

SRE

Subsea Rotary Encoder

Deep sea capable, Wassoc's SRE is ideal for applications where precise measurement of both position and direction of movement is needed. Quadrature output is standard across scientific and industrial systems making integration convenient. Anodized aluminum housing and rugged design ensures reliable performance in harsh subsea conditions. Maximize uptime and minimize risk with the SRE as a rotational sensing solution.



Features



Compact Design



Custom Configuration



5000 Meter Rated

- 1-atm housing (not oil-filled)
- Interchangeable and custom shaft configurations available
- Standard and custom mounting solutions available

How It Works

The Subsea Rotary Encoder (SRE) is a quadrature encoder that measures the rotational position of a shaft and converts mechanical rotations into output waveforms. Each waveform (A and B) are offset 90 degrees and have 240 pulses per revolution. A maximum of 480 discrete positions can be sensed over 360 degrees.

Waveform information allows users to track how many times a shaft has turned and in which direction, providing insight on position and speed of a rotating component like a motor shaft, pulley, or gear.

Custom Solutions

Easily customizable, the heart of the SRE system is a quadrature encoder which is magnetically coupled to an external shaft. These core components can be repackaged to accommodate OEM applications or user-specified conditions such as higher axial or radial loads.

Specifications

Mechanical

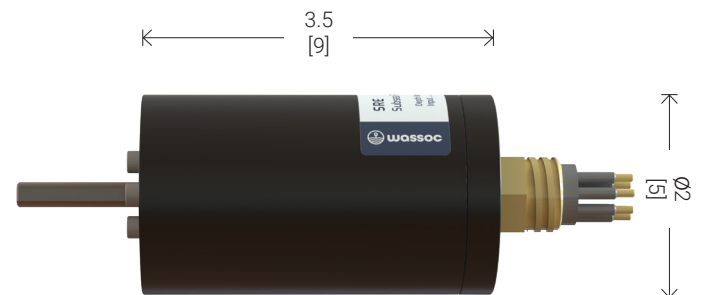
Housing Material	Anodized Aluminum
Dimensions (D x L), in [cm]	Ø2 [5] x 3.5 [9]
Weight (air/water), [lbs]	1 / 0.6
Connector.....	SUBCONN MCBH4M

Environmental

Depth Rating.....	5000m
Operating Temp	0 to +50°C

Electrical

Protocol	Quadrature Encoder, incremental
Power Supply.....	5VDC
Power Consumption	40mA (max)
Output Signal.....	Square A/B TTL 5VDC
Resolution.....	240ppr
Max Speed	300rpm
Axial Load.....	250N
Radial Load	10Nm



Side View
*Not to Scale
in [cm]