

Reliable object detection

BOS R81K PHOTOELECTRIC SENSORS FOR UNIVERSAL USE

The BOS R81K photoelectric series from Balluff is designed for area-wide use. It is available in all common photoelectric functional principles. The sensors' bright light-beam enables appealing ranges and guarantees perfect detection of your objects.

Fast mounting, universal use

Balluff BOS R81K series sensors are quick and easy to mount anywhere thanks to their cubic housing shape with M18 threaded nose. Adjustment is carried out by means of a top-mounted potentiometer without a time-consuming teaching process. Whether using as a through-beam sensor,

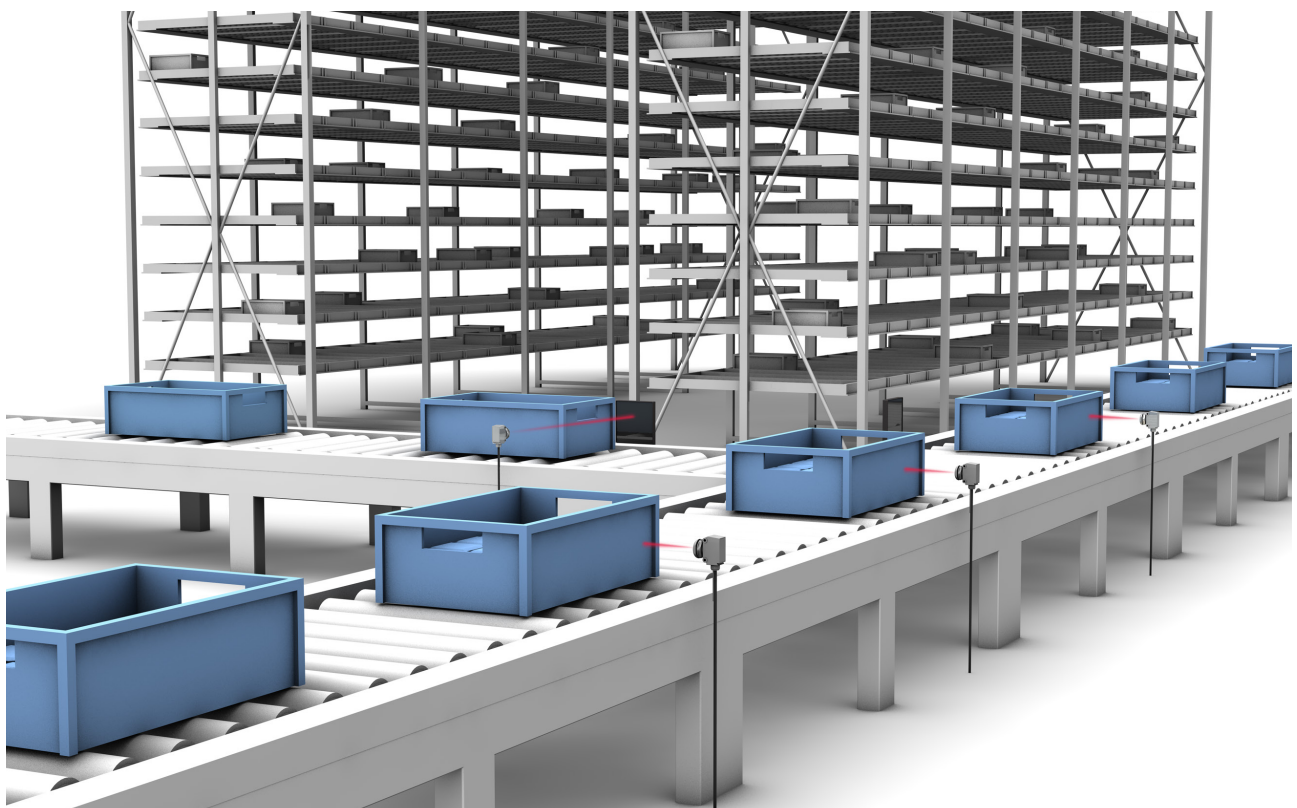
a retroreflective sensor or a diffuse sensor (with or without BGS), the BOS R81K series is ideally suited for controlling and monitoring conveyor systems and similar equipment.

Detecting objects on the conveyor

Balluff's solution can also be used in confined installation situations due to their design, which is often the case in conveyor systems. With their precise switching behavior, they always reliably detect the presence of objects – regardless of surface material and over ranges.

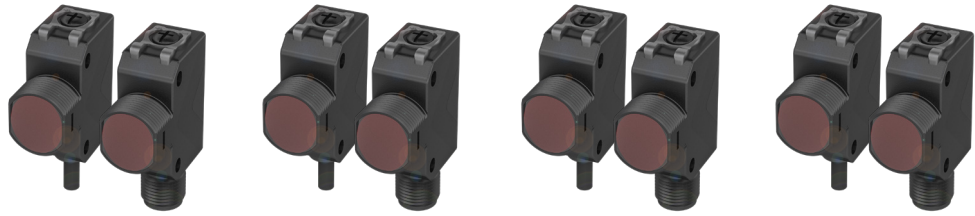
Features

- Flexible use due to a wide range of mounting options
- Quick and easy alignment thanks to large diameter red light spotlight
- Excellent price-performance ratio for all functional principles

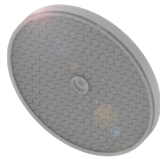


Detection of boxes on conveyor belts.

BOS PHOTOELECTRIC SENSORS



PNP	BOS0292	BOS0294	BOS0296	BOS0298	BOS029A	BOS029E	BOS028W	BOS0290
NPN	BOS0291	BOS0293	BOS0295	BOS0297	BOS0299	BOS029C	BOS028U	BOS028Z
EMITTER							BOS028T	BOS028Y
Principle of operation	Retroreflective sensor		Diffuse sensor		Diffuse sensor with background suppression		Through-beam sensor	
Dimension	15 × 35 × 31 mm		15 × 35 × 31 mm		15 × 35 × 31 mm		15 × 35 × 31 mm	
Light type	LED, red light		LED, red light		LED, red light		LED, infrared	
Range	0...3 m		50...300 mm		100 mm		0.3...20 m	
Light spot size	180 × 180 mm at 3 m		18 × 18 mm at 300 mm		8 × 8 mm at 100 mm		–	
Connection	2 m PUR cable	M12 male, 4-pin	2 m PUR cable	M12 male, 4-pin	2 m PUR cable	M12 male, 4-pin	2 m PUR cable	M12 male, 4-pin
Housing material	ABS		ABS		ABS		ABS	
Material sensing surface	PMMA		PMMA		PMMA		PMMA	
Operating voltage	10...30 V DC		10...30 V DC		10...30 V DC		10...30 V DC	
Max. output current	< 200 mA		< 200 mA		< 100 mA		< 100 mA	
Ambient temperature	–15...+60 °C		–15...+60 °C		–15...+60 °C		–15...+60 °C	
Adjustable	Yes		Yes		No		Yes (receiver)	
Approval/conformity	CE, EAC, UKCA, cULus		CE, EAC, UKCA, cULus		CE, EAC, UKCA, cULus		CE, EAC, UKCA, cULus	



ACCESSORIES

	BAM00UK
Description	Reflector for photoelectric retroreflective sensors

Reflector 60 × 40 mm included in scope of delivery



CONNECTIVITY

	BCC039M	BCC03AE
Connection 1	M12 female, straight, 5-pin, A-coded	M12 female, angled, 5-pin, A-coded
Connection 2	M12 male, straight, 4-pin, A-coded	M12 male, straight, 4-pin, A-coded
Cable	2 m PUR, black, drag chain compatible	2 m PUR, black, drag chain compatible