

**Inductive Analog  
Sensors**



contactless distance and position measurement

distance - way - position - shift - wear - thickness - width - vibration - selection





**ans**  
Leading automation. Leading innovation





[ansvietnam.com](http://ansvietnam.com)

[sales.ans@ansvietnam.com](mailto:sales.ans@ansvietnam.com)

**Proxitron**

SENSORS MADE IN GERMANY

Housing size [mm]	M30 / L = 80	M30 / L = 80	M30 / L = 80	M32 / L = 80	
Measuring range [mm]	0 - 10	0 - 15	0 - 10	0 - 14	
Mounting	f	nf	f	nf	
					
Housing material	PBT	PBT	brass, nickel plated	PTFE	
Protection class	IP 67	IP 67	IP 67	IP 68	
Type	<b>MKL 010</b>	<b>MKL 015</b>	<b>MKZ 302</b>	<b>MKLT 014</b>	
High temperature	yes	yes	yes	yes	

Housing size [mm]	PG36 / L = 70	Ø 54 / L = 68	80 x 80 x 40	110 x 110 x 55	
Measuring range [mm]	0 - 20	0 - 35	0 - 50	0 - 45	
Mounting	f	nf	nf	f	
					
Housing material	brass, nickel plated	PBT	PBT	aluminium	
Protection class	IP 67	IP 67	IP 67	IP 67	
Type	<b>MKZ 471</b>	<b>MKH 035</b>	<b>MKK 050</b>	<b>MKD 045</b>	
High temperature	yes	yes	yes	yes	

f = flush / nf = non flush

The start and end of the measurement range are freely adjustable within the limits of the measurement range, using two buttons. This makes it possible to exploit the full output signal for smaller intervals as well, or to reverse the working direction. The measurement range stated above describes the axial approximation of a square steel plate with its side length equal to three times the maximum measurement range (for example: measurement range 0 - 50 mm relates to a steel plate with side length of 150 x 150 mm). Distance measurement to a smaller metal object reduces the maximum attainable measuring distance.

# Inductive Analog Sensors up to 200 mm measuring range and special types

	<b>120 x 80 x 30</b> 0 - 60 mm nf	<b>110 x 110 x 43</b> 0 - 70 nf	<b>150 x 150 x 56</b> 0 - 100 nf	<b>280 x 150 x 68</b> 0 - 120 nf	<b>212 x 212 x 58</b> 0 - 140 nf
					
	PBT IP 67	PBT IP 67	PBT IP 67	PBT IP 67	PBT IP 67
	<b>MKRD 060</b> yes	<b>MKN 070</b> yes	<b>MKQ 100</b> yes	<b>MKU 215</b> yes	<b>MKOA 140</b> yes
	<b>260 x 260 x 120</b> 0 - 120 f	<b>320 x 320 x 85</b> 0 - 200 nf		<b>150 x 35 x 35</b> radial 0 - 100 nf	<b>ring sensor Ø 20</b> Ø 0 - 20
					
	stainless steel IP 65	PP IP 68		PVC / PP IP 67	PBT IP 67
	<b>MKZ 120</b> no	<b>MKC 200</b> yes		<b>MKU 015</b> no / yes	<b>MKV 020</b> yes

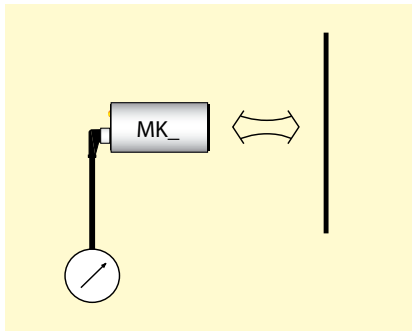
The attainable measuring distance is a function of the material of the metal object and can be calculated using the correction factor: **max. possible measuring distance = measurement range x correction factor**

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

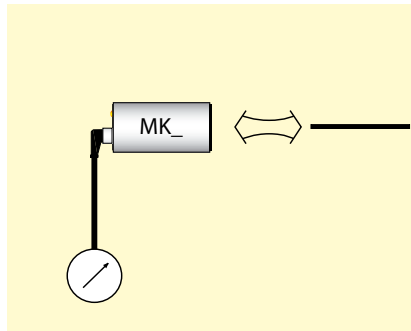
Inductive analogue sensors determine the distance to metal objects or their position, size or material. Proxitron offers the widest variety of robustly constructed designs for standard industrial solutions and complex applications. Their ease of operation enables the measurement range and individual curve shapes to be programmed. Besides the analogue output of the measured value, there is a serial interface which, as well as recording the measured value, also enables parameters to be set and sensor arrays to be constructed in bus operation.

- **contactless measurement of the distance to metal objects**
- **high repeat accuracy**
- **optimal linearity**
- **unaffected by contamination**
- **various analogue outputs**
- **RS 485 interface**
- **programmable measurement range and characteristic curve**
- **versions going up to +100°C available**

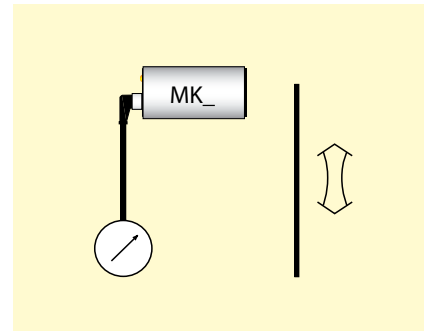
**distance**



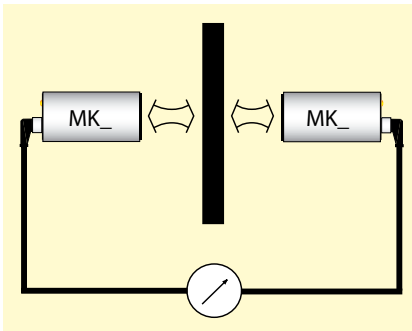
**distance**



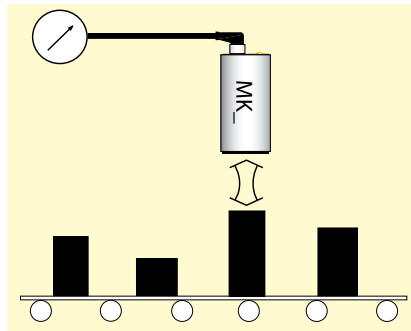
**shift**



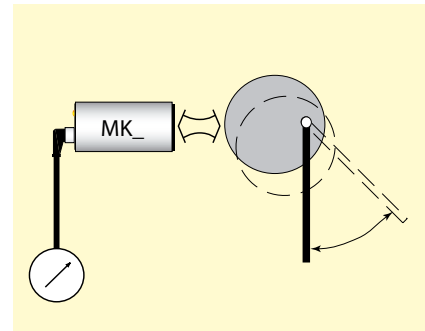
**thickness**



**selection**



**angle of rotation**



## Type Code



Type (see table previous page)

e. g. MKK 050

Supply voltage 24 V DC

1

Output 0 - 10 V

9

Output 0 - 20 mA

90

Output 4 - 20 mA

94

High temperature version up to +100 °C

H

Plug M12x1

S4

Customer specific version

SA..