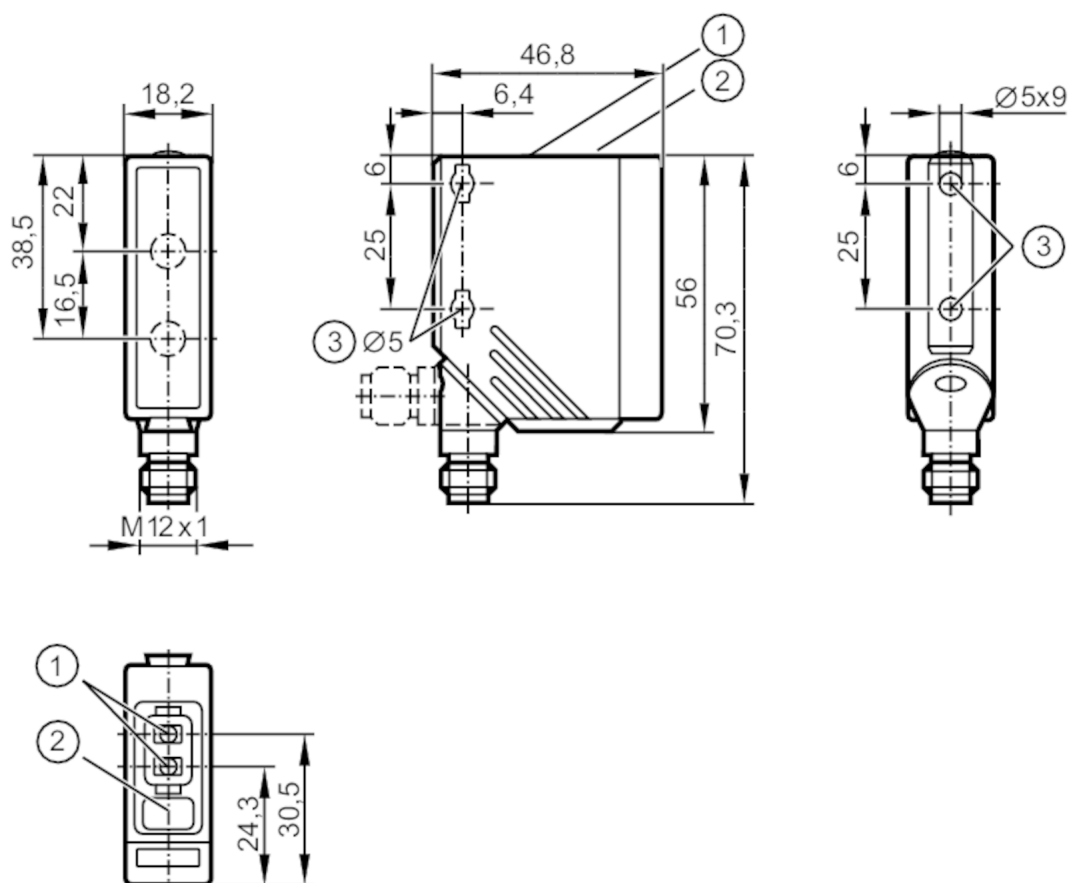


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Photoelectric distance sensor

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- 1: setting pushbuttons
2: alphanumeric display 3-digit
3: Tightening torque < 2 Nm when using a mounting screw M5



Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	75; (24 V)
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	650
Typ. lifetime	[h]	50000



Photoelectric distance sensor

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Outputs		
Total number of outputs		2
Electrical design		NPN
Number of digital outputs		2
Output function		normally open / normally closed; (complementary)
Max. current load per output [mA]		100
Switching frequency DC [Hz]		11
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Detection zone		
Max. light spot diameter [mm]		5
Light spot dimensions refer to		2 m
Detection range hysteresis [%]		< 4
Note on monitoring range hysteresis		black
Background suppression available		yes
Background suppression [m]		< 20
Measuring/setting range		
Measuring range [m]		0.03...2
Sampling rate [Hz]		33
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9
IO-Link device ID		372d / 00 01 74h
SIO mode		yes
Process data binary		2
Min. process cycle time [ms]		6.6
Operating conditions		
Ambient temperature [°C]		-25...60
Note on ambient temperature		at ta < -10 °C warm-up is necessary, laser is off
Protection		IP 65; IP 67
Max. immunity to extraneous light [klx]		10; (on the object)

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Photoelectric distance sensor

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Tests / approvals		
EMC	EN 60947-5-2	
Laser protection class	1	
Notes on laser protection	Caution:	laser light
	laser class:	1
	IEC 60825-1:2007	
	IEC 60825-1:2014	
	corresponds to	21 CFR Part 1040
except for deviations pursuant to Laser Notice No. 50, dated June 2007		
MTTF	[years]	151
Mechanical data		
Weight	[g]	77
Housing	rectangular	
Dimensions	[mm]	56 x 18.2 x 46.8
Materials	housing: PA; bezel: stainless steel; operator interface: TPU; lens: PMMA	
Lens alignment	side lens	
Displays / operating elements		
Display	switching status	LED, yellow switching output PIN 4
	operation	LED, green
	Display	alphanumeric display, 3-digit
Display unit	cm	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12		
		

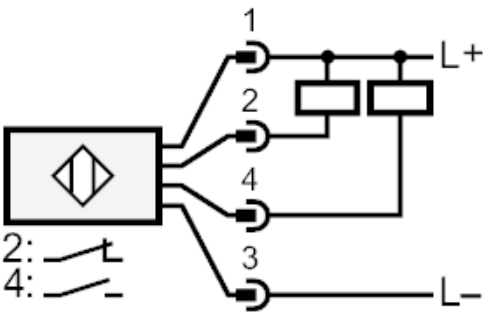
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Connection



4: OUT / IO-Link

Other data

Accuracy

	Accuracy			
distance	black (6 % remission)	white (90 % remission)		
0 mm	± 25 mm	± 25 mm		
500 mm	± 25 mm	± 25 mm		
1000 mm	± 25 mm	± 25 mm		
1500 mm	± 40 mm	± 30 mm		
2000 mm	± 50 mm	± 30 mm		
Extraneous light on the object		< 10 klx		

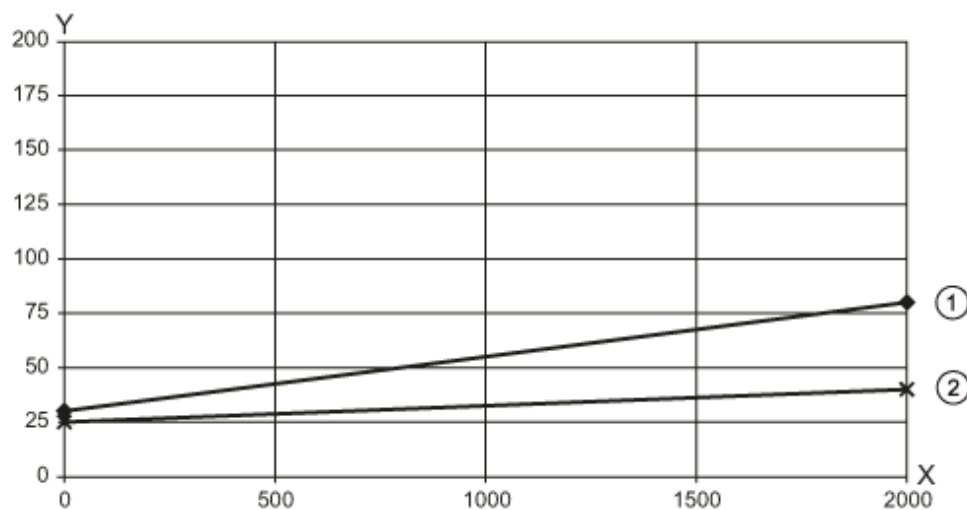


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Diagrams and graphs

hysteresis graph



x: distance [mm]

y: Hysteresis [mm]

1 = background black 6 % remission

2 = background white 90 % remission