

## Inductive proximity switches

130 °C - 150 °C - 175 °C - 200 °C - 230 °C





## Inductive high temperature proximity switches









ensing distance Sn (mm)	10	15	20	25	50
lounting	flush	non flush	flush	non flush	non flush
lousing size [mm]	M30 / L = 76	M30 / L = 85	M50 / L = 54	M50 / L = 68	M80 / L = 72
lousing material	stainless steel				
Protection class	IP 66				
<sup>2</sup> 67 protection class available (IP)	yes	yes	yes	yes	yes
00% silicone-free available (SF)	yes	yes	yes	yes	yes
ype with in-built electronics	IKZ 302	IKZ 301	IKZ 506	IKZ 505	IKZ 801
Jp to +130 °C with LED (H2)	yes	yes	yes	yes	yes
Jp to +150 °C (H3)	yes	yes	yes	yes	yes
Jp to +175 °C (H4)	yes	yes	yes	yes	no
ype with external electronics	IKZ 306	IKZ 307	IKZ 508	IKZ 507	IKZ 807
Jp to +200 °C (H5)	no	no	no	no	yes
Jp to +230 °C (H6)	yes	yes	yes	yes	no



Proxitron low-temperature series for temperatures from -40 °C available for many designs.

Proxitron high-temperature series for temperatures of up to +120 °C available for many designs.

Proxitron sensors with PTFE housing for chemically aggressive environments. See "Inductive sensors PTFE housing" brochure Product line extension with increased switching distance in existing housing design. See "ProxiPlus" brochure. The sensing distance Sn describes the axial approaching of a square steel plate with its side length equal to three times the sensing distance. (for example: Sensing distance 50 mm relates to a steel plate with side length of 150 x 150 mm). Smaller metal object reduces the maximum attainable sensing distance. The attainable sensing distance is a function of the material of the metal object and can be calculated using the correction factor: **max. possible sensing distance = sensing distance x correction factor** 

	0	0						
material	metal foil	steel	stainless steel	brass	aluminium	copper	nickel	cast iron
correction factor	1,2	1	0,5 0,8	0,45	0,4	0,3	0,7	0,93 1,05





5	8
flush	non flush
8 / L = 76	M18 / L = 83
nless steel	stainless steel
IP 66	IP 66
yes	yes
yes	yes
KZ 182	IKZ 181
yes	yes
yes	yes
yes	yes
KZ 188	IKZ 186
no	no
yes	yes





## General Information - Inductive Proximity Switches

Proximity switches for ambitious applications in high temperature areas. Proxitron offers a variety of different temperature ranges, housing designs and sensing ranges for different applications e.g. steel industry, glass, furnace construction, paint shops in automotive industry, presses for chipboard manufacturing, drying section in papermaking, food industry. Connection cables are available in standard lengths of 2, 5, 10, 15 and 20 m made of silicone and PTFE

- Contactless detection of metal objects
- Unaffected by contamination
- Various switching outputs
- Up to +130 °C with LED
- Up to +175 °C with in-built electronics
- Up to +230 °C with external electronics
- Silicone or PFTE cable
- IP 67 protection class available
- 100% silicone-free version available





Type Code								
Type (see table previous page)	<u> </u> e. g. IKZ 302							
10 - 30 V DC		2						
NPN - normally closed			1 0					
NPN - normally open			1					
PNP - normally closed			2					
PNP - normally open			3					
PNP normally closed + PNP normally open			8					
Short circuit protection				G				
High temperature version up to +130 °C (in-built e	lectronics + LED)				HZ			
High temperature version up to +150 °C (in-built e	electronics)				H3			
High temperature version up to +1/5 °C (in-built e	lectronics)				H4			
High temperature version up to +200 °C (external	electronics + LED)*				H5			
High temperature version up to +230 °C (external	electronics + LED)*				H6			
Higher protection class with additional cable gland						⊥ IP		
100% silicone-free version							SF	
Customer specific version								L SA

\* The external electronics, in separate M12 stainless steel housing, is connected to the sensing head via a fixed PTFE cable (lengths up to 30 m available). The electronics is then provided with a PUR cable, and is resistant up to 70 °C.

