O6T301
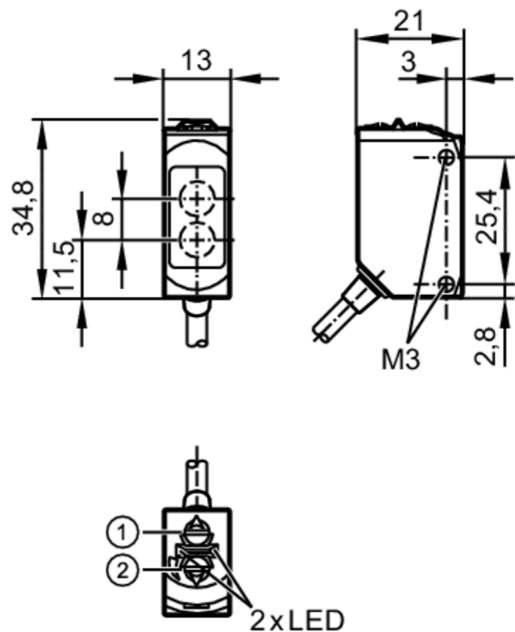
Diffuse reflection sensor

O6T-FPKG/0,30m/US

1   output function switch
1   potentiometer sensitivity
    receiver in upper lens
    transmitter in lower lens

Product characteristics

Type of light	red light
Housing	rectangular

Application

Function principle	Diffuse reflection sensor

Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	16; ((24 V))
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	633

Outputs

Electrical design		PNP
Output function		light-on/dark-on mode; (selectable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	1000
Short-circuit protection		yes
Type of short-circuit protection		pulsed

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Detection zone		
Range	[mm]	5...500; (white paper 200 x 200 mm 90% remission)
Setting range	[mm]	100...500
Range adjustable		yes
Max. light spot diameter	[mm]	15
Light spot dimensions refer to		at maximum range

Operating conditions		
Ambient temperature	[°C]	-25...80
Protection		IP 65; IP 67; IP 68; IP 69K

Tests / approvals		
EMC	EN 60947-5-2	
MTTF	[years]	910
UL approval	UL Approval no.	E006

Mechanical data		
Weight	[g]	51.2
Housing		rectangular
Materials		housing: stainless steel (316L/1.4404); plastics: PPSU; Sealing: EPDM
Lens material		PMMA
Lens alignment		side lens
Tightening torque	[Nm]	1; (screws)

Displays / operating elements		
Display	switching status	1 x LED, yellow
	operation	1 x LED, green

Remarks		
Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.

Electrical connection
Cable: 0.3 m, PVC; 3 x 0.25 mm²
Connector: 1 x M12; coding: A

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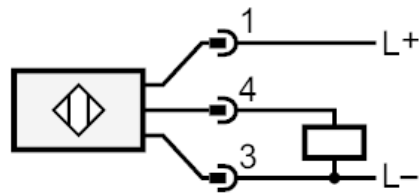### Diffuse reflection sensor

O6T-FPKG/0,30m/US

Connection

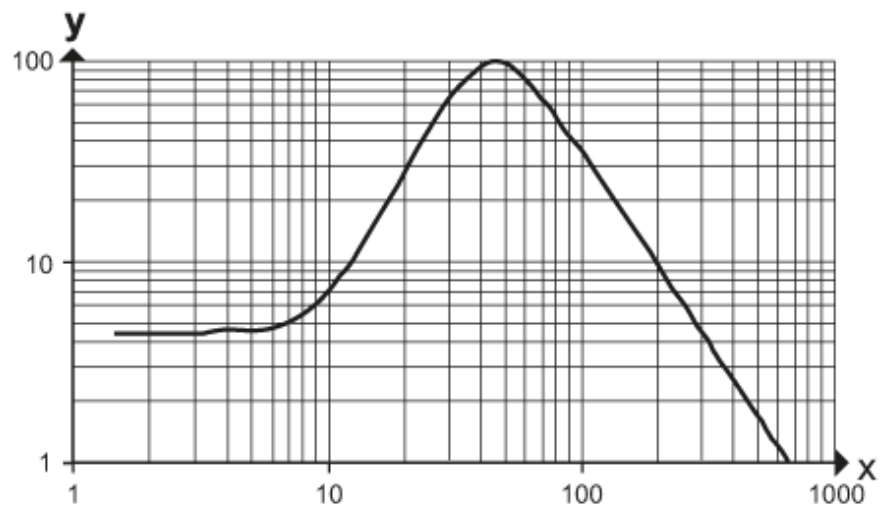## Diagrams and graphs

excess gain graph

x: distance [mm]

y: excess gain factor