



FAL

FALN/BN-1E

**Photo.M18,Laser emiss.,NPN-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	≤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

NPN NO+NC

Output Function

NO+NC

Switching frequency

800Hz

Response time

625μs

Electrical data

Operating Voltage

10...30VDC

No-Load supply current

≤ 30mA

Load current

≤100mA

Leakage current

≤10μA

Output voltage drop

≤2V@Iload=100mA

Max ripple content

≤10%

LED indicators

Green power supply/yellow (LightON $E_G \geq 2$)/yellow flashing (LightON $1 < E_G < 2$)

Time delay before availability

≤200ms

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

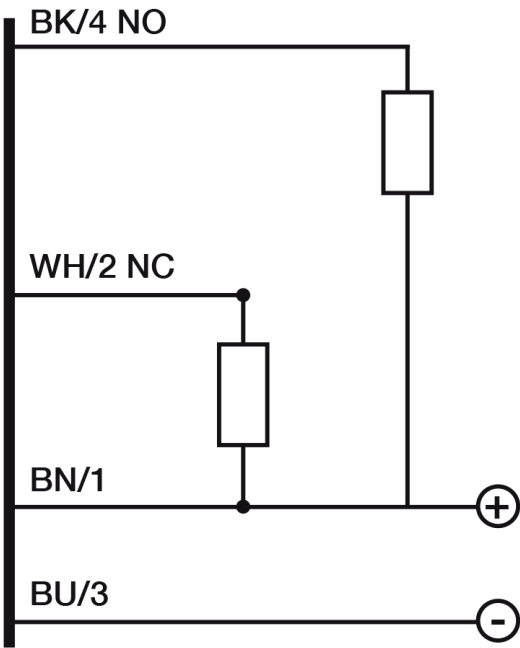
Accessories

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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

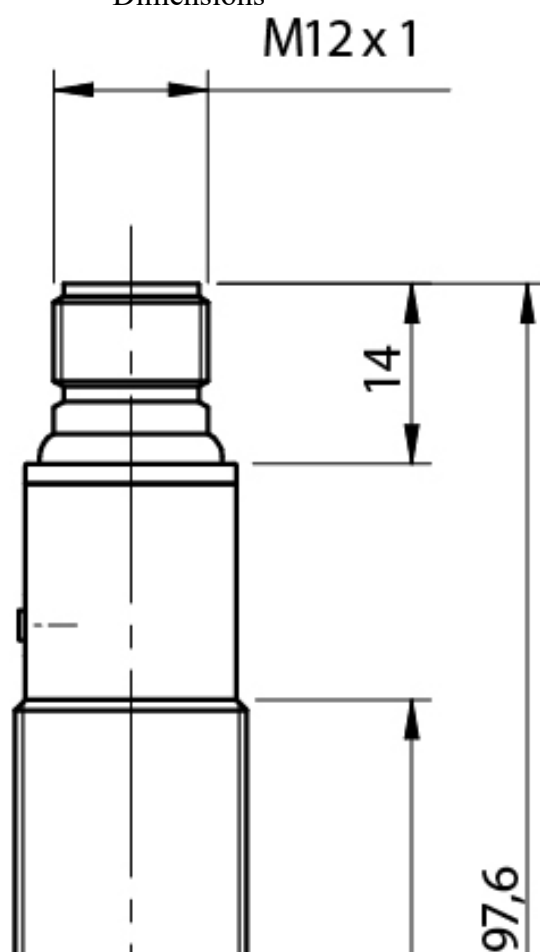


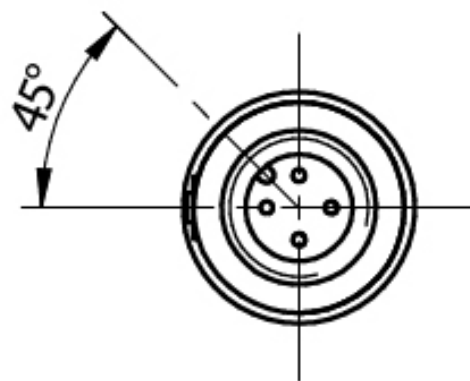
Connector



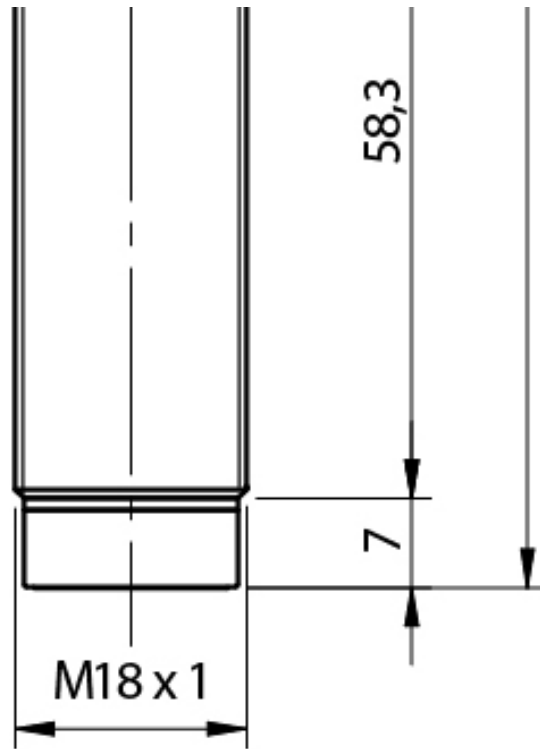
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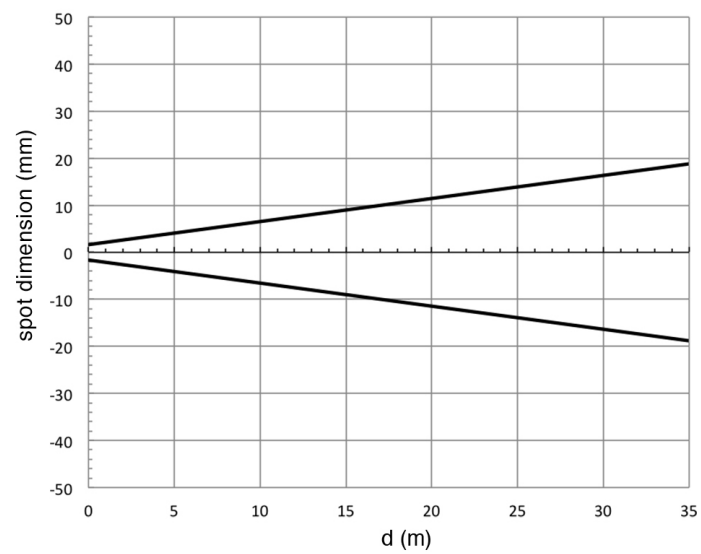
Dimensions





Response curves





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**date of
printing**
10/08/2026
00:07:00