

Photo switches transmit a beam which is reflected back from a detected object (*diffused*) or from a reflector (*retro-reflective*) or can be used with a separate transmitter and receiver (*through-beam*), typically used for longer distance sensing.

type	supply voltage	diffused	retro-reflective	polarised retro	through-beam	max. sensing distance (mm)	PNP	NPN	light-on	dark-on	connector
------	----------------	----------	------------------	-----------------	--------------	----------------------------	-----	-----	----------	---------	-----------

CX-400 series - Standard compact sensors *M8 - 4-pin connector*

CX-400 series has a high level of functionality and excellent cost performance. Moreover, a wide number of variations offering a sensor to fit all needs.

- Selectable: Light-ON or Dark-ON
- LED indication: Red: (*output ON*) Green: (*stable light received*)
- Dimensions: 31 x 11.2 x 20 mm

Diffuse reflective *proximity type detection (no transmitter or reflector required)*

CX-421-P-Z	12 - 24 VDC	•				300 mm	•	•	•	•	M8 plug
-------------------	-------------	---	--	--	--	--------	---	---	---	---	---------

Retro-reflective *used together with a reflector (supplied with reflector)*

CX-491-P-Z*	12 - 24 VDC		•			3 meters	•	•	•	•	M8 plug
CX-493-P-Z	12 - 24 VDC		•			5 meters	•	•	•	•	M8 plug
CX-483-P-Z❖	12 - 24 VDC		•			1 meters	•	•	•	•	M8 plug

* With polarizing filter ❖ For sensing transparent objects - adjustable sensing range

Thru-beam (long range) *supplied as a set with transmitter and receiver*

CX-411-P-Z	12 - 24 VDC				•	10 meters	•	•	•	•	M8 plug
CX-413-P-Z	12 - 24 VDC				•	30 meters	•	•	•	•	M8 plug

CX-400 series - Triangulation sensors (IP67) (EN60529) *M8 - 4-pin connector*

Due to their advanced optical system, Triangulation sensors are not effected by variances in the targets angle or colour. Due to the 2-segment photo-diode adjustable range system, the sensor does not detect objects outside the preset sensing distance.

- Unaffected by colour, material or background
- BGS background suppression (or) FGS foreground suppression
- Long sensing range (*adjustable via 2-turn mechanical adjuster*)
- Improved detectability even when lens is contaminated by dirt, dust, mist or smoke
- High level of basic functionality with excellent cost performance

CX-400 series - Compact triangular sensors *31 x 11.2 x 20 mm*

Triangulation sensing *for high precision detection and repeatability*

CX-441-P-Z	12 - 24 VDC	•				2...50 mm	•	•	•	•	M8 plug
CX-444-P-Z	12 - 24 VDC	•				15...100 mm	•	•	•	•	M8 plug
CX-442-P-Z	12 - 24 VDC	•				20...300 mm	•	•	•	•	M8 plug

EQ-30 series - Triangulation sensors (IP67) (EN60529) *M12 - 4-pin connector*

Featuring a 2-segment photodiode as receiving element with unique circuitry, they detect objects at the same distance regardless of colour or background beyond the adjusted sensing range.

- Sensitivity: Adjustable (*2 turn mechanical adjuster*)
- Selectable: Light-ON or Dark-ON
- LED indication: Red: (*output ON*) Green: (*stable light received*)
- Dimensions: 68 x 20 x 40 mm

Triangulation sensing *for high precision detection and repeatability*

EQ-34	10 - 30 VDC	•				2 meters	•	•	•	•	M12 plug
EQ-34-PN	10 - 30 VDC	•				2 meters	•	•	•	•	M12 plug

EQ-500 series *(IP67) (EN60529) convenient screw terminal block*

- Multi-voltage: 24 - 240 VAC / 12 - 240 VDC
- Relay output: 3A 250V - selectable: Detection-ON or Detection-OFF
- Sensitivity: Adjustable (*2 turn mechanical adjuster*)
- Timing function: 0.1 - 5s ON/OFF delay, one shot (*selectable*) "T" version only
- LED indication: Red: (*output ON*) Green: (*stable light received*)
- Dimensions: 68 x 26 x 68 mm

Triangulation sensing *for high precision detection and repeatability*

EQ-501	24 - 240 VAC/DC	•				0.2...2.5 m	•	•	•	•	screw term.
EQ-501T	24 - 240 VAC/DC	•				0.2...2.5 m	•	•	•	•	screw term.

MS-EQ501 metallic right angled foot mounting bracket EQ-501
MSCX21 L shaped metallic mounting bracket for sensor CX4...

Cables and M8/12 connectors (see page K-27 / 28)



CX-493-P-Z



CX-442-P-Z



EQ-34



EQ-501