

Catalogue No: **42CF-D1LPA2-D4**

DIFF 10-30VDC INFRARED 1-300mm LO/DO PNP DC-MICRO-4

Field Switching and Sensing > Non Contact Sensors > Photoelectric Sensors > Allen-Bradley Photoelectric Sensors > Digital Diffuse Sensors > 12mm Cylindrical



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

PHOTOSWITCH Photoelectric Sensor, 300mm, Standard Diffuse, 10-30V DC, 4-pin DC Micro QD

- 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	42CF 12 mm Metal Cylindrical
Component Type Field Switching & Sensing	Photoelectric Sensor
Sensing Mode	Diffuse
Light source type	LED
Illumination Mode	Continuous
Colour, light source	Infrared (880nm)
Beam Angle / Field of View	5.3 ° (degrees)
Spot Size	5.3 degree
Material, Lens	PMMA / Acrylic / Perspex / Plexiglas (Polymethyl methacrylate)
Material, Body / Housing	Nickel-Plated Brass material
Shape	Cylindrical - Threaded
Diameter	12 mm
Length	66 mm
Orientation	Straight Through
Mounting (Multiple)	Mounting Nuts (Included) Mounting Bracket (Ordered Separately)
Thread Size	M12 x 1 size
Teach Mode / Sensitivity Adjustment	Teach Button sensitivity
Sensing Distance, Min	1 mm min
Sensing Distance, Max	300 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 or Dark Operate Selectable
Output Type	PNP
Load Current	0.1 A

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Response Time (Off → On)	1.25 ms
Response Time (On → Off)	1.25 ms
Indicators	Yellow
Connection / Termination	M12 x 1, DC Micro, 4-pin
Number of Conductors	2 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.)	1 ms
Shock Rating	IEC 60947-5-2
Vibration Displacement (Peak to Peak Max.)	2 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:	-
Manufacturer Catalogue & Product Selection:	-

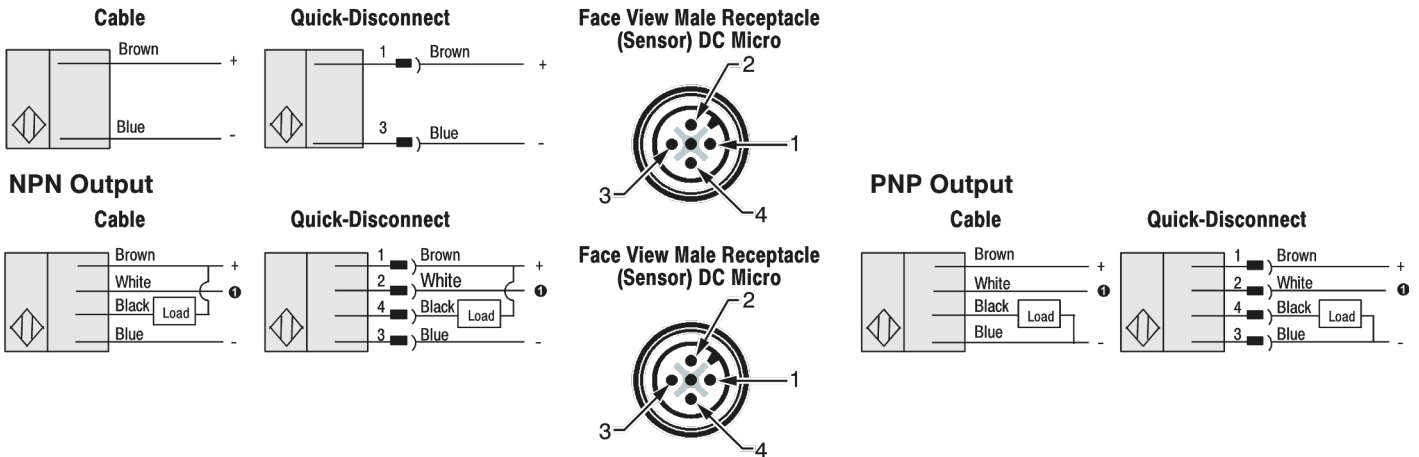
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Diffuse, Polarized Retroreflective and Transmitted Beam



- ❶ **Polarized retroreflective:** Open circuit for dark operate. Connect white (2) and brown (1) together for light operate. Connect white (2) and blue (3) together for remote teach.
- Diffuse:** Open circuit for light operate. Connect white (2) and brown (1) together for dark operate. Connect white (2) and blue (3) together for remote teach.
- Transmitted beam:** Open circuit for dark operate. Connect white (2) and brown (1) together for light operate. Connect white (2) and blue (3) together for dark operate. This model does not have remote teach.

Connection / Wiring Diagram