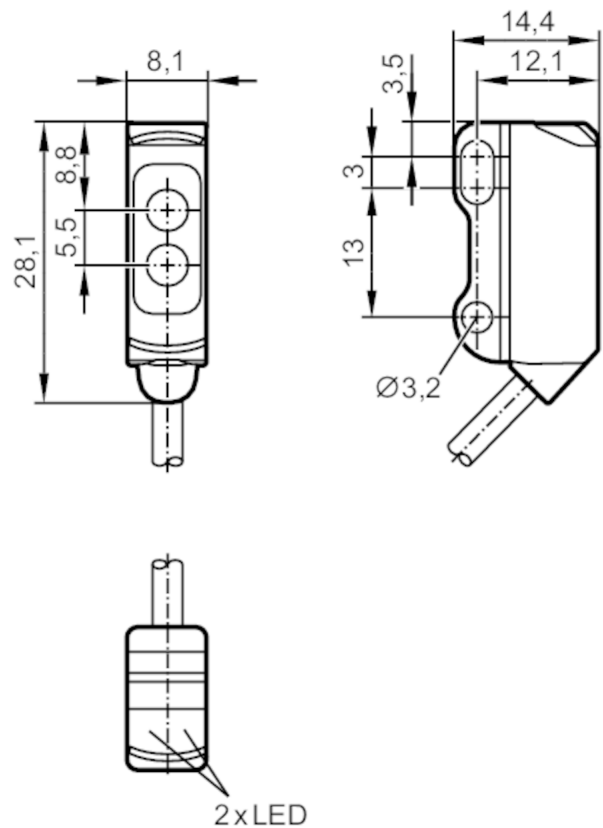


O8H212



Diffuse reflection sensor with background suppression

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



receiver in upper lens
transmitter in lower lens



Application	
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-HPKG/IO-Link/2,0M

Outputs		
Electrical design		PNP
Output function		light-on mode
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...50; (white paper 200 x 200 mm)
Range on white object (90 % remission) [mm]		1...50
Range on grey object (18 % remission) [mm]		3...50
Range on black object (6 % remission) [mm]		5...50
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]		757

O8H212



Diffuse reflection sensor with background suppression

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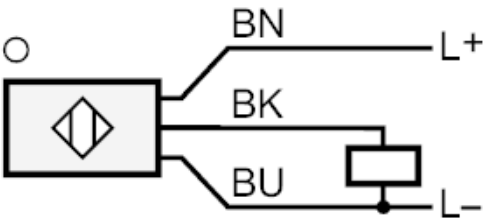
Mechanical data		
Weight	[g]	39
Housing		rectangular
Dimensions	[mm]	28.1 x 8.1 x 14.4
Materials		housing: ABS; stainless steel (1.4404 / 316L)
Lens material		PMMA
Lens alignment		side lens

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

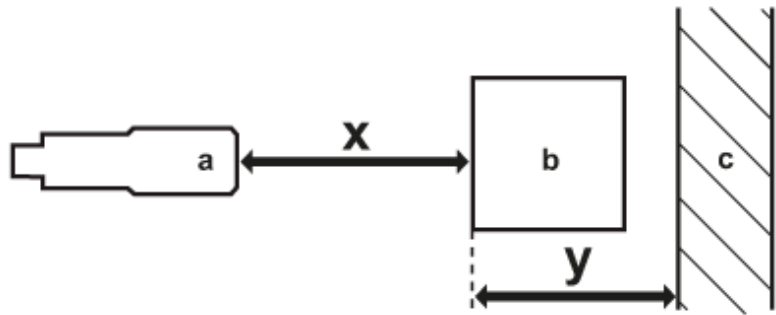


	Core colours :
BN =	brown
BK =	black
BU =	blue

Diffuse reflection sensor with background suppression

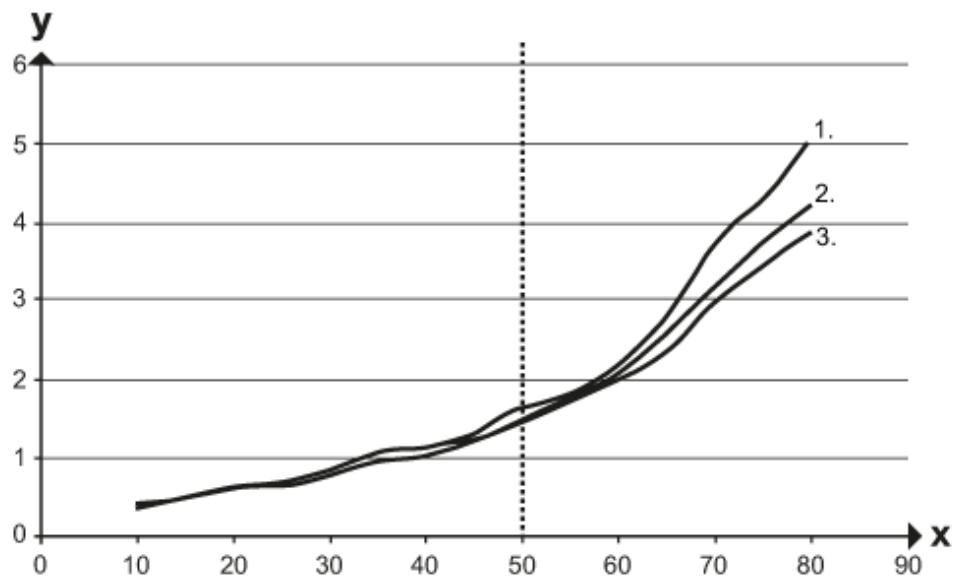
O8H-HPKG/IO-Link/2,0M

Diagrams and graphs



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

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)