

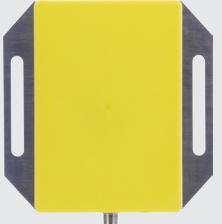


Inductive Proximity Switches  
**70 - 200 mm**  
Sensing Distance

Non-contact detection of metal objects

AC - DC - PNP - NPN - Normally Open - Normally Closed - Cable - Plug - Teach-In - +100 °C - IP68

Sensing distance Sn [mm]	<b>70</b>	<b>70</b>	<b>70</b>	<b>80</b>	
Mounting	nf	nf	nf	nf	
Housing size [mm]	<b>Ø 95 / H = 40</b>	<b>108 x 150 x 43</b>	<b>110 x 110 x 43</b>	<b>140 x 140 x 36</b>	
					
Housing material	PBT	PBT / aluminium	PBT	PBT / aluminium	
Protection class	IP 67	IP 67	IP 67	IP 67	
Type	<b>IKM 070</b>	<b>IKMN 070</b>	<b>IKN 070</b>	<b>IKNB 080</b>	
High temperature	yes	yes	yes	yes	

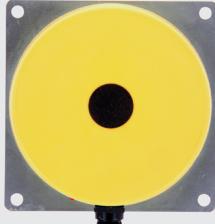
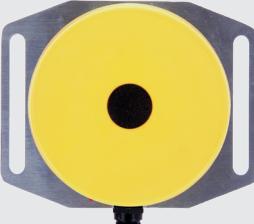
Sensing distance Sn [mm]	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	
Mounting	nf	nf	nf	nf	
Housing size [mm]	<b>150 x 150 x 56</b>	<b>108 x 194 x 56</b>	<b>150 x 210 x 56</b>	<b>Ø 163 / H = 64</b>	
					
Housing material	PBT / aluminium	PBT / aluminium	PBT / aluminium	PBT	
Protection class	IP 67	IP 67	IP 67	IP 67	
Type	<b>IKQ 100</b>	<b>IKQA 100</b>	<b>IKQR 100</b>	<b>IKO 100</b>	
High temperature	yes	yes	yes	yes	

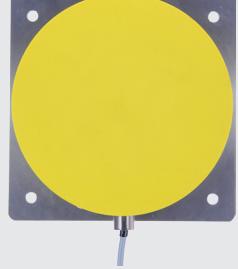
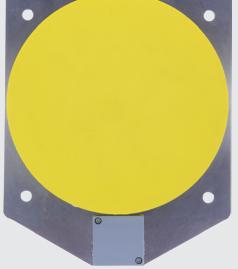
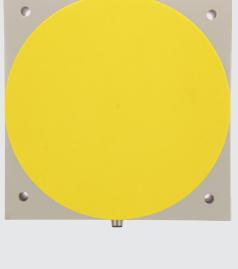
f = flush / nf = non flush

The sensing distance stated above describes the axial approximation 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.

# Inductive Proximity Switches

## 100 - 200 mm sensing distance

100	100	100	100	120
nf 170 x 170 x 68	nf 180 x 210 x 68	f 210 x 210 x 75	f 230 x 230 x 85	nf 280 x 150 x 68
				
PBT / aluminium	PBT / aluminium	aluminium	PP / aluminium	PBT / aluminium
IP 67	IP 67	IP 67	IP 68	IP 67
<b>IKOH 100</b>	<b>IKON 100</b>	<b>IKE 100</b>	<b>IKC 100</b>	<b>IKU 215</b>
yes	yes	yes	no	yes

120	120 / 140	120 / 140	180	150 / 200
nf 300 x 150 x 68	nf 212 x 212 x 58	nf 212 x 270 x 58	nf 202 x 202 x 98	f / nf 320 x 320 x 85
				
PBT / aluminium	PBT / aluminium	PBT / aluminium	PBT / PP	PP / aluminium
IP 67	IP 67	IP 67	IP 67	IP 68
<b>IKUR 215</b>	<b>IKOA 120 / IKOA 140</b>	<b>IKOAR 120 / IKOAR 140</b>	<b>IKOC 180</b>	<b>IKC 150 / IKC 200</b>
yes	yes / no	yes / no	no	no

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**

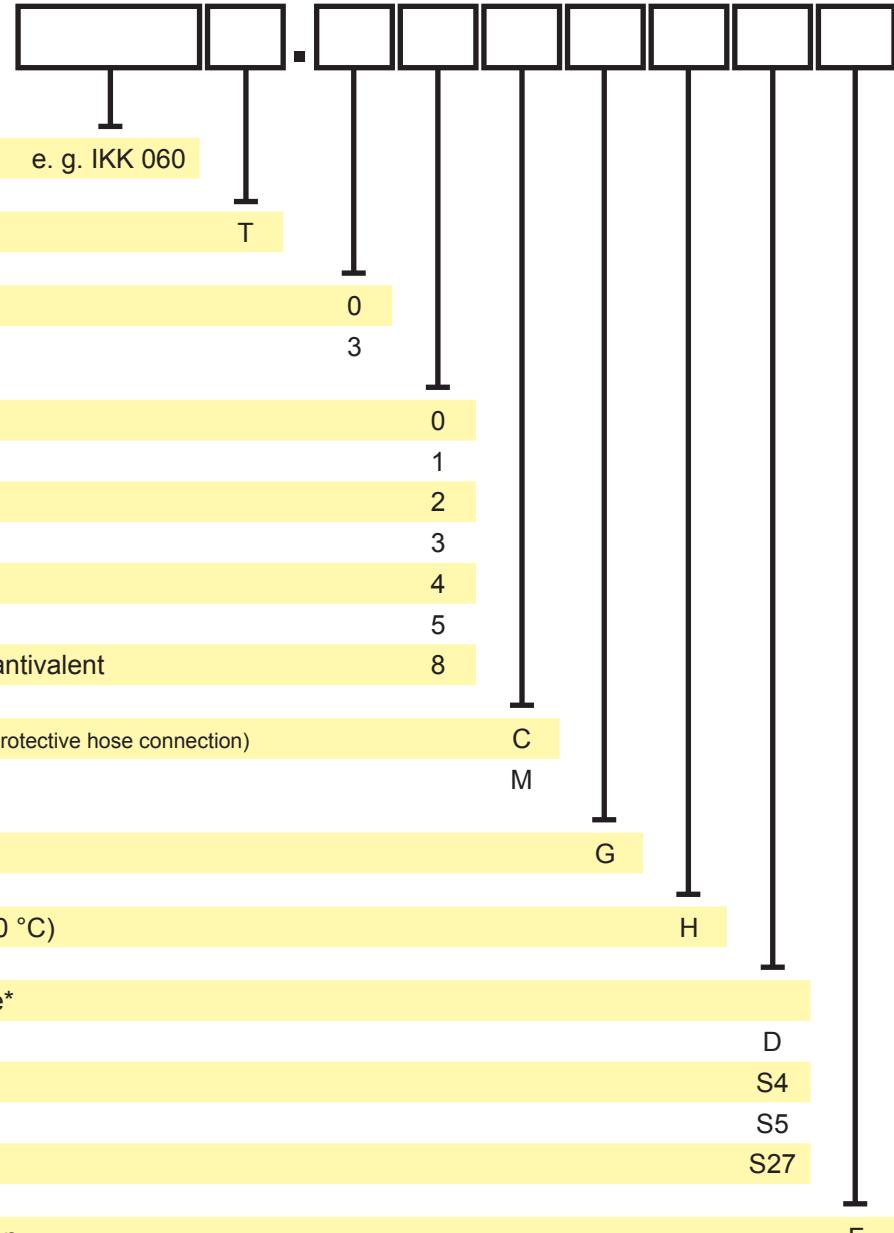
<b>material</b>	metal foil	steel	stainless steel	brass	aluminum	copper	nickel	cast iron
<b>correction factor</b>	1,2	1	0,5 ... 0,8	0,45	0,4	0,3	0,7	0,93 ... 1,05

## Basic Information

Inductive proximity switches detect metal objects contactless. Proxitron offers the widest variety of robustly constructed designs for standard industrial solutions and complex applications. Versions with extended temperature range and the comfortable setting with teach-in enable safe operation even under demanding conditions. Customisations provide the optimum solution for every application.

- **contactless detection of metal objects**
- **unaffected by contamination**
- **different supply voltages**
- **various switching outputs**
- **short circuit and reverse polarity protection**
- **versions up to +120 °C available**
- **cable- or plug connection**
- **protection class up to IP68**

## Type Code



\*Connecting cables are available in different lengths and materials.

Please tell us your requirements. We will be pleased to advise you.

\*\* Proximity switches with Proxi-Teach™ recognise the existing installation conditions after one key is pressed and adjust the operating distance optimally. This enables safety operation under non-standard installation conditions. The effort upon startup is minimized.