

# FAI8/BN-3A

cylindrical photosensors

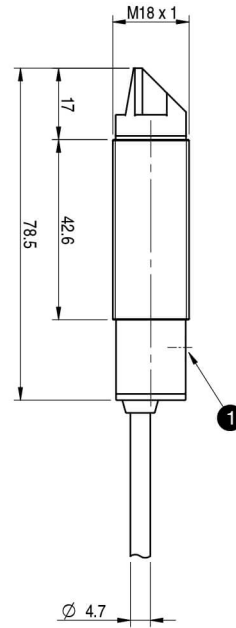


Micro Detectors

Italian Sensors Technology



Indicative image



## Detection properties

|                          |  |
|--------------------------|--|
| Nominal sensing distance | 800mm white target 90% Kodak 400x400mm |
| Thermal drift of Sr      | ≤10% Sr                                |
| Repeat Accuracy          | 5%                                     |
| Sensitivity adjustment   | Trimmer                                |

## Application

|                    |  |
|--------------------|--|
| Function Principle | Diffuse reflection (long distance, >600mm) |
| Optic position     | 90°  |

## Outputs

|                     |       |
|---------------------|-------|
| Output type         | NPN   |
| 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 (Lon) or output status Lo/Do              |
| Time delay before availability | ≤200ms   |
| Short-circuit protection       | Short circuit (autoreset), Overvoltage           |
| Reverse Polarity Protection    | Polarity inversal, Impulsive voltage             |
| Emission                       | Infrared (880 nm)                                |
| Interference to external light | 3000lux (incandescent lamp), 10000lux (sunlight) |

## Mechanical data

|                       |                                     |
|-----------------------|-------------------------------------|
| Dimensions            | M18 x 1/L=78,5mm                    |
| Weight                | 130g                                |
| Housing Material      | Nickel plated brass / PC cable exit |
| Connections           | 2m PVC cable                        |
| Active Head Material  | PC                                  |
| Tightening torque     | 25Nm                                |
| 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   |

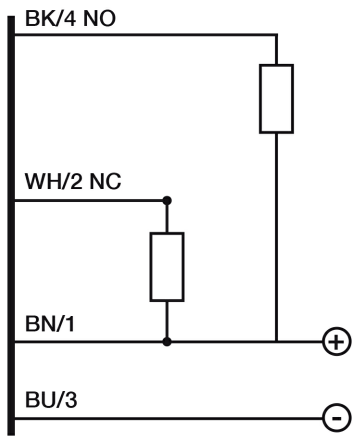
## Accessories

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

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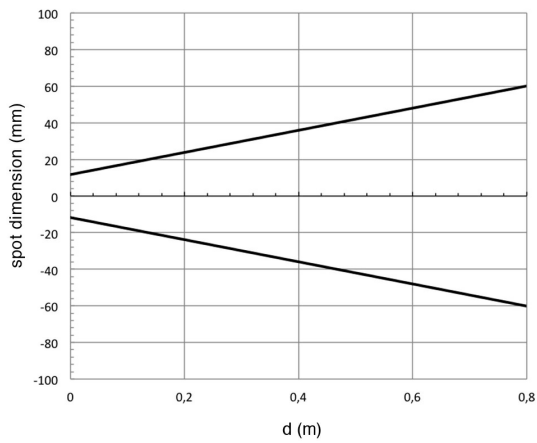
# ELECTRICAL DIAGRAMS OF THE CONNECTIONS

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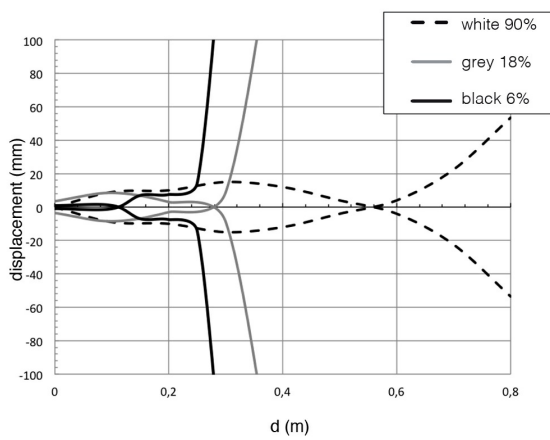


## RESPONSE CURVES

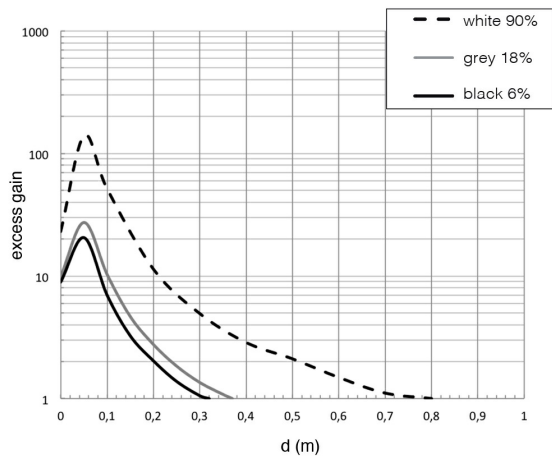
### Dimensione Spot



### Disassamento Parallelo



### Eccesso di Guadagno



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