



# FQ

## FQRN/BP-2A

Photo.M18,PNP-NO+NC,Cable,Reflex  
M18 PHOTOELECTRIC SENSORS WITH SHORT BODY

## OVERVIEW

- Wide range of models: direct diffuse, retro-reflective, polarized and fixed-focus
- Direct diffuse models with short and long sensing distance, polarized and through beam
- Nickel brass or plastic housing
- NO+NC complementary output
- P67 protection degree
- Complete protection against electrical damages
- Approvals: CE



## TECHNICAL FEATURES

### Detection properties

|                          |         |
|--------------------------|---------|
| Nominal sensing distance | 2,6m    |
| Thermal drift of Sr      | ≤10% Sr |
| Repeat Accuracy          | 5%      |
| Sensitivity adjustment   | Trimmer |

### Application

|                    |                    |
|--------------------|--------------------|
| Function Principle | Polarized          |
| Notes              | On RL110 reflector |
| Optic position     | Radial 90°         |

Outputs

|                     |           |
|---------------------|-----------|
| Output type         | PNP NO+NC |
| Output Function     | NO+NC     |
| Switching frequency | 250Hz     |
| Response time       | 2ms       |

Electrical data

|                                |                                        |
|--------------------------------|----------------------------------------|
| Operating Voltage              | 10...30VDC                             |
| No-Load supply current         | ≤ 30mA                                 |
| Load current                   | ≤50mA                                  |
| Leakage current                | ≤10μA                                  |
| Output voltage drop            | ≤2V@Iload=50mA                         |
| Max ripple content             | ≤10%                                   |
| LED indicators                 | Yellow (status output)                 |
| Time delay before availability | ≤200ms                                 |
| Short-circuit protection       | Short circuit (autoreset), Overvoltage |

|                                |                                                  |
|--------------------------------|--------------------------------------------------|
| Reverse Polarity Protection    | Polarity inversal, Impulsive voltage             |
| Emission                       | LED Red (660nm)                                  |
| Interference to external light | 5000lux (incandescent lamp), 10000lux (sunlight) |

**Mechanical data**

|                       |                                   |
|-----------------------|-----------------------------------|
| Dimensions            | M18 x 1/L=62,2mm                  |
| Housing material      | PBT / PC cable exit               |
| Weight                | 50g                               |
| Connections           | 2m PVC cable                      |
| Active Head Material  | PMMA                              |
| Tightening torque     | 1Nm                               |
| Operating temperature | - 25°C...+ 70° C (Without freeze) |
| Diameter/Dimension    | M18                               |

**Test/Approvals**

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

**Accessories**

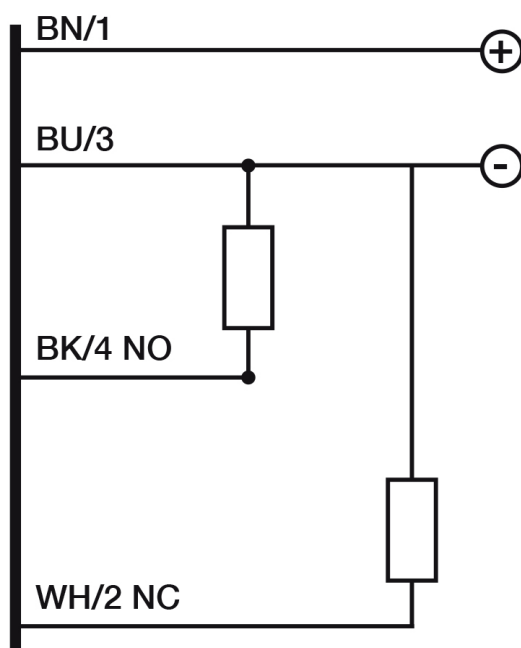
|                      |                           |
|----------------------|---------------------------|
| Supplied Accessories | nuts M18 x 1, screwdriver |
|----------------------|---------------------------|

## Generical Data

|                       |                                  |
|-----------------------|----------------------------------|
| Dimensions            | M18 x 1/L=62,2mm                 |
| Operating Temperature | - 25°C...+ 70°C (Without freeze) |
| Mechanical Protection | IP67                             |

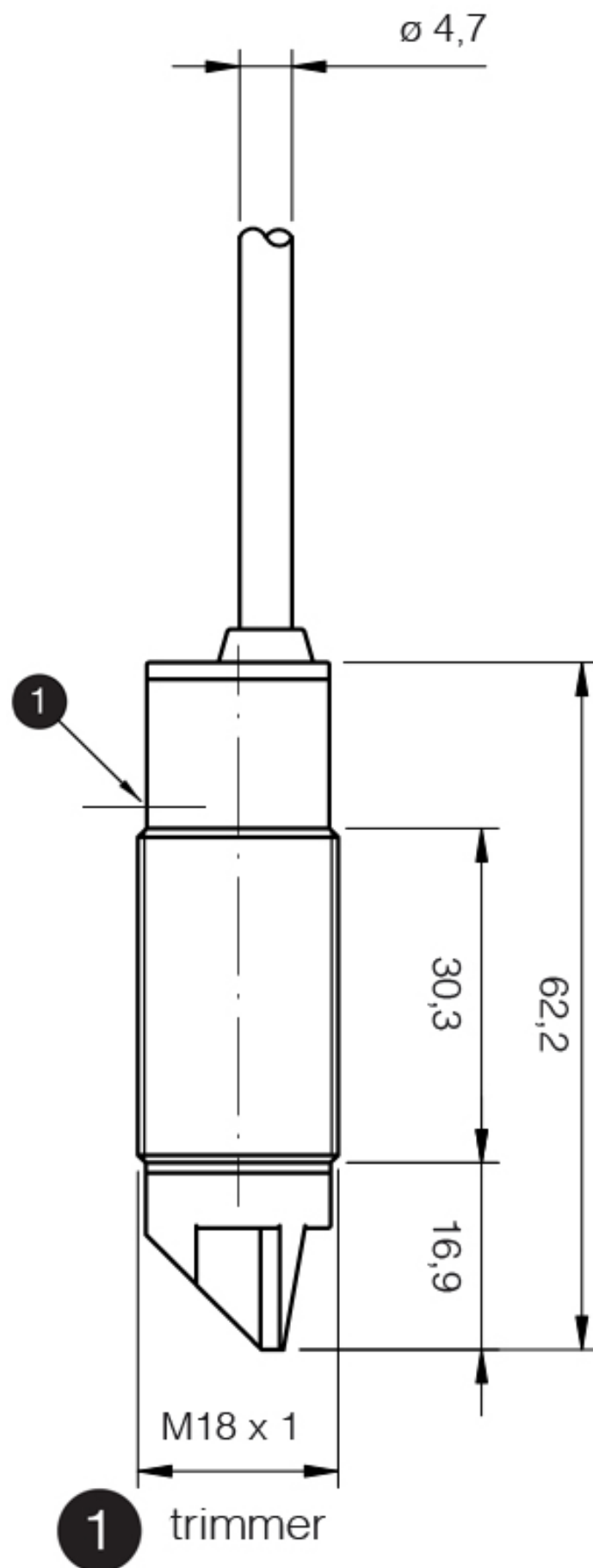
## CONNECTIONS

Eletrical diagram

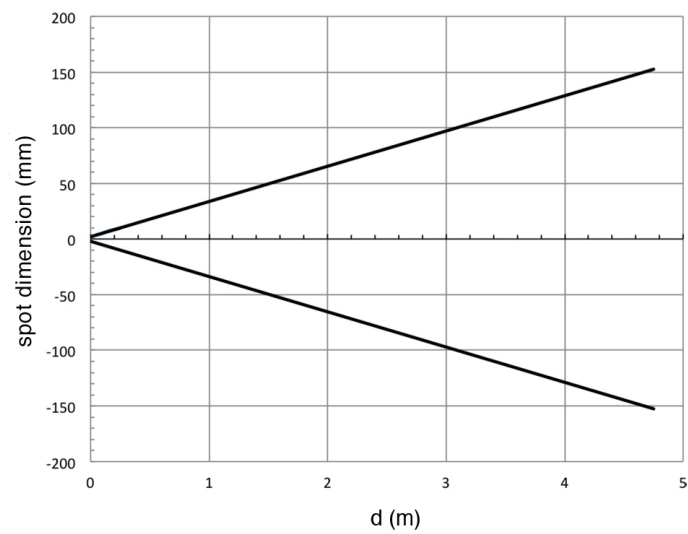


## OTHERS

Dimensions



Response curves



**Datasensing  
S.r.l.**

Strada S.Caterina, 235  
41122 Modena (MO)  
Tel. 059 420411  
Fax 059 253973  
E-mail  
[info@datasensing.com](mailto:info@datasensing.com)

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