

IC SERIES | EDDY CURRENT PROBES

Low-cost sensor with integrated electronics

- Low-cost series with integrated analog-electronics
- Measurement ranges up to 8 mm
- Output signals 0..20 mA, 4..20 mA, 0..10 V
- Threaded housings M12, M18 and rectangular version
- Linearity up to $\pm 60 \mu\text{m}$
- Measurement on steel
- Protection class IP67



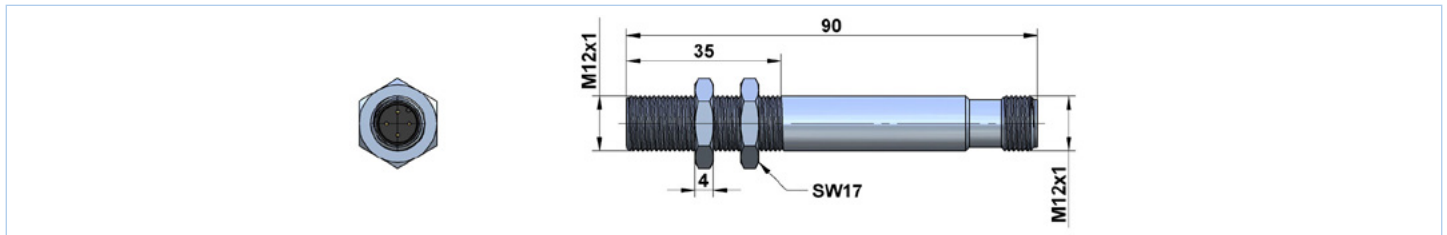
TECHNICAL DATA

SENSOR	IC12-02	IC18-08	IC18-08-V	IC2035-03	IC2035-03-V
Measurement range [mm]	0...2	0...8	0...8	2...5	2...5
Linearity [μm]	± 60	± 400	± 400	± 100	± 100
Repeatability [μm]	<5	<15	<15	<10	<10
Temperature drift* [%]	± 2	± 5	± 5	± 4	± 4
Working temperature [$^{\circ}\text{C}$]	0...+60	-10...+70	-10...+70	0...+60	0...+60
Supply Voltage V_s [VDC]	15...30				
Max. power consumption [mA]	50	40	20	35	20
Output signal	0...20 mA	4...20 mA	0...10 V	4...20 mA	1...9 V
Response time [ms]	<2	<2	<2	<5	<5
Load resistance V_s min/ V_s max [Ω]	<100/ 400	<330/ 1000	>1000	<500/ 1000	>1000
Safety features	reverse polarity / short circuit protection				
Housing material	9SMn28	nickel plated brass			
Housing design [mm]	M12 cylindric	M18 cylindric	M18 cylindric	rectangular, 35x20	rectangular, 35x20
Sensor surface(\varnothing) [mm]	10,5	16,5		17	
Target size min. [mm]	21	33		34	
Protection class	IP67				
Target material	S235 (ST37), ST52, 16MnCr5 / not suitable for aluminium and non-ferrous metals				

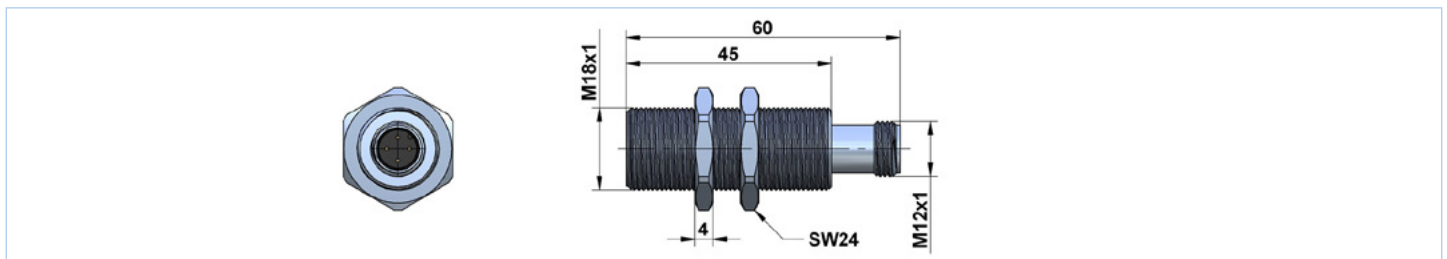
*based on full scale

TECHNICAL DRAWING

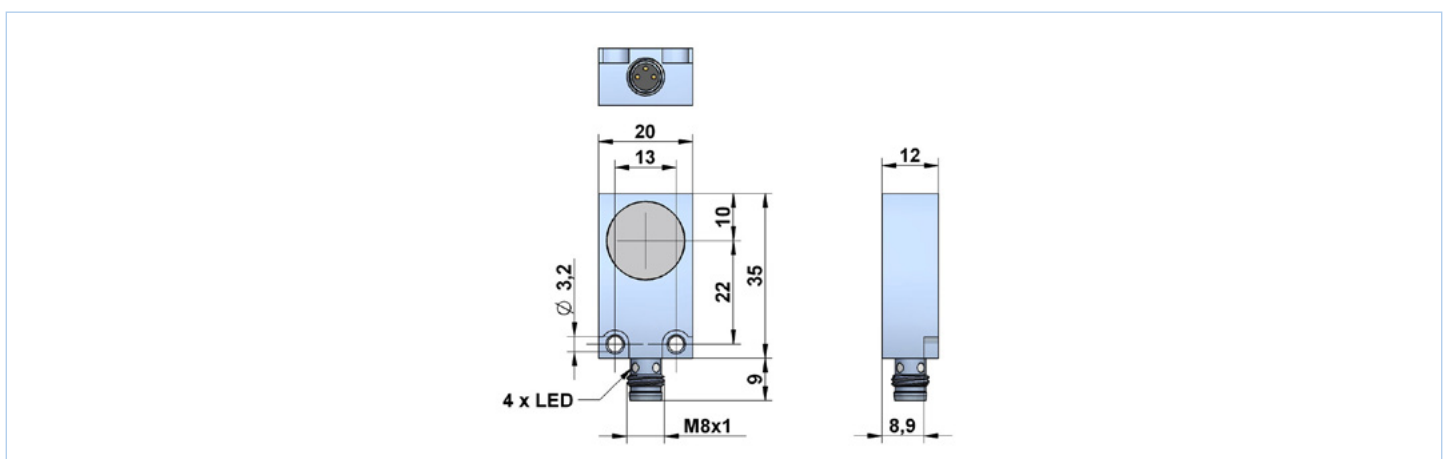
■ TYPE IC-02



■ TYPE IC18-08, IC18-08-V

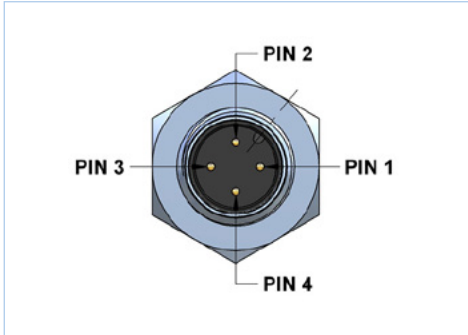


■ TYPE IC2035-03, IC2035-03-V

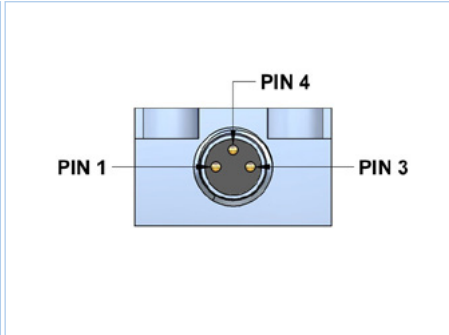


CONNECTION

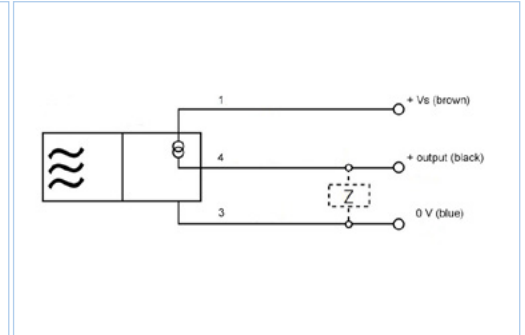
■ IC12-02, IC18-08, IC18-08-V



■ IC2035-03, IC2035-03-V



■ PIN ASSIGNMENT



ORDER CODE

IC12-02
IC18-08
IC18-08-V
IC2035-03
IC2035-03-V

ACCESSORIES

CONNECTION CABLE, 4 POLE FOR IC12-02 AND IC18-08	
K4P2M-S-M12	2 m, straight connector, M12
K4P5M-S-M12	5 m, straight connector, M12
K4P10M-S-M12	10 m, straight connector, M12
K4P2M-SW-M12	2 m, angular connector, M12
K4P5M-SW-M12	5 m, angular connector, M12
K4P10M-SW-M12	10 m, angular connector, M12

CONNECTION CABLE 3 POLE FOR IC2035	
K3P2M-S-M8	2 m, straight connector, M8
K3P5M-S-M8	5 m, straight connector, M8
K3P10M-S-M8	10 m, straight connector, M8