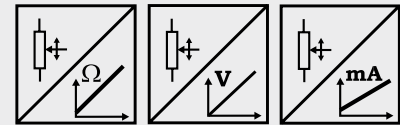


**POSIWIRE®**  
**WS100M**  
**Analog Output**



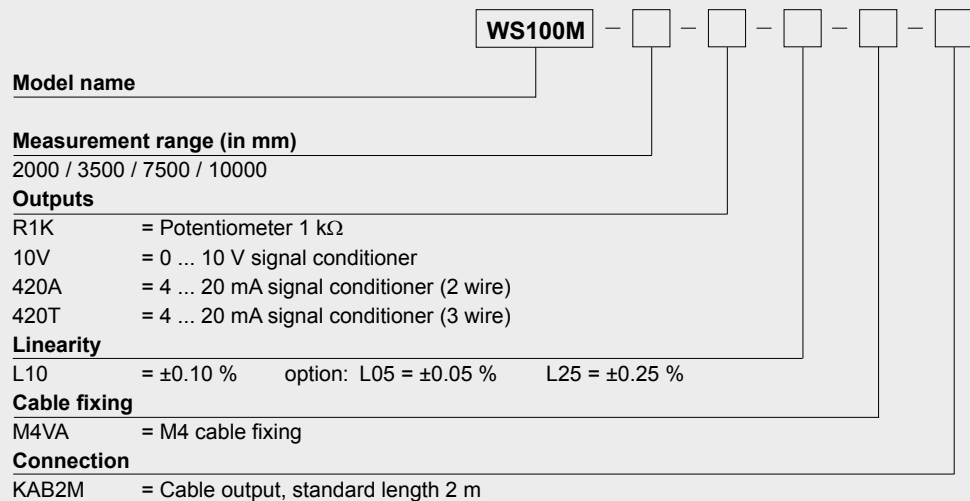
**Sensor for hostile environments and offshore applications**

- Protection class IP68/IP69K
- Measurement ranges 0 ... 2000 mm to 0 ... 10000 mm
- Analog output



<b>Specifications</b>	Outputs	Potentiometer 1 kΩ Voltage 0 ... 10 V Current 4 ... 20 mA, 2 or 3 wire
	Resolution	Essentially infinite
	Linearity	Up to ±0.05 % f. s.
	Sensing device	Hybrid precision potentiometer
	Material	Stainless steel; cable: stainless steel
	Protection class	IP68/IP69K
	Connection	Cable output, standard length 2 m
EMC, temperature	Refer to output specification	

**Order code WS100M**

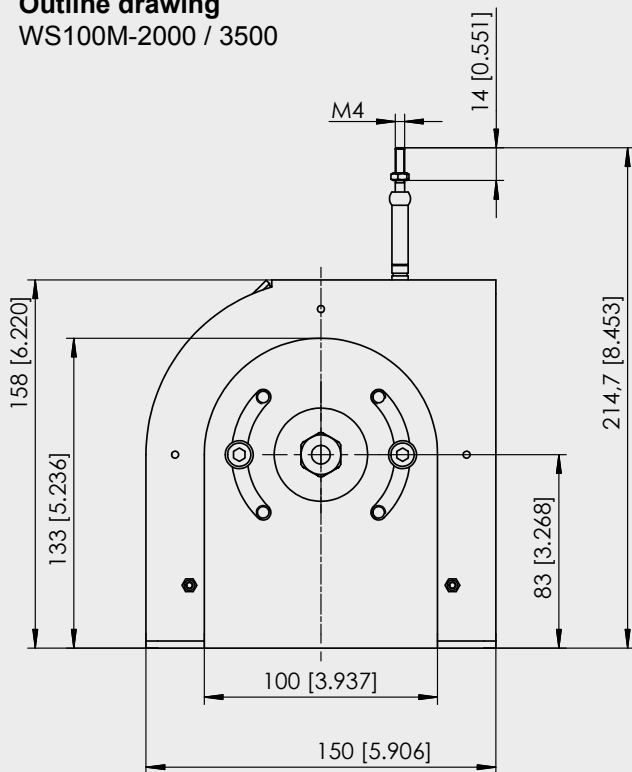


**Order example: WS100M - 7500 - 420T - L10 - M4VA - KAB2M**

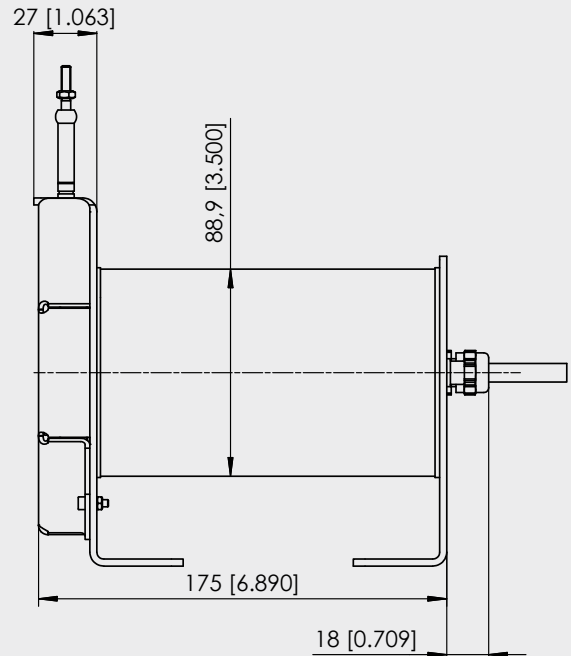
**POSIWIRE®**  
**WS100M**  
**Analog Output**



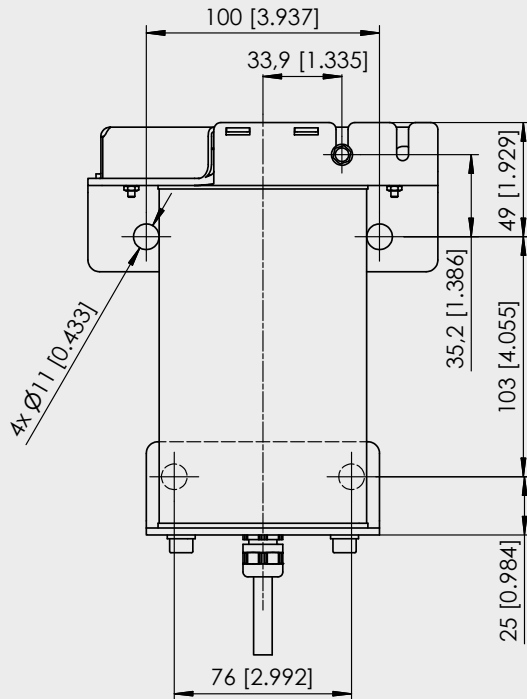
**Outline drawing**  
 WS100M-2000 / 3500



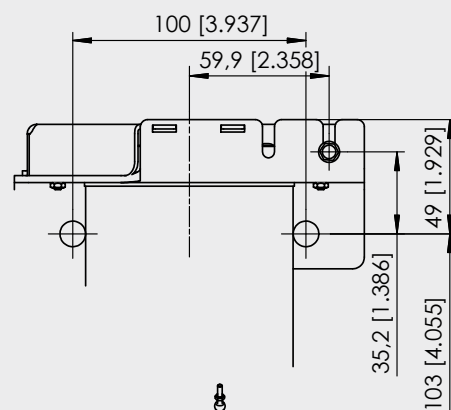
**Measurement range 2000 mm**



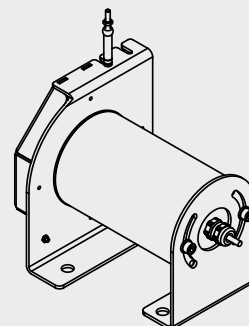
**Measurement range 3500 mm**



Dimensions in mm [inch]



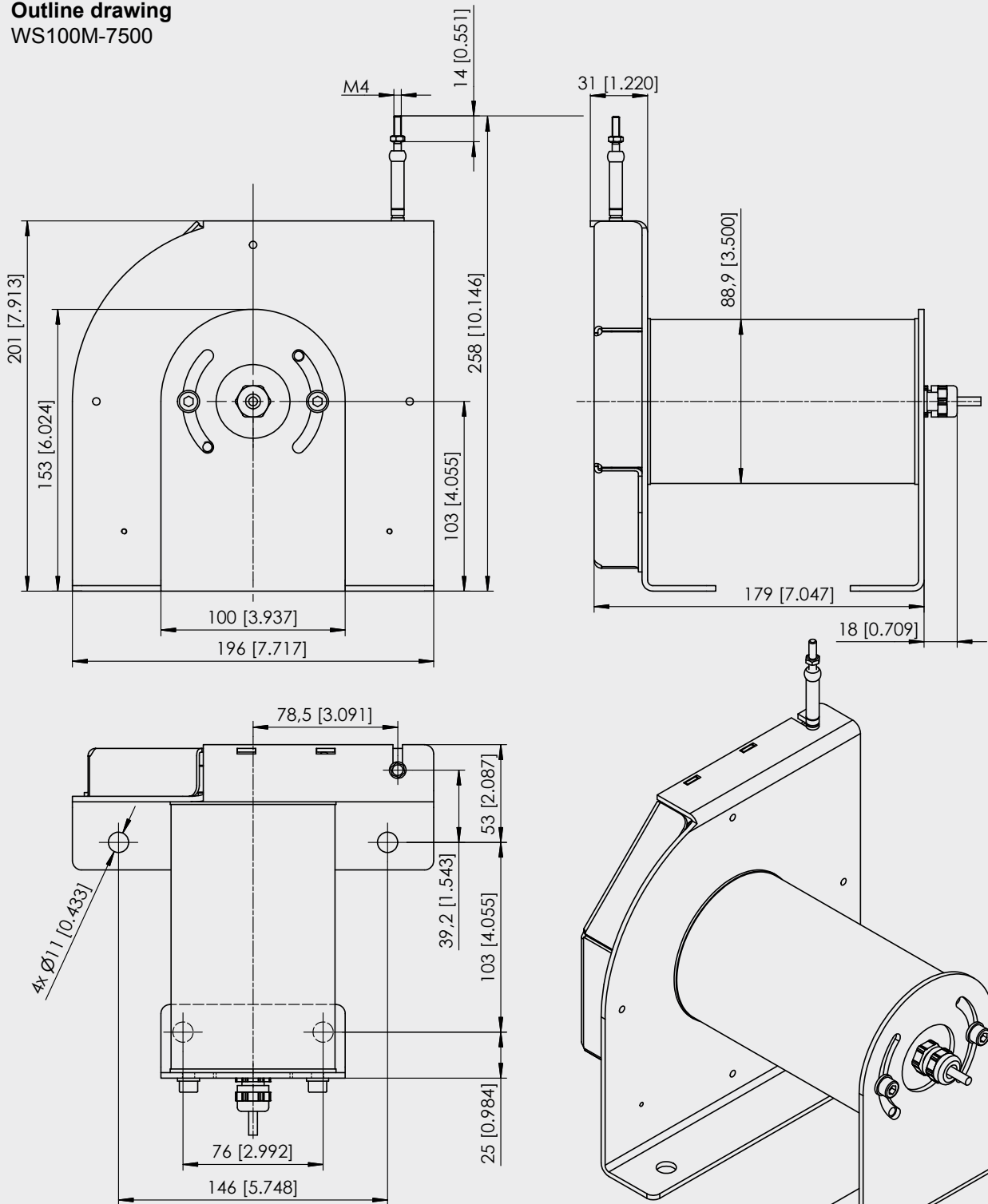
Dimensions informative only.  
 For guaranteed dimensions consult factory.



**POSIWIRE®**  
**WS100M**  
**Analog Output**



**Outline drawing**  
 WS100M-7500



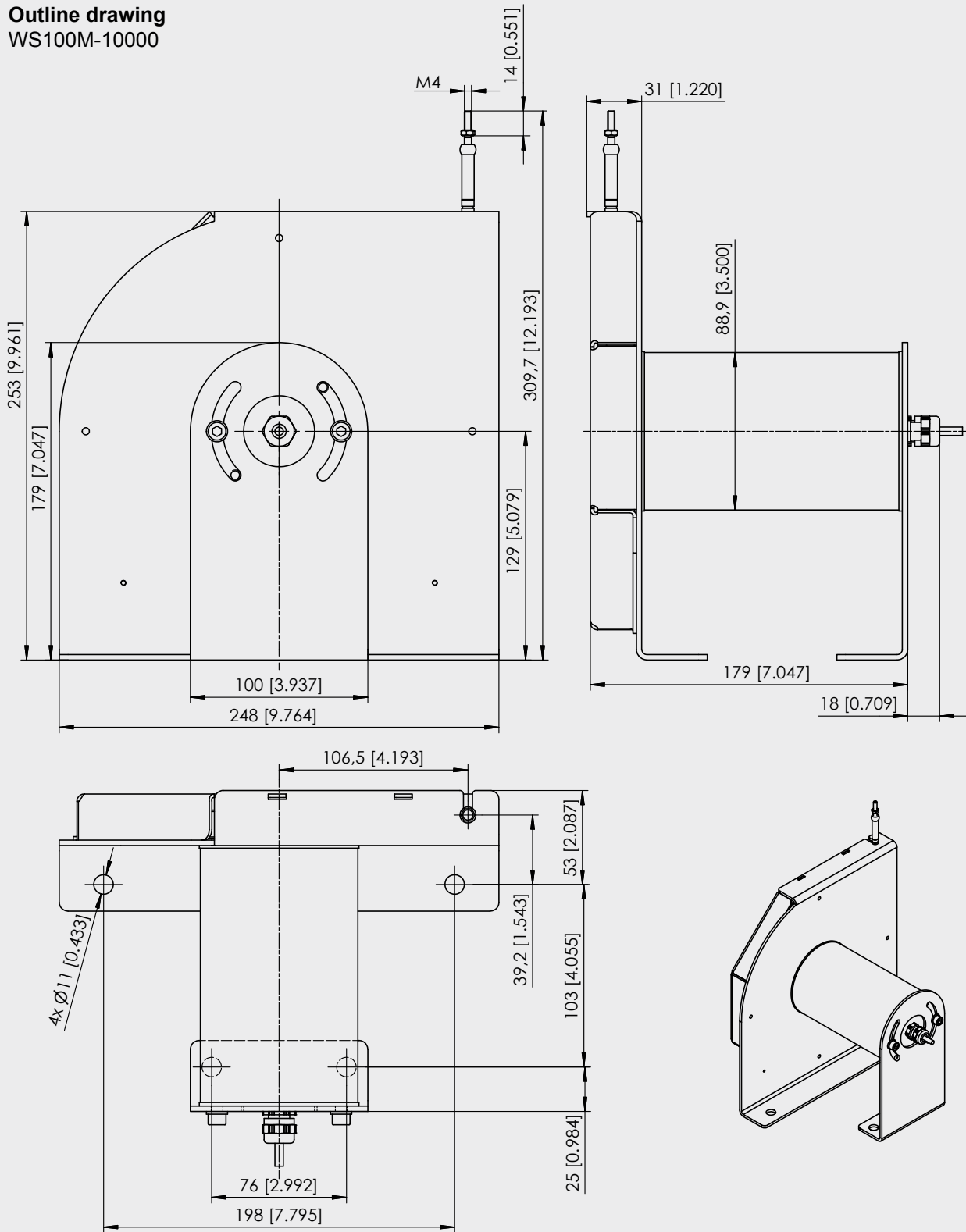
Dimensions in mm [inch]

Dimensions informative only.  
 For guaranteed dimensions consult factory.

**POSIWIRE®**  
**WS100M**  
**Analog Output**



**Outline drawing**  
 WS100M-10000



Dimensions in mm [inch]

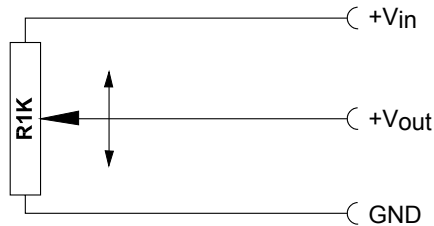
Dimensions informative only.  
 For guaranteed dimensions consult factory.

# POSIWIRE® R1K and 10V Analog Output



<b>Voltage divider R1K Potentiometer</b> 	Excitation voltage	32 V DC max. at 1 kΩ (max. power 1 W)
	Potentiometer impedance	1 kΩ ±10 %
	Thermal coefficient	±25 x 10 <sup>-6</sup> / °C f.s.
	Sensitivity	Depends on the measuring range, individual sensitivity of the sensor is specified on the label
	Voltage divider utilization range	Approx. 3 % ... 97 %
	Operating temperature	-20 ... +85 °C

## Output signals



**Note:** The Potentiometer must be connected as a voltage divider. The input impedance of the following processing circuit should be 10 MΩ min.

<b>Signal conditioner 10V and 10V5 Voltage output</b> 	Excitation voltage	18 ... 27 V DC non stabilized
	Excitation current	20 mA max.
	Output voltage	<b>10V:</b> 0 ... 10 V DC; <b>10V5:</b> 0.5 ... 10 V DC
	Output current	2 mA max.
	Output load	> 5 kΩ
	Stability (temperature)	±50 x 10 <sup>-6</sup> / °C f.s.
	Protection	Reverse polarity, short circuit
	Output noise	0.5 mV <sub>RMS</sub>
	Operating temperature	-20 ... +85 °C
	EMC	According EN 61326:2006

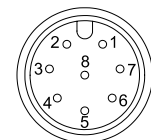
## Output signals



Signal wiring	Signal name R1K	10V	Cable color	Connector pin no.
	+Vin	Excitation + +	White	1
	GND	Excitation GND	Brown	2
	+Vout	Signal +	Green	3
		Signal GND	Yellow	4

## Connection

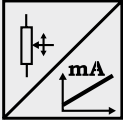
View to sensor connector



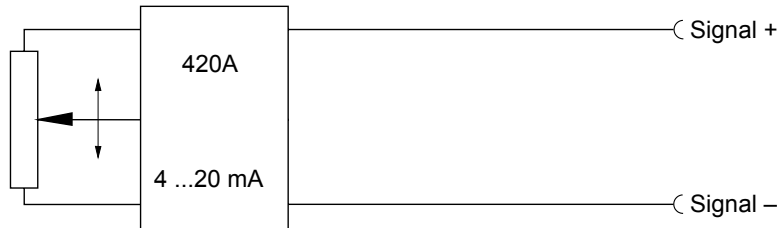
CONN-M12-8F

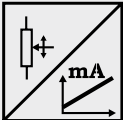
# POSIWIRE® 420A and 420T Analog Output



<b>Signal conditioner 420A</b> Current output (2 wire) 	Excitation voltage	12 ... 27 V DC non stabilized, measured at the sensor terminals
	Excitation current	35 mA max.
	Output current	4 ... 20 mA equivalent for 0 ... 100 % range
	Stability (temperature)	$\pm 100 \times 10^{-6} / ^\circ\text{C}$ f.s.
	Protection	Reversed polarity, short circuit
	Output noise	0.5 mV <sub>RMS</sub>
	Operating temperature	-20 ... +85 °C
	EMC	According to EN 61326:2006

## Output signals



<b>Signal conditioner 420T</b> Current output (3 wire) 	Excitation voltage	18 ... 27 V DC non stabilized
	Excitation current	40 mA max.
	Load resistor	350 Ω max.
	Output current	4 ... 20 mA equivalent for 0 ... 100 % range
	Stability (temperature)	$\pm 50 \times 10^{-6} / ^\circ\text{C}$ f.s.
	Protection	Reverse polarity, short circuit
	Output noise	0.5 mV <sub>RMS</sub>
	Operating temperature	-20 ... +85 °C
	EMC	According to EN 61326:2006

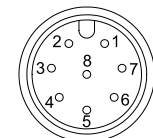
## Output signals



Signal wiring	Signal name		Cable color	Connector pin no.
	420A	420T		
Signal +		Excitation +	White	1
Signal -		Excitation GND	Brown	2
		Signal +	Green	3

## Connection

View to sensor  
connector



CONN-M12-8F