

Block-style high precision laser sensor with IO-link capabilities

DETECT-COMPLEX-SHAPED OBJECTS WITH PRECISION

Our high precision laser sensor demonstrates its class-leading performance by reliably detecting the smallest details in your application needs. It delivers outstanding precision in detection tasks and includes many useful additional features. These features and settings can be accessed using the convenient Balluff IO-Link Device Tool USB GUI interface window. The different detection and processing modes enable you to detect complex-shaped objects with precision. When other sensors reach their limits, the laser precision sensor handles complex applications easily.

You can select between two different sensor modes. In background suppression mode the sensor is taught the target object, which is then discerned and detected each time with high precision. In background evaluation mode the background is learned, so objects in front of the background are discerned and detected. This means the high precision laser sensor reliably detects highly reflective or shiny parts.

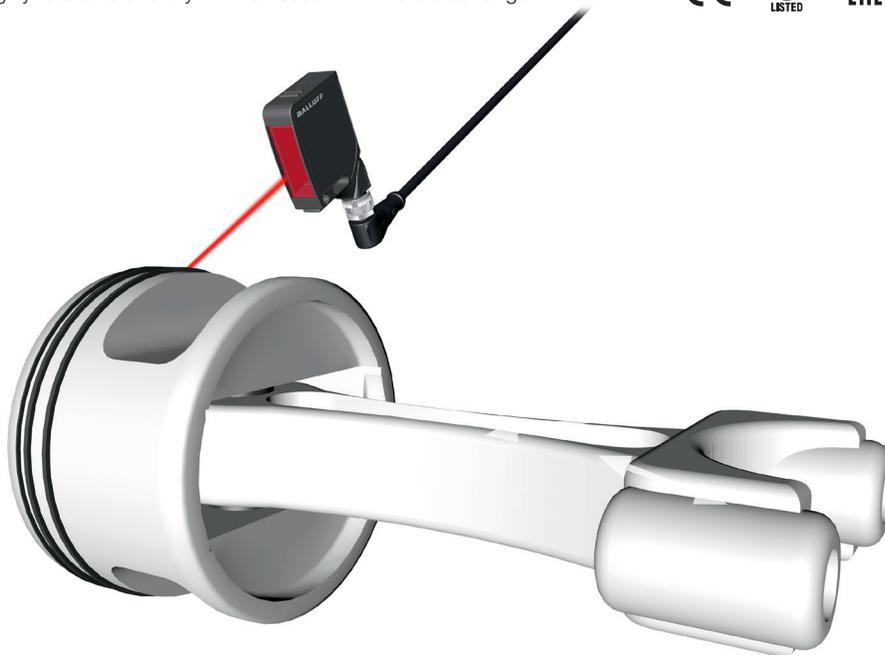
Thanks to these two detection modes, you achieve maximum precision and reliability in your applications. Depending on the target object, you can use IO-Link to switch over to the most fitting and reliable detection method for the application. And you can use the push-button on the sensor for teach-in if not using the IO-Link interface.

If you are using the sensor in critical environments with much ambient light, the intelligent ambient light suppression capability provides a further improvement; the sensor uses this suppression function to reliably filter out interference and ambient light. This feature guards against false switching, preventing equipment stoppage.

This Class1, red light laser sensor, in an IP67-rated housing, has a 30–200 mm range, though its actual focal length is 400 mm — so you can be assured of absolute accuracy when used within its stated range.

Features

- Extremely precise object detection, even in challenging environments
- Selectable detection modes: background suppression or background evaluation
- Intelligent data pre-processing in the sensor
- Smart and efficient diagnostics
- High resolution (10...100 µm)



IO-Link

OPTICAL LASER
PRECISION SENSOR



	BOS026K
Sensor principle	Background suppression
Range	30...200 mm
IO-Link interface (IO-Link version 1.1)	<ul style="list-style-type: none"> ■ Selectable detection modes – Background suppression or background evaluation ■ Intelligent ambient light suppression and adjustable hysteresis ■ Flexible, freely configurable counting function ■ Sensor condition diagnostics, plausibility check ■ Additional service functions, output configuration, time functions
Light type	Laser red light, laser class 1
Light spot size	1 × 3 mm (at 30 mm) 0,5 × 1,5 mm (at 200 mm)
Range deviation	1 % typ. (20 % to 90 % reflectivity)
Degree of protection per IEC 60529	IP67
Ambient temperature range	-5 ...+55 °C
Housing material	Die cast zinc, aluminum, glass
Connection	M12-male connector, 4-pin

ACCESSORIES



	BAM0043	BAM00TA	BAM00T9	BAM02ZE
Description	Mounting systems, protective bracket	Mounting bracket, steel, 25 × 28 × 40 mm, 2 adjustable axes, mounting with M4 screws	Mounting bracket, stainless steel, 20 × 50 × 26.5 mm, 2 adjustable axes, mounting with M4 and M5 screws	protective bracket

CONNECTOR



	BCC08A6	BCC0FL0	BCC0C5N	BCC0J7L
Description	M12 female straight, 5 pin/ M12 male straight, 5 pin, 2 m cable, TPE	M12 female right-angle, 5 pin/ M12 male straight, 4 pin, 2 m cable, TPE	M12 female, single-ended, straight, 2M, TPE	M12 female, single-ended, right-angle, 2M, TPE,