

FT 25-RGB1-GSL-M4M

Ordering information

Designation for ordering	FT 25-RGB1-GSL-M4M
Part number	607-21037
Order text	RGB contrast sensor, 12 +/- 3 mm, 25 kHz, push-pull, teach-in, metall plug M8 4-pin, IP 67 & IP 69, IO-Link
Components supplied	Operating manual, Sensor



Optical data	
Scanning distance [mm]	12
Scanning distance tolerance [mm]	-3.0 ... 3.0
Light source	LED
Light color	Red
Light type	Green
Light type	Blue
Wavelength [nm]	633
Wavelength 2 [nm]	525
Wavelength 3 [nm]	460
Light spot size [mm]	1 x 4
Switching frequency ≤ [Hz]	≤ 25,000
Explanation of switching frequency	$f = 1 / (T \times Nyq \times 2)$

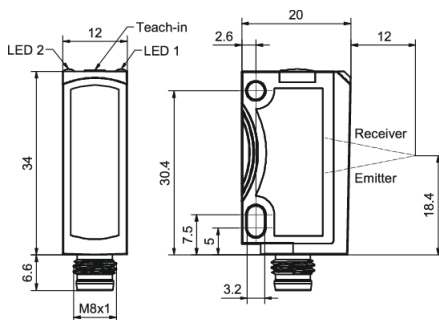
Functions	
Display, LED yellow	Switching output indicator
Display, LED green	Operating voltage indicator
Setting options	LO / DO via the teach-in button and control input Button lock via control input Multiple setting options via IO-Link
Sensitivity setting	Via teach-in button, control input and IO-Link
Teach-in modes	Mode 1: during running process Mode 2: when process at standstill

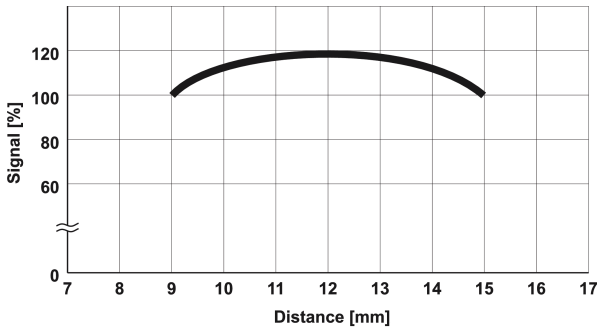
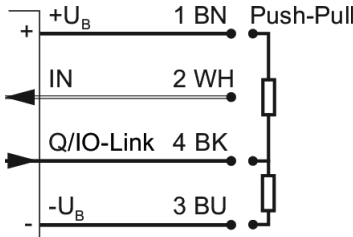
IO-Link	
Data storage	Yes
Communication mode	COM 2
Length of the process data [Bit]	16
Min. cycle time [ms]	2.3
SIO mode	is supported
IO-Link specification	1.1

Electrical data	
Operating voltage UB [V DC]	10 ... 30
Explanation of operating voltage UB	max. 10% residual ripple, within UB, ~ 50 Hz 100 Hz
No-load current [mA]	≤ 30
Output current [mA]	≤ 100
Readiness delay [ms]	≤ 300
Reverse polarity protection	Yes
Short circuit protection	Yes
Response time Q [μs]	≤ 30
Control input	+UB = Teach-in - UB = button locked open = normal operation
Protection class	2
Jitter [μs]	10.0
Output function	LO/DO
Switching output Q	Push-pull
Number of outputs	1

Mechanical data	
Height [mm]	34.0
Length [mm]	20.0
Width [mm]	12.0
Weight [g]	~ 10
Front panel material	PMMA
Housing material	ABS
Ambient temperature: operation [°C]	-20 ... 55
Explanation of operation at ambient air temperature	UL: -20 +50
Ambient temperature: storage [°C]	-20 ... 80
Protection class	IP 67, IP 69
Explanation of protection class	with IP 67 / IP 69 plug connected
Vibration and shock resistance	EN 60947-5-2
Connection name	Metal plug M8x1, 4-pin, IO-Link



Technical drawings	
Dimensional drawing	

Signal history	<table><caption>Signal history data points (approximate)</caption><tr><th>Distance [mm]</th><th>Signal [%]</th></tr><tr><td>9</td><td>100</td></tr><tr><td>10</td><td>110</td></tr><tr><td>11</td><td>118</td></tr><tr><td>12</td><td>120</td></tr><tr><td>13</td><td>118</td></tr><tr><td>14</td><td>110</td></tr><tr><td>15</td><td>100</td></tr></table> 155-01648	Distance [mm]	Signal [%]	9	100	10	110	11	118	12	120	13	118	14	110	15	100
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Connections	4-pin, IO-Link <table><tr><th>Pin</th><th>Color</th><th>Function</th></tr><tr><td>1</td><td>BN</td><td>+U_B</td></tr><tr><td>2</td><td>WH</td><td>IN</td></tr><tr><td>4</td><td>BK</td><td>Q/IO-Link</td></tr><tr><td>3</td><td>BU</td><td>-U_B</td></tr></table> Push-Pull 154-00580	Pin	Color	Function	1	BN	+U _B	2	WH	IN	4	BK	Q/IO-Link	3	BU	-U _B	
Pin	Color	Function															
1	BN	+U _B															
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Product link

<https://www.sensopart.com/en/products/details/607-21037>