FGL

Fork sensors with metal housings



PRODUCT HIGHLIGHTS

- Robust metal housings
- Small part detection from 0.3 mm
- High switching frequency of 1500 Hz
- Precise sensitivity adjustment via potentiometer
- N.O. N.C. switchable

Optical data	
Fork width	20 … 30 mm (see selection table)
Type of light	LED, red, 640 nm
Smallest detectable part	0.3 mm
Repeatability	0.02 mm

Functions	
Indicator LED, yellow	Switching output indicator
Sensitivity adjustment	Via potentiometer
Adjustment possibilities	N.O. / N.C. via potentiometer

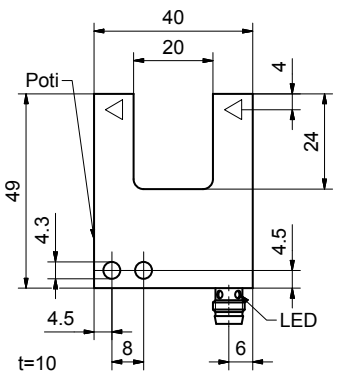
Electrical data	
Operating voltage, $+U_B$	10 … 30 V DC[1]
No-load current, I_0	≤ 35 mA
Output current, Ie	≤ 200 mA
Voltage drop, U_D	< 3 V
Protective circuits	Reverse polarity protection, U_B / Short-circuit protection (Q)
Protection Class	2
Switching output, Q	PNP
Output function	N.O. / N.C.
Switching frequency, f (ti/tp 1:1)	1500 Hz

Mechanical data	
Dimensions	(See plug connection)
Enclosure rating	IP 67[2]
Material, housing	Die-cast zinc (GD Zn)
Material, active areas	Glass
Type of connection	See selection table
Ambient temperature: operation	-10 … +60 °C
Ambient temperature: storage	-20 … +80 °C
Weight	See selection table
Vibration and impact resistance	EN 60947-5-2

[1] Max. 10 % ripple, within U_B [2] With connected IP 67 plug

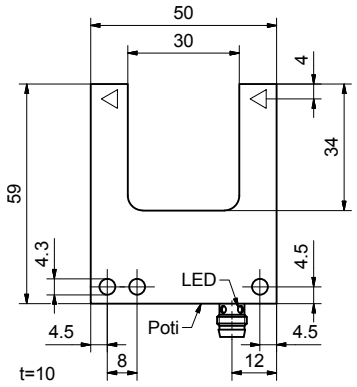
Fork width	Type of connection	Weight	Part number	Article number
20 mm	Metal plug, M8x1, 3-pin	50 g	FGL 20-R-PSM3	830-11002
30 mm	Metal plug, M8x1, 3-pin	66 g	FGL 30-R-PSM3	830-11003

Plug connection (20 mm fork width)



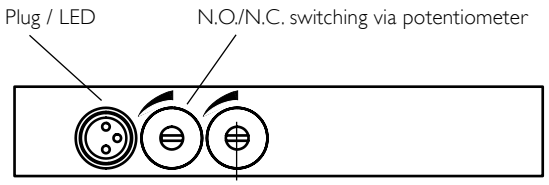
153-00264

Plug connection (30 mm fork width)



153-00265

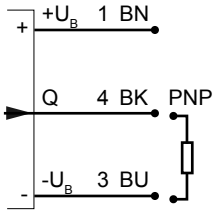
Operating / display elements



Sensitivity adjustment via potentiometer

155-00237

Connection, 3-pin



154-00531

Accessories

Connection cables	www.sensopart.com/en/accessories