



# DM

## DM3/0P-1A

Photo.M12,PNP-NO/NC,Cable,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	PNP 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=54,5mm
Housing material	Nickel plated brass / PBT cable exit
Weight	60g
Connections	2m PVC cable
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=54,5mm

Operating Temperature

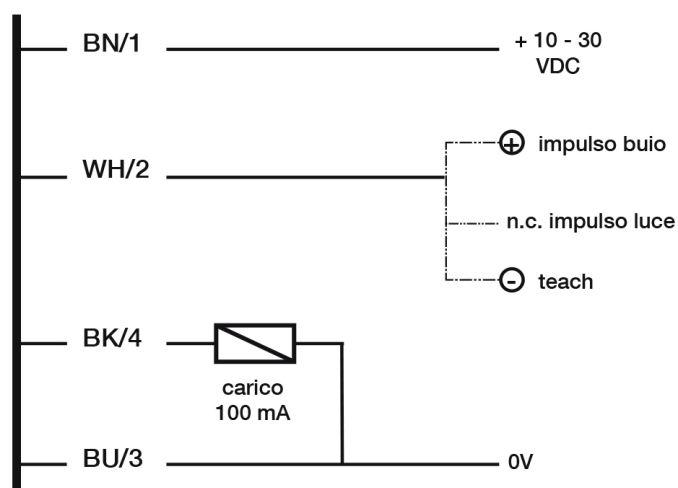
- 25°C...+ 70°C (Without freeze)

Mechanical Protection

IP67

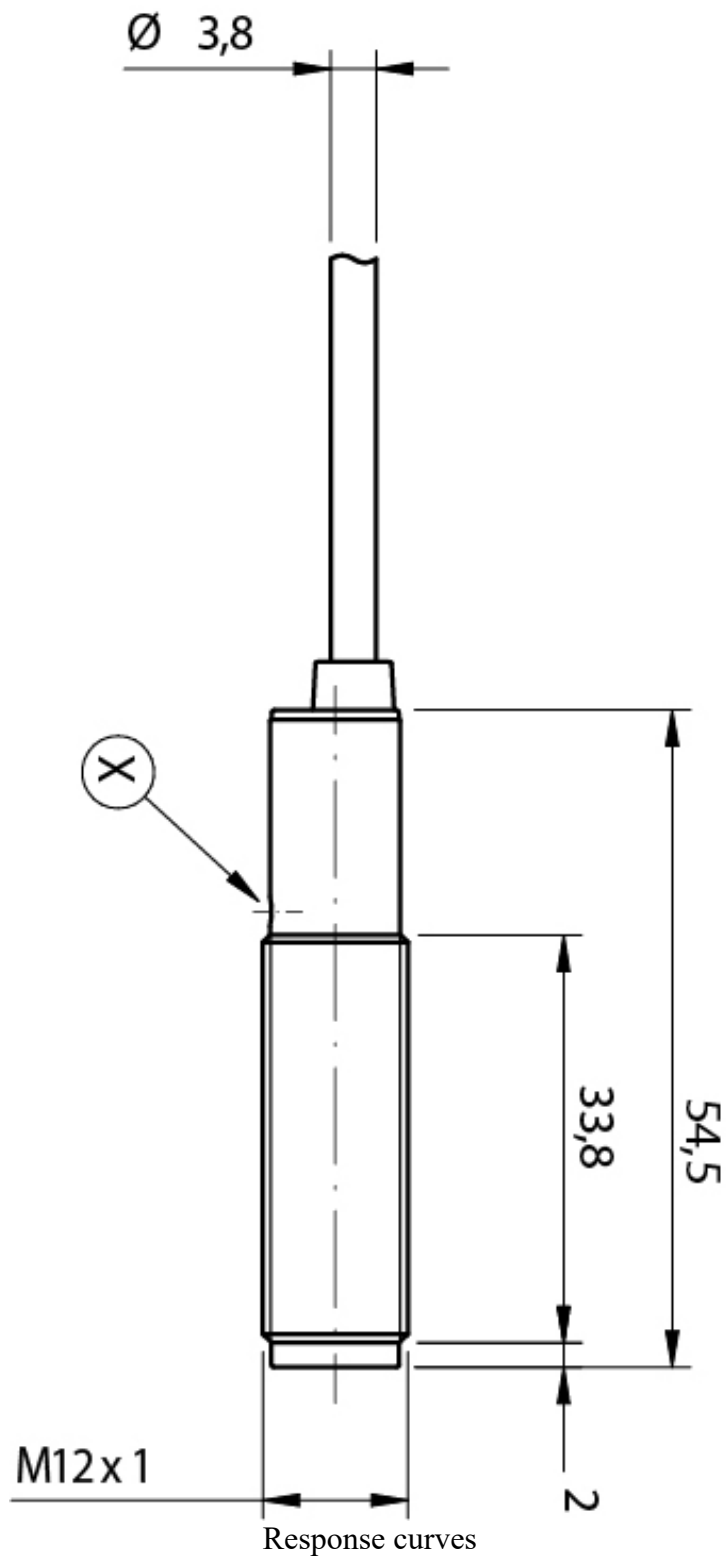
# CONNECTIONS

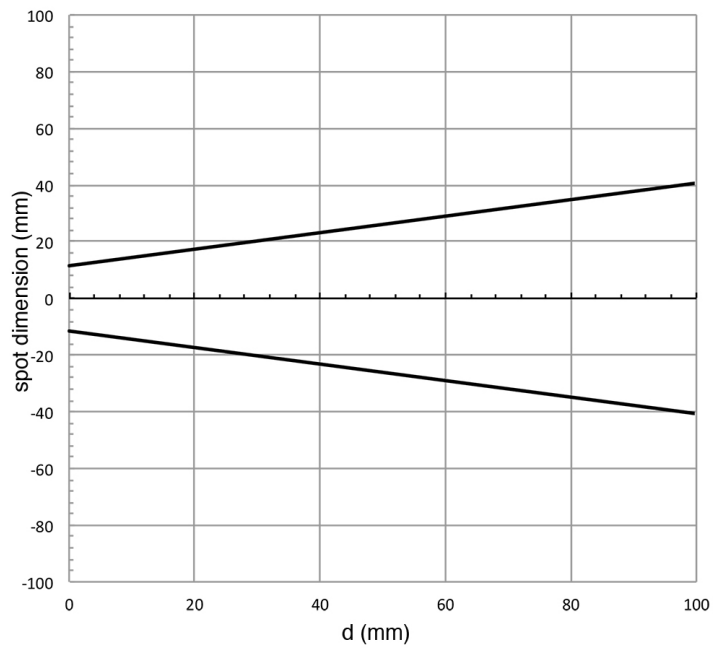
Electrical diagram



# OTHERS

Dimensions





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