



- Measurement length 300 mm to 2750 mm
- 0,5 mm stainless steel wire diameter
- Small size
- High resolution
- 5 VDC or 10...30 VDC Power supply
- A, B, Z, /A, /B, /Z Encoder Signal Outputs (Push-Pull or Line Driver)
- High strength stainless steel wire
- 0,5 m/s maximum speed
- Wide working temperature range of -25 to +85 °C
- Shock/Vibration resistant
- 2,4N Maximum extension force
- Aluminum anodized body

AWE 120 wire encoders are incremental wire transducers that turn a linear motion into coded digital pulses. AWE 120 series can measure 300 mm up to 2750 mm. Optionally other stroke lengths, resolution, cable length and socket connector can be requested.

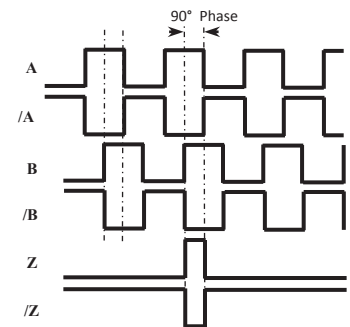
They are made of an incremental encoder, activated by the stroke of a, winding or unwinding, stainless steel wire. A special feature is their easy assembling. The linking together to a display or an electronic positioner supplies an excellent system to measure the dimensions on machine tools, automatic, wood, marble, glassworking machinery etc.

### TECHNICAL SPECIFICATIONS

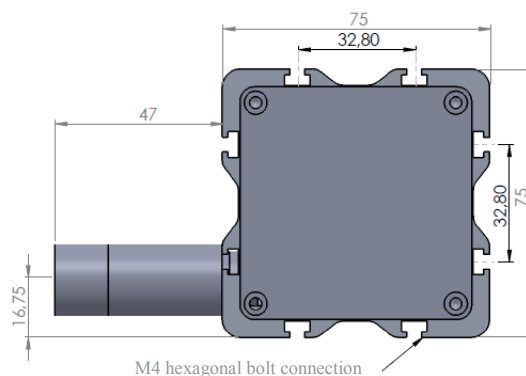
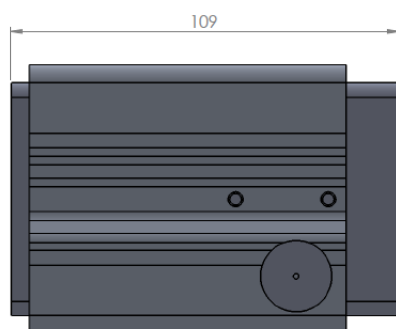
<b>Power Supply</b>	10...30VDC ±%20 , 5VDC ±%5 5...24VDC ±%20 , 5...30VDC ±%20
<b>Resolution</b>	0,1 mm Pulse / 0,025 mm edge * only for 2500,2750 mm 0,16/0,04 mm
<b>Stroke Length (mm)</b>	300 , 500 , 700 , 1000 , 1250 , 1500 , 1700 , 2000 , 2500 , 2750 mm (Please ask us for other)
<b>Accuracy</b>	±0,2 mm/meter
<b>Maximum Speed</b>	0,5 m/s
<b>Output Signals</b>	AB , ABZ , AB/A/B , ABZ/A/B/Z
<b>Maximum Output Current</b>	Max. 60 mA per channel
<b>Working Temperature</b>	-25 to +85 °C
<b>Relative Humidity</b>	10 to 90%
<b>Weight</b>	450 grams

PIN NO	SIGNAL	CABLE COLOR
1	A	YELLOW
2	/B	WHITE
3	+V	RED
4	0 V	BLACK
5	/A	BLUE
6	B	GREEN
7	/Z	GREY
8	Z	PINK
9	EARTH	SHIELD

In the left tablet he cable colors of sensors output signals are given. If the control circuit is suitable in the Line Driver sensors of the not output signals (/A, /B, /Z) have to be added to the system. If it is not suitable /A, /B, /Z signal cables must be fixed as insulated separately. Don't forget that these edges have electricity too.

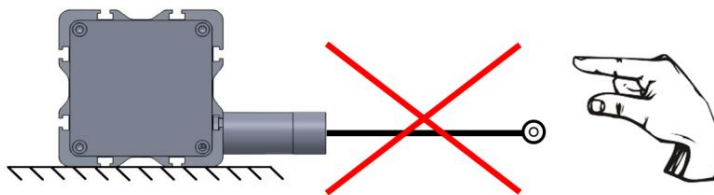


### MECHANICAL DIMENSIONS

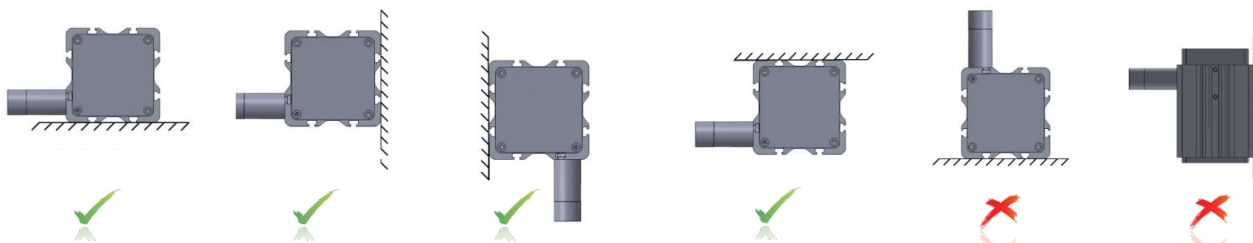


**MOUNTING - WARNINGS**

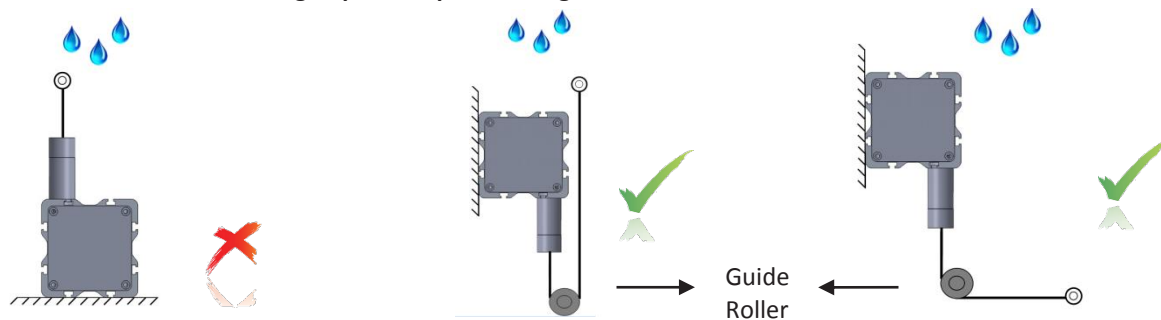
1. Do not release the wire suddenly, after pulling.



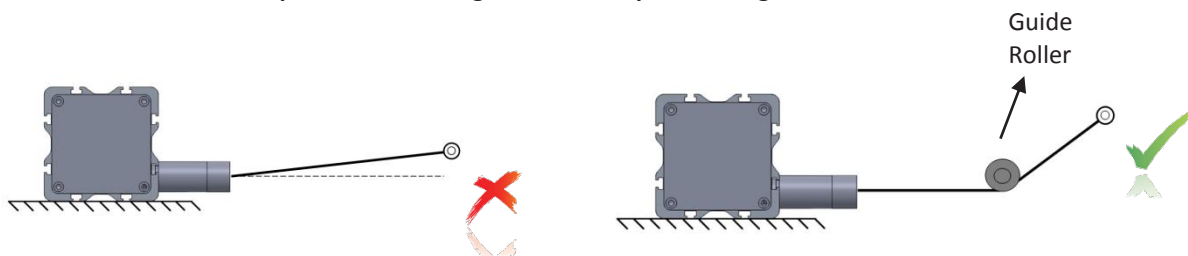
2. The wire encoder must be mounted vertically in position, not horizontally.



3. If there is the possibility of splashing of water (like rain) on the device, the wire outlet must not look upwards. If the wire needs to go upwards, please use guide rollers.



4. The wire should not be pulled with an angle. If needed, please use guide rollers.



**Failure to comply with these recommendations will lead to malfunctions, which will not be covered by the warranty.**

**Order Code**

<b>Model</b> AWE 120		<b>Wire Length</b> * See Wire Length		<b>Output Signals</b> 3 (A,B,Z) 6 (A,/A,B,/B,Z,/Z)	
<b>AWE 120</b>	<b>XX</b>	<b>XXX</b>	<b>XXX</b>	<b>X</b>	<b>3M</b>
<b>Resolution</b> 01 : 0,1 mm Pulse (Standard) * Only for 2500 ,2750 mm models 0,16 mm		<b>Power Supply and Output</b> PP : 10...30 VDC Supply : 10...30VDC Output TTL : 5 VDC Supply : 5 VDC TTL RS422 Line Driver Output HTL : 10...30 VDC Supply : 5 VDC TTL RS422 Line Driver Output HPL : 5...24 VDC Supply : 5...24 VDC Push-Pull Output PTL : 5...30 VDC Supply : 5 VDC TTL RS422 Line Driver Output			<b>Cable Length</b> 3M : 3M (standard) 5M : 5M 10M : 10M S16 : M16 Socket Connector S23 : M23 Socket Connector *Please ask us for other cable lengths and socket connectors
<b>Wire Length (mm):</b> 300, 500, 700, 1000, 1250, 1500, 1700, 2000, 2500, 2750					