

RUDDER INSTRUMENTATION / RUDDER ANGLE INDICATORS

MD77RDI DIAL RUDDER ANGLE INDICATOR

SKU: F077202

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FEATURES

- **Clear and Easily Read Dial Display**
- **Rudder Angle up to 40°**
- **Automatic indication of lost valid rudder sensor angle data**
- **Automatic detection of previously lost heading data with no reset required**
- **Panel or Bulkhead Mounted**
- **Accepts NMEA data from a Rudder Angle Transmitter**
- **Local and Remote Dimming Control**
- **Supports digital RS422 NMEA 0183**
- **Wheelmark Approved when installed as part of a Marine Data Rudder Angle Indication System**

OVERVIEW

The MD77RDI is a NMEA-based Rudder Angle Indicator, housed in a robust, compact aluminium enclosure. Fitted with touch panel dimmer control for background and pointer illumination.

The MD77RDI provides a clear and easy to read 118 mm diameter analogue display graduated in 1 degree increments from 45 degrees PORT to 45 degrees STARBOARD.

Compact and rugged, the MD77RDI offers a solution for locations where the available space is limited and may be either bulkhead or panel mounted. Finished in Jet Black (RAL9005) Fine-texture Powder Coat to complement other marine navigation equipment.

The MD77RDI from Marine Data: flexible in application, easy to install and simple to maintain.

APPLICATIONS

- External use on a seagoing vessel
- Used to display RSA Rudder Sensor Angle Data transmitted from marine equipment compatible with the NMEA 0183 data protocol
- Two units may be used to display dual rudder positions

ACCESSORIES

- Panel Mounting Kit (Supplied)
- Bulkhead Bracket Mounting Kit
- Remote Dimmer Control (0-24 V dc)

RELATED PRODUCTS

- MD61 - Rudder Angle Transmitter
- MD94DDU - Data Distribution Unit
- The complete range of Rudder Angle Indicators from Marine Data

TYPE APPROVED PRODUCT
DNV
DNV.COM/AF

Wheelmark 0098

SPECIFICATIONS

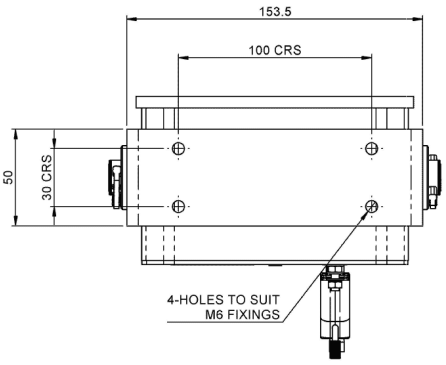
PHYSICAL	
Weight:	1.25 kg (on bracket)
Dimensions:	H 166 mm; W 172 mm; D 87 mm (on bracket) Fascia 144 x 144 x 6 mm deep; dial Ø 118 mm 140 mm square panel cut out required
Mounting:	Panel or optional Bulkhead mounted
Connections:	1 x data cable to 15-pin D-sub plug
Construction:	Aluminium alloy enclosure
Finish:	Jet Black (RAL9005) Fine-texture Powder Coat

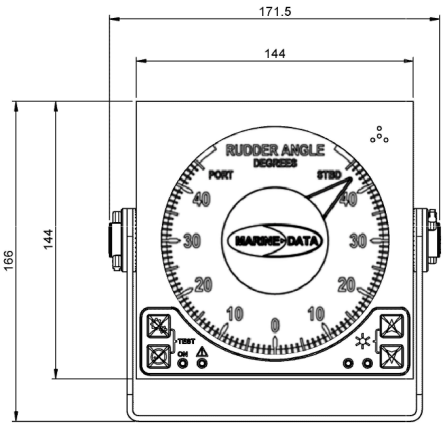
ELECTRICAL	
Power Supply:	24 V to 28 V dc; 10 W
Data Protocol:	Digital RS422 NMEA 0183; 4800 / 9600 / 19200 / 38400 Baud, auto-selecting
Data Sentence:	($--RSA, x.x, A, x.x, A, x.x, A, x.x, A *hh<CR><LF>)
Cable:	Supplied with 2.5 m multi-core data cable

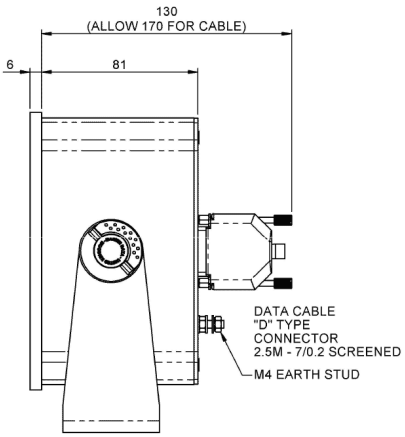
OPERATIONAL	
Performance:	±0.5° accuracy; 40°sec-1 follow-up rate
Dial Illumination:	Backlit white illumination Remote Dimmer Control
Display:	Rudder Angle; range 0-40°; scale graduated in 1° increments; full scale deflection 45°
Loss of Valid Data:	Pointer assumes the vertical upright position, and the Red Fault LED will be illuminated

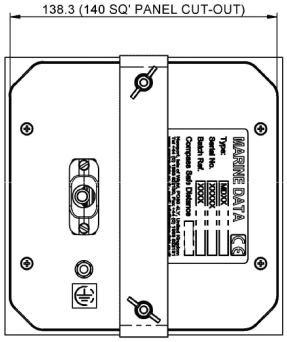
ENVIRONMENTAL	
IEC 60945 Equipment Category:	Protected Area
Operating temp:	-15°C to +55°C
Storage temp:	-25°C to +70°C
RoHS:	Compliant
Magnetic Permeability:	Category 'A'
Compass Safe Distance:	Standard: 85cm Steering: 45cm

APPROVALS	
Conforms with:	BS EN 60945:2002 Inc. corrigendum April 2008 (BSI, 2008) BS EN IEC 61162-1:2024 (BSI, 2024) BS EN IEC 62288:2022+A1:2024 (BSI, 2024) ISO 20673:2022 (BSI, 2022) IMO Resolution A.694(17) IMO Res. MSC.36(63) (IMO, 1994) IMO Res. MSC.97(73) (IMO, 2000) IMO Res. MSC191(79) (IMO, 2004)
Type Approval:	DNV Wheelmark (0098) when installed as part of the Marine Data Rudder Angle Indicator System









All dimensions in mm

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