

Instructions

RF25 Rudder Feedback (P/N 22014302)

GENERAL

The RF25 is designed for connection to the SimNet network. It is equipped with transmission link and 5 m (16 feet) of SimNet cable with connector. It transforms the angular travel of the rudder to a digital signal read by the autopilot steering computer. The RF25 transmits the rudder angle even if the autopilot is switched off.

INSTALLATION

The RF25 Rudder feedback unit mounts close to the rudder, and is mechanically linked to the rudder tiller arm or rudder quadrant. Refer to the figure below for recommended mounting arrangement.

Do not remove the transmitter lever from the feedback unit. The unit is factory adjusted and need no further adjustment at installation than described below.

Turn the helm to set the rudder tiller arm to approximate centre position.

Set the mounting location to be in accordance with the figure. The centre of the feedback unit should be in line with the centre of the rudder post. 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 the transmitter lever to be level with the rudder tiller arm.

Due to space limitations, it may be necessary to cut the length of the transmitter rod to move the feedback unit closer to the rudder post.

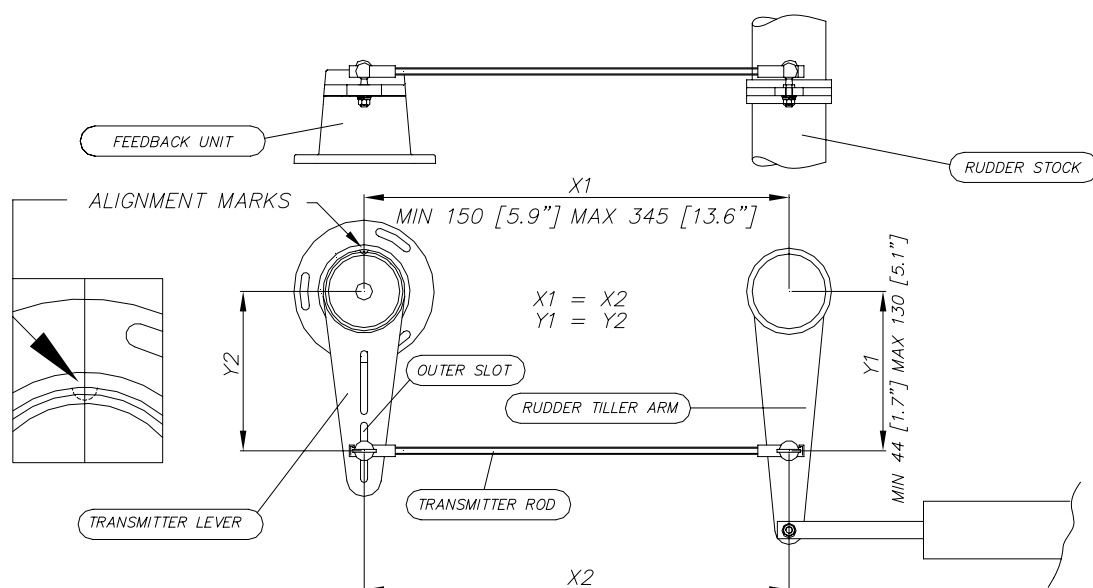
Rotate the feedback transmitter lever to centre position. (Use the alignment mark to line up the transmitter lever to be opposite the cable entry into the feedback.)

Carefully observe the alignment marks. A rudder feedback alarm may be the result if the alignment instructions are neglected.

Note that the transmitter lever has two slots for the transmitter link. The slots enable maximum flexibility to provide the 1:1 mechanical linkage relationship. As a starting point, set the transmitter rod to the inner limit of the outer slot if possible. Drill and tap the rudder tiller arm so that the Y1 dimension is equal to the Y2 dimension (Use 4.2 mm drill and 5 mm tap). Attach the ball joint to the tiller arm, and connect the transmitter rod to the ball joint at the rudder tiller arm.

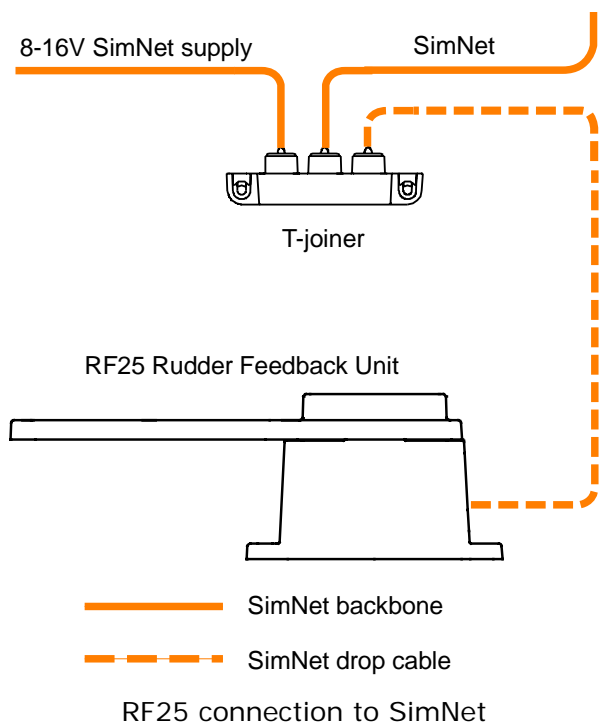
Tighten the mounting screws for both the feedback unit and the transmitter rod ball joint.

Observe the feedback unit while someone turns the helm wheel through the complete rudder travel H.O. to H.O. and verify that the mechanical linkage moves freely.



SIMRAD

ELECTRICAL CONNECTION

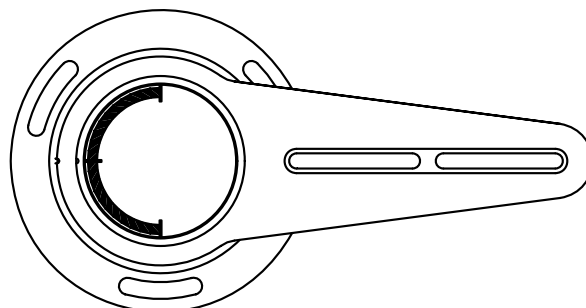
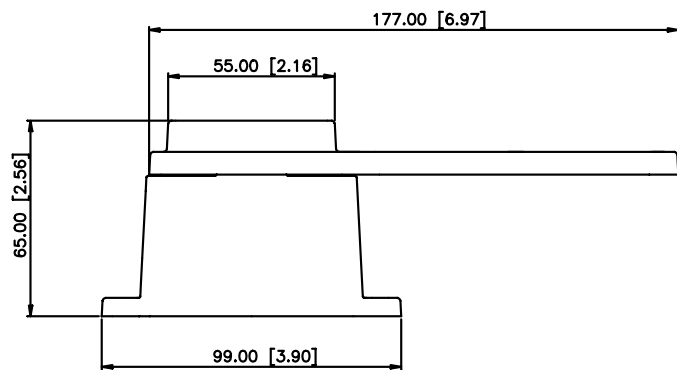


SPARE PARTS

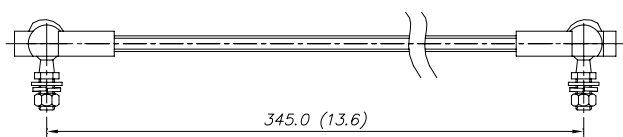
22014286	RF25 Rudder Feedback w/accessories
20193454	Transmitter link
44133122	Transmitter rod M5x325mm
20193624	Ball joint Ass'y (2)

TECHNICAL SPECIFICATIONS

- Dimensions: See figure
- Weight: 0,5 kg (1,1 lbs)
- Material: Arnite T06 200 PBT
- Environmental Protection: IP56
- Safe distance to compass: 1,0 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: Horizontal, vertical, or upside down
- Supply and interface: 8-16V via SimNet
- Power consumption: 0,4W
- SimNet Network load factor (NL): 1
- SimNet ports (input/output): 1
- Cable supplied: 5 m (16') SimNet cable with connector
- Rudder angle: ±120 degrees
- Output signal: SimNet/NMEA2000 PGN127245
- Accuracy: ±0.25° within ±5°, otherwise ±0.5°
- Repeatability: ±0.1°
- NMEA compliant
- Transmitter link: Stainless 345 mm (13.6") with 2 ball joints.
- Ball joint stud for rudder arm requires 4.2 mm diameter hole and 5 mm tap.



RF25 Dimensions



Transmitter Link – dimensions