efector200

ifm electronic

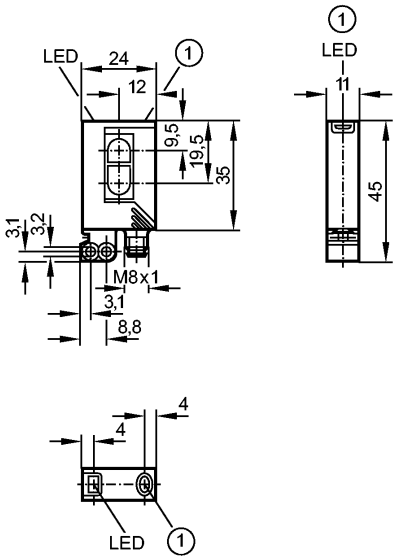
Photoelectric sensors

OJ5052

OJHLFPKG/FO/AS
Diffuse reflection sensor
Rectangular, plastics
Connector

Electronic lock
Visible laser light, LASER CLASS 1
LASER diffuse reflection sensor
Background suppression
External teach function
Front sensing

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



1: pushbutton
Receiver in upper lens
transmitter in lower lens

Made in Germany

Electrical design	DC PNP
Output	light-on / dark-on programmable
Smallest detectable object [Ø in mm]	2
Light spot diameter [mm]	2x1 (vertical)
Operating voltage [V]	10...30 DC
Current rating [mA]	200
Short-circuit protection	pulsed
Reverse polarity protection	yes
Overload protection	yes
Voltage drop [V]	< 2.5
Current consumption [mA]	13
Switching frequency [Hz]	1000
Type of light	red light 650 nm
Life expectancy typ. [h]	50000
Ambient temperature [°C]	-10...60
Protection	IP 67, III
EMC	EN 60947-5-2
MTTF [Years]	501
Housing materials	housing: ABS; fixture: diecast zinc; LED window: SEPS; pushbutton: SEPS
Lens material	PMMA
Function display	
Switching status LED	yellow
Operation LED	green
Connection	M8 connector
Weight [kg]	0.055
Remarks	Laser light CLASS 1 LASER PRODUCT IEC 60825-1 : 2007 complies with 21 CFR 1040.10 except for deviations pursuant to Laser Notice No. 50, dated June 2007 cULus - Class 2 source required
Accessories (included)	Basic clip, E20964, 2 mounting screws, M3 x 16, 2 spring washers, 2 nuts

efector200

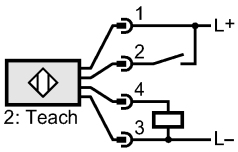
ifm electronic

OJ5052

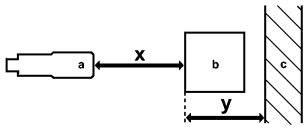
OJ5052

Wiring

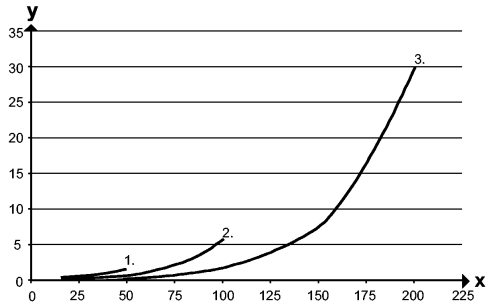




Accuracy graph



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 grey (18 % remission), background white (90 % remission)
3 = object white (90 % remission), background white (90 % remission)