



FA

FAI8/BP-2EAN

Photo.M18,PNP-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	800mm
--------------------------	-------

Thermal drift of Sr	$\leq 10\%$ Sr
---------------------	----------------

Repeat Accuracy	5%
-----------------	----

Sensitivity adjustment	Trimmer
------------------------	---------

Application

Function Principle	Diffuse reflection (long distance, >600mm)
--------------------	--

Notes	white target Kodak 90% 400 x 400mm
-------	------------------------------------

Optic position	Radial 90°
----------------	------------

Outputs

Output type	PNP NO+NC
-------------	-----------

Output Function	NO+NC
-----------------	-------

Switching frequency	250Hz
---------------------	-------

Response time	2ms
---------------	-----

Electrical data

Operating Voltage	10...30VDC
-------------------	------------

No-Load supply current	$\leq 30\text{mA}$
------------------------	--------------------

Load current	$\leq 100\text{mA}$
--------------	---------------------

Leakage current	$\leq 10\mu\text{A}$
-----------------	----------------------

Output voltage drop	$\leq 2\text{V}@I_{\text{load}}=100\text{mA}$
---------------------	---

Max ripple content	$\leq 10\%$
--------------------	-------------

LED indicators	Yellow (Lon) or output status Lo/Do
----------------	-------------------------------------

Time delay before availability	$\leq 200\text{ms}$
--------------------------------	---------------------

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=92,7mm
Housing material	PBT / PC plug
Weight	30g
Connections	M12 plug
Active Head Material	PC
Tightening torque	1Nm
Operating temperature	- 25°C...+ 70° C (Without freeze)
Diameter/Dimension	M18

Test/Approvals

Approvals	CE cULus Ex: II 3G Ex nA IIC T6 Gc II 3D Ex tc IIIB T85°C Dc
EMC compatibility	EN 60947-5-2
Shocks and vibrations	Vibration IEC 60068-2-6 / Shock IEC 60068-2-27
Degree of protection	IP67

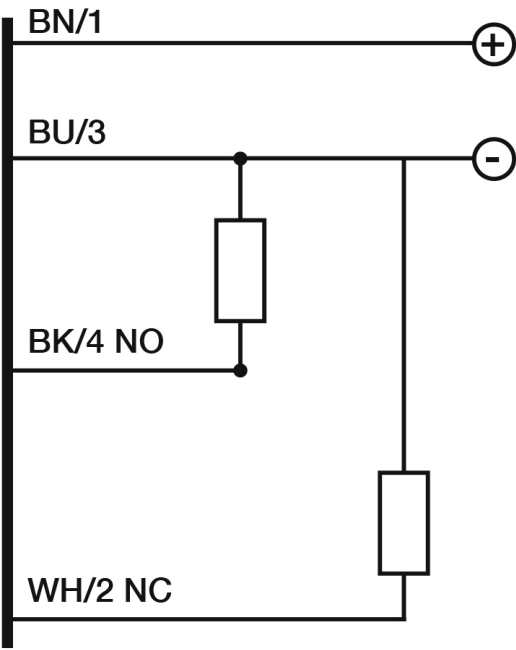
Accessories

||
||
||

Supplied Accessories	nuts M18 x 1, screwdriver
Generical Data	
Dimensions	M18 x 1/L=92,7mm
Operating Temperature	- 25°C...+ 70°C (Without freeze)
Mechanical Protection	IP67

CONNECTIONS

Eletrical diagram

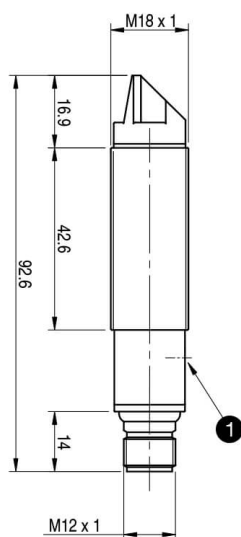
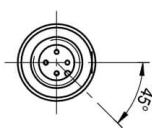


Connector



OTHERS

Dimensions



1 Trimmer

**Datasensing
S.r.l.**

Strada S.Caterina, 235
41122 Modena (MO)

**date of
printing**
10/08/2026
07:46:21

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