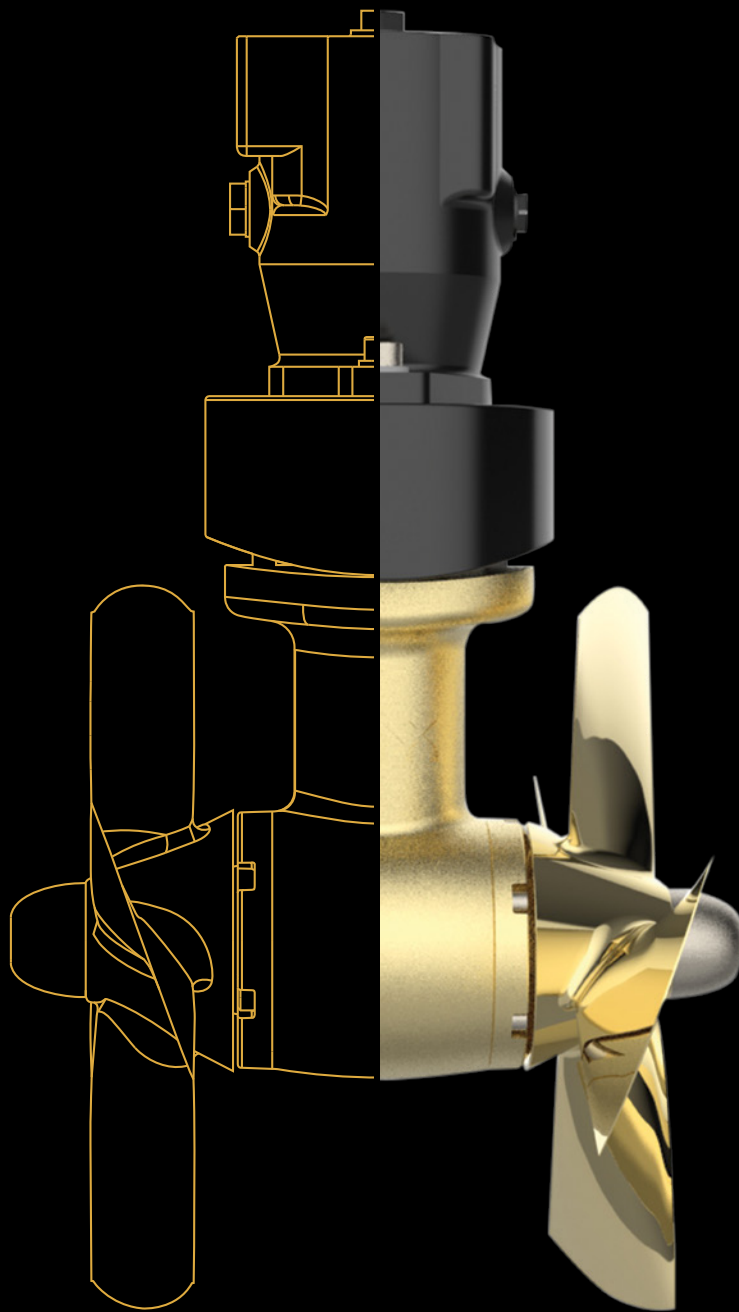


MAX

POWER
CONTROL TO THE MAX



MAX

POWER

CONTROL TO THE MAX

www.max-power.com

Founded in 1987, MAX POWER has developed a wide range of products, designed for yachts of all types and sizes. Initially established in Mandelieu, France, the complete production, assembly and dispatch moved to Monza, Italy at the end of 2011.



Since the beginning of 2013 MAX POWER has been heavily invested in, following the action plan to upgrade its production processes, quality systems and logistics structure. Investments also included a tailor-made WMS (Warehouse Management System) and a SAP ERP system.

MAX POWER offers an extensive variety of products, from simple tunnel thrusters to top-of-the-range retractable thrusters, ensuring complete freedom of choice. Backed up by an extensive range of accessories, power options and customized solutions, MAX POWER has become a leader in its market with many people all over the world trusting the brand for their boat's maneuverability.

Renowned for supplying high quality products, MAX

POWER has been focusing on designing and producing innovative and often unique solutions bringing ultimate performance and maneuverability into the world of everyday yachting.

With more than 32 years of experience in designing and manufacturing leisure marine products, there is certainly a MAX POWER bow thruster, stern thruster or related equipment which meets your needs and makes your life easier on board.

MAX POWER's technical team of experts is available 24/7 to provide you with solutions, offering you 98% availability of spare parts and fast dispatch anywhere in the world. Our global Service Network will also provide you with technical support on board if required.

CONTROL TO THE MAX

Superior quality



Innovative solutions



Compact Retract

- Lightweight composite construction
- Lowest profile and smallest hull opening on the market
- Rapid deployment
- Unique patented folding movement (Retract™)

Composite Leg

- Maintenance-free
- Easy fit
- No corrosion



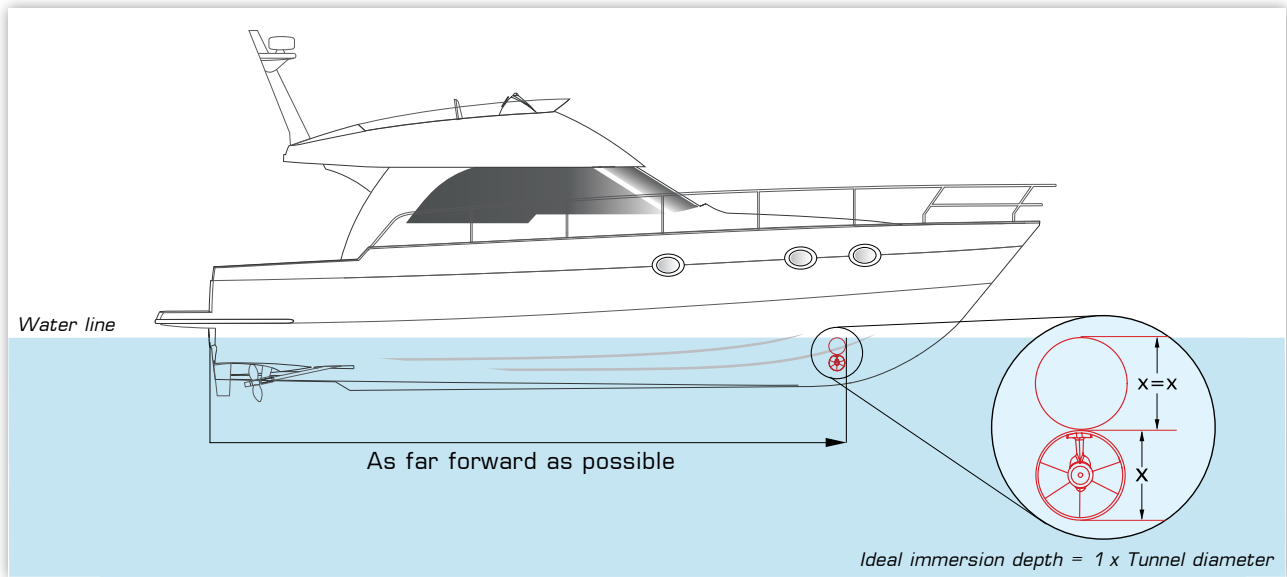
Global Service Network



Complete Spare Parts Availability
Fast dispatch anywhere in the world

Tunnel Thrusters

Positioning thrusters is as much important as choosing the right thrust output when seeking a suitable thruster for your yacht.

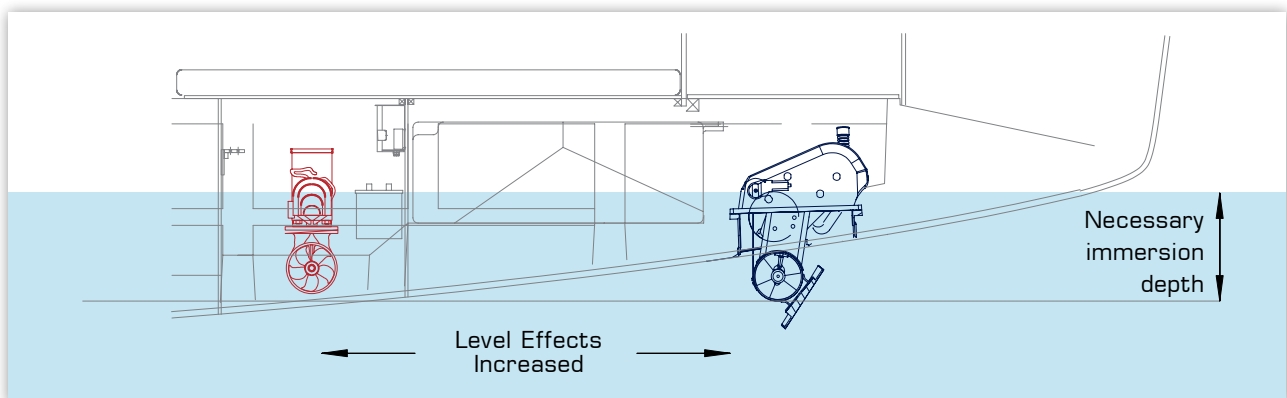


The thruster's turbine needs to be placed one full propeller diameter under the water line to achieve optimal thrust. The thruster must also be positioned as far forward in the bow or as far back in the stern as possible. A thruster stepped back from the bow (or stern) would need to be more powerful than one mounted further forward (or aft), to achieve the same turning effect on the yacht.

With this in mind, tunnel thrusters are the ideal solution for motor yachts and even deep-footed sailing yachts when sailing performance is not paramount.

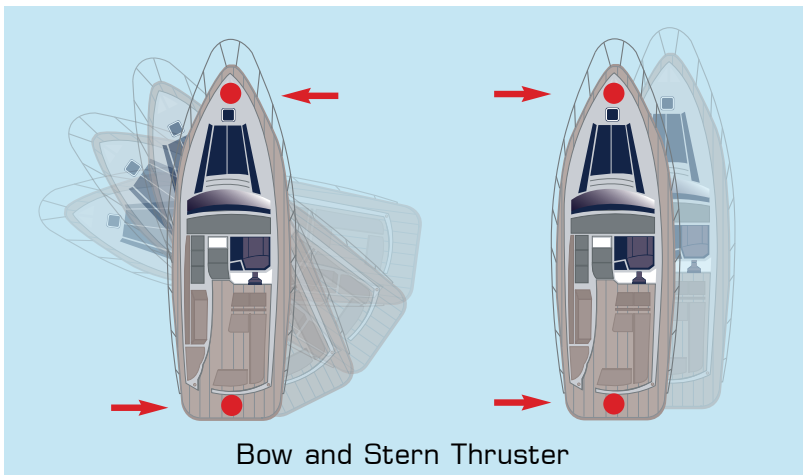
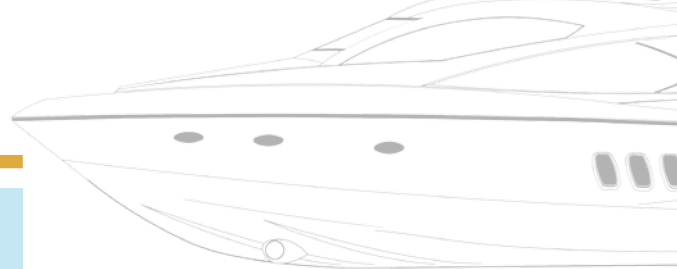
Retractable thrusters

Retractable thrusters are easily installed far forward in the bow whilst still achieving the required immersion depths. This results in a thruster offering a good turning effect on the yacht, often allowing a unit with a lower thrust rating than its tunnel equivalent to be used with excellent results.

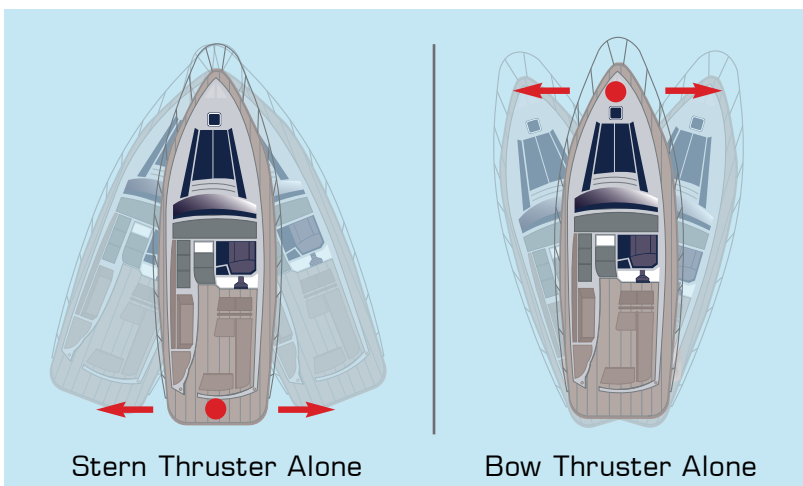


When retracted, these units have no effect on the yacht's drag and do not reduce sailing performance in light winds.

Retractable thrusters are mostly suited to modern sailing yachts.



Bow and Stern Thrusters

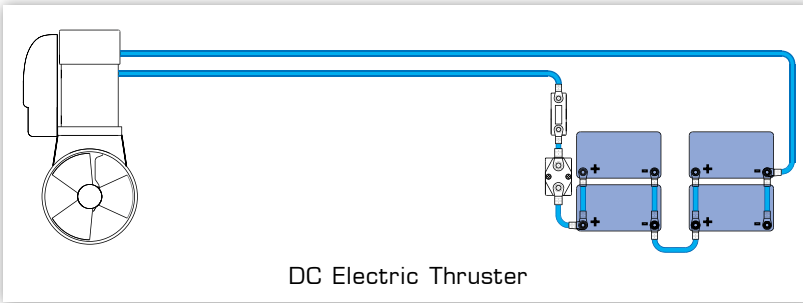


The combined use of a bow and stern thruster adds a **greater level of control** when manoeuvring in difficult conditions or tight corners.

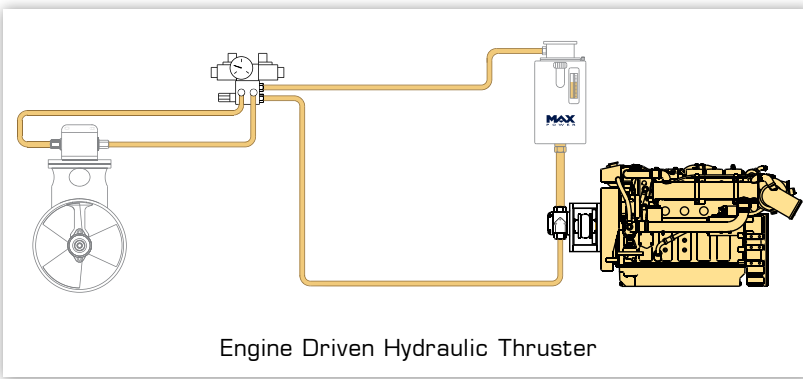
Turning on the spot or even stepping the entire yacht sideways becomes possible.

MAX POWER offers stern thruster adapters for the entire tunnel thruster range. A range of Ignition Protected thrusters is also available enabling the use of a stern thruster in habitually damp zones.

Electric or Hydraulic Power Source

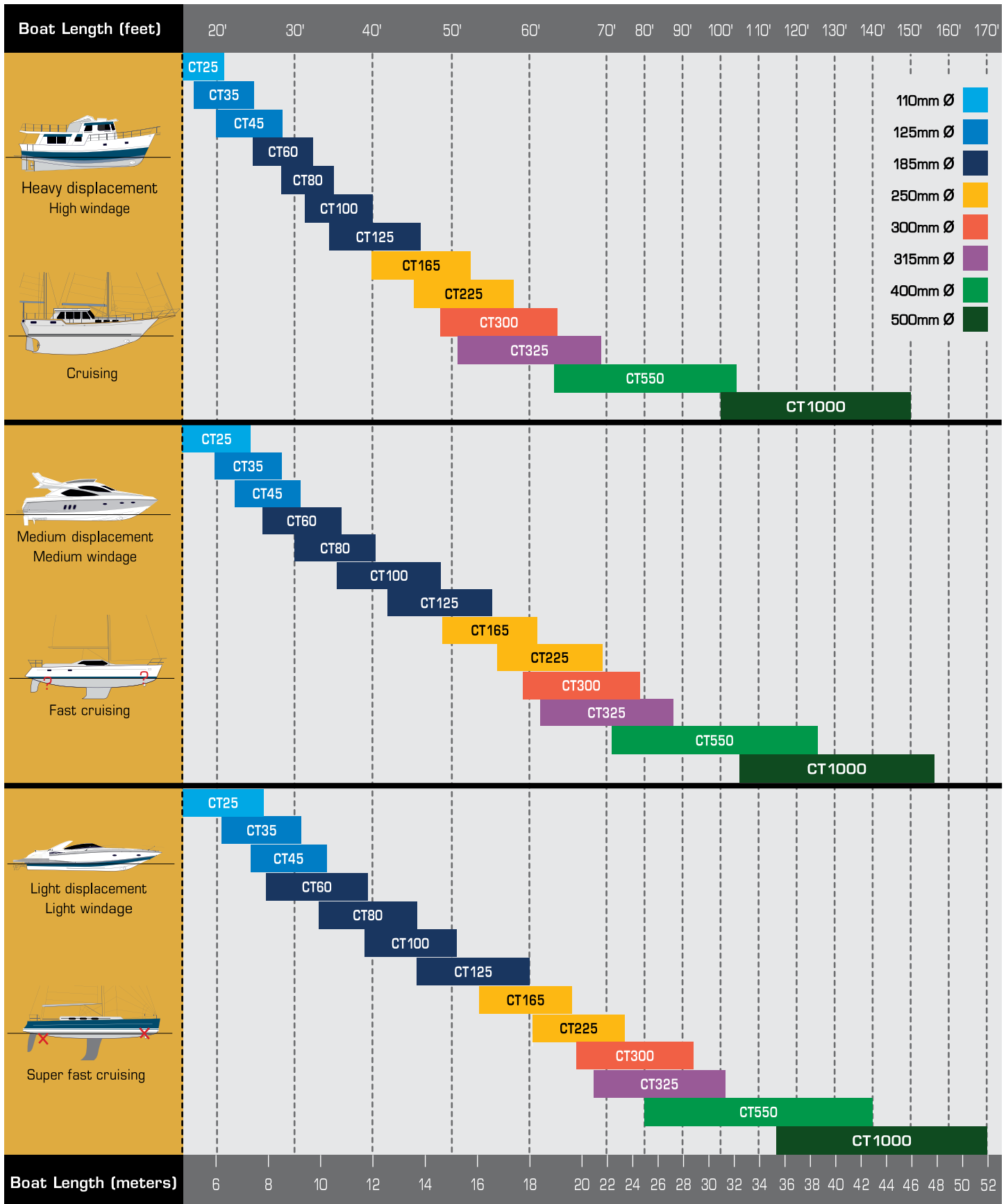


Bow and stern thrusters, whether retractable or tunnel, **require a power source**. On a yacht this can be either a 12/24V DC electric motor or a hydraulic motor.

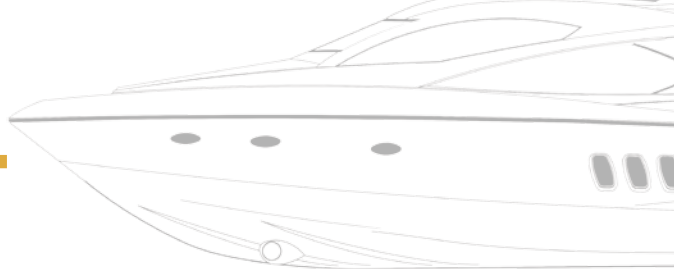


Bow and stern thrusters, whether retractable or tunnel, **require a power source**. On a yacht this can be either a 12/24V DC electric motor or a hydraulic motor. **The hydraulic motor will need to draw power from a thermal engine (via a hydraulic pump) or a remote mounted DC motor (also via a hydraulic pump).** The DC motor will draw power directly from a battery bank as do direct electric thrusters.

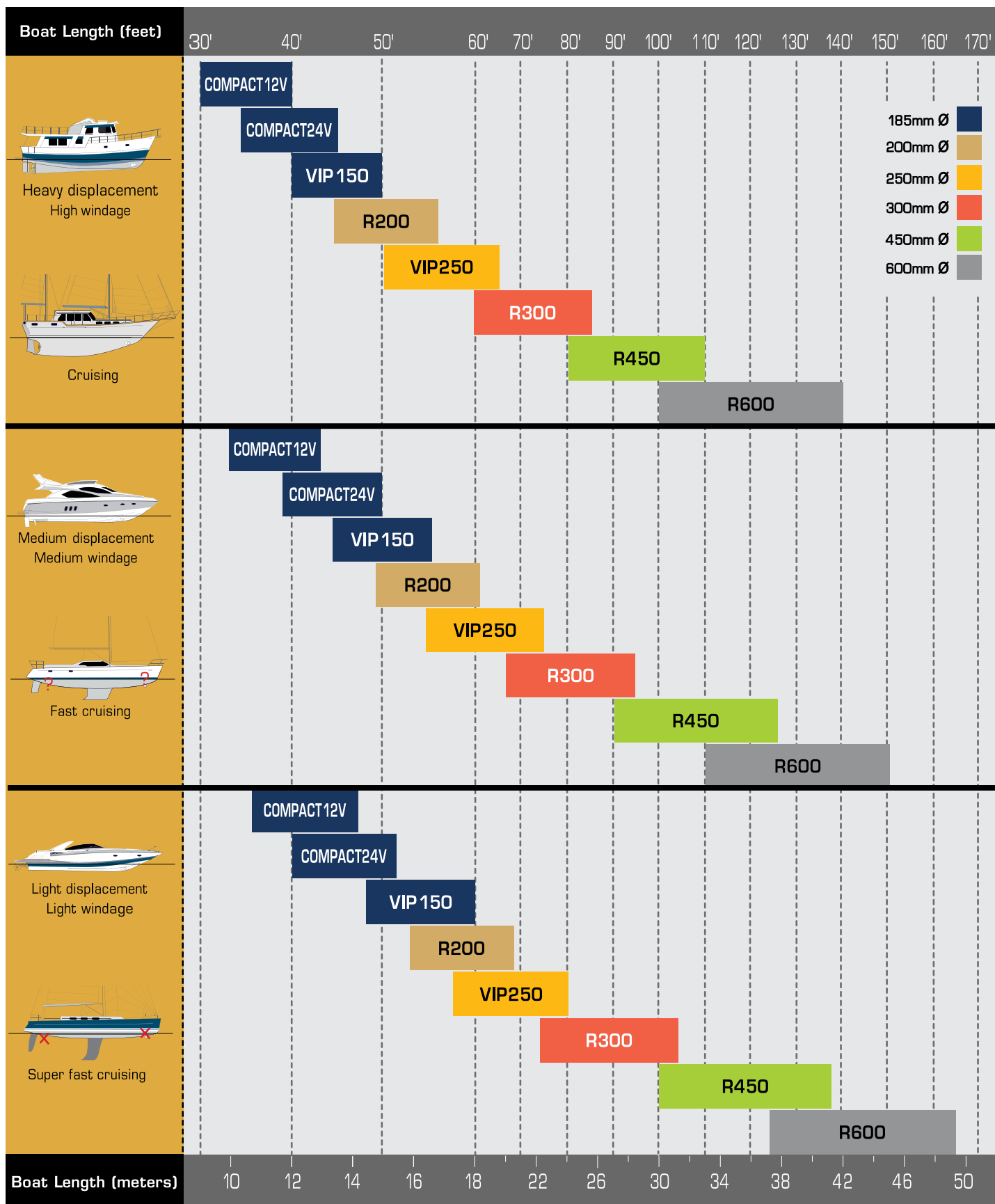
Tunnel Thrusters



* ? X : Only when required immersion depth is achieved.



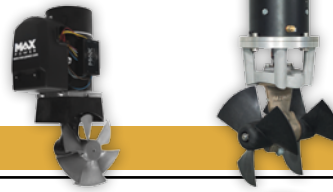
Retractable Thrusters



* ? X : Only when required immersion depth is achieved.

CONTENTS

Electric Tunnel Thrusters



7-9

Ignition Protected Thrusters



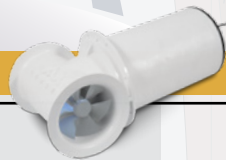
10-11

Hydraulic Tunnel Thrusters



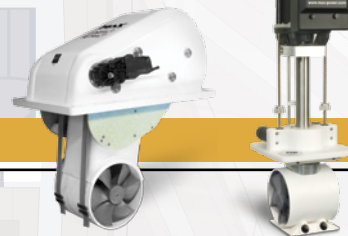
12-15

Stern Pod Thrusters



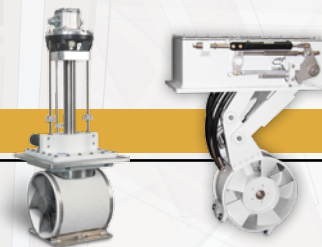
16-17

Electric Retractable Thrusters



18-20

Hydraulic Retractable Thrusters



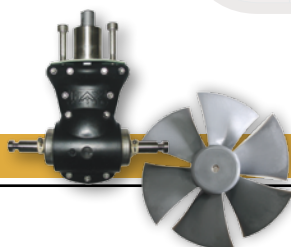
21-27

Control Panels & Remote Control



28-31

Accessories



32-33

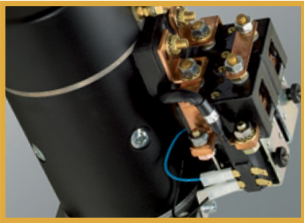
Integrated Hydraulic systems



34-35

MAX POWER offers a complete range of 12/24V composite electric tunnel thrusters to suit motor yachts and deep footed sailing yachts from 17'-85'. **Designed for maximum performance and durability**, each model is easy to fit, highly cost effective, and integrates a variety of unique features.

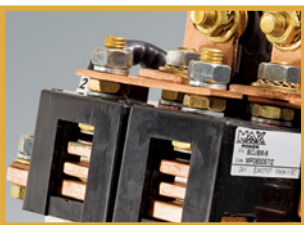
- Patented composite drive legs
- Zero maintenance
- Case hardened spiro-conical gears
- Line shields
- Purpose built DC motors
- Electronic control boxes for unrivaled safety features
- Safe, high power connections
- Purpose built high specification DC contactors



High efficiency purpose built DC motors ensure outstanding performance and long runtime ratings.



Solid copper contact bars guarantee safe, high power connections.



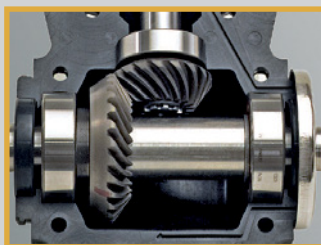
Purpose built high specification DC contactors are both safe and durable.



Electronic control boxes offer unique and unrivaled safety features.



Corrosion free composite drive legs eliminate the need for anodes and offer high manufacturing tolerances.



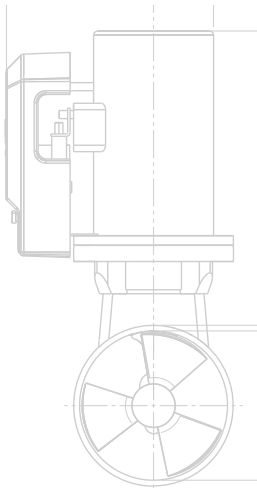
Drive legs are pre-filled with oil and then sealed for life for zero maintenance.



Case hardened spiro-conical gears guarantee a silent, smooth operation, and a long lifespan.



Stainless Steel protection caps secure the seals from fishing lines.



Model	CT 25	CT 35	CT 45	CT 60	
Code	636061	42529	317603	42530	42531
Voltage*	12 V	12 V	12 V	12 V	24 V
Max Thrust at 10,75V (kgf/lbs)**	26 / 57,2	30 / 66	40 / 88	63 / 138,6	65 / 143
Max Thrust at 12V (kgf/lbs)**	30 / 66	35 / 77	45 / 99	70 / 154	71 / 158,4
Propellers	Mono	Mono	Duo	Mono	Mono
Drive Leg (material)	Composite	Composite	Composite	Composite	Composite
Power (kw/hp)	1.8 / 2.4	2.69 / 3.6	3.23 / 4.3	4.35 / 5.8	4.4 / 5.9
Weight (kg)	7	9.6	9.65	14.7	14.8
A (mm)	180	190	190	210	
B (mm)	145	140	140	140	
C (mm)	225	210	210	275	
D (mm)	110	125	125	185	
E (mm)	4 to 5	4 to 5	4 to 5	6 to 7	
Boat Type	Boat Length (feet/meter)				
Heavy Displacement High Windage & Cruising	up to 21' / 6,5 m	17' - 25' / 5,2 - 7,6 m	20' - 28' / 6 - 8,5 m	25' - 32,5' / 7,8 - 10 m	
Medium Displacement Medium Windage & Fast Cruising	up to 24' / 7,3 m	20' - 28' / 6 - 8,5 m	22,5' - 31' / 6,8 - 9,5 m	26' - 36' / 7,3 - 11 m	
Light Displacement Light Windage & Super Fast Cruising	up to 26' / 7,3 m	21' - 31' / 6,4 - 9,5 m	24' - 34' / 7,3 - 10,3 m	27' - 39' / 8,2 - 11,8 m	



Notes: Images are not to scale.

* Thrusters are designed to run at 10.75V on 12V units and 22V on 24V units. Higher voltages will result in higher thrust ratings, higher power consumption, and a reduced duty cycle.

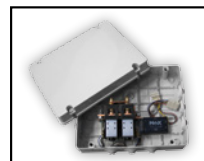
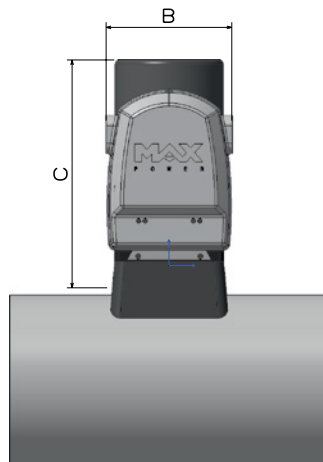
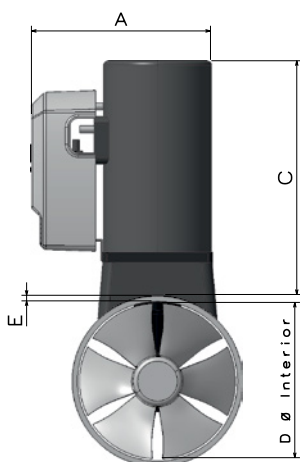
** Performance data is given for a thruster installed at an immersion depth of one tunnel's diameter, in a tunnel no longer than twice the tunnel's diameter, and this within a variation of + / - 6%. Longer tunnels will result in lower thrust ratings and higher power consumption.



CT 80		CT 100		CT 125	CT 165	CT 225	CT 300	CT 325	
42532	42533	42534		42535	317557	317558	317606	42542	634361
12 V	24 V	12 V		24 V	24V	24V	24V	24V	
75 / 165	83 / 182,6	96 / 211,2		115 / 253	165 / 363	195 / 429	255 / 561	265 / 583	
80 / 176	89 / 195,8	105 / 231		122 / 268,4	185 / 407	250 / 550	300 / 660	325 / 715	
Duo Composite		Duo Composite		Duo Composite	Duo Composite	Duo Composite	Duo Composite	Duo Bronze	Duo Aluminium
4.79 / 6.4	5.28 / 7.1	7.1 / 9.5		8.58 / 11.5	11.88 / 15.9	14.96 / 20	19.7 / 26.4	19.69 / 26.4	
15	15.1	24		24	36	37	58.5	59	
210		250		250	250	270	250	250	
140		200		200	200	200	250	250	
275		356		365	430	405	480	480	
185		185		185	250	250	300	315	
6 to 7		6 to 7		6 to 7	7 to 8	7 to 8	9 to 10	9 to 10	

Boat Length (feet/meter)

28' - 35' / 6 - 10,6 m	32' - 10' / 9,7 - 12 m	35' - 46' / 10,6 - 14 m	40' - 52' / 12 - 15,8 m	45' - 58' / 13,7 - 17,6 m	48' - 63' / 14,6 - 19 m	51' - 69' / 15,5 - 21 m
30' - 40' / 9 - 12 m	36' - 48' / 11 - 14,6 m	42' - 55,5' / 12,8 - 17 m	48' - 61' / 14,6 - 18,5 m	53' - 69' / 16 - 21 m	59' - 79' / 18 - 24 m	62' - 87' / 19 - 26,5 m
33' - 46' / 10 - 14m	39' - 51' / 11,8 - 15,5 m	46' - 60' / 14 - 18 m	54' - 65' / 14,5 - 20 m	60' - 75' / 18 - 22,8 m	67' - 93' / 20,4 - 28 m	68' - 100' / 20,7 - 30,5 m



The electric tunnel CT 300 & CT 325 are delivered complete with control system.

NEW



Proportional Electronic System Kit for Tunnel Thrusters
 - Proportional Electronic Controller for Electric Tunnel Thrusters, 12-24V
 - Proportional High-Power Unit for Electric Tunnel thrusters, 12-24V, 900A
 - Proportional Joystick for Electric Tunnel Thrusters, 5V

Please refer to page 29



GRP tunnels

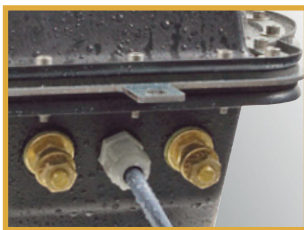
Please refer to page 35

MAX POWER's range of **Ignition Protected tunnel thrusters** is available for models CT35 to CT125. **Certified ISO 8846**, this range allows the safe use of an electric tunnel thruster in petrol / gas engine vessels where there may be potentially flammable gases. **IP thrusters can also be installed in habitually wet or damp areas** such as sail lockers, or in the transom of deep "V" shaped motor yachts.

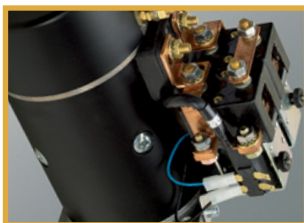
- Ignition Protected to ISO 8846 and water resistant
- Easy-to-connect thruster
- Patented composite drive leg
- Zero maintenance
- Case hardened spiro-conical gears
- Line shields
- Purpose built DC motors
- Electronic control boxes for unrivaled safety features
- Safe, high power connections
- Purpose built high specification DC contactors



Ignition Protected and water resistant.



Easy to connect thruster. Robust metallic frame.



High specification electric motors. See page 8 for full details.



Unique composite drive leg design. See page 8 for full details.



Model
Code
Voltage*
Max Thrust at 10,75V (kgf/lbs)**
Max Thrust at 12V (kgf/lbs)**
Propellers
Power (kw/hp)
Weight (kg)
A (mm)
B (mm)
C (mm)
D (mm)
E (mm)
Boat Type
Heavy Displacement High Windage & Cruising
Medium Displacement Medium Windage & Fast Cruising
Light Displacement Light Windage & Super Fast Cruising



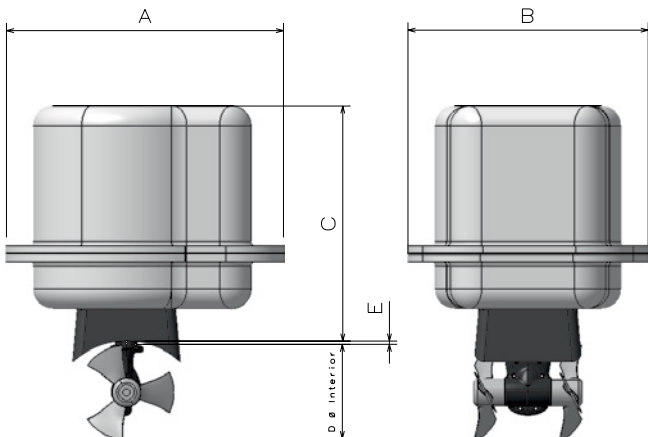
GRP tunnels
Please refer to page 35



CT 35-IP	CT 45-IP	CT 60-IP	CT 80-IP		CT 100-IP	CT 125-IP
317609	317610	317611	317613	317614	317615	317616
12 V	12 V	12 V	12V	24V	12V	24V
30 / 66	40 / 88	63 / 138,6	75 / 165	83 / 182,6	96 / 211,2	115 / 253
35 / 77	45 / 99	70 / 154	80 / 176	89 / 195,8	105 / 231	122 / 268,4
Mono	Duo	Mono	Duo	Duo	Duo	Duo
2,69 / 3,6	3,23 / 4,3	4,35 / 5,8	4,79 / 6,4	5,28 / 7,1	7,1 / 9,5	8,58 / 11,5
11,6	11,65	17,3	17,6	17,6	27,2	27,2
301			320		390	
230			255		305	
295			375		490	
125			185		185	
4 to 5			6 to 7		6 to 7	

Boat Length (feet/meter)

17' - 25' / 5,2 - 7,6 m	20' - 28' / 6 - 8,5 m	25' - 32,5' / 7,8 - 10 m	28' - 35' / 6 - 10,6 m	32' - 40' / 9,7 - 12 m	35' - 46' / 10,6 - 14 m
20' - 28' / 6 - 8,5 m	22,5' - 31' / 6,8 - 9,5 m	26' - 36' / 7,3 - 11 m	30' - 40' / 9 - 12 m	36' - 48' / 11 - 14,6 m	42' - 55,5' / 12,8 - 17 m
21' - 31' / 6,4 - 9,5 m	24' - 34' / 7,3 - 10,3 m	27' - 39' / 8,2 - 11,8 m	33' - 46' / 10 - 14 m	39' - 51' / 11,8 - 15,5 m	46' - 60' / 14 - 18 m



Notes: Images are not to scale.

* Thrusters are designed to run at 10.75V on 12V units and 22V on 24V units. Higher voltages will result in higher thrust ratings, higher power consumption, and a reduced duty cycle.

** Performance data is given for a thruster installed at an immersion depth of one tunnel's diameter, in a tunnel no longer than twice the tunnel's diameter, and this within a variation of + / - 6%. Longer tunnels will result in lower thrust ratings and higher power consumption.

*** Model only available with bronze driveleg

MAX POWER's range of **hydraulic tunnel thrusters** is suitable for medium to heavy displacement, high windage vessels from 40'-85'. **Designed for durability and performance**, hydraulic tunnel thrusters are ideal when long runtimes are required. **Manufactured using corrosion free components**, these models are robust, water resistant and integrate a variety of unique features.

- Branded hydraulic components
- Long runtimes
- Water resistant
- Patented composite drive legs
- Zero maintenance
- Case hardened spiro-conical gears
- Line shields
- Electronic control boxes for unrivaled safety features



Branded hydraulic components for international serviceability.



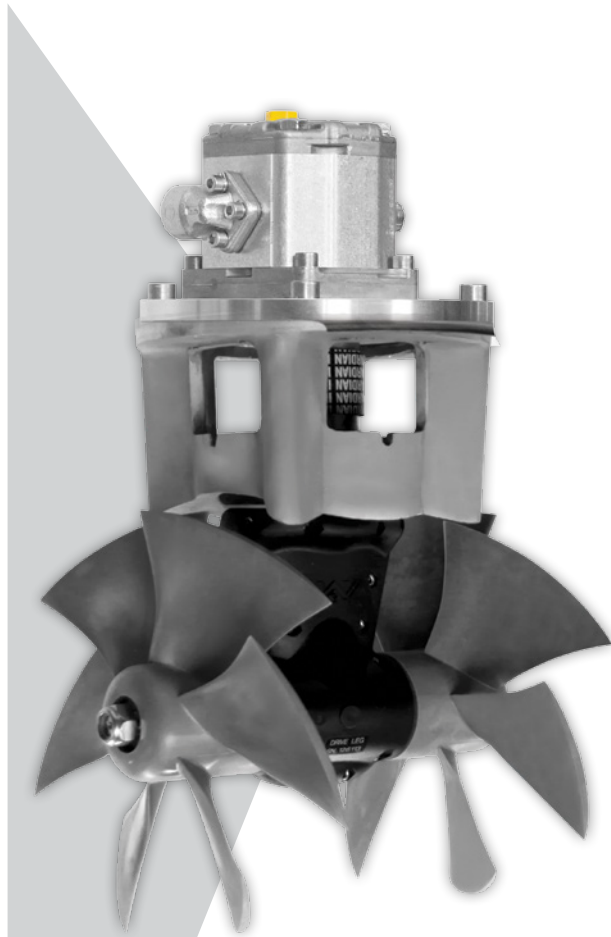
Can be installed in habitually damp areas such as sail lockers.



Unique composite drive leg design. See page 8 for full details.



Electronic control boxes offer unique and unrivaled safety features.



Model
Code
Max Thrust (kgf/lbs)
Hydraulic power (kw)
Propellers
Weight (kg)
A (mm)
B (mm)
C (mm)
D (mm)
E (mm)
Boat Type
Heavy Displacement High Windage & Cruising
Medium Displacement Medium Windage & Fast Cruising
Light Displacement Light Windage & Super Fast Cruising

Optional Accessories for hydraulic tunnel thrusters



MAX POWER
Electronic Thruster Controller

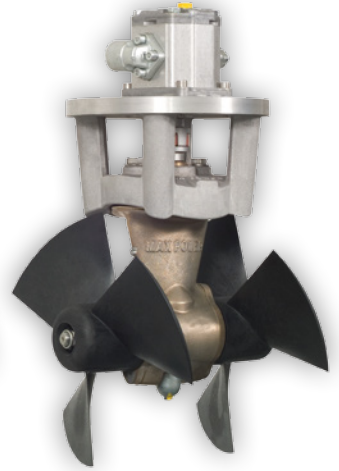
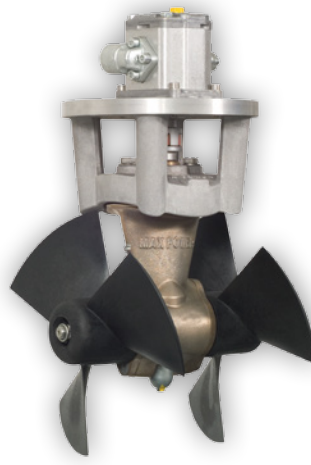
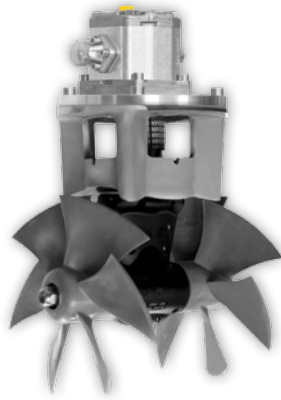
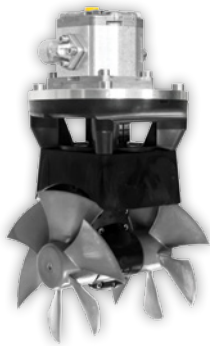
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Only for MAX POWER Joystick.... page 30-31



GRP tunnels

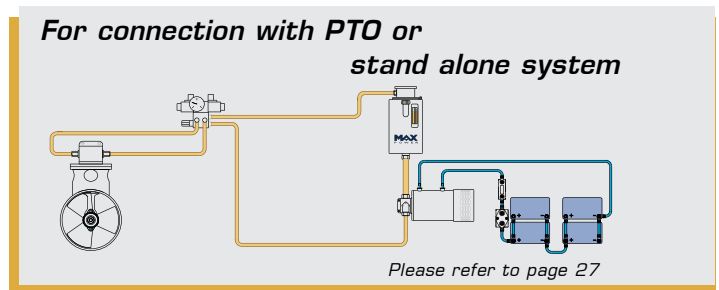
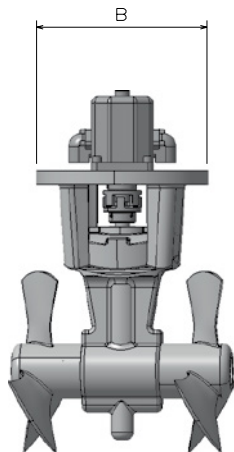
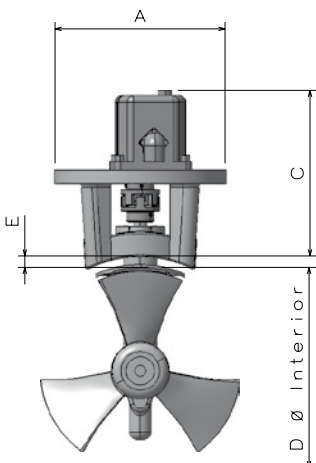
Please refer to page 35

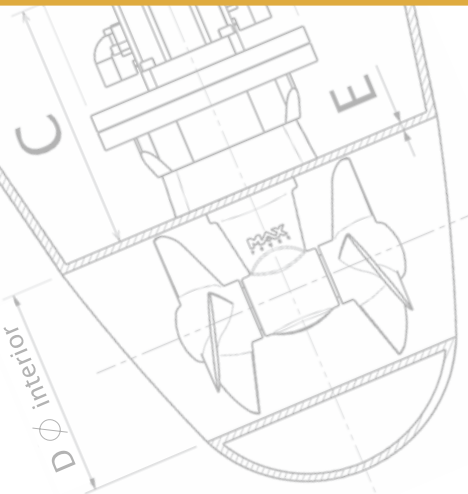


CT 125 HYD			CT 225 HYD	CT 300 HYD	CT 325 HYD	
317588	317590	317589	317591	317607	317598	317599
140 / 308	120 / 264	90 / 198	220 / 441	300 / 529	275 / 551	325 / 606
13,5	11	7,5	13,5	19,5	14	20
Duo	Duo	Duo	Duo	Duo	Duo	Duo
12	12	12	19	24	24	24
	210		220	240	240	
	210		220	240	240	
	215		220	240	240	
	185		250	300	315	
	6 to 7		7 to 8	9 to 10	9 to 10	

Boat Length (feet/meter)

35' - 46' / 10,6 - 14 m	45' - 58' / 13,7 - 17,6 m	48' - 63' / 14,6 - 19 m	51' - 69' / 15,5 - 21 m
42' - 55,5' / 12,8 - 17 m	53' - 69' / 16 - 21 m	59' - 79' / 18 - 24 m	62' - 87' / 19 - 26,5 m
46' - 60' / 14 - 18 m	60' - 75' / 18 - 22,8 m	67' - 93' / 20,4 - 28 m	68' - 100' / 20,7 - 30,5 m





The **NEW MAX POWER CT 550 HYD & CT 1000 HYD** are the flagships of **MAX POWER Tunnel Thrusters** for up to 55m boats.

All immersed parts have a specially designed **hydrodynamic profile** to avoid any turbulence.

The most powerful tunnel thruster in the **D400 tunnel category** comes with **4 blade, metallic propellers** designed by MAX POWER, to guarantee maximum thrust performance.

Counter rotating system offers higher efficiency on thrusting with left side and right side pitch propellers in order to have identical performance in both directions.

NEW

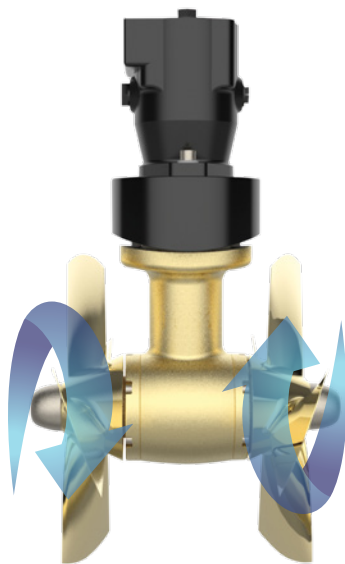


CT 1000 HYD

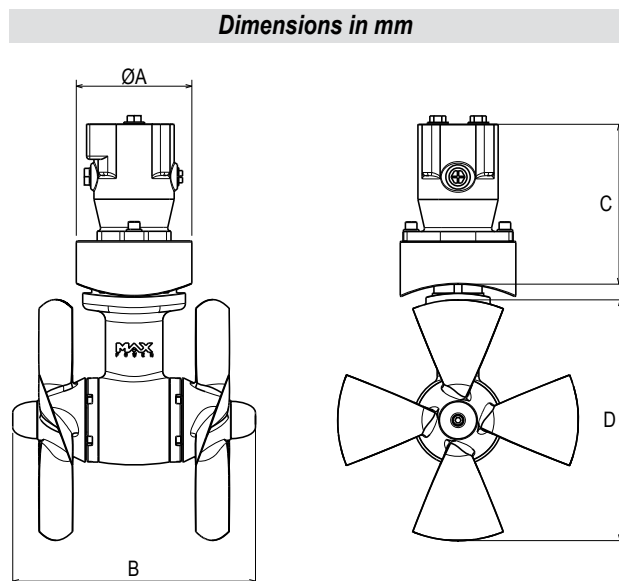


CT 550 HYD

Model	CT 550 HYD	CT 1000 HYD
Code	636211	6364280
Thruster Power (kw)	min 42 - max 50	min 70 - max 85
Motor Power (cc/kw)	40	80,4
Tunnel Diameter (mm)	400	500
Required Pressure (bar):	min 210 - max 250	
Required Flow (lt/min)	120	200
Propellers	4 Blade, DUO, Counter Rotating	
Weight (kg)	65	145
Light Duty Thrust (Kgf)	630	1200
Heavy Duty Thrust (Kgf)	550	1000
A (mm)	180	251
B (mm)	378	640
C (mm)	249	322
D (mm)	375	488
Boat Type	Boat Length (feet/meter)	
Heavy Displacement High Windage & Cruising	63 - 105' / 19 - 35 m	100 - 150' / 30 - 45 m
Medium Displacement Medium Windage & Fast Cruising	71 - 125' / 20 - 37,5 m	105 - 156' / 32 - 47,5 m
Light Displacement Light Windage & Super Fast Cruising	80 - 140' / 25 - 42 m	115 - 170' / 35 - 52 m



Counter Rotating



The MAX POWER Stern Pod offers an innovative solution to the often difficult tasks of installing a thruster into the stern of modern motor yachts.

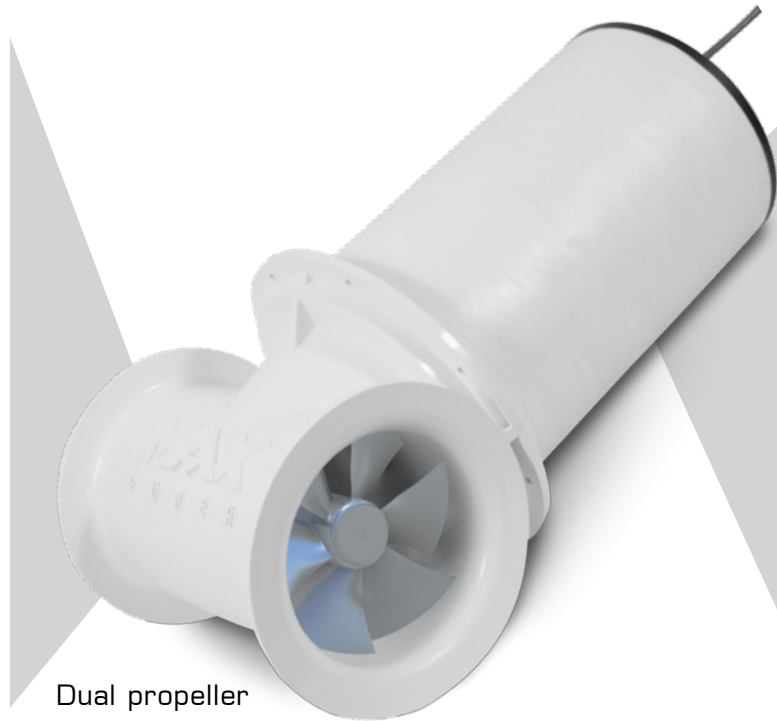
- Combining a dry area on the stern with correct immersion depth and sufficient access can be challenging.
- Designed with these constraints in mind, Stern Pod units can be installed entirely from the outside of the transom, reducing greatly the need for inside access. This allows greater immersion depth to be achieved.
- The Stern Pod housing is waterproof and ignition protected (ISO 8846) designed to withstand the corrosive damp atmosphere of the bilge.
- Entirely assembled and tested in our factory, Stern Pod units guarantee long term trouble-free operation with only minimal maintenance care.



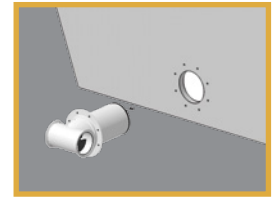
Case hardened spiro-conical gears.



Ignition protected and water resistant.



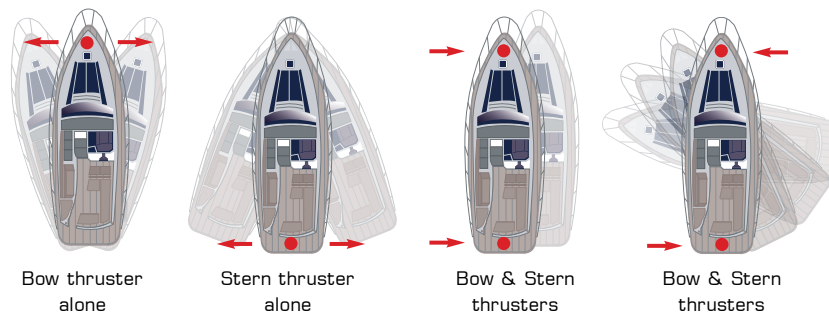
Dual propeller



Easy external installation











Watertight seals ensure extra protection



Code	317625	317628	317629	317630	317631	317632	317633
Model	CT45	CT80		CT100	CT125	CT165	CT225
Boat size	6m - 10.5m 20 - 34'	8.5m - 14m 28 - 46'		9.8m - 15.5m 32 - 51'	10.5m - 18m 34 - 59'	12m - 20m 40 - 66'	14m - 22m 46 - 73'
Voltage	12 V	12 V	24 V	12 V	24 V	24 V	24 V
Thrust up to	45 kg	69 kg	75 kg	96 kg	115 kg	160 kg	195 kg
Power	3.2 kW / 4.3 hp	4.8 kW / 6.4 hp	5.3 kW / 7.1 hp	7.1 kW / 9.5 hp	8.6 kW / 11.5 hp	11.9 kW / 15.9 hp	15 kW / 20 hp
Weight	21 kg	31 kg	31 kg	41 kg	41 kg	61 kg	61 kg

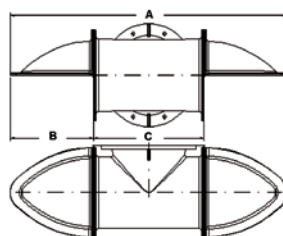
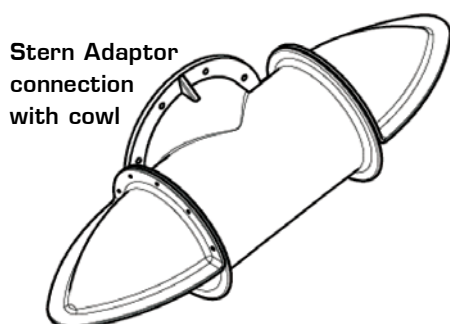
You can assembly your own Stern Thruster

An alternative solution for installing a stern thruster on your boat is combining the standard CT – tunnel thruster (electric or hydraulic) with the MAX POWER stern adaptor, as shown below:

Ø Diameter	Tunnel Thrusters	Stern Adaptors	
125mm	 CT 45	 3 15399	Stern Adaptor fixation kit 35016
185mm	 CT 80 CT 100 CT 125	 3 15392	
250mm	 CT 165 CT 225	 3 15395	
315mm	 CT 325	 35015	



MAX POWER's Stern Adaptor Cowls are easily fitted to our STERN ADAPTOR or STERN POD and allow the use of stern thrusters in relatively shallow draft applications.



Tunnel Ø (mm)	Stern adaptors	Stern adaptor cowls	A (mm)	B (mm)	C (mm)
125mm	315389	315398	672	168	336
185mm	315392	315399	842	253	336
250mm	315395	315400	1019	303	415
315mm	35015	-	390	0	390

Combining the cost effective simplicity of DC electric with the **high performance characteristics of retractable units**, this range is ideally suited to modern sailing yachts and super fast motor yachts. MAX POWER offers two different types of electric retractable thrusters: **the low profile Compact Retract™** and **the vertically retracting VIP 150 Electric**, catering for yachts from 30'-60'. (MAX POWER patented designs).

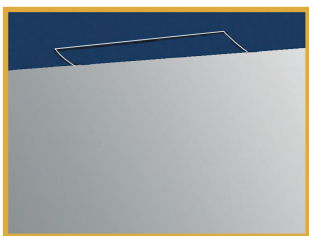
- Retract to leave smooth hull lines
- When deployed ideal immersion depth is achieved
- Patented composite drive legs
- Zero maintenance
- Case hardened spiro-conical gears
- Line shields
- Purpose built DC motors
- Electronic control boxes for unrivaled safety features
- Safe, high-power connections
- Purpose built high specification DC contractors



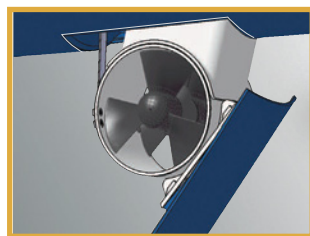
High specification electric motors. See page 8 for details.



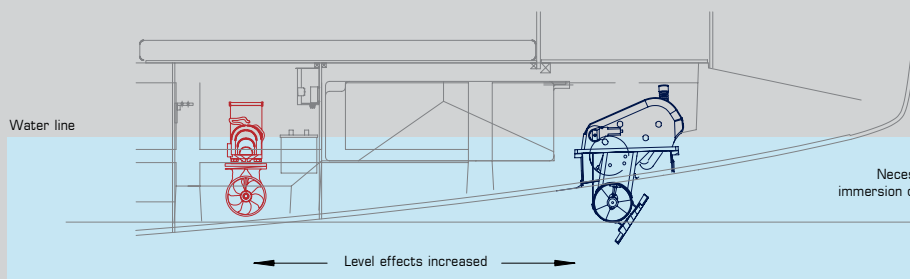
Unique composite drive leg design. See page 8 for details.



When retracted hull lines are left smooth and unaffected.



When deployed ideal immersion depth is achieved.



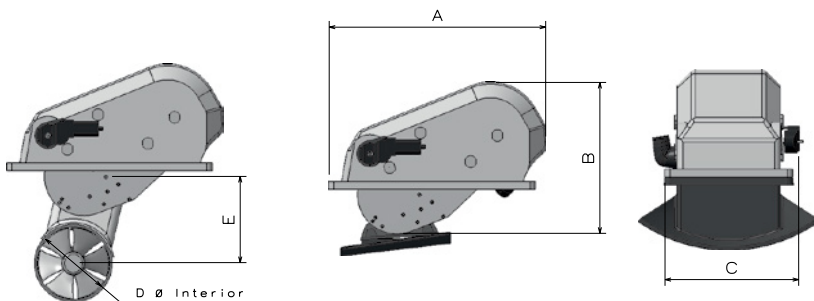
Installed further forward (or aft) in the hull than is possible with a tunnel thruster, retractable units offer a far better turning moment on the yacht thus producing greater manoeuvrability.

Designed for yachts from 9 to 16 metres (30'-52'). This lightweight electric retractable thruster, the first of its kind, has been a major success with shipyards from the start.

- Lightweight composite construction.
- Lowest profile and smallest hull opening on market.
- Bolted onto flange, not directly laminated into the hull.
- Rapid deployment.
- No exposed moving parts inside yacht.
- Splash resistant inside yacht.
- Intelligent position detection.



Model	COMPACT RETRACT™	
Code	317821	42529
Voltage*	12 V	24 V
Max Thrust (kgf/lbs)	70 / 154	85 / 187
Propellers	Duo	Duo
Power (kw/hp)	4.79 / 6.4	5.28 / 7.1
Weight (kg)	40	40
A (mm)	555	
B (mm)	388	
C (mm)	385	
D (mm)	185	
E (mm)	241	
Boat Type	Boat Length (feet/meter)	
Heavy Displacement High Windage & Cruising	21' - 40' / 9 - 12 m	35' - 45' / 10,5 - 13,5 m
Medium Displacement Medium Windage & Fast Cruising	35' - 44' / 10,5 - 13 m	39' - 50' / 11,5 - 15 m
Light Displacement Light Windage & Super Fast Cruising	36' - 47' / 11 - 14 m	40' - 51' / 12 - 15,5 m



The compact retract is delivered along with black joystick and support.



Mounting Base

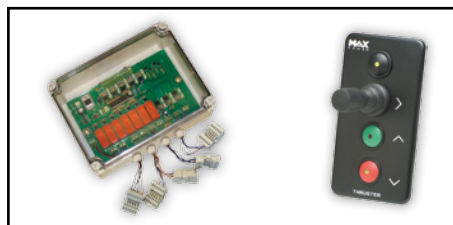
- Code: 311362** Aluminium flange
- Code: 313760** GRP Mounting Base



MAX POWER's vertically retracting **VIP thrusters** use a unique and patented thrust plate design. **The largest electric thruster in the MAX POWER range**, the **VIP 150** is available in both 12V and 24V and is ideally suited to high performance sailing yachts and super fast motor yachts 40'-60'.

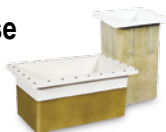


Model	VIP 150 ELECTRIC		VIP 250 ELECTRIC
Code	35023	35024	35043
Voltage*	12 V	24 V	24 V
Max Thrust (kgf/lbs)	96 / 212	115 / 254	145 / 319
Propellers	Duo	Duo	Duo
Power (kw/hp)	7,1 / 9,5	8.56 / 11.5	9,5 / 12.74
Weight (kg)	40	40	54
A (mm)	330		360
B (mm)	290		360
C (mm)	710		765
D (mm)	185		250
E (mm)	970		1075
F (mm)	240		295
Boat Type	Boat Length (feet/meter)		
Heavy Displacement High Windage & Cruising	21' - 40' / 9 - 12 m		35' - 45' / 10,5 - 13,5 m
Medium Displacement Medium Windage & Fast Cruising	35' - 44' / 10,5 - 13 m		39' - 50' / 11,5 - 15 m
Light Displacement Light Windage & Super Fast Cruising	36' - 47' / 11 - 14 m		40' - 51' / 12 - 15,5 m



The VIP 150 & VIP 250 are delivered complete with black joystick, control box and 25m control system cable.

Mounting Base

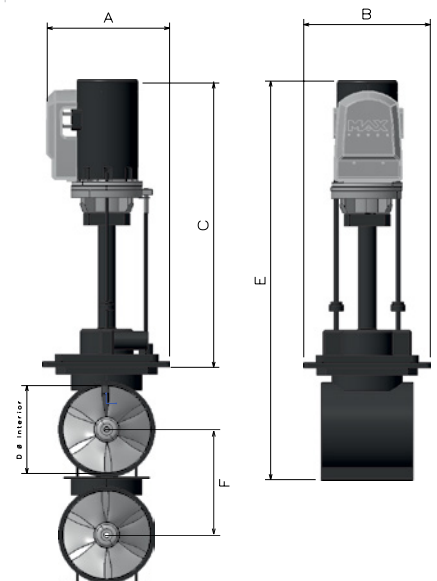


	VIP 150	VIP 250
Aluminium flange	Code: 35025	Code: 311303
GRP Mounting Base	Code: 35026	Code: 635663

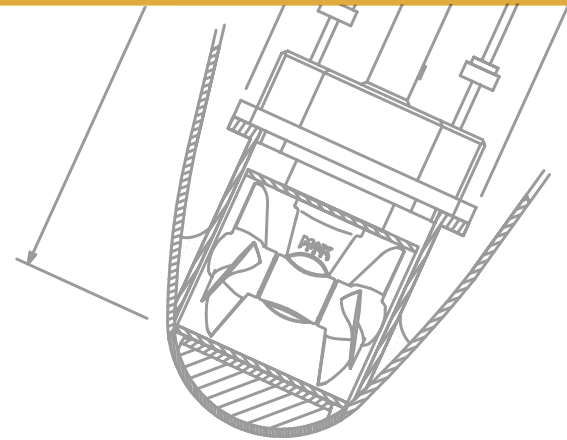
Notes: Images are not to scale.

* Thrusters are designed to run at 10.75V on 12V units and 22V on 24V units. Higher voltages will result in higher thrust ratings, higher power consumption, and a reduced duty cycle.

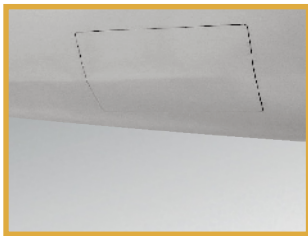
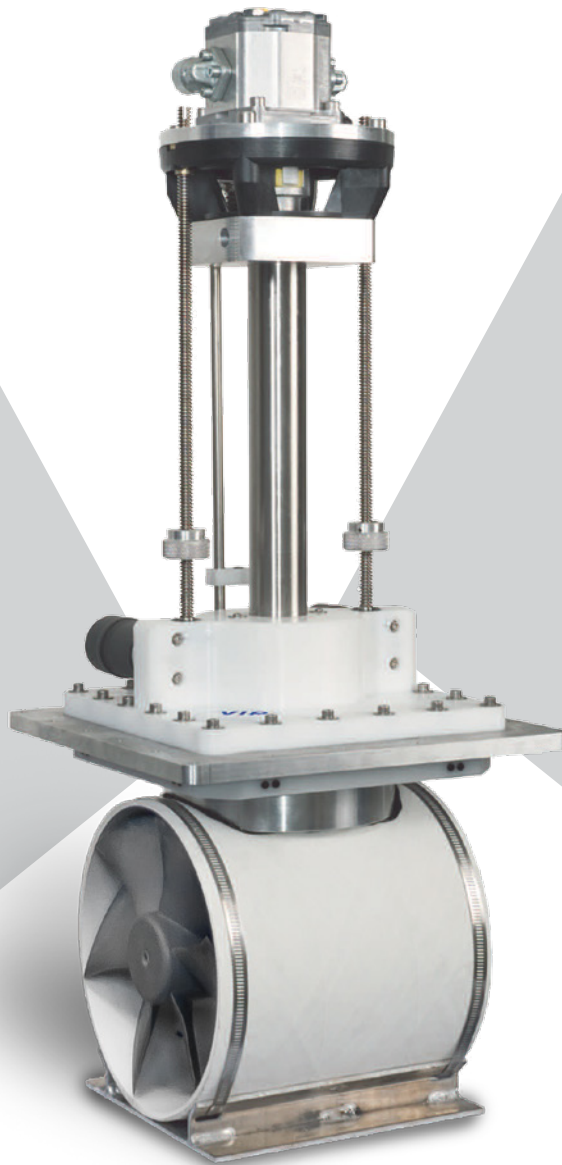
** Performance data is given for a thruster installed at an immersion depth of one tunnel's diameter, in a tunnel no longer than twice the tunnel's diameter, and this within a variation of +/- 6%. Longer tunnels will result in lower thrust ratings and higher power consumption.



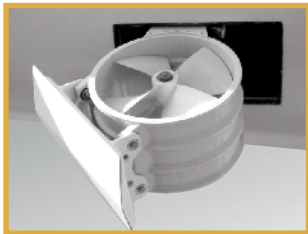
When performance is paramount, hydraulic retractable thrusters provide a perfect solution. Lightweight, powerful and allowing near perfect weight distribution, designers and prestigious yards have consistently specified MAX POWER thrusters over the years. MAX POWER offers two product ranges in this family: **the vertically retracting VIP HYD range and the top end Retract™ folding series.**



- Retract to leave smooth hull lines
- When deployed ideal immersion depth is achieved
- Water resistant
- Allow ideal weight distribution
- Ideal for high performance yachts
- Unique patented thrust plate design (VIP)
- Unique patented folding movement (Retract™)
- Case hardened spiro-conical gears
- Lightweight design



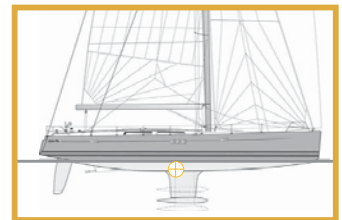
When retracted hull lines are left smooth and unaffected.



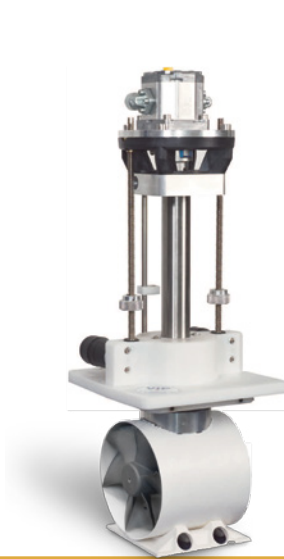
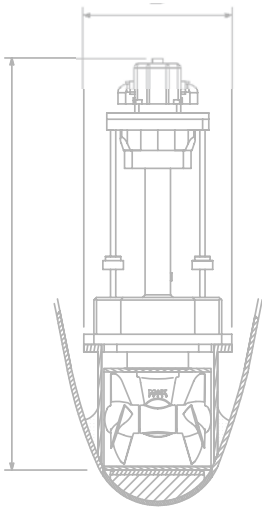
When deployed ideal immersion depth is achieved.



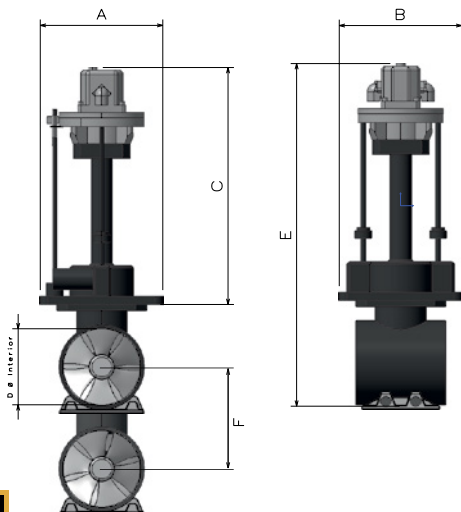
Can be installed in habitually damp areas such as sail lockers.



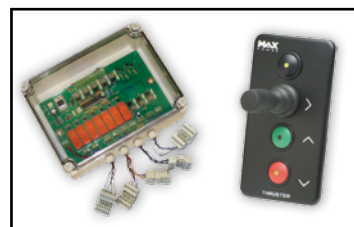
Allow ideal weight distribution in high performance yachts.



Model	VIP 150 HYD		VIP 250 HYD
Code	317702	317703	317705
Voltage	12 V control	24 V control	24 V control
Max Thrust (kgf/lbs)	120 / 264		200 / 441
Propellers	Duo		Duo
Hydraulic Power (kw)	10		13,5
Weight (kg)	28		37
A (mm)	290		360
B (mm)	290		360
C (mm)	580		620
D (mm)	185		250
E (mm)	810		950
F (mm)	240		295
Boat Type	Boat Length (feet/meter)		
Heavy Displacement High Windage & Cruising	40' - 50' / 12 - 15 m		50' - 65' / 15 - 20 m
Medium Displacement Medium Windage & Fast Cruising	45' - 55' / 14 - 17 m		54' - 75' / 16,5 - 23 m
Light Displacement Light Windage & Super Fast Cruising	48' - 60' / 14,5 - 18 m		57' - 80' / 17 - 24 m



The VIP HYD is delivered complete with black joystick and control box.

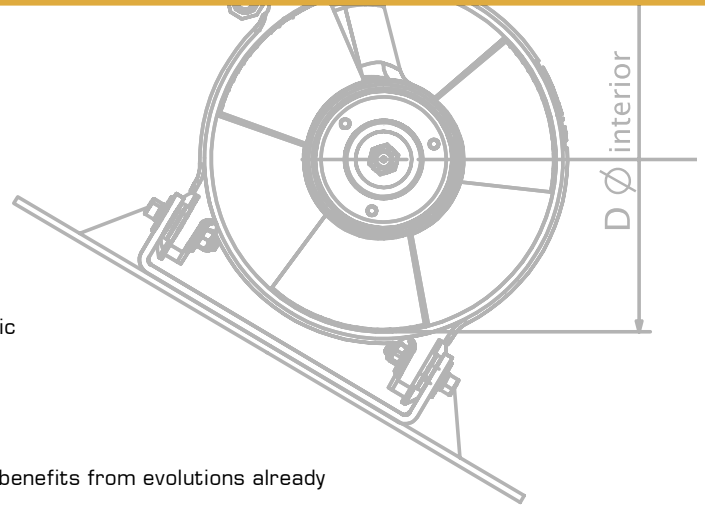


Notes: Images are not to scale

**Performance data is given for a thruster deployed at one tunnel diameter immersion depth, and this within a variation of + / - 6%.*

For more in-depth information on this range, please visit our website: www.max-power.com

R Range

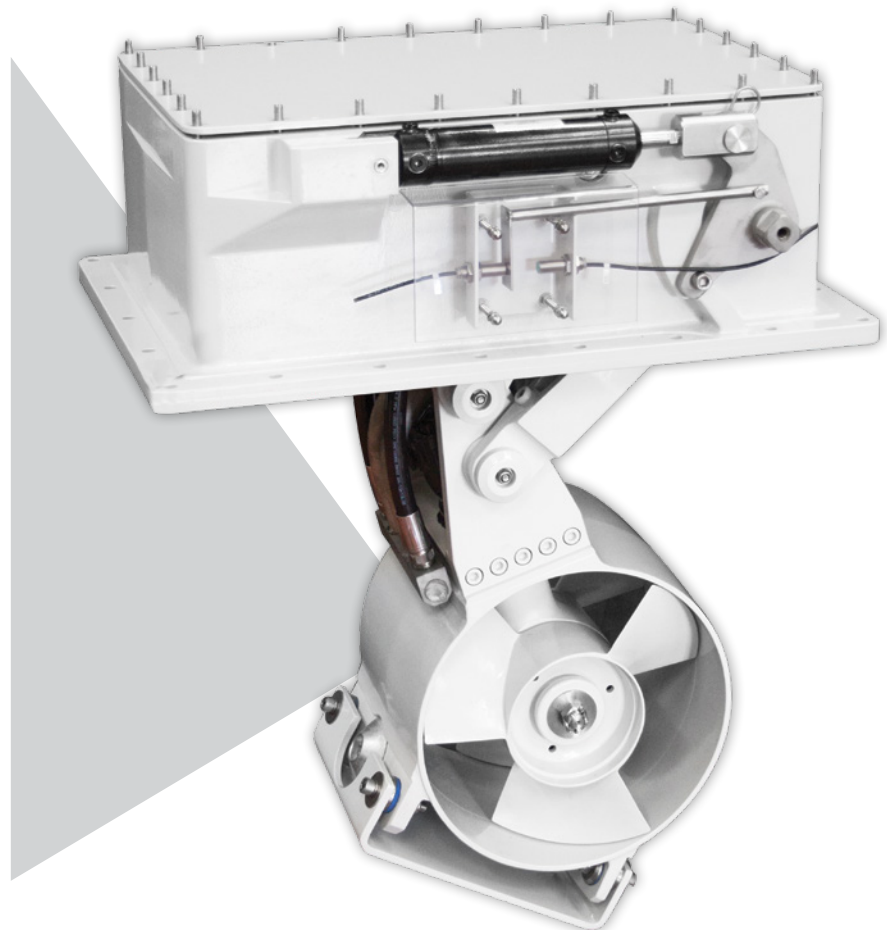


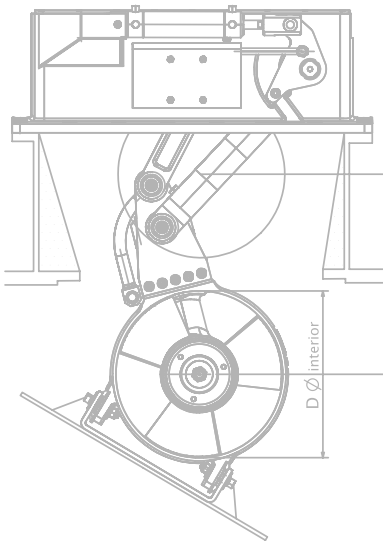
R200/6 - R200/8 Benefiting from a control system redesign, the R200 is the smallest model in the MAX POWER Retract™ range. Designed for top end production boats, this hydraulic retractable thruster has long been installed in prestigious yachts ranging from 45' - 68'.

R300/15 - R300/21 Newly redesigned, the R300 now benefits from evolutions already pioneered on the R450. Both light & powerful this unit has been consistently specified by designers around the world for many years and is ideal for yachts from 60'- 104'.

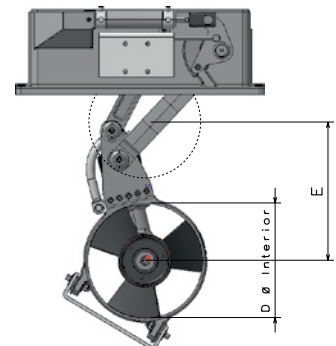
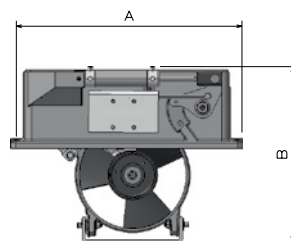
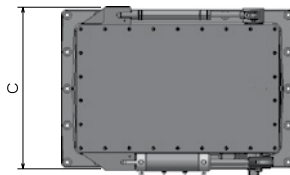
R450/34 - R450/40 - R450/50 Light & robust this thruster unit has been designed specifically for performance yachts, both sail & motor from 80'- 136'. With positive locking and a unique gas spring lifting system, the R450 can withstand the pounding that offshore performance boats endure.

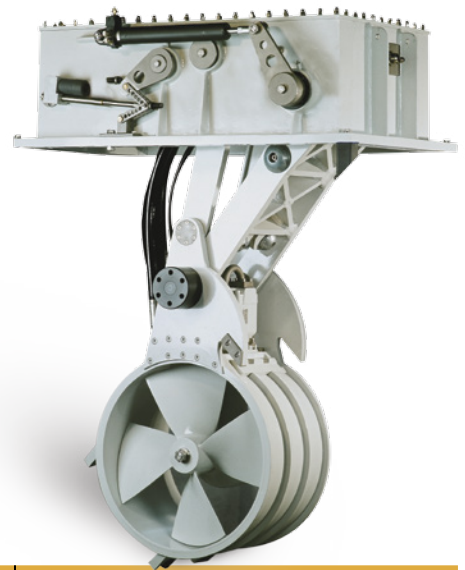
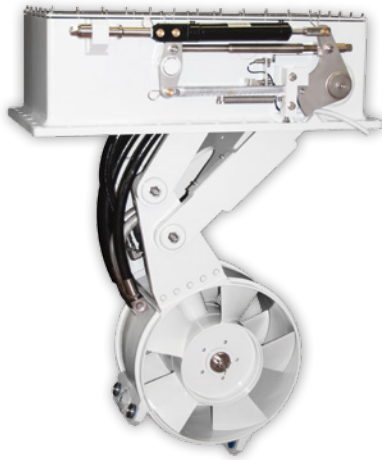
R600 An ingenious design makes this thruster the lightest and arguably the safest 100HP retractable thruster available. With a locking system inspired by aircraft cargo doors, and thrust transfer pads to transmit load to the hull, performance is first and foremost with this unit ideal for yachts from 100'- 167'.





Model	R 200/6	R 200/8	R 300/15	R 300/21
Code	317803	317804	317810	317811
Power ratings (hp)	10 / 17		20 / 34	
Thrust	10 kgf per kw		11 kgf per kw	
Max. Hydraulic power (kw)	13		25	
Hydraulic power	20 lpm / 200-230 bar	30 lpm / 220-250 bar	28-35 lpm / 220-260 bar	45-55 lpm / 230-270 bar
Power pack options	PTO & 24V		PTO & 24V	
Hydraulic motor	Piston		Piston	
Opening/closing mechanism	Electric & Manual		Hydraulic & Gas Spring	
Propellers	Duo, 2 blades		Duo, 3 blades	
Weight (kg)	35		73	
A (mm)	500		665	
B (mm)	355		500	
C (mm)	320		450	
D (mm)	200		300	
E (mm)	255		360	
Boat Type	Boat Length (feet/meter)			
Heavy Displacement High Windage & Cruising	45' - 56' / 14 - 17 m		60' - 85' / 18 - 26 m	
Medium Displacement Medium Windage & Fast Cruising	49' - 61' / 15 - 18,5 m		77' - 95' / 23,5 - 29 m	
Light Displacement Light Windage & Super Fast Cruising	53' - 69' / 16 - 21 m		75' - 104' / 23 - 32 m	





R 450/34	R 450/40	R 450/50	R 600
317813*	317814*	317912*	317819*
	50 / 65 / 80		75 / 110
	11 kgf per kw		11 kgf per kw
	60		85
	Upon Request		Upon Request
	PTO		PTO
	Piston		Piston
	Hydraulic & Gas Spring		Twin Hydraulic
	Duo, 5 blades		Mono, 4 blades
	165		320
	940		1210
	748		967
	460		985
	450		600
	540		772
	Boat Length (feet/meter)		
	80' - 110' / 24 - 33,5 m		100' - 140' / 30,5 - 43 m
	90' - 125' / 27,5 - 38 m		110' - 150' / 33,5 - 46 m
	100' - 138' / 30,5 - 42 m		125' - 165' / 38 - 50 m

Custom Services

- Several versions of each Retractable™ model are available.
- Hydraulic flow and pressure can be customised to suit hydraulic system specifications.
- Many of the larger units in this range are manufactured to order. Specified by designers and architects alike, these technically superior retractable units are supplied to many of the world's finest custom yacht builders.
- For more in-depth information on this range, please visit our website: www.max-power.com

*For further details on full package units, assemblies and components, please refer to page 26

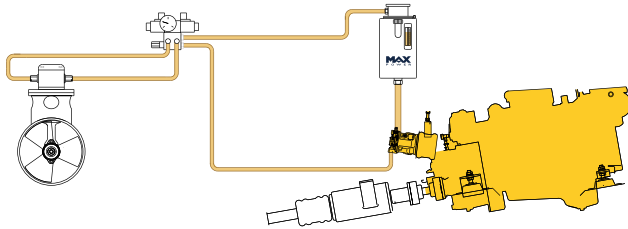
RETRACT RANGE: FULL PACKAGE UNITS, ASSEMBLIES & COMPONENTS

Model	Code	HP	FLOW	PRESSURE	MOTOR
R200/6	317803	10	22 lpm	200-230 bar	6 cc
R200/8	317804	17	30 lpm	220-250 bar	8 cc
R300/15	317810	20	28-35 lpm	220-260 bar	15 cc
R300/21	317811	34	45-55 lpm	230-270 bar	21 cc
R450/34	317813	50	110 lpm	210 bar	34 cc
R450/40	317814	65	170 lpm	170 bar	40 cc
R450/50	317912	80	200 lpm	180 bar	50 cc
R600	317819	110	200 lpm	250 bar	65 cc

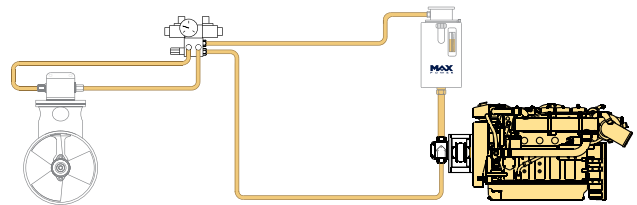
	Code	Description
Full Package Units	317801	RETRACT R200/6 24V (Complete Package)
	317802	RETRACT R200/8 24V (Complete Package)
	317807	RETRACT R300/15 ELECTRO PUMP 24V (Complete Package)
	317809	RETRACT R300/21 ELECTROHYDRO (Excludes Electro-pump)
317801 R200/6 Package includes	317803	THRUSTER ASSEMBLY R200/6
	312950	ELECTRONIC CONTROLLER VIP/R200
	318224	JOYSTICK VIP & RETRACT GREY
	316504	MAX POWER DISTRIBUTION BLOCK
	313456	TANK 8Ltr WHITE COMPLETE (filter etc.)
	316511	ELECTROPUMP BK8/8.5cc
317802 R200/8 Package includes	317804	THRUSTER ASSEMBLY R200/8
	312950	ELECTRONIC CONTROLLER VIP/R200
	318224	JOYSTICK VIP & RETRACT GREY
	316504	MAX POWER DISTRIBUTION BLOCK
	313456	TANK 8Ltr WHITE COMPLETE (filter etc.)
	317904	ELECTRO HYDRAULIC PUMP BK13/11cc
317807 R300/15 Package includes	317810	THRUSTER ASSEMBLY R300/15
	633652	ELECTRONIC CONTROLLER R300
	318226	JOYSTICK BLACK FOR R300/R450
	316501	MAX POWER DISTRIBUTION BLOCK
	313450	TANK 12Ltr WHITE COMPLETE (filter etc.)
	317905	ELECTRO HYDRAULIC PUMP BK14/11cc
	316515	LIFTING PUMP R300 (> 2007)
317809 R300/21 Package includes	317811	THRUSTER ASSEMBLY R300/21
	633652	ELECTRONIC CONTROLLER R300
	318226	JOYSTICK BLACK FOR R300/R450
	316501	MAX POWER DISTRIBUTION BLOCK
	316515	LIFTING PUMP R300 (> 2007)
Thruster Assemblies	317813	RETRACT R450/34 (Thruster Assembly ONLY)
	317814	RETRACT R450/40 (Thruster Assembly ONLY)
	317912	RETRACT R450/50 (Thruster Assembly ONLY)
	317819	RETRACT R600/60 (Thruster Assembly ONLY)
317813 R450/34 & 317814 R450/40 & 317912 R450/50 Additional Components	316515	LIFTING PUMP R450
	633652	ELECTRONIC CONTROLLER R450
	318226	JOYSTICK BLACK FOR R300/R450
317819 R600/60 Additional Components	313352	POWER LIFT R600
	318226	JOYSTICK BLACK FOR R300/R450
		CONTROL BOX Upon Request

Thruster only hydraulics systems

Hydraulic thrusters need a carefully designed hydraulic system to run them reliably and efficiently. Often this system may only be required for the yacht's thruster(s). The most common form of thruster only system uses an engine as its power source. These can offer unlimited run times and do not need batteries or high power cables. Two types of hydraulic pumps can be used for these dedicated systems.



Variable displacement pump fitted to gearbox mounted PTO



Fixed displacement pump fitted to generator mounted PTO

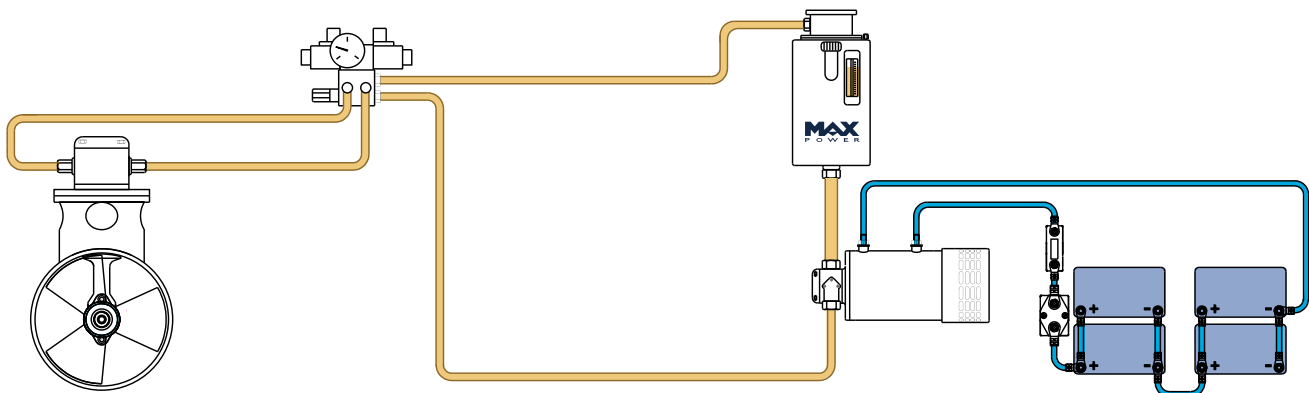
Variable displacement pumps

A variable displacement pump can be used when a fixed flow is needed but the engine RPM is likely to vary. This would typically be a main engine or gearbox mounted pump. Often used on large powerboats, these systems offer a powerful solution for larger thrusters.

Fixed displacement pumps

Used when a generator with a PTO (power take off) is available, fixed displacement pumps give a single (fixed) flow at a given engine RPM. Highly robust, these systems are simple to install and cost effective.

Dedicated electric hydraulic powerpacks™



Sometimes an engine driven pump may not be feasible. If this is the case, MAX POWER manufactures a range of dedicated DC power packs specifically designed to run our range of hydraulic thrusters both retractable and tunnel. These have been designed to supply a fixed flow of oil at a specific pressure.

Although still fundamentally a DC thruster, a hydraulic unit run from a DC power pack offers a host of advantages over conventional DC thrusters.

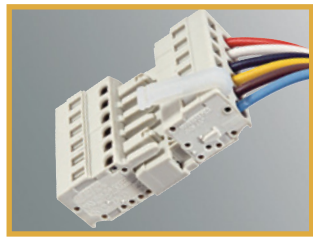
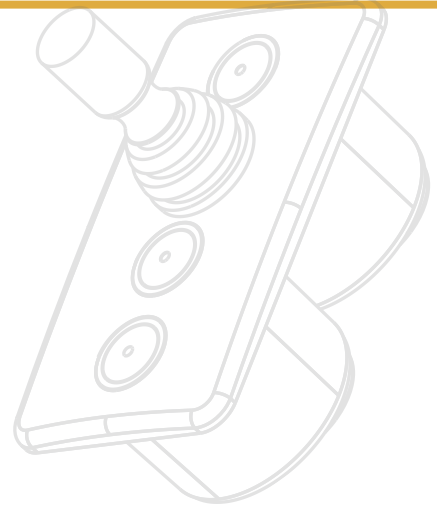
- Better weight distribution in the yacht
- The ability to fit the thruster unit in habitually damp and even wet areas such as sail lockers
- Allows the DC motor to be placed close to the batteries that supply it, whilst still enabling the installation of the thruster(s) in the yacht's extremities

Whether run from a DC motor or an engine, MAX POWER can supply a full range of components including all necessary accessories such as a variety of oil tanks and control valves.

In both cases MAX POWER can advise and assist in the design of an efficient system suited to your needs.

All control panels are **specially designed for use with MAX POWER's complete range** of tunnel and retractable thrusters. Fitted using a simple hole saw cut-out, panels are easy to install and benefit from a simple and easily replaceable weatherproof clip-on cover. **Each panel is complete with both male and female connectors using a reusable connection system.**

- Available in black or grey
- Water resistant
- Easy to fit
- Replaceable clip-on cover
- Safety features
- Control panels
- Water



Reusable connections.



Easy to fit.



Easy to replace clip-on cover.

MAX POWER's thruster control systems are childproof and incorporate unique safety features.

The control system software monitors for incoherent signals, stray voltage, and abnormally long thrust signals in order to help protect against malfunctions caused by water ingress and short circuits. Visual and audio alarms provide a 10 second warning before the overheat shutdown function is activated. If left idle for thirty minutes, the system switches itself off automatically.

Designed with technical details such as independent control power supply (protects relays against damage due to low voltage), and standard remote electric battery isolator control, MAX POWER's system is clearly ahead of the competition. These effective mechanisms ensure that your MAX POWER thruster is both safe and reliable thus guaranteeing peace of mind onboard.

- Childproof activation
- Automatic shutdown after 30 minutes of inactivity
- Visible and audible motor overheat warning
- Motor overheat shutdown after prior warning
- Standard automatic battery isolator control
- Time delay switch between port and starboard thrust
- Software protection against short circuits

MAX POWER strongly recommends the installation of an automatic battery isolator device when installing thruster systems.

NEW

Proportional Electronic System Kit for Tunnel Thrusters



3

Compatible with:
Electric tunnel thrusters

Code: 72632

MAX POWER has developed an innovative Proportional Electronic System that can be delivered ready to be installed on new MAX POWER thrusters or to upgrade older units. Making it easier to keep stock while being flexible, offering our customers more options.

MAX POWER's Proportional Electronic System encourages the captain to use the full potentials of Max power Thrusters. With the tips of his finger, the captain can move proportionally the stern or the bow of the boat simply by moving the joystick's lever left or right.

The installation of the Proportional Electronic System is very simple due to its plug and play connections either you have already installed an electric tunnel thruster with conventional control or you install a complete system from the beginning.

Included:

1. Proportional Electronic Controller for Electric Tunnel Thrusters, 12-24V

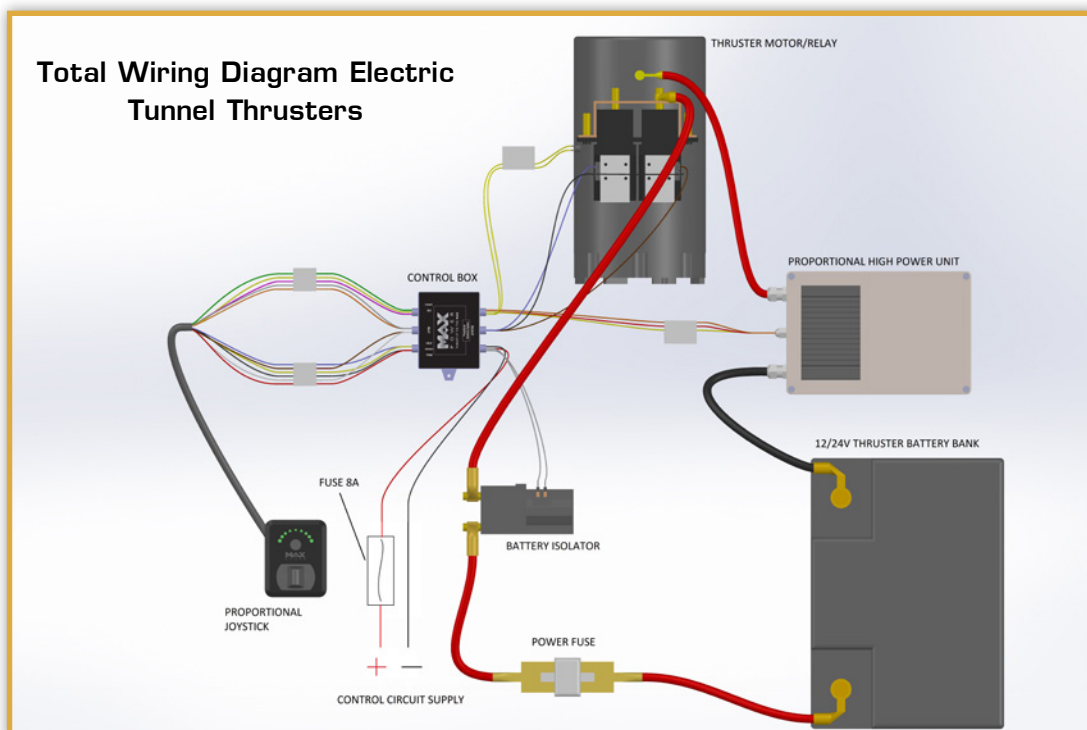
Proportional input to the power module - Plug & Play - Child proof activation protection - Auto power off after 30 minutes idle state - Coil current of the power relay is not going through the control circuit - Power supply can be different than the power supply - 3sec delay switch between port and starboard thrust - 100% Battery Isolation (The controller is able to switch on or off an electronic circuit breaker) - Shutdown on thruster over-heat - Auto switch off after 2 min of continuous thrust.

2. Proportional High-Power Unit for Electric Tunnel thrusters, 12-24V, 900A

Proportional Output to the thruster - Plug & Play - Compatible with all CT electrical MAX POWER thrusters - Able to support motors up to 25kW (900A, 24V) - Power unit must be the closest possible to the battery pack.

3. Proportional Joystick for Electric Tunnel Thrusters, 5V

Proportional Input to the controller - New Design - Visual thrust LED indication - IP67, Plug & Play - installation hole diameter 51mm - Simple serial control connection.



Waterproof Rating IP 67



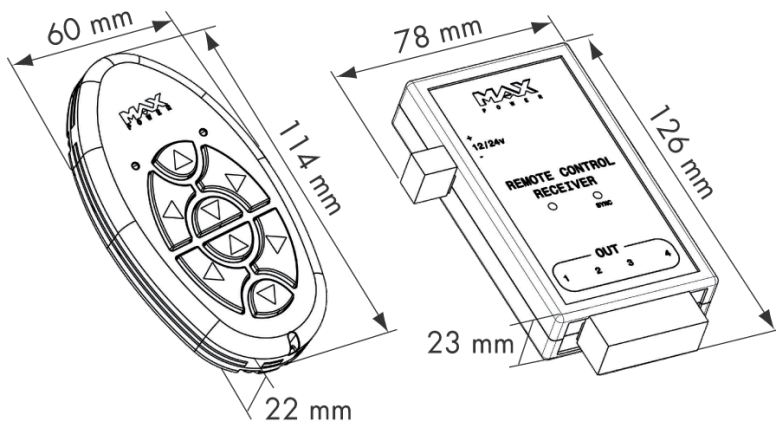
Model	Touch panel		Joystick Simple		Joystick Double	
Code	318200	318201	318202	318203	318204	318205
Color	Black	Grey	Black	Grey	Black	Grey
Compatible with	All tunnel thrusters		All tunnel thrusters		All tunnel thrusters	
Dimension	65 x 65 mm		65 x 65 mm		65 x 117 mm	



Radio remote controls

MAX POWER Radio remote control is designed to work with our entire range of tunnel and retractable thrusters. The remote control can also be used to operate additional onboard equipment such as windlasses, passerelles, cranes, etc.

- Transmitter rated IP 67
- Supports up to 8 independently control channels
- Each receiver can switch 4 channels (12/24V -2A)
- Each transmitter can handle 2 receivers (8 channels)
- Digital recognition avoids accidental activation of other systems
- Zero power consumption when in standby mode(transmitter)
- Easy to install and set up, simple to use





Touch Panel Double	Joystick		Joystick Simple	Control Panel Boat
318233	318206	318224	318226	318234
Black	Black	Grey	Black	Black
All retractable thrusters, in combination with 318204 - 318205 - 318234	Compact Retract all VIP & R200		R300 & R450	Combined use of a bow and stern thruster
65 x 117 mm	65 x 117 mm		65 x 117 mm	65 x 117 mm

Code	312973	312974	312971	312972	312969	312970
Description	Transmitter & receiver (EU)	Transmitter & receiver (USA)	Additional receiver (EU)	Additional receiver (USA)	Spare transmitter (EU)	Spare transmitter (USA)
Frequency*	868MHz	915MHz	868MHz	915MHz	868MHz	915MHz
Number of buttons (Transmitter)	8	8	-	-	8	8
Voltage	12-24Vdc (receiver)		12-24Vdc		2pcs of 3V size CR2430	
Operative temperature	-10:+60					
IP protection rated (transmitter)	67	67	-	-	67	67
Max contacts amperage(A), (Receiver)	2	2	2	2	2	2
Weight(gr)	310	310	100	100	85	85
Dimension(mm)	114x60x22 (transmitter) 126x78x23 (receiver)		126x78x23		114x60x22	

* 868 MHz is the authorised frequency for Europe and Australia. 915 MHz is the authorised frequency for Canada and the USA. Retail sales and use of non-authorised frequency transmitters and receivers is prohibited. For all other countries please consult the local regulation in force.

Tinned Copper marine grade wire and cable



MAX POWER realizes the importance of high quality, reliable electrical marine grade wire and cable. In both wet and dry conditions, marine cable needs to behave consistently in order to perform properly. That is why **MAX POWER** decided to supply only the best electrical marine grade wire and cable.

Single core, Tinned

Code	Size	Color	Sectional Area (mm ²)	Overall Diameter (mm)	Meters per reel	Uses
70351	1x1,5mm ²	black	1,5	3	100	Indoor & Outdoor Lighting / Navigation Lights
70352		red		3	100	
70353	1x2,5mm ²	black	2,5	3.6	100	
70354		red		3.6	100	
70355	1x6mm ²	black	6	5	100	Medium Load Appliances / e.g Refrigerator
70356		red		5	100	
70359	1x16mm ²	black	16	10	50	Battery connections / Anchor Winch Supply
70360		red		10	50	
70361	1x25mm ²	black	25	11.5	50	
70362		red		11.5	50	
70363	1x35mm ²	black	35	13	50	
70364		red		13	50	
70365	1x50mm ²	black	50	15	30	
70366		red		15	30	
70367	1x70mm ²	black	70	17	30	
70370		red		17	30	
70371	1x95mm ²	black	95	20	30	
70372		red		20	30	
70368	2x1,5mm ²	black	1,5	7	100	Small loads / e.g. Lighting, small bilge pumps
70369	2x2,5mm ²	black	2,5	9.4	100	

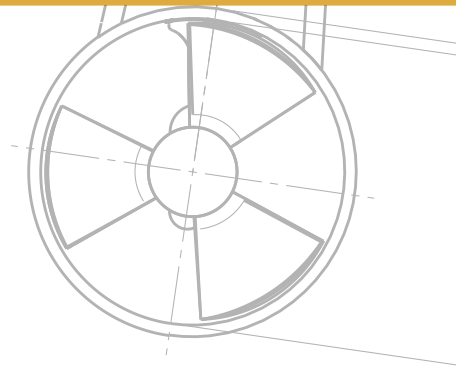
Twin core, Tinned

Code	Size	Color	Sectional Area (mm ²)	Overall Diameter (mm)	Meters per reel	Uses
70368	2x1,5mm ²	black	1,5	7	100	Small loads / e.g. Lighting, small bilge pumps
70369	2x2,5mm ²	black	2,5	9.4	100	

* Temperature: ≤ 105 °C

Command cables, linking the controller (ie Joystick) to the thruster's control box:

Code	Description	Sectional Area (mm ²)	Temperature (°C)	Overall Diameter (mm)	Meters per reel	Uses
312781	MAX POWER Cable 6x0,5mm ² (Tunnel Thruster)	0,5	-	-	25	All Tunnel Thrusters (CT)
312948	MAX POWER Cable 10x0,5mm ² (VIP, Compact & R-series)	0,5	-	-	25	All Retractable Thrusters (VIP, Compact Retract & R-series)

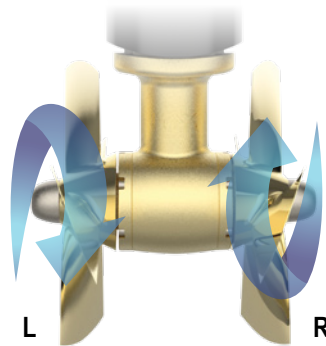


- Less Noise
- Higher Efficiency

Propellers

Code	35030	35041	35040	35042	313810	35033
Thruster Model	CT25	CT35 / 45	CT60 / 80 / 100 / 125 VIP 150 & Compact retract	CT165 / 225 & VIP 250	CT300	CT325
Diameter (mm)	Ø 110	Ø 125	Ø 185	Ø 250	Ø 300	Ø 315
Colour	Black	Grey	Grey	Grey	Black	Black

Code	636242	636243
Thruster Model	CT550	CT550
Type	Left	Right
Diameter (mm)	Ø 375	Ø 375
Colour	Broze	Broze



Counter Rotating

Product Innovation:

- Protective caps
- Corrosion resistant
- Precision machining
- Without oil pipelines
- Without porosity
- 4 sealed bearings

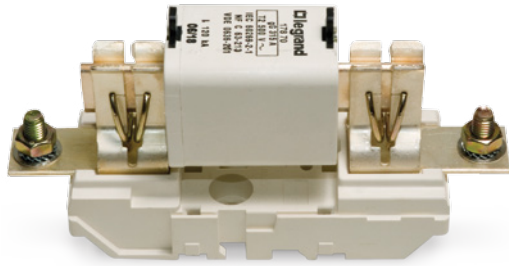
Product Advantages:

- Maintenance free
- No electrolysis
- Plug & Play
- Lower costs



Legs

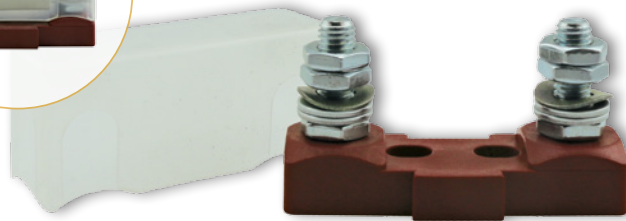
Code	636098	315318	310376	35034	315321	35035	315388	315324	315411	636256
Thruster model	CT25	CT35	CT45	CT60	CT165 / 225	CT80 / 100 / 125	CT300	CT325	CT325	CT550
Contruction	Composite						Bronze		Aluminium	Bronze
Diameter (mm)	Ø 110	Ø 125	Ø 125	Ø 185	Ø 250	Ø 185	Ø 300	Ø 315	Ø 315	Ø 400
Proppellers	Mono	Mono	Duo	Mono	Duo	Duo	Duo	Duo	Duo	Duo



Fuses (electric tunnel and retractable thrusters)

MAX POWER offers a range of calibrated fuses specifically selected model by model and tested fuses. Chosen taking into account each fuse's specific blow curve, MAX POWER fuses match the requirements of each thruster system.

Thruster model	CT25/35/45	CT60	CT80 / C. Retract	CT60 / CT80 / C. Retract	CT100 / VIP150	CT125 / VIP150	CT165 / 225	CT300 / 325
Voltage	12 V	12 V	12 V	24 V	12 V	24 V	24 V	24 V
Amp	125 A	160 A	200 A	125 A	315 A	200 A	250 A	400 A
Fuse	35021	35019	35020	35021	35022	35020	35027	35028
Fuse holder	35017	35017	35017	35017	35018	35017	35018	35018
Extractio handle	312882 (for all models)							



NEW

Thruster model	CT25	CT35 / CT45	CT60 / CT80 C. Retract	CT60 / CT80 / C. Retract	CT100 / VIP150	CT125 / VIP150	CT165	CT225
Voltage	12 V	12 V	12 V	24 V	12 V	24 V	24 V	24 V
Amp	150 A	175 A	225 A	175 A	400 A	225 A	325 A	400 A
Fuse	636342	636343	636344	636343	636346	636344	636345	636346
Fuse holder	636347							



Electric battery isolator

Code	318400	318401
Accessory	Electric battery isolator	
Voltage	12 V	24 V

WARNING:
Please use original MAX POWER fuse and battery isolator for warranty



Mounting bases

Mounting bases to suit all of our retractable thrusters are available to facilitate installation. Manufactured from isophtalic GRP, they can be easily integrated into new builds or retro-fitted. Aluminium yachts are catered for suitable aluminium flanges. These are designed to be welded to the top of a mounting base constructed in the hull.

Code	311362	35025	311303	313760	35026	635663
Description	Aluminium flange			GRP Mounting Base		
Suitable for	Compact Retract	VIP 150	VIP 250	Compact Retract	VIP 150	VIP 250



GRP tunnels

Manufactured from fully isophtalic resin and pre-gel coated, MAX POWER's high quality tunnels have the added advantage of a first coat of matt before being filament wound. Cutting and drilling can therefore be carried out without the risk of damaging the gel coat on the inside surface of the tunnel.

Thruster model	CT25	CT35 / CT45	CT60 / CT80 / CT100 / CT125	CT165 / CT225	CT 300	CT325	CT550
Tunnel diameter	110 mm	125 mm	185 mm	250 mm	300 mm	315 mm	400 mm
Tunnel length	Reference						
500 mm	-	42546	-	-	-	-	-
750 mm	636062	42547	42549	-	-	-	-
1000 mm	636063	313804	42550	42553	-	-	-
1250 mm	-	313809	-	-	-	-	-
1500 mm	-	-	42551	42554	313811	35004	-
2000 mm	-	-	-	-	313812	42557	636210
2500 mm	-	42548	42552	42555	-	-	-



Stern adaptors

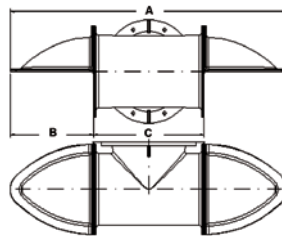
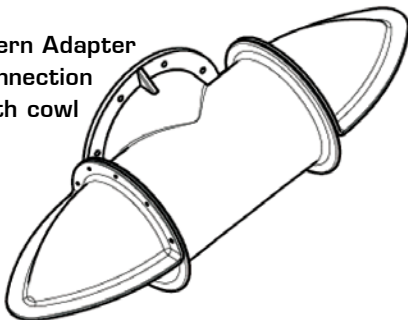
Also manufactured from fully isophtalic resin, MAX POWER's range of stern adaptors are SMC moulded (sheet moulding compound) in a male / female steel mould. This ensures perfect resin fibre ratio and exceptional reproduction of form.



Cowls

Cowls are easily fitted to the stern adaptors and allow the use of stern thrusters in relatively shallow draft applications.

Stern Adapter connection with cowl

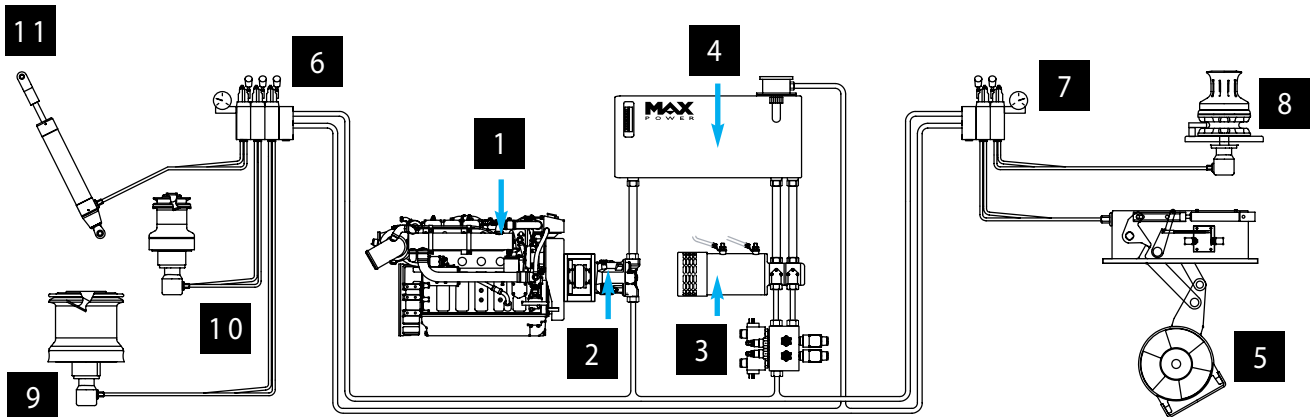
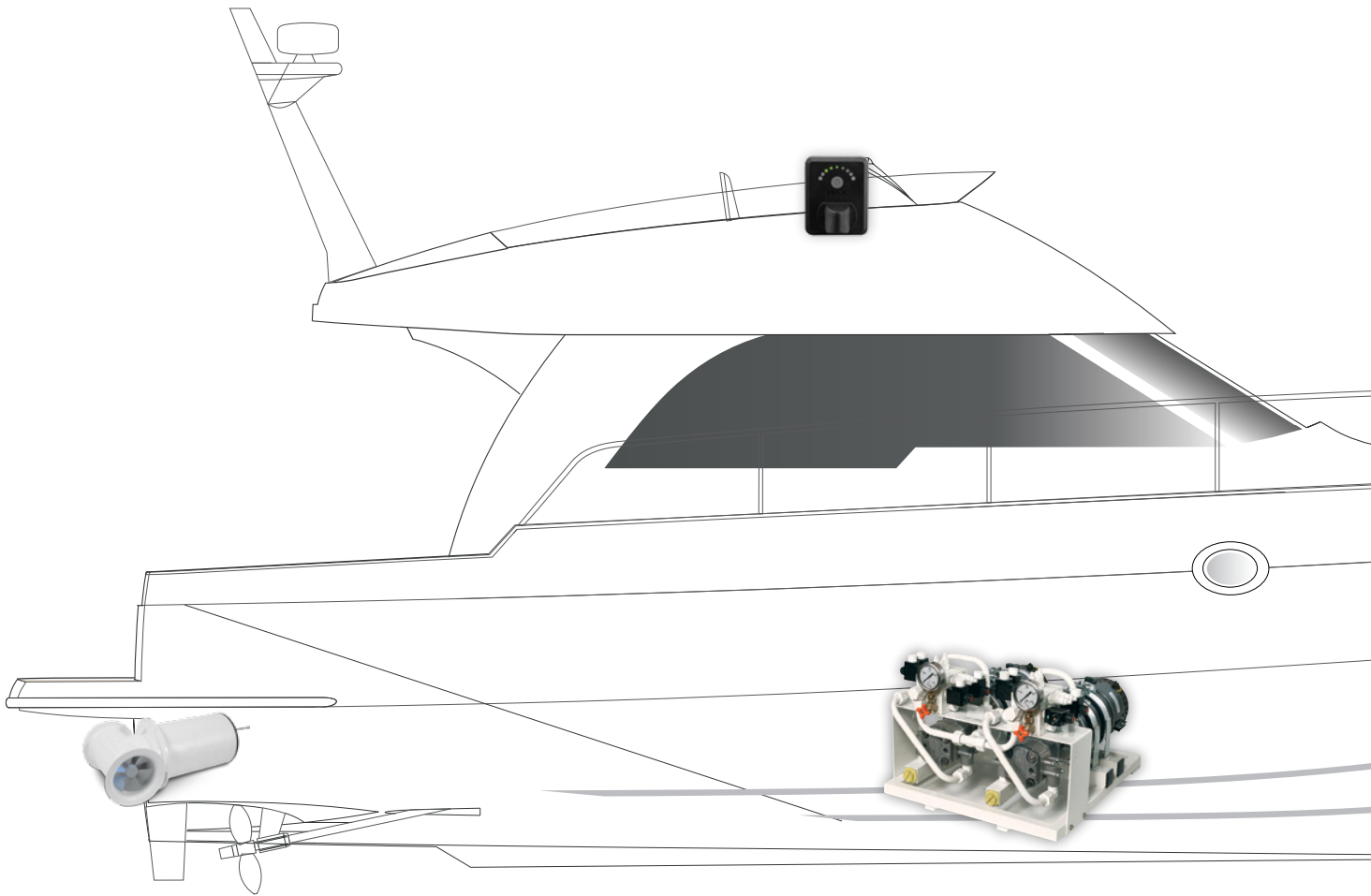


Tunnel Ø (mm)	Stern adaptors	Stern adaptor cowls	A (mm)	B (mm)	C (mm)
125mm	315389	315398	672	168	336
185mm	315392	315399	842	253	336
250mm	315395	315400	1019	303	415
315mm	35015	-	390	0	390

Stern adaptor fixation kit (for all models) Code: 35016

As of 2013, a strong partnership has been built among Lofrans' and MAX POWER thrusters creating a synergy in yacht control and maneuvering solutions.

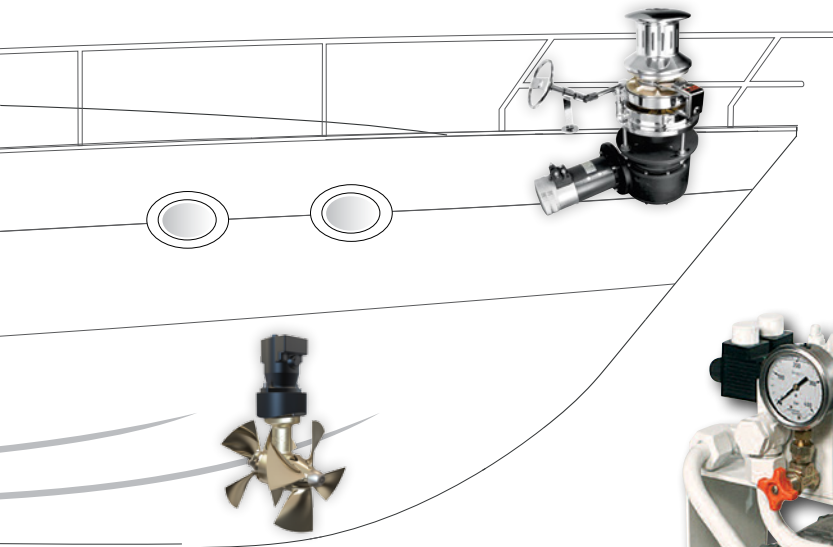
From simple stand-alone independent units, MAX POWER is now able to offer fully integrated hydraulic systems for sailing and motor yachts. Whether running winches, windlasses, bow thrusters, stern thrusters, hydraulic davits or complex keel lifting mechanisms, our complete hydraulic solutions are used by many of the world's large sailing and motor yacht manufacturers. Unique in their flexibility, our systems are built using a common central line principle.



This means that any function can be run from any power source thereby allowing a high level of user control. The use of load sensing pumps and valves ensures efficient and silent operation over a wide range of hydraulic flows and pressures. Our experience in designing and supplying complete solutions ensures that a MAX POWER-Lofrans' integrated system will be efficient, flexible and reliable.

Sailing yacht power systems typically include one or several generator mounted hydraulic pumps and in addition will require a DC power pack for silent sailing and light maneuvering. The Power-Valve™ power pack range used in our systems, offers exceptional flexibility and power efficiency over a wide range of hydraulic flows.

Available as single or twin motor units, each motor pump can deliver 3 flow ratings at two predetermined system pressures, thereby accommodating a wide variety of hydraulic functions. From high pressure, low flow keel, to a powerful high flow windlass, each function only draws the amperage needed for that specific application.



MAX POWER
offers a complete range of hydraulic parts using only the best suppliers

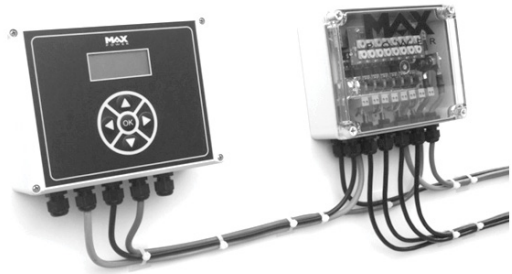


- 1 Generator with PTO
- 2 Variable displacement pump
- 3 DC power pack
- 4 Oil tank with filtration and gages
- 5 Thruster
- 6 Control Valve
- 7 Control Valve
- 8 Windlass
- 9 Winch
- 10 Winch
- 11 Hydraulic ram

Code	316511	317908	317909	317907	317911
Motor	1 x 8 KW	2 x 8 KW	1 x 13 KW	2 x 13 KW	2 x 14 KW
Settings	3	6	3	6	6
Flow range	10 < 30 lt/min	10 < 60 lt/min	10 < 30 lt/min	10 < 60 lt/min	10 < 60 lt/min
Pressure	140 < 214 bar				
Weight	35 kg	76 kg	39 kg	83 kg	87 kg

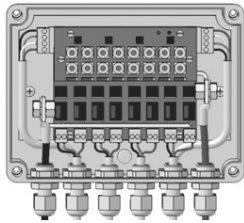
Functional Concept

When a hydraulic function is initiated, depending whether the system is running on DC or PTO POWER, a specific sequence of valves & solenoids needs to be energised. It is the electrical control system that makes sure this happens in the **correct order** & **with the correct timing**.



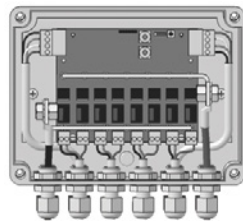
It is built using a modular construction incorporated **4 main types** of control Modules these are as follows:

IN/OUT Control Module



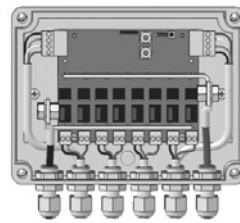
Code: 312714

DC PUMP Control Module



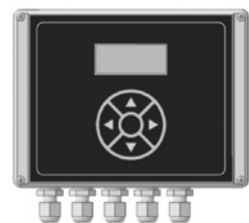
Code: 635828

PTO Control Module



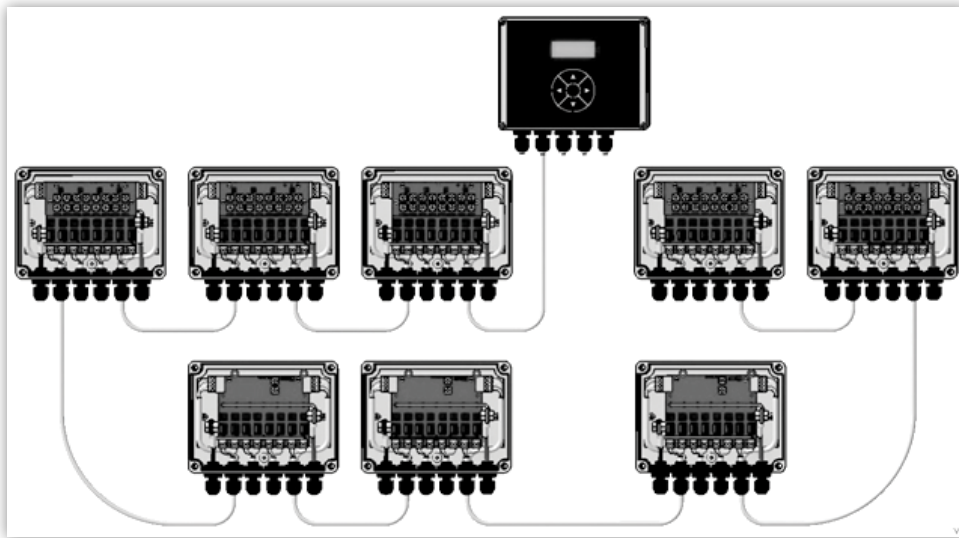
Code: 636009

Main Control Module



Code: 313359

This must be fitted in an easily accessible dry and well ventilated area. The crew must be able to consult this module rapidly and easily. This module is not water resistant.



The figure shows a typical installation system using **only 1 main control module CAN Bus trunk** Any combination of the systems shown above can be envisaged.

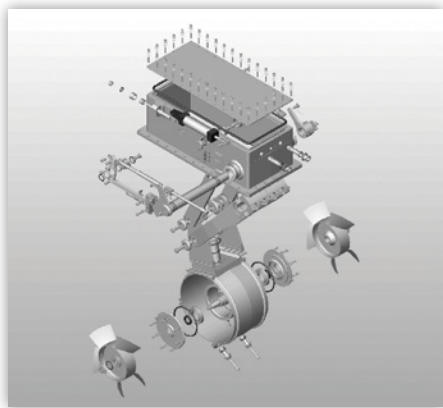
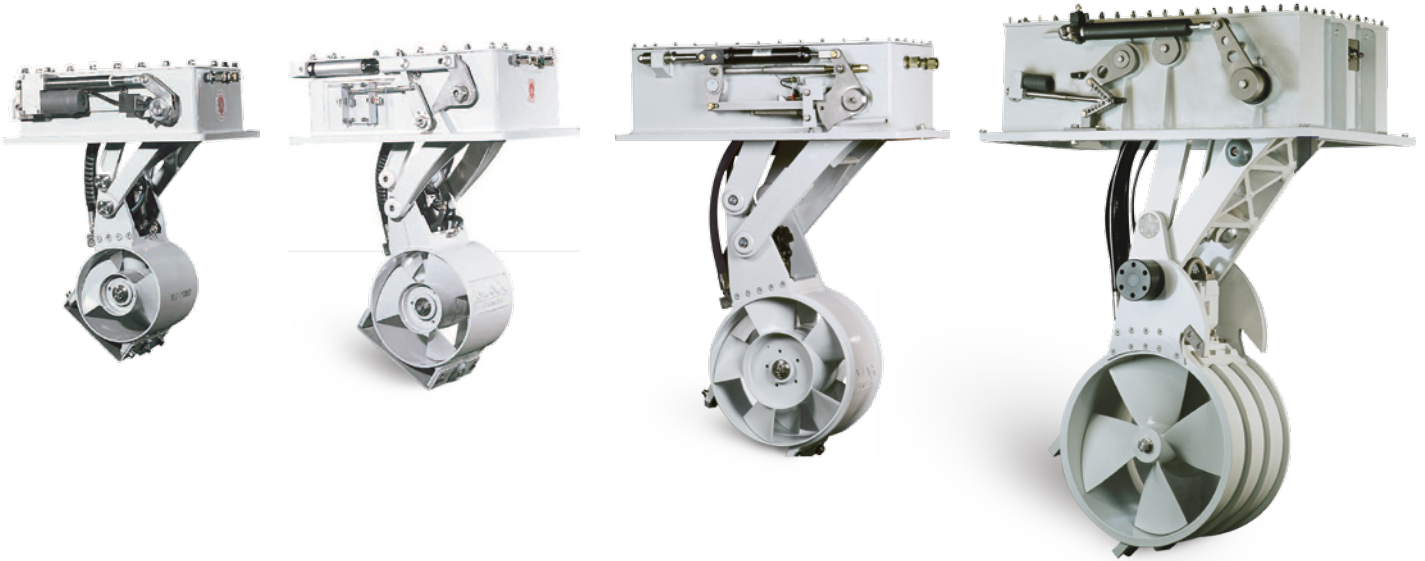
Advantages

1. Each function or 'line' can have as much input as required. This brings much needed flexibility to the super yacht build process
 2. Each channel is manually identified through the use of a unique & patented dial system

3. No PC setup is necessary! No programming is needed!
 4. Simply user interface
 5. System upgrades, adding control functions or pumps is simple and rapid



The MAX POWER Thruster Revision Program is carried out at our production facilities in Monza.



- Initial inspection and complete disassembly of your Retractable Hydraulic Thruster.
- Inspection and full report on the condition of all components, with photos of all parts requiring replacement.
- Replacement of all seals and bearings.
- Repair cost analysis through a comprehensive and detailed quotation.
- Rebuild of your unit following your approval to proceed.
- Extra option of grit-blasting of all casted parts and re-painting
- Delivery of your thruster in as "As-good-as-new" condition, with a warranty period of one year.

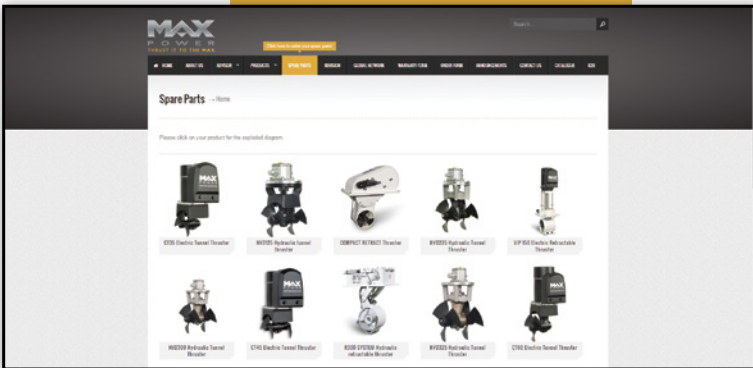


The Revision program is carried out by our experienced technical personnel, having been developed through a series of educational seminars by our engineers and marine professionals.

For further details on Revision Program please contact MAX POWER at contact@max-power.com.

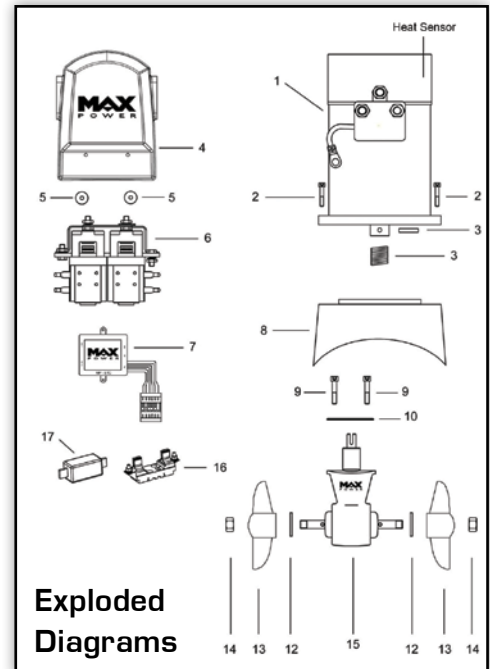
The most useful website of the industry Where you can easily "maneuver" and...

...Order **SPARE PARTS**



Complete Spare Parts Availability

- Exploded diagrams for complete range of thrusters
- Simple spare part ordering
- Simplified spare part selection - Send a spare parts request order directly to MAX POWER



...Obtain Local Support

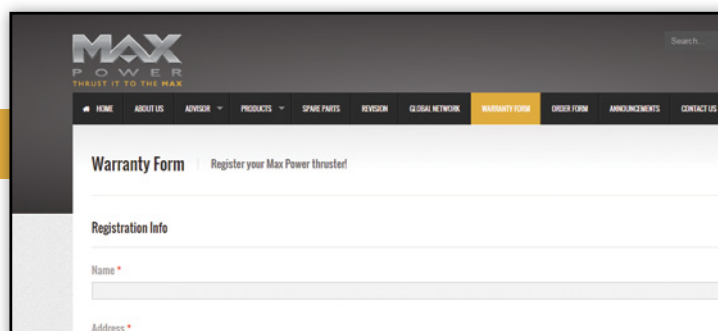
GLOBAL NETWORK

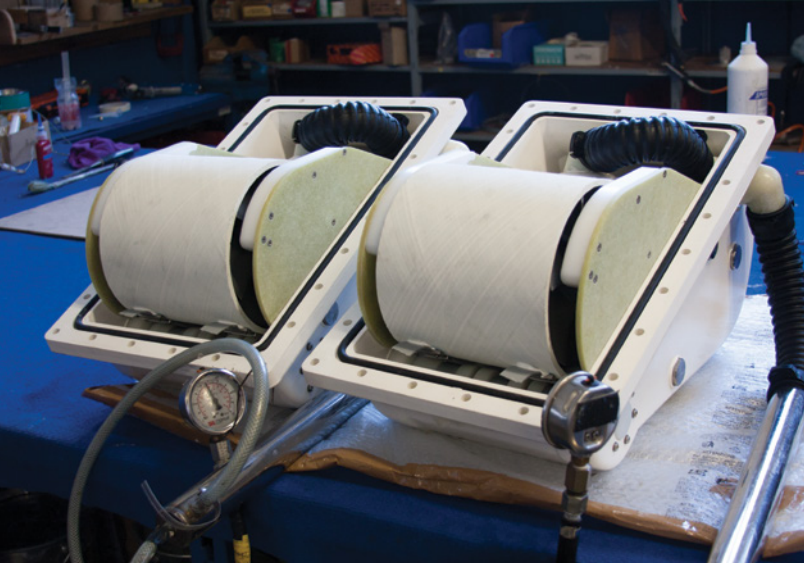
Vast Service Network at your fingertips



...Validate your **WARRANTY**

Register your unit and take advantage of the warranty period.





MAX
POWER
CONTROL TO THE MAX

