

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 PNP

10...30 DC

25

red light 660 nm

III

yes

light-on / dark-on programmable

< 2.5

200

yes (non-latching)

yes

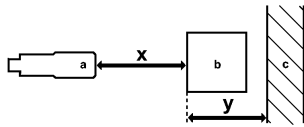
1000

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

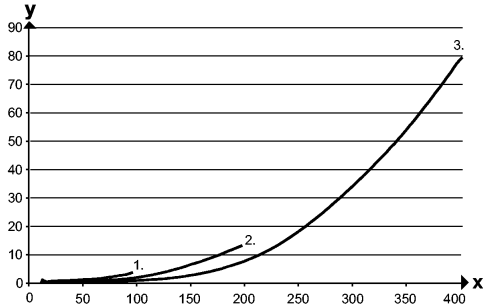
< 18 ( Range 150 mm )

**Background suppression chart**

**OJ5048 - Diffuse reflection sensor - eclass: 27270904 / 27-27-09-04**



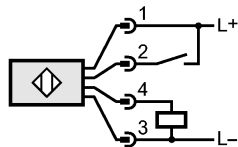
a: sensor  
 b: object  
 c: background  
 x: distance sensor / object  
 y: min. distance object / background



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]                  | 556   |
| Mechanical data               |   |
| Housing materials             | housing: ABS; fixture: diecast zinc; LED window: SEPS; pushbutton: SEPS |
| Lens material                 | PMMA  |
| Weight [kg]                   | 0.047   |
| Displays / operating elements |   |
| Output status indication LED  | yellow  |
| Power LED                     | green   |
| Electrical connection         |   |
| Connection                    | M8 connector  |

**Wiring**



**2: Teach**

|                        |  |
|------------------------|--|
| 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  |