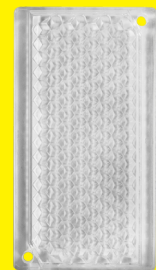


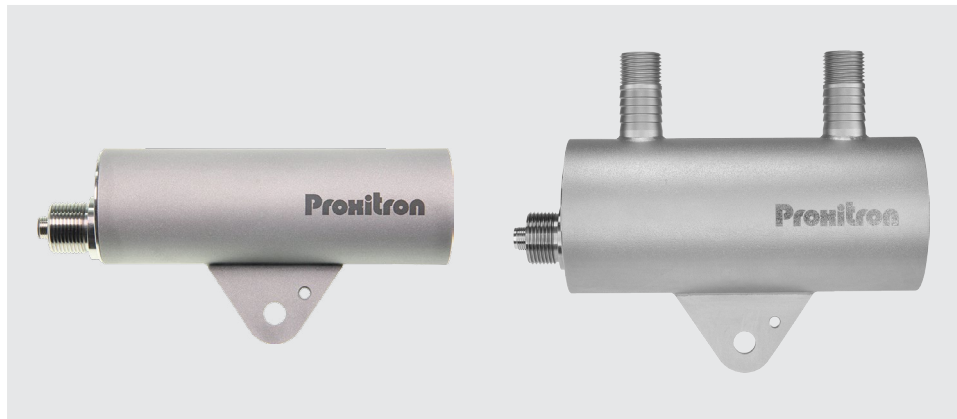
High-performance Light Barriers

LX series with digital interface

detection of hot and cold material



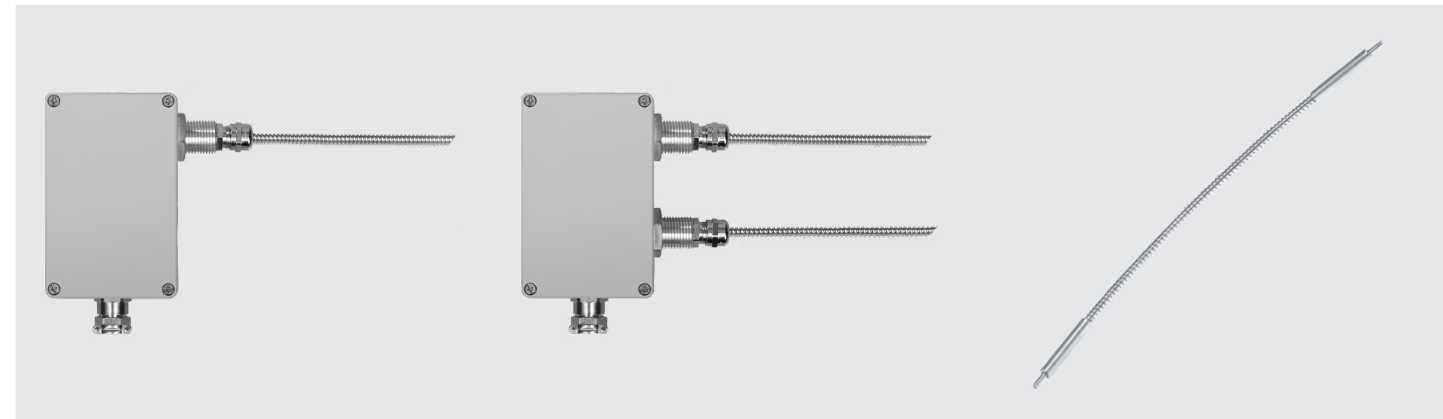
High-performance Light Barriers – LX Series compact devices



Ambient temperature	70 °C	200 °C with water cooling
Housing [mm]	Ø57 x 170	Ø76 x 170
Housing material	stainless steel	stainless steel
Through-beam sensor emitter type	LXAA 600.3 S4	LXAB 600.3 S4
Through-beam sensor receiver type	LXSA 600.3A GV S8	LXSB 600.3A GV S8
Max. sensing range / operating range	2500 m / 1500 m	2500 m / 1500 m
Universal light barrier with through-beam, retroreflective and diffuse function	LXUA 600.3A GV S8	LXUB 600.3A GV S8
Retroreflective * max range / operation	65 m / 35 m	65 m / 35 m
Diffuse function ** max range / operation	6 m / 4,5 m	6 m / 4,5 m
Through-beam max range / operation		

*The max range of the retroreflective sensor is referred to the OR 03 reflector
** The max range of diffuse sensor is referred to a Kodak grey card 90% remission

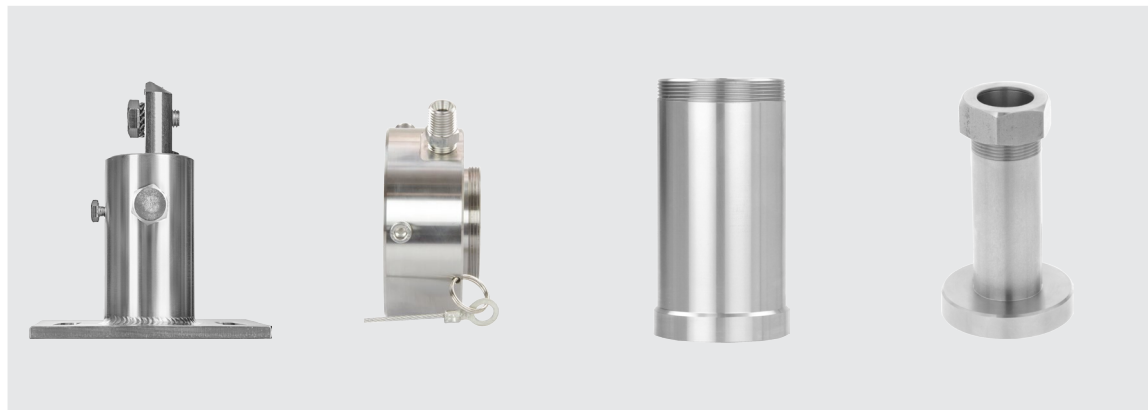
High-performance Light Barriers – LX Series With fiber optic cable and separate electronics



electronics up to 70 °C	electronics up to 70 °C	fibre optic cable up to 290 °C
125 x 150 x 55 aluminium	125 x 150 x 55 aluminium	Ø6 x length (2, 4, 5, 6, 8, 10, 15, 20 m) stainless steel
LXAD 600.3 LXSD 600.3A GV		LLK (2, 4, 5, 6, 8, 10, 15, 20) LLK (2, 4, 5, 6, 8, 10, 15, 20)
750 - 150 m / 600 - 120 m***		
	LXUD 600.3A GV	2x LLK (2, 4, 5, 6, 8, 10, 15, 20)
	35 m / 25 m	
	1,8 m / 1 m	
	100 m / 40 m	

***Through-beam light barriers with fibre optic cable can be combined with different optics or even with a compact device (transmitter or receiver) of the 600 series. The achievable range varies accordingly.

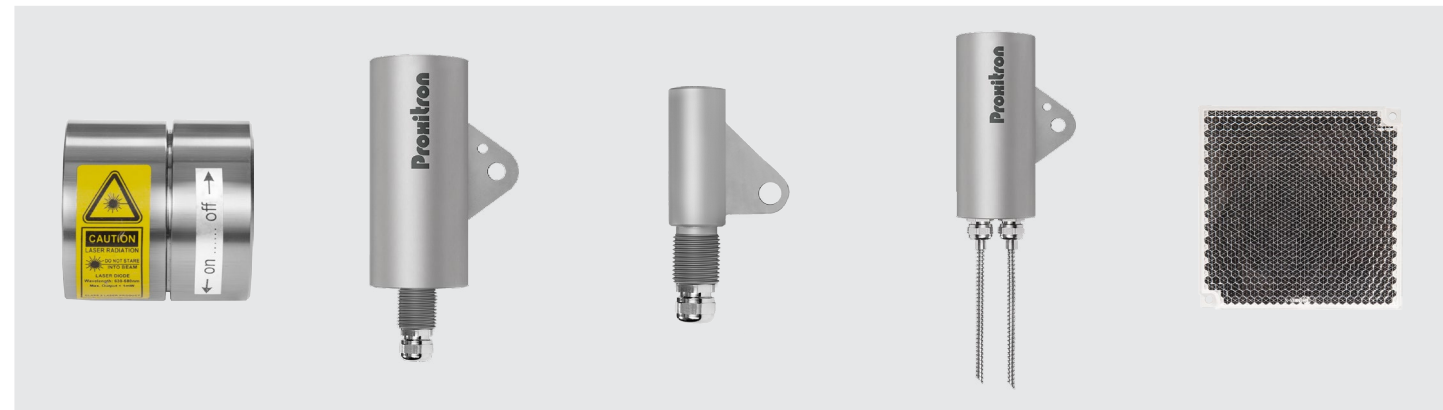
Accessories for High-performance Light Barriers



Accessory	Swivel stand	Air purge adapter	Protection tube	Tube
Function	mounting	pollution control	maximize air purge effect, protect against sparks	detection of small parts, protect against IR radiation
Material	stainless steel	stainless steel	stainless steel	stainless steel
Type	HM 2	OL 34	OL 37	OL 19
Description	massive swivel stand	for Ø57	length 100 mm	for Ø57
Type	HM 4	OL 35	OL 38	OL 21
Description	light mounting bracket	for Ø76	length 150 mm	for Ø76
Type	HM 6	OL 44		OL 36
Description	mounting unit for mirror	for optic OACF		for air purge adapter
Type				
Description				

Additional accessories, as for ex. dedicated furnace windows, are available for industrial furnaces applications

Accessories for High-performance Light Barriers



Laser pointer	large optics for LLK	small optics for LLK	double optics for LLK	reflector
Alignment	through-beam light barrier	through beam light barrier constricted space	retroreflective or diffuse sensor	retroreflective sensor
stainless steel	stainless steel	stainless steel	stainless steel	plastics/glass
DAK 308 Laser	OAA 154 up to +150 °C	OACF 154 up to +290 °C	OADF 154 for retroreflective sensor	OR 03 up to +60 °C
OL 26 adapter for Ø57	OAA 154 H up to +290 °C	OACF 154 H up to +600 °C	OATF 154 for diffuse sensor	OR 04 up to +150 °C
OL 27 adapter for Ø76		OACF 671 fibre optic cable only	OACF 672H fibre optic cable only	OR 05 up to +500 °C
OL 28 adapter for OACF				OR 09 chemical resistant

more reflectors available.

Light Barriers LX Series - General Information

Proxitron light barriers of the LX series, with a number of functions and extremely high range, are ideal for the detection of hot and cold objects even under difficult environmental conditions. The sensors can be adjusted via software and teach function to the most different working conditions. The front optic lights up for simple installation over large distances and the alarm function provides warning against pollution and excessive temperature. An on- and off-delay can be adjusted to easily suppress occasional disturbances caused by water or steam. The sensors robust design guarantees safe operation also in case of vibrations. The lens is made of high-quality, temperature-resistant glass and withstands radiated heat. For higher ambient temperatures housing variants with cooling jacket are available, as well as systems with fibre optic cable, optics and remote electronics.

- detection of hot and cold objects
- material tracking in drying ovens
- jam detection
- prevention of obstruction caused by collapsed material
- material tracking on conveyors in hot areas
- feeding control in high temperature processes
- vehicle height monitoring in outdoor conditions
- object detection in dense environment (dust, vapour, water, smoke)
- detections of parts on conveyor belts in areas with spraying mist
- extremely high pollution resistance
- Individual settings for three switching outputs
- Alarm for excessive temperature or pollution
- Tech and test function
- extremely fast (0,5 ms/1000 Hz)
- robust and maintenance-free
- wide range of accessories

Common technical features

Light type	invisible infrared light
Supply voltage	12 - 55 V DC
Switching output	3 x PNP normally open / normally closed (can be parameterized)
On / off delay adjustable	0 – 60000 ms
Response time / switching frequency	≤ 0,5 ms / 1000 Hz
Adjustment aid	optical with LED, software
Alarm function	pollution, overtemperature
Digital communication	RS 485 MODBUS RTU
Software functions	operating mode, configuration of switching outputs, on/off delay, alarm function, status display, teach-in, internal temperature

