FGL

Fork sensors with metal housings



PRODUCT HIGHLIGHTS

- Robust metal housings
- Small part detection from 0.4 mm
- High switching frequency of 1500 Hz
- Precise sensitivity adjustment via potentiometer
- N.O./N.C. switchable

Optical data	
Fork width	50 … 80 mm (see selection table)
Type of light	LED, red, 640 nm
Smallest detectable part	0.4 mm
Repeatability	0.04 mm[1] / 0.06 mm[2]

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

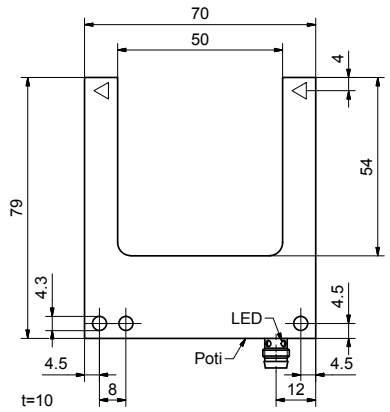
Electrical data	
Operating voltage, $+U_B$	10 … 30 V DC[3]
No-load current, I_0	≤ 35 mA
Output current, Ie	≤ 200 mA
Voltage drop, U_D	< 3 V
Protective circuits	Reverse polarity protection, U_B / Short-circuit protection (Q)
Protection Class	2
Switching output, Q	PNP
Output function	N.O. / N.C.
Switching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

Mechanical data	
Dimensions	(See plug connection)
Enclosure rating	IP 67[4]
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

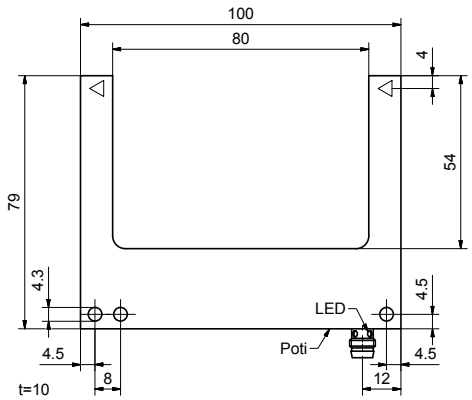
[1] FGL 50 [2] FGL 80 [3] Max. 10 % ripple, within U_B [4] With connected IP 67 plug

Fork width	Type of connection	Weight	Part number	Article number
50 mm	Metal plug, M8x1, 3-pin	110 g	FGL 50-R-PSM3	830-11004
80 mm	Metal plug, M8x1, 3-pin	135 g	FGL 80-R-PSM3	830-11005

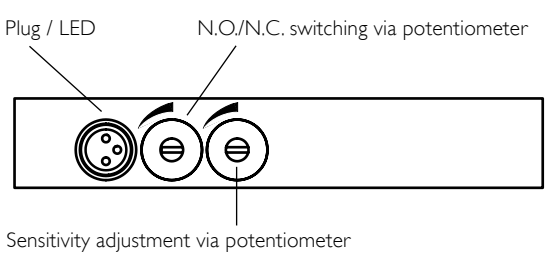
Plug connection (50 mm fork width)



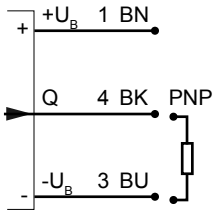
Plug connection (80 mm fork width)



Operating / display elements



Connection, 3-pin



Accessories

Connection cables	www.sensopart.com/en/accessories