

Type 2302-1000

The Type 2302-1000 Position Transmitter converts mechanical angular position into electrical signals. These electrical signals are directly proportional to the absolute angular position of the input shaft. The transmitter operates in the harsh environment of a ship's engine room. It can be mounted directly on machinery.

The Type 2302-1000 position transmitter utilizes an RVDT (Rotary Variable Differential Transformer) as the sensing element. This type of non contact sensing element has an exceptionally long life and infinite resolution. This arrangement excels over other types of position transmitters, especially when the input shaft is subjected to dithering. The internal printed circuit board is powered from 24 V_{DC} nominal. It converts the signals from the RVDT into -10 to 0 to 10 V_{pc} , 0 to 10 V_{pc} or 4 to 20 mA signals.

APPLICATIONS Accurate Position Sensing of:

- Fuel racks
- CP propellers
- Valves
- Levers
- Dampers
- Gates

FEATURES

- Non-contact RVDT position sensor available
- · Long life sensor
- Infinite resolution
- Conformal coated PC boards
- \bullet 4 to 20 mA, 0 to 10 $V_{\mbox{\tiny DC}}$ or -10 to 0 to 10 $V_{\mbox{\tiny DC}}$ output
- Zero & span are field adjustable
- Completely watertight
- Corrosion resistant
- Rugged construction
- Can be mounted directly on machinery

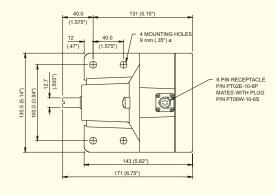


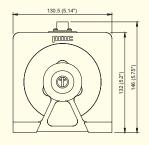
TYPE 2302-1000 RVDT

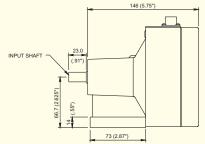


PRIME MOVER CONTROLS INC.

DIMENSIONS FOR 2302-1000 RVDT POSITION TRANSMITTER







SCALE 1:5

SPECIFICATIONS:

Supply:

- ullet 24 V_{DC} nominal, 19.2 to 32 V_{DC} range
- Typical 120 mA
- ullet Protection: 120 V_{AC} , 24 V_{DC} reverse
- Fuse: One 1A ceramic ABC-1
- Mating connector: p/n PT06W-10-6S

Sensor:

- Servo mount RVDT
- Shaft rotation: 50° standard (contact factory for alternates)
- Polarity: CW rotation (viewing shaft) increases output (CCW available)
- Accuracy: 1% of full travel (contact factory for more precise models)
- Current output: 4 to 20 mA into a 0 to 820 Ohm load
- \bullet Voltage output 0 to 10 V_{DC} or -10 to 0 to 10 V_{DC} @ 0 to 5 mA

Environmental:

- Operating temperature -25 to +70°C
- Storage temperature -55 to +75°C
- Vibration: Frequency range 3 to 100 Hz
 Peak to peak amplitude 2 mm below 13.2 Hz
 Acceleration amplitude 0.7 g above 13.2 Hz

Physical:

- Watertight can be mounted on machinery
- Dimensions:
 - 171 mm L × 130.5 mm W × 146 mm H (6.75" L × 5.14" W × 5.75" H)
- Weight, typical 2.2 kg (5.5 lbs)

PRIME MOVER CONTROLS INC.