

## **DRAW WIRE ENCODER**

"Small size, High strength stainless steel wire"

**AWE 120** 



#### **GENERAL FEATURES**

- Different stroke (measuring) lengths from 300 mm to 2100 mm
- Incremental output
- 0.5 mm or 1 mm Stainless Steel wire
- IP65 protection class
- Compact design
- Easy installation
- 2 m/s maximum speed
- Shock/Vibration resistant
- Aluminum anodized body



AWE 120 wire encoders convert linear motion into incremental digital pulses. Different stroke lengths from 300 mm to 2100 mm are available. Optionally other stroke lengths, resolutions, cable lengths and socket connectors can be requested.

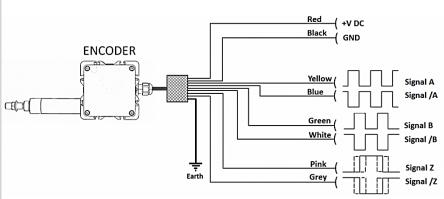
They make measurement by pulling and rewinding stainless steel wire. Usage is practical and usage area is quite wide. By connecting to a counter or position controller, they become a perfect system in high resolutions for position control in wood processing, marble machines, glass processing machines and other machines.

TECHNICAL SPECIFICATIONS							
	Different measuring lengths from 300 mm to 2100 mm		Maximum Speed	2 m/s			
(measuring) length			Required force	2,4N			
*Resolution	pulse/mm	mm/edge	Man Outrot Comment	CO m A (man aban mal)			
	10 pulses/mm (standard)	0.025 mm (standard)	Max Output Current	60 mA (per channel)			
	5 pulses/mm	0.05 mm	Measuring Type	Optic			
*Connection cable	3m (standard), 5m, 10 m		Materials	Housing: Aluminum/steel /ABS plastic			
	530V DC ±20%			Measuring Wire: Stainless steel			
				(0.5 mm or 1 mm)			
*Output Signals	A,B,Z (standard) A,B A,/A,B,/B A,/A,B,/B,Z,/Z		IP Protection Class	IP65			
			Operating Temperature	-25°C +85°C			
			Relative Humudity	%95			
Accuracy	Accuracy ±0.25% FS		Weight	≈1300 gr			

Note: The technical specifications indicated by (\*) vary according to the selected model. The detailed code table is shown on page 3.

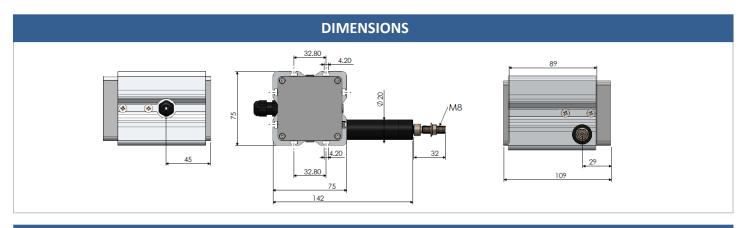
### **ELECTRICAL CONNECTION**

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.



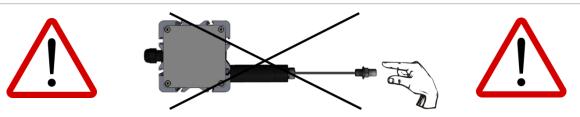
		M12 SOCKET	M16 SOCKET	M23 SOCKET
SIGNAL	CABLE COLOR	2 • 5 • 1 3 • • 4	10 07 02 0 60 30 4 05	8 • • • • • • • • • • • • • • • • • • •
		PIN NO	PIN NO	PIN NO
Α	Yellow	1	1	5
В	Green	2	2	8
+V	Red	3	3	2,12
0V	Black	4	4	10,11
Z	Pink	5	5	3
/A	Blue	6	-	6
/B	White	7	-	1
/Z	Grey	8	-	4
EARTH	Silver	-	-	9

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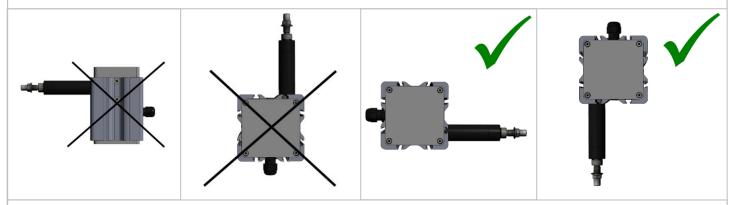


### **MOUNTING AND WARNINGS**

1. Never release the wire after pulling. Otherwise, the coil spring will be damaged.



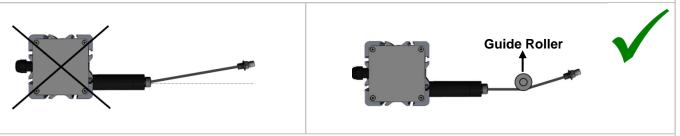
2. Mount the sensor according to the mounting directions shown below.



3. If there is a trickle of water (like a rain), the wire outlet must not be a drip of water upstream. If needed please use guide rollers.



4. The wire should not be pulled in angular. If needed, please use guide rollers.



Important Note(!): Failure to comply with these recommendations, the malfunctions that may occur will not be under the warranty.

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#### SAMPLE APPLICATION FIELDS

- **Elevators**
- Press machines
- Crane systems
- Wood processing machines
- Marble processing machines
- Storage positioning
- Dam protections
- Sluice gate control
- Air compressors





- Glass processing machines
- Lifting platforms
- Applications in medical technologies (operating table etc.)
- **Forklifts**
- Screw machines
- Paper machines
- Sewing machines
- Hydraulic machines

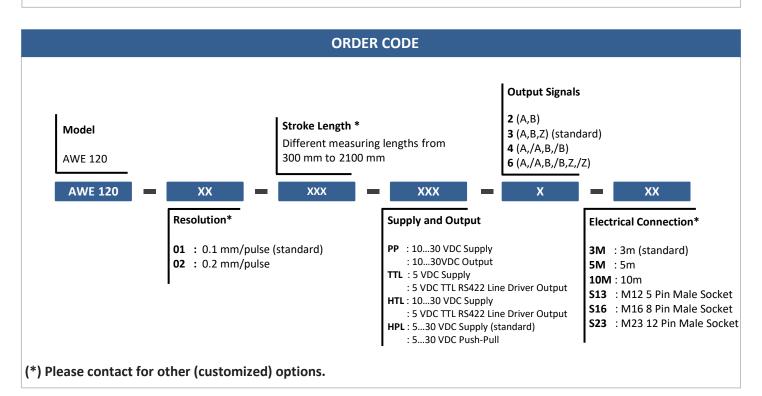




- Sheet metal machines
- **Printing machines**
- Horizontal control equipments
- Construction machines
- Industrial robots
- Injection machines
- X-Y axis displacement
- Liquid level measurements and position control







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