## **WS2.1 Position Sensor** with Analog or A/D converted synchronous serial output





**Compact Sensor for Medium Ranges** 

- Protection Class IP50
- Measurement Range:
  - 0 ... 1500 mm to 0 ... 2500 mm
  - 0 ... 59.06 in to 0 ... 98.43 in
- With Analog Output or

A/D Converter with synchronous serial output

Outputs Potentiometer: 1 k $\Omega$ **Specifications** Voltage: 0...10 V Current: 4...20 mA, 2 or 3 wire A/D Converter synchronous serial 12 Bit RS-485 Resolution Essentially inifinite / ADSI: 12 Bit Full Scale Material Aluminium and Stainless Steel Cable: Stainless Steel Sensing Device Precision Potentiometer Connector Male Socket 8 pin DIN 45326 Linearity Up to ±0,05 % Full Scale Protection class (IEC 529) IP50 Weight 1.8 kg approx. Environmental Refer to Output Specification Immunity to Interference Refer to Output Specification Temperature Humidity 90 % R.H. max. non condensing Shock 50 g's max. for 6 ms Duration Vibration 10 g's max. (1 Hz - 2000 Hz)

#### **Order Code WS2.1** WS2.1 **Analog Model Name** Measurement Range (in mm) 1500 / 2000 / 2500 **Outputs** R1K = Potentiometer 1 k $\Omega$ (other Values on Request, i.e. 500 $\Omega$ ) 10V = with 0 ... 10 V Signal Conditioner 420A = with 4 ... 20 mA Signal Conditioner (2 wire) 420T = with 4 ... 20 mA Signal Conditioner (3 wire) ADSI = with A/D Converter synchronous serial output 12 Bit / RS-485 Linearity $L10 = \pm 0.10 \%$ 1.05 = +0.05%

### **Order Code Mating Connector**

Options (see catalog)

WS-CONN-D8

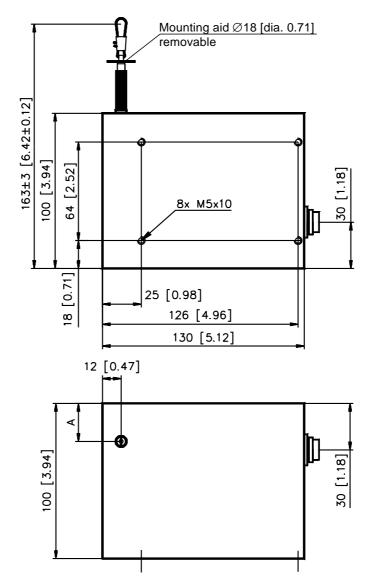
Order Example: WS2.1 - 2500 - 10V - L10

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## WS2.1 Position Sensor with Analog or A/D converted synchronous serial output



Cable Forces	Range [mm in]	Maximum Pull-out Force [N]	Minimum Pull-in Force [N]
typical at 20 °C	1500 59.06	10.2	6.7
	2000 78.74	8.4	5.4
	2500 98.43	7.2	4.8



Dimensions in brackets are inches. For guaranteed dimensions consult factory

Dimensions (mm)	Range	Α
	1500	24.5
	2000	16.5
	2500	8.5
<b>D</b> : (1)	59.06	0.96
Dimensions (in)	78.74	0.65
	98.43	0.33

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## **WS2.1 Position Sensor** with Incremental Encoder





## **Compact Sensor for Medium Ranges**

- Protection Class IP50
- Measurement range:
  - 0 ... 2500 mm
  - 0 ... 98.43 in
- Incremental Encoder Output





Specifications	Outputs	Incremental Encoder Output with differential Push-pull Circuit for reliable Data Transmission. The output is compatible with LD, TTL and CMOS.
	Resolution	5 or 10 pulses per mm; 127 or 254 pulses per in.
	Distance between Reference Pulses	200 mm; 7.87 in
	Material	Aluminium and Stainless Steel. Cable: Stainless Steel
	Sensing Device	Incremental encoder
	Connector	Male Socket 8 pin DIN 45326
	Linearity	±0,05 % Full Scale
	Protection Class (IEC 529)	IP50
	Weight	1.8 kg approx.
	Environmental	
	Immunity to Interference (EMC)	Refer to Output Specification
	Temperature	Refer to Output Specification
	Humidity	85 % R.H. max. non condensing
	Shock	30 g's for 11 ms Duration
	Vibration	10 g's max. (50 Hz / 1 h)

# Order Code WS2.1 Incremental Model Name Measurement Range (in mm) 2500 (smaller measurement ranges included) Pulses per mm 5 = 5 Pulses per mm; 127 pulses per in 10 = 10 Pulses per mm; 254 pulses per in Output

### **Order Code Mating Connector**

WS-CONN-D8

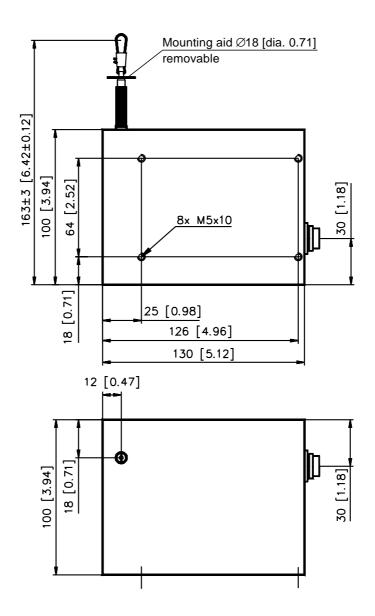
Order Example: WS2.1 - 2500 - 5 - PP530

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## **WS2.1 Position Sensor** with Incremental Encoder



Cable Forces	Range [mm in]	Maximum Pull-out Force [N]	Minimum Pull-in Force [N]
typical at 20 °C	2500 98.43	8.6	5.7



Dimensions in brackets are inches. For guaranteed dimensions consult factory

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