



DM

DM2/0N-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 | ≤10% Sr |
| Repeat Accuracy | 5% |
| Sensitivity adjustment | No |

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 |

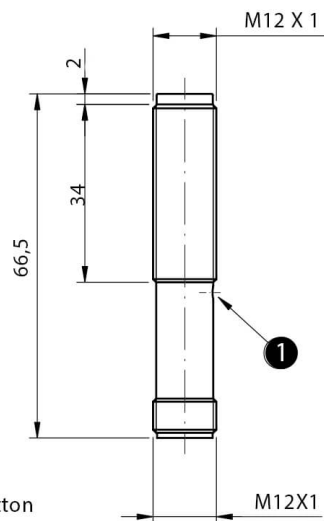
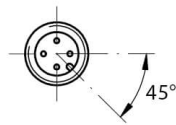
Accessories

| | |
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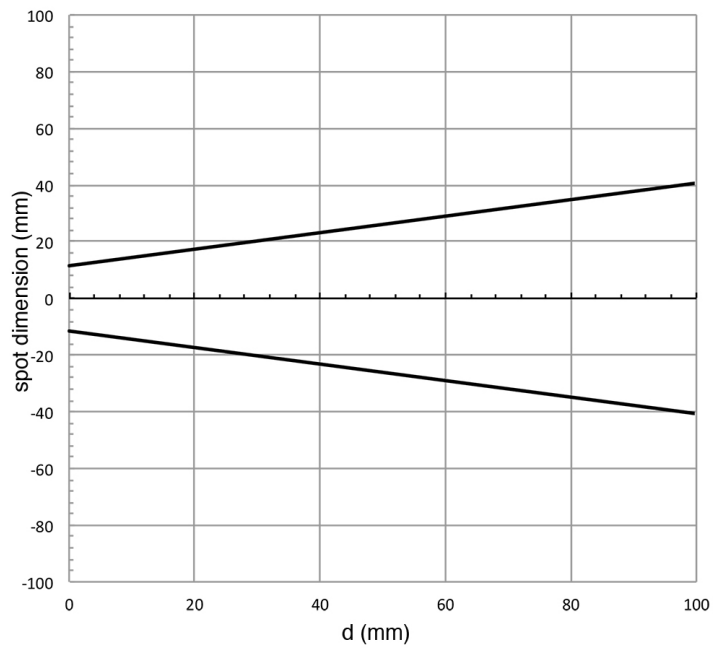
OTHERS

Dimensions



1 Teach-in button

Response curves



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