

Photoelectric Special Sensors

Analog fork sensors BGL_C

Product overview



Photoelectric sensors

Photoelectric standard sensors

Photoelectric special sensors

Optical fiber base units

Fiber optics

Contrast sensor

Luminescence sensor

Color sensors

Fork sensors

Angle sensors

Dynamic optical windows

Light grids

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

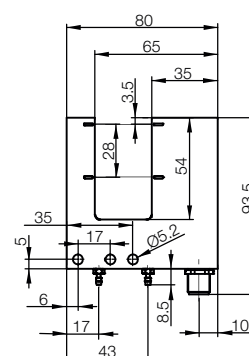
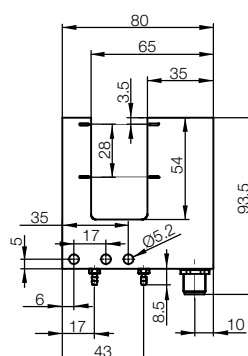
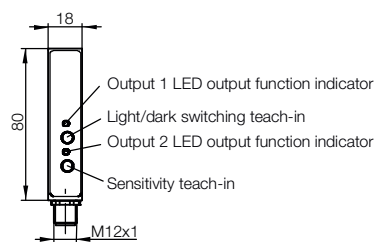
Type	Fork opening	Resolution	Light type		Output					Switching type		Switching frequency	U _s	Connection	Page	
			Red light		0-10 V	4-20 mA	1 × PNP transistor	2 × PNP transistor	DSC (Dynamic Sensor Control)	Light switching	Dark switching					
Fork sensors																
BGL002Z	BGL 30C-001-S4	30 mm	80 μm	■					■		■	■	500 Hz	■	■	332
BGL0031	BGL 30C-003-S4	30 mm	80 μm	■			■	■			■	■	500 Hz	■	■	332
BGL0033	BGL 30C-005-S4	30 mm	80 μm	■		■		■			■	■	500 Hz	■	■	333
BGL0036	BGL 30C-009-S4	30 mm	80 μm	■					■	■	■	■	500 Hz	■	■	332
BGL0037	BGL 50C-001-S4	50 mm	80 μm	■					■		■	■	500 Hz	■	■	333
BGL0039	BGL 50C-003-S4	50 mm	80 μm	■			■	■			■	■	500 Hz	■	■	333
BGL003C	BGL 50C-005-S4	50 mm	80 μm	■		■		■			■	■	500 Hz	■	■	333
BGL003H	BGL 50C-009-S4	50 mm	80 μm	■					■	■	■	■	500 Hz	■	■	333

NPN on request

Also available with IO-Link



Series			BGL	BGL
Fork opening			30 mm	30 mm
Fork depth			54 mm	54 mm
PNP 2 switching outputs	NC/NO	Ordering code	BGL002Z	
		Part number	BGL 30C-001-S4	
PNP 1 analog and 1 switching/error output	NC/NO	Ordering code		BGL0031
		Part number		BGL 30C-003-S4
PNP 2 switching outputs with DSC	NC/NO	Ordering code	BGL0036	
		Part number	BGL 30C-009-S4	
Supply voltage U_B			18...30 V DC	18...30 V DC
No-load supply current I_0 max.			≤ 20 mA	≤ 20 mA
Output current			100 mA	100 mA
Analog output				4...20 mA
Switching type			Light/dark switching (selectable)	Light/dark switching (selectable)
Polarity reversal/short-circuit protected			Yes/Yes	Yes/Yes
Settings			Teach-in	Teach-in
Emitter, light type			Red light	Red light
Wavelength			633 nm	633 nm
Resolution (smallest discernible part)			≤ 80 μ m	≤ 80 μ m
Repeat accuracy			0.15 mm	0.15 mm
Switching hysteresis			< 0.4 mm	< 0.4 mm
Output function indicator			2x Yellow LEDs	2x Yellow LEDs
Response time			2 ms	2 ms
Switching frequency			500 Hz	500 Hz
Measurement field length			28 mm	28 mm
Degree of protection as per IEC 60529			IP 65	IP 65
Ambient temperature T_a			-5...+55°C	-5...+55°C
Ambient light limit according to			EN 60947-5-2	EN 60947-5-2
Material	Housing		Anodized aluminum	Anodized aluminum
	Optical surface		PMMA	PMMA
Connection			M12 connector, 4-pin	M12 connector, 4-pin



Suitable connector
 (please order separately)

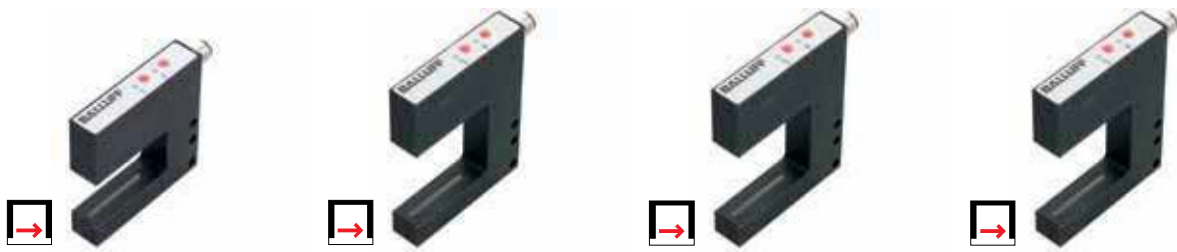
Size	Design	Cable material	Color	Length	Ordering code
M12, 4-pin	Straight	PUR	Black	2 m	BCC032F
M12, 4-pin	Straight	PVC	Gray	2 m	BCC0367
M12, 4-pin	Angled	PUR	Black	2 m	BCC032Y
M12, 4-pin	Angled	PVC	Gray	2 m	BCC036N

More electrical accessories: You can find a large selection of plug connectors and connector cables in a wide variety of cable materials, colors and lengths in our **Industrial Networking and Connectivity catalog**.

Connectors without LED are suitable for PNP and NPN sensors.

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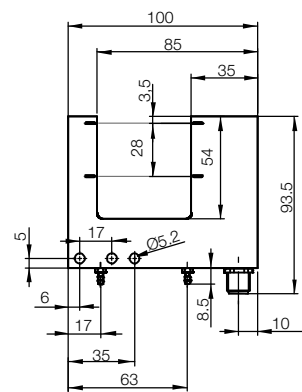
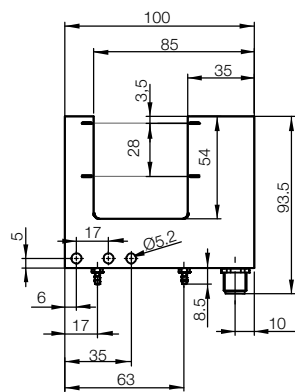
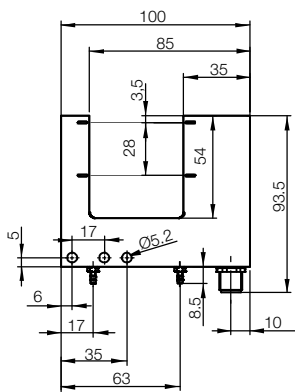
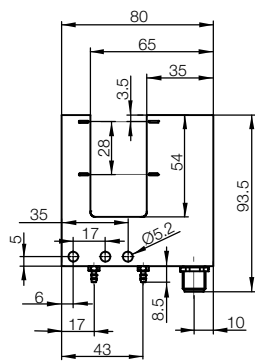
Dynamic optical windows

Light grids

Photoelectric distance sensors for analog distance measurement

Special accessories for photoelectric sensors

BGL 30 mm 54 mm	BGL 50 mm 54 mm BGL0037 BGL 50C-001-S4	BGL 50 mm 54 mm BGL0039 BGL 50C-003-S4	BGL 50 mm 54 mm BGL003C BGL 50C-005-S4
BGL0033 BGL 30C-005-S4	BGL003H BGL 50C-009-S4		
18...30 V DC ≤ 20 mA 100 mA 0...10 V DC Light/dark switching (selectable) Yes/Yes Teach-in Red light 633 nm ≤ 80 μm 0.15 mm < 0.4 mm 2x Yellow LEDs 2 ms 500 Hz 28 mm IP 65 -5...+55°C EN 60947-5-2 Anodized aluminum PMMA M12 connector, 4-pin	18...30 V DC ≤ 20 mA 100 mA Light/dark switching (selectable) Yes/Yes Teach-in Red light 633 nm ≤ 80 μm 0.15 mm < 0.4 mm 2x Yellow LEDs 2 ms 500 Hz 28 mm IP 65 -5...+55°C EN 60947-5-2 Anodized aluminum PMMA M12 connector, 4-pin	18...30 V DC ≤ 20 mA 100 mA 4...20 mA Light/dark switching (selectable) Yes/Yes Teach-in Red light 633 nm ≤ 80 μm 0.15 mm < 0.4 mm 2x Yellow LEDs 2 ms 500 Hz 28 mm IP 65 -5...+55°C EN 60947-5-2 Anodized aluminum PMMA M12 connector, 4-pin	18...30 V DC ≤ 20 mA 100 mA 0...10 V DC Light/dark switching (selectable) Yes/Yes Teach-in Red light 633 nm ≤ 80 μm 0.15 mm < 0.4 mm 2x Yellow LEDs 2 ms 500 Hz 28 mm IP 65 -5...+55°C EN 60947-5-2 Anodized aluminum PMMA M12 connector, 4-pin



Wiring diagrams

