



Superior Quality bowthrusters

from ABS Hydromarine

HYDROMARINE

Hydraulic bowthrusters

Bow thrusters often produce a lot of noise. ABS Hydromarine has attempted to reduce this by means of a lubrication-free toothed belt drive that operates a bronze propeller consisting of blades with a large surface area. The result is a high level of thrust. The interests of the environment were also considered at the design stage. The hydraulic motor is located outside the tunnel and can be used for environmentally friendly hydraulic oils.

- Superior quality
- Affordable cost
- Bronze propeller
- Very low noise level
- Stainless steel body (optional)
- Sturdy toothed belt transmission
- 60 - 815 kgf

Type:	TH 5	TH 10	TH 15	TH 20	TH 35	TH 50
Hydromotor	gear	gear	gear	gear	piston	piston
Flow (ltr/min)	18	30	44	70	90	125
Pressure (bar)	180	220	210	180	250	220
Capacity (kW)	5	10	15	20	35	50
Transmission:						
Type	Toothed belt.					
Lubrication	None.					
Paint	2k-powder Coating.					
Propeller:						
Diameter (mm)	180	250	290	340	390	480
Blade area	75%	92%	90%	90%	90%	90%
Material	Bronze					
Effective thrust (kgf)	80 kgf	150 kgf	215 kgf	300 kgf	475 kgf	815 kgf

Options:

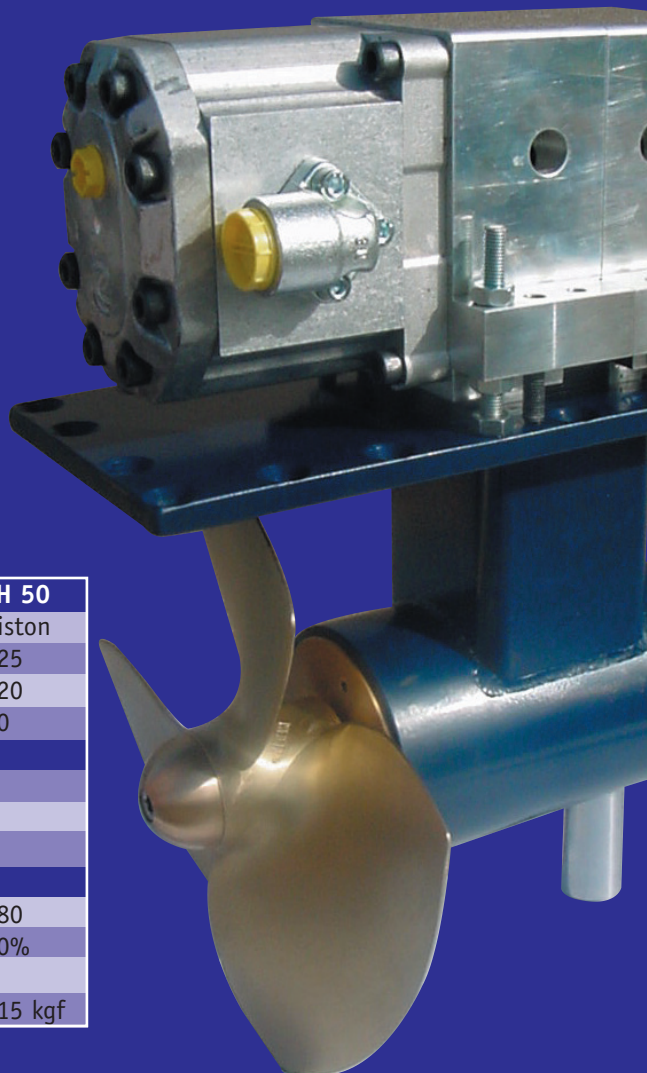
- Proportional control.
- Custom build stern tubes for stern thrusting.
- Additional joystick control for the flybridge or aft steering position
- Radiographic control
- Integration with other users, like winches, radar mast, steering, etc.

Components to Match:

- Hydraulic Load Sensing pump.
- Hydraulic reservoir with build up valve and equipment
- Dashboard with joystick and level alarm.
- Electric loom with casing.

To help you decide which bow thruster is the most appropriate for your vessel, use the formula below as a guide. It assumes a maximum of wind force 5.

$$F(\text{kgf}) = 3 (\text{kg/m}^2) \times \text{length vessel (m)} \times \text{average height above the waterline (m)}$$



Electric 12/24VDC thrusters

To reduce the noise of the bow thrusters,

ABS Hydro Marine uses:

- A high-quality low-speed traction motor
- Sturdy toothed belt transmission.

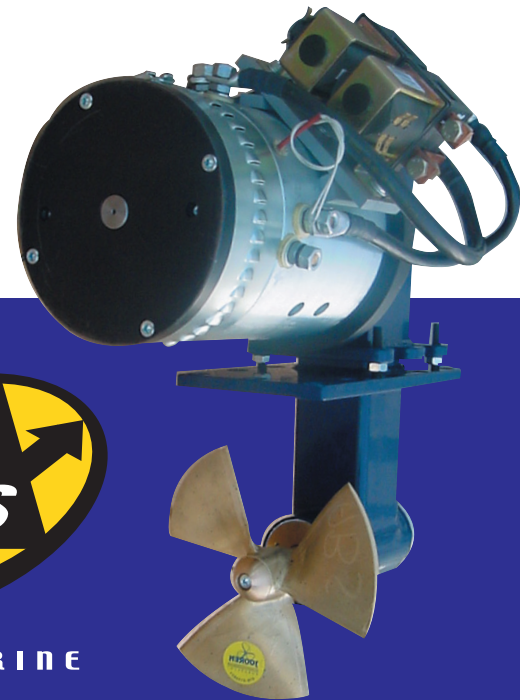
Standard features are:

- High thrust thanks to a bronze propeller consisting of blades with a large surface area.
- Continuous running for four minutes without causing motor failure.
- The motor is designed not to overheat.
- Low current consumption thanks to deployment of motor manufactured in Europe.

Options:

- Proportional control.
- Custom built stern tubes for stern thrusting.
- Additional joystick control for the flybridge or aft steering position.
- Radiographic control.

Type:	TDC 3	TDC 7
E-motor:	Traction motor	Traction motor
Voltage	12 VDC. / 24 VDC.	24 VDC.
Current	384 A. / 192 A.	486 A.
Power	3 kW.	7 kW.
Transmission:		
Type	Toothed belt.	
Lubrication	None.	
Paint	2k-powder Coating.	
Propeller:		
Diameter	180 mm.	180 mm.
Blade area	75 %	70 %
Material	Bronze	
Effective thrust:	60 kgf.	150 kgf.



HYDROMARINE

Electric 400 VAC bow- and sternthrusters

Standard features are:

High thrust thanks to a bronze propeller consisting of blades with a large surface area. Continuous running for five minutes without causing motor failure. The motor is designed not to overheat. Motor protected against dust and water jets in all directions

Type:	TAC3	TAC8	TAC15	TAC23	TAC33	TAC45
E-motor	Induction motor IP56					
Voltage	400 VAC (50hz) or 440 VAC (60hz)					
Rpm	2.900 (50hz)	1.450 (50hz)	1.450 (50hz)	1.450 (50hz)	1.450 (50hz)	1.450 (50hz)
	3.500 (60hz)	1.740 (60hz)	1.740 (60hz)	1.740 (60hz)	1.740 (60hz)	1.740 (60hz)
Power	3 kW	8kW	15kW	23kW	33kW	45kW
Transmission:						
Type	Toothed belt					
Lubrication	none					
Painting	2k Powder coating					
Propeller:						
Diameter	180 mm	250 mm	290 mm	340 mm	380 mm	480 mm
Blade area	75%	92%	90 %	90%	90%	90%
Material	Bronze					
Effective thrust	60 kgf	150 kgf	215 kgf	300 kgf	475 kgf	815 kgf

To reduce the noise of the bow thrusters,

ABS Hydromarine uses:

- A low-speed induction motor
- Sturdy toothed belt transmission.

Delivery scope bow thruster:

Bow thruster unit with electric-powered motors, toothed belt transmission and bronze propeller. Tubes with assembly flange for steel, GRP or aluminium.

Matching components:

- Dashboard with proportional joystick
- Frequency converter (Proportional control) for soft start

Option:

- Custom built stern tubes for stern thrusting.
- Additional joystick control for the flybridge or aft steering position
- Radiographic control (on/off control)

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