



FAL

FALN/BP-1E

**Photo.M18,Laser emiss.,PNP-NO+NC,M12
plug,Reflex**

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	20m
Thermal drift of Sr	$\leq 10\%$ Sr
Repeat Accuracy	5%
Sensitivity adjustment	Teach-in

Application

Function Principle

Polarized

Notes

On RL110 reflector ; 30m on RL201 , 5m on RL100D

Optic position

Axial

Outputs

Output type

PNP NO+NC

Output Function

NO+NC

Switching frequency

800Hz

Response time

625 μ s

Electrical data

Operating Voltage

10...30VDC

No-Load supply current

≤ 30 mA

Load current

≤ 100 mA

Leakage current

≤ 10 μ A

Output voltage drop

≤ 2 V@Iload=100mA

Max ripple content

$\leq 10\%$

LED indicators

Green power supply/yellow (LightON EG ≥ 2)/yellow flashing (LightON 1<EG<2)

Time delay before availability

≤ 200 ms

Short-circuit protection

Short circuit (autoreset), Overvoltage

Reverse Polarity Protection	Polarity inversal, Impulsive voltage
Emission	LASER Red (650nm) class1
Interference to external light	3000lux (incandescent lamp), 10000lux (sunlight)

Mechanical data

Dimensions	M18 x 1 /L =80 mm
Housing material	Nickel plated brass / PC plug
Weight	70g
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

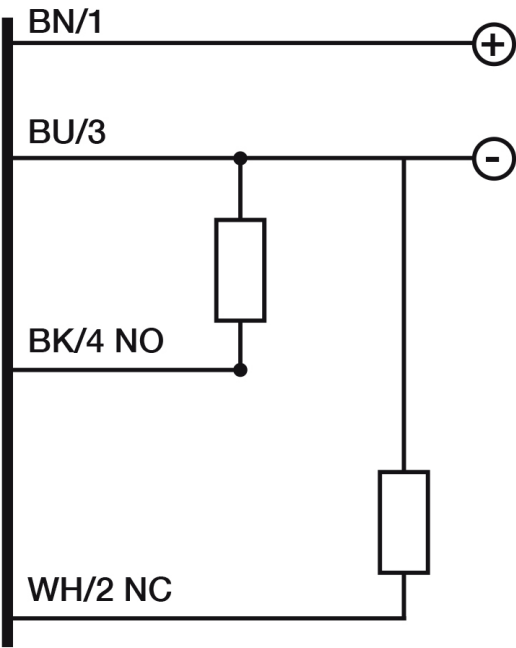
Accessories

||
||
||

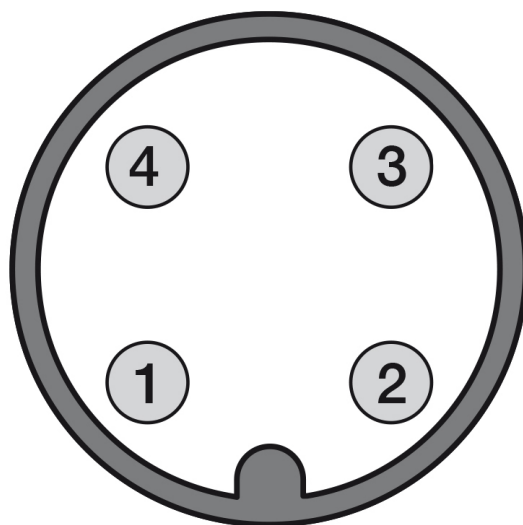
Supplied Accessories	nuts M18 x 1, screwdriver
Generical Data	
Dimensions	M18 x 1 /L =80 mm
Operating Temperature	- 15°C...+ 55°C (Without freeze)
Mechanical Protection	IP67

CONNECTIONS

Eletrical diagram

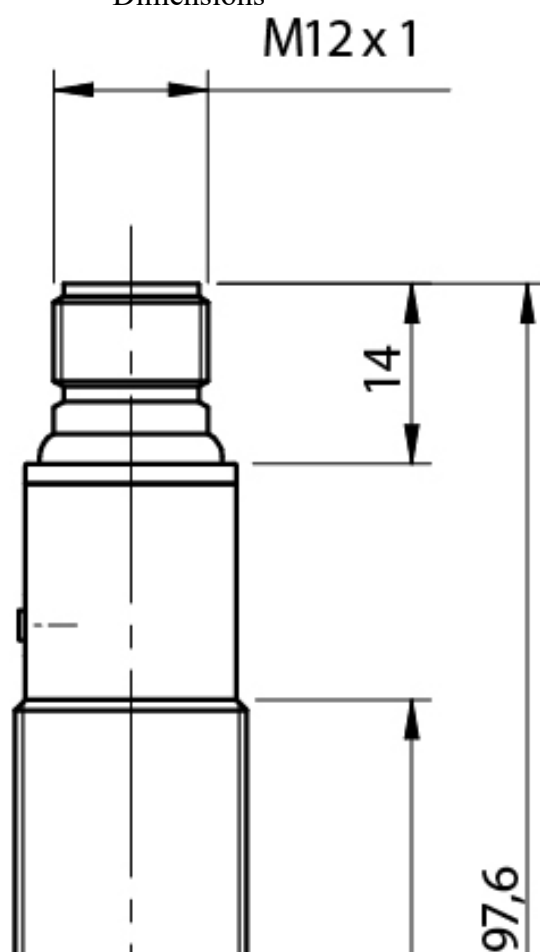


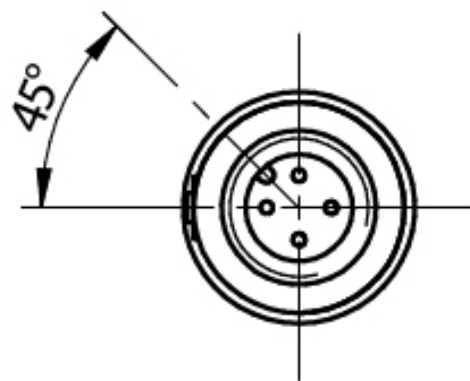
Connector



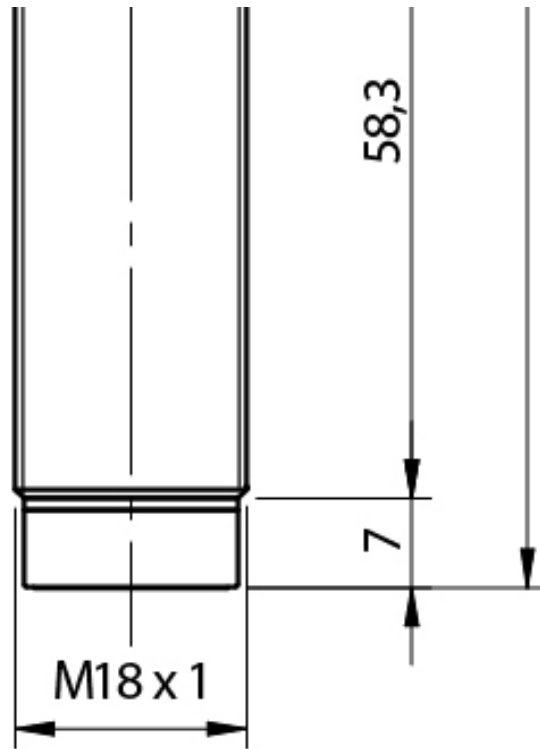
OTHERS

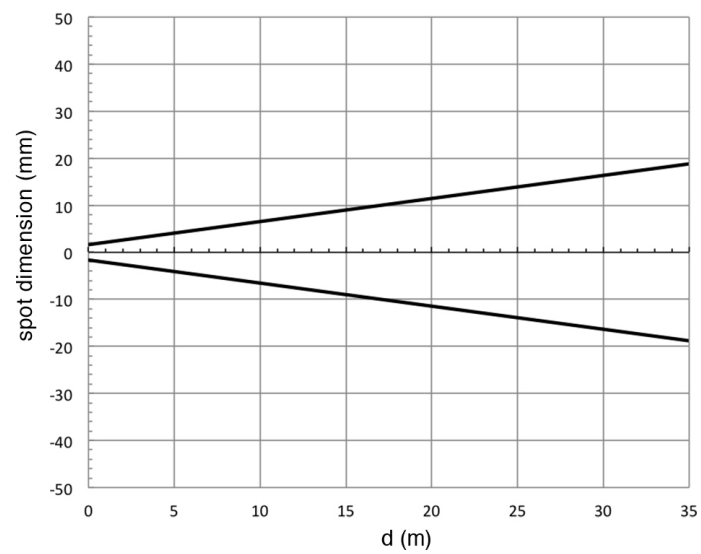
Dimensions





Response curves





**Datasensing
S.r.l.**

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

**date of
printing**
10/08/2026
05:45:34