BALLUFF

Optical Laser Precision Sensor

CLASS-LEADING OBJECT DETECTION

Reliably detecting the smallest details has always been a major challenge. This is where the new BOS 21M High Precision Laser sensor shows its class-leading performance. It impresses with outstanding precision in all detection tasks and convinces with numerous useful additional features. Different detection and processing modes enable you to detect even complicated objects with exactness. And when other sensors reach their limits, the laser precision sensor handles even complex applications with aplomb.

You can select between two different sensor modes: In background suppression mode the sensor is taught the target object, which is then detected every time with high precision. In background evaluation mode the background is learned. Objects in front of the background are detected. This means the BOS 21M HPL reliably detects highly reflective or shiny parts.

Thanks to these two sensor modes you always achieve the maximum precision and reliability. Depending on the object, you use IO-Link to simply switch over to the best and most reliable detection method for the task at hand.

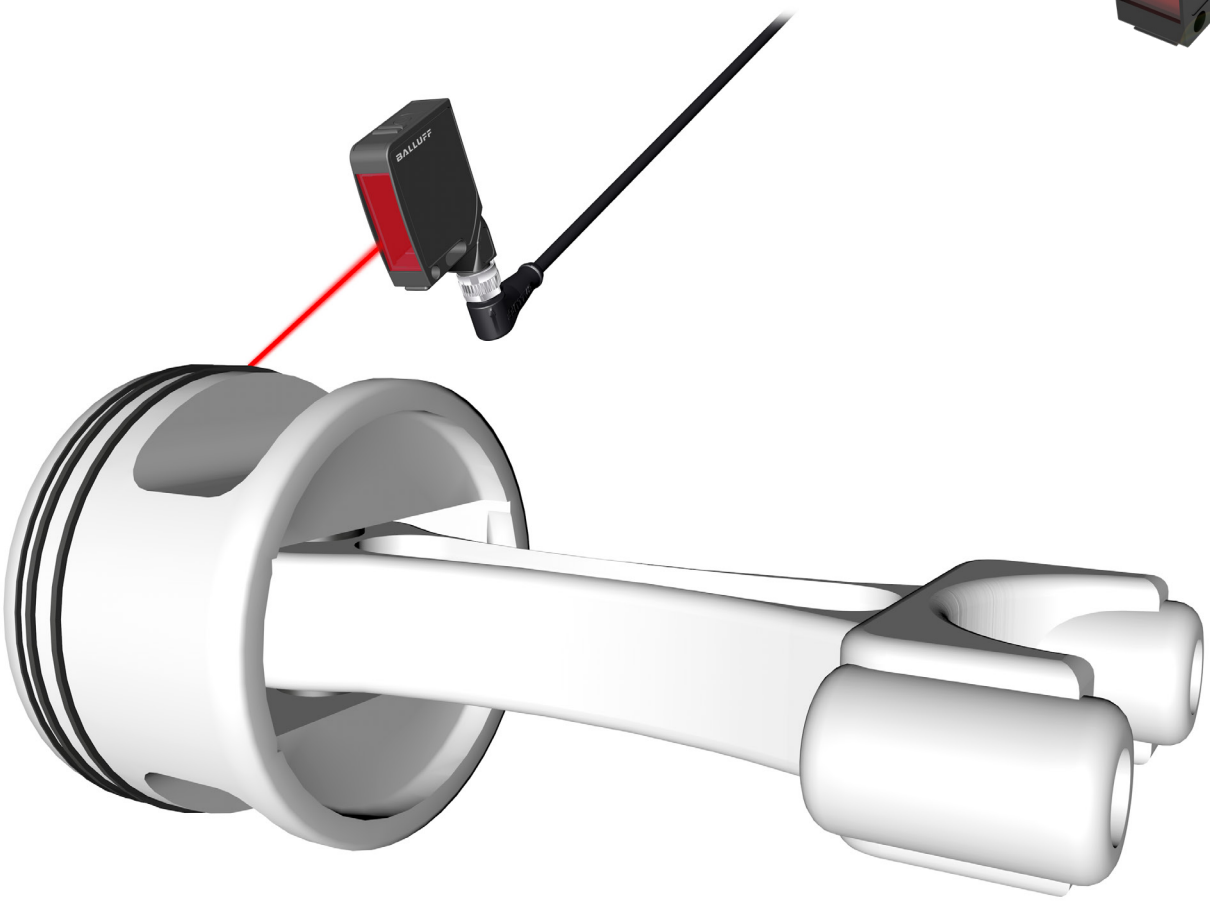
If you are using the sensor in critical environments with much stray light, the intelligent ambient light suppression provides even greater improvement. The sensor uses this function to reliably filter out interference and ambient light, so that false switching and the resulting equipment stoppage can be prevented.

Features

- Extremely precise object detection, even in challenging environments
- Selectable background suppression/ background evaluation
- Intelligent data pre-processing in the sensor
- Smart and efficient diagnostics

CE EAC IO-Link





OPTICAL LASER
PRECISION SENSOR



	BOS026K
Sensor principle	Background suppression
Range	30…200 mm
IO-Link interface (IO-Link version 1.1)	■ 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 605529	IP67
Ambient temperature range	–5 …+55 °C
Housing material	Die cast zinc, aluminum, glass
Connection	M12-male connector, 4-pin

ACCESSORIES







	BAM00TH	BAM00TA	BAM00T9	
Description	Clamping holder, aluminum, 15.5 × 19 × 14 mm, sensors with dovetail clamp, mounting with M4 screws	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	

CONNECTOR





	BCC039M	BCC03AE
Description	M12 female straight, 5 pin/ M12 male straight, 4 pin, 2 m cable	M12 female right-angle, 5 pin/ M12 male straight, 4 pin, 2 m cable

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