

# FT 25-C

RGB colour sensor



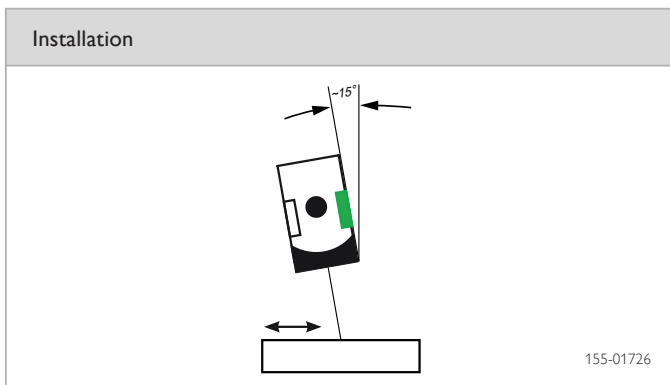
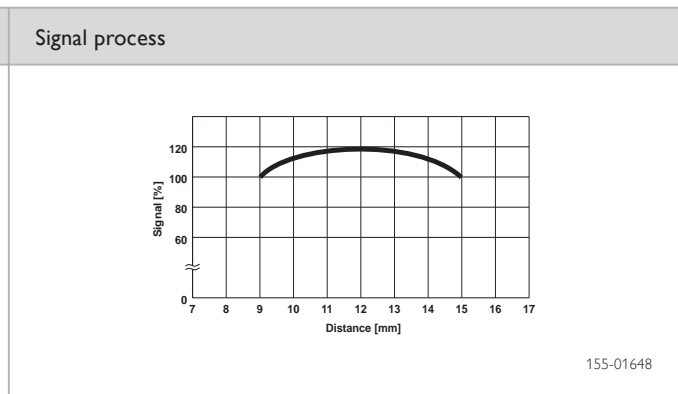
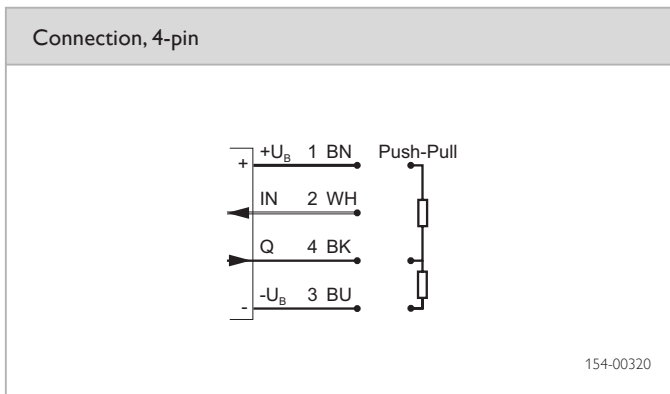
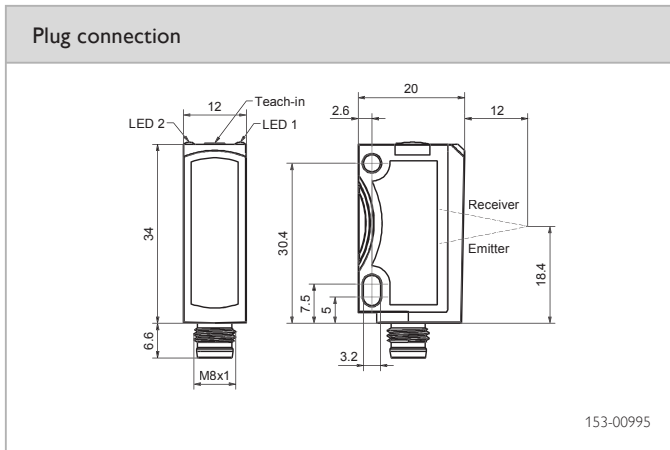
## PRODUCT HIGHLIGHTS

- Smallest RGB colour sensor with high switching frequency  $\leq 10$  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	$\pm 3$ 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	$1 \times 5$ mm <sup>2</sup>	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 <sub>g</sub>	10 ... 30V DC <sup>1</sup>	Dimensions	34 x 20 x 12 mm <sup>3</sup>
No-load current, I <sub>0</sub>	$\leq 30$ mA	Enclosure rating	IP 67 / IP 69K <sup>3</sup>
Output current, I <sub>e</sub>	$\leq 100$ mA	Material, housing	ABS
Protective circuits	Reverse-polarity protection, U <sub>g</sub> / 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 <sup>4</sup>
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) <sup>2</sup>	See Selection Table	Vibration and impact resistance	EN 60947-5-2
Response time	See Selection Table		

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

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



### Accessories

Connection cables	From Page A-32
Brackets	From Page A-4