



FAL

FALS/BN-3E

Photo.M18,Laser emiss.,NPN-NO+NC,M12
plug,BGS

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	80mm
Thermal drift of Sr	$\leq 10\%$ Sr
Repeat Accuracy	10%
Sensitivity adjustment	Trimmer

Minimum sensing distance (blind zone)	30mm
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Application

Function Principle	Blackground suppression
Notes	white target Kodak 90% 100 x 100mm
Optic position	Radial 90°

Outputs

Output type	NPN NO+NC
Output Function	NO+NC
Switching frequency	1,5kHz
Response time	333μs

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	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	LASER Red (650nm) class1
Interference to external light	3000lux (incandescent lamp), 10000lux (sunlight)

Mechanical data

Dimensions	M18 x 1/L=89,4mm
Housing material	Nickel plated brass / PC plug
Weight	60g
Connections	M12 plug
Active Head Material	Glass / ABS
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
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Generical Data

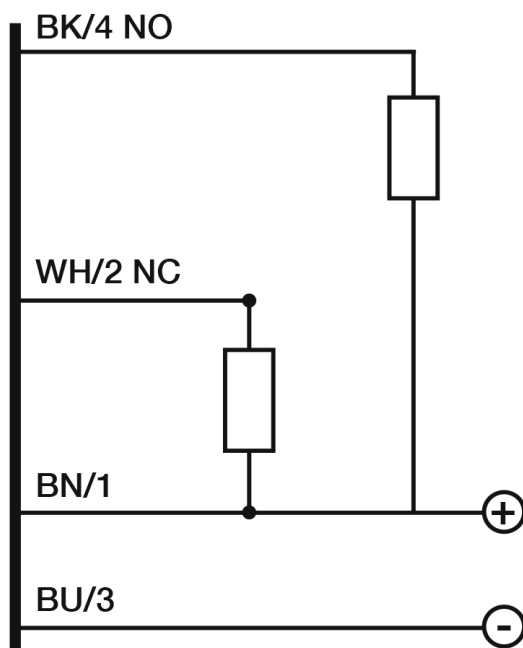
Dimensions	M18 x 1/L=89,4mm
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Operating Temperature	- 15°C...+ 55°C (Without freeze)
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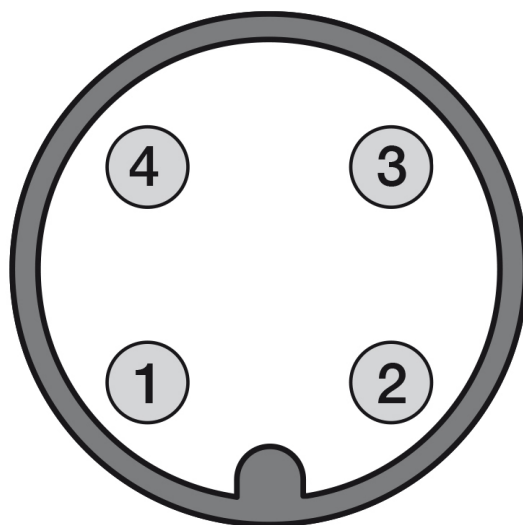
Mechanical Protection	IP67
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CONNECTIONS

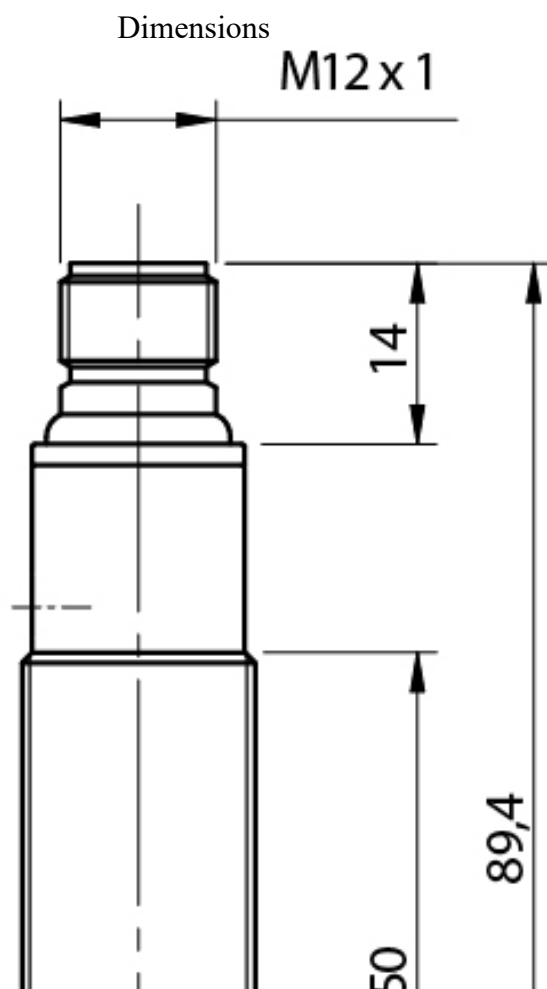
Eletrical diagram

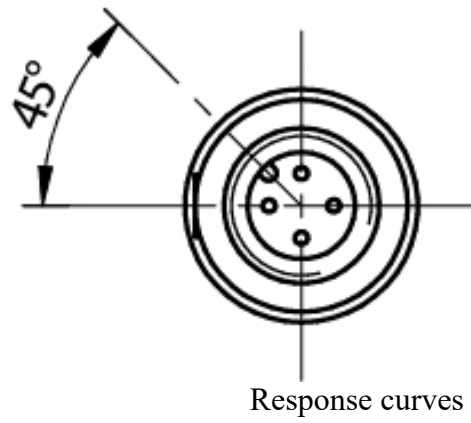
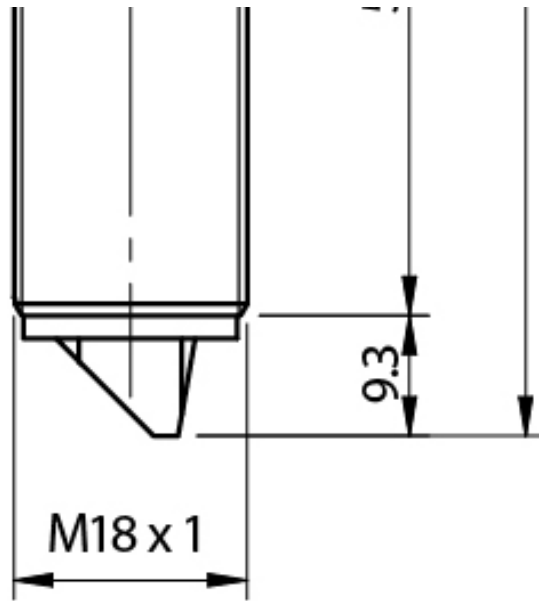


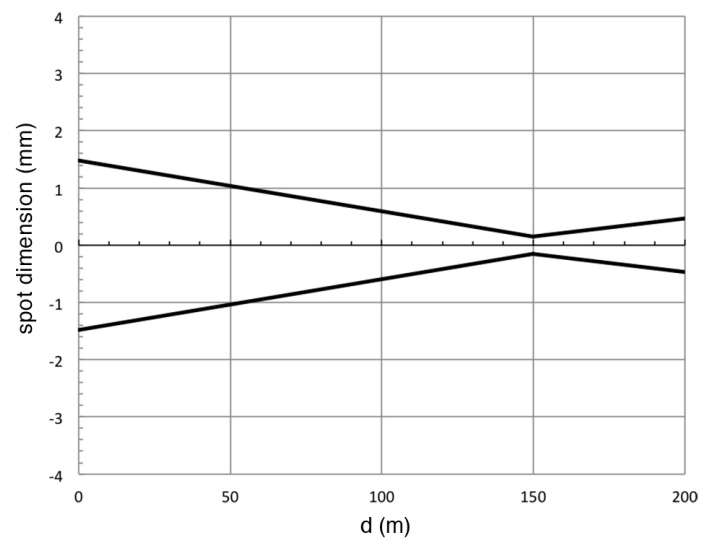
Connector



OTHERS







**Datasensing
S.r.l.**

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

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