



FAL

FALD/BN-1A

Photo.M18,NPN-NO+NC,Cable,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
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Emitter/Receiver	Receiver
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Optic position	Axial
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Outputs

Output type	NPN NO+NC
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Output Function	NO+NC
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Switching frequency	1Khz
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Response time	500μs
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Electrical data

Operating Voltage	10...30VDC
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No-Load supply current	$\leq 25\text{mA}$
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Load current	$\leq 100\text{mA}$
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Leakage current	$\leq 10\mu\text{A}$
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Output voltage drop	$\leq 2\text{V}@I_{\text{load}}=100\text{mA}$
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Max ripple content	$\leq 10\%$
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LED indicators	Yellow (Lon) or output status Lo/Do
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Time delay before availability	$\leq 200\text{ms}$
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Short-circuit protection	Short circuit (autoreset), Overvoltage
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Reverse Polarity Protection	Polarity inversal, Impulsive voltage
Emission	
Interference to external light	5000lux (incandescent lamp), 10000lux (sunlight)

Mechanical data

Dimensions	M18 x 1/L=68,5mm
Housing material	Nickel plated brass / PC cable exit
Weight	130g
Connections	2m PVC cable
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

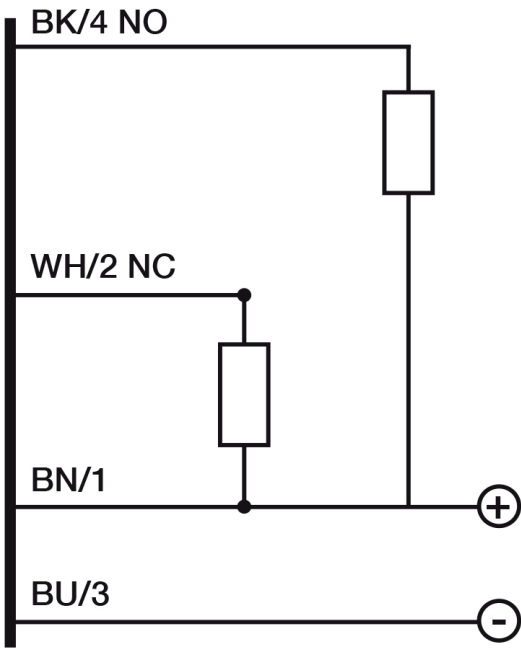
Accessories

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Supplied Accessories	nuts M18 x 1, screwdriver
Generical Data	
Dimensions	M18 x 1/L=68,5mm
Operating Temperature	- 15°C...+ 55°C (Without freeze)
Mechanical Protection	IP67

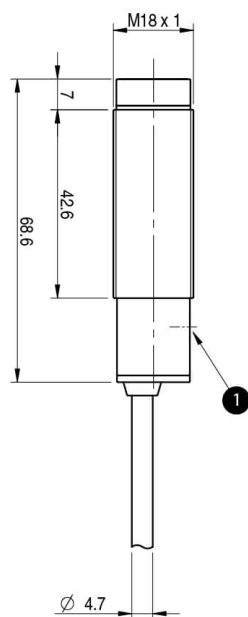
CONNECTIONS

Eletrical diagram



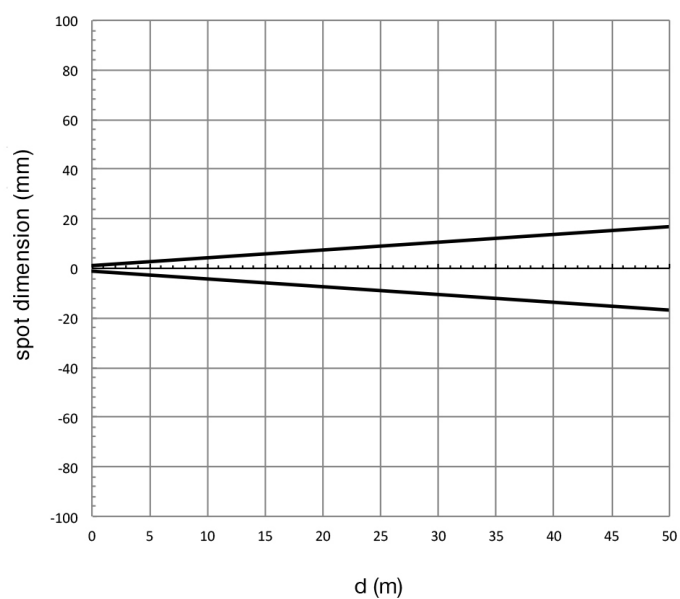
OTHERS

Dimensions



1 Teach-in button

Response curves



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