



# FAL

## FALD/BP-1E

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	Axial

## Outputs

Output type	PNP NO+NC
Output Function	NO+NC
Switching frequency	1Khz
Response time	500 $\mu$ s

## Electrical data

Operating Voltage	10...30VDC
No-Load supply current	$\leq 25$ mA
Load current	$\leq 100$ mA
Leakage current	$\leq 10$ $\mu$ A
Output voltage drop	$\leq 2$ V@Iload=100mA
Max ripple content	$\leq 10$ %
LED indicators	Yellow (Lon) or output status Lo/Do
Time delay before availability	$\leq 200$ ms
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 =82,6mm
------------	--------------------

Weight	100g
--------	------

Housing Material	Nickel plated brass / PC plug
------------------	-------------------------------

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

Supplied Accessories

nuts M18 x 1, screwdriver

Generical Data

Dimensions

M18 x 1 /L =82,6mm

Operating Temperature

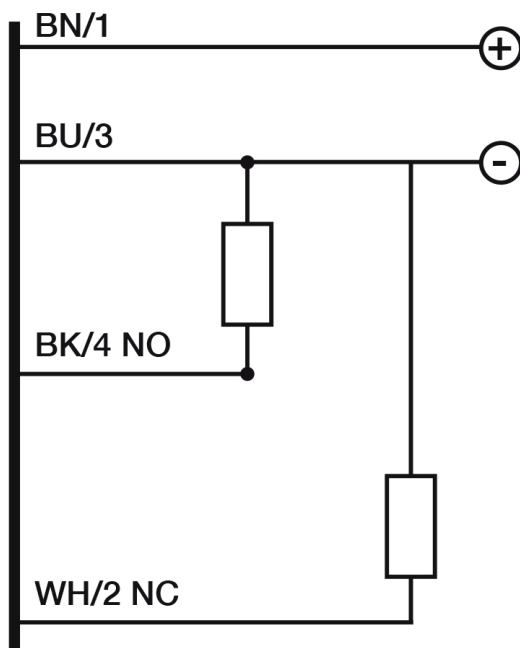
- 15°C...+ 55°C (Without freeze)

Mechanical Protection

IP67

# CONNECTIONS

Eletrical diagram

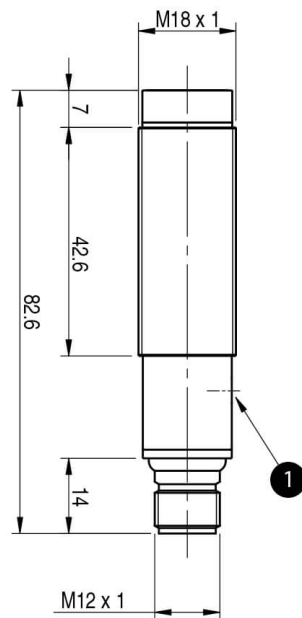


Connector



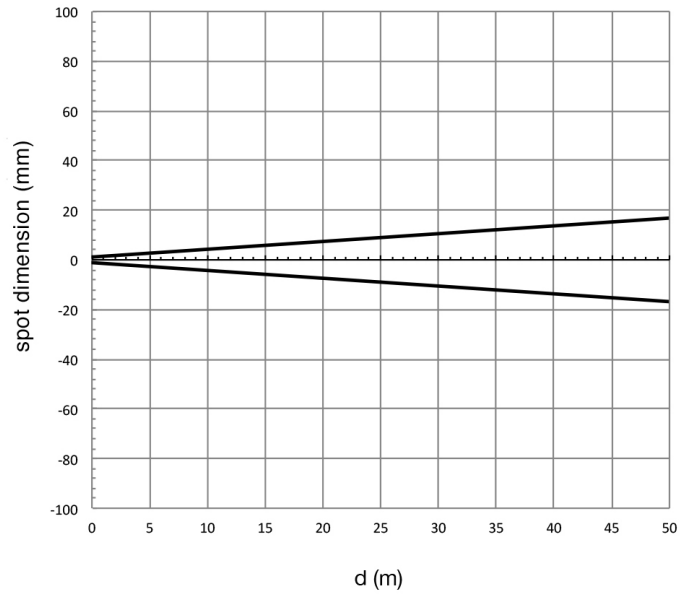
## OTHERS

### 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**  
14/05/2026  
00:08:19