

RUDDER INSTRUMENTATION / RUDDER ANGLE SENSORS

MD61 RUDDER ANGLE SENSOR TRANSMITTER

SKU F061001

[View Online >](#)

FEATURES

- **Ship's Rudder Angle Sensor and Transmitter**
- **Digital NMEA 0183 Output (IEC 61162-1)**
- **Analogue Variable Voltage Output - 5 K Ω Potentiometer**
- **Built-in Rudder Indication LEDs for easy set-up**
- **Fully Adjustable Rudder Linkage Rod**
- **Proven Rugged Design**

OVERVIEW

The MD61 Rudder Angle Transmitter is a Rudder Angle Transducer for providing steering indication. Mounted in the steering compartment, it transmits the vessel's Rudder Angle to a Marine Data Rudder Angle Indicator. The input shaft is mechanically linked to the vessel's rudder stock by a fully adjustable linkage rod (supplied).

The MD61 has dual outputs:

1. Digital NMEA 0183 and
2. Analogue Variable Voltage (via 5 K Ω geared potentiometer)

The Rudder Angle Transmitter is fully sealed and housed in a robust aluminium alloy enclosure. Finished in Window Grey semi-gloss paint to complement other marine navigation equipment.

The MD61 from Marine Data: flexible in application, easy to install and simple to maintain.

APPLICATIONS

- Transmits Rudder Angle data to a Marine Data Rudder Angle Indicator, VDR or Auto-Pilot at any convenient location

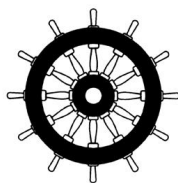
RELATED PRODUCTS

- [MD94DDU](#) - Data Distribution Unit with Dual NMEA Inputs for Dual Rudder Installations
- The complete range of [Rudder Angle Indicators](#) from Marine Data
- MD/RDI [Rudder Indication System](#) – Wheelmark Approved

CERTIFICATIONS



GL Type Approved



Wheel Mark 0098-14

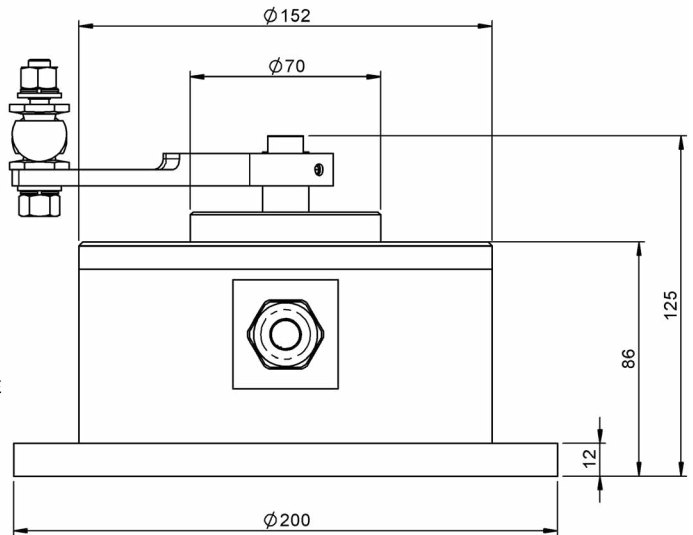
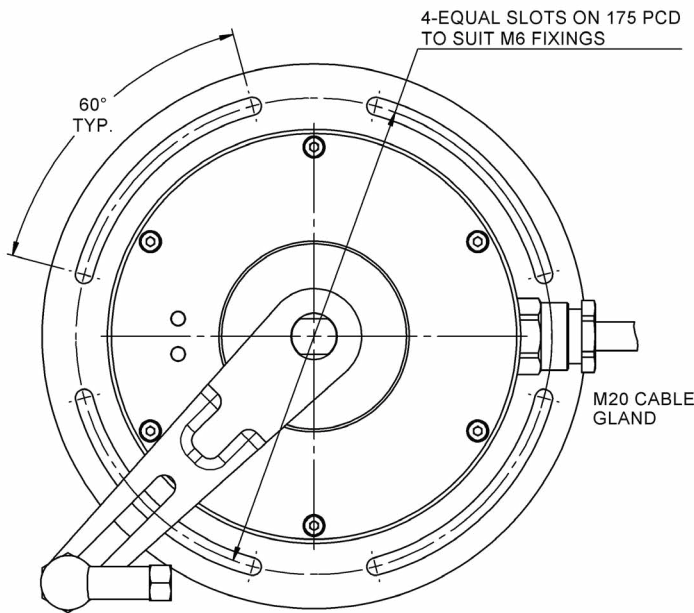
PHYSICAL	
Weight:	4.0 kg (including rudder linkage rod)
Dimensions:	H 125 mm; Ø 200 mm
Linkage Rod:	Adjustment range 270 - 580 mm
Mounting:	4x M6 screws on 175 mm Ø (PCD)
Connections:	12-core captive cable, 2.5 m long
Construction:	Aluminium alloy enclosure
Finish:	RAL7040 Window Grey, semi-gloss

ELECTRICAL	
Power Supply:	24 V dc nominal
Data Input:	Mechanical Linkage to Rudder
Data Sentence:	RSA: (\$-RSA, x.x, a, x.x*hh<CR><LF>)
Data Output:	1x NMEA 0183 (IEC 61162-1) 4800 Baud
1 x 5 KΩ potentiometer (volt free)	
Red & Green LED Rudder Position Indicators	

OPERATIONAL	
Static Accuracy:	± 0.25° accuracy of rudder movement
Working Angular Range:	± 45°
Follow-Up Rate:	>20° per second
Pot. Output:	Midships Position = 2.5 KΩ ± 45° of rotation = 2.38 KΩ (approx.)
Indications:	Red LED = Steering to Port Green LED = Steering to Starboard Both LEDs = Midships Position (000°)

ENVIRONMENTAL	
IP rating:	IP65
Operating temp:	-15°C to +55°C
Humidity:	0% to 100%
RoHS:	Compliant
Compass:	Safe Distance 50 cm

APPROVALS	
Compliance:	IEC 60945; IEC 61162-1; ISO 20673
Type Approval:	Wheel Mark (0098-14) when installed as part of the Marine Data Rudder Angle Indicator System



All dimensions in mm



Copyright © 2018 Marine Data Systems Ltd. - MD61 Datasheet v06r01

Vittlefields Technology Centre, Forest Road, Newport, Isle of Wight, United Kingdom. PO304LY
 Marine Data Systems Ltd. reserves the right to make changes to its products and specifications without prior notice.