

FT 10-RF1-PNSL-K4

Ordering information

Designation for ordering FT 10-RF1-PNSL-K4

Part number 600-11052

Order text Photoelectric diffuse sensor with background suppression (fixed focus), 15mm, LED, auto-detect, fixed adjustment, 2m 4-wire cable, IP 67, IO-Link

Components supplied Operating manual, Sensor, Jaw clamps



Optical data

Working range [mm]	2 ... 15
Explanation working range	Reference material white, 90% remission
Light source	LED
Light color	Red
Wavelength [nm]	650
Light spot size [mm]	See diagram
Switching frequency ≤ [Hz]	≤ 1,000
Explanation of switching frequency	f (ti/tp 1:1)

Functions

Display, LED yellow	Switching output indicator
Display, LED green	Operating voltage indicator
Display, LED orange	Operating voltage indicator
Setting options	N.O. / N.C. via control input and IO-Link

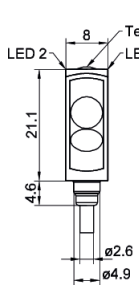
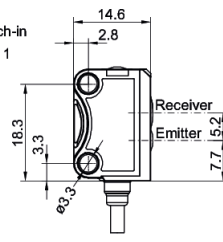
IO-Link

Data storage	Yes
Communication mode	COM 2
Length of the process data [Bit]	16
Min. cycle time [ms]	2.3
SIO mode	is supported
IO-Link specification	1.1

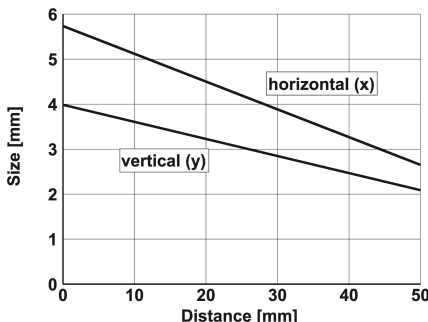
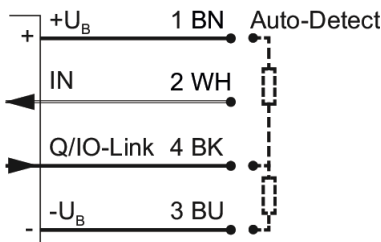
Electrical data	
Operating voltage UB [V DC]	10 ... 30
Explanation of operating voltage UB	max. 10% residual ripple, within UB approx. 50 Hz / 100 Hz
No-load current [mA]	≤ 20
Output current [mA]	≤ 50
Reverse polarity protection	Yes
Short circuit protection	Yes
Response time Q [μs]	≤ 500
Control input	+UB = N.C. (normally closed contact) -UB / open = N.O. (normally open contact)
Protection class	2
Output function	N.O./N.C.
Switching output Q	1x Auto-Detect (automatische Auswahl PNP oder NPN)
Explanation of switching output Q	Auto-Detect: automatic selection of PNP or NPN by sensor, PNP or NPN can be configured permanently
Switching output Q	

Mechanical data	
Height [mm]	8.0
Length [mm]	21.1
Width [mm]	14.6
Weight [g]	~ 22
Front panel material	PMMA
Housing material	PUR
Ambient temperature: operation [°C]	-20 ... 60
Explanation of operation at ambient air temperature	UL: -20 ... +30 °C
Ambient temperature: storage [°C]	-20 ... 80
Protection class	IP 67
Connection name	Cable, 2 m, 4-wire, IO-Link

Working range	
Target	Arbeitsbereich
Weiß, 90%	2...15 mm
Grau, 20%	3...15 mm
Schwarz, 5%	5...15 mm

Technical drawings	
Dimensional drawing 	Cable connection 

153-01110

Light spot size	<table><caption>Light spot size data</caption><tr><th>Distance [mm]</th><th>Horizontal (x) Size [mm]</th><th>Vertical (y) Size [mm]</th></tr><tr><td>0</td><td>6</td><td>4</td></tr><tr><td>10</td><td>5.2</td><td>3.6</td></tr><tr><td>20</td><td>4.4</td><td>3.2</td></tr><tr><td>30</td><td>3.6</td><td>2.8</td></tr><tr><td>40</td><td>2.8</td><td>2.4</td></tr><tr><td>50</td><td>3</td><td>2</td></tr></table> 155-01769	Distance [mm]	Horizontal (x) Size [mm]	Vertical (y) Size [mm]	0	6	4	10	5.2	3.6	20	4.4	3.2	30	3.6	2.8	40	2.8	2.4	50	3	2
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50	3	2																				
Connections	Receiver  154-00566 The sensor must be used with shielded cables.																					

Product link

<https://www.sensopart.com/en/products/details/600-11052>