

## DRAW WIRE ENCODER

"High strength stainless steel wire"

**AWE 404** 



## **GENERAL FEATURES**

- Different stroke (measuring) lengths between 0...1000 mm and 0...4200 mm
- Incremental output
- Stainless steel measuring wire
- IP67 protection class
- Compact design
- Easy installation
- 2 m/s maximum speed
- Shock/Vibration resistant
- Aluminum body



AWE 404 series wire encoders convert linear motion into incremental digital pulses. They have different stroke lengths up to 4200 mm. Optionally other 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 Length		ent measuring le	engths between 01000 mm	Accuracy	±0.25% FS	
*Resolution	pulse/mm		mm/edge	Maximum Speed	2 m/s	
	5 pulses/mm		0.05 mm 0.025 mm (std) 0.0125 mm	Required force	5 N	
	10 pulses/mm (std) 20 pulse/mm			Max Output Current	60 mA (per channel)	
*Electrical Interface	20 pui	Supply	Output	Measuring Type	Optical	
	PP	1030 VDC	1030 VDC Push-Pull	*Electrical Connection	5 or 8x0,14 mm² shielded cable M12 / 8 pin socket	
	TTL	5 VDC	5VDC TTL RS422 Line Driver	Materials	Housing: Aluminum/steel /plastic	
	HTL	1030 VDC	5VDC TTL RS422 Line Driver		Measuring Wire: Stainless steel	
	HPL	530 VDC	530 VDC Push-Pull	IP Protection Class	IP67	
*Output Signals	A,B,Z (standard)			Operating Temperature	-25°C +85°C	
	A,B A,/A,B	/R		Relative Humudity	%95	
	A,/A,B,/B,Z,/Z			Weight	≈1400 gr	

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

**ELECTRICAL CONNECTIONS** 

## Signal A Signal /A Signal B Signal /B Signal Z

Signal /Z

In the right table 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	CAPIL COLOR	20 01 03 0 70 40 5 06
SIGNAL	CABLE COLOR	M12 SOCKET PIN NO
Α	Yellow	1
В	Green	2
+V	Red	3
0V	Black	4
Z	Pink	5
/A	Blue	6
/B	White	7
/Z	Grey	8
EARTH	Silver	-

DS-AWE.012 Rev No:1

# MECHANICAL DIMENSIONS (mm) 4.20 35 36 151

### **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



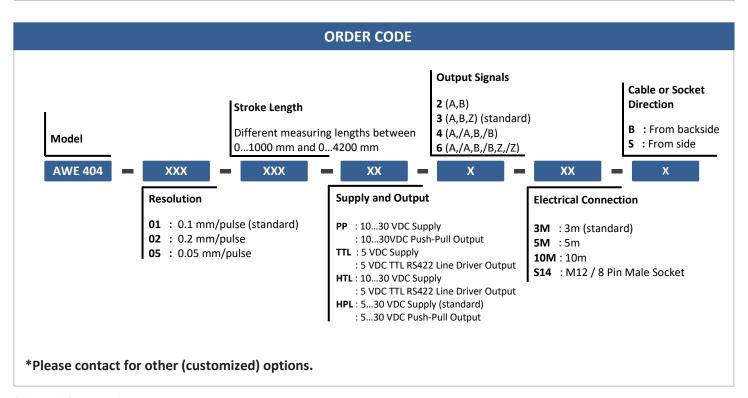








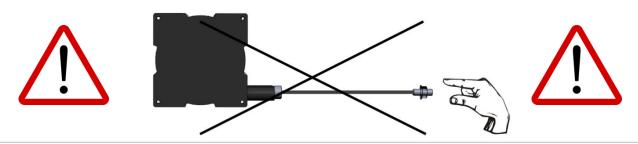




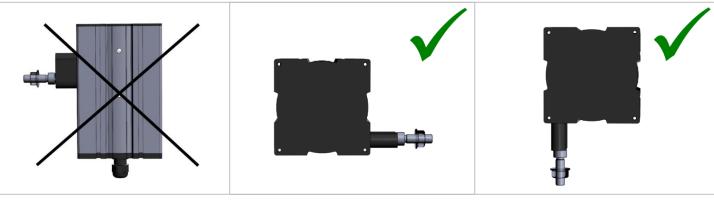
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## **MOUNTING AND WARNINGS**

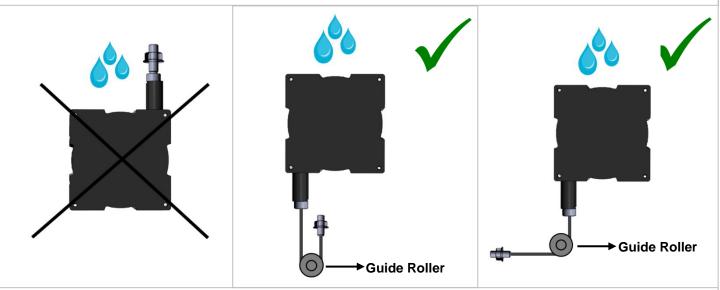
1. Never release the wire after pulling. Otherwise, the coil spring will be damaged.



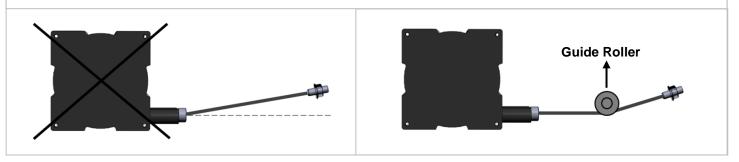
2. Mount the sensor according to the mounting directions shown below.



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.

## <u>فروشگاه کانون ابزار</u>

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