

**RoHS
Compliant**



Description

This Series comprises cylindrical photoelectric sensors in reflex, mirror-reflex and through-beam configurations. The range includes DC NPN/PNP and AC SCR output versions, lead-wire and M12 connector options, and horizontal or vertical sensing arrangements. Sensitivity adjustment is provided by a 270-degree trimmer. The compact polyamide housing is rated IP66 for industrial sensing applications.

Features

- 10V to 30V DC or 90V to 250V AC models
- DC models provide NPN and PNP outputs
- AC models provide SCR output
- Reflex, mirror-reflex and through-beam variants
- Horizontal and space-saving vertical versions
- Lead-wire and M12 connector options
- 270-degree sensitivity adjustment
- Short-circuit and reverse-polarity protection on DC models
- Surge protection on AC models
- IP66 polyamide housing

Specifications

Operating voltage	: 10V to 30V DC; ripple <20% Vp-p
Output method	: NPN and PNP
Output current	: 150mA max.
Residual voltage	: 0.8V Max.
Leakage current	: 0.8mA Max.
Protection circuit	: Short-circuit and reverse-polarity protection
Response time	: 2 ms
Sensitivity adjustment	: 270-degree trimmer
Hysteresis	: 10% of sensing distance max.
Ambient illumination	: Lamplight <10,000 lux; sunlight <30,000 lux
Connection	: 4-core, 5mm dia. x 2m; 4-pin plug
Housing colour	: Grey
Housing material	: Polyamide
Operating environment	: -20 C to +60 C; 35% to 95% RH
Protection rating	: IP66

Reflective Type

Connection	Output	Direction	Distance	Supply	Consumption	Output method
MP-CDR-30X	NO	Horizontal	30 cm	10-30 V DC	25 mA max.	NPN & PNP, 150 mA max.
MP-CDR-30XB	NC					
MP-CDR-10 X	NO		10 cm			
MP-CDR -10XB	NC					

Mirror-reflex type

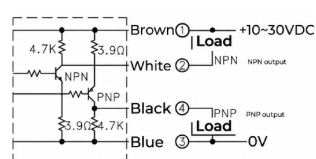
Connection	Output	Direction	Distance	Supply	Consumption	Output method
MP-CDM-2MX	NO	Horizontal	0.1-2.5 m	10-30 V DC	20 mA max.	NPN & PNP, 150 mA max.
MP-CDM-2MXB	NC					

Model code guide

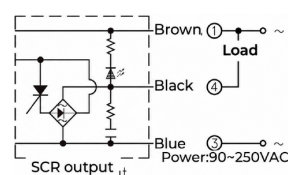
Code element	: Meaning
CDR	: DC reflex type
CAR	: AC reflex type
CDM	: DC mirror-reflex type
CAM	: AC mirror-reflex type
CDT	: DC through-beam type
10 / 30 / 2M / 10M	: Nominal sensing-distance code
X / R	: Infrared LED / red LED
B / no suffix	: NC / NO output
V / no suffix	: Vertical / horizontal sensing
M12	: M12 × 1.0 connector

Output circuit & connection diagram

Dc Type NPN & PNP Output

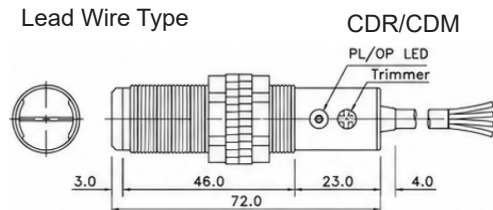


AC Type SCR Output



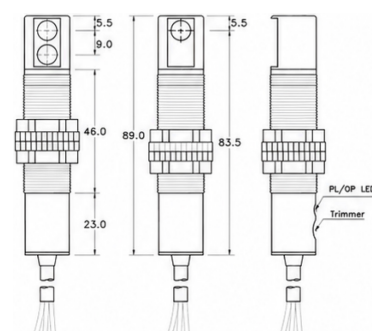
Mechanical dimensions

Lead Wire Type



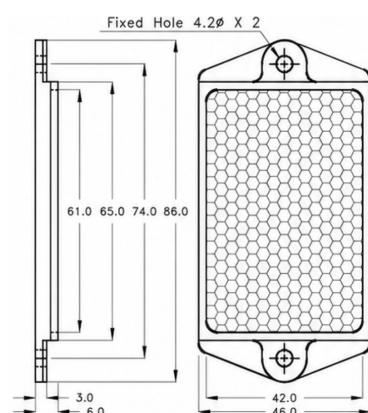
Lead Wire Type

Vertical Type



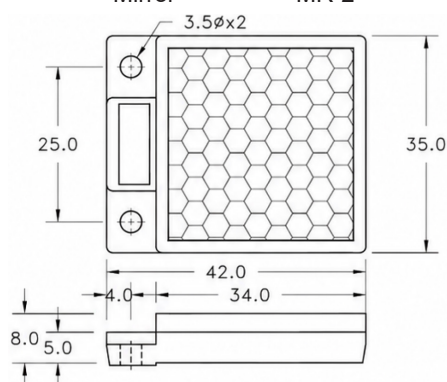
Mirror

MR-1



Mirror

MR-2



Part Number Table

Description	Output	Part Number
Photoelectric Sensor, 25mA, 10 to 30V DC, 30cm	NO	MP-CDR-30X
	NC	MP-CDR-30XB
Photoelectric Sensor, 25mA, 10 to 30V DC, 10cm	NO	MP-CDR-10X
	NC	MP-CDR -10XB
Photoelectric Sensor, 20mA, 10 To 30V DC, 0.1 to 2m	NO	MP-CDM-2MX
	NC	MP-CDM-2MXB

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.