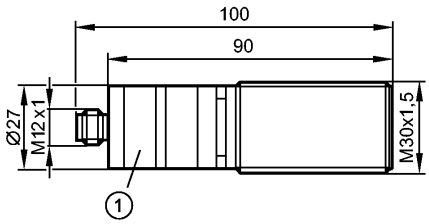
efector200

OID200

OIDLCPKG/US

Photoelectric sensors



1: setting ring

Made in Germany

Product characteristics

Photoelectric distance sensor
Connector
Background suppression
Visible laser light, protection class 2 laser
setting ring
manually adjustable [cm/inch]
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

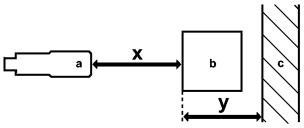
Outputs

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	[%]	< 5; black (6 % remission) at max. range

Accuracy graph

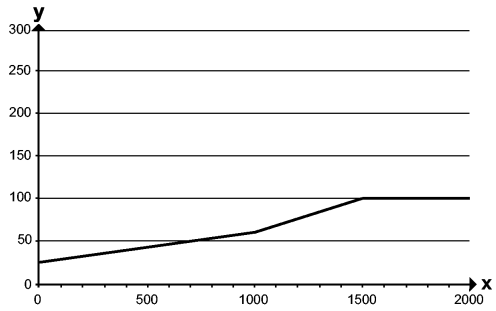


a: sensor
b: object
c: background
x: distance sensor / object
y: min. distance object / background

OID200

OIDLCPKG/US

Photoelectric sensors



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		373d / 00 01 75h
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]	157

Mechanical data

Housing materials		housing: stainless steel; window: PMMA; LED window: polycarbonate; PBT (Pocan); PC (Makrolon); FPM (Viton)
Weight	[kg]	0.209

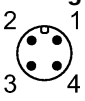
Displays / operating elements

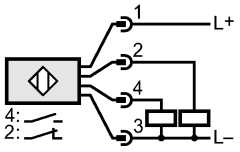
Display	Switching status LED yellow Operation LED green

Electrical connection

Connection	M12 connector

Wiring





4: OUT / IO-Link

Accessories

Accessories (included)	2 lock nuts VA (stainless steel); M30

Remarks

Remarks	Caution: Laser Light Power <= 4.0 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