

1: pushbutton
Receiver in upper lens
transmitter in lower lens



Product characteristics
Diffuse reflection sensor
Rectangular, plastics
Quick disconnect
Electronic lock
Background suppression
External teach function
Side sensing

Range 15...400mm (Range referred to white paper 200 x 200 mm, 90 % remission)
adjustable

Electrical data

Electrical design

Operating voltage [V]

Current consumption [mA]

Type of light

Protection class

Reverse polarity protection

Outputs

Output function

Voltage drop [V]

Current rating [mA]

Short-circuit protection

Overload protection

Switching frequency [Hz]

Monitoring range

Range [mm]

Light spot diameter [mm]

DC NPN

10...30 DC

25

red light 660 nm

III

yes

light-on / dark-on programmable

< 2.5

200

yes (non-latching)

yes

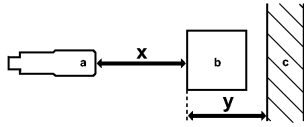
1000

15...400 (Range referred to white paper 200 x 200 mm, 90 % remission)

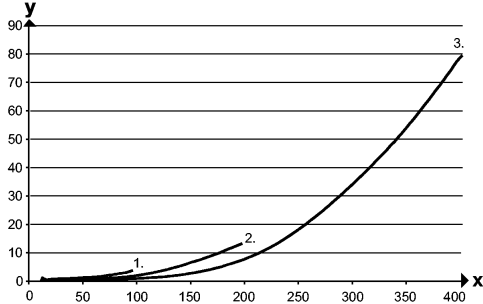
< 18 (Range 150 mm)

Background suppression chart

OJ5049 - Diffuse reflection sensor - eclass: 27270904 / 27-27-09-04



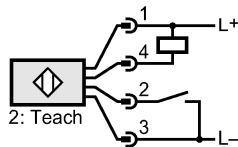
a: sensor
 b: object
 c: background
 x: distance sensor / object
 y: min. distance object / background



Values in [mm]
 1 = object black (6 % remission), background white (90 % remission)
 2 = object gray (18 % remission), background white (90 % remission)
 3 = object white (90 % remission), background white (90 % remission)

Environment	
Ambient temperature [°C]	-25...60
Protection	IP 67
Tests / approvals	
EMC	EN 60947-5-2
MTTF [Years]	574
Mechanical data	
Housing materials	housing: ABS; fixture: diecast zinc; LED window: SEPS; pushbutton: SEPS
Lens material	PMMA
Weight [kg]	0.035
Displays / operating elements	
Output status indication LED	yellow
Power LED	green
Electrical connection	
Connection	M8 connector

Wiring



Accessories	
Accessories (included)	Basic clip; E20964; 2 mounting screws; M3 x 16; 2 spring washers; 2 nuts
Remarks	
Remarks	cULus - Class 2 source required
Pack quantity [piece]	1