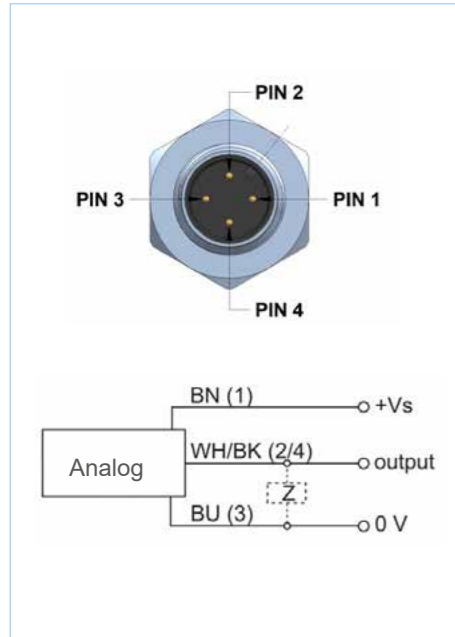
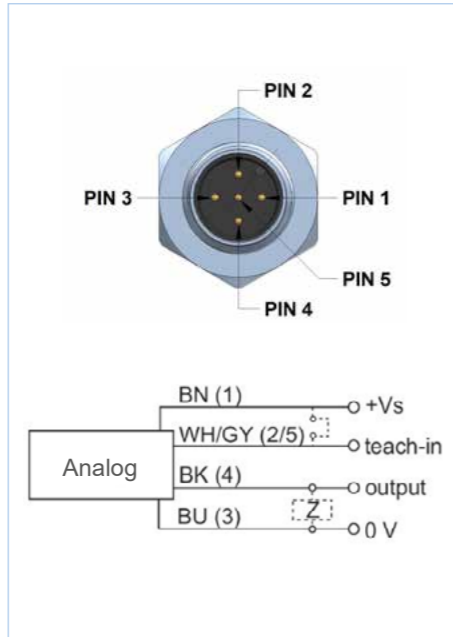


## CONNECTION

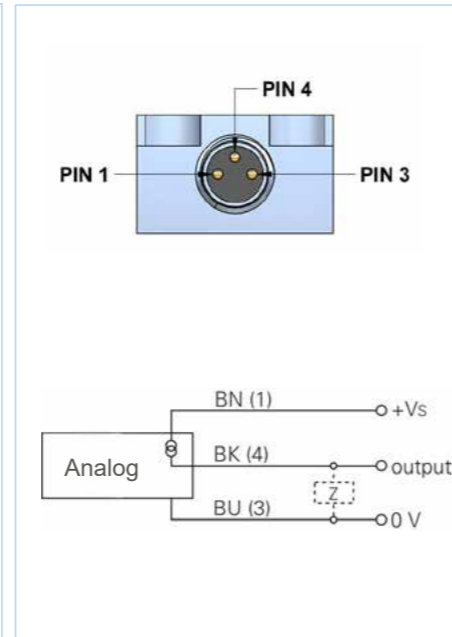
■ IC12-02  
IC18-08S  
IC18-08S-V



■ IC18-08L, IC18-08L-V  
IC30-18S, IC30-18L  
IC30-18S-V, IC30-18L-V



■ IC2035-03  
IC2035-03-V



## ACCESSORIES

### CONNECTION CABLE, 4-POLE WITH M12 CONNECTOR

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 WITH M8 CONNECTOR

K3P2M-S-M8	2 m, straight connector, M8
K3P5M-S-M8	5 m, straight connector, M8
K3P10M-S-M8	10 m, straight connector, M8

### CONNECTION CABLE, 5-POLE WITH M12 CONNECTOR

K5P2M-S-M12	2 m, straight connector
K5P5M-S-M12	5 m, straight connector
K5P10M-S-M12	10 m, straight connector
K5P2M-SW-M12	2 m, angular connector
K5P5M-SW-M12	5 m, angular connector
K5P10M-SW-M12	10 m, angular connector

## ORDER CODE

IC12-02
IC18-08S, IC18-08L, IC18-08S-V, IC18-08L-V
IC30-18S, IC30-18L, IC30-18S-V, IC30-18L-V
IC2035-03, IC2035-03-V

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Version: 29.03.2023

## DATASHEET



# IC SERIES | EDDY CURRENT PROBES

Cost-effective sensor with integrated electronics



- Cost-effective series with integrated analog-electronics
- Measurement ranges up to 18 mm
- Output signals 0..20 mA, 4..20 mA, 0..10 V
- Threaded housings M12, M18, M30 and rectangular version
- Linearity up to  $\pm 60 \mu\text{m}$
- Measurement on steel
- Protection class IP67



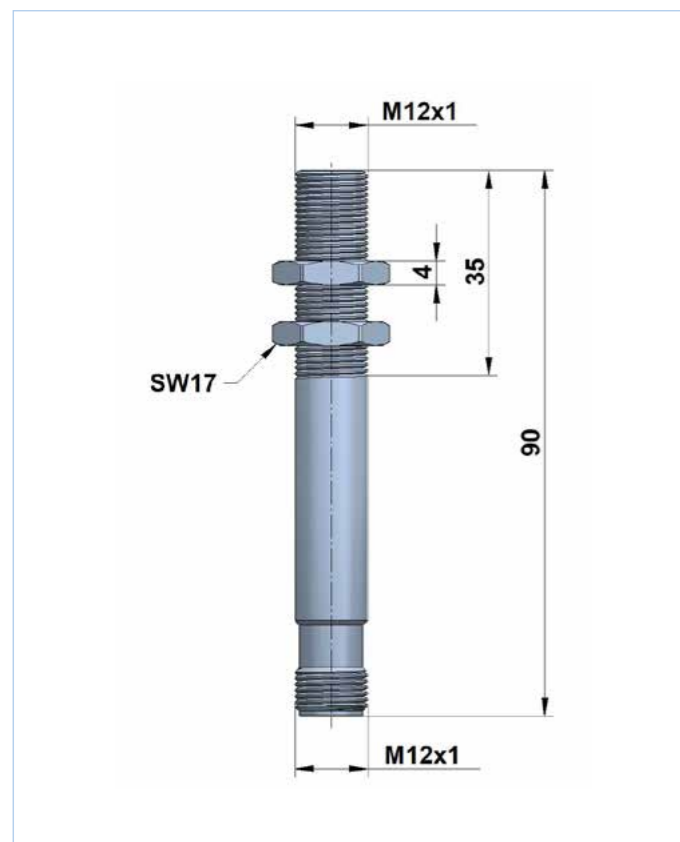
## TECHNICAL DATA

SENSOR	IC12-02	IC18-08S	IC18-08L	IC18-08S-V	IC18-08L-V
Measurement range [mm]	0...2	0...8	0...8	0...8	0...8
Special feature	-	-	linearized	-	linearized
Linearity [ $\mu\text{m}$ ]	$\pm 60$	$\pm 640$	$\pm 32$	$\pm 640$	$\pm 32$
Repeatability [ $\mu\text{m}$ ]	<5	<15	<15	<15	<15
Teachable	-	-	1 point analog, 2 point analog, Factory Reset	-	1 point analog, 2 point analog, Factory Reset
Temperature drift* [%]	$\pm 2$	$\pm 2$ (0...+60°C) $\pm 4$ (-10...+70°C)	$\pm 4$	$\pm 2$ (0...+60°C) $\pm 4$ (-10...+70°C)	$\pm 3$
Working temperature [°C]	0...+60	-10...+70	-25...+75	-10...+70	-25...+75
Supply voltage $V_s$ [VDC]	15...30	12...36	12...36	12...36	12...36
Max. power consumption [mA]	50	20	20	10	15
Output signal	0...20 [mA]	4...20 [mA]	4...20 [mA]	0...10 VDC	0...10 VDC
Response time [ms]	<2	<2	<1	<2	<1
Load resistance $V_s$ min/ $V_s$ max [ $\Omega$ ]	<100/ 400	< 50 Ohm/V * $V_s$ - 150 Ohm > 500 Ohm ( $V_s = 30 \dots 36$ VDC)	< 50 Ohm/V * $V_s$ - 250 Ohm > 500 Ohm ( $V_s = 30 \dots 36$ VDC)	>4000 Ohm	>4000 Ohm
Reverse polarity / short circuit protection	yes/ yes				
Housing material	9SMn28	nickel plated brass			
Connector output	4-pole	4-pole	5-pole	4-pole	5-pole
Sensor surface( $\emptyset$ ) [mm]	10,5	16,5		16,5	
Target size min. [mm]	21	33		33	
Protection class	IP67				
Target material	S235 (ST37), ST52, 16MnCr5 / not suitable for aluminium and non-ferrous metals				
Teach-Feedback	-	-	LED yellow	-	LED yellow

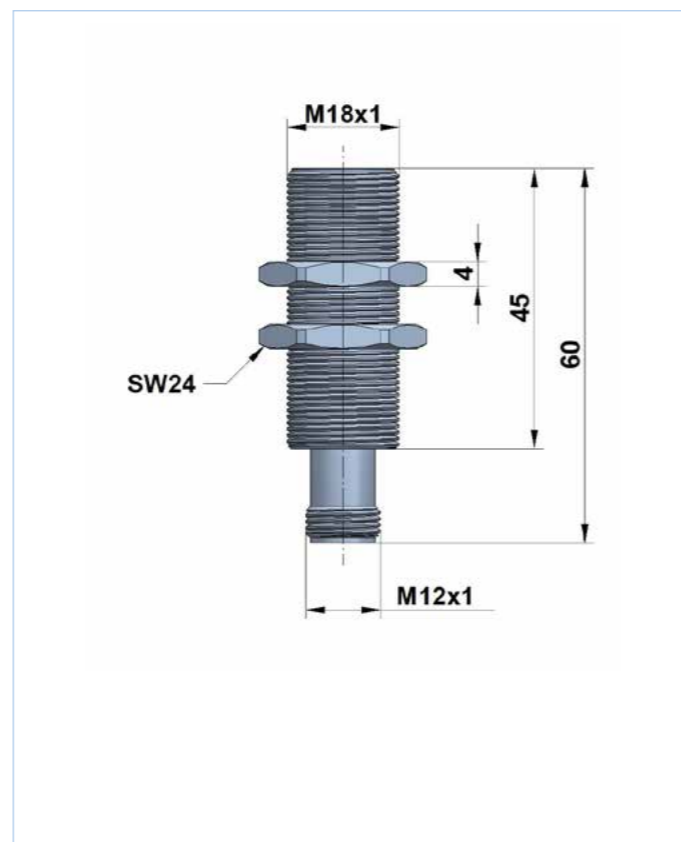
\* based on full scale

## TECHNICAL DRAWINGS

### TYPE IC12



### TYPE IC18



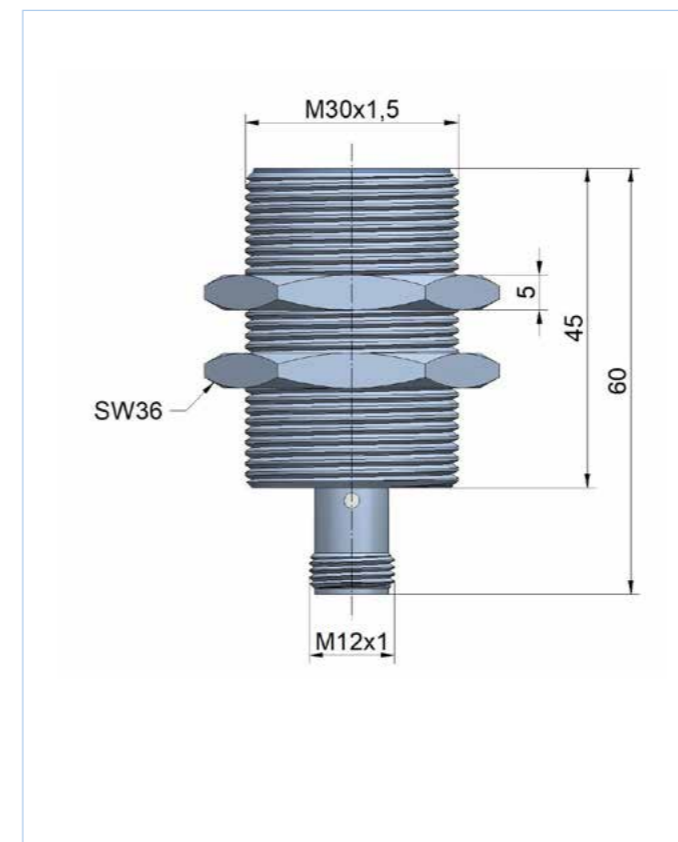
## TECHNICAL DATA

SENSOR	IC30-18S	IC30-18L	IC30-18S-V	IC30-18L-V	IC2035-03	IC2035-03-V
Measurement range [mm]	0..18	0...18	0...18	0...18	2...5	2...5
Special feature	-	linearized	-	linearized	-	-
Linearity [ $\mu\text{m}$ ]	$\pm 2400$	$\pm 360$	$\pm 2400$	$\pm 360$	$\pm 100$	$\pm 100$
Repeatability [ $\mu\text{m}$ ]	<20	<20	<20	<20	<10	<10
Teachable	-	1 point analog, 2 point analog, Factory Reset	-	1 point analog, 2 point analog, Factory Reset	-	-
Temperature drift* [%]	$\pm 6$	$\pm 6$	$\pm 6$	$\pm 6$	$\pm 4$	$\pm 4$
Working temperature [°C]	-25...+75	-25...+75	-25...+75	-25...+75	0...+60	0...+60
Supply voltage $V_s$ [VDC]	8...36	8...36	12...36	12...36	15...30	15...30
Max. power consumption [mA]	20	20	10	20	35	20
Output signal	4...20 [mA]	4...20 [mA]	0...10 VDC	0...10 VDC	4...20 mA	1...9 V
Response time [ms]	<2	<5	<2	<5	<5	<5
Load resistance $V_s$ min/ $V_s$ max [ $\Omega$ ]	< 50 Ohm/V* $V_s$ 250 Ohm >500 Ohm ( $V_s = 30 \dots 36$ VDC)	< 50 Ohm/V* $V_s$ 250 Ohm >500 Ohm ( $V_s = 30 \dots 36$ VDC)	>4000 Ohm	>4000 Ohm	<500/ 1000	>1000
Reverse polarity/ short circuit prot.	yes/ yes					
Housing material	nickel plated brass					
Connector output	5-pole	5-pole	5-pole	5-pole	3-pole	3-pole
Sensor surface( $\emptyset$ ) [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					
Teach-Feedback	-	LED yellow	-	LED yellow	-	-

\* based on full scale

## TECHNICAL DRAWINGS

### TYPE IC30



### TYPE IC2035

