

Robertson S35 NFU Steering Lever

S35 is designed for indoor and outdoor bulkhead mount and made of shock resistant polyxymethylene. The lever has spring loaded return to mid-position. A push button with light indicator is used for mode selection when connected to a Robertson J3XX junction unit.

Alternatively S35 can be used as a conventional NFU lever without mode selection. See page 3.

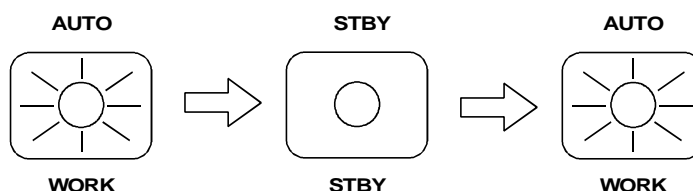
Operation with J3XX

STBY: The rudder will move as long as the lever is offset to Port or Stbd (NFU steering). The mode button is lit each time the lever is offset.

AUTO/WORK: The set course will be changed by 3°/sec. when the lever is offset to port or Stbd.

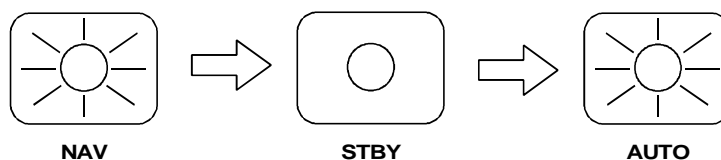
The mode button remains lit as long as the autopilot is in AUTO or WORK mode (and NAV mode).

Mode change sequence is as follows:



Operation of mode button returns the autopilot to initial mode.

NAV: It is not possible to change set course by the lever. Pressing the mode button brings the autopilot to Stby mode, but next press brings it to Auto mode, not back to Nav mode.



Specifications

Dimensions: See Figure 1.

Weight: 1.4 kg (inclusive cable)

Max. inductive load:..... 4A/24V DC, 60mA/110V AC, 25mA/220V AC

Temperature range: Storage: -30 to 80° C
 Operation: -10 to 55° C.

Environmental protection:.. IP56

Safe distance to compass: .. 0.5 m (1,6 ft.)

Power consumption (light): 6 mA

Cable:..... 10 m cable with six wires connected through bottom gland

Note! Cable gland can be moved to the back side.

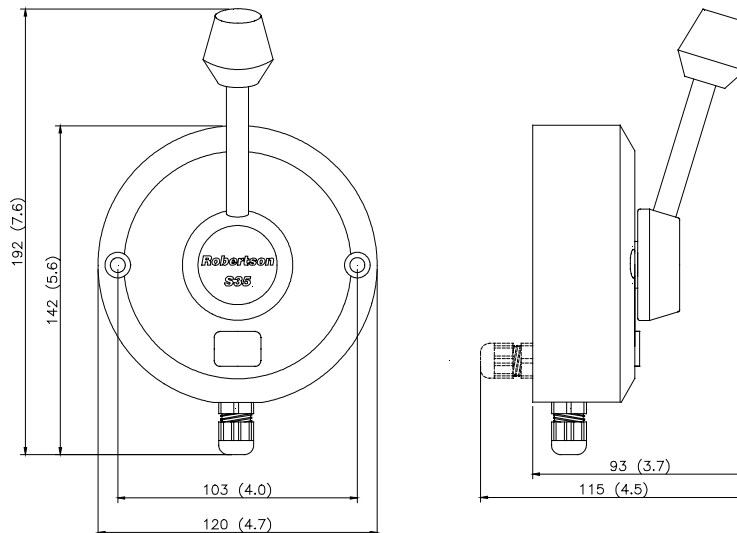


Figure 1
S35 Dimensions

Installation

The unit is mounted to bulkhead or panel by two screws from the front. The cable is connected to the junction unit according to figure 2. Interchange the port and stbd wires to the screw terminals in the junction unit if necessary to make the direction of the lever movement coincide with the direction of the rudder movement.

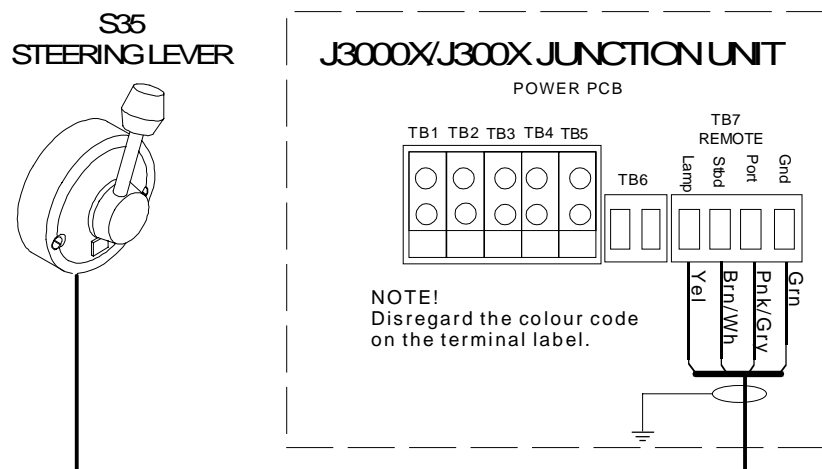


Figure 2
S35 connection to Junction unit

The unit is opened by removing the three screws on the back cover. Inside are two sets of micro-switches, a printed circuit board with a plug-in terminal, a jumper strap and other components according to circuit diagram.

Direct connection to solenoid valve

Warning!

When using the S35 for direct operation of solenoids, the jumper J1 **must** be removed.

Starboard solenoid (brown + white) is connected to TB1-2, port solenoid (pink + grey) to TB1-3 and common (yellow + green) to TB1-4.

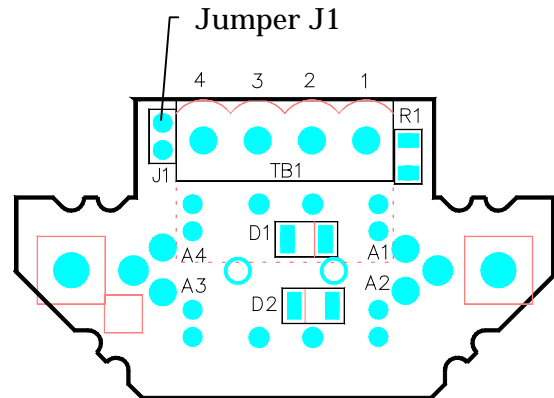


Figure 3
S35 PCB assy

Option

The upper set of micro-switches may be used for direct operation of a second set of solenoids if there are two steering gear pumps. Connections are made directly onto the switches. A second cable (min. 0.5 mm²) must be run into the alternative cable inlet at the back. (Extra cable gland is needed.)

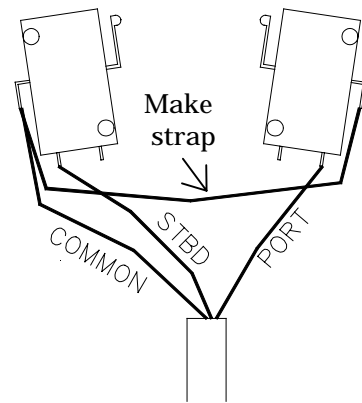


Figure 4
Connections for second set of solenoids

Spare parts

23241144	S35 PCB Assy
44125599	Micro switch
23240096	Spring
44190114	Gasket
44140796	Cable gland

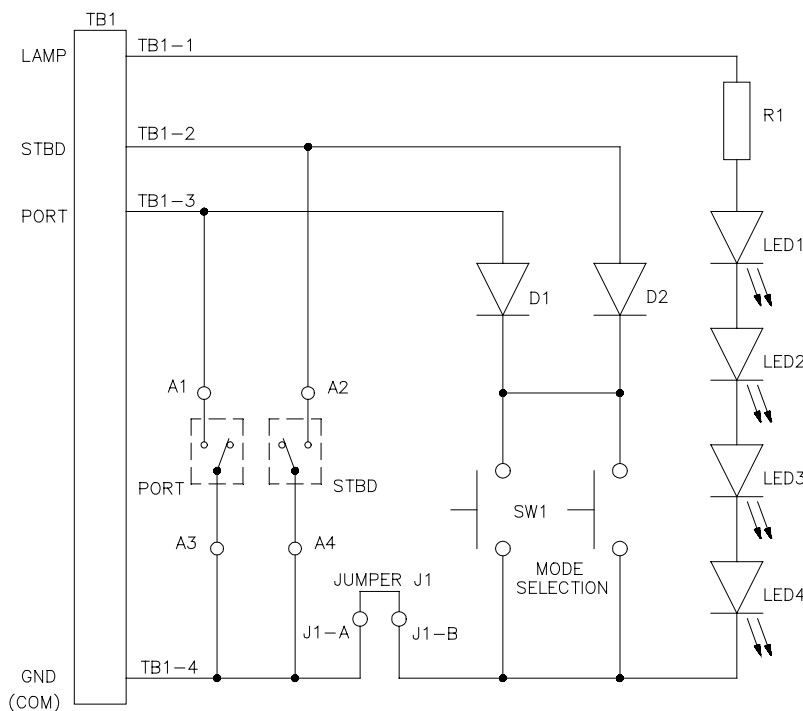


Figure 5
S35 circuit diagram

Robertson S35 NFU styrespak

S35 er laget i slagfast polyxymethylen og konstruert for innendørs og utendørs skottmontasje. Styrespaken har fjærbelastet retur til midtstilling. En trykknapp med lysindikator brukes for modusvalg når spaken er koblet til en Robertson J3XX koblingsenhet.

S35 kan alternativt brukes som en konvensjonell NFU spak uten modusvalg. Se siste side.

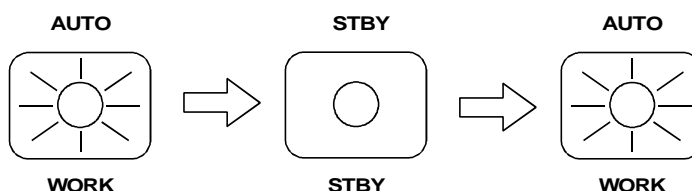
Betjening sammen med J3XX

STBY: Roret kjøres og modusknappen lyser så lenge spaken beveges til styrbord eller babord (NFU styring).

AUTO/WORK: Satt kurs endres med 3°/sek. så lenge spaken beveges til styrbord eller babord.

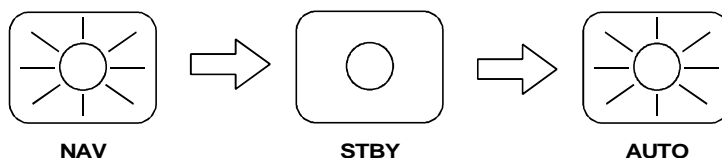
Modusknappen fortsetter å lyse så lenge autopiloten er i AUTO eller WORK modus (og NAV modus).

Modus endres etter følgende sekvens:



Betjening av modusknappen setter autopiloten tilbake til utgangsmodus.

NAV: Det er ikke mulig å endre satt kurs med styrespaken. Autopiloten går til STBY modus i det modusknappen trykkes, mens neste trykk setter autopiloten til AUTO modus, ikke tilbake til Nav modus.



Spesifikasjoner

Dimensjon: Se figur 1.

Vekt: 1.4 kg (inkl. kabel)

Maks. induktiv belastning: 4A/24V DC, 60mA/110V AC, 25mA/220V AC

Temperaturområde: Lagring: -30 to 80° C
Bruk: -10 to 55° C.

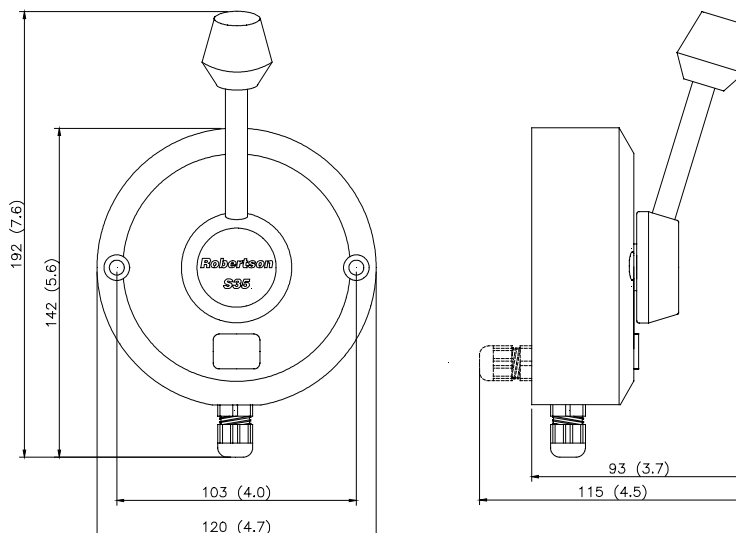
Beskyttelse: IP56

Sikker avst. til kompass: ... 0.5 m (1,6 ft.)

Effektforbruk (lys): 6 mA

Kabel: 10 m kabel med 6 ledninger tilkoblet gjennom nippel i bunnen.

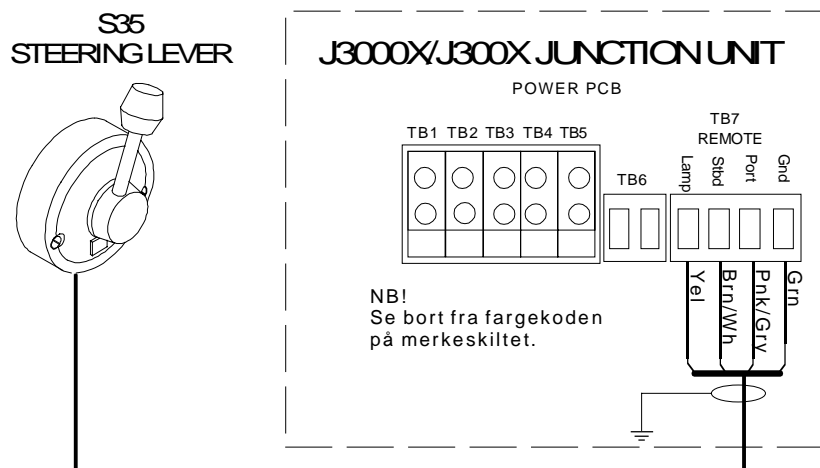
NB! Pakknippel kan flyttes til baklokket.



Figur 1
S35 Dimensjon

Installasjon

Enheden monteres til skott eller panel med to skruer fra fronten. Kabelen kobles til koblingsenheten i henhold til figur 2. Bytt om nødvendig babord og styrbord ledning i klemmerekken i koblingsenheten for at spakens bevegelse skal stemme med rorets bevegelse.



Figur 2
S35 koblet til koblingsenhet

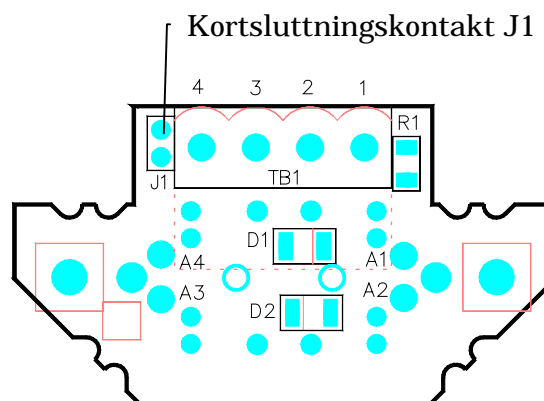
Enheden åpnes ved å fjerne tre skruer i bakløknet. Innvendig finnes to sett mikrobrytere, kretskort med klemmerekke og kortslutningskontakt og ellers komponenter i henhold til kretsskjema.

Direkte tilkobling til magnetventil

Advarsel!

Når S35 brukes for direkte operering av magnetventilene **må** kortslutningskontakten J1 fjernes.

Styrbord magnetventil (brun + hvit) kobles til TB1-2, babord magnetventil (rosa + grå) til TB1-3 og fellesleder (gul + grønn) til TB1-4.

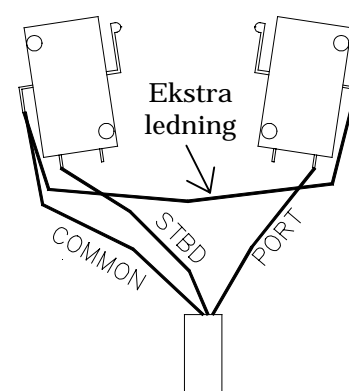


Figur 3
S35 krettskort

Opsjon

I de tilfeller hvor man har to styremaskiner og ønsker direkte operering av begge sett magnet-ventiler, kan det andre settet med magnetventiler kobles til de to øverste mikrobyrterne.

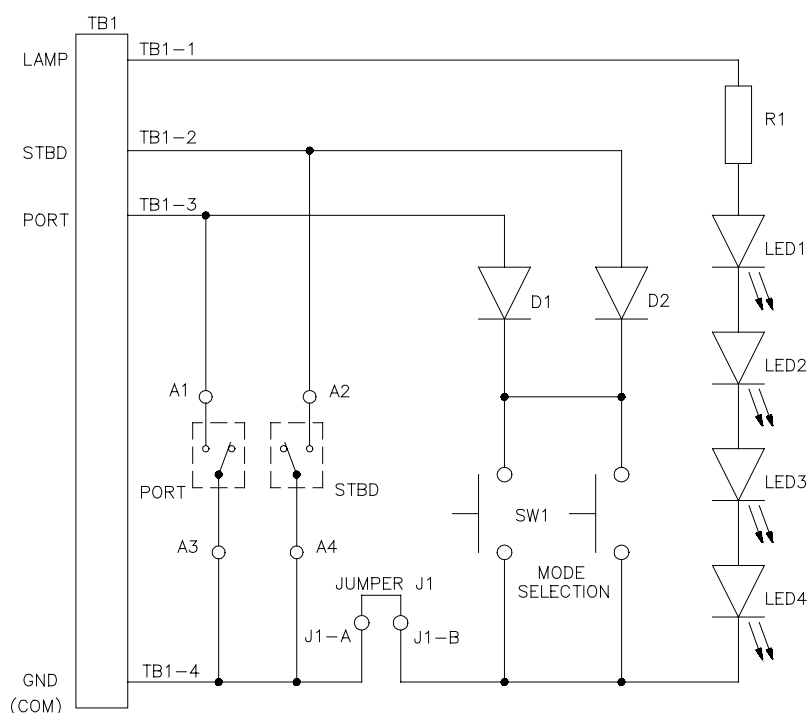
Tilkoblingen foretas direkte til mikrobyrterne. En ekstra kabel (min. 0.5 mm²) må føres gjennom ekstra pakknippel på baksiden. (Ekstra pakknippel er nødvendig.)



Figur 4
Direkte tilkobling til ekstra magnetventil

Reservedeler

23241144	S35 krettskort
44125599	Mikrobyrter
23240096	Fjær
44190114	Pakning
44140796	Pakknippel



Figur 5
S35 kretsskjema