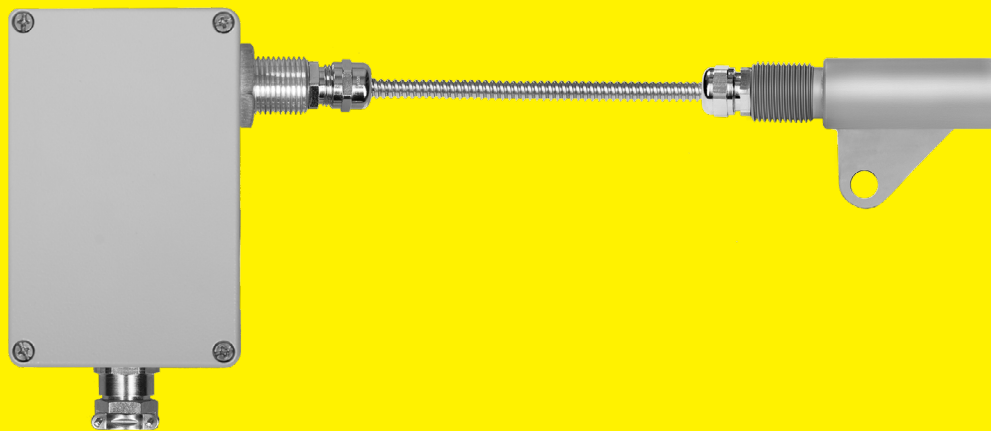


Infrared Sensors (HMD) with fibre optic cable

Detection of Hot Material

For steelworks, rolling mills, metalworking industry



Infrared Sensors (HMD) with fibre optic cable
Electronics and fibre optic cable



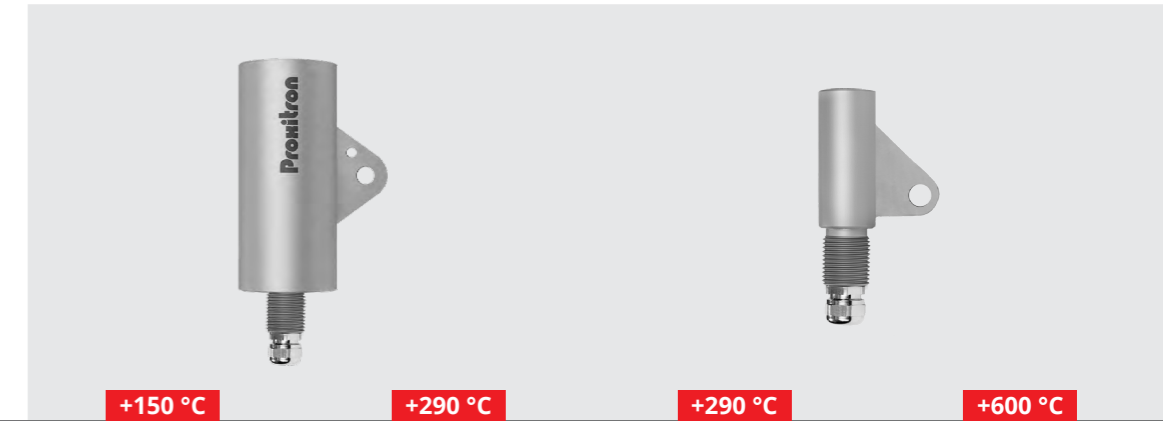
Response temperature	250 - 600 °C	250 - 600 °C	fibre optic cable for 250 - 600 °C
Type	OXLD 6726	OSD 6729	LLKL (2, 4, 5, 6, 8, 10, 15, 20)
Response temperature	400 - 1000 °C	400 - 1000 °C	fibre optic cable for 400 - 1000 °C
Type	OXLD 6741	OSD 6741	LLK (2, 4, 5, 6, 8, 10, 15, 20)
Adjustment	software	manual, step-switch	
Standard functions	two separate temperature settings	one response temperature	
Additional functions	teach, offset, alarm, test	none	
Digital interface	RS-485 (MODBUS RTU)	none	
Housing [mm]	125 x 150 x 55	125 x 150 x 55	Ø6 x length (2, 4, 5, 6, 8, 10, 15, 20 m)
Housing material	aluminium	aluminium	stainless steel
Ambient temperature	70 °C	70 °C	290 °C

Accessories for Infrared Sensors (HMD)



Accessory	cable protection set	Swivel stand	Air purge adapter
Function	protect fibre optic cable against shocks and humidity	mounting	pollution control
Material	steel, TPE, PVC, silicone	stainless steel	stainless steel
Type	KSL 1	HM 2	OL 34
Description	up to 100 °C	massive swivel stand	for optics OAA Ø57
Type	KSL 2	HM 4	OL 44
Description	up to 260 °C	light mounting bracket	for optics OACF Ø25
Type	KSL 3		
Description	up to 145 °C		

Infrared Sensors (HMD) with fibre optic cable
Optics



Viewing angle	1,5°	1,5°	1,5°	1,5°
Type	OAA 154	OAA 154 H	OACF 154	OACF 154 H
Viewing angle	2°	2°	2°	2°
Type	OAA 204	OAA 204 H	OACF 204	OACF 204 H
Viewing angle	4°	4°	7°	7°
Type	OAA 404	OAA 404 H	OACF 704	OACF 704 H
Viewing angle	2° x 25°		22°	
Type	OAA 264		OACF 671	
Housing [mm]	Ø57 x 120	Ø57 x 120	Ø25 x 100	Ø25 x 100
Housing material	stainless steel	stainless steel	stainless steel	stainless steel
Ambient temperature	150 °C	290 °C	290 °C	600 °C at front side only

Accessories for Infrared Sensors (HMD)



Accessory	Protection tube for OL 34	Tube	Laser pointer
Function	maximize air purge effect, protect against sparks	protection against IR radiation	alignment
Material	stainless steel	stainless steel	stainless steel
Type	OL 37	OL 19	DAK 308
Description	length 100 mm	for optics OAA Ø57	Laser
Type	OL 38	OL 36	OL 26
Description	length 300 mm	for air purge adapter OL 34	adapter for optics OAA Ø57
Type			OL 28
Description			adapter for optics OACF Ø25

Infrared Sensors with fibre optic cable – General Information

Infrared sensors (Hot Metal Detectors) with fibre optic cable can be mounted quite near the hot object to be detected, with no need for water cooling. This ensures accurate switching point and undisturbed operation. Depending on the application, different optics and fibre optic cables in several lengths can be combined to build up an extremely robust and maintenance-free design layout. Sensors of the OX series can be parameterized in a teaching mode and offer the possibility to set different behaviors for multiple outputs, as well as an offset function with different response and switch-off temperatures, or an alarm function. The sensors are equipped with a comfortable software interface to meet the needs of Industry 4.0.



- Detection of hot objects
 - Material tracking on roller conveyors
 - Control of slabs, blocks and billets position at
 - Continuous casting, torch-cutting and deburring
 - Material tracking on conveyors in hot areas
 - Strip detection at coiler
 - Feeding and ejection control in hot forging
 - Wire detection in wire drawing plants
 - Material detection in tube and sections mills
 - Material tracking in dense environment (dust and vapor)
 - Strip detection in processes with spraying mists
 - Bottle counting in glass production
- Response temperature from 250 up to 1000 °C
 - Two switching outputs in one single device
 - 8 variants of optics available
 - Alarm for sensor overheating or dirt
 - Teach and test function
 - Fast response time (0,3 ms / 1500 Hz)
 - Extremely robust and maintenance-free
 - diverse accessories

Viewing angle	Measurement distance a [m]	1	2	3	4	5
Optics OAA Ø57						
1,5°	Spot diameter M [mm]	40	65	100	135	175
2°	Spot diameter M [mm]	40	75	130	185	240
4°	Spot diameter M [mm]	70	130	210	290	370
2° x 25°	Spot size M [mm]	40 x 350	75 x 950	130 x 1550	185 x 2150	240 x 2750
Optics OACF Ø25						
1,5°	Spot diameter M [mm]	25	45	80	115	150
2°	Spot diameter M [mm]	40	95	150	205	260
7°	Spot diameter M [mm]	70	170	270	370	470
22°	Spot diameter M [mm]	380	765	1150	1535	1920

Spot dimensions are referred to sensors with 400 - 1000 °C response temperature.
For sensors with 250 - 600 °C response temperature, spot dimensions are approx. 50% smaller.

Type code

