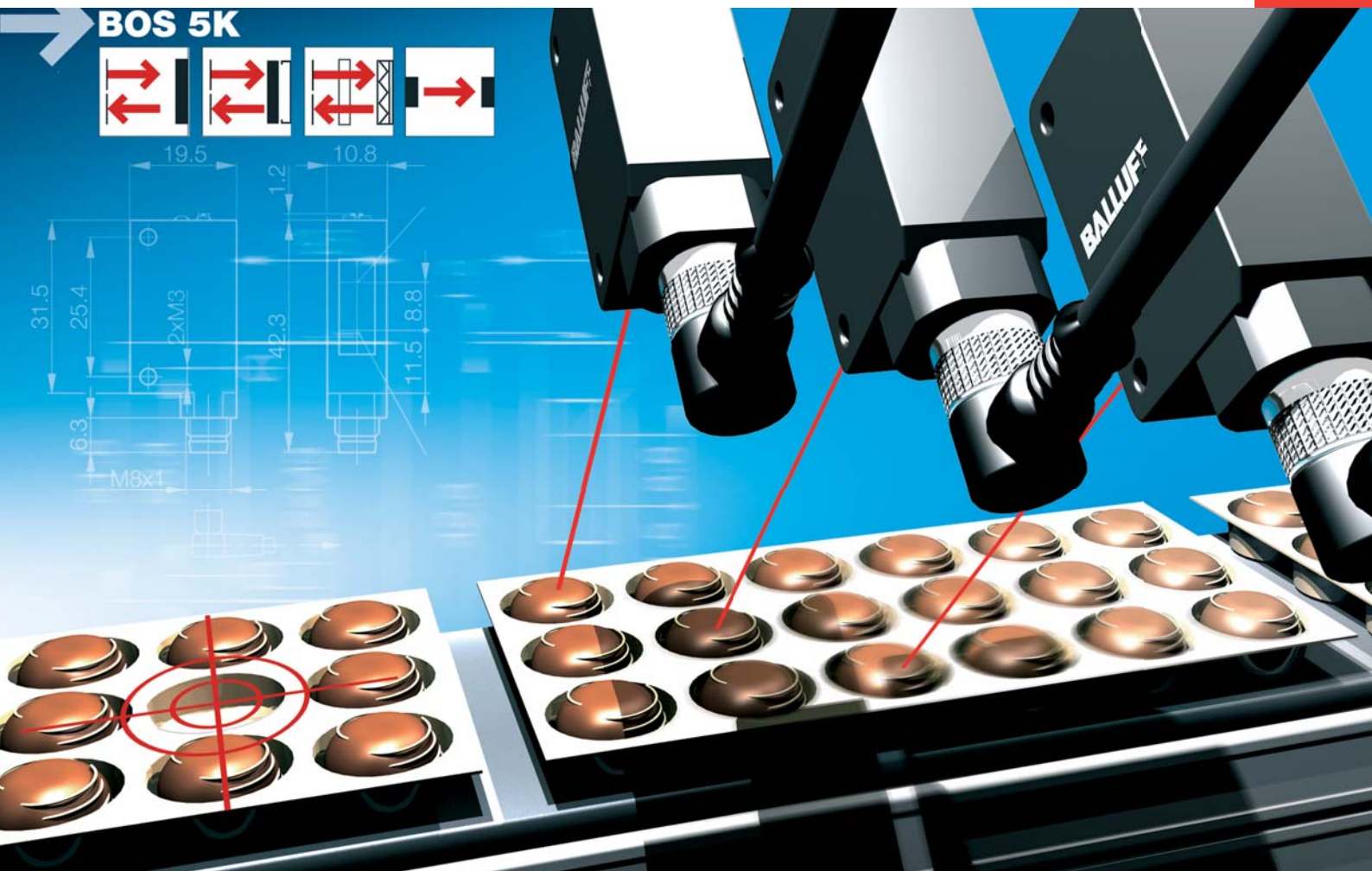
BALLUFF

sensors worldwide

Series BOS 5K

... Now with Background Suppression



Photoelectric Sensors
BOS 5K – just the essentials

Series BOS 5K includes diffuse, retro-reflective and through-beam sensors. New is a diffuse model with background suppression and 200 mm range.

All models can be ordered with cable or connector, PNP or NPN output and light-on or dark-on switching.

The benefits to you:

- **Small, compact housing**
- **Complete series for virtually any application**
- **For universal use**
- **Simple to calibrate**
- **Reliable in the application**
- **Very good price/ performance ratio**
- **Large offering of mounting brackets, apertures and reflectors**



Diffuse with Background Suppression
Monitoring the assembly process in consumer goods production – targeted interrogation of individual product attributes.

Diffuse











with background suppression
scan range 40...200 mm

- Simple to calibrate using 6-turn potentiometer
- Visible red light for easy alignment
- Reliable object detection in front of a background

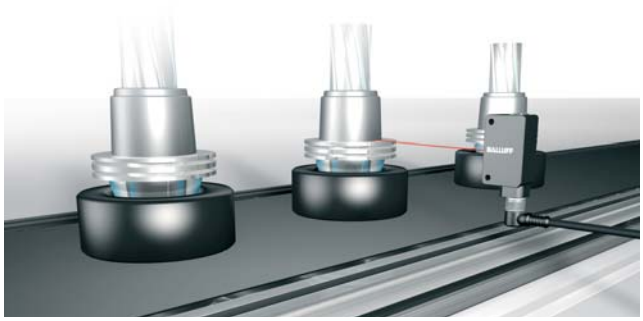
"small beam" with red light (energetic)
scan range 50...200 mm

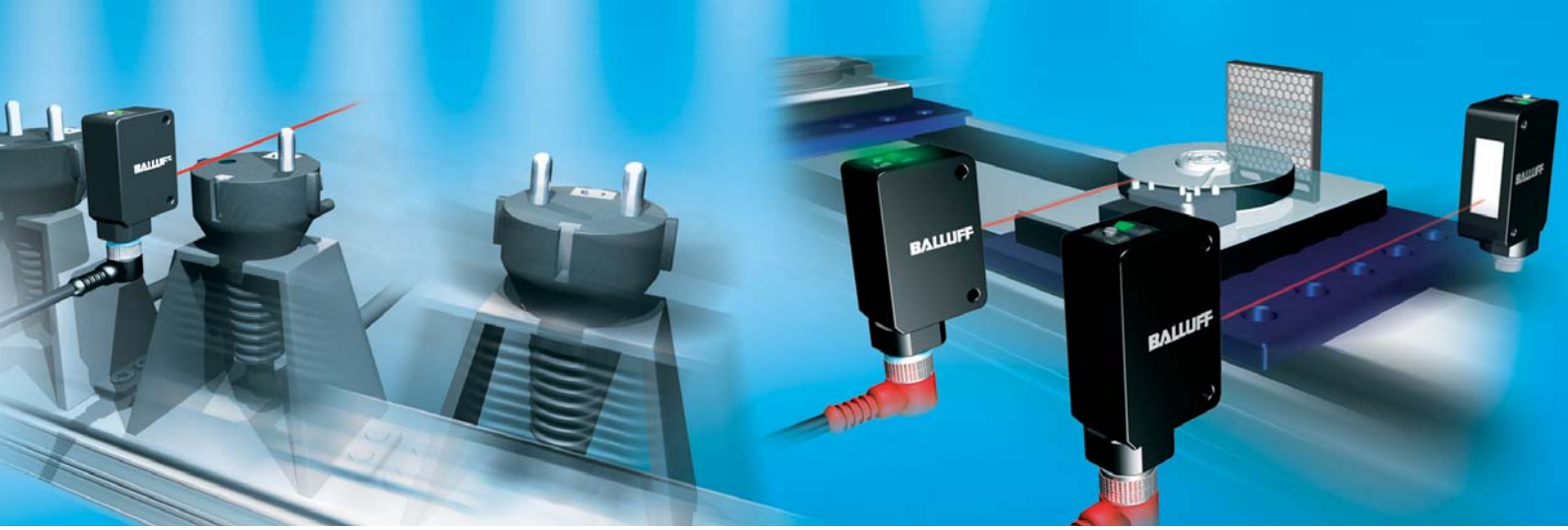
- Pinpoint LED enables detection of small objects
- Simple to align and calibrate
- Cost-effective solution for demanding applications

with infrared light (energetic)
scan range 900 mm

- High light intensity enables ranges up to 900 mm
- Simple calibration via potentiometer
- Very good price/performance ratio



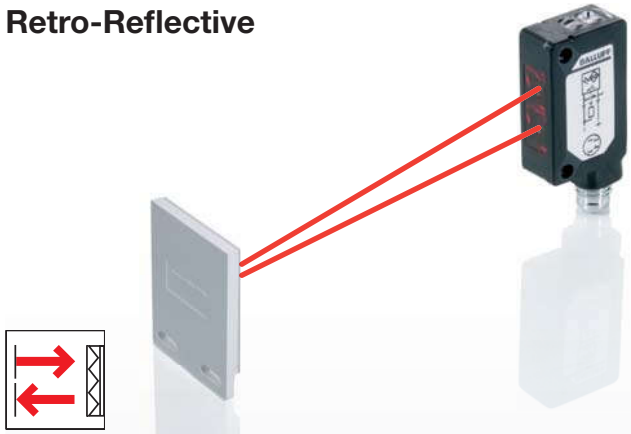




Diffuse "small beam" with Red Light (energetic)
The precise light beam reliably detects the presence of small parts.

Retro-Reflective and Through-Beam
Assembly technology – powerful sensors for long ranges and a high degree of function reserve.

Retro-Reflective



with polarized red light
range 0.1...4 m

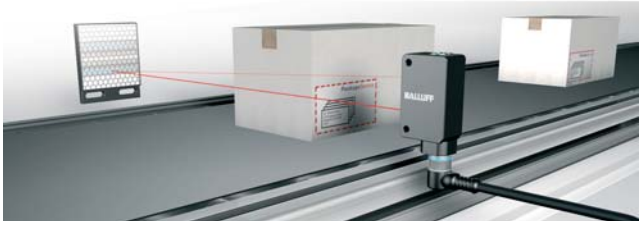
- Polarized red light enables reliable detection even of reflective objects
- Long range up to 4 m
- Simple to align and calibrate

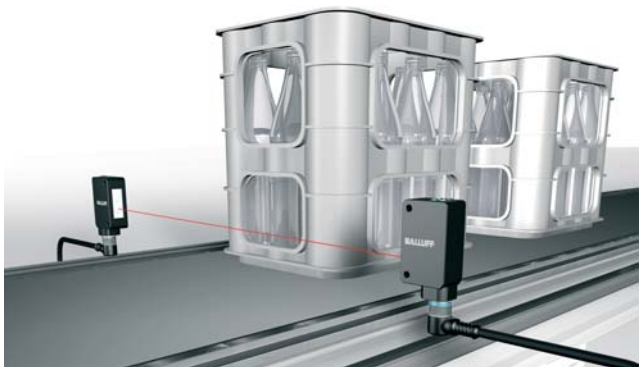
Through-Beam



with infrared light
range 10 m

- Long range up to 10 m
- Simple to align emitter and receiver
- Slit apertures enable excellent small parts detection
- Simple calibration via potentiometer





Photoelectric Sensors
BOS 5K – Selection Table

P/N with connector	P/N with cable	Output
Diffuse with background suppression, red light, scan range 40...200 mm		
BOS 5K-PS-RH12-S75	BOS 5K-PS-RH12-02	PNP
BOS 5K-NS-RH12-S75	BOS 5K-NS-RH12-02	NPN
BOS 5K-PO-RH12-S75	BOS 5K-PO-RH12-02	PNP
BOS 5K-NO-RH12-S75	BOS 5K-NO-RH12-02	NPN
BOS 5K-PO-RH12-S75-S		PNP
BOS 5K-NO-RH12-S75-S		NPN
Diffuse "small beam“ with red light (energetic), scan range 50...200 mm		
BOS 5K-PS-RD11-S75	BOS 5K-PS-RD11-02	PNP
BOS 5K-NS-RD11-S75	BOS 5K-NS-RD11-02	NPN
BOS 5K-PO-RD11-S75	BOS 5K-PO-RD11-02	PNP
BOS 5K-NO-RD11-S75	BOS 5K-NO-RD11-02	NPN
BOS 5K-PO-RD11-S75-S		PNP
BOS 5K-NO-RD11-S75-S		NPN
Diffuse, infrared light (energetic), scan range 900 mm		
BOS 5K-PS-ID10-S75	BOS 5K-PS-ID10-02	PNP
BOS 5K-NS-ID10-S75	BOS 5K-NS-ID10-02	NPN
BOS 5K-PO-ID10-S75	BOS 5K-PO-ID10-02	PNP
BOS 5K-NO-ID10-S75	BOS 5K-NO-ID10-02	NPN
BOS 5K-PO-ID10-S75-S		PNP
BOS 5K-NO-ID10-S75-S		NPN

NEW!

P/N with connector	P/N with cable	Output
Retro-reflective, polarized red light, scan range 0.1...4 m		
BOS 5K-PS-RR10-S75	BOS 5K-PS-RR10-02	PNP
BOS 5K-NS-RR10-S75	BOS 5K-NS-RR10-02	NPN
BOS 5K-PO-RR10-S75	BOS 5K-PO-RR10-02	PNP
BOS 5K-NO-RR10-S75	BOS 5K-NO-RR10-02	NPN
BOS 5K-PO-RR10-S75-S		PNP
BOS 5K-NO-RR10-S75-S		NPN
Through-beam, infrared light, range 10 m (both emitter and receiver included)		
BOS 5K-PS-IX10-S75	BOS 5K-PS-IX10-02	PNP
BOS 5K-NS-IX10-S75	BOS 5K-NS-IX10-02	NPN
BOS 5K-PO-IX10-S75	BOS 5K-PO-IX10-02	PNP
BOS 5K-NO-IX10-S75	BOS 5K-NO-IX10-02	NPN
BOS 5K-PO-IX10-S75-S		PNP
BOS 5K-NO-IX10-S75-S		NPN

Accessories

Brackets
BOS 5-HW1
BOS 5-HW2
BOS 5-HW3
(from left to right)



Connectors
BKS-S 74
BKS-S 75
(from left to right)



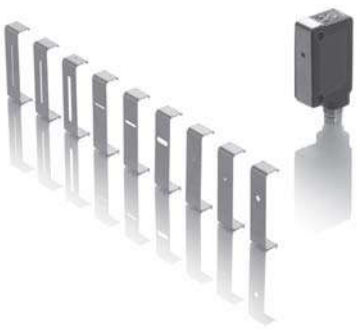
Reflectors, reflector brackets
BOS R-1
BOS R-25
BOS 5-HW4
BOS R-26
BOS 5-HW5
BOS R-9
BOS 5-HW6
BOS R-27
BOS R-28
BOS R-29
BOS R-30
(from left to right)



Vertical slit apertures
BOS 5-BL1
BOS 5-BL2
BOS 5-BL3

Horizontal slit apertures
BOS 5-BL4
BOS 5-BL5
BOS 5-BL6

Circular apertures
BOS 5-BL7
BOS 5-BL8
BOS 5-BL9
(from left to right)



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