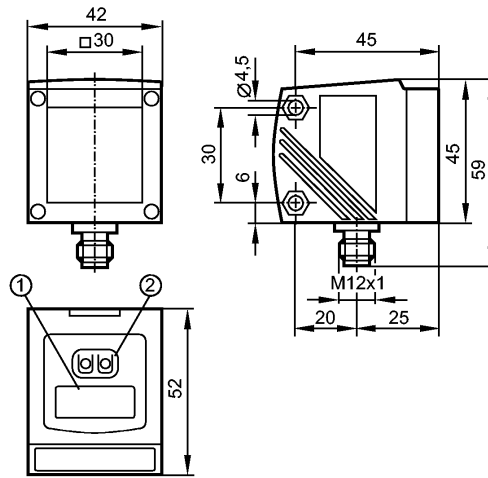


**O1D106**

O1DLF3KG

Photoelectric sensors



- 1: 4-digit alphanumeric display
- 2: Programming buttons



Made in Germany

**Product characteristics**

Photoelectric distance sensor
Connector
Visible laser light, protection class 2 laser
4-digit alphanumeric display
Measuring range 1...75 m (on reflector E21159)
Background suppression > 75...150 m
Application 1...150 m

**Application**

Application	[m]	1...150
-------------	-----	---------

**Electrical data**

Electrical design		DC PNP
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 150
Life expectancy typ.	[h]	50000
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**

## O1D106

O1DLF3KG

Photoelectric sensors

Background suppression	> 75...150 m
Light spot diameter [mm]	< 150 x 150 ( Sensing range 75 m )

### Measuring / setting range

Measuring range [m]	1...75 (on reflector E21159)
Sampling rate [Hz]	1...33

### Environment

Ambient temperature [°C]	-10...60
Protection	IP 67

### Tests / approvals

EMC	EN 60947-5-2
MTTF [Years]	186

### Mechanical data

Housing materials	housing: diecast zinc; window: glass; LED window: polycarbonate
Weight [kg]	0.293

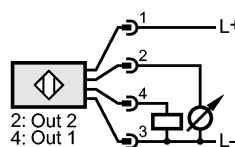
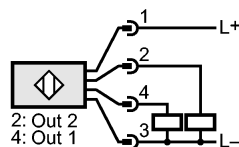
### Displays / operating elements

Display	Switching status      2 x LED yellow Operation                LED green Distance, programming 4-digit alphanumeric display
---------	--

### Electrical connection

Connection	M12 connector
------------	---------------

### Wiring



### Remarks

Remarks	<p>Caution: Laser Light                  Power &lt;= 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</p>
---------	---

Pack quantity [piece]	1
-----------------------	---

### Other data

Parameter	Setting range	Factory setting
Uni	m, feet	m
OU1	Hno, Hnc, Fno, Fnc	Hno
SP1	1.00...75.00	10.00
nSP1	1.00...75.00	8.00
FSP1	1.00...75.00	12.00
OU2	Hno, Hnc, Fno, Fnc, I, U	I
SP2	1.00...75.00	20.00
nSP2	1.00...75.00	18.00

**O1D106**

O1DLF3KG

**Photoelectric sensors**

FSP2	1.00...75.00	22.00
ASP	0...75.00	0
AEP	0...75.00	75.00
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	0.3
dIS	d1...3; rd1...3; OFF	d3

**Repeatability / Accuracy**

**Sampling rate 33 Hz on reflector**

	Repeatability of the measured values	Accuracy
1...25 m	± 15 mm	± 35 mm
30 m	± 15 mm	± 35 mm
40 m	± 15 mm	± 35 mm
50 m	± 19 mm	± 39 mm
60 m	± 27 mm	± 47 mm
70 m	± 43 mm	± 63 mm

**Repeatability / Accuracy**

**Sampling rate 1 Hz on reflector**

	Repeatability of the measured values	Accuracy
1...75 m	± 15 mm	± 35 mm

The values apply at

- constant ambient conditions: 23 °C / 960 hPa
- extraneous light max.: 100 klx
- minimum power-on time in minutes: 10