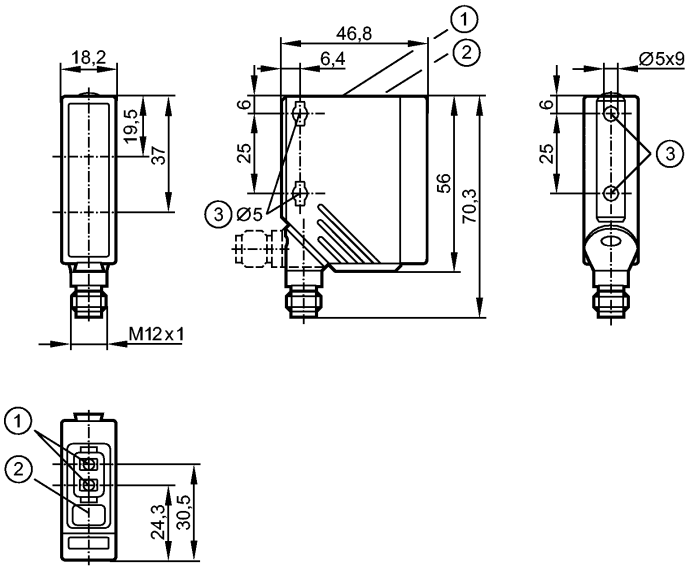
efector200

O5D100

O5DLCPKG/US

Photoelectric sensors



1: setting pushbuttons
2: 3-digit alphanumeric display
3: When a M5 mounting screw is used, the max. tightening torque is 2 Nm.

Made in Germany

CE cULus LISTED IO-Link

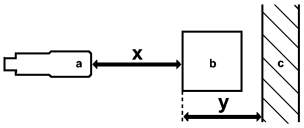
Product characteristics	
Photoelectric distance sensor	
Connector	
Background suppression	
Visible laser light, protection class 2 laser	
3-digit alphanumeric display [cm]	
adjustable	
Measuring range 0.03...2 m	
Background suppression ...20 m	

Electrical data		
Electrical design		DC PNP
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 75; @ 24 V DC
Life expectancy typ.	[h]	50000
Type of light		Red light 650 nm
Protection class		III
Reverse polarity protection		yes

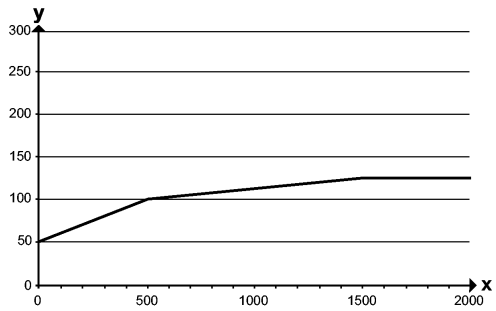
Outputs		
Output function		2 switching outputs normally open / closed complementary
Current rating	[mA]	2 x 100
Short-circuit protection		pulsed
Overload protection		yes
Switching frequency	[Hz]	11

Range		
Background suppression		...20 m
Light spot diameter	[mm]	< 5 (Range 2 m)
Hysteresis	[%]	< 6; black (6 % remission) at max. range

Accuracy graph



a: sensor
b: object
c: background
x: distance sensor / object
y: min. distance object / background

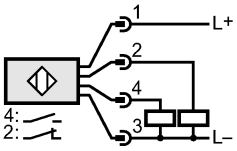


Values in [mm]

Measuring / setting range		
Measuring range	[m]	0.03...2
Sampling rate	[Hz]	33
Interfaces		
IO-Link Device		
Transfer type		COM2 (38.4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9 CDV
IO-Link Device ID		372d / 00 01 74h
SIO mode		yes
Process data analogue		-
Process data binary		2
Min. process cycle time	[ms]	6.6
Environment		
Ambient temperature	[°C]	-25...60, at ta < -10 °C warm-up is necessary, laser is off
Protection		IP 65 / IP 67
Tests / approvals		
EMC		EN 60947-5-2
MTTF	[Years]	137
Mechanical data		
Housing materials		housing: PA; bezel: high-grade stainless steel; operator interface: TPU; lens: PMMA
Weight	[kg]	0.075
Displays / operating elements		
Display		Switching status LED yellow Operation LED green Display 3-digit alphanumeric display
Electrical connection		
Connection		M12 connector

Wiring





4: OUT / IO-Link

Remarks

Remarks	Caution: Laser Light Power <= 4.4 mW wavelength = 650 nm pulse 1.3 ns Do not stare into beam Avoid exposure Class 2 laser product EN 60825-1:2007-10 extraneous light on the object max.: 8 klx cULus - Class 2 source required
Pack quantity [piece]	1