



FF + FFRS

FFI7/BP-1E

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

OVERVIEW



TECHNICAL FEATURES

Detection properties

Nominal sensing distance	400mm
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Thermal drift of Sr	10% Sr
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Repeat Accuracy	5%
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Sensitivity adjustment	Teach-in
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Application

Function Principle	Diffuse reflection (medium distance, $\approx 600\text{mm}$)
Notes	white target Kodak 90% 400 x 400mm
Optic position	Axial

Outputs

Output type	PNP NO+NC
Output Function	NO+NC
Switching frequency	500Hz
Response time	1ms

Electrical data

Operating Voltage	10~30VDC
No-Load supply current	$\approx 35\text{mA}$
Load current	$\approx 100\text{mA}$
Leakage current	$\approx 10^{-4}\text{A}$
Output voltage drop	$\approx 2\text{V}@I_{\text{load}}=100\text{mA}$
Max ripple content	$\approx 10\%$
LED indicators	Green Stability ; Yellow Output state ,
Time delay before availability	$\approx 200\text{ms}$
Short-circuit protection	Yes
Reverse Polarity Protection	Yes

Emission	LED Infrared (880nm)
Interference to external light	5.000lux (incandescent lamp), 10.000lux (sunlight)

Mechanical data

Dimensions	M18x1/L=83mm
Weight	60g
Housing Material	Stainless steel AISI 316L / PA12 plug
Connections	M12 plug
Active Head Material	PA12
Tightening torque	50Nm
Operating temperature	-25°Câ€¦+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
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Generical Data

Dimensions

M18x1/L=83mm

Operating Temperature

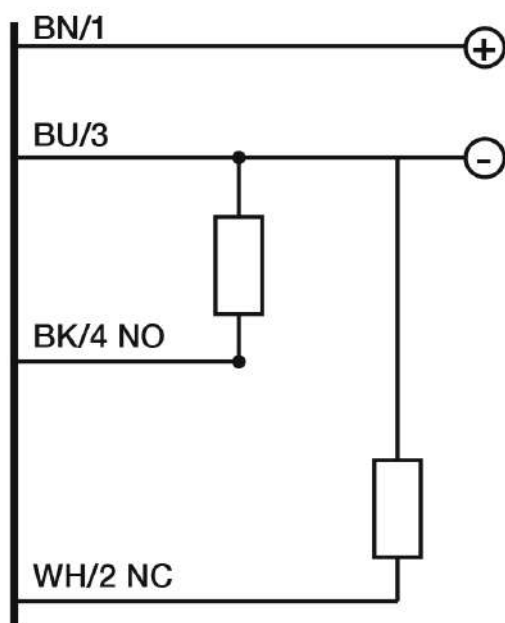
- 25°Câ€|+ 80°C (Without freeze)

Mechanical Protection

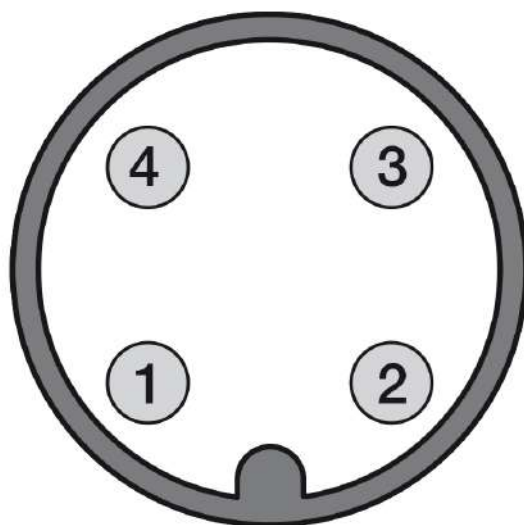
IP68, IP69K

CONNECTIONS

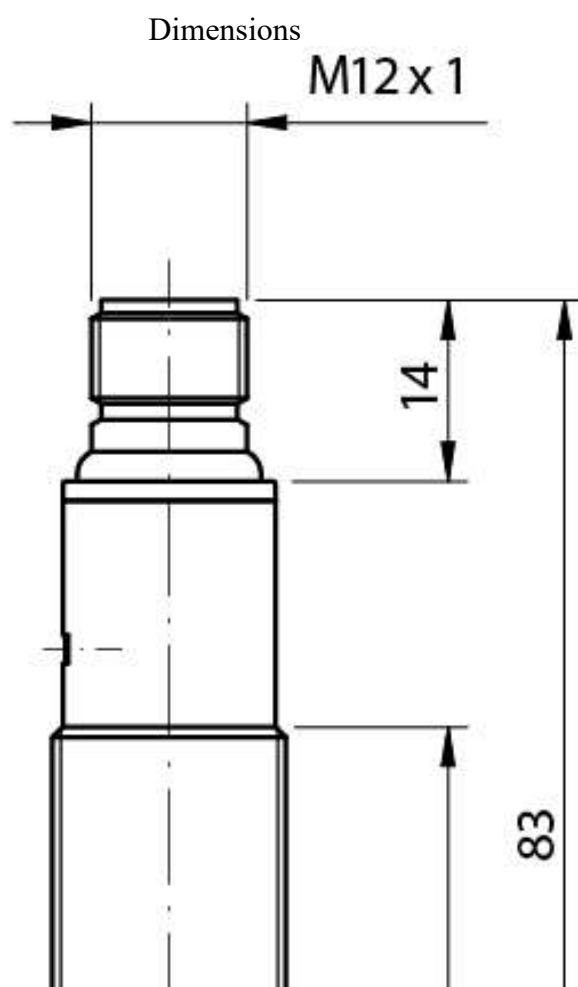
Eletrical diagram

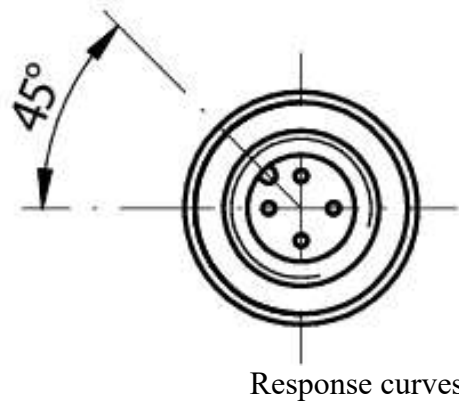
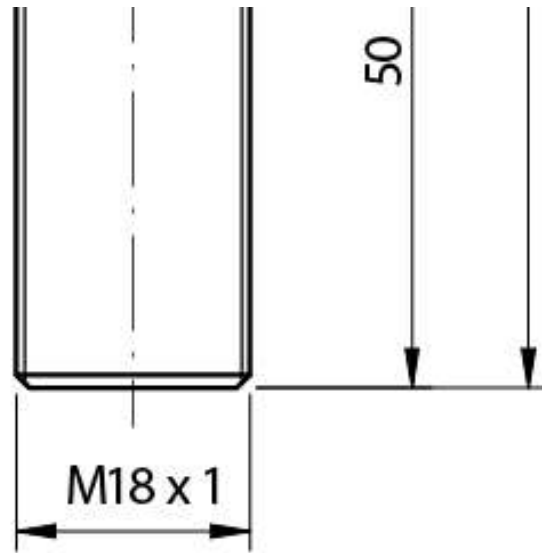


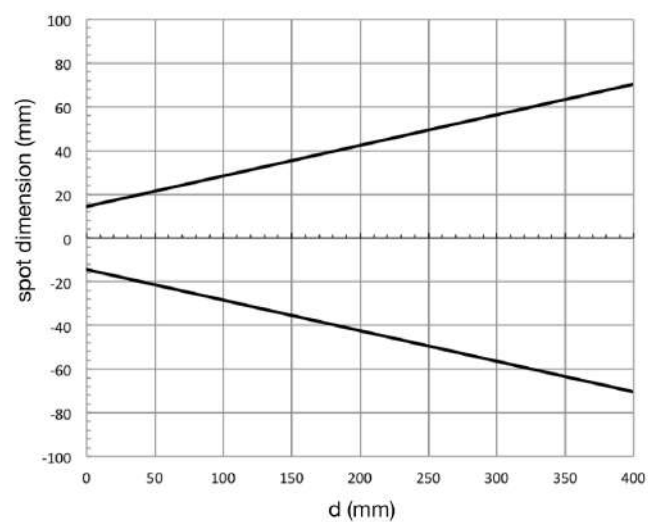
Connector



OTHERS







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