



# FAL

## FALD/BN-0A

**Photo.M18,NPN-NO+NC,Cable,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 | Axial |
|----------------|-------|

## Outputs

|             |           |
|-------------|-----------|
| Output type | NPN 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=68,5mm                  |
| Housing material      | PBT / PC cable exit               |
| Weight                | 50g                               |
| Connections           | 2m PVC cable                      |
| Active Head Material  | Glass / PC                        |
| Tightening torque     | 1Nm                               |
| 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                                           |

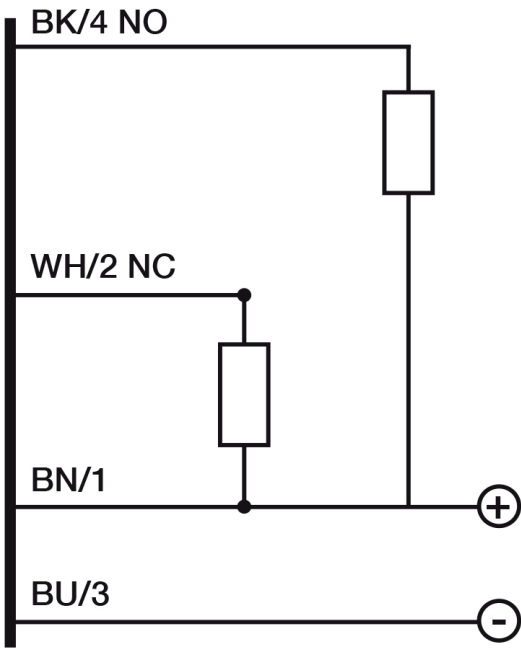
Accessories

||
||
||

|                       |                                  |
|-----------------------|----------------------------------|
| Supplied Accessories  | nuts M18 x 1, screwdriver        |
| Generical Data        |                                  |
| Dimensions            | M18 x 1/L=68,5mm                 |
| Operating Temperature | - 15°C...+ 55°C (Without freeze) |
| Mechanical Protection | IP67                             |

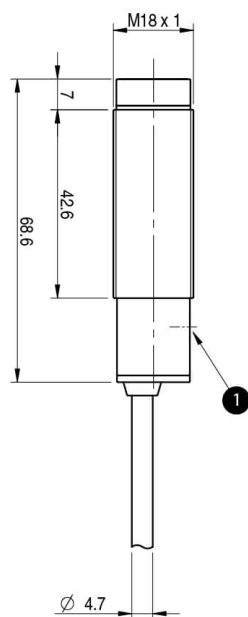
# CONNECTIONS

Eletrical diagram



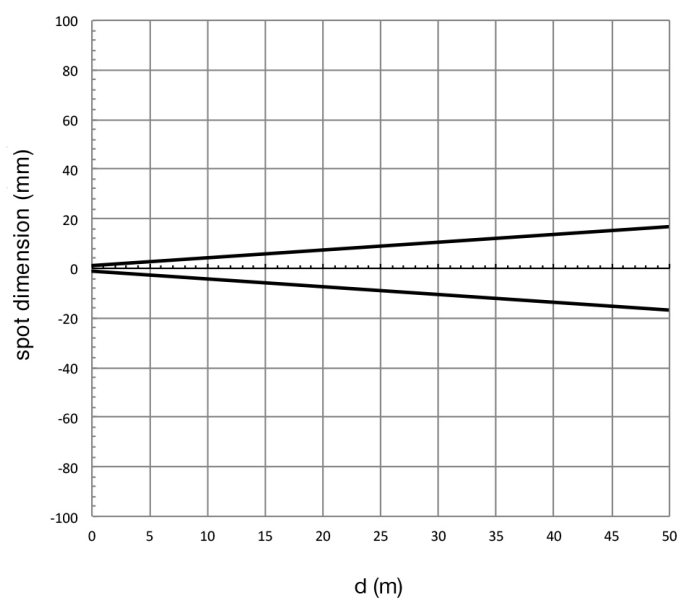
# OTHERS

Dimensions



1 Teach-in button

## Response curves



## Datasensing S.r.l.

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

**date of  
printing**  
10/08/2026  
03:36:32