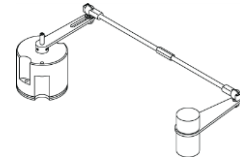


Instructions

RF70N Rudder Feedback



General

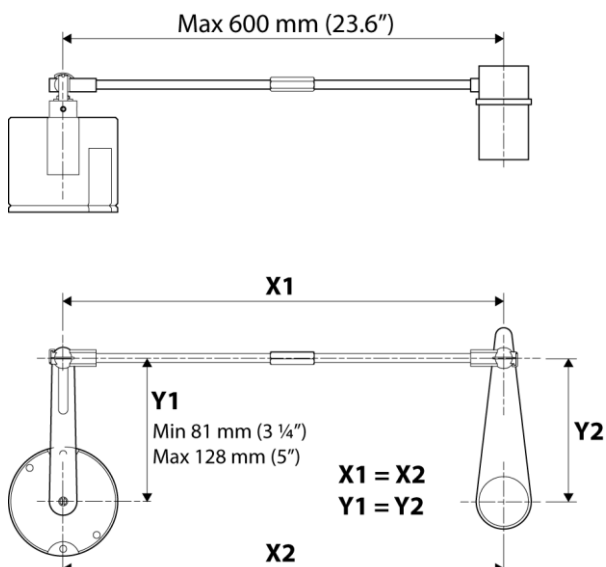
The RF70N is designed for electrical connection to any NMEA 2000 network with Micro-C connector backbone. The angle of rotation is transmitted over the network.

Installation

The RF70N Rudder feedback unit mounts close to the rudder, and is mechanically connected to the rudder tiller arm or rudder quadrant with the supplied transmission link. Refer to the figure below for recommended mounting arrangement.

The center of the feedback unit should be in line with the centre of the rudder post. Use the template (next page) to drill the required mounting holes. Mount the feedback unit to a suitable platform using the screws provided. If necessary, add blocking material under the feedback unit to adjust the height of its lever to be level with the rudder tiller arm.

Make the parallelogram configuration of the transmission link with the rudder amidships and temporarily fasten the link to the RF70N shaft. The transmission link can be shortened by cutting off a piece using a hacksaw. Move the rudder manually h.o. - h.o. and make sure the transmission link is moving freely in both directions.

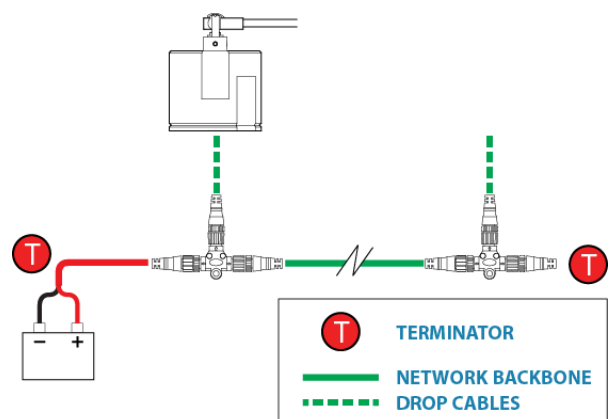


RF70N Mounting

Alignment and calibration

The purpose of this procedure is to make the feedback unit operate within its active segment. If the unit operates outside this segment, there may be a feedback failure alarm.

1. Position the rudder amidships.
2. Loosen the two screws that secure the transmission lever to the RF70N shaft.
3. Connect the cable to the CAN bus and set up a CAN device (autopilot, plotter or rudder angle indicator) to show rudder angle from RF70N being installed.
Note: If a Rudder Feedback Alarm occurs because RF70N shaft initially is outside normal working range, proceed with step 4. and reset the alarm when inside normal range.
4. Use a flat screwdriver in the slot and adjust the rudder angle to zero degrees on the display.
5. Secure the transmission lever to the shaft and proceed with the normal installation and calibration as per the manual for the unit showing the rudder angle.



RF70N connection to Micro-C/NMEA2000

Technical specifications

Dimensions: See figure

Weight: 1 kg (2.2 lbs)

Material: Polyacetal (POM)

Protection: IPx6

Safe distance to compass: 1 m (3.1 ft)

Temperature range:

-Operation: -25 to +55 °C (-13 to +130 °F)

-Storage: -30 to +70 °C (-22 to + 158 °F)

Mounting: any direction

Supply and interface: 9-16V via NMEA2000

Power consumption: 0.4W

NMEA2000 Load Equivalence Number (LEN):1

NMEA2000 ports (input/output):1

Output signal: NMEA2000 PGN127245

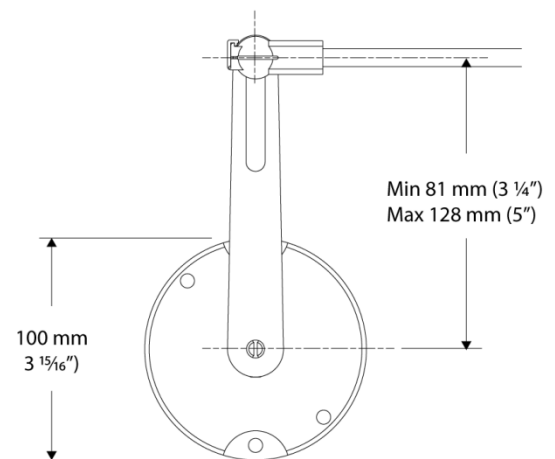
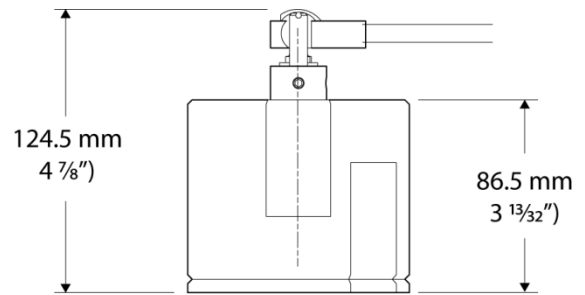
Cable: 5.5 m (18 feet) with male plug

Rudder angle range: $\pm 120^\circ$

Accuracy: $\pm 0.5^\circ$ within $\pm 45^\circ$, otherwise $\pm 1^\circ$

Repeatability: $\pm 0.1^\circ$

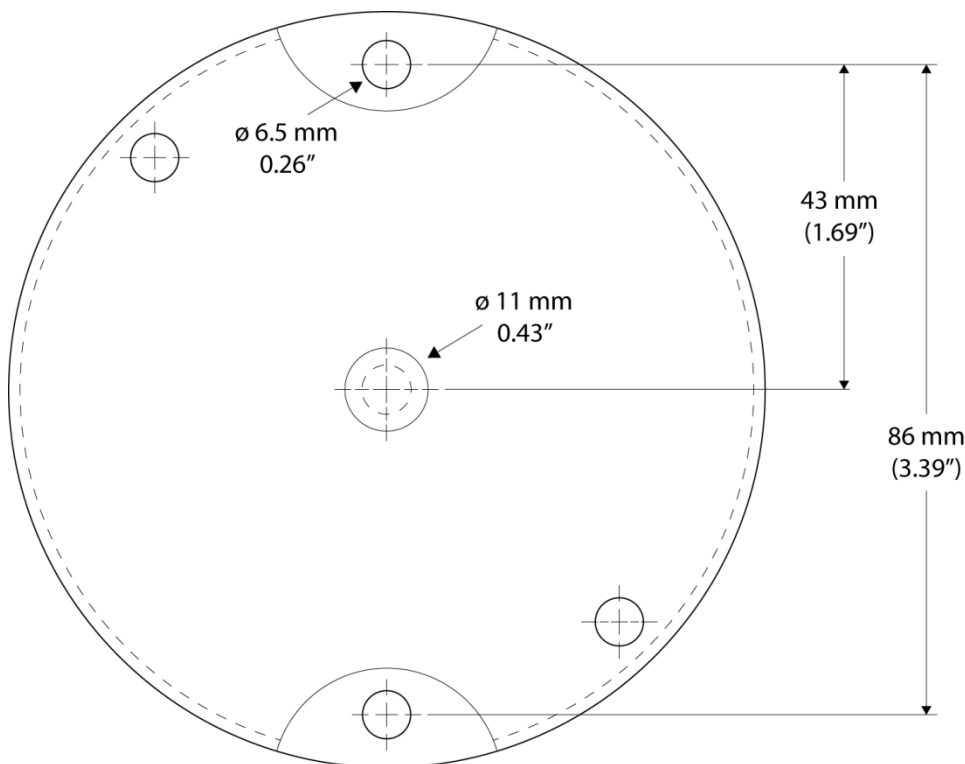
Transmission link: Stainless 600 mm (23.5")
with 2 ball joints



Spare parts

000-10591-001 RF70N Rudder Feedback

22011183 Transmission link



RF70N Drilling template

