

FL 70 R-...D / FL 70 RA-...D

Fibre-optic sensor with display



PRODUCT HIGHLIGHTS

- Fibre-optic sensor for the adaptation of a wide variety of fibre-optic cables
- Very user-friendly thanks to combination of display and teach-in
- Several operating modes for individual adaptation to the application
- DIN-rail mounting
- No mutual interference thanks to automatic communication
- Variants with supplementary analogue output

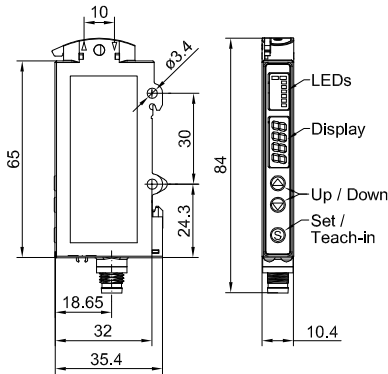
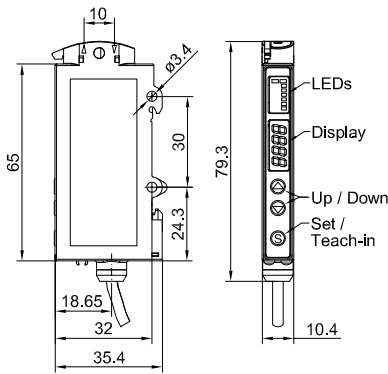
Optical data		Functions	
Scanning distance	Dependant on fibre-optic cable (scanner) ¹	Indicator LED, green	Operating voltage indicator
Operating range	Dependant on fibre-optic cable (cabinet)	Indicator LED, yellow	Switching output indicator
Type of light	LED, red, 630 nm	Indicator LEDs, red (x6)	Feedback on selected functions
Distance hysteresis	< 10 % of set scanning distance	Teach-in modes	Switching point / switching window
		Scanning distance adjustment	Fine adjustment of the switching point
		Adjustment possibilities	Via teach-in and control input
		Default settings	Invert switching output
			Switching frequency / accuracy
			Timer function (e.g. switch-on delay)
			Button lock, default settings
			N.O. / no special functions active
Functions		Mechanical data	
Operating voltage, +U _B	10 ... 30V DC ²	Dimensions	84 x 35 x 10 mm
No-load current, I ₀	≤ 25 mA	Enclosure rating	IP 64 ³
Output current, I _e	≤ 100 mA	Material, housing	ABS
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q)	Type of connection	See selection table
Protection Class	2	Ambient temperature: operation	-20 ... +60 °C
Switching output, Q	PNP/NPN (see selection table)	Ambient temperature: storage	-20 ... +80 °C
Output function	N.O./N.C.	Weight (plug device)	20 g
Switching frequency, f (ti/tp 1:1)	Dependent on the setting / operating mode Standard Mode 1000 Hz / Fast Mode 8000 Hz Fine Mode 125 Hz / High Distance Mode 125 Hz	Weight (cable device)	50 g
Control input, IN (only 4-pin version)	+ U _B = teach-in - U _B = button locked Open = normal operation		
Analogue output (non-scalable)	See selection table		
Display value 0000	0V		
Display value 4095	10V		

¹ Reference material: white, 90 % reflectivity

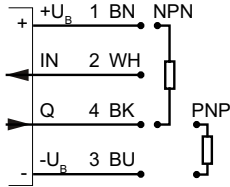
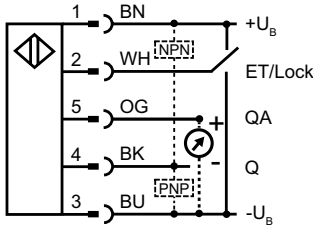
² Max. 10 % ripple, within U_B

³ With connected IP 64 plug

Switching output	Analogue output	Type of connection	Part number	Article number
PNP	No	Plug, M8x1, 4-pin	FL 70 R-PSD-M4	567-71004
NPN	No	Plug, M8x1, 4-pin	FL 70 R-NSD-M4	567-71005
PNP	0...10V / 2 mA	Cable, 2 m, 5-wire	FL 70 RA-PSD-K5	567-71006
NPN	0...10V / 2 mA	Cable, 2 m, 5-wire	FL 70 RA-NSD-K5	567-71007

Plug connection	Cable connection
 153-01083	 153-01082

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Connection, 4-pin	Connection, 5-pin
 154-00508	 154-00191

Accessories	
Connection cables	www.sensopart.com/en/accessories
Brackets	
Fibre-optic cables	