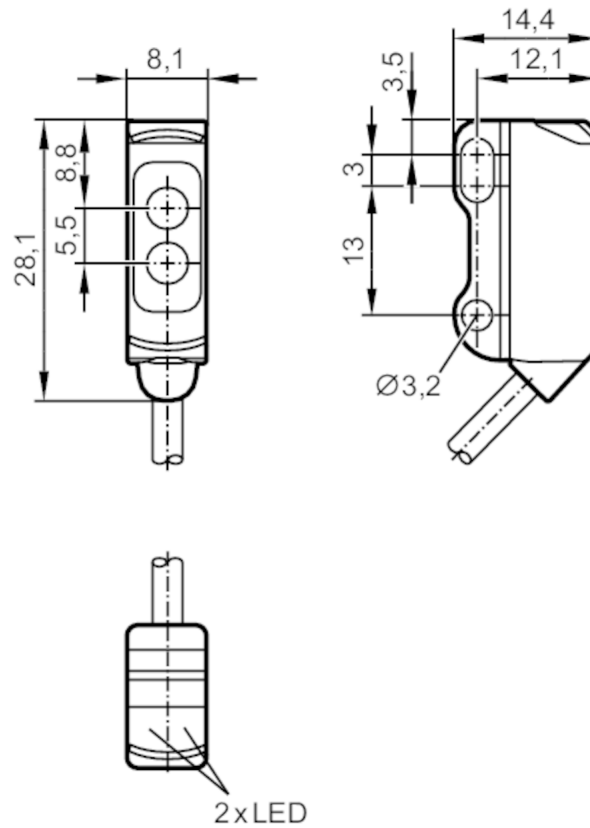


O8H270



Diffuse reflection sensor with background suppression

O8H-FPKG/IO-Link/2,0M



receiver in upper lens
transmitter in lower lens



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
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



Diffuse reflection sensor with background suppression

O8H-FPKG/IO-Link/2,0M

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
Tests / approvals	
EMC	EN 60947-5-2
MTTF [years]	756

O8H270

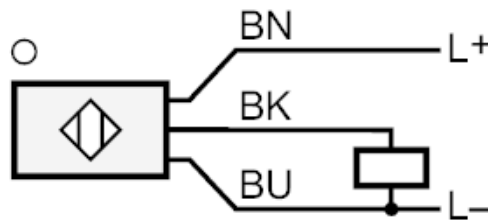


Diffuse reflection sensor with background suppression

O8H-FPKG/IO-Link/2,0M

Mechanical data		
Weight	[g]	37.3
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: 2 m, PVC; 3 x 0.08 mm ²		

Connection



- BK = IO-Link
Core colours :
- BK = black
BN = brown
BU = blue

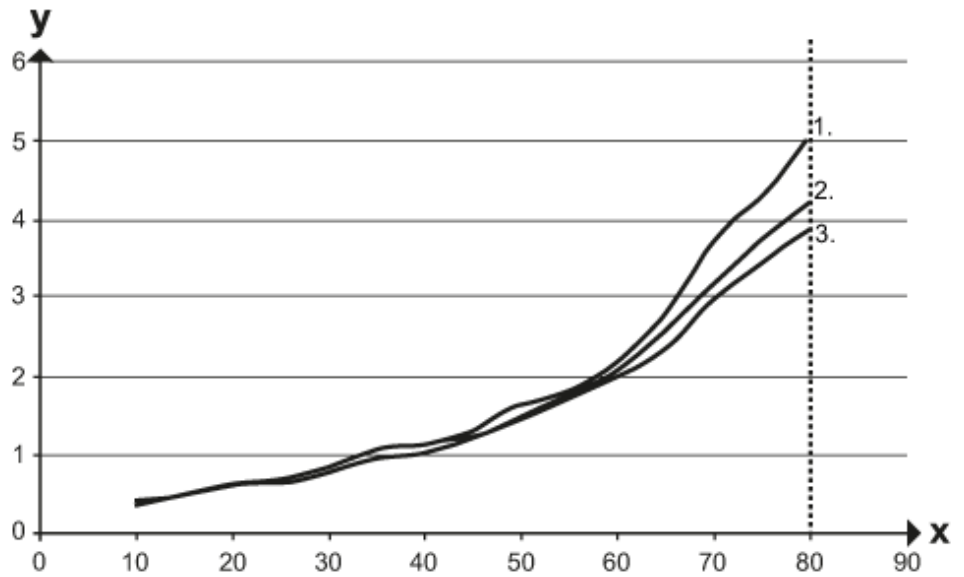


Diffuse reflection sensor with background suppression

O8H-FPKG/IO-Link/2,0M

Diagrams and graphs

accuracy graph



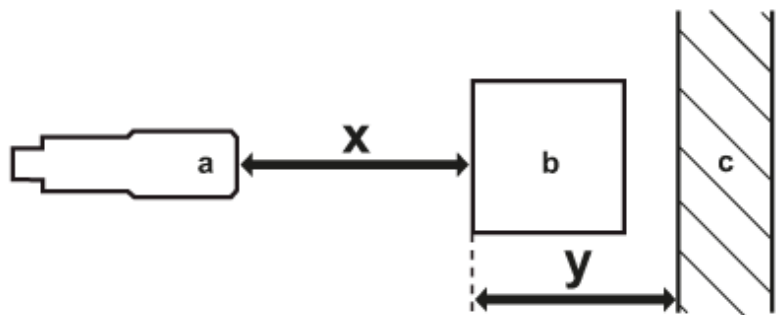
x: distance sensor/object [mm]

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]