



FA

FAI9/BN-1E

Photo.M18,NPN-NO+NC,M12 plug,Diffuse
M18 PHOTOELECTRIC SENSORS DC

OVERVIEW

- Complete range of M18 sensors with 10...30 Vdc power supply
- Axial and radial optic with flat surface
- Retro-reflective models for transparent objects detection, with red emission 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	1m
Thermal drift of Sr	$\leq 10\%$ Sr
Repeat Accuracy	5%
Sensitivity adjustment	No

Application

Function Principle	Diffuse reflection (long distance, >600mm)
Notes	white target Kodak 90% 400 x 400mm
Optic position	Axial
Outputs	
Output type	NPN NO+NC
Output Function	NO+NC
Switching frequency	250Hz
Response time	2ms
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	LED Infrared (880nm)
Interference to external light	3000lux (incandescent lamp), 10000lux (sunlight)

Mechanical data

Dimensions	M18 x 1 /L =81,6mm
Housing material	Nickel plated brass / PC plug
Weight	100g
Connections	M12 plug
Active Head Material	PC
Tightening torque	25Nm
Operating temperature	- 25°C...+ 70° 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

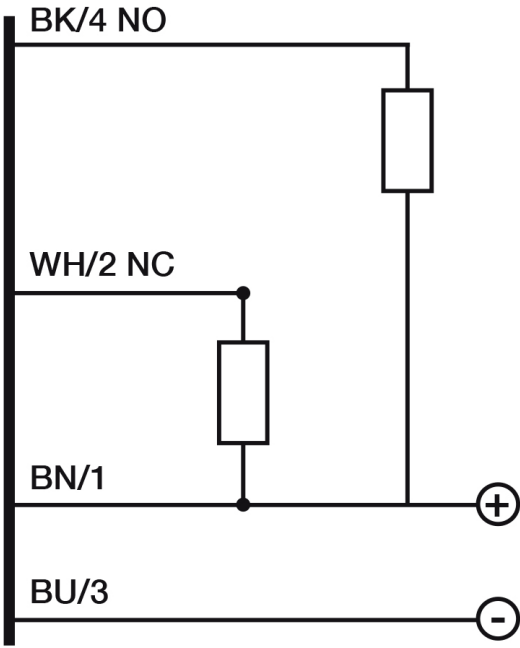
Accessories

--

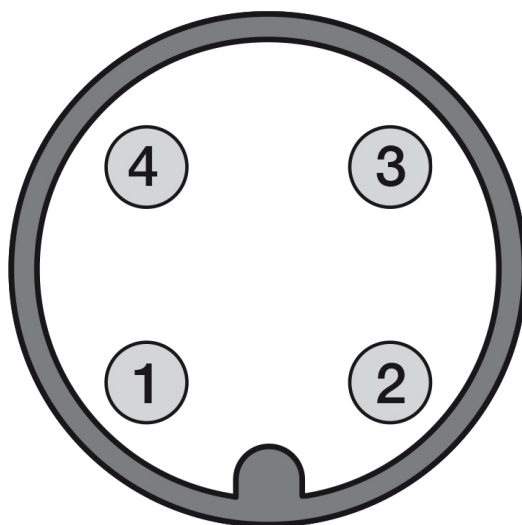
Supplied Accessories	nuts M18 x 1
Generical Data	
Dimensions	M18 x 1 /L =81,6mm
Operating Temperature	- 25°C...+ 70°C (Without freeze)
Mechanical Protection	IP67

CONNECTIONS

Eletrical diagram

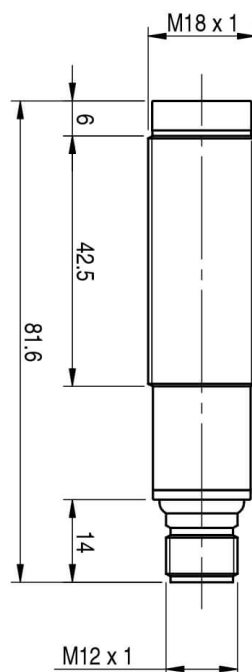


Connector



OTHERS

Dimensions



**Datasensing
S.r.l.**

Strada S.Caterina, 235
41122 Modena (MO)

**date of
printing**
10/08/2026
00:38:11

Tel. 059 420411
Fax 059 253973
E-mail
info@datasensing.com