DATA SHEET PHOTOELECTRIC SENSOR V1.0

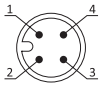
ODC300 SERIES

ARTICLE PROPERTIES

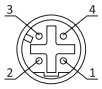
SENSOR TYPE	Optical Data Transmission
SIZE	100 x 156 x 110 mm
OPERATING DISTANCE	See table
DETECTION MODE	Data Communication

CONNECTION TYPES (*see table*)

- M12 connector A-coded



D-coded



TECHNICAL DATA

OPERATING VOLTAGE	18 ... 30 V DC	**INPUT**	1 digital switch input
RIPPLE VOLTAGE	≤ 10 %	**OUTPUT**	1 digital switch output PNP / NPN, manually set-table
LIGHT SOURCE	Red laser: 660 nm Infrared laser: 780 nm	**HOUSING MATERIAL**	Housing: aluminium alloy Front screen: glass
LASER CLASS	1 M	**VOLTAGE WITHSTANDING**	650 V/AC, 50/60 Hz, 60 s
LIGHT SPOT SIZE	1.75 m@100 m	**REVERSE POLARITY PROTECTION**	Yes
APERTURE ANGLE	1° (transmitter) 1.5° (receiver)	**OVERLOAD RESISTANCE**	Yes
TRANSMISSION SPEED	100 Mbit/s	**SHORT CIRCUIT PROTECTION**	Yes
TRANSMISSION INTERFACE	EtherCAT, EtherNet, PROFINET, PROFIsafe, TCP/IP	**MTTF**	47 years

ENVIRONMENTAL CONDITIONS

OPERATING ENVIRONMENT HUMIDITY	35 % to 85 % RH (no condensation)	**INSULATION IMPEDENCE**	≥20 MΩ (500 V DC)
PROTECTION CLASS	IP65	**SHOCK RESISTANCE (EN 60068-2-27)**	500 m/s² (50 G) 3 times X, Y, Z respectively
STORAGE TEMPERATURE	-35 ... +70 °C	**IMPACT RESISTANCE (EN 60068-2-6)**	Complex amplitude 1.5 mm 10 ... 50 Hz (2hr X, Y, Z respectively)
AMBIENT TEMPERATURE	-20 ... +50 °C		

STANDARDS AND DIRECTIVES

EMC DIRECTIVE 2014/30/EU	EN IEC 60947-5-2	**ROHS DIRECTIVE 2011/65/EU**	EN IEC 63000

ODC300 SERIES

DETECTION MODE DATA COMMUNICATION

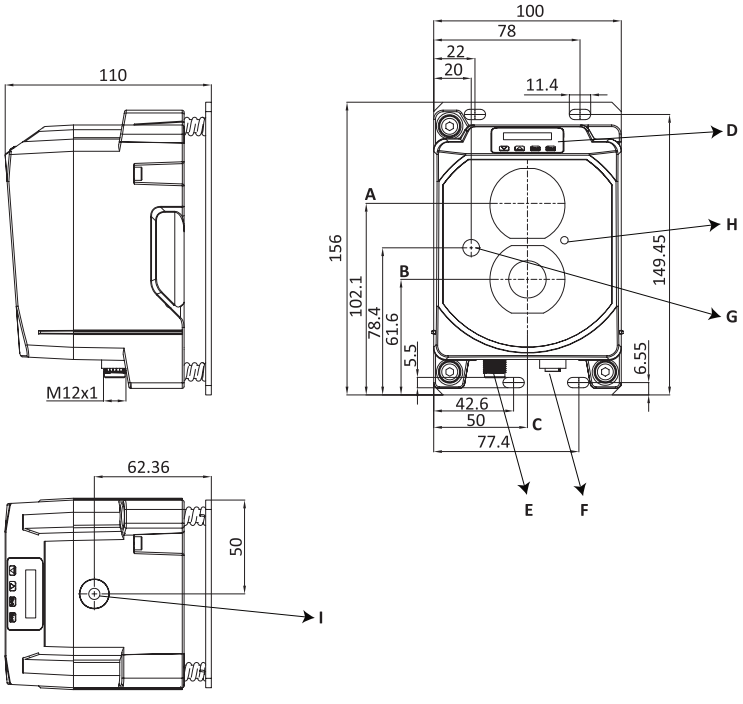
Article number		Operating distance	Light source	Output (wiring diagram)	Interface	Connection	Dimensions
ODC300-T120 (A+B)	ODC300-120ACBEN6Q12	0.3 ... 120 m	Red laser	NPN / PNP (WD1)	Ethernet (WD2)	M12 connector	*see Fig. 1*
	ODC300-120BCBEN6Q12	0.3 ... 120 m	Infrared laser	NPN / PNP (WD1)	Ethernet (WD2)	M12 connector	*see Fig. 1*

WIRING DIAGRAMS

WD1

WD2

DIMENSIONS



A: Central axis of the transmitter
B: Central axis of the receiver
C: Central axis of both transmitter and receiver
D: Button-equipped display
E: Power interface M12, 4-pin
F: Ethernet M12, 4-hole
G: Calibration laser
H: Status indicator light
I: Optical alignment assistance device

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