



# FAL

## FALD/BP-3E

Photo.M18,PNP-NO+NC,M12 plug,Receiver  
M18 PHOTOELECTRIC SENSORS DC LASER EMISSION

## OVERVIEW

- Complete range of M18 sensors with 10...30 Vdc power supply
- Axial and radial optic with flat surface
- Visible red laser emission models
- IP67 protection degree
- Metallic or plastic housing
- Sensitivity adjustment available for all models
- Total protection against any type of electric damages
- Approvals: CE and cULus listed



## TECHNICAL FEATURES

### Detection properties

|                          |                |
|--------------------------|----------------|
| Nominal sensing distance | 50m            |
| Thermal drift of Sr      | $\leq 10\%$ Sr |
| Repeat Accuracy          | 5%             |
| Sensitivity adjustment   | Trimmer        |

|                                |                                        |
|--------------------------------|----------------------------------------|
| Application                    |                                        |
| Function Principle             | Receiver                               |
| Emitter/Receiver               | Receiver                               |
| Optic position                 | Radial 90°                             |
| Outputs                        |                                        |
| Output type                    | PNP NO+NC                              |
| Output Function                | NO+NC                                  |
| Switching frequency            | 1Khz                                   |
| Response time                  | 500μs                                  |
| Electrical data                |                                        |
| Operating Voltage              | 10...30VDC                             |
| No-Load supply current         | ≤ 25mA                                 |
| Load current                   | ≤100mA                                 |
| Leakage current                | ≤10μA                                  |
| Output voltage drop            | ≤2V@Iload=100mA                        |
| 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                       |                                                  |
| Interference to external light | 5000lux (incandescent lamp), 10000lux (sunlight) |

Mechanical data

|                       |                                   |
|-----------------------|-----------------------------------|
| Dimensions            | M18 x 1/L=92,6mm                  |
| Housing material      | Nickel plated brass / PC plug     |
| Weight                | 100g                              |
| Connections           | M12 plug                          |
| Active Head Material  | Glass / PC                        |
| Tightening torque     | 25Nm                              |
| Operating temperature | - 15°C...+ 55° 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

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|                       |                                  |
|-----------------------|----------------------------------|
| Supplied Accessories  | nuts M18 x 1, screwdriver        |
| Generical Data        |                                  |
| Dimensions            | M18 x 1/L=92,6mm                 |
| Operating Temperature | - 15°C...+ 55°C (Without freeze) |
| Mechanical Protection | IP67                             |

# CONNECTIONS

Eletrical diagram

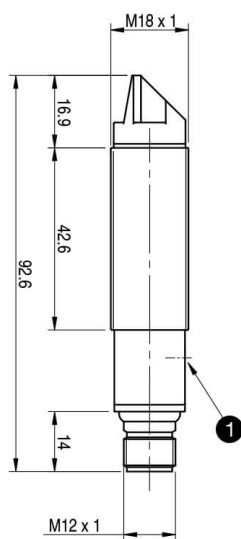
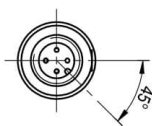


Connector



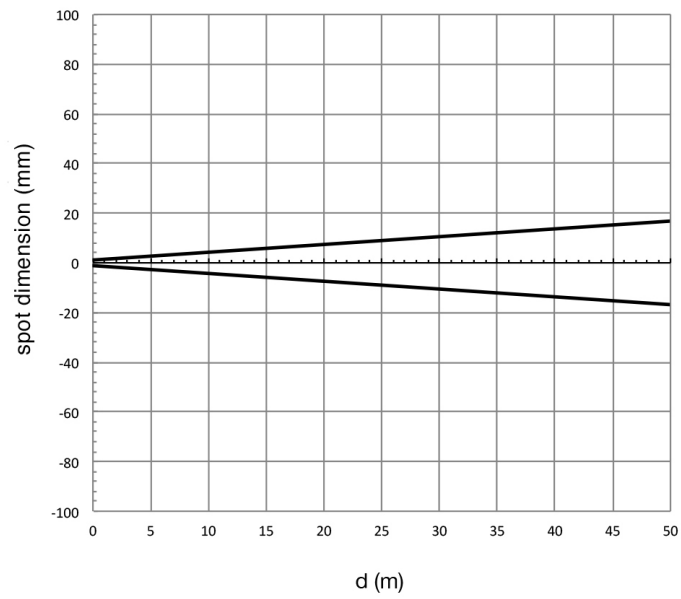
## OTHERS

### Dimensions



1 Trimmer

### Response curves



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**date of  
printing**  
10/08/2026  
01:21:06