

PRE 4000 Series

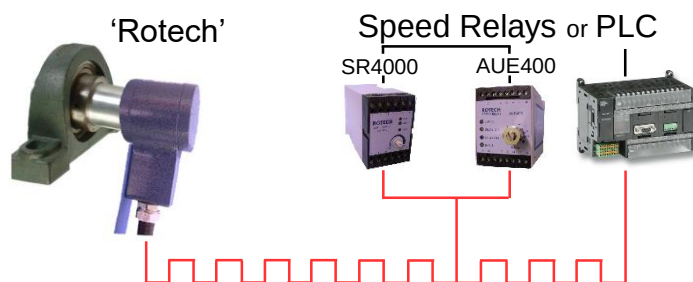
Programmable Encoder
Polypropylene Body
Heavy Duty – End of Shaft

The PRE 4000 programmable series of Rotech shaft encoders are manufactured in an extremely tough and durable 30% glass fibre reinforced polypropylene housing.

Programming is quick using custom software and compatible programming lead (PRE-Modem). This encoder also offers the ability to measure the shafts Revolutions Per Minute (RPM) using our Tachometer (PRE-RPM-TACHO).

Installation is simple & easy, just requiring one 12mm threaded hole in the end of the shaft being monitored.

APPLICATION EXAMPLE:



FOR MONITORING:

- Speed
- Distance
- Direction
- Belt slip
- Shaft stopped
- Underspeed
- Overspeed
- Safety guards interlocking

FEATURES:

- Totally self contained (no guards required)
- Maintenance free for maximum reliability
- Programmable from 1-16384 PPR
- Environment ingress-IP66
- -25 to +85 degrees Celsius



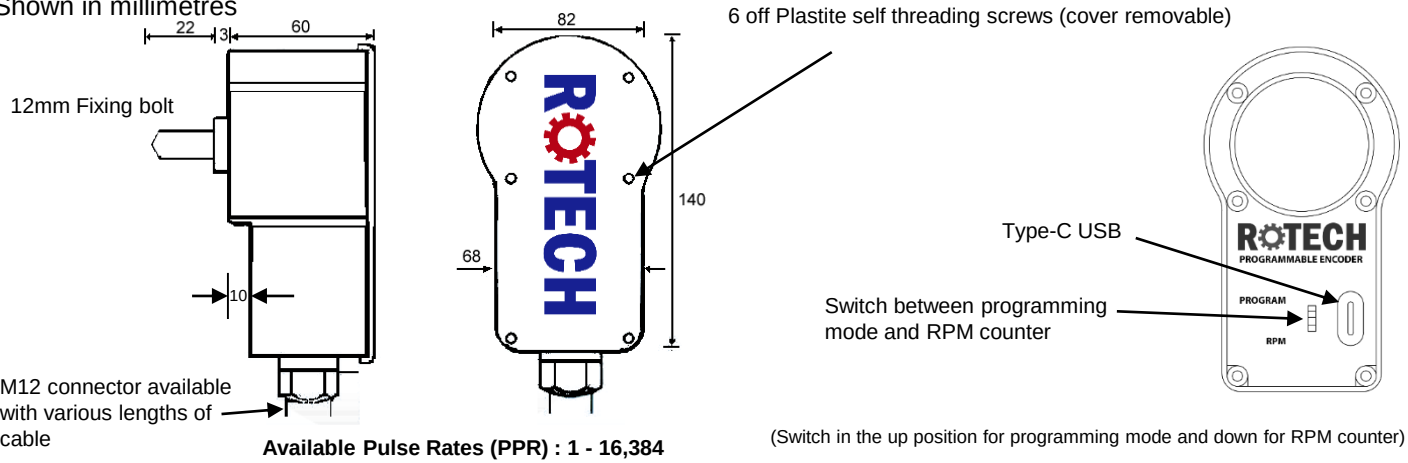
- High shock and vibration resistance thanks to magnetic sensing principle
- Resolution freely programmable from 1 ... 16,384
- Operating Voltage 5, 8 – 30 VDC
- 6 channel quadrature complimentary output.
- Can be reprogrammed at any time to suit application

*Speeds higher than 1000RPM available upon request

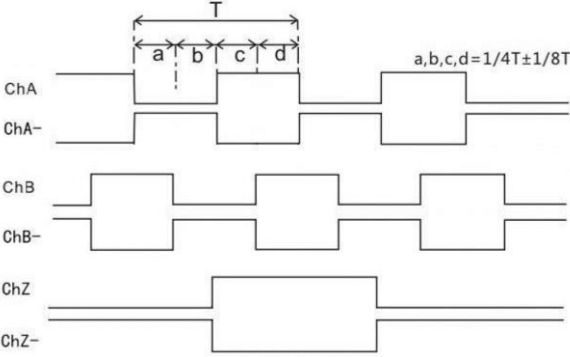
Supply Voltage	5, 8-30v
Current consumption	≤80mA
Load current	40mA
Highest frequency response	300kHz
Max speed r/min	1000*
Work temperature	-25~85°C
Storage Temperature	-40~95°C
Starting torque	<0.05nm
Axis maximum load	Radial 50n Axial 50N
Impact	50G/11ms
Moment inertia	4*10 ⁻⁸ kg

Dimensions and Installation Information

Shown in millimetres

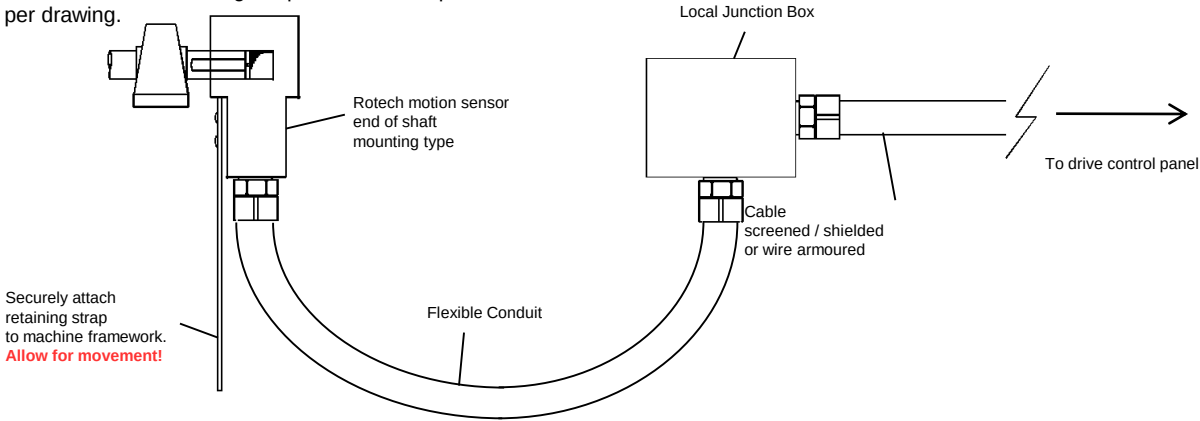


Single	COLOUR
5, 8-30VDC	BROWN
GND(0V)	BLUE
A	GREEN
A-	WHITE
B	YELLOW
B-	RED
Z	PINK
Z-	GREY



Installation

1. Drill & tap end of shaft to be monitored (refer to "Mag-con" data sheet for any applications under 300 RPM).
2. Install encoder to end of shaft using a 21mm spanner. Ensure bolt does not 'bottom' in tapped hole, slippage may occur if shaft faces are not firmly in contact. ***RECOMMENDED: APPLY A SUITABLE THREAD LOCKING ADHESIVE PRIOR TO INTALLATION***
3. If fitted – secure flexible restraining strap to convenient point on machine.
4. Cable as per drawing.



Commissioning & Testing

IMPORTANT: All wiring must be in accordance with local and national electrical codes and should only be undertaken by a QUALIFIED and experienced electrician/engineer.

All disconnections and connections must be made with the power supply switched off.

To test the Rotech unit, it must be connected to it's power source and associated control circuit i.e. "ROTECH" speed relay, PLC, Computer etc. And for the power to be switched on.