

BALLUFF

sensors worldwide

Photoelectric Global Sensors

The miniature series for versatile use



For object detection we offer a broad range of high-performance, proven sensors for standard applications. These global sensors are designed for universal, flexible application and boast an ideal price/performance ratio.

The Global series includes inductive, photoelectric, capacitive and magnetic field sensors for cylinder slots – along with matching accessories.

Benefits at a glance

- Quality products for standard applications
- Optimal price/performance ratio
- Short delivery times
- International certifications such as CE, cULus, etc.
- Available worldwide, usable worldwide
- Tested above and beyond standard requirements

Photoelectric Global Sensors

The BOS 5K photoelectric miniature series with its attractive pricing solves a variety of applications. We have put together a selection for you from our comprehensive product line.

More types can be found on our website or are available on request.

Properties

- Block style housing
- Rugged, compact housing
- Laser red light, LED red light and infrared models
- Potentiometer for simple yet precise calibration
- Long range, up to 30 m (through-beam type)

Industries/Applications

- Packaging machines
- Assembly machinery
- Conveying
- General automation tasks
- Detecting or positioning small objects
- Reliable detection of objects over large distances



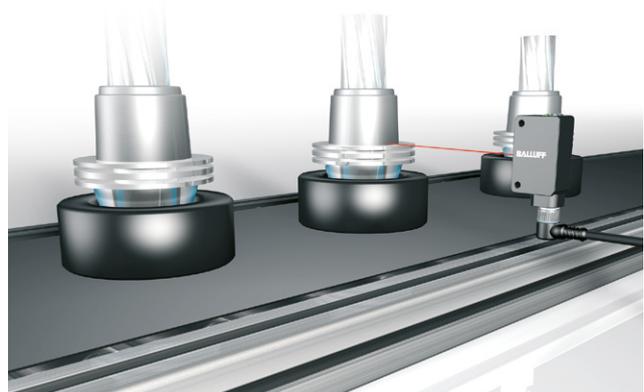
Type	Diffuse sensor with background suppression
Detection range	20...200 mm
PNP, NO	BOS012A
PNP, normally closed	BOS011Z
PNP, NO/NC contact	
NPN, NO	BOS011F
NPN, NC	BOS0112
NPN, NO/NC contact	
Supply voltage U_s	10...30 V DC
Output current	100 mA
No-load supply current I_0 max.	≤ 30 mA
Polarity reversal protected/short-circuit protected	Yes/Yes
Settings	Potentiometer, 6-turn
Emitter, light type	LED, red light
Switching frequency f	500 Hz
Degree of protection as per IEC 60529	IP 67
Ambient temperature T_a	-25...+55 °C
Material	Housing: PC/PBT Optical surface: PC
Connection	M8 connector, 4-pin

Preferred variants (available immediately)

Reference object: white, 90% reflection, 200×200 mm



Surface-independent package detection using a retro-reflective sensor



Reliable object detection against a bright background



Diffuse sensor with Background suppression	Diffuse sensor	Retroreflective sensor	Through-beam sensor
20...300 mm	0...900 mm	0.1...4 m	0...20 m
	BOS0124	BOS012E	BOS0125
	BOS011L	BOS0121	BOS011N
BOS01JK			
	BOS0117	BOS011J	BOS0118
	BOS010R	BOS0114	BOS010U
BOS01K0			
10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC
100 mA	100 mA	100 mA	100 mA
≤ 35 mA	≤ 30 mA	≤ 30 mA	≤ 20 mA (receiver), ≤ 15mA (emitter)
Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Potentiometer, 270°	Potentiometer, 270°	Potentiometer, 270°	Potentiometer, 270°
Laser, red light	LED, infrared	LED, red light	LED, infrared
2000 Hz	500 Hz	500 Hz	500 Hz
IP 67	IP 67	IP 67	IP 67
-10...+55 °C	-25...+55 °C	-25...+55 °C	-25...+55 °C
PC/PBT	PC/PBT	PC/PBT	PC/PBT
PMMA	PC	PC	PC
M8 connector, 4-pin	M8 connector, 4-pin	M8 connector, 4-pin	2 m PVC cable

Available sets

SET018E	SET018A	SET0176	
		■	BOS012E Retro-reflective, M8×1, 4-pin, range 4 m
■	■		BCC02PZ M8 connector, 4-pin, right-angle, PVC, 2 m
■	■	■	BAM00U5 Mounting bracket for BOS 5K
■		■	BAM00WL Reflector (BOS R-9) for retro-reflective sensor

Additional sets available on request.
Contact us.

Suitable connectors

Size/design	Length/cable material	
M8, 4-pin/straight	2 m/PVC	BCC02PL
M8, 4-pin/angled	2 m/PVC	BCC02PZ
M8, 4-pin/straight	5 m/PVC	BCC02PM
M8, 4-pin/angled	5 m/PVC	BCC02R0

You can find additional electrical accessories in our catalog
Industrial Networking and Connectivity.

Recommended accessories

Description	
Mounting bracket	BAM00U5
Mounting bracket	BAM00U6
BOS R-9 Reflector 51×61 mm	BAM00WL
BOS R-1 Reflector Ø 84 mm	BAM00UK

You can find additional mechanical accessories in
our catalog **Accessories Line.**

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Systems and Service



Industrial Networking and Connectivity



Industrial Identification



Object Detection



Linear Position Sensing and Measurement



Condition Monitoring and Fluid Sensors



Accessories

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