

FGL 5-IK

Fork sensors for the detection of labels and multilayers



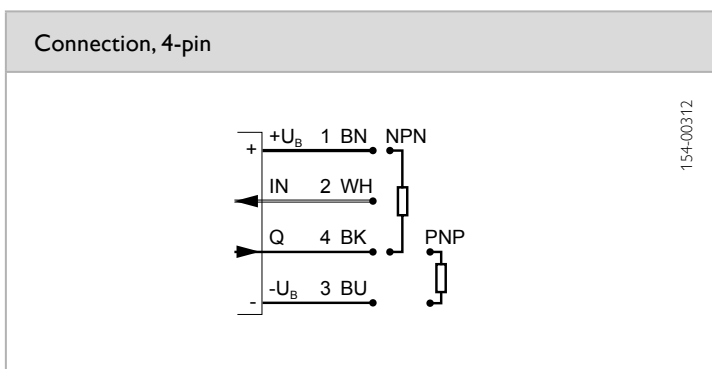
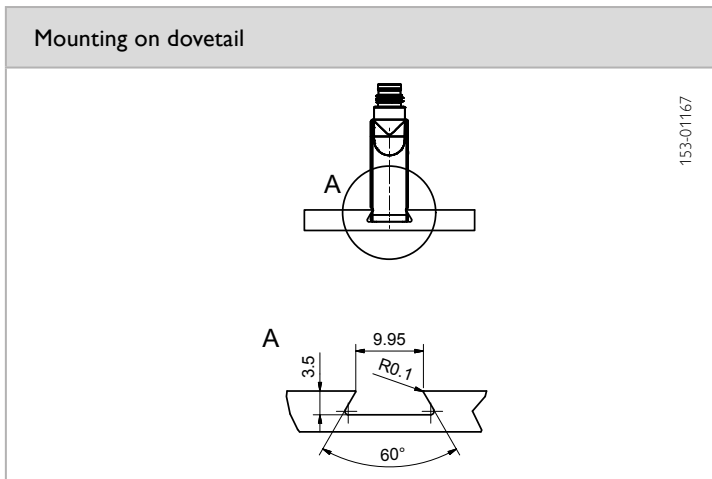
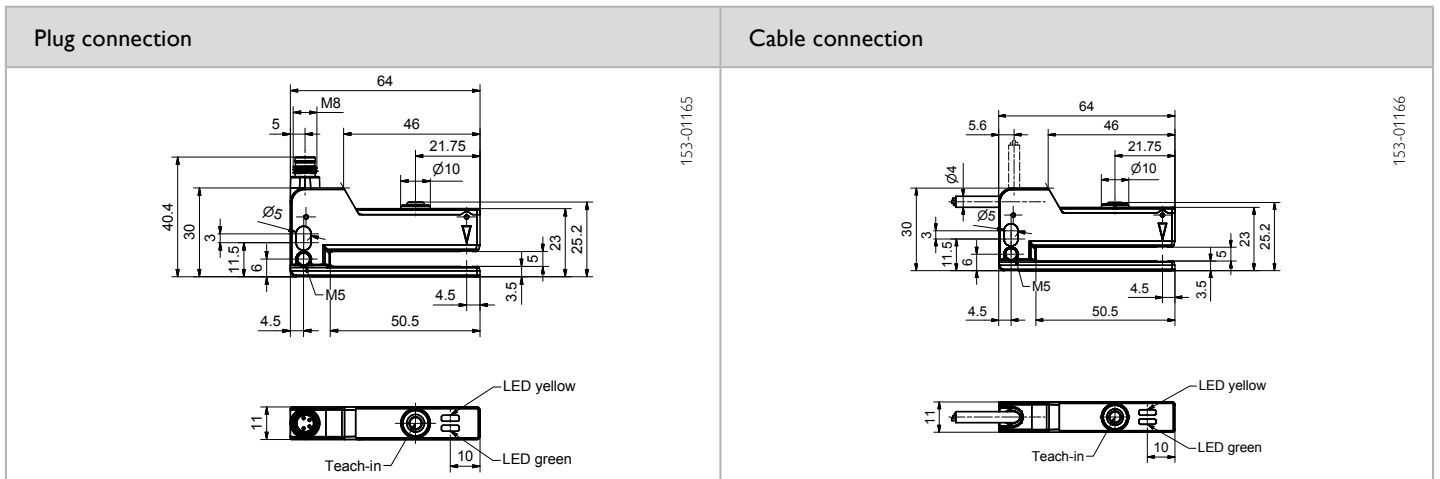
PRODUCT HIGHLIGHTS

- Detects even semi-transparent labels on carrier material
- Non-distorting and robust metal housing with cable or M8 plug
- Design with small arm adapted to label dispenser
- Easy adjustment via teach-in button or control line
- Versatile mounting possibilities
- N.O./N.C. switchable
- High positioning accuracy thanks to 12 kHz switching frequency

Optical data		Functions	
Fork width	5 mm	Indicator LED, green	Operating voltage indicator
Fork depth	50 mm	Indicator LED, yellow	Switching output indicator
Type of light	Infrared, 850 nm	Sensitivity adjustment	Via Teach-in button and control input
Minimum label width	0.5 ... 2 mm ¹	Teach-in modes	Mode 1: during running process Mode 2: process at standstill
Minimum distance between labels	0.5 ... 2 mm ¹	Adjustment possibilities	N.O. / N.C. via Teach-in button and control input Button lock via control input Default: via Teach-in button and control input
		Default setting	Active on carrier material - reset via control line or teach-in button
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30V DC ²	Dimensions	64 x 40.4 x 11 mm
No-load current, I ₀	≤ 30 mA	Enclosure rating	IP 65 ⁴
Output current, I _e	100 mA	Material, housing	Aluminium, Zinc alloy and PBT (cover)
Protective circuits	Reverse polarity protection, U _B / Short-circuit protection (Q)	Material, lens	PC
Protection Class	2	Type of connection	See Selection Table
Switching output, Q	PNP / NPN ³ (see Selection Table)	Ambient temperature: operation	-20 ... +55 °C
Output function	N.O. / N.C.	Ambient temperature: storage	-20 ... +70 °C
Switching frequency, f (ti/tp 1:1)	12000 Hz	Weight	See Selection Table
Response time	Max. 40 µs	Vibration and impact resistance	11 ms (30 G) 6 shocks per every axis EN 60068-2-27
Control input, ET ²	+U _B = Teach-in, -U _B = normal operation Open = normal operation		

¹ Max. 10 % ripple, within U_B ² Voltage peak max. 2Vpp ³ Pull up/down resistance 33 kOhm ⁴ With connected IP 67 plug

Fork width	Switching output	Type of connection	Weight	Part number	Article number
5 mm	PNP	Metal plug, M8x1, 4-pin	46 g	FGL 5-IK-50-PS-M4	830-11011
5 mm	NPN	Metal plug, M8x1, 4-pin	46 g	FGL 5-IK-50-NS-M4	830-11013
5 mm	PNP	Cable, 2 m, 4-wire	85 g	FGL 5-IK-50-PS-K4	830-11010
5 mm	NPN	Cable, 2 m, 4-wire	85 g	FGL 5-IK-50-NS-K4	830-11012



Accessories	
Connection cables	From Page A-38
Brackets	From Page A-4