SmartReflect ®
The light barrier without reflector.

A world first from Baumer:

SmartReflect® – reliable and economical.

With *SmartReflect®* Baumer has reinvented the optical light barrier: The reflector as the weak point is eliminated and highly reliable object detection is still guaranteed. That reduces your costs tremendously. Since every interruption of the light beam by any object is detected thanks to the *SmartReflect®* principle, the *SmartReflect®* light barrier can reliably detect objects independent of their shape, color or surface finish. The *SmartReflect®* detects virtually anything – even mirrors.

Maximum system uptime and process safety
- Very reliable object detection thanks to barrier principle
- Elimination of the reflector as a potential source of error
- No function impairment through dirt accumulation
- Available in robust washdown or hygiene design

Reduction of operating costs
- No reflector means time saving installation
- No need for a reflector eliminates exchange and wear
- No need for a reflector eliminates cleaning effort

Raising productivity
- Sensing range up to 1.9 m or 1 m for transparent objects
- High machine performance thanks to short response times of < 0.25 ms
- Fast format changes, easy sensor exchange and additional usage data via IO-Link

Wouldn't you like to save money too?

Individual solutions for your industry.

Space-saving miniature sensors

- Very small designs with cable outlet at the rear or below
- Point or line versions
- Fast configuration by *qTeach*®
- IO-Link – Industry 4.0 and IoT-ready
- Sensing range up to 300 mm

Rectangular standard sensors

- Easy implementation and operation
- Quick configuration by *qTeach*®
- Short response times of < 0.25 ms
- IO-Link – Industry 4.0 and IoT- ready
- Sensing range up to 1000 mm

Cylindrical M18 sensors

- Rugged M18 metal housing
- Baumer PinPoint LED
- Simple and user-friendly commissioning with *qTeach*®
- Sensing range up to 300 mm

We at Baumer know that different industries can require different features.

That's why we manufacture the *SmartReflect®* light barrier in different versions individually matched to the needs of your field. For example hygiene-certified by EHEDG for the food industry, space-saving and flexible for handling technology or easy to adjust and not sensitive to soiling or dust for the graphical industry. Increase your process safety with *SmartReflect®*.

Sturdy stainless steel sensors in wash-down or hygiene design
O300 / O500 / FNDR14 / FNDH14

- EHEDG certified, FDA-compliant, Ecolab tested and IP 69K
- Long-term sealing thanks to *proTect+*
- Variants with IO-Link and for transparency detection
- Sensing range up to 1000 mm

Long range up to 1.9 m
O500 / ONDK 25

- Safe Class 1 lasers
- Easy and user-friendly commissioning by *qTeach®*
- IP 67
- Sensing range up to 1900 mm

Linear beam for seamless detection
O300

- Up to 67 mm long line
- Detection of small or perforated objects
- Laser class 1 or PinPoint LED
- Easy and user-friendly commissioning by *qTeach®*
- IO-Link – Industry 4.0 and IIoT ready

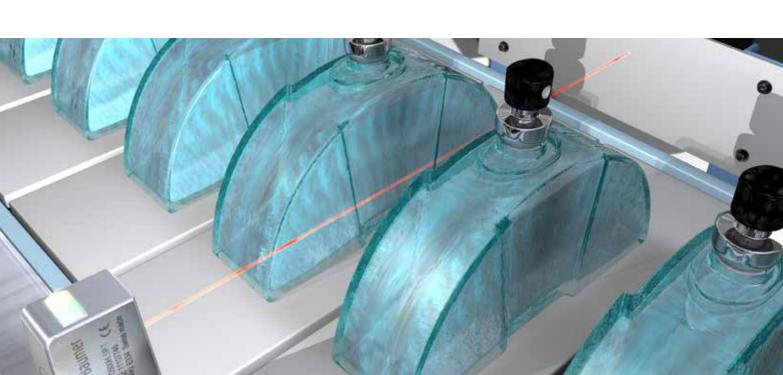# SmartReflect® – clear advantages in transparency detection.

The O300 and O500 *SmartReflect®* Transparent sensors set new standards in the detection of transparent objects. The light barrier without a reflector is the only sensor in its class to detect transparent objects of any shape or structure up to a distance of 1 meter. Both sizes are available in plastic and high grade stainless steel. Thanks to this variety, *SmartReflect®* Transparent sensors are the ideal solution in all areas of the packaging industry.

Digitization begins with the sensor.

IIO-Link supports not only the bi-directional transmission of sensor parameters like measuring ranges or sensitivity levels for fast for fast format changes. The interface also supplies qualified process and diagnostic data for optimized, cost-saving maintenance processes. This means that the IO-Link sensors by Baumer are "Ready for Industry 4.0".

Cost-effective & securely connected

Simple & safe operation

Extended settings

IO-Link

Fast sensor exchange

Additional data

Increased flexibility

Smart products for all requirements

Description		Sensing range	Light source	Response time			IO-Link
				Red LED	PinPoint LED	Laser Class 1	
Miniature	FNCK 07	17 … 45 mm	< 0.5 ms	▪			
	O200.SP	20 … 180 mm	< 0.25 ms		▪		▪
	O300.SP	30 … 300 mm	< 0.25 ms		▪		▪
	O300.SL	30 … 250 mm	< 0.25 ms			▪	▪
Standard	O500.SP	60 … 600 mm	< 0.25 ms		▪		
	FNDK 14	50 … 800 mm	< 1.8 ms	▪			▪
	ONDK 25	1900 mm	< 10 ms			▪	
Stainless steel	O300W.SP	30 … 300 mm	0.49 ms		▪		▪
	O300W.SL	30 … 250 mm	< 0.25 ms			▪	▪
	O300H.SL	30 … 250 mm	< 0.25 ms			▪	▪
	O300H.SP	30 … 300 mm	0.49 ms		▪		▪
	O500W.SP	60 … 600 mm	< 0.49 ms		▪		▪
	O500H.SP	60 … 600 mm	< 0.25 ms		▪		▪
	FNDR 14	50 … 800 mm / 30 … 250 mm (Laser)	< 1.8 ms	▪		▪	▪
	FNDH 14	50 … 800 mm / 1900 mm (Laser)	< 1.8 ms	▪		▪	▪
M18	OR18.SP	55 … 300 mm	< 0.49 ms		▪		▪
Transparent detection	O300.SP.T	30 … 250 mm	< 0.25 ms		▪		▪
	O300W.SP.T	30 … 300 mm	< 0.25 ms		▪		▪
	O300H.SP.T	30 … 300 mm	< 0.25 ms		▪		▪
	O500.SP.T	30 … 1000 mm	< 0.25 ms		▪		▪
	O500W.SP.T	30 … 1000 mm	< 0.25 ms		▪		▪
	O500H.SP.T	60 … 1000 mm	< 0.25 ms		▪		▪
	FNDH 14	20 … 800 mm	< 1.8 ms	▪			▪

For more information about our *SmartReflect®* sensors please visit
www.baumer.com/smartreflect

Find your local partners at: www.baumer.com/worldwide

Baumer
Passion for Sensors