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Customer Service Hotline



# Magnetostrictive Displacement Sensors Operating Manual



### Use Regulations

Magnetostrictive displacement sensor is used to detect the displacement of motion mechanism. According to the selection regulations, the magnets matched with magnetostrictive displacement detection electronic components are selected for detection applications in different occasions. During use, ensure that the cable, connector, magnet and sensor body are the original parts of the manufacturer.

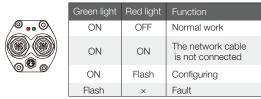
Please do not open the shell of the sensor without authorization, so as not to affect the normal warranty period of the product.

# Saftey matters

Please read the manual carefully before powering up the sensor. First, confirm the outlet mode and pin signal of the sensor, and make correct electrical connection to prevent power-on from damaging the sensor or causing misoperation of the equipment. During the construction and use of the sensor, the current of high-power equipment such as welding machine should be avoided from entering the working circuit of the sensor.

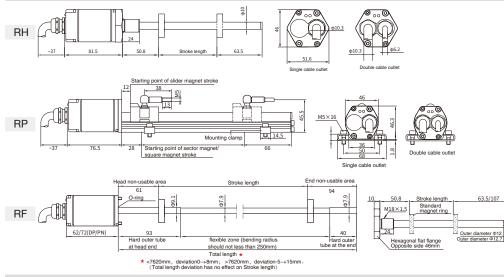
If you find that the sensor data is abnormal or the appearance has obvious changes, please stop using it immediately, and contact the manufacturer to confirm the current state of the sensor before continuing to use it.

# Status indication/fault analysis

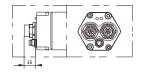


# Installation Dimensions

Outgoing mode: Cable outlet



#### Outgoing mode: Connector



# Electric interface



• Co	connector Connection Mode (Interface 1, 2)						
Pin	Cable color	Pin/wire function definition		F			
1	Yellow	Tx +					
2	White	Rx +					
3	Orange	Tx -					
4	Blue	Rx -					
• Si	ngle cabl	e outlet connection mode		k			
Pin	Cable color 1*	Pin/wire function definition					
1	Yellow	Tx +					
2	White	Rx +					
3	Orange	Tx -					

		0 6	(for power supply)				
Connector Connection Mode (Interface 3)							
Pin	Cable color	Pin/wire function definition					
1	Brown	+24Vdc (-20%~+20%)					
2	White	Do not connect					
3	Blue	COM					
4	Black	Do not connect					
Double cable outlet connection mode							
Pin	Cable color 1*	Cable color 2*	Pin/wire function definition				
1	Yellow	Yellow	Tx +				
2	White	White	Rx +				
3	Orange	Orange	Tx -				
4	Blue	Blue	Rx -				

24Vdc

COM

A-nin connector socke

2 4

COM Note: \* Cable color 1: light green, PUR sheath, 6 cores, -40C~85 °C

Rx -

24Vdc

Note: \* Cable color 2: light green, PUR sheath, 4 cores, -40C~70°C

## Application environment

Magnetostrictive displacement sensor is a kind of magnetic measurement sensor. Make sure there is no strong magnetic field around the sensor, which may interfere with the data.

5

6

Red

Black

The displacement output signal cable of magnetostrictive displacement sensor should be away from the power cable or large current or strong pulse interference source.

Confirm the environmental parameters including temperature, vibration, etc., and ensure that the working conditions are within the nominal working parameters of the sensor.

## Installation

4

5

6

Blue

Red

Black

The installation of magnetostrictive displacement sensor mainly includes sensor body, magnet and cable fixing.

The installing forms of the sensor body are: thread installing, clamp installing and matching fixing installing. Before installation, make sure that the packaging is in good condition, and the sensor body has no obvious bending and bumping. The sensor body should be assembled according to the specific installation form.

When installing magnets, please use matching magnetic insulation gaskets to ensure normal magnetic field circuit.

When installing plugs or cables, please connect them accurately according to the electrical interfaces in the instructions.

### After-sales support

If the sensor malfunctions, please contact the after-sales department of the company in time. Do not attempt to repair it vourself.