

EDX2 SPEED MONITOR (SCREW-ON TYPE) Operation Manual

INTRODUCTION

The application of speed monitors requires sensors to have particularly high stability. The product is widely used in conveyance systems in industries such as electric power, metallurgy, coal, light, and food, to detect misalignment of transportation belts or irregular (too fast or slow) speed of various rotating machines.

Metal housing encapsulates the sensor, which is the best choice for such applications.

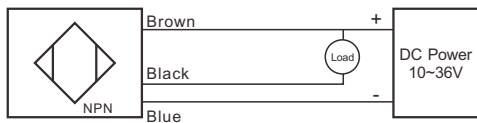
Applications such as machine tools or metal processing, idling etc. will expose the sensor to impact, wear, or contact with harmful liquids.

SPECIFICATIONS

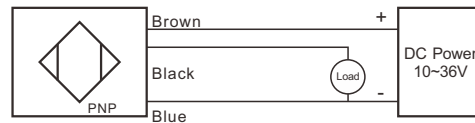
Power supply	10~36 VDC
Output type	3-wire PNP or NPN
Output function	NO or NC
Current load	<250 mA (MAX)
Sensing rotational speed	500 RPM
Sensing distance	≤10 mm (MAX) Iron:10mm, Stainless Steel:7mm
Startup delay	15'S
Adjustment point (Sp)	Potentiometer
Hysteresis interval (RPM)	Sp+10 %
Status indicator light	Alarm light display: green Induction status display: yellow
IP rating	IP 67
Ambient temperature	-40°C ~ 85°C

WIRING INFORMATION

NPN Output



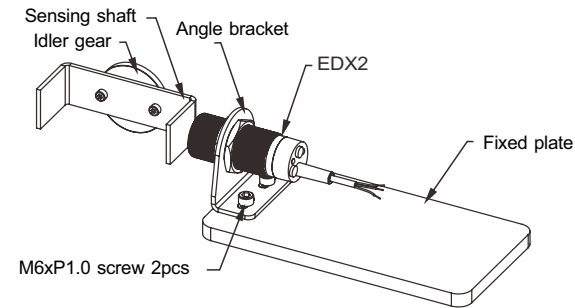
PNP Output



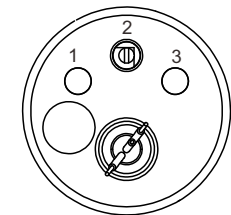
INSTALLATION

- (1) The surface of the sensing shaft must be made of metal. (Figure 1)
- (2) The sensing area size needs to be 30 * 30mm. (Figure 1)
- (3) The EDX speed monitor's front probe must be ≤10mm (max) from the sensing shaft. (Figure 2)
- (4) Adjust the distance based on the material of the sensed. (Iron: 1.0, stainless steel: 0.7)
- (5) Supply voltage of 10~36 Vdc.
- (6) The default value of the speed monitor, set at the factory, is 250±5 RPM.
- (7) After the product is powered on for 15 seconds, the green light will activate according to the contact form and speed setting
- (8) The speed monitor uses the sensing rod to measure up to 500 RPM (MAX).
- (9) Rotate the potentiometer counterclockwise for 1 turn to reduce the action point by 10RPM. Rotate clockwise for 1 turn to increase the action point by 10RPM. Example: The potentiometer (Figure 3) is adjusted by 1 to 2 turns counterclockwise as required. The low-speed alarm setting (switch point) is about 240~230 RPM. It is activated when the rotation speed is below this setting.

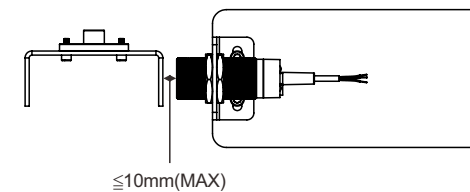
ILLUSTRATION ON INSTALLING THE SENSOR



(Figure 1)



(Figure 3)



(Figure 2)

1. Green light: Warning light
2. Potentiometer: Adjust the rotation speed
3. Yellow light: Speed detector

LOW-SPEED ALARM SETTING

Example 1: Conveying equipment low-speed alarm 100RPM

- (1) Install EDX2 on the conveyance equipment.
- (2) Turn on the power for EDX2 and adjust the rotation speed of the conveyance equipment to 100RPM. After 15 seconds, the product will start up. The green light will only light up after 15 seconds.
- (3) Once the rotational speed of the equipment stabilizes, adjust the potentiometer behind the EDX2. Turn it counterclockwise until the green light is off (assuming NC alarm mode). The 100RPM low-speed alarm is now set.
- (4) Adjust the rotational speed of the equipment to a normal speed.

Example 2: Conveying equipment low-speed alarm 300RPM

- (1) Install EDX2 on the conveyance equipment.
- (2) Turn on the power for EDX2 and adjust the rotation speed of the conveyance equipment to 300RPM. After 15 seconds, the product will start up. The green light will only light up after 15 seconds.
- (3) Once the rotational speed of the equipment stabilizes, adjust the potentiometer in the back of EDX2. Turn it clockwise until the green light turns on and then counterclockwise until the green light is off (assuming NC alarm mode). The 300RPM low-speed alarm is now set.
- (4) Adjust the rotational speed of the equipment to a normal speed.

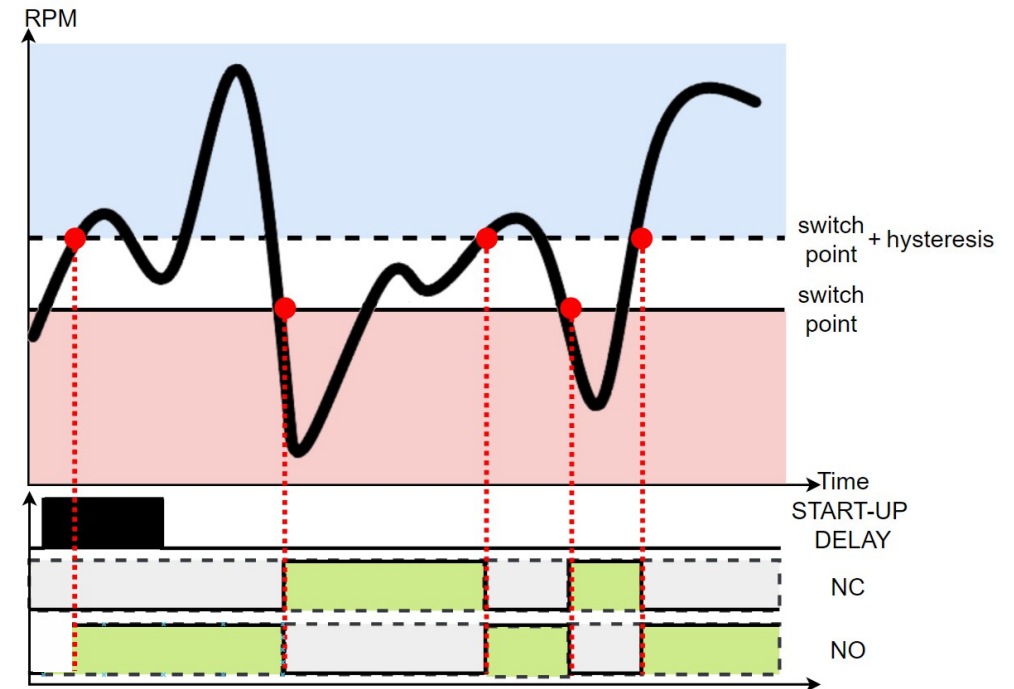
Table 1

Output mode	Alarm mode	Alarm setting	Output	LED Indicator
PNP	NO	Conveyance equipment rotation speed > set point	ON	Green light on
		Conveyance equipment rotation speed < set point	OFF	Green light off
	NC	Conveyance equipment rotation speed > set point	OFF	Green light off
		Conveyance equipment rotation speed < set point	ON	Green light on
NPN	NO	Conveyance equipment rotation speed > set point	ON	Green light on
		Conveyance equipment rotation speed < set point	OFF	Green light off
	NC	Conveyance equipment rotation speed > set point	OFF	Green light off
		Conveyance equipment rotation speed < set point	ON	Green light on

EDX2 FACTORY OUTPUT

Assume that the output contact type is PNP/NO, the product supplies voltage, the conveyance equipment has a rotation speed of < 250RPM, the green light of the product is on, and the alarm output is activated. After waiting 15 seconds, if the conveyance equipment speed remains < 250RPM, the green light will go out without any action. If the rotation speed of the conveyance equipment is > 275RPM, the green light will light up and the output will act.

STATUS/ACTION



COMMON FAULTS AND TROUBLESHOOTING

Fault	Cause	Troubleshooting
No power	Input power supply specifications	Confirm if the power specifications are correct
No speed signal is received, or the signal received is unstable The distance is too wide.	The distance is too wide.	Adjust the distance
	The line is short-circuited or disconnected.	Configure again
	Sensor is damaged.	Replace the sensor

※ If the failure is not listed herein or cannot be addressed, please contact the local sales representative.



FineTek Co., Ltd.

No.16, Tzuchiang St., Tucheng Industrial Park, New Taipei City 23678, Taiwan.
Tel: 886-2-22696789 Fax: 886-2-22686682
Email: info@fine-tek.com http://www.fine-tek.com



08-ED2-B0-EM,04/26/2023

