

Rudder Position Transmitter

S 50/44



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The Rudder Position Transmitter (RPT) senses the absolute value of the rudder angle. It has been designed for direct mounting on the hydraulic cylinder of the steering gear. The measuring rod with the integrated transmitter magnet is connected to the piston rod of the steering gear. The measuring system works without contact between moving rod and sensor elements. The determined position is provided both in digital and analogue form allowing the rudder position information to be processed as desired. An additional mechanical scale is mounted on the RPT for optical pick up of the actual position. The firmware of the RPT enables linearization of the actual position to provide a corrected value.

The redundantly designed electronics are based on proven microprocessor technology. Up to three independent measuring devices can be integrated.

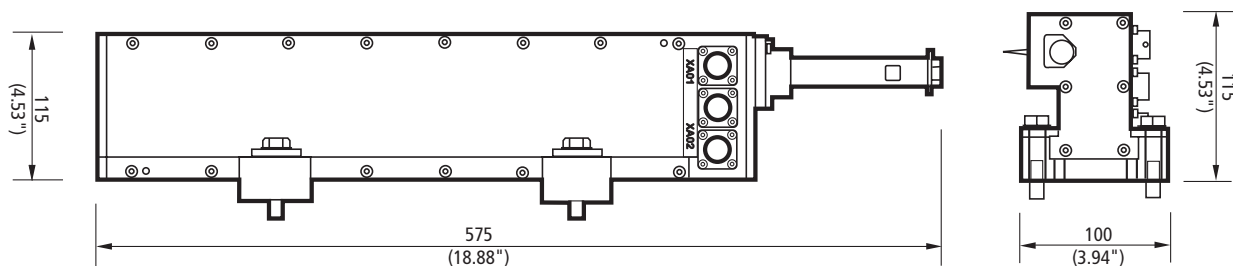
The casing is made out of aluminum in accordance with submarine installation requirements. The length of the RPT is up to the individual needs.

Your Benefit[®]

- Contact free measuring system
- Absolute position determination
- Position correction by signal linearization
- Up to three independant RS422 and analogue interface
- Water-tight, submarine proven housing

Technical Data

Input supply voltage	24 VDC acc. to STANAG 1008
Operating current	< 250 mA
Surge current	< 900 mA
Analogue interface	4 – 20 mA
Load resistance	100 Ohm max
Digital interface	RS422A, full duplex, 9600 Baud
Position resolution, digital	± 0.01 mm
Position accuracy, digital, absolute	0.3 mm (standard deviation)
Position resolution, analogue	measuring length / 4096 mm 12 bit D/A converter
Housing	aluminum
Guidance rod	stainless steel, grinded and polished
Ambient temperature range	-15°C to +65°C
Humidity, operation	min 80% at 45°C
Mounting position	without restrictions
EMC	acc. to BV 3012, class 1, zone 1
Shock resistance	acc. to BV 0430/1985 Ed. 1/89



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