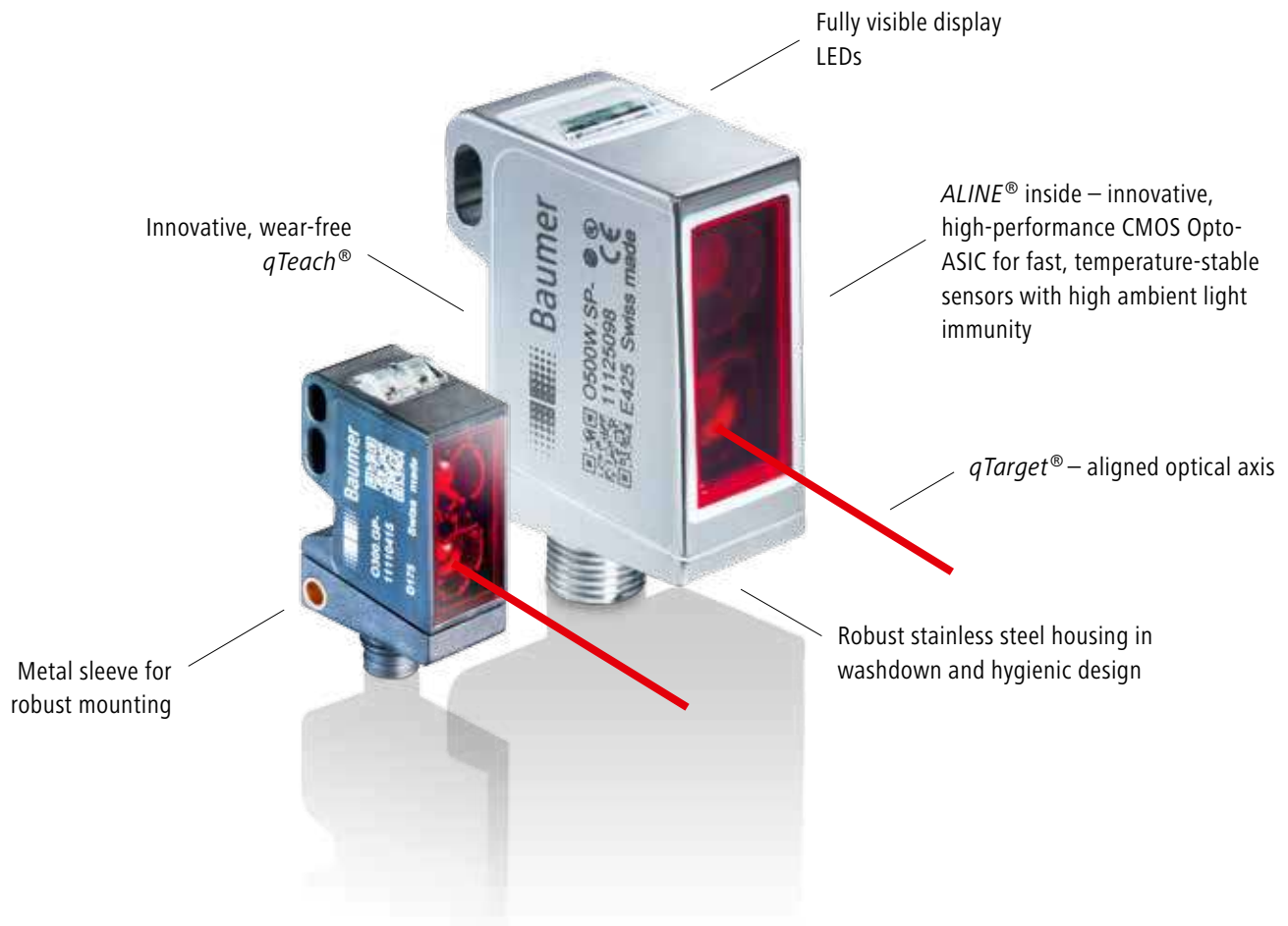


O300, O500 Light barriers and diffuse sensors

A unique portfolio for reliable object detection.



O300/O500 – the easy solution for reliable object detection.



Solve applications simply and properly

Thanks to the choice of two housing sizes in three designs, four light sources and seven sensor principles, among other options, you are sure to find the right sensor solution for your application.

Process safety through extended performance reserves

Powerful processors, sophisticated optical measuring technology, high MTF values and intelligent analysis algorithms guarantee you the necessary reserves to make sure that objects are always reliably detected, even under difficult conditions.

Simple implementation

Flexibility in machine design thanks to the housing in *OneBoxDesign*, fast installation thanks to the *qTarget*[®] aligned light beam and optimum adjustment with the reliable and wear-free *qTeach*[®] and 1-step teach-in procedure allow you to implement solutions very easily.

Uniform operating concept

qTeach[®], the comfortable and wear-free teach-in procedure by Baumer, allows flexible and accurate adjustment of the sensors. The shortened 1-step teach-in procedure is available for simple applications.

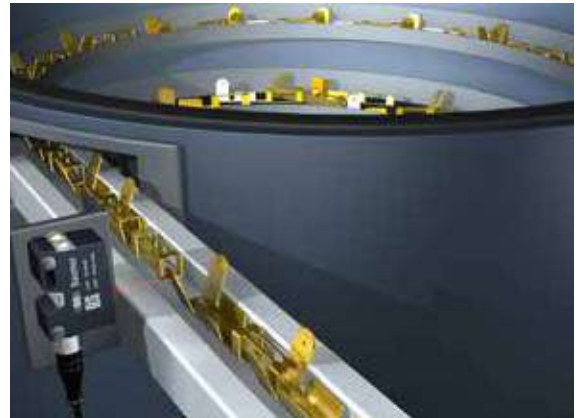
Ready for Industry 4.0

The use of additional sensor data via the IO-Link interface offers not only further improvements in efficiency but also the option of developing completely new products and services. Examples are proactive maintenance and highly flexible parameterization in complex format changes.

The O300/O500 highlights.

SmartReflect[®] – the first light barrier without a reflector

- Highly reliable object detection thanks to the sensor principle
- Greater process safety through elimination of the reflector as the weak point
- No function impairment from dirt accumulation
- Reduction of running costs: fast installation, no downtimes caused by defective or dirty reflector



Detection of transparent objects from up to one meter without reflector

- Unique range of 1 meter without reflector
- Response time of only 0.25 ms allows usage in fast applications
- One sensor for all objects: PET and glass bottles, trays, films or flow packs
- Large sensing distance thanks to very small blind region



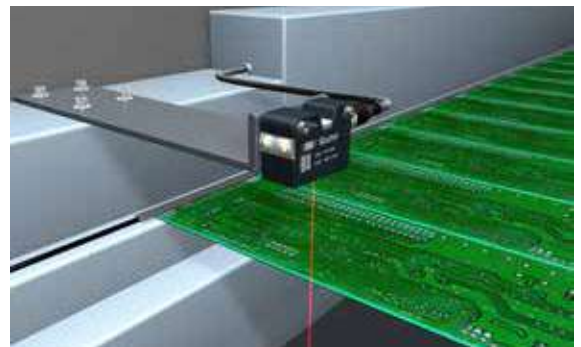
Improvement in reliability – O300/O500 in stainless steel with *proTect*⁺

- Thanks to the *proTect*⁺ impermeability concept by Baumer, the sensors offer maximum reliability and a long service life
- The special design and the selection of high-quality materials guarantee maximum strength
- More than just IP 69K: the sensors undergo a demanding testing procedure consisting of high-pressure cleaning, immersion tests lasting 168 hours as well as temperature shock tests in water and air


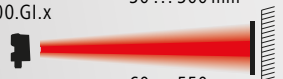

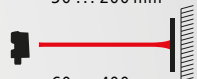

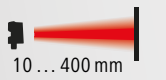
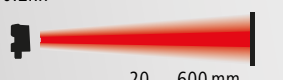





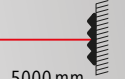



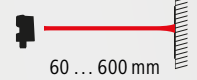


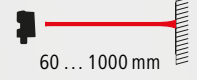
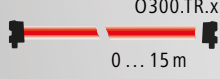

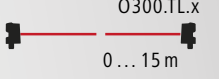
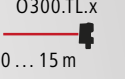


In a nutshell – O300/O500 laser

- Detection of tiny objects thanks to a very accurate, 0.1 mm light beam
- Reliable detection of parts positioned close together
- Laser class 1, to protect your eyes
- The light beam also allows detection through very small openings and in complex machine designs





Light sources for every application.


Standard LED (R)/ Infrared LED (I)	Baumer <i>PinPoint</i> (P)	Laser (L)
Diffuse sensor with background suppression		
O300.GR.x/O300.GI.x  30 ... 300 mm O500.GR.x/O500.GI.x  60 ... 550 mm	O300.GP.x  30 ... 200 mm O500.GP.x  60 ... 400 mm	O300.GL.x  30 ... 250 mm
Diffuse sensor with intensity difference		
O300.ZR.x/O300.ZI.x  10 ... 400 mm O500.ZR.x/O500.ZI.x  20 ... 600 mm		O300.ZL.x  10 ... 250 mm
Retro-Reflexive sensor		
O300.RR.x  0 ... 4000 mm O500.RR.x  0 ... 7500 mm	O300.RP.x  0 ... 5000 mm O500.RP.x  0 ... 7500 mm	O300.RL.x  0 ... 5000 mm
Retro-Reflexive sensor for transparent objects		
	O300.RP.T.x  0 ... 3500 mm O500.RP.T.x  0 ... 5500 mm	
<i>SmartReflect</i> [®] light barrier without reflector		
	O300.SP.x  30 ... 300 mm O500.SP.x  60 ... 600 mm	O300.SL.x  30 ... 250 mm
<i>SmartReflect</i> [®] Transparent		
	O300.SPT.x  30 ... 300 mm O500.SPT.x  60 ... 1000 mm	
Through beam barrier		
O300.ER.x  0 ... 15 m O500.ER.x  0 ... 40 m		O300.EL.x  0 ... 15 m O300.TL.x  0 ... 15 m


Please find the complete portfolio including hygienic and washdown design in the Baumer product finder at www.baumer.com.

The ideal platform for tailor-made solutions.

 **Standard LED** – diffuse light spot, especially suited for object detection during parts feeding

 **Baumer *PinPoint* LED** – small, homogenous light spot with a sharp focus

 **Infrared LED** – invisible light spot e.g. used for light barriers

 **Laser** – focused, clearly visible light beam, well suited for accurate positioning tasks

- **O300** – for tight spaces (12.9 × 32.3 × 23 mm)
- **O500** – for larger ranges (18 × 45 × 32 mm)




4 light sources

3 housing designs

More than
2500 sensor
variants

2 housing sizes

 **IO-Link**

7 sensor principles

- Compact plastic housing IP67
- Stainless steel washdown design IP68/69K, Ecolab and *proTect*⁺
- Stainless steel hygienic design with Ecolab and *proTect*⁺ conforms to EHEDG and FDA



- Diffuse sensor with background suppression
- Diffuse sensor with intensity difference
- *SmartReflect*[®] – light barrier without reflector
- *SmartReflect*[®] Transparent
- Retro-Reflexive sensor
- Retro-Reflexive sensor for transparent objects
- Through beam barrier

Accessories.



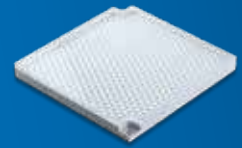
Sensofix mounting



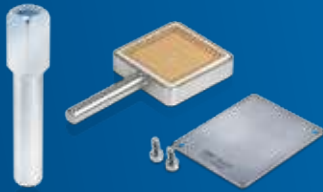
Mounting angles



Connectors



Reflector



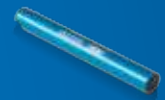
Stainless steel reflectors,
EHEDG and Ecolab-certified



Mountings for sensors in
hygienic design



Connectors/Plugs in
washdown design



Magnetic teach pen



USB IO-Link Master

You can find further information about additional models of the new performance category in optical sensors at:



www.baumer.com/O300-0500

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Passion for Sensors

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