









**Inductive Analog
Sensors**



contactless distance and position measurement

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

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	MKL 010	MKL 015	MKZ 302	MKLT 014	
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	MKZ 471	MKH 035	MKK 050	MKD 045	
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

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

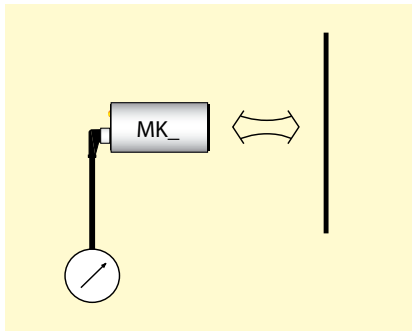
The attainable measuring distance is a function of the material of the metal object and can be calculated using the correction factor: **max. possible measuring distance = measurement range x correction factor**

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

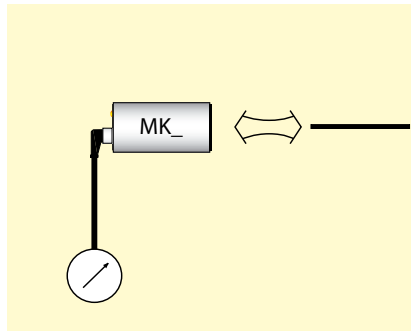
Inductive analogue sensors determine the distance to metal objects or their position, size or material. Proxitron offers the widest variety of robustly constructed designs for standard industrial solutions and complex applications. Their ease of operation enables the measurement range and individual 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**

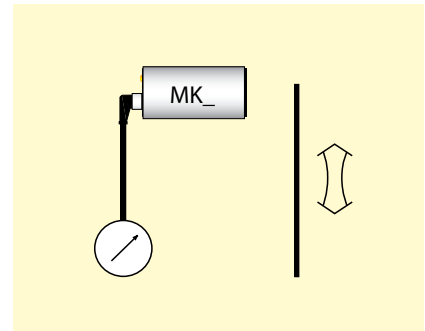
distance



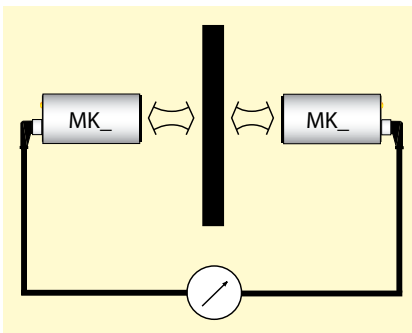
distance



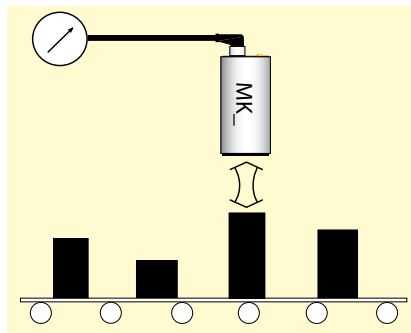
shift



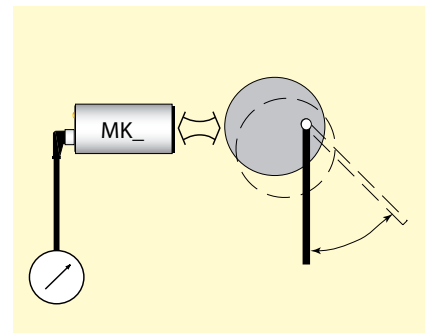
thickness



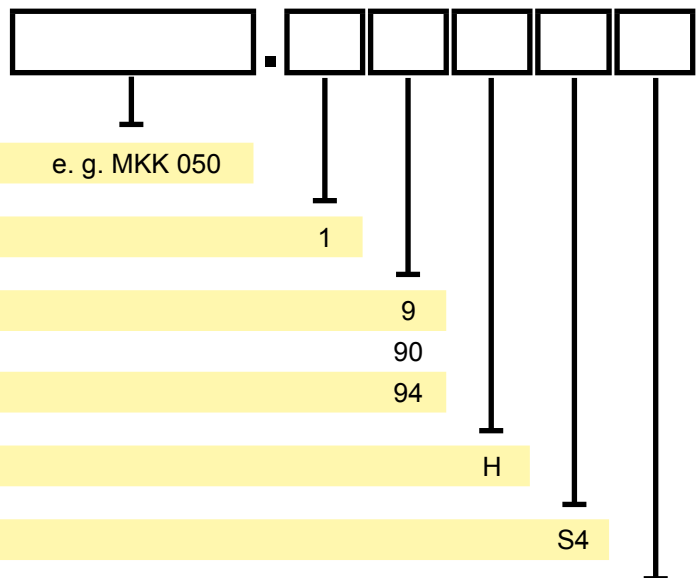
selection



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..