



WET128

Wire position sensor

VOLBUFF
SENSORS

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1 Product description

The Wet128 series is a solid and durable high-performance pull-rope position sensor, and is designed by the Canopen output industrial application, so it is particularly high-quality and durable.

Excellent repetitiveness, high protection level, resistance impact and vibration, high electromagnetic compatibility, using this sensor is suitable for mobile hydraulic applications, such as cranes, remote control and air operating platforms.

Advantages are suitable for measuring length and inclination positions in harsh environmental conditions and outdoor environment, and adapting to high reliability and long service life.

The main features are as follows:

- Measurement distance: A variety of measurement distance: 0 meters to 10 meters/12.5 meters
- Wide voltage input: 9-30VDC
- CANopen output
- The measurement range of compact size linear as high as: $\pm 0.5\%$ (FS)
- High protection level: IP67
- Width temperature range: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Anti-vibration and impact
- Use imported high-performance steel wire ropes
- High durability ability
- Redundant signal output

2 technical specifications

Electrical parameter

Rated voltage	9~30V DC
Typical current consumption	<100mA
Initialization time	<1.5s
interface	CANopen
Resolution	0.1mm
Linearity	$\leq \pm 0.5\%$ (FS)
Repetitiveness	$\leq \pm 0.2\%$ (FS)

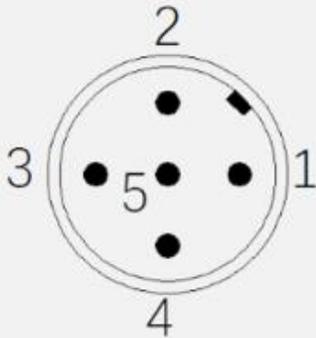
Mechanical parameter

Measurement limit	0...10m/12.5m angle 0...359.9°
Steel rope specification	AISI304 $\varnothing 0.8$ mm PA12 Plastics
Broken rope	About 300N
Maximum wire pulling out speed	MAX 1M/s
Connection method	Public connection M12,5-PIN
Shell material	nylon
weight	About 1kg

Environmental parameters

Work temperature	-40°C...+85°C
storage temperature	-40°C...+85°C
Impact resistance	50g, 11ms impact per shaft 100 times X-axis, Y axis, Z axis
Anti-vibration	10...500Hz, 10g per shaft 2 hours x axis, y-axis, Z axis
Protection level	IP67
life cycle	More than 250,000 times
Electromagnetic compatibility	ACC.TO EN 61326-1, EN 61326-3-1

3 Interface definition

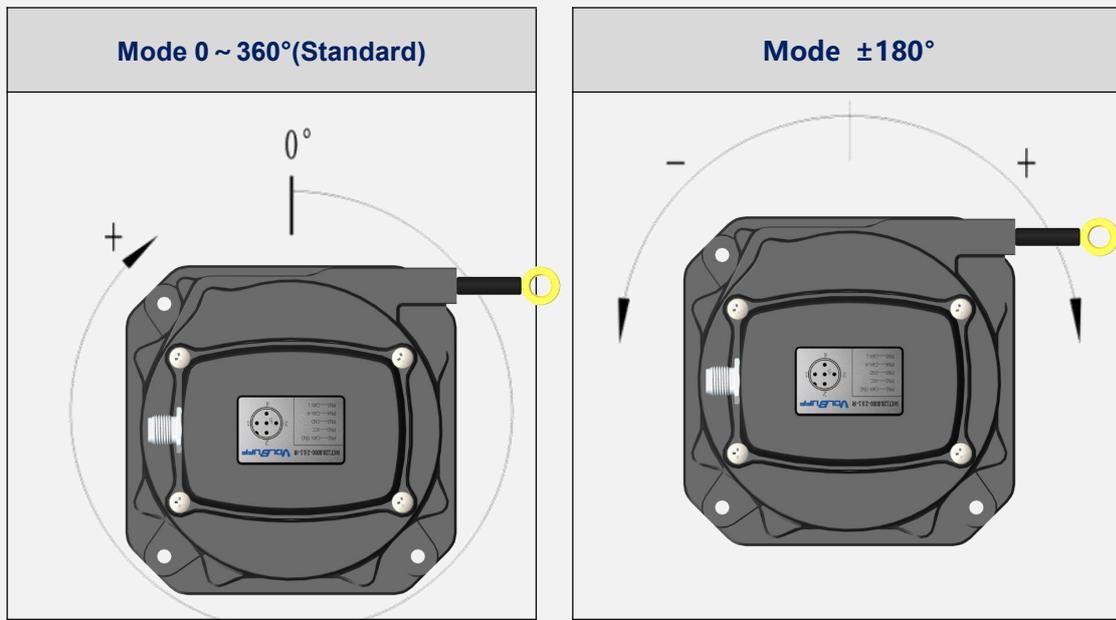


Male M12, 5-pin

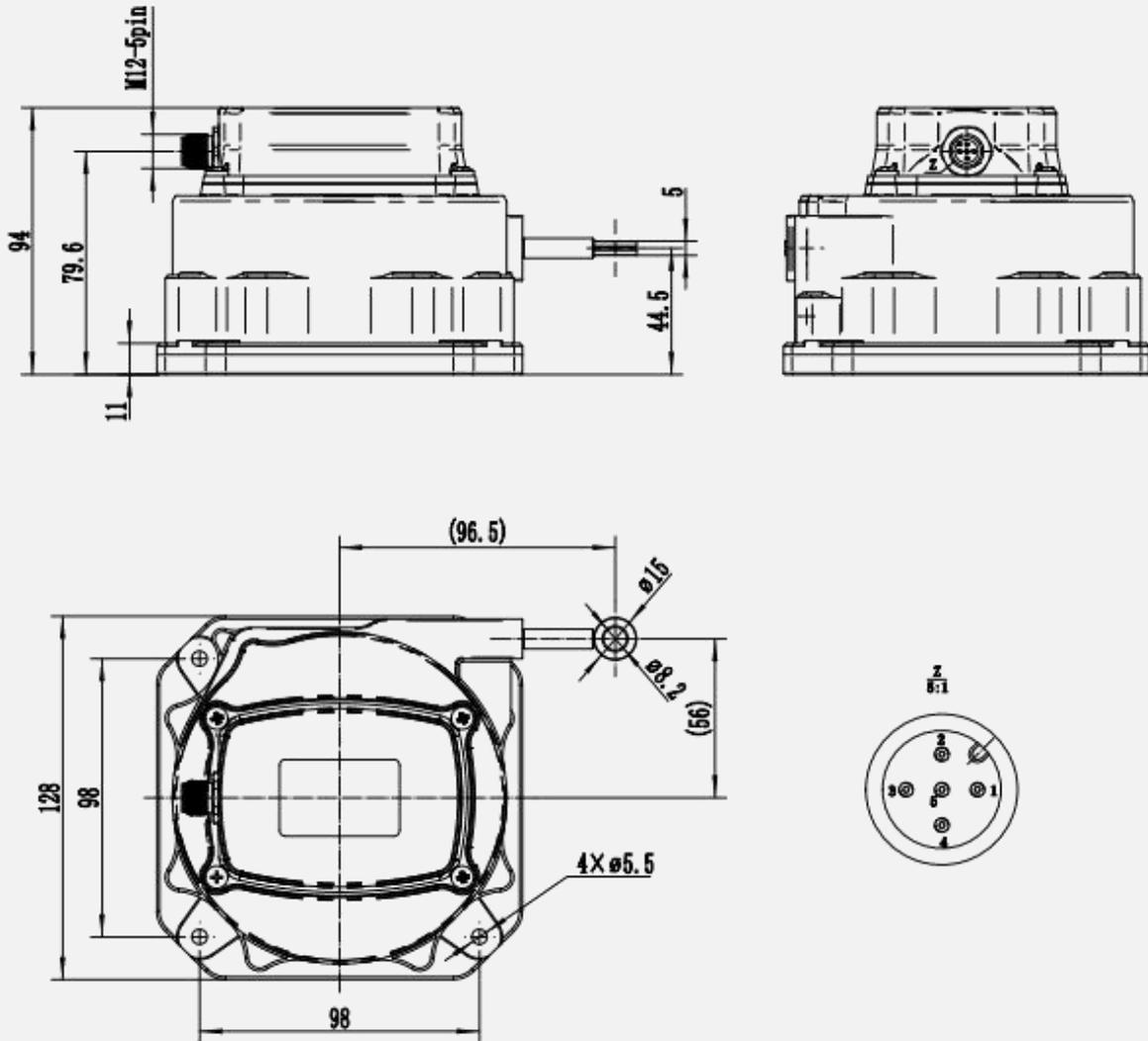
PIN	Definition description
1	CAN-GND
2	VCC
3	GND
4	CAN-H
5	CAN-L

The WET128 series has a tilt function that can be set in a variety of ways

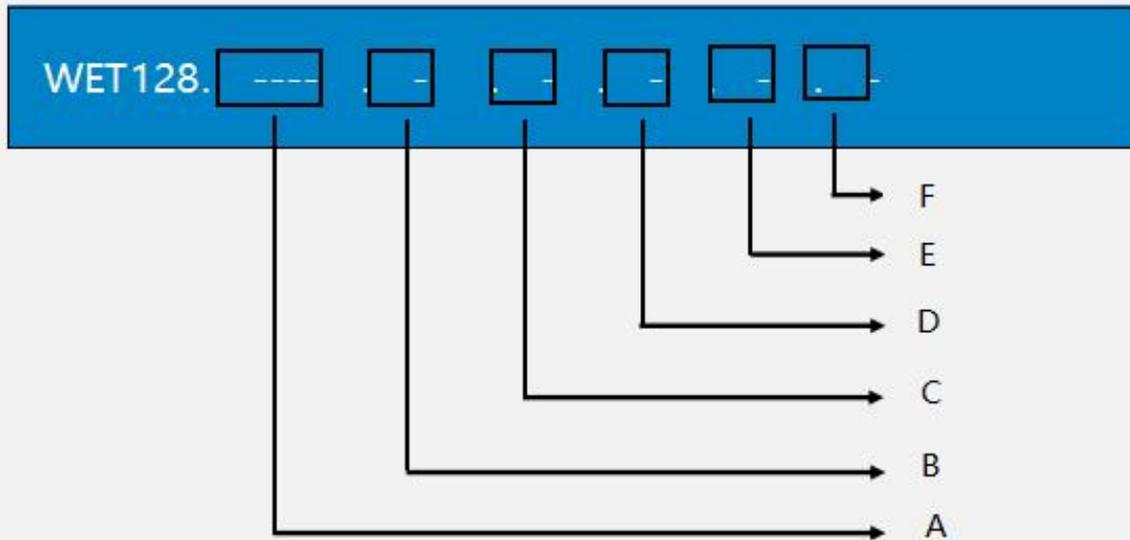
- $\pm 180^\circ$ and 360° modes can be selected
- Rotation direction can be set (CW/CCW)
- User signal bias setting and reset



4 Outline installation drawing (unit: mm)



5 Product coding rules



A	Measuring length
3000	=3m
5000	=5m
8000	=8m
10000	=10m
12000	=12m
15000	=15m

B	Power supply voltage
2	=9...30VDC

D	Connector style
1	=Mole M12, 5pin

E	Dumping function
X	=No inclination function
I	=Tilt -angle function

F	Signal type
S	=Single road
R	=Redundancy

C	Sensor output form
6	=CANopen

6 Precautions for use

(1) The power supply of this product uses an independent power supply, and it is recommended not to be connected in parallel with other loads. During use, the power supply is not allowed to have serious safety hazards or instability, otherwise it will cause the product to fail!



(2) When using this product, please operate in strict accordance with the specified wiring method under the specified power supply voltage to prevent short circuit and damage to the power supply and sensor caused by misoperation .

(3) Do not disassemble the sensor without permission, so as not to cause the sensor to not work normally.

(4) This sensor is a precision device, please handle it with care during use.

(5) Do not use in a strong magnetic field environment.

