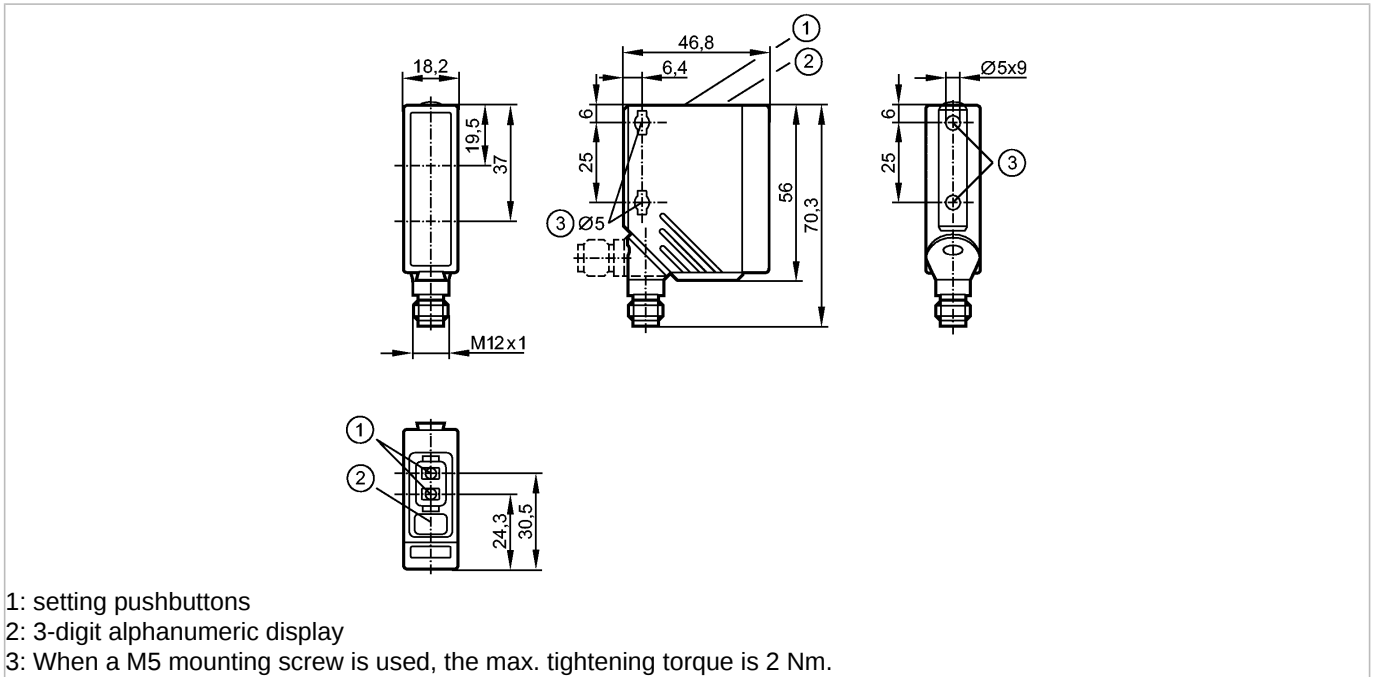


O5D100

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.

CE  

Made in Germany

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

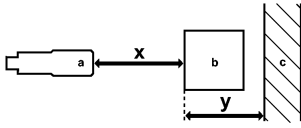
Background suppression	...20 m
Light spot diameter [mm]	< 5 (Range 2 m)
Hysteresis [%]	< 6; black (6 % remission) at max. range

O5D100

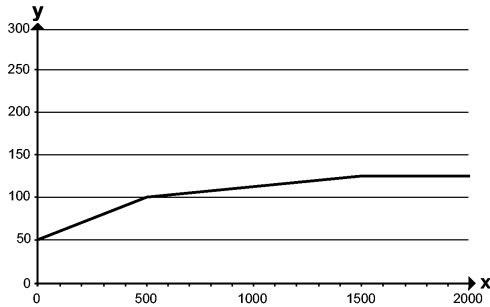
O5DLCPKG/US

Photoelectric sensors

Accuracy graph



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



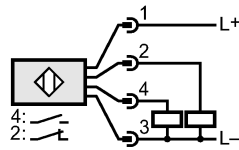
Values in [mm]

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 $t_a < -10$ °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	

O5D100

O5DLCPKG/US

Photoelectric sensors



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