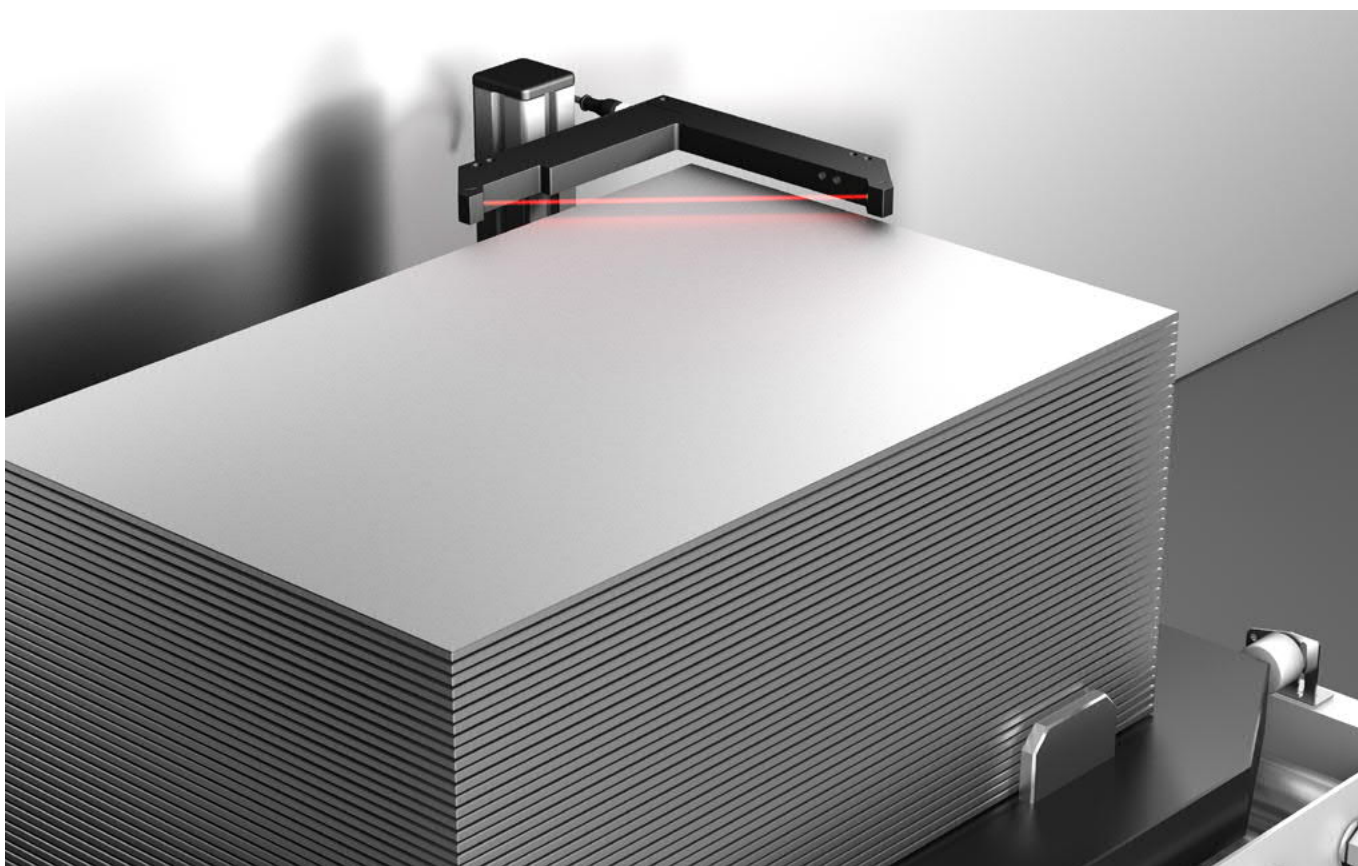


Angled light barriers



Angled light barriers from di-soric work according to the through-beam principle. They are used, preferably in tight spaces, for fast, surface-independent detection of objects. Since transmitter, receiver and the electronics are located in one housing, they can be mounted quickly. Costly brackets and time-consuming adjustments can be avoided.



 **di-soric**

OGL	81
OGLP Dirt-resistant	82
OGLL Laser	83

The OGL angled light barrier offers unsurpassed performance and can be operated with a potentiometer. The OGL offers high resolution and reproducibility with outstanding speed. It is operated intuitively using potentiometers or IO-Link. Four preset operation modes provide the option for ideal adaptation to the application. At the same time, IO-Link offers important advantages in configuration and diagnosis.



Technical data (typ.) +20 °C, 24 VDC	
Service voltage	10 to 30 VDC (Supply Class 2)
Switching output	Push-pull (pnp/npn can be adjusted by IO-Link) 100 mA, NO/NC (can be switched by potentiometer)
Sensitivity adjustment	Adjustable (potentiometer)
Ambient temperature	-25 to +60 °C
Protection type	IP 67
Operation modes	Standard (general applications) High Resolution (for detecting very small objects) Power (increased function reserve) Speed (reliable detection of fast-moving parts)
Plug connector	M8, 3-pin
Connection cable	TK ... (optionally available)

Operation modes



Standard – General applications

- 5 kHz
- Reproducibility: 0.02 mm



Power – Increased function reserve

- Increased transmitting power,



High Resolution – For detecting very small objects

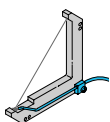
- Resolution improved by 30%



Speed – Reliable detection of fast-moving parts

- 30% higher switching frequency

	Length of the optical axis (mm)	Housing design Size (mm)	Red light, 660 nm	Infrared light, 880 nm	No-load current (mA)	Resolution (mm)	Standard factory settings	Switching frequency (Hz)	Reproducibility (mm)	Die-cast zinc, black powder-coated	Product description
OGL											
	50	75 x 75 x 10	■	■	< 30	Ø 0.3 (min. Ø 0.2)	■	5,000 (max. 10,000)	0.02	■	OGL 050 G3-T3 ¹⁾
											OGL 051 G3-T3 ¹⁾
	80	105 x 105 x 10	■	■	< 30	Ø 0.3 (min. Ø 0.2)	■	5,000 (max. 10,000)	0.02	■	OGL 080 G3-T3 ¹⁾
											OGL 081 G3-T3 ¹⁾
	120	150 x 150 x 12	■	■	< 30	Ø 0.5 (min. Ø 0.4)	■	5,000 (max. 10,000)	0.02	■	OGL 120 G3-T3 ¹⁾
											OGL 121 G3-T3 ¹⁾








Air nozzle devices FBE for OGLP xx G3-T3

see "OG-Z Accessories for fork light barriers," page 79

OGLP DIRT-RESISTANT

The high-performance angled light barriers from di-soric have an increased functional reserve. In the devices with contamination indicator, the cleaning cycles are reduced to a minimum.

Technical data (typ.) +20°C, 24 VDC	OGLP xx G3-T3	OGL xx/xx P6L-IBS
Service voltage	10 to 30 VDC (Supply Class 2)	10 to 35 V DC
Switching output	Push-pull (pnp/npn can be adjusted by IO-Link) 100mA, NO/NC (can be switched by potentiometer)	pnp, 200 mA, NO
Sensitivity adjustment	Adjustable (potentiometer)	
Ambient temperature	-25 to +60 °C	-10 to +60 °C
Protection type	IP 67	IP 67
Operation modes	Standard (general applications) High Resolution (for detecting very small objects) Power (increased function reserve) Speed (reliable detection of fast-moving parts)	
Plug connector	M8, 3-pin	M12, 4-pin
Connection cable	TK ... (optionally available)	VK ... /4 (optionally available)

Operation modes OGLP xx G3-T3



- Standard** – General applications
- 5 kHz
 - Reproducibility: 0.02 mm



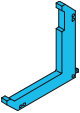

- Power** – Increased function reserve
- Increased transmitting power,



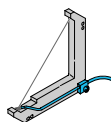
- High Resolution** – For detecting very small objects
- Resolution improved by 30%



- Speed** – Reliable detection of fast-moving parts
- 30% higher switching frequency

	Length of the optical axis (mm)	Housing design Size (mm)	Infrared light, 860 nm	Red light, 660 nm	No-load current (mA)	Resolution (mm)	Power factory settings	Switching frequency (Hz)	Reproducibility (mm)	Contamination indicator / output	IO-Link	Die-cast zinc, black powder-coated	Die-cast zinc, natural	Product description
OGLP Dirt-resistant														
	50	75 x 75 x 10	■		< 30	Ø 0.3 (min. Ø 0.2)	■	5,000 (max. 8,000)	0.02	–	■	■	–	OGLP 050 G3-T3
	80	105 x 105 x 10	■		< 30	Ø 0.3 (min. Ø 0.2)	■	5,000 (max. 8,000)	0.02	–	■	■	–	OGLP 080 G3-T3
	120	150 x 150 x 12	■		< 30	Ø 0.5 (min. Ø 0.4)	■	5,000 (max. 8,000)	0.03	–	■	■	–	OGLP 120 G3-T3
	40	60 x 83 x 10		■	45	–	■	200	–	■	–	–	■	OGL 50/31 P6L-IBS
	60	65 x 106 x 10		■	45	–	■	200	–	■	–	–	■	OGL 55/54 P6L-IBS

Air nozzle devices FBE for OGLP xx G3-T3



see "OG-Z Accessories for fork light barriers," page 79

OGLL LASER

The OGLL laser angled light barrier is particularly suited for detecting small parts down to 0.05 mm. Using collimated laser red light achieves a high degree of precision of the switching point between transmitter and receiver across the entire fork width. The devices work with a clocked red light laser in the eye-safe laser class 1. The easily visible, small laser point makes quick adjustment to the object possible even with a large amount of ambient light.



Technical data (typ.) +20 °C, 24 VDC	
Service voltage	10 to 30 VDC (Supply Class 2)
Switching output	Push-pull (pnp/npn can be adjusted by IO-Link) 100 mA, NO/NC (can be switched by potentiometer)
Sensitivity adjustment	Adjustable (potentiometer)
Ambient temperature	-25 to +60 °C
Protection type	IP 67
Operation modes	Standard (general applications) High Resolution (for detecting very small objects) Power (increased function reserve) Speed (reliable detection of fast-moving parts)
Plug connector	M8, 3-pin
Connection cable	TK ... (optionally available)

Operation modes



Standard – General applications

- 5 kHz
- Reproducibility: 0.01 mm



Power – Increased function reserve

- Increased transmitting power,



High Resolution – For detecting very small objects

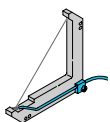
- Resolution improved by 30%



Speed – Reliable detection of fast-moving parts

- 100% higher switching frequency

	Length of the optical axis (mm)	Housing design Size (mm)	Transmission light (clocked)	Red-light laser, 670 nm	No-load current (mA)	Resolution (mm)	Standard factory settings	Switching frequency (Hz)	Reproducibility (mm)	Die-cast zinc, black powder-coated	Product description
OGLL Laser											
	50	75 x 75 x 10		■	< 30	Ø 0.05 (min. Ø 0.03)	■	5000 (10,000)	0.01	■	OGLL 051 G3-T3
	80	105 x 105 x 10		■	< 30	Ø 0.05 (min. Ø 0.04)	■	5000 (10,000)	0.01	■	OGLL 081 G3-T3
	120	150 x 150 x 12		■	< 30	Ø 0.10 (min. Ø 0.05)	■	5000 (10,000)	0.01	■	OGLL 121 G3-T3



Air nozzles (FBE)

see "OG-Z Accessories for fork light barriers," page 79