



OJ100-F6-E23

Fibre optics sensor

OJ100-F6-E23

CE



- ◆ For plastic fibre optics
- ◆ Light/dark ON, switchable
- ◆ Visible red light
- ◆ Pre-fault indication and output (dynamic)
- ◆ Protected against mutual interference
- ◆ Protection degree IP63
- ◆ DIN rail mounting

Release date: 2005-07-14 13:11 Date of issue: 2005-07-14 023381_ENG.xml

General specifications

Upper limit of the sensing range	depending on fitted light guide
Reference target	standard white 50 mm x 50 mm (only for TLK)
Light type	Red light 660 nm
Ambient light limit	≤ 40000 Lux sun light ≤ 30000 Lux halogen light

Indicators/operating means

LED yellow	switching state
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Electrical specifications

Rated operational voltage U_e	10 ... 30 V DC , ripple 10 % _{SS}
No-load supply current I_0	≤ 30 mA
Time delay before availability t_v	20 ms

Output

Output type	1 switch output E2/E3, pnp NO/NC switchable pre-fault output: npn, NO
Rated operational current I_e	switch output: 200 mA Output of the pre-fault indication 10 mA each short/overload protected
Voltage drop U_d	≤ 2.5 V
Switching frequency f	≤ 1.5 kHz switchable
Switch-on delay t_{on}	2.5 ms by 200 kHz 0.3 ms at 1.5 kHz

Standard conformity

Standards	EN 60947-5-2
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Ambient conditions

Ambient temperature	-25 ... 70 °C (248 ... 343 K)
Storage temperature	-40 ... 80 °C (233 ... 353 K)

Mechanical specifications

Protection degree	IP63 according to EN 60 947-5-2
Connection	2 m cable, 4 x 0,34 mm ² , PUR
Material	
Housing	PBT
Mass	80 g



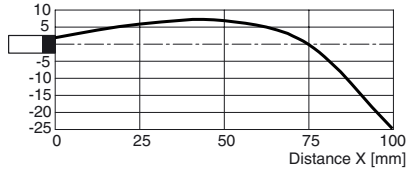
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Curves/diagrams

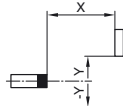
Characteristic response curve

Operating mode:
Direct detection with TLK 70-K59-P-2000

Offset Y [mm]

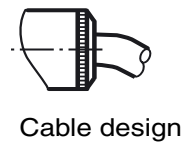
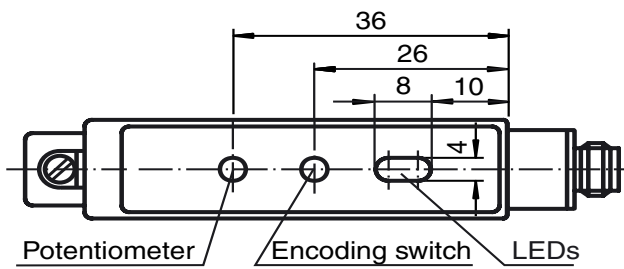
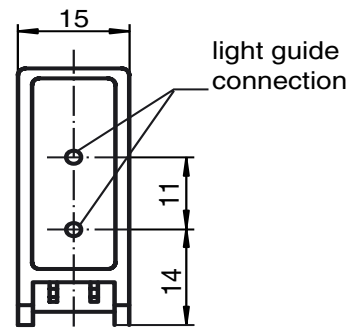
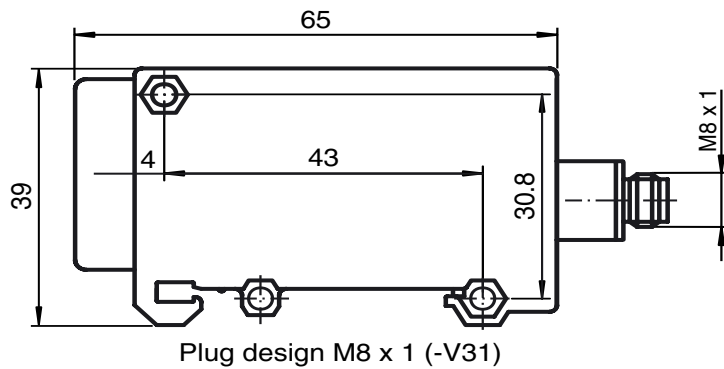


Permissible distance (offset)
between optical axis and
object.



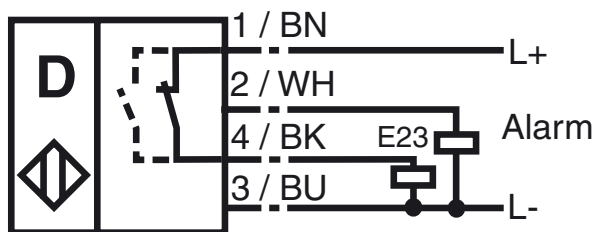
Programmable via encoding switch	Code	Switch output	Pulse frequency	Pulse extension	Switch frequency
Switch output: N.O. (E2)/ N.C. (E3)	0	N.O.	1	0 ms	200 Hz
	1	N.O.	1	0 ms	1.5 Hz
	2	N.O.	1	20 ms	200 Hz
	3	N.O.	1	20 ms	1.5 Hz
Pulse frequency: Frequency 1/ Frequency 2	4	N.O.	2	0 ms	200 Hz
	5	N.O.	2	0 ms	1.5 Hz
	6	N.O.	2	20 ms	200 Hz
	7	N.O.	2	20 ms	1.5 Hz
Pulse extension: 0 ms / 20 ms	8	N.C.	1	0 ms	200 Hz
	9	N.C.	1	0 ms	1.5 Hz
	A	N.C.	1	20 ms	200 Hz
	B	N.C.	1	20 ms	1.5 Hz
Switch frequency: 200 Hz / 1.5 kHz	C	N.C.	2	0 ms	200 Hz
	D	N.C.	2	0 ms	1.5 Hz
	E	N.C.	2	20 ms	200 Hz
	F	N.C.	2	20 ms	1.5 Hz

Dimensions



Electrical connection

E23:



Pre-fault indicator WH
Switch output BK