

FT 25-C

RGB colour sensor



PRODUCT HIGHLIGHTS

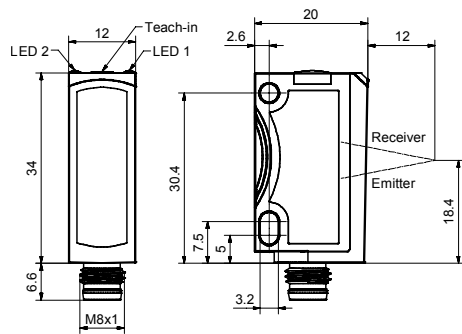
- Smallest RGB colour sensor with high switching frequency ≤ 10 kHz
- Precise detection of the slightest of contrast differences
- Very robust operation despite fluttering and glossy objects
- Feedback via „responding light spot“ about quality of taught-in colour value

Optical data		Functions	
Scanning distance	12 mm	Indicator LED, green	Operating voltage indicator
Depth of field	± 3 mm	Indicator LED, yellow	Switching output indicator
Type of light	Red LED, 633 nm Green LED, 525 nm Blue LED, 460 nm	Sensitivity adjustment	Via Teach-in button and control input
Light spot size	1×5 mm ²	Adjustment possibilities	N.O./N.C. via Teach-in button and control input
		Default settings	Button lock via control input
			N.O.
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30V DC ¹	Dimensions	34 x 20 x 12 mm ³
No-load current, I ₀	≤ 30 mA	Enclosure rating	IP 67 / IP 69K ³
Output current, I _e	≤ 100 mA	Material, housing	ABS
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q)	Material, front screen	PMMA
Protection class	2	Type of connection	See Selection Table
Power On Delay	< 300 ms	Ambient temperature: operation	-20 ... +55 °C ⁴
Switching output, Q	Push-Pull	Ambient temperature: storage	-20 ... +80 °C
Output function	N.O. / N.C.	Weight (metal plug device)	10 g
Switching frequency, f (ti/tp 1:1) ²	See Selection Table	Vibration and impact resistance	EN 60947-5-2
Response time	See Selection Table		
Control input, IN	+U _B = teach-in -U _B = button locked open = normal operation		

¹ Max. 10 % ripple, within U_B, ~ 50 Hz / 100 Hz ² $f = 1 / (T \times Nyq \times 2)$ ³ With connected IP 67 / IP 69K plug ⁴ UL: -20 ... +50 °C

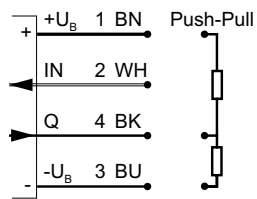
Switching frequency, f (ti/tp 1:1) ²	Response time	Scanning distance	Type of connection	Part number	Article number
≤ 10000 Hz	≤ 50 μ s	12 ± 3 mm	Metal plug, M8x1, 4-pin	FT 25-C1-GS-M4M	607-21020
≤ 2500 Hz	≤ 200 μ s	12 ± 3 mm	Metal plug, M8x1, 4-pin	FT 25-C2-GS-M4M	607-21021

Plug connection



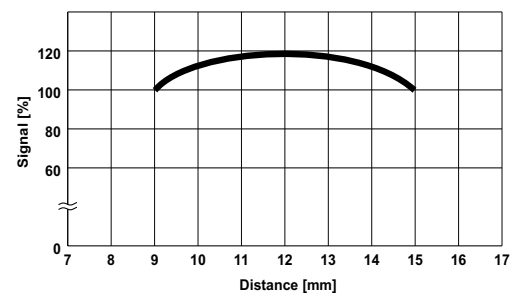
153-00995

Connection, 4-pin



154-00320

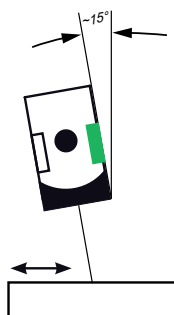
Signal process



155-01648

7

Installation



155-01726

Accessories

Connection cables
Brackets

From Page A-34
From Page A-4