



FF + FFRS

FFRN/BP-1E

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

OVERVIEW



TECHNICAL FEATURES

Detection properties

Nominal sensing distance	4,5m
Thermal drift of Sr	10% Sr
Repeat Accuracy	5%
Sensitivity adjustment	Teach-in

Application

Function Principle	Polarized
Notes	On RL110 reflector

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	≤ 35mA
Load current	≤100mA
Leakage current	≤10μA
Output voltage drop	≤2V@Iload=100mA
Max ripple content	≤10%
LED indicators	Green Stability ; Yellow Output state ,
Time delay before availability	≤200ms
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Emission	LED Red (660nm)

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

Dimensions	M18x1/L=83mm
Weight	60g
Housing Material	Stainless steel AISI 316L / PA12 plug
Connections	M12 plug
Active Head Material	PMMA
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
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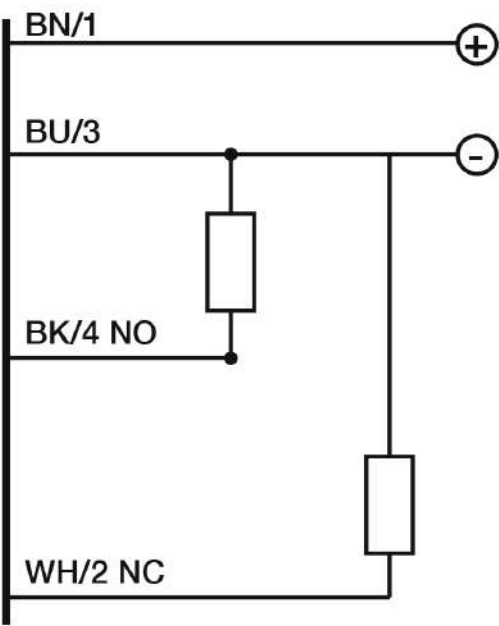
Generical Data

Dimensions	M18x1/L=83mm
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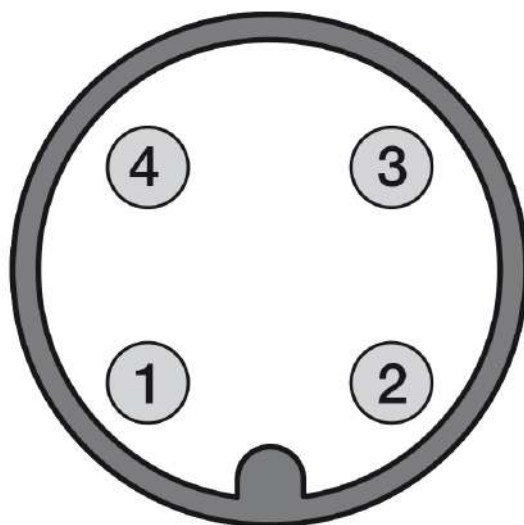
Operating Temperature	- 25°C...+ 80°C (Without freeze)
Mechanical Protection	IP68, IP69K

CONNECTIONS

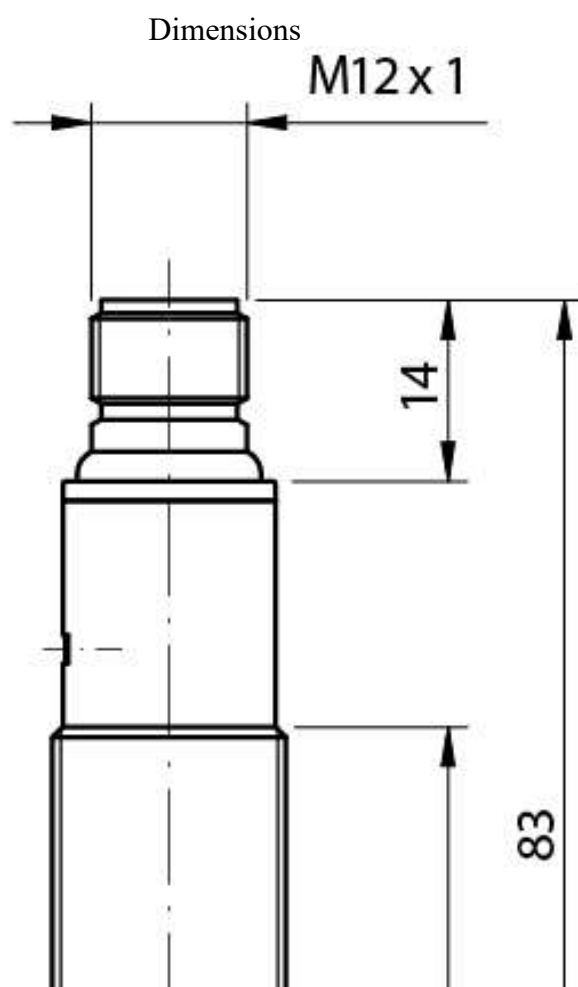
Eletrical diagram

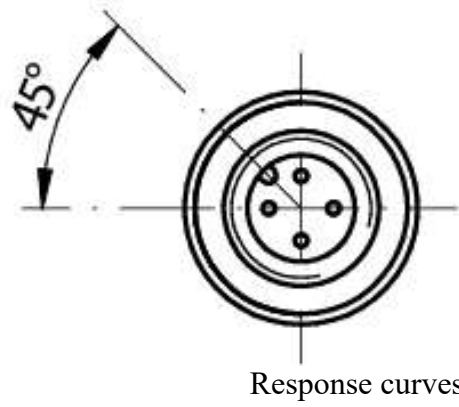
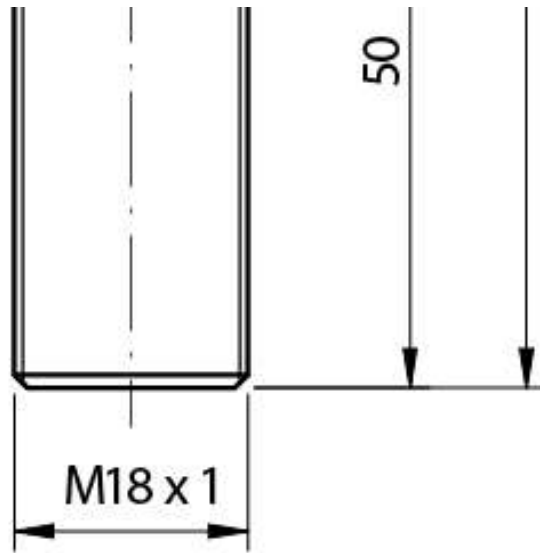


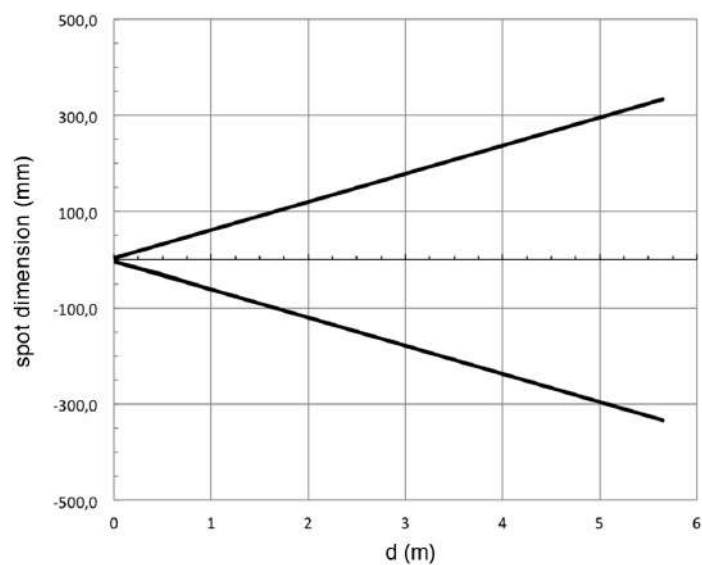
Connector



OTHERS







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