O6T403
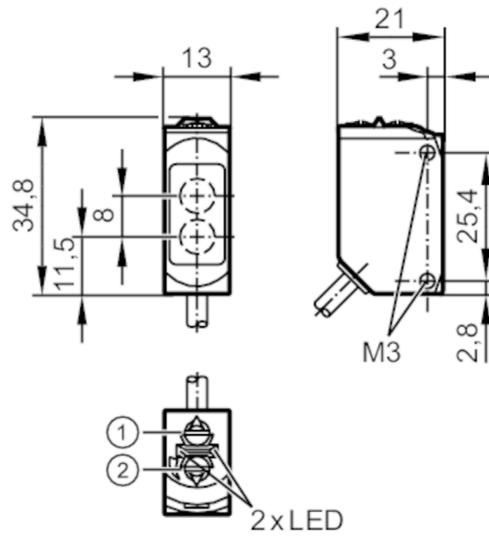
Diffuse reflection sensor

O6T-FNKG/5M

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	
Function principle	Diffuse reflection sensor
Application	suited for use in the machine tool industry
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	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	[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...60
Protection		IP 65; IP 67; IP 68

Tests / approvals		
EMC	EN 60947-5-2	
MTTF	[years]	896
UL approval	Ta	-25...60 °C
	Enclosure type	Type 1
	voltage supply	Class 2
	UL approval number	E018

Mechanical data		
Weight	[g]	133.3
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.

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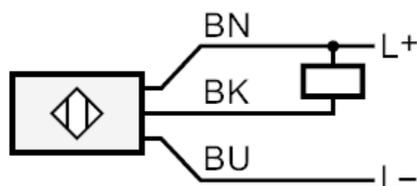### Diffuse reflection sensor

O6T-FNKG/5M

Electrical connection

Cable: 5 m, PUR; 3 x 0.25 mm²

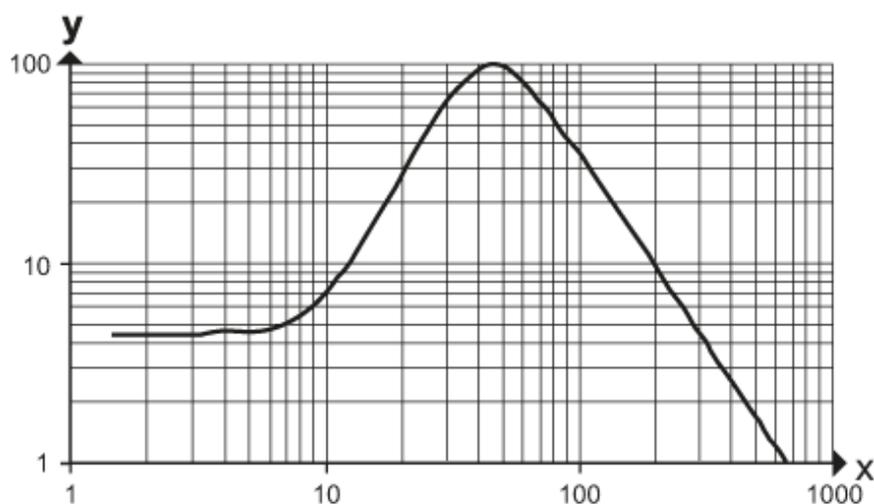Connection

Core colors :
BN =   brown
BK =   black
BU =   blue

Diagrams and graphs

excess gain graph

x: distance [mm]

y: excess gain factor