



Retro-reflective sensor

O6P-FNKG/0,30m/US



- 1 output function switch
 2 potentiometer sensitivity
 Receiver in upper lens
 transmitter in lower lens



Product characteristics

Type of light	red light
Housing	rectangular

Application

System	polarization filter
Function principle	Retro-reflective sensor
Application	suited for use in the machine tool industry

Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	12; ((24 V))
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	633

Outputs

Electrical design		NPN
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		yes (non-latching)

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Monitoring range		
Range referred to prismatic reflector	[m]	0.05...5; (Prismatic reflector Ø 80 E20005)
Range adjustable		yes
Max. light spot diameter	[mm]	150
Light spot dimensions refer to		at maximum range
Polarization filter available		yes
Operating conditions		
Ambient temperature	[°C]	-25...60
Protection		IP 65; IP 67; IP 68
Tests / approvals		
EMC		EN 60947-5-2
MTTF	[years]	895
UL approval	Ta	-25...50 °C
	Enclosure type	Type 1
	voltage supply	Class 2
	UL approval number	E020
Mechanical data		
Weight	[g]	51.5
Housing		rectangular
Dimensions	[mm]	34.8 x 13 x 21
Material		housing: stainless steel (1.4404 / 316L); plastics: PPSU; sealing: FKM
Lens material		PMMA
Lens alignment		Side sensing
Tightening torque	[Nm]	1; (screws)
Displays / operating elements		
Display	Switching status	1 x LED, yellow
	Power	1 x LED, green
Remarks		
Remarks		cULus - Class 2 source required
Pack quantity		1 pcs.
Electrical connection		
Cable: 0.3 m, PUR; 3 x 0.25 mm ²		
Connector: 1 x M12; coding: A		

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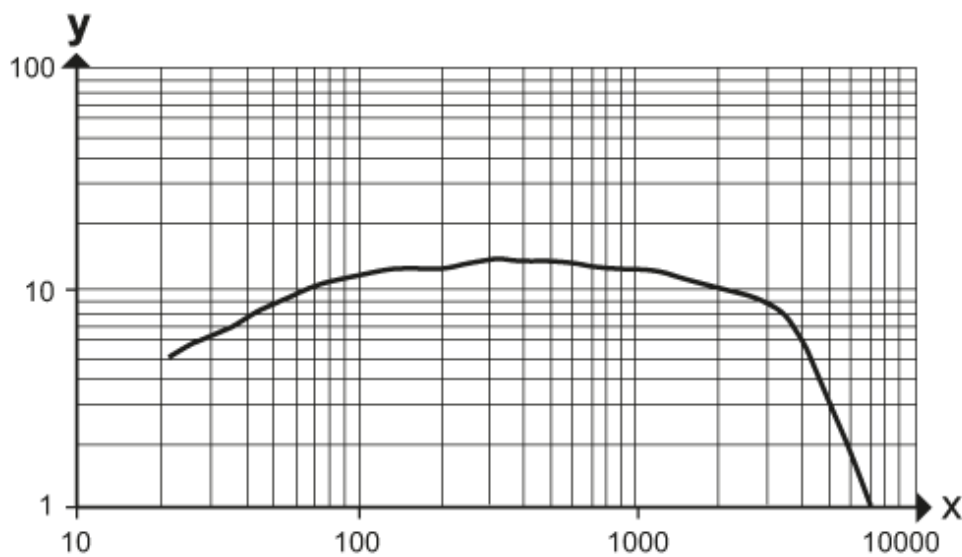
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Connection



Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor