THOR-100

Rudder Angle Indicator

The THOR line is a complete line of navigation products in which proven techniques are combined with present-day technology.

RADIO HOLLAND

The THOR line is based on its predecessors – the Sigma, Titan and Falcon lines – and combines analogue and digital technologies in a versatile line of navigation products. The THOR line is suitable for both new construction and the replacement market.

The THOR-100

The THOR-100 is a rudder angle indicator which can be set to the user's personal preference. The THOR-100 can be used as a stand-alone unit in combination with the Radio Zeeland DMP autopilots, or the display unit can be used as a repeater, which makes reading at multiple locations possible.

LED display

The small LED display in the middle over the analog meter provides a digital reading next to the analog meter for a quick and clear overview of the data provided. General information, feedback and functions are also indicated on the LED display.

Sensors

The THOR-100 works with the P-100, a smart rudder angle sensor. The P-100 can indicate all rudder angles without the use of any slide contacts. Due to the contactless rudder angle indication, the P-100 has a long and reliable life.

Dimming

The display unit comes with a dimmer. When the repeater is used, dimming the main device and the repeater can be synchronized.

Colored scale illumination

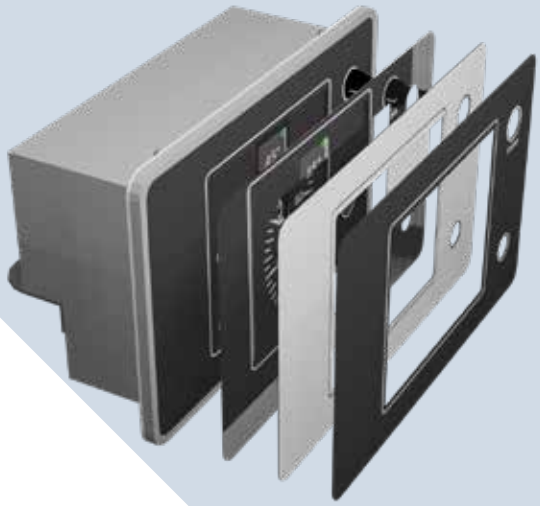
The scale of the display unit is illuminated with LED background lighting. The lighting can be set to three different colors: red, yellow or blue, so that night vision can be adjusted to personal preferences.

Two-wire and Ethernet

As the THOR line can be connected to a network and to a cabled two-wire system, it offers the unique possibility of using analog and digital devices side by side. With this possibility the navigation line offers many possibilities and much flexibility.

Look and feel

The THOR instruments have a slightly lower top, so that an adjustable front can be added. These fronts are available in any color and lay-out you want. The fronts are available in Gorilla Glass or foil.



Technical specifications

Display unit

Housing	Powder-coated aluminum
Dimensions	236 x 154 x 80mm
Weight	Net weight 1.30kg
Security	IP-50
Temperature	0 to +55°C
Humidity	0 to 90% non-condensing

Electrical specifications

Main power supply	18-36VDC fused @900mA self-recovering
Backup power supply	18-36VDC fused @900mA self-recovering
Amperage	< 1A (without repeaters)

Optical specifications

Scale	90° - 0° - 90°
Dimmer range	5-100%
Colors lighting	red / blue / yellow

Outputs

- External dimmer 15VDC PWM with a maximum of 150mA
- 3x THOR-100 or repeater -1 - 0 - 1mA
- External on/off 15VDC
- 1x Ethernet port

Inputs

- P-100 of RZ610 rudder position indicator
- 1x Ethernet port

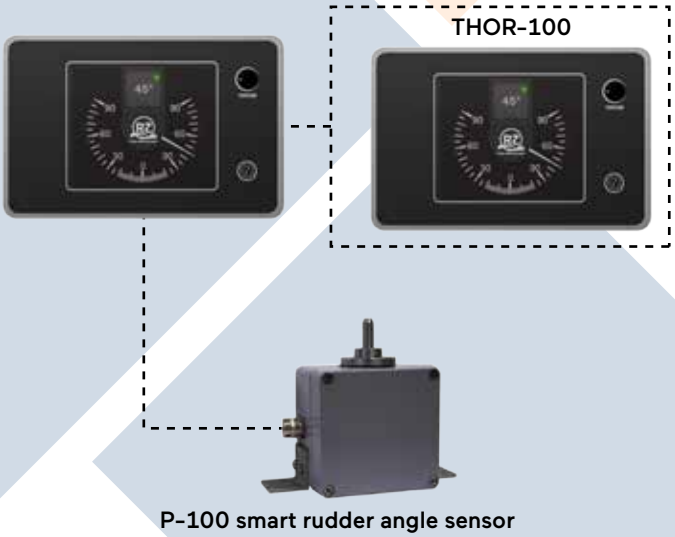
P-100 Sensor Specifications

- Voltage: 12-36VDC
- Power consumption: less than 200mA
- Contactless magnetic recording angle
- Resolution: 0.5°
- Zero can be set across the entire range
- 360° mechanical and electric turning
- NMEA RSA output signal (not galvanically separated)
- -10V to +10V analog output, galvanically separated
- DIP switch selectable port and starboard feedback unit

Declaration of conformity

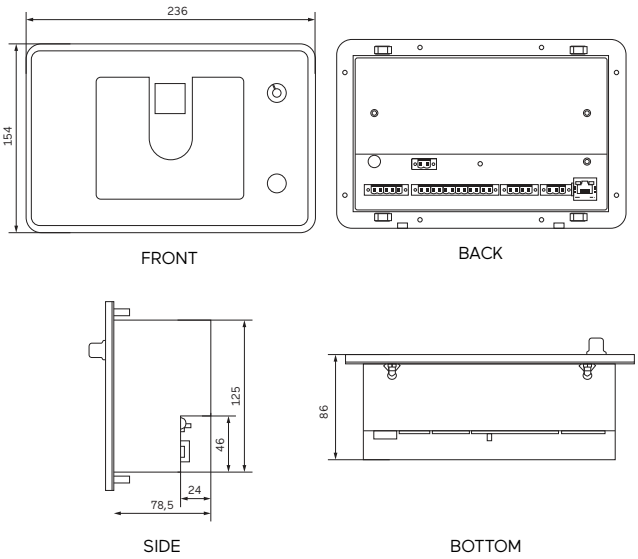
EN 60945 (IEC 945, third edition: 1996-11) Chapters 9, 10, 11 and 12

System diagram

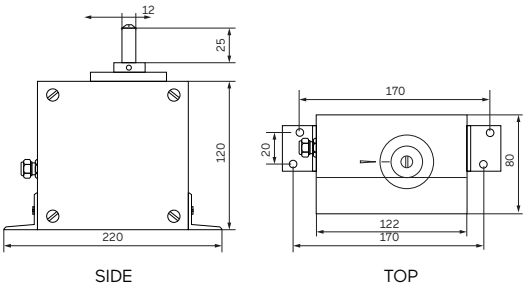


Dimension diagrams

Display unit



P-100 rudder position sensor



Delivery package

- Display unit THOR-100
- THOR-100 Manual
- Assembly set

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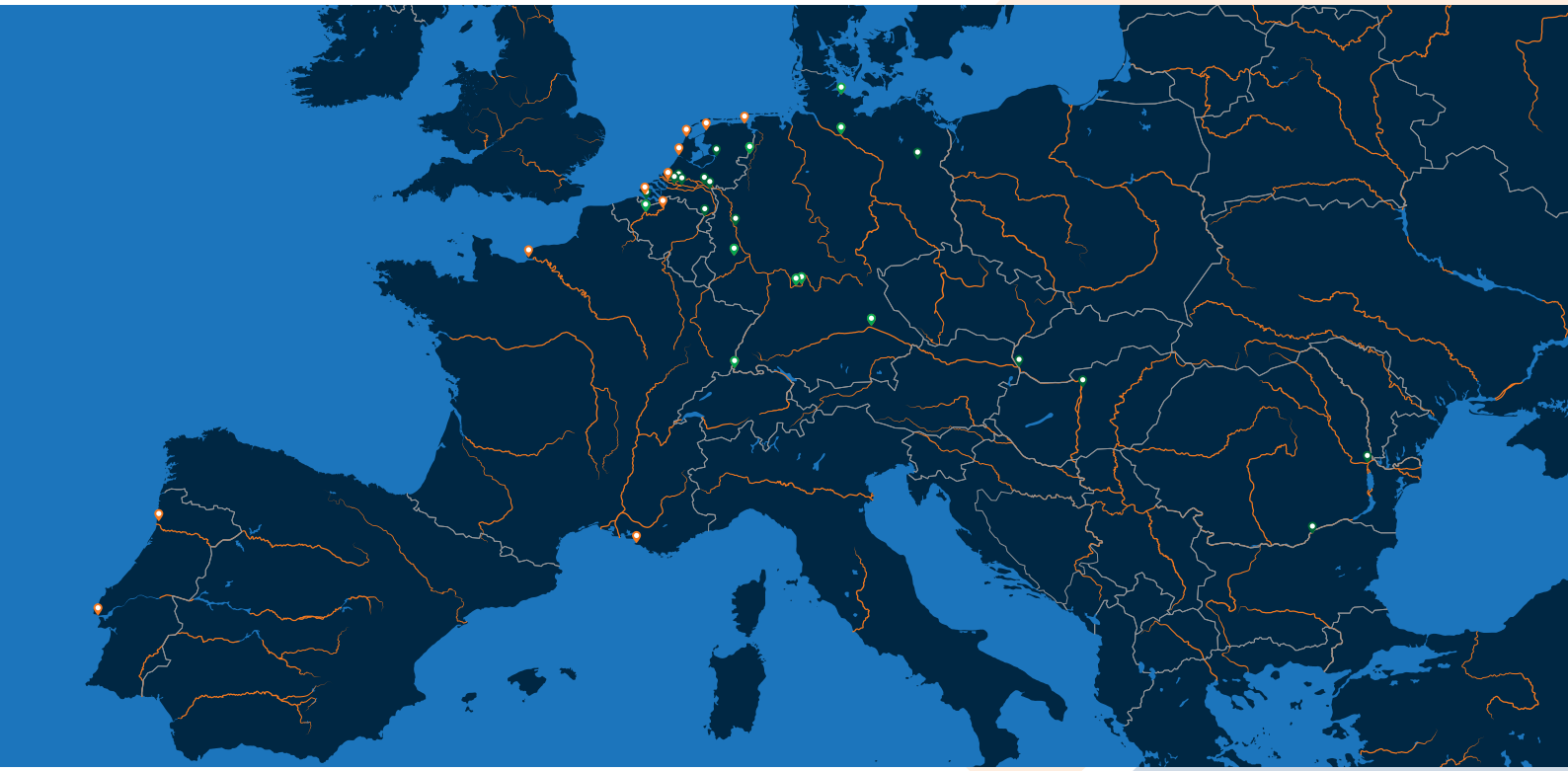

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ALWAYS THERE. EVERYWHERE.

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