

Catalogue No: 42CM-D1MPAL-D4

DIFF 10-30VDC INFRARED 3-400mm PNP DC-MICRO-4

Field Switching and Sensing > Non Contact Sensors > Photoelectric Sensors > Allen-Bradley Photoelectric Sensors > Digital Diffuse Sensors > 18mm Cylindrical



PHOTOSWITCH Photoelectric Sensor, 400mm (15.6in), Standard Diffuse, Source (PNP), 4-pin DC Micro QD



Representative Photo Only
(actual product may vary based on configuration selections)

- Comprehensive range of photoelectric sensing technologies available which include retroreflective, through-beam, diffuse, background suppression, clear object detection, colour detection and fibre-optics
- Extensive range of photoelectric sensors with laser light source available suitable for high precision applications
- Extensive range of housing styles and mounting options
- Specialised versions with IP69k rating available for high-pressure washdown applications in the food and beverage industry
- Specialised long-range laser sensors available for distance measurement applications
- Specialised versions available with IO-Link technology. This technology enables the data delivery from the sensor directly into a control system in a very efficient manner

SPECIFICATIONS

Product Series	42CM 18mm Metal Cylindrical
Component Type Field Switching & Sensing	Photoelectric Sensor
Sensing Mode	Diffuse
Light source type	LED
Illumination Mode	Continuous
Colour, light source	Red (660nm)
Beam Angle / Field of View	6.6 ° (degrees)
Material, Lens	PMMA / Acrylic / Perspex / Plexiglas (Polymethyl methacrylate)
Material, Body / Housing	Nickel-Plated Brass material
Shape	Cylindrical - Threaded
Diameter	18 mm
Length	79.4 mm
Orientation	Straight Through
Mounting (Multiple)	Mounting Nuts (Included) Mounting Bracket (Ordered Separately)
Thread Size	M18 x 1 size
Teach Mode / Sensitivity Adjustment	Single-Turn Knob / Potentiometer sensitivity
Sensing Distance, Min	3 mm min
Sensing Distance, Max	400 mm max
Sensing Direction	Face
Operating Range(s)	10 ... 30V DC
Ue, Rated Operational Voltage, DC, min	10 V DC
Ue, Rated Operational Voltage, DC, max	30 V DC
Switching Mode	Light & Dark Operate
Output Type	PNP
Load Current	0.1 A
Response Time (Off → On)	2 ms

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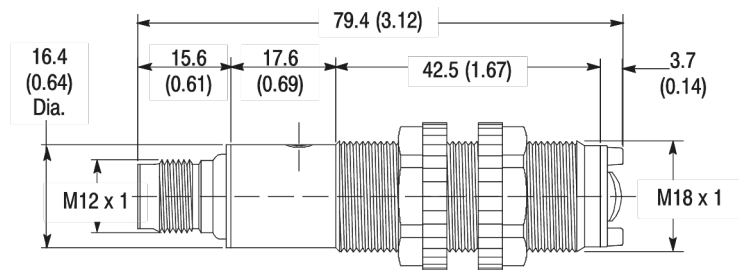
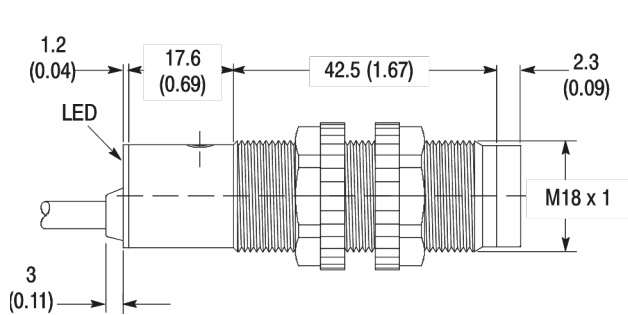
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Response Time (On → Off)	2 ms
Indicators	Yellow
Connection / Termination	M12 x 1, DC Micro, 4-pin
Number of Conductors	4 qty
Operating Temperature, Min	-25 °C min
Operating Temperature, Max	70 °C max
Relative humidity, min	5 %RH
Relative Humidity, Max	95 %RH
Humidity Type	Non-condensing
IP Rating	IP67
Shock Acceleration (Max.)	30 g
Shock Duration (Max.)	11 ms
Shock Rating	IEC 60947-5-2
Vibration Displacement (Peak to Peak Max.)	1 mm
Vibration Frequency, Operational (Max.)	55 Hz
Vibration Rating	IEC 60947-5-2

REFERENCES

IECEX Certificate	-
Supplier Declaration of Conformity:	-
Installation Guide:	-
User Manual:	-
Manufacturer Datasheet:	42CMD1MPALD4_ManufacturerDatasheet
Manufacturer Catalogue & Product Selection:	-



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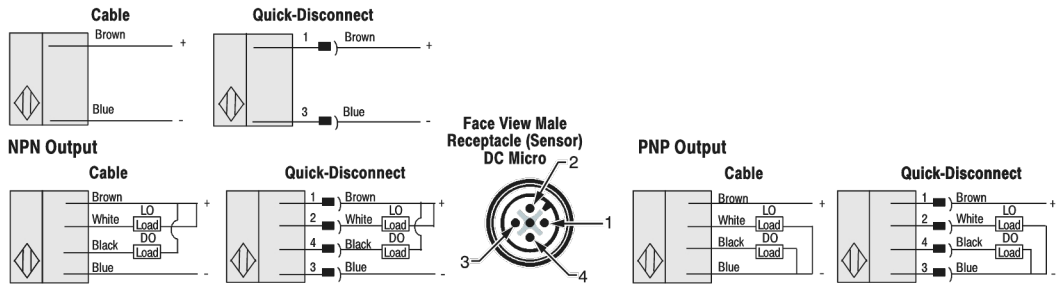
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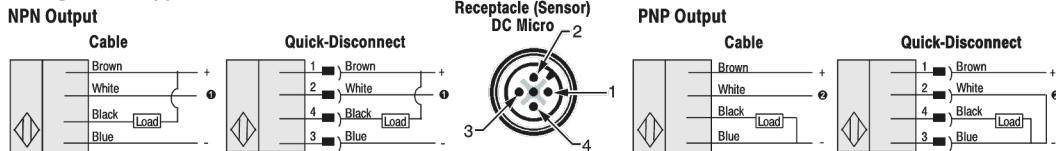
Dimension Diagram



Transmitted Beam, Retroreflective, Polarized Retroreflective



Background Suppression



- Open circuit or tie white (2) and brown (1) conductors together for L.O. Tie white (2) and blue (3) conductors together for D.O.
- Tie white (2) and brown (1) conductors together for L.O. or tie white (2) and blue (3) conductors together for D.O.

Connection / Wiring Diagram