



FF + FFERS

FFIZ/0P-1E

Photo.M18,PNP-NO/NC,M12 plug,Receiver
M18 IP69K PHOTOELECTRIC SENSORS FOR HARSH ENVIRONMENTS

OVERVIEW



TECHNICAL FEATURES

Detection properties

Nominal sensing distance	20m
Thermal drift of Sr	10% Sr
Repeat Accuracy	5%
Sensitivity adjustment	No

Application

Function Principle	Receiver
Emitter/Receiver	Receiver

Optic position	Axial
----------------	-------

Outputs

Output type	PNP L/D Selectable
-------------	--------------------

Output Function	L/D Selectable
-----------------	----------------

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

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

Electrical data

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

No-Load supply current	$\leq 25\text{mA}$
------------------------	--------------------

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 Output state ,
----------------	-----------------------

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

Short-circuit protection	Yes
--------------------------	-----

Reverse Polarity Protection	Yes
-----------------------------	-----

Emission	
----------	--

Interference to external light	5.000lux (incandescent lamp), 10.000lux (sunlight)
--------------------------------	--

Mechanical data

Dimensions	M18x1/L=83mm
------------	--------------

Housing material	Stainless steel AISI 316L / PA12 plug
------------------	---------------------------------------

Weight	60g
--------	-----

Connections	M12 plug
-------------	----------

Active Head Material	PA12
----------------------	------

Tightening torque	50Nm
-------------------	------

Operating temperature	-25°C...+80°C (without freeze)
-----------------------	--------------------------------

Diameter/Dimension	M18
--------------------	-----

Test/Approvals

Approvals	CE cULus ECOLAB Diversey
-----------	--------------------------

EMC compatibility	EN 60947-5-2
-------------------	--------------

Shocks and vibrations	Vibration IEC 60068-2-6 / Shock IEC 60068-2-27
-----------------------	--

Degree of protection	IP68, IP69K
----------------------	-------------

Accessories

Supplied Accessories	Nuts M18 x 1
----------------------	--------------

Generical Data

Dimensions	M18x1/L=83mm
------------	--------------

Operating Temperature

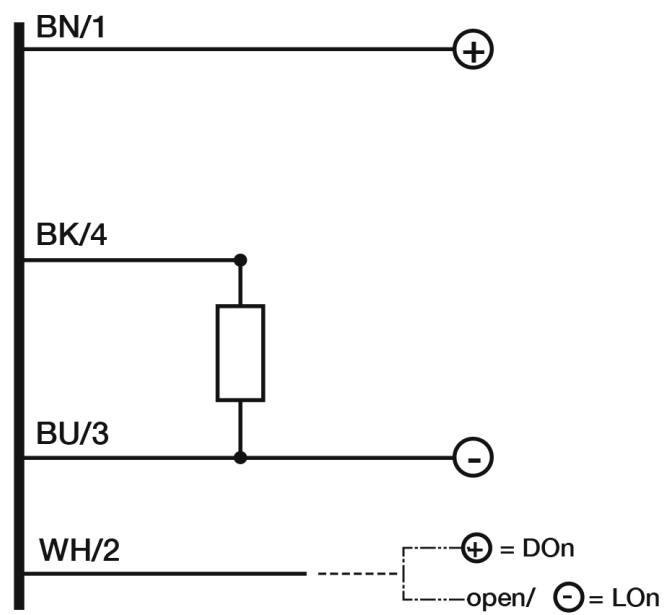
- 25°C...+ 80°C (Without freeze)

Mechanical Protection

IP68, IP69K

CONNECTIONS

Electrical diagram

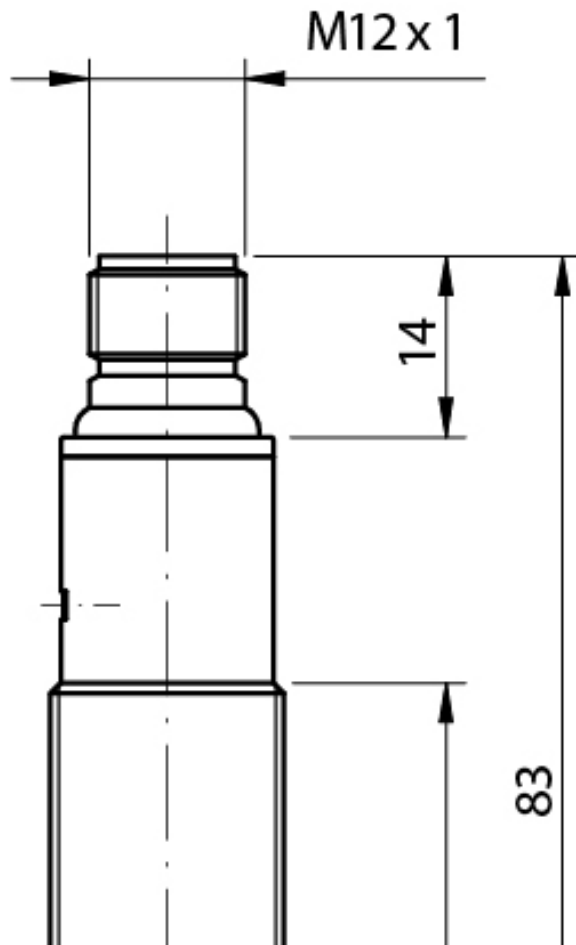


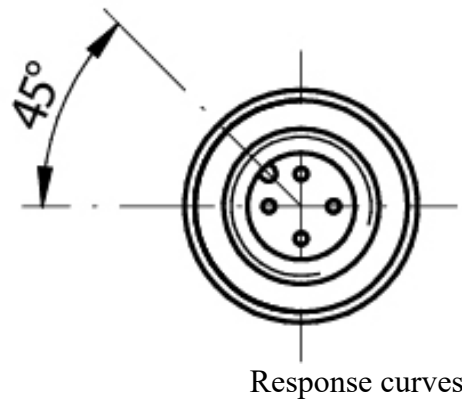
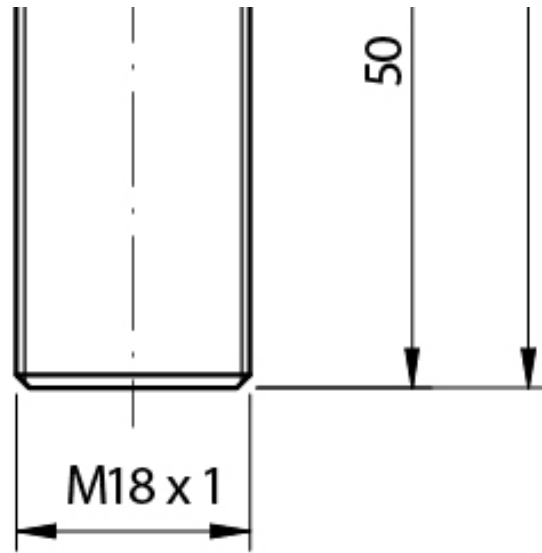
Connector

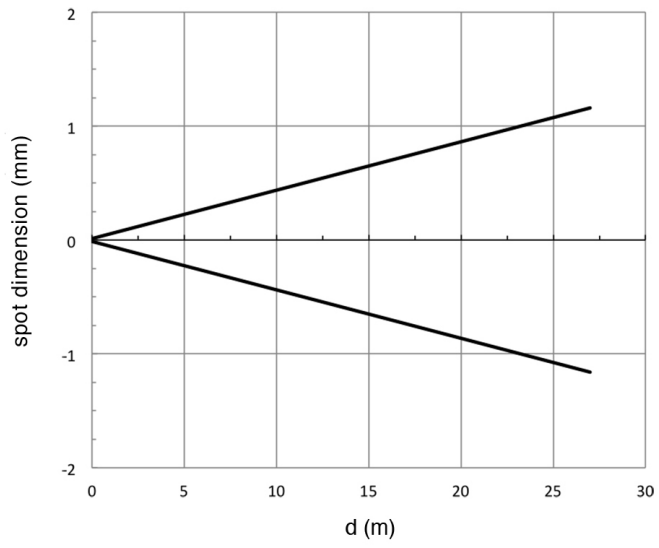


OTHERS

Dimensions







**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**
15/06/2026
09:55:16