



FAL

FALD/BN-3E

Photo.M18,NPN-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	Radial 90°
----------------	------------

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=92,6mm
Housing material	Nickel plated brass / PC plug
Weight	100g
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

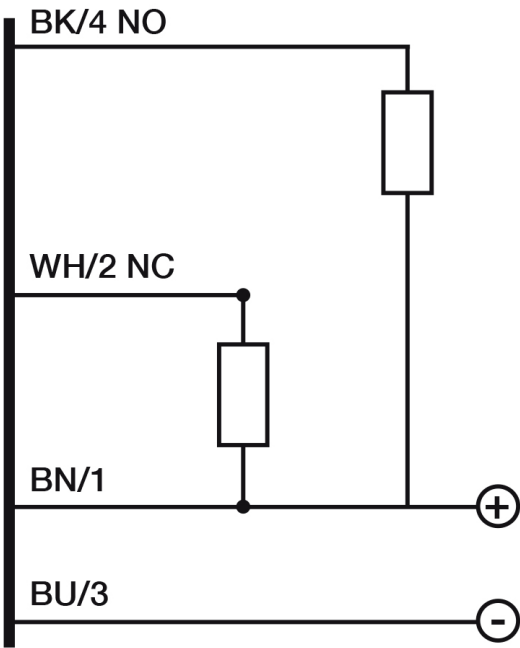
Accessories

||
||
||

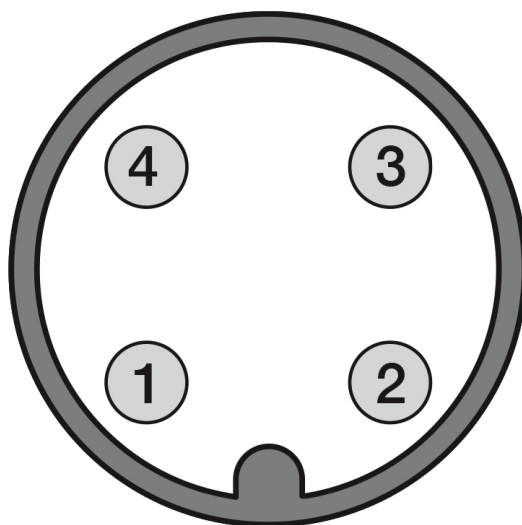
Supplied Accessories	nuts M18 x 1, screwdriver
Generical Data	
Dimensions	M18 x 1/L=92,6mm
Operating Temperature	- 15°C...+ 55°C (Without freeze)
Mechanical Protection	IP67

CONNECTIONS

Eletrical diagram

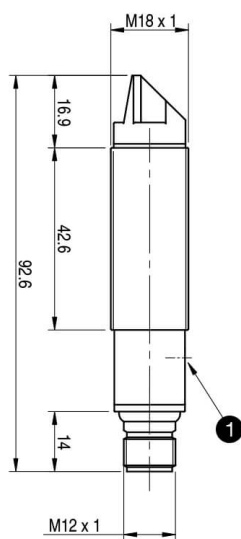
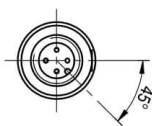


Connector



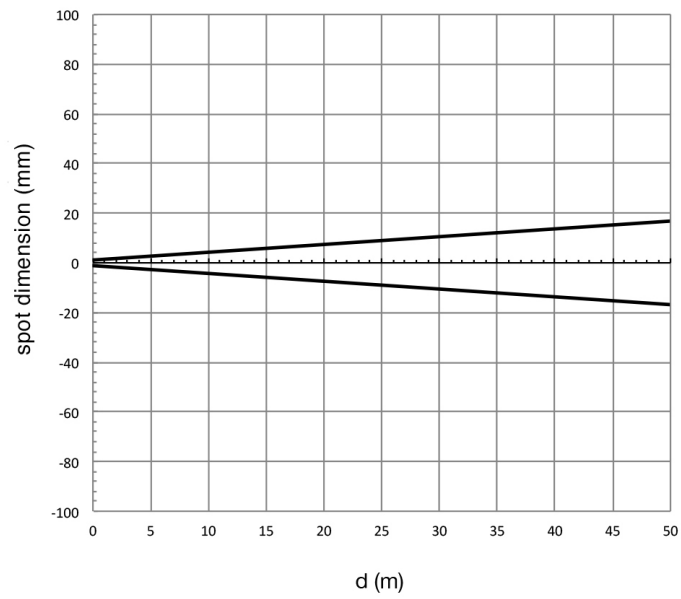
OTHERS

Dimensions



1 Trimmer

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
08:26:12