

# EDDY CURRENT PROBES



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## Series WST

### Key-Features:

- Contactless measurement on metal
- Measurement unaffected by oil, water or dust
- Measurement ranges from 0.8 to 4 mm (more on request)
- Linearity up to 1 %
- Resolution up to 0.4  $\mu\text{m}$
- Measurement frequency up to 50 kHz
- Analog output: 0...10 V, 0...20 mA, 4...20 mA
- Operating temperature -20...+125 °C
- Protection class up to IP65

## TECHNICAL DATA SENSORS

		WST-0.8	WST-1.25	WST-2.5	WST-3	WST-4
Measurement range <sup>1)</sup>	[mm]	0.8	1.25	2.5	3	4
Sensitivity	[V/mm]	10	8	4	3.34	2.5
Resolution typical	[ $\mu$ m]	0.4	0.5		1	2
Temperature stability typical <sup>2)</sup>	[%/K]			0.02		
Protection class				IP65		
Operating temperature	[°C]			-20...+125		
Vibration resistance				5...500 Hz, 5 g (IEC 68-2)		
Shock resistance				40 g, 11 ms		
Connection				axial cable output (1.5 m) with Lemo connector		
Housing				stainless steel (1.4571)		
Weight (cable included)	[g]		24	30	36	42

<sup>1)</sup> Values for measurements on steel (ST37). Ranges for measurements on Al, Cu, Ms and CFK  $\approx$ 50 %. Ranges for measurements on Ti, Pb and VA  $\approx$ 75 %  
<sup>2)</sup> at 50 % measurement range at temperature +10...+90 °C.

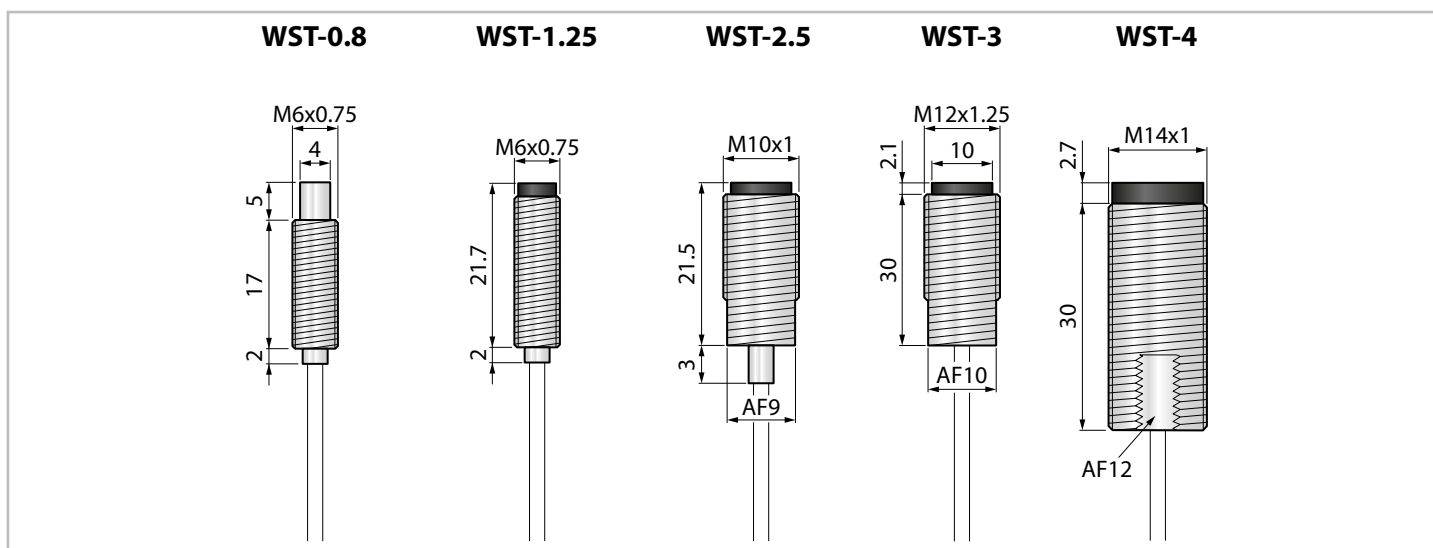
## TECHNICAL DATA AMPLIFIER

		WAT-10V	WAT-020A	WAT-420A
Output		0...10 V	0...20 mA <sup>2)</sup>	4...20 mA <sup>2)</sup>
Linearity max. <sup>1)</sup>	[%]		1	
Initial non-linearity	[%]		approx. 10	
Frequency	[kHz]		5 / 20 / 50	
Supply	[VDC]		10...32	
Current consumption	[mA]		300	
Load resistance	[k $\Omega$ ]	>10		<0.5
Residual ripple	[mV <sub>SS</sub> ]		$\leq$ 10	
Protection class			IP40	
Operating temperature	[°C]		0...+50	
Connection			screw terminals	
Weight	[g]		340	
Mounting			DIN rail	

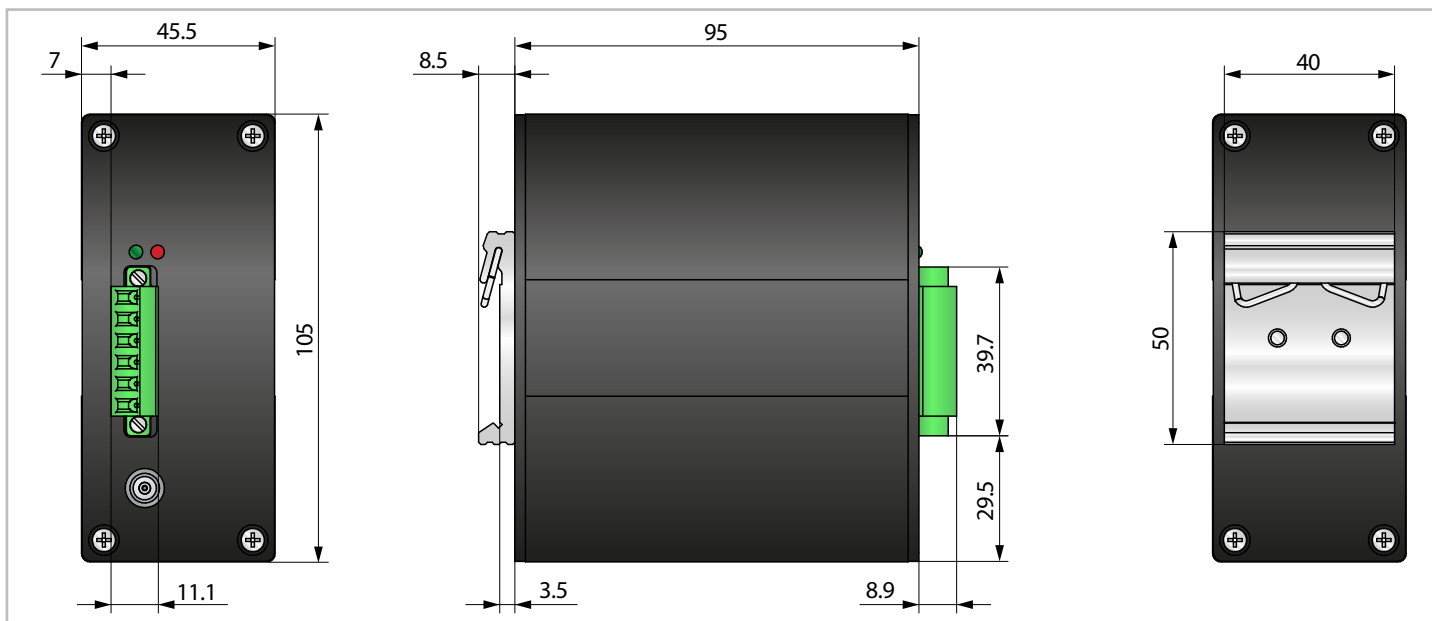
<sup>1)</sup> based on the measurement range

<sup>2)</sup> the versions WAT-020A and WAT-420A additional feature a 0...10 V output.

## TECHNICAL DRAWING SENSORS



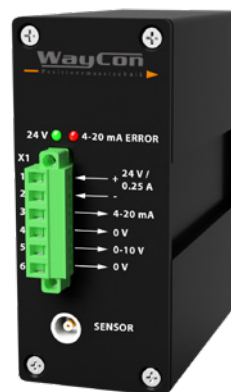
## TECHNICAL DRAWING AMPLIFIER



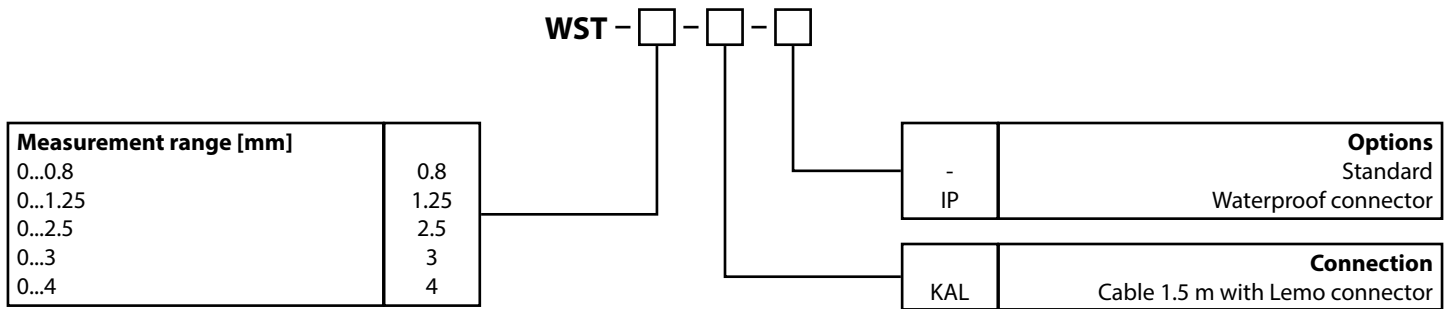
## ELECTRICAL CONNECTION

Terminal	Function
1	+V
2	GND
3	0...20 mA / 4...20 mA <sup>1)</sup>
4	0 V <sup>1)</sup>
5	0...10 V
6	0 V

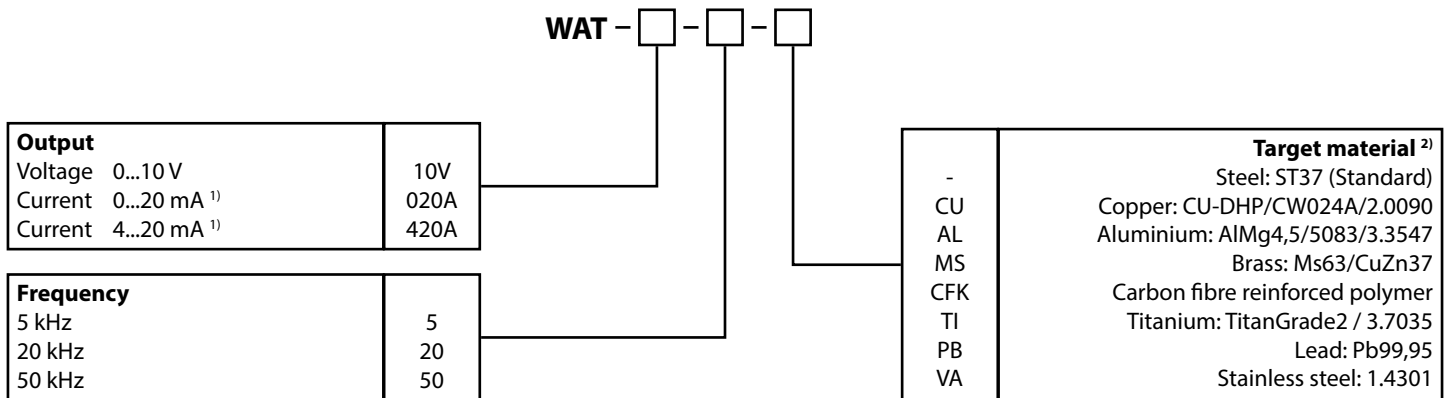
<sup>1)</sup> WAT-020A and WAT-420A only



## ORDER CODE SENSORS



## ORDER CODE AMPLIFIER



<sup>1)</sup> the versions WAT-020A and WAT-420A additional feature a 0...10 V output.

<sup>2)</sup> Values for measurements on steel (ST37). Ranges for measurements on Al, Cu, Ms and CFK ≈50 %. Ranges for measurements on Ti, Pb and VA ≈75 %. Other materials on request.

## ACCESSORIES

K3.5L-MF Cable 3.5 m, Lemo female to Lemo male

K3.5L-MF-IP65 Cable 3.5 m, Lemo female to Lemo male, IP65

Please note that no more than two extension cables per sensor should be used, otherwise the linearity will be negatively affected.

Subject to change without prior notice.

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