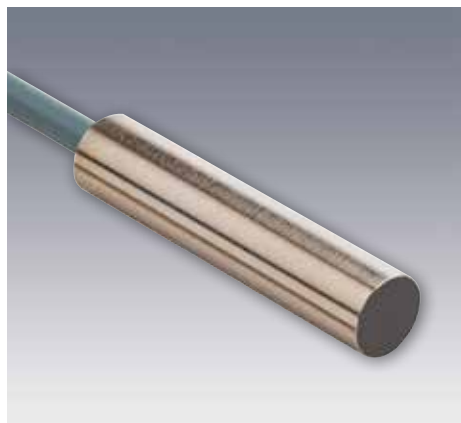


IS 56

Inductive sensor



Plug connection (M8x1)	Plug connection (M12x1)	Cable connection

Sensor data		Functions	
Switching distance	3 mm	Indicator LED, yellow	Switching output indicator
Repeatability	0.15 mm ¹		
Hysteresis	≤ 10 % ²		
Reduction factor; Al	0.26		
Reduction factor; Cu	0.18		
Reduction factor; V2A	0.67		
Reduction factor; steel FE 360	1.00		
Reduction factor; brass	0.35		
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30 V DC ³	Dimensions	See Selection Table
No-load current, I ₀	≤ 10 mA	Mounting	Quasi-flush
Output current, I _e	≤ 200 mA	Enclosure rating	IP 67 ⁴
Voltage drop, U _D	≤ 2 V at 200 mA	Material, housing	Brass, chrome-plated
Protective circuits	Reverse-polarity protection, U _B / Short-circuit protection (Q) / induction protection	Material, front surface	PBTP
Switching output, Q	PNP / NPN (see Selection Table)	Type of connection	See Selection Table
Output function	N.O.	Ambient temperature: operation	-25 ... +70 °C
Switching frequency, f (ti/tp 1:1)	≤ 1000 Hz	Vibration and impact resistance	IEC 60947-5-2 / 7.4

¹ U_B = 20 ... 30V DC, T_A = 23 °C ± 5 °C

² Refers to switching distance

³ Max. 20 % ripple, within U_B

⁴ With connected IP 67 plug

Connection plug, 3-pin	Connection plug, 4-pin	Connection cable, 3-wire

Switching distance	Switching output	Dimensions	Type of connection	Part number	Article number
3 mm	PNP	Ø 6.5 x 60 mm	Plug, M8x1, 3-pin	IS 56-12	996-50586
3 mm	NPN	Ø 6.5 x 60 mm	Plug, M8x1, 3-pin	IS 56-11 T	996-50632
3 mm	PNP	Ø 6.5 x 66 mm	Plug, M12x1, 4-pin	IS 56-42	996-09963
3 mm	NPN	Ø 6.5 x 66 mm	Plug, M12x1, 4-pin	IS 56-41	996-50390
3 mm	PNP	Ø 6.5 x 45 mm	Cable, 2 m, 3-wire	IS 56-02	996-09409
3 mm	NPN	Ø 6.5 x 45 mm	Cable, 2 m, 3-wire	IS 56-01	996-09408