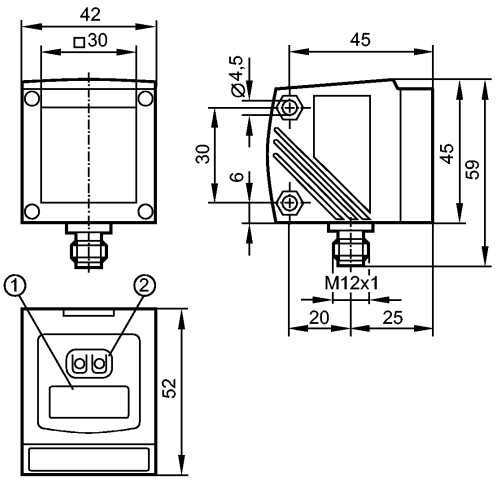
efector200

O1D155

O1DLF3KG

Photoelectric sensors



1: 4-digit alphanumeric display
2: Programming buttons

Made in Germany

Product characteristics		
Photoelectric distance sensor		
Connector		
Visible laser light, LASER CLASS 1		
4-digit alphanumeric display		
Measuring range 0.3...6 m (Range referred to white paper 200 x 200 mm, 90 % remission)		
Background suppression > 6...100 m		
Electrical data		
Electrical design		DC PNP
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 150
Life expectancy typ.	[h]	50000
Type of light		Red light 650 nm
Protection class		III
Reverse polarity protection		yes
Outputs		
Output function		OUT1: normally open / closed programmable OUT2: normally open / closed programmable or analogue (4...20 mA / 0...10 V, scalable)
Current rating	[mA]	2 x 200
Short-circuit protection		pulsed
Overload protection		yes
Analogue output		
current output	[mA]	4...20; according to IEC 61131-2
- Max. load	[Ω]	250
voltage output	[V]	0...10; according to IEC 61131-2
- Min. load	[Ω]	5000
Range		
Background suppression		> 6...100 m
Light spot diameter	[mm]	< 8 x 8 (Range 6 m)

efector200

O1D155

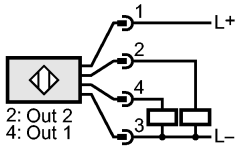
O1DLF3KG

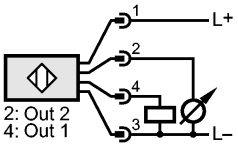
Photoelectric sensors

Measuring / setting range		
Measuring range	[m]	0.3...6 (Range referred to white paper 200 x 200 mm, 90 % remission)
Sampling rate	[Hz]	1...33
Environment		
Ambient temperature	[°C]	-10...60
Protection		IP 67
Tests / approvals		
EMC		EN 60947-5-2
MTTF	[Years]	185
Mechanical data		
Housing materials		housing: diecast zinc; window: glass; LED window: polycarbonate
Weight	[kg]	0.292
Displays / operating elements		
Display		Switching status 2 x 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		Laser light CLASS 1 LASER PRODUCT IEC 60825-1 : 2007 complies with 21 CFR 1040.10 except for deviations pursuant to Laser Notice No. 50, dated June 2007 cULus - Class 2 source required
Pack quantity	[piece]	1

Other data

Parameter	Setting range	Factory setting
Uni	mm, m, inch	mm
OU1	Hno, Hnc, Fno, Fnc	Hno
SP1	300...5999	1000
nSP1	300...5999	800
FSP1	300...5999	1200
OU2	Hno, Hnc, Fno, Fnc, I, U	I
SP2	300...5999	2000
nSP2	300...5999	1800
FSP2	300...5999	2200

ASP	0...5999	0
AEP	0...5999	5999
rATE [Hz]	1...33	15
dS1	0...0.1...5	0
dr1	0...0.1...5	0
dS2	0...0.1...5	0
dr2	0...0.1...5	0
dAP	0...0.1...5	0
dIS	d1..3; rd1...3; OFF	d3

Repeatability / Accuracy
Sampling rate 15 Hz

	Repeatability of the measured values		Accuracy	
	white (90 % remission)	grey (18 % remission)	white (90 % remission)	grey (18 % remission)
300...1000 mm	± 11 mm	± 13 mm	± 31 mm	± 33 mm
1000...2000 mm	± 28 mm	± 30 mm	± 48 mm	± 50 mm
2000...3000 mm	± 50 mm	± 50 mm	± 70 mm	± 70 mm
3000...4000 mm	± 85 mm	± 85 mm	± 105 mm	± 105 mm
4000...5000 mm	± 105 mm	--	± 125 mm	--
5000...6000 mm	± 145 mm	--	± 165 mm	--

Repeatability / Accuracy
Sampling rate 1 Hz

	Repeatability of the measured values		Accuracy	
	white (90 % remission)	grey (18 % remission)	white (90 % remission)	grey (18 % remission)
300...1000 mm	± 8 mm	± 10 mm	± 28 mm	± 30 mm
1000...2000 mm	± 25 mm	± 25 mm	± 45 mm	± 45 mm
2000...3000 mm	± 38 mm	± 38 mm	± 58 mm	± 58 mm
3000...4000 mm	± 70 mm	± 70 mm	± 90 mm	± 90 mm
4000...5000 mm	± 100 mm	--	± 120 mm	--
5000...6000 mm	± 100 mm	--	± 120 mm	--

Range on black (6 % remission) <= 2500 mm
The values apply at
- constant ambient conditions: 23 °C / 960 hPa
- extraneous light on the object max.: 100 klx
- minimum power-on time in minutes: 10