

DRAW WIRE ENCODER

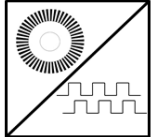
“Small size, High strength stainless steel wire”

AWE 110



GENERAL FEATURES

- Different stroke (measuring) lengths between 0...300 mm and 0...1200 mm
- Incremental output
- Stainless steel measuring wire
- Small structure
- IP53 protection class
- Compact design
- Easy installation
- 2 m/s maximum speed
- Shock/Vibration resistant
- Aluminum anodized body



AWE 110 wire encoders convert linear motion into incremental digital pulses. Different stroke lengths between 0...300 mm and 0...1200 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.

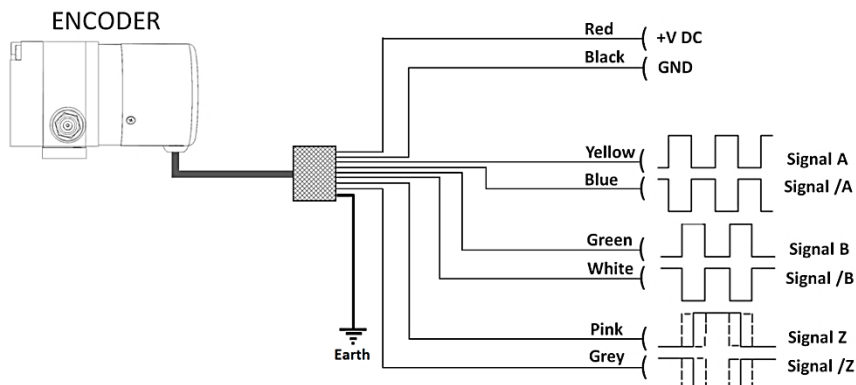
TECHNICAL SPECIFICATIONS

*Stroke (measuring) Length	Different measuring lengths between 0...300 mm and 0...1200 mm		Maximum Speed	2 m/s
			Required Force	5 N
*Resolution	pulse/mm	mm/edge	Max Output Current	60 mA (per channel)
	5 pulses/mm	0.05 mm	Measuring Type	Optic
	10 pulses/mm (standard)	0.025 mm (standard)	Materials	Housing: Aluminum/steel /plastic
	20 pulses/mm	0.0125 mm		Measuring Wire: Stainless steel
*Connection Cable	3m (standard), 5m, 10m		IP Protection Class	IP53
*Supply Voltage	5...30V DC $\pm 20\%$		Operating Temperature	-25°C ... +85°C
*Output Signals	A,B,Z (standard)		Relative Humidity	%95
	A,B		Weight	≈550 gr
	A,/A,B,/B			
	A,/A,B,/B,Z,/Z			
Accuracy	$\pm 0.25\%$ FS			

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

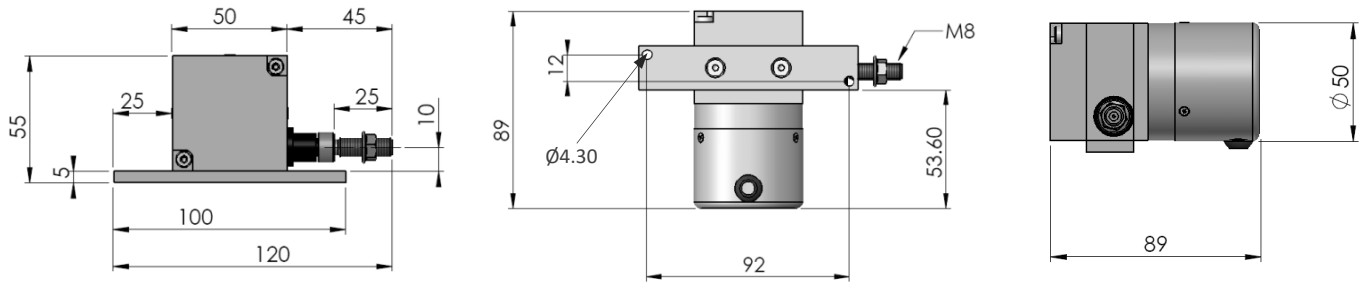
ELECTRICAL CONNECTION

In the left tablet the 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.



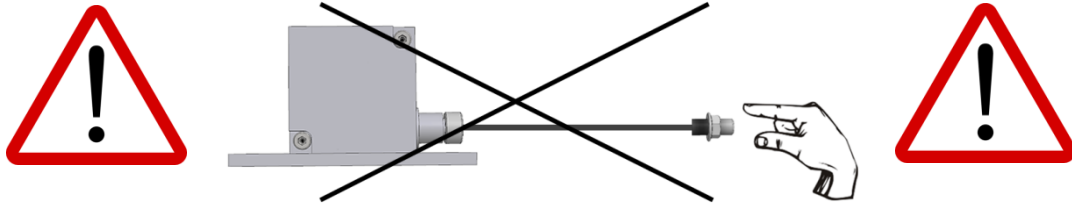
SIGNAL	CABLE COLOR	M12/8 pin SOCKET	M12/5pin SOCKET
		 PIN NO	 PIN NO
A	Yellow	1	1
B	Green	2	2
+V	Red	3	3
0V	Black	4	4
Z	Pink	5	5
/A	Blue	6	-
/B	White	7	-
/Z	Grey	8	-
EARTH	Silver	-	-

DIMENSIONS

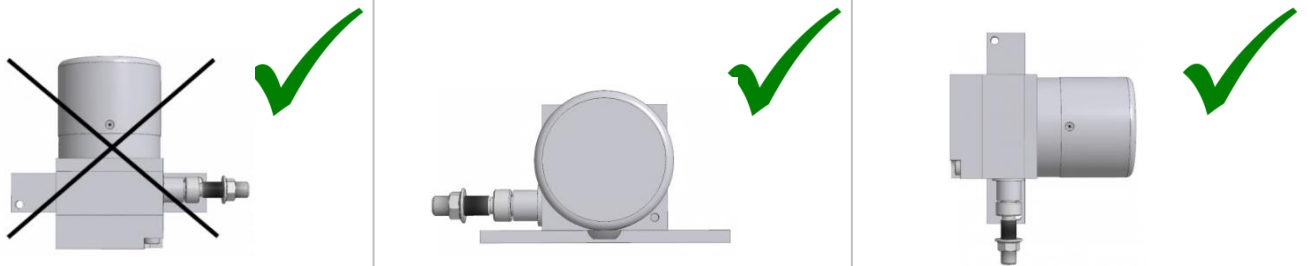


MOUNTING AND WARNINGS

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



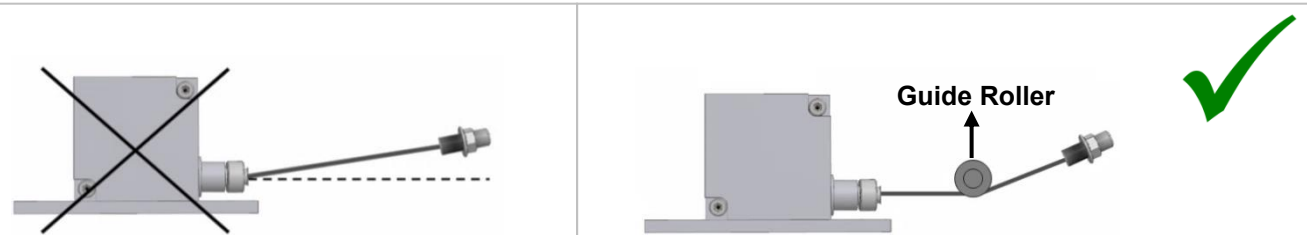
2. The wire encoder must be mounted vertically in position, not be horizontally.



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.



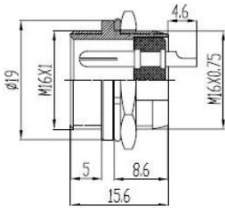
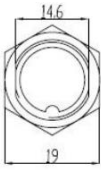
4. The wire should not be pulled in angular. If needed, please use guide rollers.




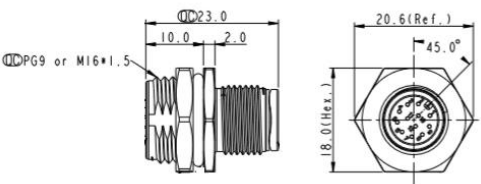
Important Note(!): Failure to comply with these recommendations, the malfunctions that may occur will not be under the warranty.

SOCKET MODELS

M16 8 PIN MALE SOCKET

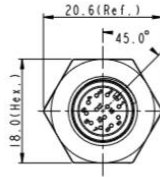
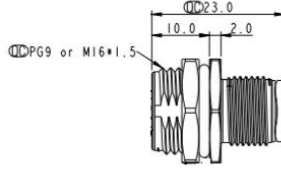


M12 5 PIN MALE SOCKET

Technical drawing showing the dimensions of the M12 5 PIN MALE SOCKET:

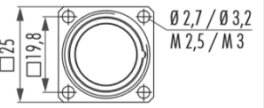
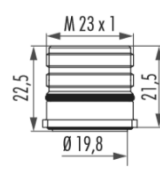
- Overall length: 23.0
- Length of the first section: 10.0
- Length of the second section: 2.0
- Thread specification: M16x1.5 or PG9
- Reference length: 20.6 (Ref.)
- Angle: 45.0°
- Hexagonal base size: 18.0 (Hex.)



M23 12 PIN MALE SOCKET

Technical drawings showing dimensions for the M23 12 PIN MALE SOCKET:

- Overall length: 22,5
- Mounting flange diameter: Ø 19,8
- Mounting flange thickness: 21,5
- Thread specification: M 23 x 1
- Mounting flange side view dimensions: 25 (square), Ø 19,8 (circle), Ø 2,7 / Ø 3,2 (hole), M 2,5 / M 3 (hole)



SAMPLE APPLICATION FIELDS


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



ORDER CODE

3M : 3m (standard)
5M : 5m
10M : 10m
S13 : M12 5 Pin Male Socket
S14 : M12 8 Pin Male Socket
S16 : M16 8 Pin Male Socket
S23 : M23 12 Pin Male Socket

Atek Elektronik Sensör Teknolojileri Sanayi ve Ticaret A.Ş.

 Gebze OSB. 800. Sokak. No:814 Gebze/KOCAELİ/TÜRKİYE

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