

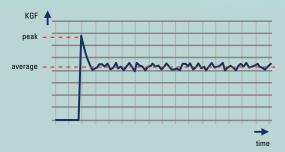
Thrusters for pleasure craft have to be small, easy to install, reliable, efficient, long-lasting and easy to handle from the console.

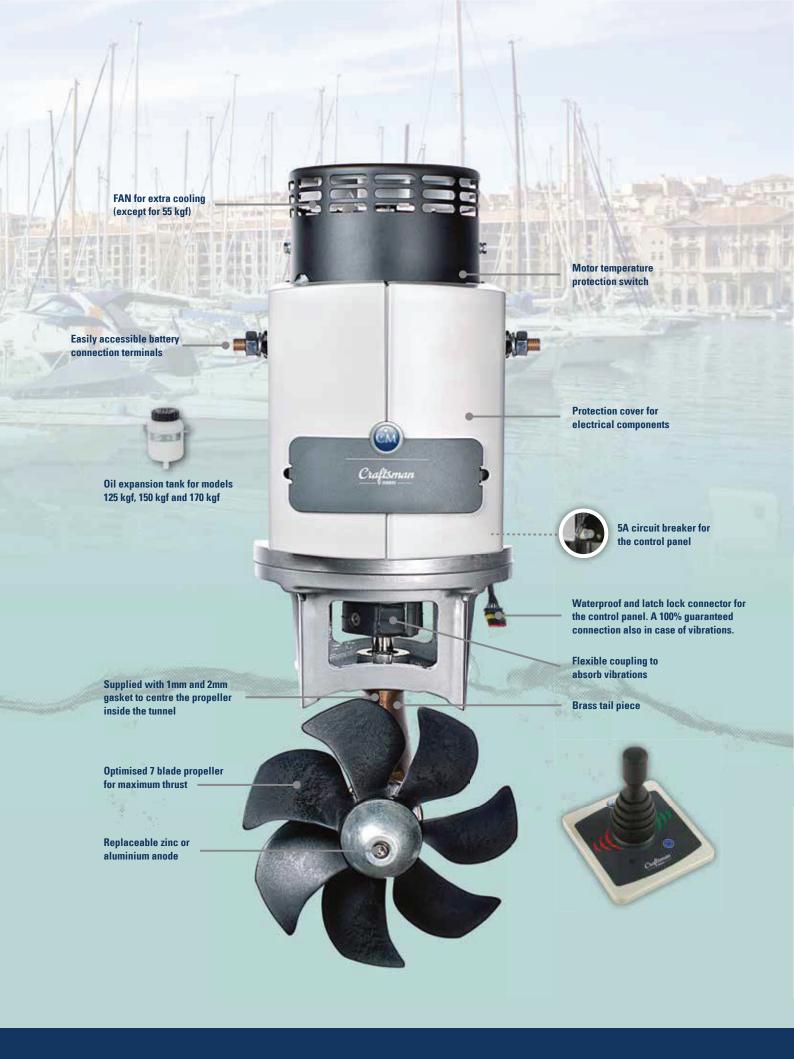
The robust and versatile Craftsman Marine thrusters meet all these requirements.

Our thruster propellers are designed to achieve maximum thrust in a relatively small tunnel diameter. Made of maintenance-free synthetic material, these propellers are capable of running in both directions, producing thrust to port and starboard.

Depending on your hull structure, length and your vessel's water displacement, you can select the right thruster for your vessel.

Craftsman Marine specifies the average force of the thrusters, however the starting peak force (1 second) can easily be 60% higher.



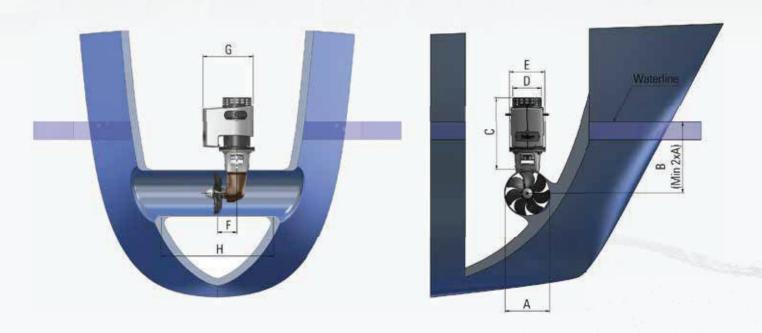


## **Thruster selection**

Choosing the right thruster for your boat is not easy. Many factors play a role when making a selection. Not only the length and height of the boat are important, but also the type of boat. A light displacement boat requires less force to manoeuvre than a heavy displacement boat and then there is the weather to take into account.

When the wind speed is twice as much, the wind force acting on the boat is four times as high. So when you always sail with your boat in perfect weather you can choose a smaller thruster, but when you want to be able to control your boat under all weather conditions you need to install a more powerful thruster.





	Thruster 35kgf 12V	Thruster 55kgf 12V	Thruster 80kgf 12V	Thruster 80kgf 24V	Thruster 95kgf 12V	Thruster 115kgf 24V	Thruster 125kgf 12V	Thruster 150kgf 24V	Thruster 170kgf 24V
Α	ø110 mm	ø150 mm	ø185 mm	ø185 mm	ø185 mm	ø185 mm	ø <b>250</b> mm	ø <b>250</b> mm	ø <b>250</b> mm
B (min.)	220 mm	300 mm	370 mm	370 mm	370 mm	370 mm	500 mm	500 mm	500 mm
С	276 mm	303 mm	344 mm	307 mm	372 mm	372 mm	404 mm	404 mm	422 mm
D	ø114 mm	ø128 mm	ø126 mm	ø128 mm	ø160 mm	ø160 mm	ø <b>160</b> mm	ø <b>160</b> mm	ø172 mm
Е	ø175 mm	ø175 mm	ø175 mm	ø175 mm	ø <b>200</b> mm	ø <b>200</b> mm	ø <b>200</b> mm	ø <b>200</b> mm	ø <b>200</b> mm
F	68 mm	115 mm	115 mm	115 mm					
G	238 mm	238 mm	238 mm	294 mm	294 mm	294 mm	294 mm	294 mm	301 mm
H (min.)	110 mm	150 mm	185 mm	185 mm	185 mm	185 mm	250 mm	250 mm	250 mm

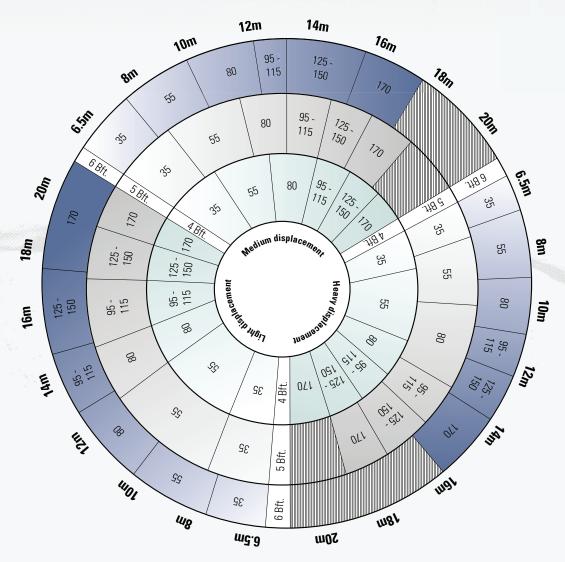
We have made a thruster selection guide to give you an idea of the thruster suitable for your boat. Your dealer will assist you in selecting the correct thruster.

Follow the steps below to find your Craftsman Marine thruster:

Step 1.	Select your type of boat. In the graph are three boat types: light displacement, medium displacement and heavy displacement. Rotate the graph so that your boat type is facing upward.
Step 2.	Select the length of your boat.
Step 3.	Choose under what wind conditions you want to be able to manoeuvre the boat.  You can choose between 4bft, 5bft or 6bft (bft = beaufort).

As you will see, the type of bowthruster can vary by as much as three types depending on the chosen weather conditions.

Take into consideration that most of the times manoeuvring will be in a sheltered harbor. Manoeuvring with the wind on the bow will also require less force than wind from the side, so choose your berth carefully. For installation of the biggest thruster possible you not only require batteries with a higher capacity but also thicker cables and bigger fuses.





	THRUSTER 35kgf 12V	THRUSTER 55kgf 12V	THRUSTER 80kgf 12V
Article code:	BA.110.20012	BA.150.20012	BA.185.20012
Thrust force @ 10.5V:	35 kgf	55 kgf	80 kgf
Tunnel diameter:	110 mm	150 mm	185 mm
Power of electric motor:	2.4 kW (3.3 hp)	3.5 kW (4.8 hp)	4.0 kW (5.4 hp)
Motor type:	12V DC	12V DC	12V DC
Motor temperature switch:	~	~	~
Operating time:	2min/hr	2min/hr	2min/hr
Current consumption:	340 A	400 A	420 A
Min. battery capacity: *	105 Ah	140 Ah	140 Ah
Main fuse slow-blow, type ANL: *	250 A	300 A	355 A
Battery cable, total length of plus and minus: *	0-9m / 50mm² 9-13m / 70mm²	0-6m / 50mm², 6-11m / 70mm² 11-14m / 95mm²	0-10m / 70mm <sup>2</sup> 10-14m / 95mm <sup>2</sup>
Connection battery cable:	M8	M10	M10
Weight:	12 kg	18 kg	19 kg

<sup>\*</sup> The recommended battery capacity, and cable ratings are based on an operation time of 2 minutes. Short cable lengths in combination with a higher battery capacity may overheat the electromotor. Depending on the boat installation and the distance between thruster and battery, other ratings can be chosen.

All thrusters are fitted with a zinc anode as standard. Aluminium anodes are available separately.



	THRUSTER 80kgf 24V	THRUSTER 95kgf 12V	THRUSTER 115kgf 24V
Article code:	BA.185.20024	BA.185.25012	BA.185.25024
Thrust force @ 10.5V:	80 kgf	95 kgf	115 kgf
Tunnel diameter:	185 mm	185 mm	185 mm
Power of electric motor:	4.0 kW (5.4 hp)	5.95 kW (8.1 hp)	5.95 kW (8.1 hp)
Motor type:	24V DC	12V DC	24V DC
Motor temperature switch:	~	~	~
Operating time:	2min/hr	2min/hr	2min/hr
Current consumption:	240 A	640 A	320 A
Min. battery capacity: *	2*95 Ah	2*180 Ah	2*105 Ah
Main fuse slow-blow, type ANL: *	200 A	425 A	250 A
Battery cable, total length of plus and minus: *	0-19m / 35mm² 19-27m / 50mm²	0-9m / 95mm² 9-12m / 120mm²	$\begin{array}{c} \text{0-20m / 50mm}^2 \\ \text{20-28m / 70mm}^2 \end{array}$
Connection battery cable:	M10	M10	M10
Weight:	17 kg	25 kg	25 kg



	THRUSTER 125kgf 12V	THRUSTER 150kgf 24V	THRUSTER 170kgf 24V
Article code:	BA.250.20012	BA.250.20024	BA.250.25024
Thrust force @ 10.5V / 21V:	125 kgf	150 kgf	170 kgf
Tunnel diameter:	250 mm	250 mm	250 mm
Power of electric motor:	6.5 kW (8.8 hp)	6.5 kW (8.8 hp)	11.3 kW (15.4 hp)
Motor type:	12V DC	24V DC	24V DC
Motor temperature switch:	~	~	~
Operating time:	2min/hr	2min/hr	2min/hr
Current consumption:	750 A	380 A	520 A
Min. battery capacity: *	2*230 Ah	2*105 Ah	2*180 Ah
Main fuse slow-blow, type ANL: *	500 A	250 A	355 A
Battery cable, total length of plus and minus: *	0-10m / 120mm <sup>2</sup> 10-13m / 150mm <sup>2</sup>	0-23m / 70mm <sup>2</sup> 23-31m / 95mm <sup>2</sup>	0-23m / 95mm² 23-30m / 120mm²
Connection battery cable:	M10	M10	M10
Weight:	33 kg	33 kg	38 kg

<sup>\*</sup> The recommended battery capacity, and cable ratings are based on an operation time of 2 minutes. Short cable lengths in combination with a higher battery capacity may overheat the electromotor. Depending on the boat installation and the distance between thruster and battery, other ratings can be chosen.

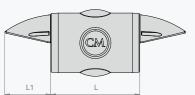
All thrusters are fitted with a zinc anode as standard. Aluminium anodes are available separately.

#### Stern Thruster tunnel deluxe

Craftsman Marine stern thruster tunnels are built from a glassfiber reinforced polyester filled with PU foam. This sandwich construction creates a great look and helps to reduce noise.

Shallow draft vessels might need an additional deflection kit to use the stern tunnel. These additional covers are mounted on the tunnel and minimise the amount of false air being sucked into the tunnel.







Article codes	
BB.010.20150	Stern thruster tunnel 150mm
BB.050.20150	Deflection covers 150mm
BB.010.20185	Stern thruster tunnel 185mm
BB.050.20185	Deflection covers 185mm

	150 mm	185 mm
Н	225	230
ID	150	185
L	300	330
L1	155	190
W	208	236.5

# **Anodes**

The anodes are available in both zinc and aluminium. For boats that are mainly used on fresh water aluminium is advised, while zinc is best suited for saltwater applications.



Thruster		Aluminium	Zinc
	35 kgf	BA.110.95007	BA.110.90007
	55 kgf	BA.150.95007	BA.150.90007
	80 / 95 / 115 kgf	BA.185.95007	BA.185.90007
	125 / 150 / 170 kgf	BA.250.95007	BA.250.90007

### Stern Thruster tunnel basic

When aestetics are less important the new more simple stern thruster tunnel is the choice for you. It is strong and functional but lacks the elegance that made the original Craftsman Marine stern thruster

stand out.





BB

221.5

	ID .	
.010.25150	BB.020.25185	BB.020.25250
260	285	285
150	185	250
300	330	450

242

322

180 GRP: Glassfiber reinforced polyester

BB.010.25110

240

110 280

Н

ID

W

### **Thruster Tubes**

Craftsman Marine supplies the required tunnels in various lengths and diameters. The diameter of the tunnel depends on the chosen thruster. Tubes are made from steel or GRV (glass fibre reinforced vinylester). Vinylester is equally strong as polyester but does not absorb water.



Article codes	
BG.110.21100	GRV tunnel 110mm L=1.000mm
BG.110.21300	GRV tunnel 110mm L=3.000mm
BG.150.21100	GRV tunnel 150mm L=1.000mm
BG.150.21300	GRV tunnel 150mm L=3.000mm
BG.185.21100	GRV tunnel 185mm L=1.000mm
BG.185.21300	GRV tunnel 185mm L=3.000mm
BG.250.21100	GRV tunnel 250mm L=1.000mm
BG.250.21150	GRV tunnel 250mm L=1.500mm
BG.110.22100	Steel tunnel 110mm L=1.000mm
BG.150.22100	Steel tunnel 150mm L=1.000mm
BG.185.22100	Steel tunnel 185mm L=1.000mm
BG.250.22100	Steel tunnel 250mm L=1.000mm