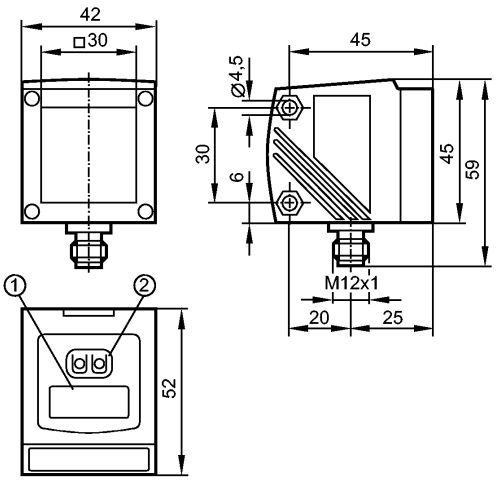
efector200

O1D101

O1DLFPKG

Photoelectric sensors



1: 4-digit alphanumeric display
2: Programming buttons

Made in Germany

Product characteristics		
Photoelectric distance sensor		
Connector		
Background suppression		
Visible laser light, protection class 2 laser		
4-digit alphanumeric display		
Measuring range 0.2...10 m (Range referred to white paper 200 x 200 mm, 90 % remission)		
Background suppression >10...100 m		
Electrical data		
Electrical design		DC PNP
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 150
Life expectancy typ.	[h]	50000
Protection class		III
Reverse polarity protection		yes
Outputs		
Output function		normally open / closed programmable
Current rating	[mA]	200
Short-circuit protection		pulsed
Overload protection		yes
Range		
Background suppression		>10...100 m
Light spot diameter	[mm]	< 15 x 15 (Range 10 m)
Measuring / setting range		
Measuring range	[m]	0.2...10 (Range referred to white paper 200 x 200 mm, 90 % remission)
Switching frequency	[Hz]	5
Environment		
Ambient temperature	[°C]	-10...60
Protection		IP 67

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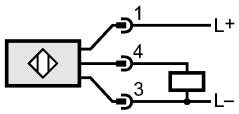
Tests / approvals		
MTTF	[Years]	227
Mechanical data		
Housing materials		housing: diecast zinc; window: glass; LED window: polycarbonate
Weight	[kg]	0.261
Displays / operating elements		
Display		Switching status LED yellow Operation LED green Distance, programming 4-digit alphanumeric display
Electrical connection		
Connection		M12 connector

Wiring



Accessories		
Accessories (optional)		Protective cover E21133
Remarks		
Remarks		Caution: Laser Light Power <= 4.1 mW wavelength = 650 nm pulse 1.3 ns Do not stare into beam Avoid exposure Class 2 laser product EN 60825-1:2003-10 cULus - Class 2 source required
Pack quantity	[piece]	1
Other data		

Repeatability / Accuracy
- extraneous light on the object max.: 40 klx

	Repeatability of the measured values		Accuracy	
	white (90 % remission)	grey (18 % remission)	white (90 % remission)	grey (18 % remission)
200...1000 mm	± 4.5 mm	± 6.0 mm	± 15.0 mm	± 16.0 mm
1000...2000 mm	± 5.0 mm	± 8.0 mm	± 15.0 mm	± 18.0 mm
2000...4000 mm	± 16.0 mm	± 19.0 mm	± 25.0 mm	± 30.0 mm
4000...6000 mm	± 24.0 mm	± 33.0 mm	± 35.0 mm	± 45.0 mm
6000...10000 mm	± 50.0 mm	--	± 65.0 mm	--

Repeatability / Accuracy
- extraneous light on the object max.: 40...100 klx

	Repeatability of the measured values		Accuracy	
	white (90 % remission)	grey (18 % remission)	white (90 % remission)	grey (18 % remission)
200...2000 mm	± 14.0 mm	± 14.0 mm	± 24.0 mm	± 24.0 mm
2000...4000 mm	± 25.0 mm	± 30.0 mm	± 35.0 mm	± 40.0 mm

4000...6000 mm	± 31.0 mm	± 45.0 mm	± 41.0 mm	± 55.0 mm
6000...10000 mm	± 60.0 mm	--	± 70.0 mm	--

Range on black (6 % remission) <= 4000 mm
The values apply at
- constant ambient conditions: 23 °C / 960 hPa
- minimum power-on time in minutes: 10