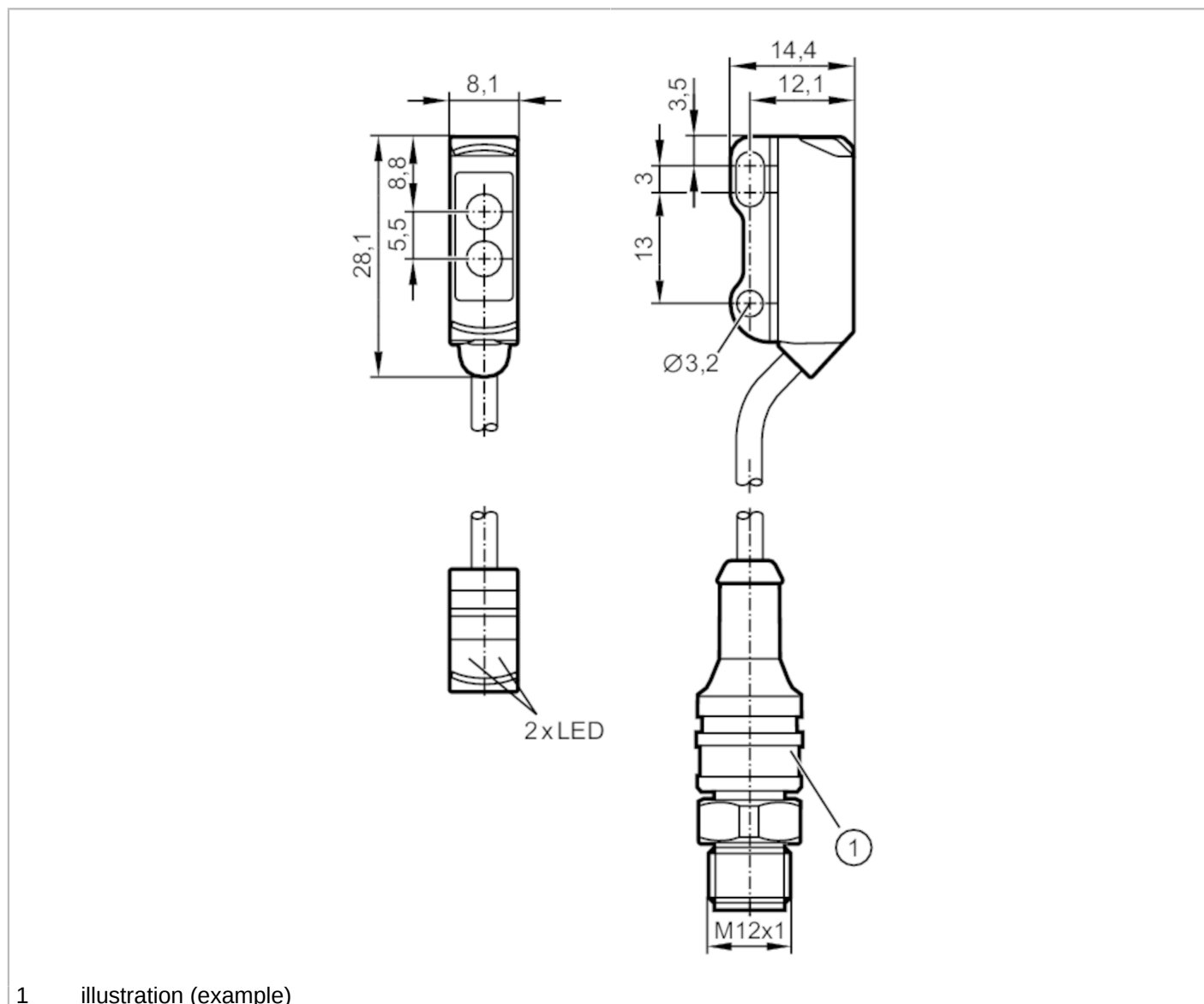


O8H273



Diffuse reflection sensor with background suppression

O8H-FPKG/IO-Link/0,30M/US/4P



1 illustration (example)



Product characteristics

Type of light	red light
Communication interface	IO-Link
Housing	rectangular
Dimensions [mm]	28.1 x 8.1 x 14.4

Application

Special feature	Background suppression
Function principle	Diffuse reflection sensor



Diffuse reflection sensor with background suppression

O8H-FPKG/IO-Link/0,30M/US/4P

Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	20; ((24 V))
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	633
Outputs		
Electrical design		PNP
Output function		light-on/dark-on mode; (programmable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	1000
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Detection zone		
Range	[mm]	1...80; (white paper 200 x 200 mm)
Range on white object (90 % remission)	[mm]	1...80
Range on grey object (18 % remission)	[mm]	3...76
Range on black object (6 % remission)	[mm]	5...74
Range adjustable		yes
Max. light spot diameter	[mm]	4
Light spot dimensions refer to		at maximum range
Monitoring range final value	[mm]	10...80
Background suppression available		yes
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		535 d / 00 02 17 h
Profiles		Smart Sensor: Device Identification; Device Diagnosis; Teach Channel; Binary Data Channel
SIO mode		yes
Required master port type		A
Operating conditions		
Ambient temperature	[°C]	-25...60
Protection		IP 65; IP 67

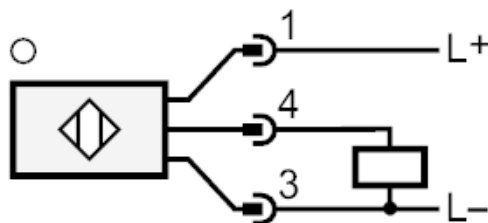
O8H273



Diffuse reflection sensor with background suppression

O8H-FPKG/IO-Link/0,30M/US/4P

Tests / approvals		
EMC	EN 60947-5-2	
MTTF [years]		756
Mechanical data		
Weight [g]		27
Housing		rectangular
Dimensions [mm]		28.1 x 8.1 x 14.4
Materials		housing: ABS; stainless steel (1.4404 / 316L)
Lens material		PMMA
Lens alignment		side lens
Displays / operating elements		
Display	switching status	1 x LED, yellow
	operation	1 x LED, green
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Cable: 0.3 m, PVC; 3 x 0.08 mm ²		
Connection		



Electrical connection - plug

Connector: 1 x M12



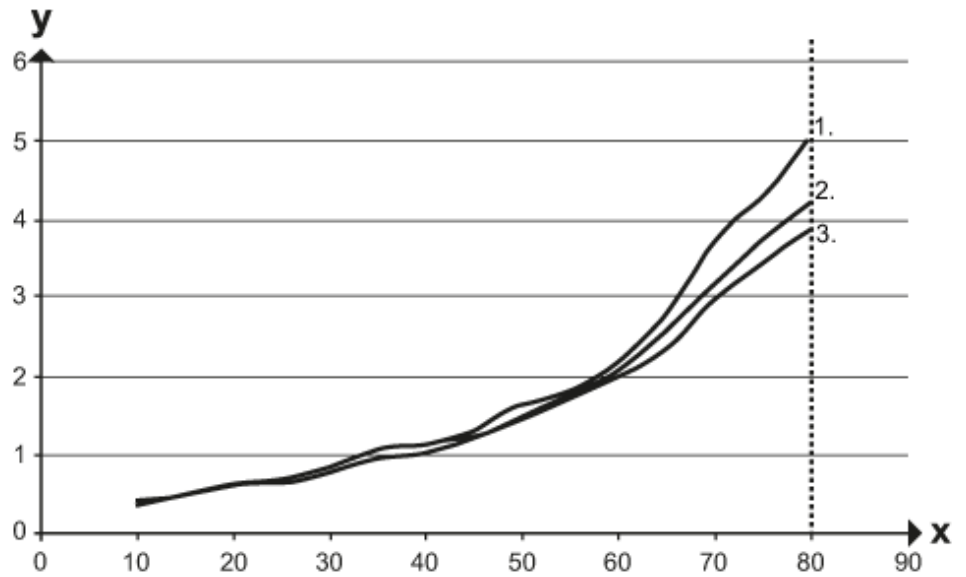


Diffuse reflection sensor with background suppression

O8H-FPKG/IO-Link/0,30M/US/4P

Diagrams and graphs

accuracy graph



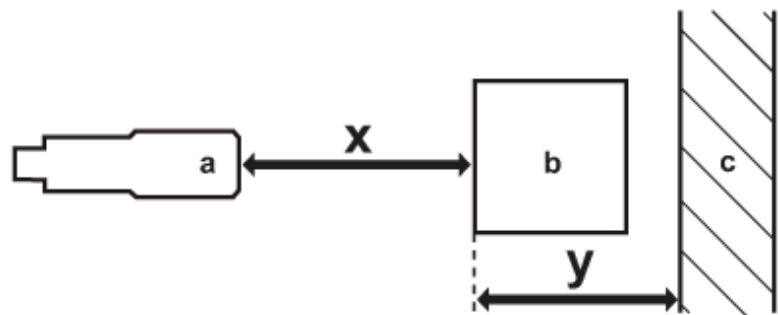
x: distance sensor/object [mm]

y: min. distance object/background [mm]

1 = object black (6 % remission) , background (white 90 % remission)

2 = object grey (18 % remission) , background (white 90 % remission)

3 = object white (90 % remission) , background (white 90 % remission)



a: sensor

b: object

c: background

x: distance sensor/object [mm]

y: min. distance object/background [mm]