

FT 50 C

Colour sensor with 3 switching outputs



PRODUCT HIGHLIGHTS

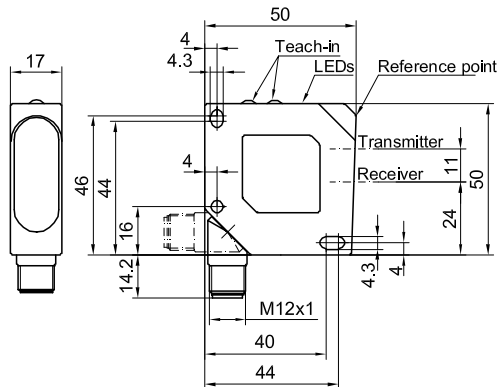
- Colours are reliably detected despite fluctuating scanning distances thanks to patented optical technology
- 3 colours distinguishable via 3 switching outputs
- Even the smallest of colour differences are reliably detected
- Easy teach-in of colours via Teach-in button or control line

Optical data		Functions	
Scanning distance	See Selection Table	Indicator LED, green	Operating voltage indicator
Scanning distance tolerance	See Selection Table	Indicator LED, yellow	3 x switching output indicators
Type of light	LED, white	Indicator LED, red	3 x tolerance level indicators
Light spot size	See Selection Table	Colour and tolerance settings	Via teach-in button and control line
		Adjustment possibilities	Colours taught-in via Teach-in button and control line
			Pulse stretching via Teach-in button
			Button lock via control input
		Default setting	Normal operation, Tol. 3 for X01, typ. = Tol. 5
Electrical data		Mechanical data	
Operating voltage, +U _B	12 ... 28 V DC ²	Dimensions	50 x 50 x 17 mm ³
No-load current, I ₀	≤ 40 mA	Enclosure rating	IP 67 ³
Output current, I _e	≤ 100 mA	Material, housing	ABS, impact-resistant
Voltage drop, U _d	≤ 2.4 V	Material, front screen	PMMA
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q)	Type of connection	See Selection Table
Protection Class	2	Ambient temperature: operation	-10 ... +55 °C
Power On Delay	≤ 300 ms	Ambient temperature: storage	-20 ... +80 °C
Switching output, Q	3 x PNP	Weight (plug device)	40 g
Output function	N.O.	Vibration and impact resistance	EN 60947-5-2
Switching frequency, f (ti/tp 1:1)	500 Hz		
Response time	10 ms		
Control input, AT	> 12 V ... 28 V = triggered < 3 V / open = free-running Response time: 10 ms		
Control input, KeyLock	> 12 V ... 28 V = button locked < 3 V / open = normal operation Pulse stretching / release delay: 50 ms		
Control input, Ext. Teach-in (normal operation Q3)	> 12 V ... 28 V = Teach-in < 3 V / open = normal operation Min. response time: 2 ms		

¹ At scanning distance of 22 mm ² Max. 10 % ripple, within U_B ³ With connected IP 67 plug

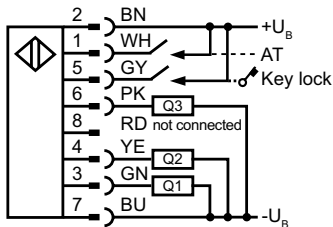
Scanning distance/Scanning distance tolerance/Light spot size	Switching output	Type of connection	Part number	Article number
12 ... 32 mm / ± 6 mm / Ø 4 mm ¹	3 x PNP	Plug, M12, 8-pin	FT 50 C-1-PSL8	575-11000
15 ... 30 mm / ± 5 mm / 2 x 2 mm ¹	3 x PNP	Plug, M12, 8-pin	FT 50 C-2-PSL8	575-11003
18 ... 22 mm / ± 2 mm / 5 x 1 mm ¹	3 x PNP	Plug, M12, 8-pin	FT 50 C-3-PSL8	575-11004

Plug connection



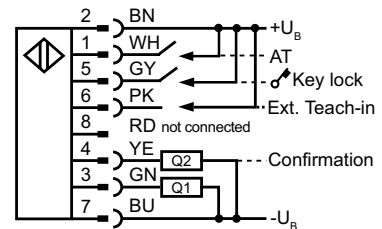
153-00350

Connection, 8-pin (normal operation)



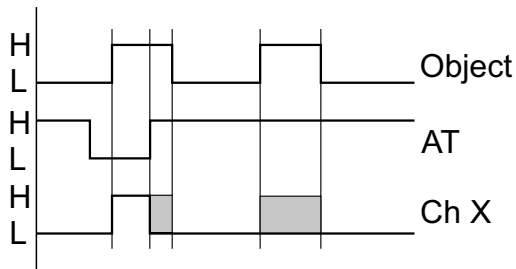
154-00197

Connection, 8-pin (external teach-in)



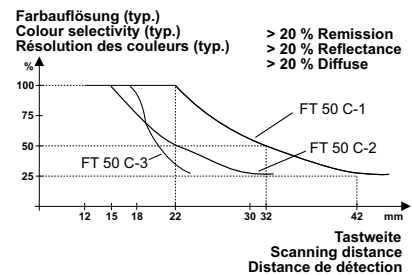
154-00198

Control input (AT)



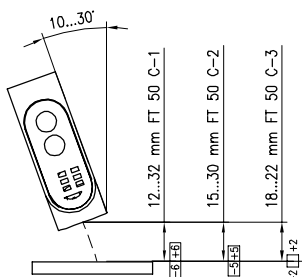
155-00085

Colour selectivity

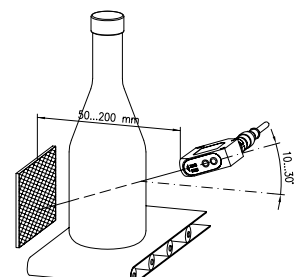


155-00926

Installation



155-00698



155-00925

Accessories

Connection cables
Brackets

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