Product manual

WET080

Wire position sensor

VOLBUFF

SENSORS

VOLBUFF ELECTRONIC | www.volbuff.com

ADDR: Building 5,#118,Lane 2129,South Lianhua Rd.,Minhang District, Shanghai, 210011, China.

TEL: 021-54293326 EMAIL: sales06@volbuff.com

1 Product description

The Wet080 series is a solid and durable high-performance rope positioning sensor,and is designed with 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: 0～8.3 m
- Wide voltage input: 9～30VDC
- CANopen output
- The measurement range of compact size linear as high as:±0.5%(FS)
- High protection level: IP67
- Width temperature range: -40℃～+85℃
- Anti-vibration and impact
- Use imported high-performance steel wire ropes
- High durability ability

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2 Technical specification

Technical specification	
Rated voltage	9…30V DC
Typical current consumption	42MA(12VDC,no load.Current output) 21MA(24VDC,no load.Current output)
Initialization time	<1.5s
interface	CAN open
Resolution	0.1mm
Linearity	≤±0.5%(FS)
Repetitiveness	≤±0.1%(FS)
Electromagnetic compatibility	acc.to ISO7637-3，ISO 11452-2，ISO 11452-3，ISO 11452-4，ISO 11452-5，GB/T 28554-2012，GB/T 17626.5-2008，EN 61000-6-4，GB/T 28554-2012
Environmental adaptability	acc.to QC/T 413-2002，GB/T 28046.4-2011，QC/T 413-2002，GB/T 28046.4-2011，GB/T 2423.10-2008，GB/T 2423.43-2008，IEC 60068-2-27：2008

Mechanical parameter	
Measurement limits	Length 0～8.3m
Steel rope specification	AISI304 ø0.7 mm PA12 Plastics
Rope breaking force	About 300N
Maximum wire pull-out speed	MAX 1M/s
The pull rope retracts the pulling force	＞2.5N(normal temperature)
Pull rope to pull out the resistance	≤8 n(normal temperature)
life cycle	More than 250,000 times
Connection method	M12,5-PIN
Shell material	nylon
weight	About 0.8kg
Authentication	CCC/CE

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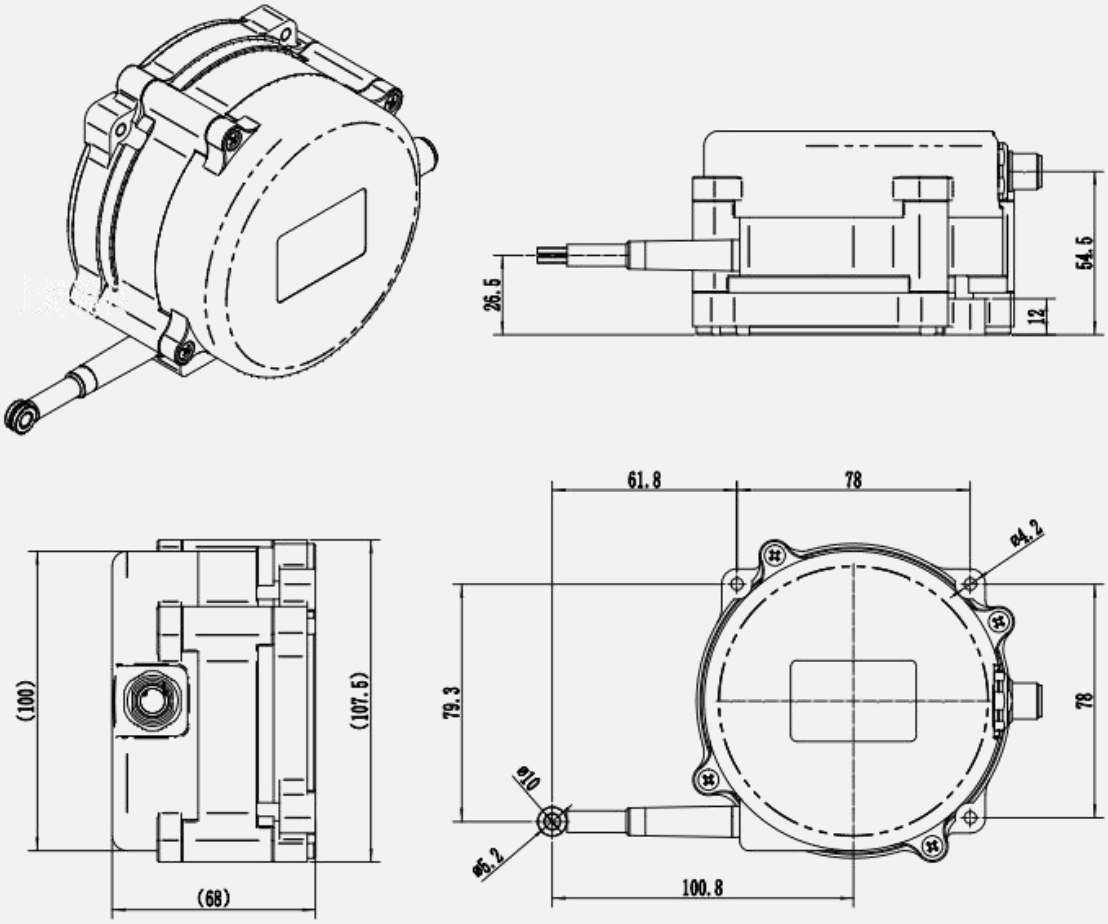
Environmental parameters	
Work temperature	-40℃~+85℃
storage temperature	-40℃~+85℃
Impact resistance	50g,11ms impact per shaft 100 times X-axis,Y axis,Z axis
Anti-vibration	10...500Hz,10g per shaft 2 hours x axis,y-axis,Z axis
Protection level	IP67

3 Installation chart (unit mm)



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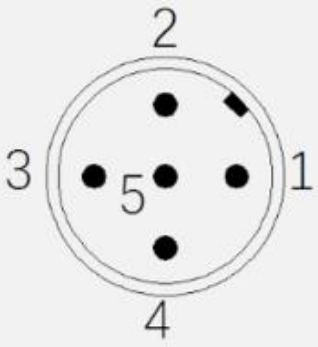
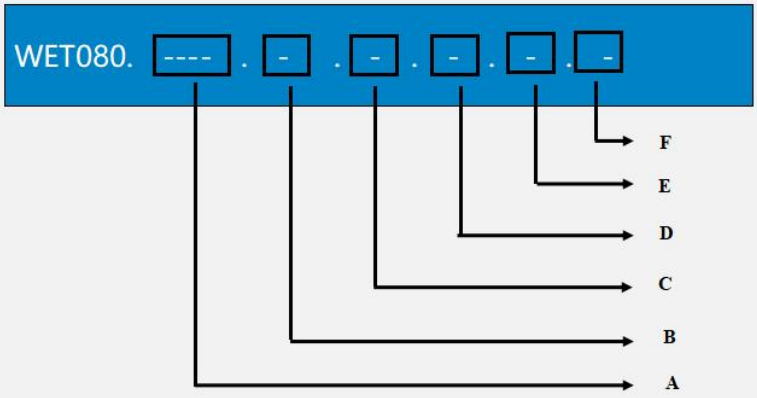
4 Interface definition



M12, 5-PIN

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

5 Product encoding rules



A	Measuring length
1500	=1.5m
2000	=2m
3000	=3m
5000	=5m
6000	=6m
7000	=7m
8000	=8m

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

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

D	Connector style
1	=Male M12, 5pin

F	Signal type
S	=single-way
R	=redundancy

C	Sensor output form
6	=CAN open

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6 Precautions

(1) The power supply of this product uses an independent power supply. It is recommended not to connect with other loads. During use, the power supply is not allowed to have serious safety hazards or instability, otherwise the product will fail!

(2) When using this product, please work strictly under the specified power supply voltage to prevent short -circuit and damage the power and sensors due to error operation.

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

(4) This sensor is a precision device. Please bring it lightly during use.

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