



DM

DM3/0N-1H

Photo.M12,NPN-NO/NC,M12 plug,Diffuse
M12 CYLINDRICAL PHOTOELECTRIC SENSORS

OVERVIEW

- Models diffuse reflection, polarized and through-beam
- Local and remote teach-in function
- Light-on / Dark-on selectable outputs
- IP67 protection degree
- Multifunction LED status indicator
- Complete protection against electrical damages
- Approvals: CE and cULus listed



TECHNICAL FEATURES

Detection properties

Nominal sensing distance	100mm
Thermal drift of Sr	$\leq 10\%$ Sr
Repeat Accuracy	5%
Sensitivity adjustment	Teach-in

Application

Function Principle	Diffuse reflection (short distance, $\leq 200\text{mm}$)
Notes	white target Kodak 90% 100 x 100mm
Optic position	Axial

Outputs

Output type	NPN L/D Selectable
Output Function	L/D Selectable
Switching frequency	400Hz
Response time	1,25ms

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 (status output)
Time delay before availability	$\leq 150\text{ms}$
Short-circuit protection	Yes

Reverse Polarity Protection	Yes
Emission	LED Infrared (880nm)
Interference to external light	3.000lux (incandescent lamp), 10.000lux (sunlight)
Impulsive Overvoltage Protection	Yes

Mechanical data

Dimensions	M12x1/L=65,5mm
Housing material	Nickel plated brass
Weight	28g
Connections	M12 plug
Active Head Material	PMMA
Operating temperature	- 25°C...+ 70° C
Diameter/Dimension	M12

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

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Supplied Accessories

nuts M12 x 1

Generical Data

Dimensions

M12x1/L=65,5mm

Operating Temperature

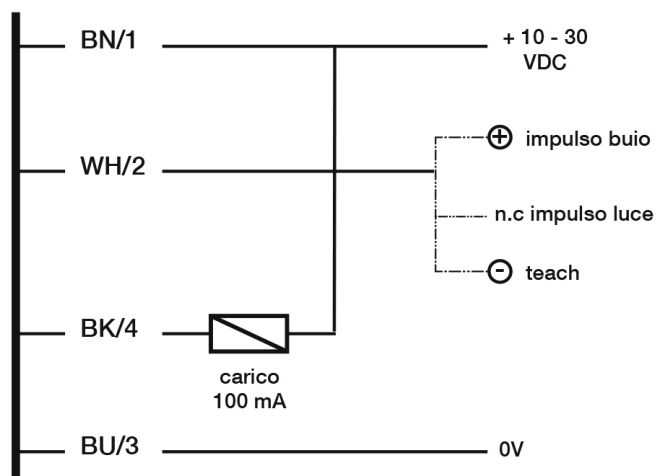
- 25°C...+ 70°C (Without freeze)

Mechanical Protection

IP67

CONNECTIONS

Electrical diagram

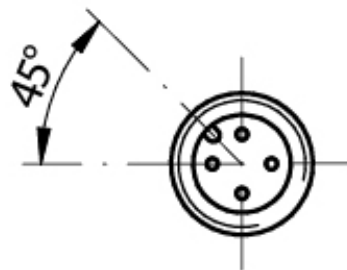
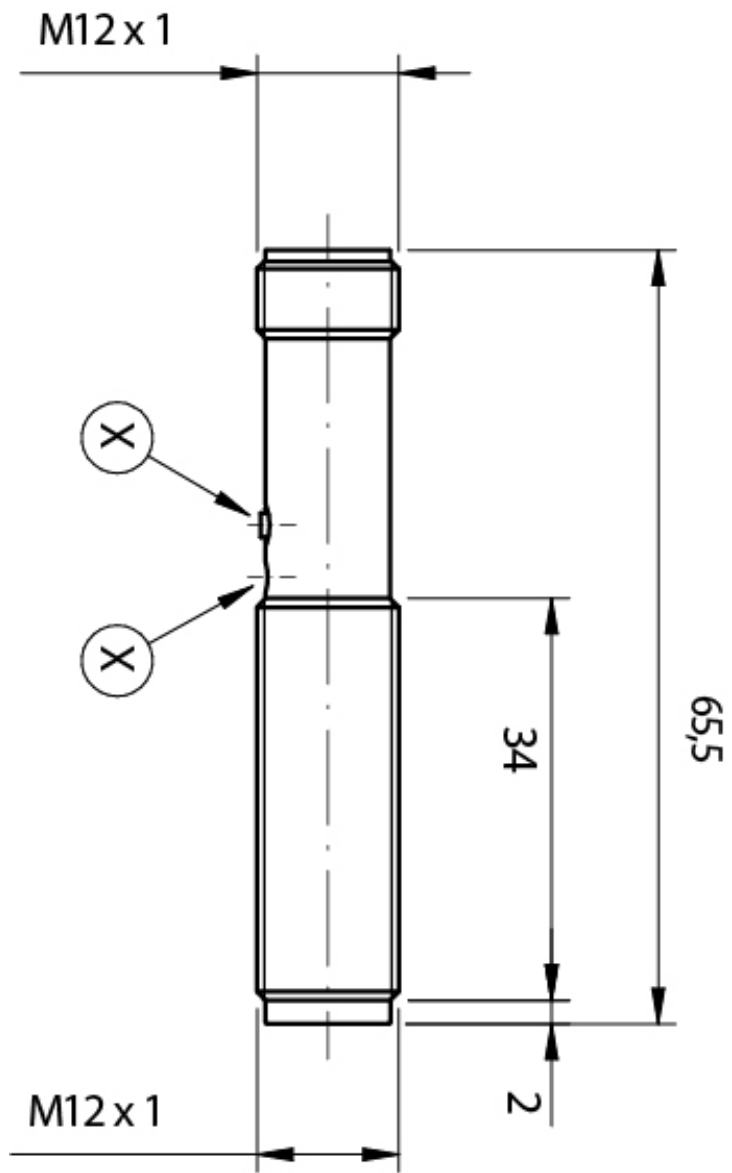


Connector

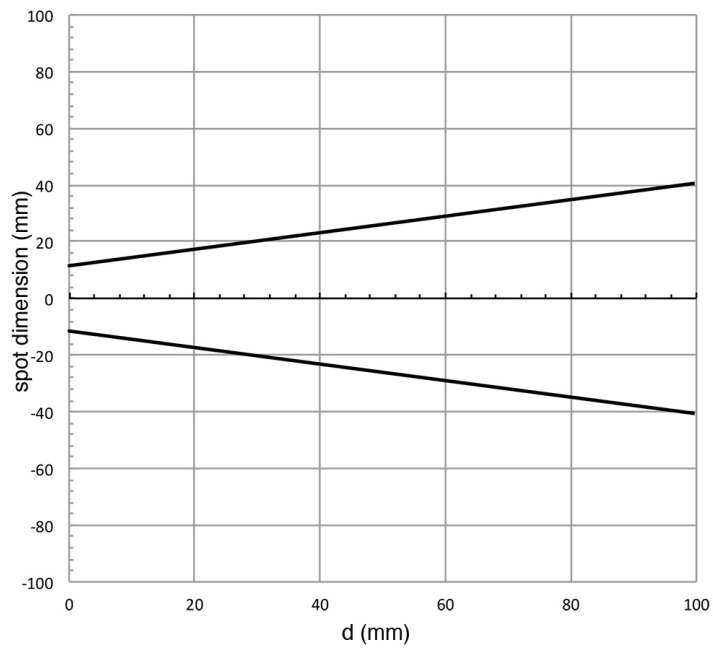


OTHERS

Dimensions



Response curves



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