short circuit (autoreset), Overvoltage           |
| Reverse Polarity Protection    | Polarity inversal, Impulsive voltage             |
| Emission                       | Red (660 nm)                                     |
| Interference to external light | 5000lux (incandescent lamp), 10000lux (sunlight) |

## Mechanical data

|                       |                                   |
|-----------------------|-----------------------------------|
| Dimensions            | M18 x 1 / L =81,6mm               |
| Weight                | 30g                               |
| Housing Material      | PBT / PC plug                     |
| Connections           | M12 plug                          |
| Active Head Material  | PMMA                              |
| Tightening torque     | 1Nm                               |
| Operating temperature | - 25°C...+ 70° C (Without freeze) |
| Diameter/Dimension    | M18                               |

## Test/Approvals

|                       |  |
|-----------------------|--|
| Approvals             | CE, cULus                                      |
| EMC compatibility     | EN 60947-5-2                                   |
| Shocks and vibrations | Vibration IEC 60068-2-6 / Shock IEC 60068-2-27 |
| Degree of protection  | IP67   |

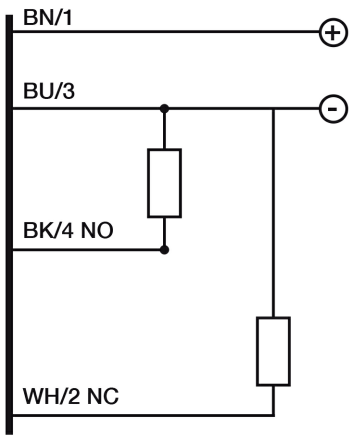
## Accessories

|                      |                           |
|----------------------|---------------------------|
| Supplied Accessories | nuts M18 x 1, screwdriver |
|----------------------|---------------------------|

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# ELECTRICAL DIAGRAMS OF THE CONNECTIONS

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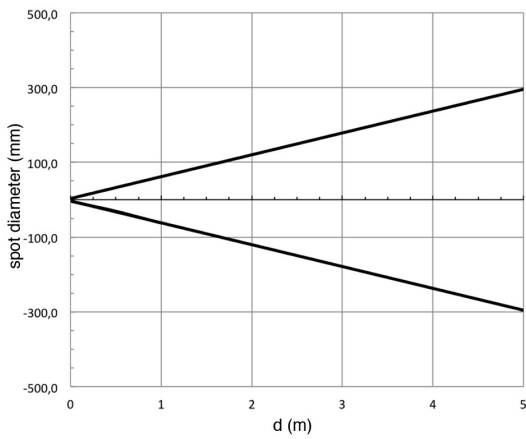


## CONNECTOR

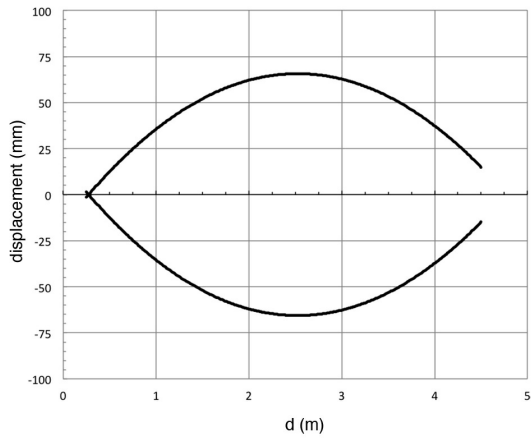


## RESPONSE CURVES

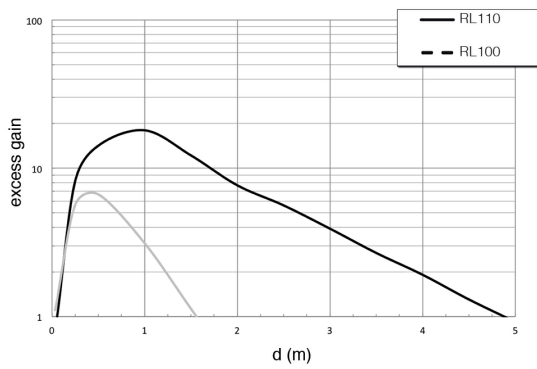
### Dimensione Spot



### Disassamento Parallelo



## Eccesso di Guadagno



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