

Smart Automation and Monitoring System

PHOTOELECTRIC SENSORS WITH CONDITION MONITORING

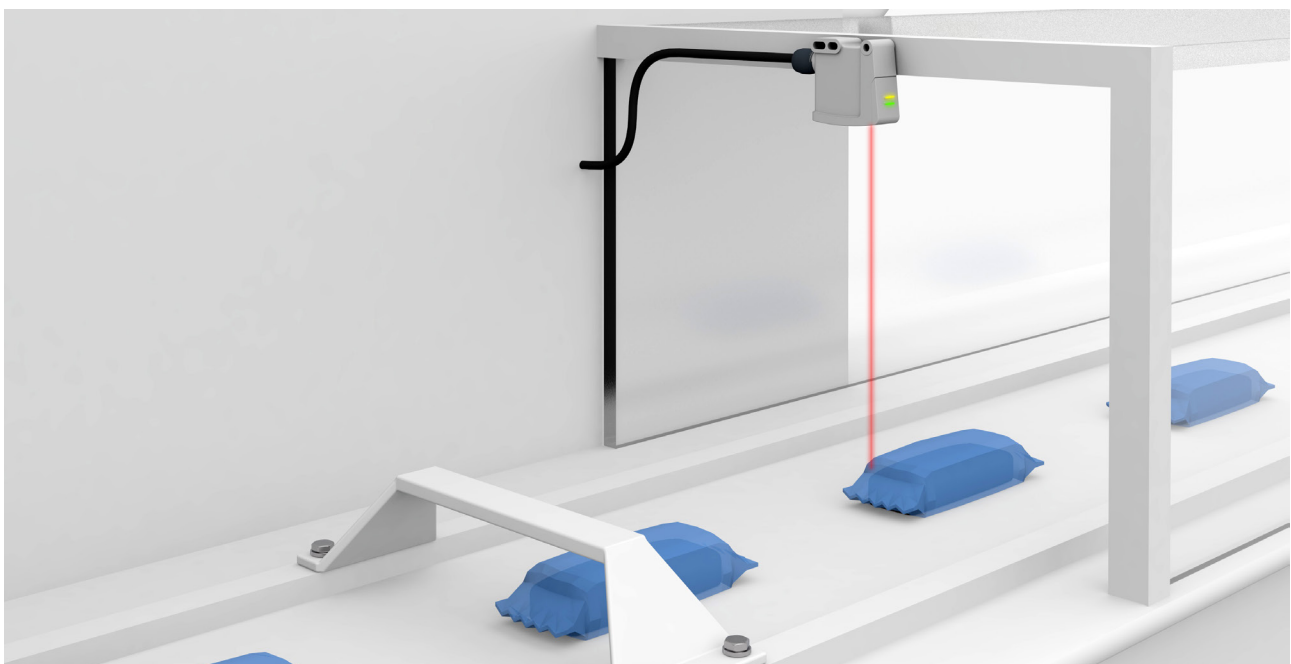
SAMS (Smart Automation and Monitoring System) stands for Balluff's comprehensive automation philosophy. On the one hand, the Smart Automation and Monitoring System comprises a large number of additional functions and additional information for each individual component while, on the other hand, it is characterized by its uniform and standardized operating, configuration and diagnosis concept.

Part of this system is our new BOS R254K photoelectric sensor for reliable detection of objects like bottles, containers and pallets in the food industry and in the packaging sector. Designed for demanding applications, it is ideal wherever cleaning involves aggressive media and high pressure. Resistant to cleaning agents (Ecolab), it has passed the cleaning cycle according to the high Balluff standard. IP67 and IP69K ratings enable use in critical applications with harsh ambient conditions, especially in factory automation.

Another plus: its numerous additional functions provide for comprehensive condition monitoring. The sensor is self-monitoring while also providing helpful diagnostic data. You also gain valuable information related to the installed location including the application itself. All in all, the sensor ensures greater equipment uptime.

Features

- IO-Link V1.1 (Smart Sensor Profile 2)
- Additional functions: various operating modes also for demanding object detection (averaging, time and counting functions, dynamic switching threshold variation, preset switching thresholds, emitter LED monitoring, recording of extreme values)
- Designed for harsh ambient conditions
- Sensor monitors itself and its environment: temperature, humidity, vibration, inclination, contamination, function reserve

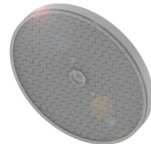


PHOTOELECTRIC SENSORS



	BOS0285	BOS0286	BOS0288	BOS0289
Series	R254K	R254K	R254K	R254K
Principle of optical operation	Diffuse sensor, triangulation	Retroreflective sensor	Through-beam sensor, receiver	Through-beam sensor, emitter
Dimension	20.4 × 60.3 × 49.5 mm	20.4 × 60.3 × 49.5 mm	20.4 × 60.3 × 49.5 mm	20.4 × 60.3 × 49.5 mm
Switching output Pin 4	Push-pull	Push-pull	Push-pull	Push-pull
Switching output Pin 2	PNP/NPN/push-pull programmable	PNP/NPN/push-pull programmable	PNP/NPN/push-pull programmable	PNP/NPN/push-pull programmable
Switching function	NO/NC programmable	NO/NC programmable	NO/NC programmable	NO/NC programmable
Analog output	Analog, current 4...20 mA	Analog, current 4...20 mA	Analog, current 4...20 mA	Analog, current 4...20 mA
Interface	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1
Time function	Single pulse, on/off delay	Single pulse, on/off delay	Single pulse, on/off delay	Single pulse, on/off delay
Beam characteristic	Focus, typical at 400 mm	Divergent		Divergent
Light type	Laser red light	LED red light	LED red light	LED red light
Range	30...250 mm	8 m	0...20 m	0...20 m
Connection	Connector, M12 male, 4-pin	Connector, M12 male, 4-pin	Connector, M12 male, 4-pin	Connector, M12 male, 4-pin
Housing material	PA 12, PA PACM 12	PA 12, PA PACM 12	PA 12, PA PACM 12	PA 12, PA PACM 12
Material sensing surface	PA PACM 12	PA PACM 12	PA PACM 12	PA PACM 12
Operating voltage U _B	10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC
Approval/conformity	CE, cULus, EAC, Ecolab	CE, cULus, EAC, Ecolab	CE, cULus, EAC, Ecolab	CE, cULus, EAC, Ecolab

ACCESSORIES



	BAM00UK
Description	Reflector for photoelectric retroreflective sensors, PMMA

CONNECTIVITY



	BCC0JRK	BCC0LC6	BCC0JRZ
Connection 1	M12 female, straight, 5-pin, A-coded	M12 female, right-angle, 5-pin, A-coded	M12 female, straight, 5-pin, A-coded
Connection 2			M12 male, straight, 4-pin, A-coded
Cable	TPE-V gray, 5 m	TPE-V gray, 5 m	TPE-V gray, 2 m