

# FGL

## Fork sensors with metal housings



### PRODUCT HIGHLIGHTS

- Robust metal housings
- Small part detection from 0.3 mm
- High switching frequency up to 3000 Hz
- Precise sensitivity adjustment via potentiometer
- N.O. / N.C. switchable

Optical data		Functions	
Fork width	5 ... 30 mm (see selection table)	Indicator LED, yellow	Switching output indicator
Type of light	LED, red, 640 nm	Sensitivity adjustment	Via potentiometer
Smallest detectable part	(See table)	Adjustment possibilities	N.O. / N.C. via potentiometer
Repeatability	0,02 mm		
Electrical data		Mechanical data	
Operating voltage, +U <sub>B</sub>	10 ... 30V DC <sup>1</sup>	Dimensions	(See plug connection)
No-load current, I <sub>0</sub>	≤ 35 mA	Enclosure rating	IP 67 <sup>4</sup>
Output current, I <sub>e</sub>	≤ 200 mA	Material, housing	Die-cast zinc (GD Zn)
Voltage drop, U <sub>D</sub>	< 3V	Material, active areas	Glass
Protective circuits	Reverse polarity protection, U <sub>B</sub> / Short-circuit protection (Q)	Type of connection	See selection table
Protection Class	2	Ambient temperature: operation	-10 ... +60 °C
Switching output, Q	PNP	Ambient temperature: storage	-20 ... +80 °C
Output function	N.O. / N.C.	Weight	See selection table
Switching frequency, f (ti/tp 1:1)	3000 Hz <sup>2</sup> / 1500 Hz <sup>3</sup>	Vibration and impact resistance	EN 60947-5-2

<sup>1</sup> Max. 10 % ripple, within U<sub>B</sub>    <sup>2</sup> FGL 5 / FGL 10    <sup>3</sup> FGL 20 / FGL 30    <sup>4</sup> With connected IP 67 plug

Fork width	Type of connection	Weight	Part number	Article number
5 mm	Metal plug, M8x1, 3-pin	32 g	FGL 5-R-PSM3	830-11000
10 mm	Metal plug, M8x1, 3-pin	36 g	FGL 10-R-PSM3	830-11001
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

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Plug connection (5 mm fork width)	Plug connection (10 mm fork width)
<p style="text-align: right;">153-00262</p>	<p style="text-align: right;">153-00263</p>
Plug connection (20 mm fork width)	Plug connection (30 mm fork width)
<p style="text-align: right;">153-00264</p>	<p style="text-align: right;">153-00265</p>

Operating / display elements	Connection, 3-pin
<p style="text-align: right;">155-00237</p>	<p style="text-align: right;">154-00531</p>

Smallest detectable part				
Type	FGL 5	FGL 10	FGL 20	FGL 30
Part size	0.3 mm	0.3 mm	0.3 mm	0.3 mm

Accessories	
Connection cables	From Page A-38

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