

Selecting the motor cable

The current drawn by the bow thruster motor is very high during operation. It is, therefore, very important to select cable with the correct cross-sectional area. Select the cable cross-sectional area from the table below.

Bow thruster	Fuse	25 mm ²	35 mm ²	50 mm ²	70 mm ²	95 mm ²	120 mm ²	150 mm ²	175 mm ²
140, 12 V	200 A	6 m	10 m	15 m	21 m				
185, 12 V	250 A	6 m	8 m	10 m	15 m	21 m			
185, 24 V	130 A	18 m	22 m						
185, 12 V	400 A	4 m	6 m	8 m	12 m	16 m	20 m	25 m	29 m
185, 24 V	250 A	12 m	16 m	24 m	32 m				
185, 12 V	500 A			6 m	8 m	12 m	15 m	21 m	28 m
185, 24 V	325 A	9 m	12 m	16 m	24 m	32 m			
250, 24 V	400 A	7 m	10 m	12 m	21 m	28 m	36 m	45 m	

Points to bear in mind when installing battery cables

1. The battery capacity must be adequate for the bow thruster.
2. The battery cable must be taken directly from the battery and fitted with a fuse in series.
3. The installation must be fitted with a battery isolator switch which can be switched off when the bow thruster is not in use or when the boat is being left unattended.
4. The battery cables must be fitted with ring terminals at the motor ends. For the model 140 bow thruster, these must be 8 mm, and for the models 185 and 250, 10 mm.

Maintenance

Annual maintenance

1. Clean the thruster and tunnel if required.
2. Replace the anode.
3. Check that nuts and bolts are tight.
4. Check that the battery cables are still properly in place.
5. Raise and lower the bow thruster to ensure that everything is still moving freely.
6. Check that the contacts have not corroded.
7. Check the rubber in the bow thruster hinge. Replace if necessary. The manufacturer recommends replacement every five years.

Other maintenance

Replacement of shear pin, on models 140 and 185 only. The shear pin is located under the electric motor. Remove the electric motor, replace the pin, fit a new cable tie to lock the shear pin. Refit the electric motor.

Replacement of shear pin for the actuator. Deploy the bow thruster and switch of the current before the bow thruster is fully extended. This reduces the load on the shear pin. Remove the pin and fit a new one. Switch on the power again and raise and lower the bow thruster.