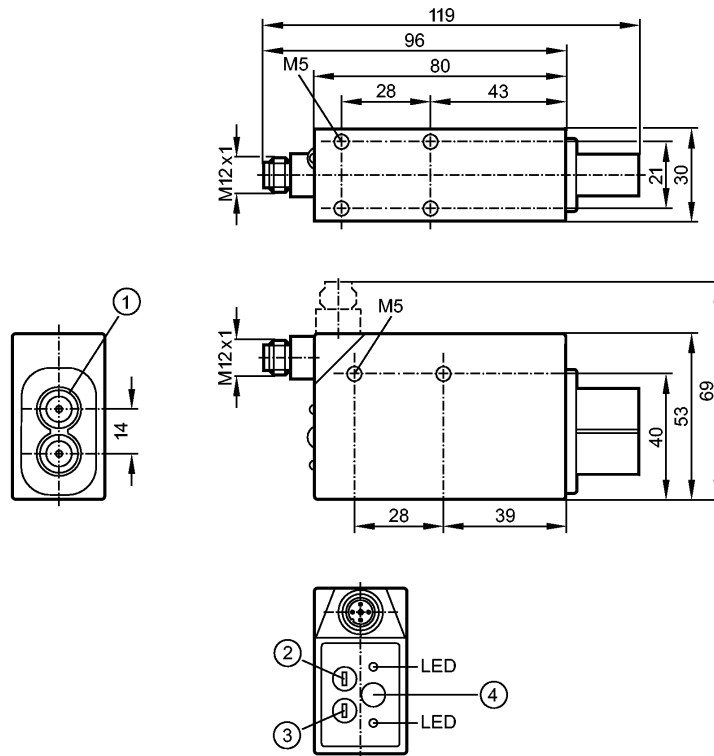




ODF-MPKG/US

Photoelectric sensors



- 1: fiber optic connection
- 2: selection switch color tolerance
- 3: programming selector switch
- 4: teach button



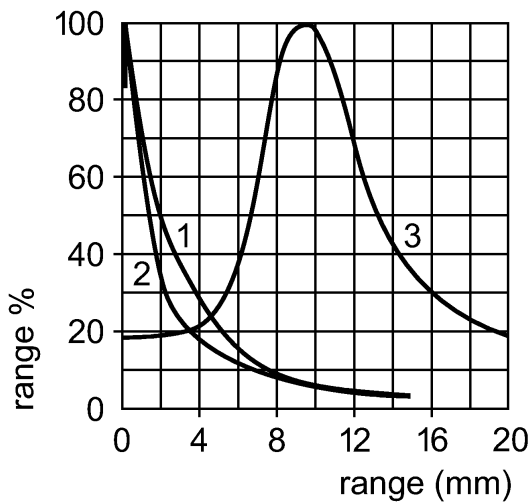
Product characteristics

Color sensor	
Rectangular Metal	
Quick disconnect	
Color detection with fiber-optic	
Teach-in method, 1 colour programmable, color resolution to be set	
Sensing range 2...4mm (Through-beam sensor)	
Range 9mm (in diffuse reflection mode)	
Electrical data	
Electrical design	DC PNP
Operating voltage [V]	12...30 DC
Residual ripple [Vss]	< 5
Current consumption [mA]	80
Type of light	red light; green light; blue light
Life expectancy typ. [h]	100000 (25 °C)
Protection class	II
Type of operation	to be selected: permanent or synchronized (deactivated) 20 ms switch-off delay

Inputs

Input external teach ET	reference colour is programmed via input wire ET activate Teach-in : 12...30 V RUN mode: 0...2 V pulse duration: > 0.5 ms
Input AT activation trigger	sensor deactivated: 12...30 V sensor activated: 0...2 V response time: < 0.2 ms
Outputs	
Voltage drop [V]	2
Current rating [mA]	100
Switching frequency [Hz]	1000
Monitoring range	
Sensing range [m]	0.002...0.004 (Through-beam sensor)
Range [mm]	9 (in diffuse reflection mode)

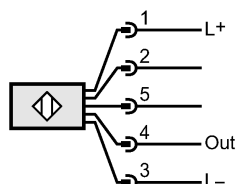
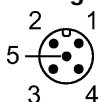
Background suppression chart



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 Note: range % = setting in % of the range

Reaction times	
Response time [ms]	0.7
Environment	
Immunity to extraneous light [klx]	20
Ambient temperature [°C]	-10...55
Protection	IP 67
Tests / approvals	
EMC	EN 60947-5-2
Mechanical data	
Housing materials	diecast zinc
Weight [kg]	0.377
Displays / operating elements	
Power LED	green
Function display LED	yellow
Electrical connection	
Connection	M12 connector

Wiring



OD5013 - Color sensor - eclass: 27270907 / 27-27-09-07

2: Input AT activation trigger
5: input "External Teach"

Accessories

Accessories (included)

2 coupling nuts

Remarks

Pack quantity

[piece]

1

ifm efector, inc. • 1100 Atwater Drive • Malvern • PA 19355 — We reserve the right to make technical alterations without prior notice. — US — OD5013 — 30.11.2006
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