Retro-Reflective Sensor
Diffuse Sensor
up to 65 m range
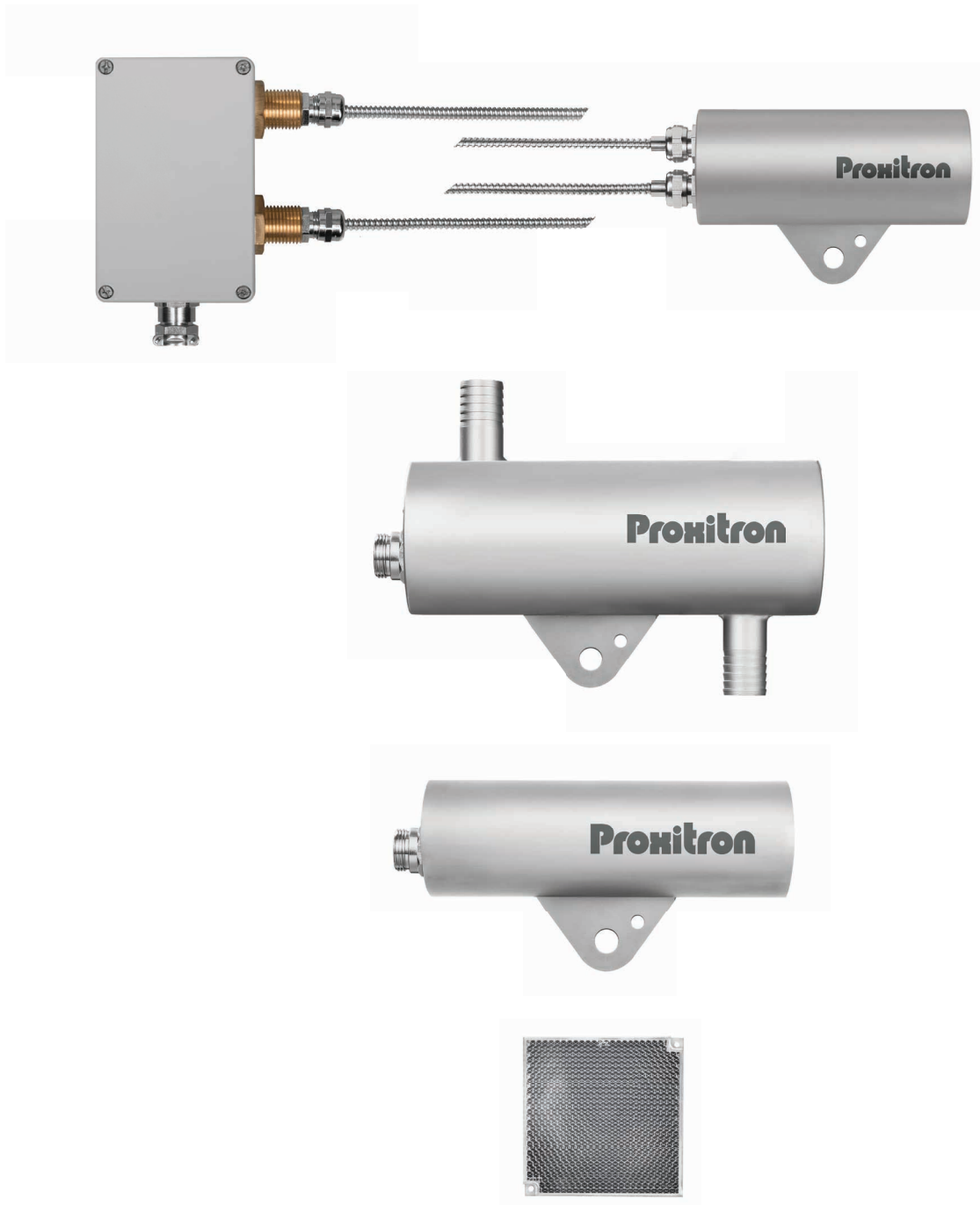
Detects hot and cold objects extremely secure

Retro-Reflective - Diffuse - Cooling Jacket - Fiber Optic - Optics - Reflectors - High Temperature

Proxitron
SENSORS MADE IN GERMANY

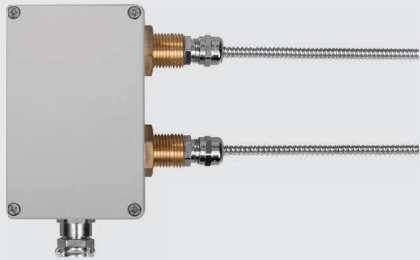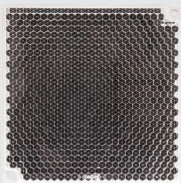| Sensing range max.	65 m	65 m	
Operating range	47 m	47 m	
Type of sensor	Retro-Reflective Sensor	Retro-Reflective Sensor	
Housing size [mm]	Ø57 x 170	Ø76 x 170	
Housing material	stainless steel	stainless steel	
Type of light	infrared	infrared	
Ambient temperature	up to +70 °C	up to +200 °C (with water cooling)	
Type	LRA 600	LRB 600	
Contamination control	yes	yes	
Notes	The sensing range of the Retro-Reflective Sensor is related to reflector OR 03		
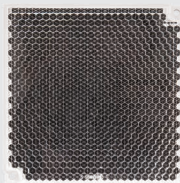
Sensing range max.	6000 mm	6000 mm	
Operating range	4500 mm	4500 mm	
Type of sensor	Diffuse Sensor	Diffuse Sensor	
Housing size [mm]	Ø57 x 170	Ø76 x 170	
Housing material	stainless steel	stainless steel	
Type of light	infrared	infrared	
Ambient temperature	up to +70 °C	up to +200 °C (with water cooling)	
Type	LTA 600	LTB 600	
Contamination control	yes	yes	
Notes	The sensing range of the Diffuse Sensor is related to the Kodak Grey card 90 % reflexion		

Retro-Reflective Sensor / Diffuse Sensor with Fiber Optic Cable

Reflectors for Retro-Reflective Sensors

	35 m	65 m	39 m	30 m	21 m
	25 m	47 m	28 m	22 m	15 m
	Retro-Reflective Sensor	Reflector	Reflector	Reflector	Reflector
	125 x 150 x 55	100 x 100	56 x 132	100 x 100	51 x 95
	aluminium	plastic	plastic	plastic	glass
	infrared				
	up to +60 °C (with fiber optic cable up to +290 °C)	up to +60 °C	up to +100 °C	up to +140 °C	up to +500 °C
	LRD 600	OR 03	OR 08	OR 04	OR 05
	yes				

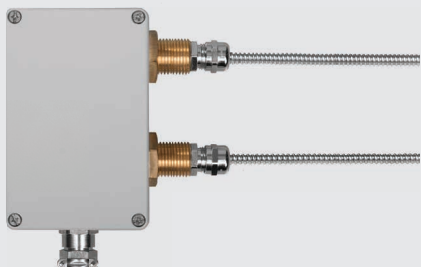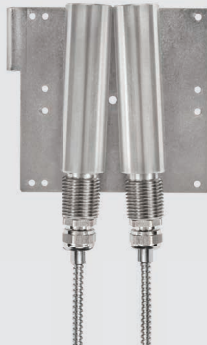The sensing range of the Retro-Reflective Sensor is related to Retro-Reflective Sensor LRA
More reflector housing sizes: view accessories brochure

Accessory for fiber optic cable versions

	1800 mm			
	1000 mm			
	Diffuse Sensor	Optic for LRD 600	Optic for LTD 600	Fiber optic cable
	125 x 150 x 55	Ø57 x 145	112 x 135 x 70	Ø6 x Lengths [2]
	aluminium	stainless steel	stainless steel	stainless steel
	infrared			
	up to +60 °C (with fiber optic cable up to +290 °C)	up to +290 °C [1]	up to +290 °C [1]	up to +290 °C
	LTD 600	OADF 104	OATF 154	LLK
	yes			

More optics and fiber optic cables: view accessories brochure

[1] Up to + 600 °C available
[2] Lengths 2, 4, 5, 6, 8, 10, 15, 20 m

Retro-Reflective and Diffuse Sensors
General informationen

Proxitron light barriers are outstanding for detecting hot and cold objects. They are not sensitive to exterior light influences and resistant to infrared radiation from other heat sources. This enables them to be used for detection of objects inside furnaces. The high switching speed enables secure monitoring of rapid processes and the extreme range permits the use in most difficult environments. Proxitron has set new standards of operating security and functional reserve. The robust design guarantees secure operation even in cases of vibrations, radiating heat, and high ambient temperatures. The optics consist of temperature-resistant glass that can resist the toughest condition.

In addition to the standard versions featuring stainless steel housing with integrated electronics, there are variations with cooling jacket housing for temperatures up to 200 °C available. Furthermore versions with fiber optic cable, separate evaluation system and separate optics that are able to withstand ambient temperatures up to 600 °C are also part of the product range. A contamination control enables early signalling of unstable operating conditions. Several connection variations, an optional air purge, and matching accessories round off the series.

- **detection of hot and cold objects**
- **max. range 65 m**
- **ambient temperature up to +600 °C**
- **extremely fast (1 ms/ 1000 Hz)**
- **extremely high functional reserve**
- **robust stainless steel housing**
- **simple LED signalling**
- **optics and fiber optic cables for hot areas**
- **contamination control**
- **diverse connections, outputs, and operating voltage variations**
- **several accessories**

Type Code

Description	Code
Type (see table previous page)	e. g. LRA 600
10 - 55 V DC	3
90 - 260 V AC	6
PNP normally closed + PNP normally open antivalent	8
Relay changeover potential-free	R
Short circuit protection	G
Contamination control output	V
Air purge for optic	L
Fixed connection cable or terminal chamber	
Plug M12	S4
Customer specific version	SA