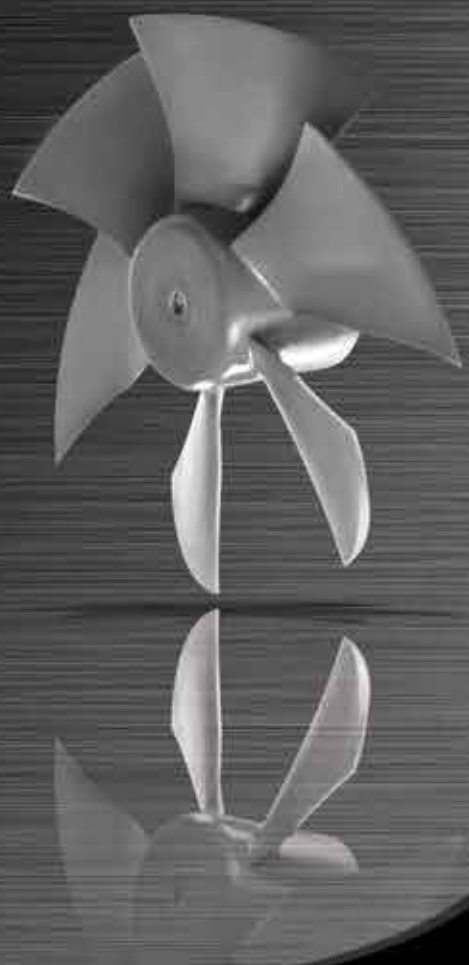
MAX POWER

THRUST IT TO THE **MAX**



SAILTEC

SAILTEC GmbH
Hasselbinnen 28
D-22869 Schenefeld
Germany

+49 40 8229940
info@sailtec.de
www.sailtec.de

2016

MAX POWER

THRUST IT TO THE MAX

Founded in 1987, Max Power has developed a wide variety of products, destined 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 and an SAP ERP system.

Max Power offers a full vessel maneuverability range, 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 a dedicated group of followers.

Renowned for supplying high quality products, Max Power has remained dedicated to designing and producing innovative and often unique solutions which all strive to bring ultimate performance into the world of everyday yachting.

With more than 25 years of experience in designing and manufacturing leisure marine products, there is certainly a Max Power bow thruster, stern thruster or related equipment to meet your requirements.

www.max-power.com

Famous quality

Innovative solutions

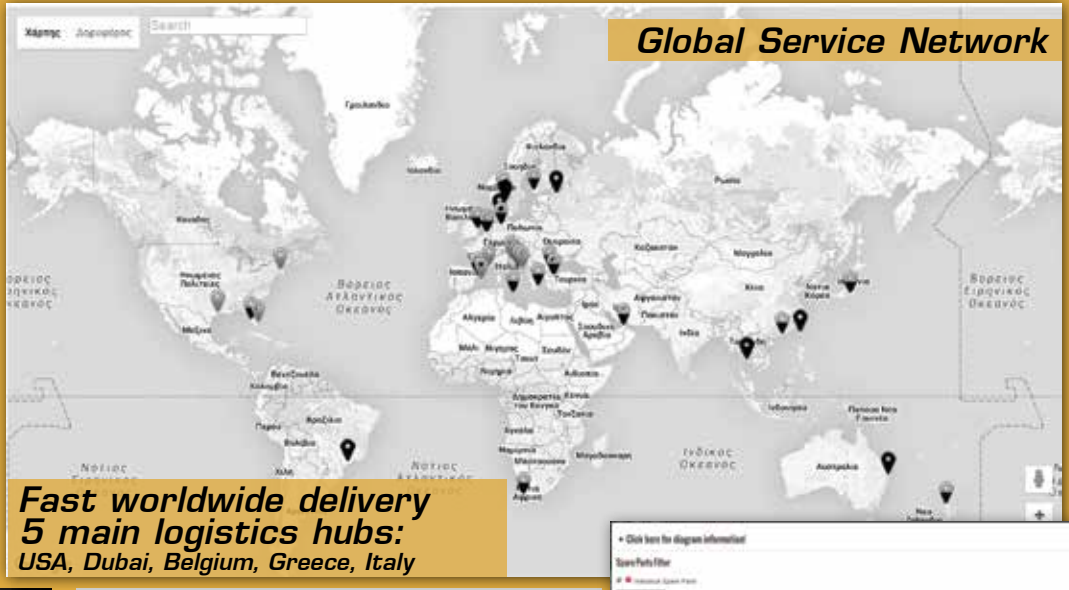
Compact Retract

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

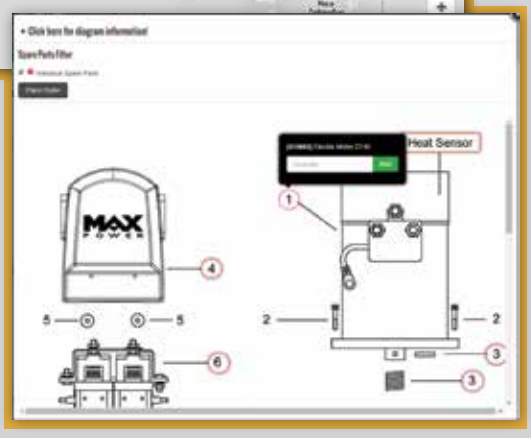
Composite Leg

- Maintenance free
- Easy fit
- No corrosion

Worldwide Customer Satisfaction



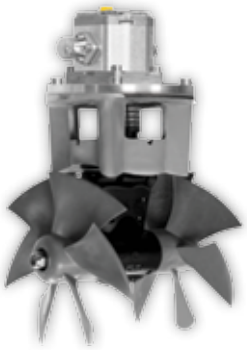
Fast worldwide delivery
5 main logistics hubs:
USA, Dubai, Belgium, Greece, Italy

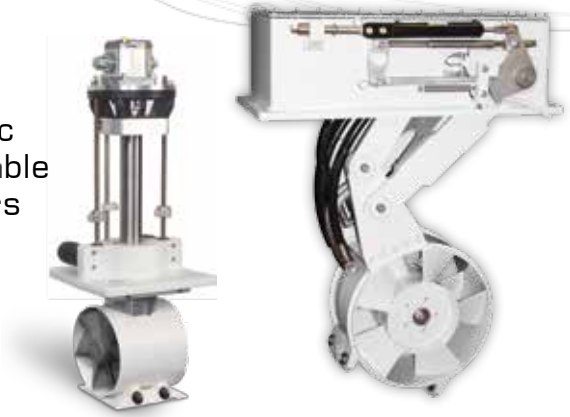


Spare Parts:
Easy web ordering & next day dispatch

Haben Sie Fragen zum Thema? Einfach ein Email an verkauf@sailtec.de, oder 040-8229940 anrufen !

Contents





MAX POWER

THRUST IT TO THE MAX

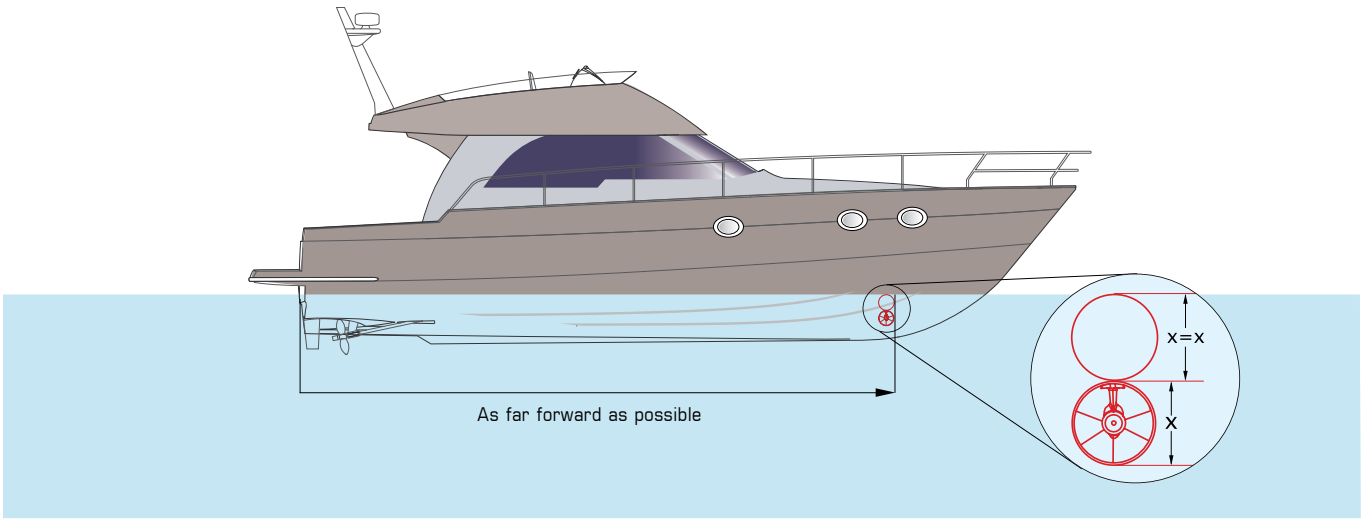
Select the right thruster

Tunnel thrusters

Positioning thrusters is often as 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 offer an ideal solution for motor yachts and even deep-footed sailing yachts when sailing performance is not paramount.



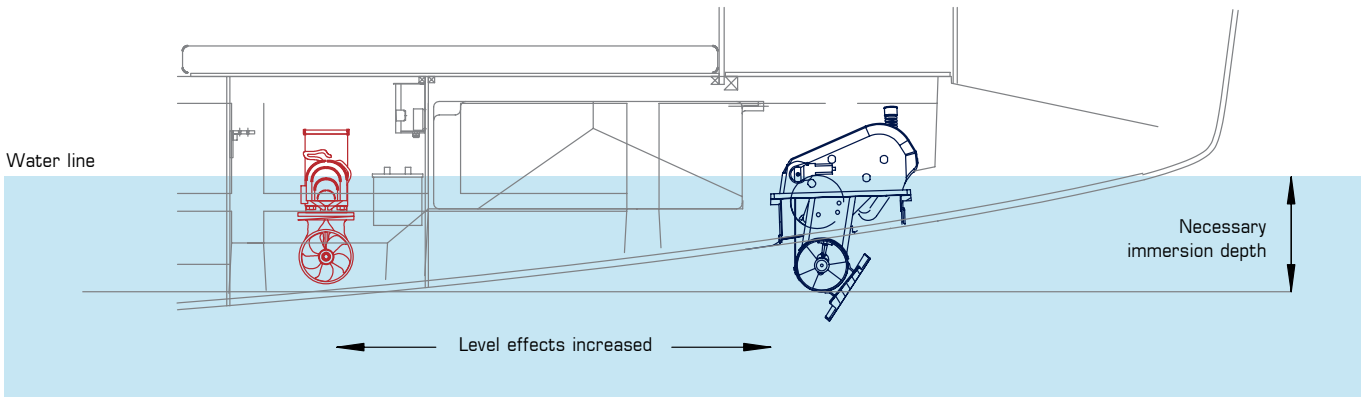
Ideal immersion depth = 1 x Tunnel diameter

Retractable thrusters

Retractable thrusters are easily installed far forward in the bow whilst still achieving the required immersion depths. This results in a thruster that has 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.

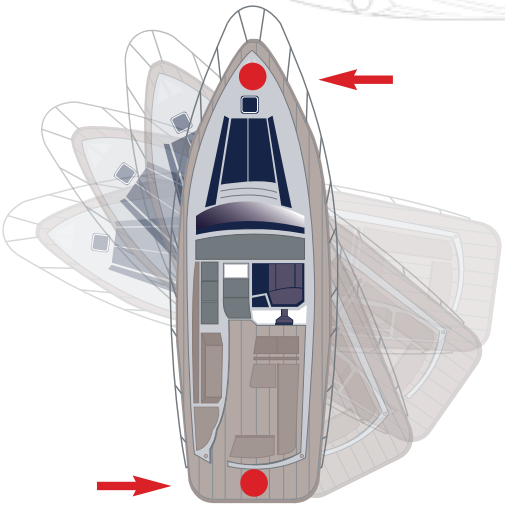
Most modern sailing yachts are better suited to retractable thrusters.



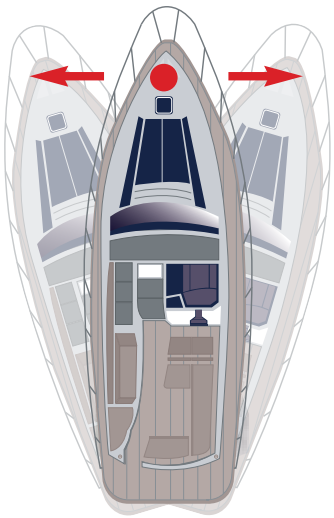
Bow and stern thrusters

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

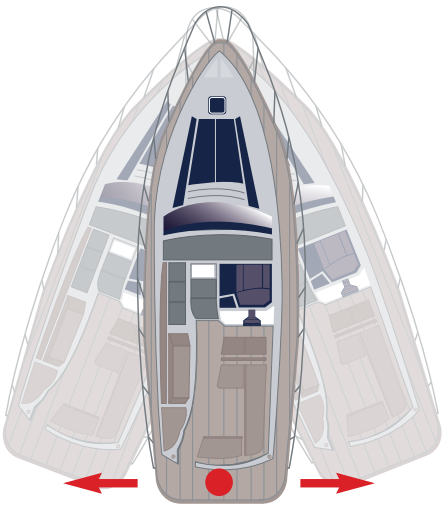
Turning on the spot or even stepping the entire yacht sideways becomes possible. Max Power offers stern thruster adapters for the entire tunnelthruster range. A range of Ignition Protected thrusters is also available enabling the use of a stern thruster in habitually damp zones.



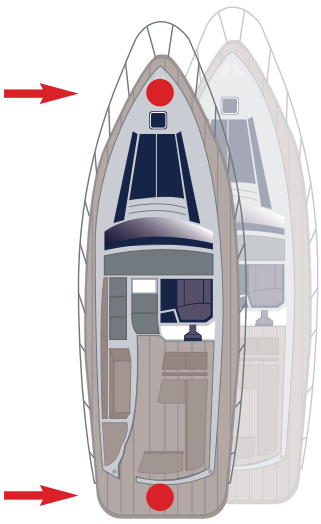
Bow and stern thruster



Bow thruster alone



Stern thruster alone



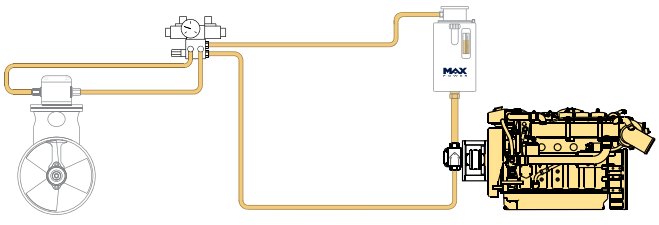
Bow and stern thruster

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.

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

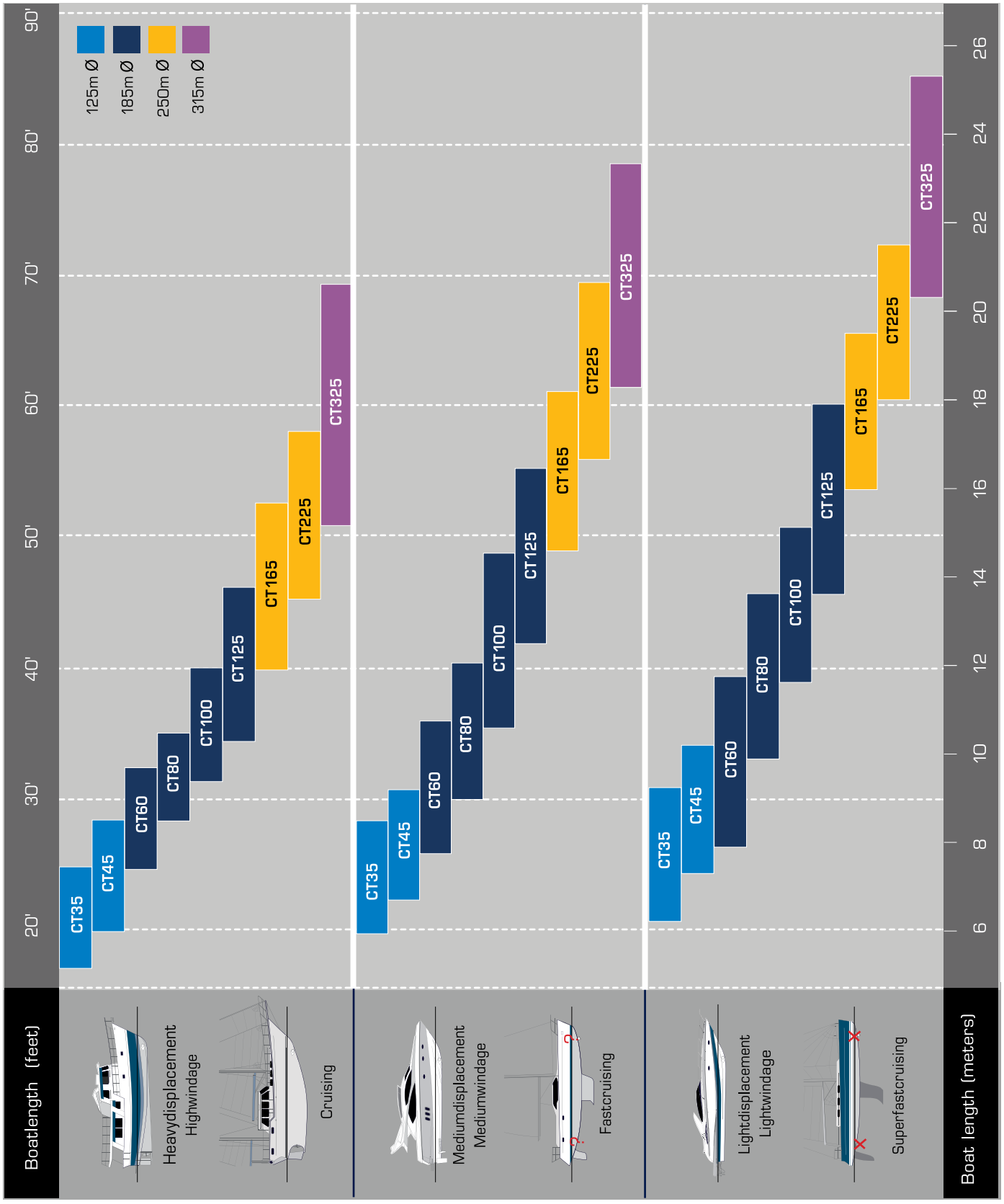
DC Electric thruster



Engine driven hydraulic thruster

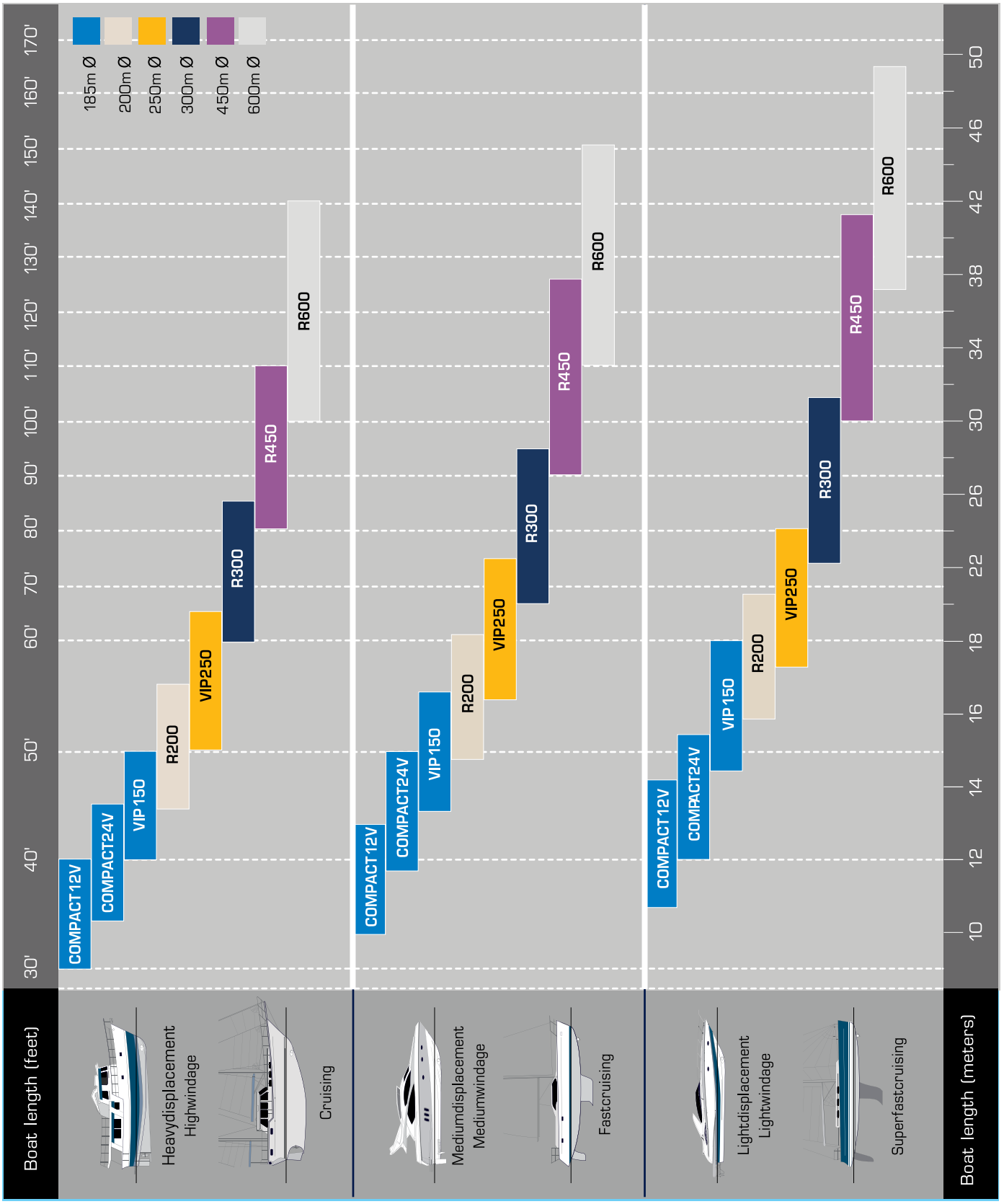
Select the right thruster

Tunnel thrusters



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

Retractable thrusters



Electric tunnel thrusters

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 performance and durability, each model is easy to fit, highly cost effective, and integrates a variety of unique features.

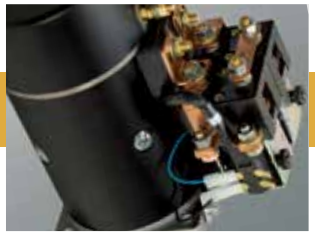
- Patented composite drive legs
- Zero maintenance
- Case hardened spiro-conical gears
- Line shields
- Purpose built DC motors
- Electronic control boxes for unrivaled safety features
- Safe, high power connections
- Purpose built high specification DC contactors

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.

Line shields protect oil seals from fishing lines and fouling.

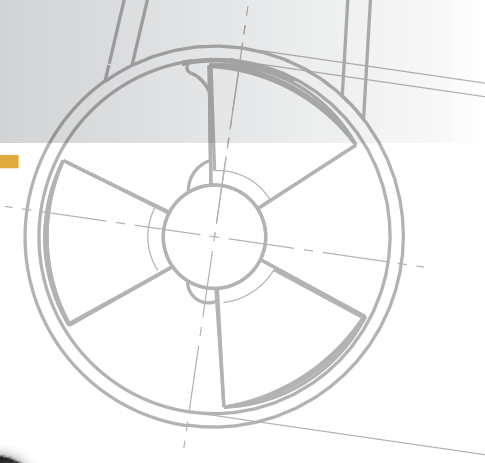


High efficiency, purpose built DCmotors ensure outstanding performance and long runtime ratings.

Electronic control boxes offer unique and unrivaled safety features.

Solid copper contact bars guarantee safe, high power connections.

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



CT 35

Code: 42529

Voltage*:	12V
Thrust (kg/lbs)**:	35 / 77
Propellers:	Mono
Power (kw/hp):	2.69 / 3.6
Weight (kg):	9.6

CT 45

Code: 317603

Voltage*:	12V
Thrust (kg/lbs)**:	39 / 88
Propellers:	Duo
Power (kw/hp):	3.23 / 4.3
Weight (kg):	9.65

CT 60

Code: 42530

Voltage*:	12V
Thrust (kg/lbs)**:	58 / 128
Propellers:	Mono
Power (kw/hp):	4.35 / 5.8
Weight (kg):	14.7

Code: 42531

Voltage*:	24V
Thrust (kg/lbs)**:	63 / 139
Propellers:	Mono
Power (kw/hp):	4.4 / 5.9
Weight (kg):	14.8

New Propellers

20% Less Noise

5% Higher Efficiency

Code: 35041 CT 35 & CT 45

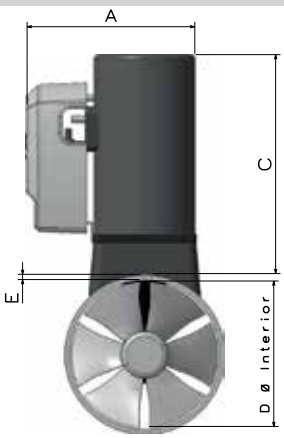
Code: 35040 CT 60

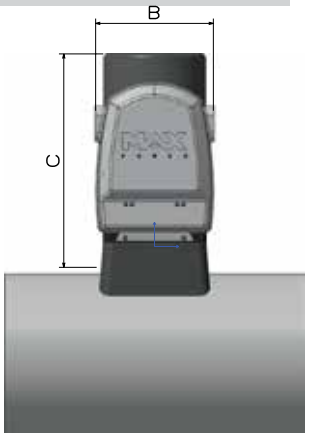
GRP tunnels

Please refer to page 33

Dimensions in mm

Model	A	B	C	D	E
CT 35	190	140	210	125	4 to 5
CT 45	190	140	210	125	4 to 5
CT 60	210	140	275	185	6 to 7





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

Code: 42532	
Voltage*:	12V
Thrust (kg/lbs)**:	69 / 152
Propellers:	Duo
Power (kw/hp):	4.79 / 6.4
Weight (kg):	15

Code: 42533	
Voltage*:	24V
Thrust (kg/lbs)**:	75 / 165
Propellers:	Duo
Power (kw/hp):	5.28 / 7.1
Weight (kg):	15.1

CT 100

Code: 42534	
Voltage*:	12V
Thrust (kg/lbs)**:	96 / 212
Propellers:	Duo
Power (kw/hp):	7.1 / 9.5
Weight (kg):	24

CT 125

Code: 42535	
Voltage*:	24V
Thrust (kg/lbs)**:	115 / 254
Propellers:	Duo
Power (kw/hp):	8.58 / 11.5
Weight (kg):	24

New Propellers

20% Less Noise

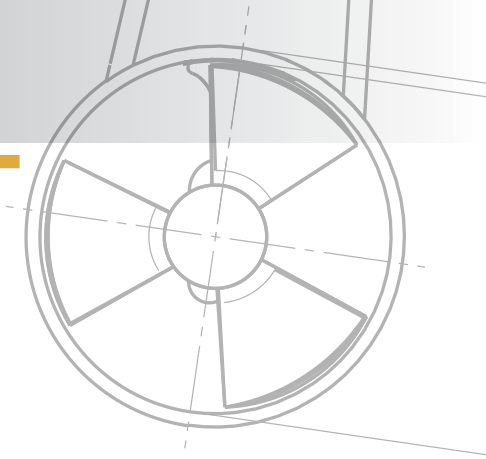
5% Higher Efficiency

Code: 35040 CT 80, CT 100 & CT 125

Code: 35042 CT 165 & CT 225

GRP tunnels

Please refer to page 33



CT 165

Code: 317557

Voltage*:	24V
Thrust (kg/lbs)**:	160 / 353
Propellers:	Duo
Power (kw/hp):	11.88 / 15.9
Weight (kg):	36

CT 225

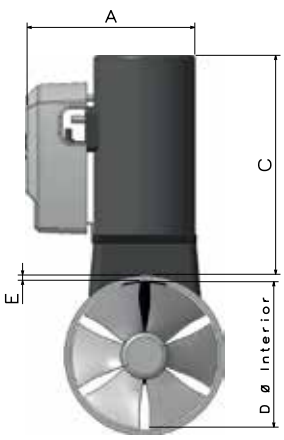
Code: 317558

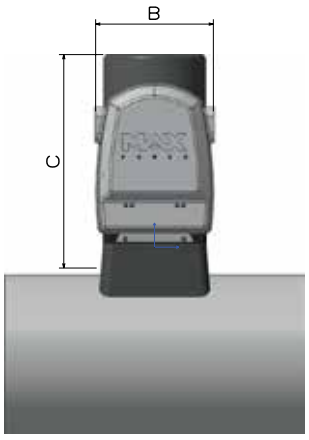
Voltage*:	24V
Thrust (kg/lbs)**:	195 / 430
Propellers:	Duo
Power (kw/hp):	14.96 / 20
Weight (kg):	37

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.*

Dimensions in mm

Model	A	B	C	D	E
CT 80	210	140	275	185	6 to 7
CT 100	250	200	365	185	6 to 7
CT 125	250	200	365	185	6 to 7
CT 165	250	200	430	250	7 to 8
CT 225	270	200	405	250	7 to 8





Electric tunnel thrusters

CT 300

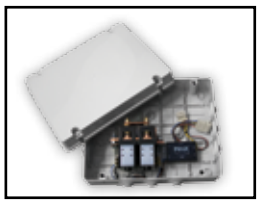
Code: 317606

Voltage*:	24V
Thrust (kg/lbs)**:	255 / 562
Propellers:	Duo
Power (kw/hp):	19.7 / 26.4
Weight (kg):	58.5

CT 325

Code: 42542***

Voltage*:	24V
Thrust (kg/lbs)**:	255 / 562
Propellers:	Duo
Power (kw/hp):	19.69 / 26.4
Weight (kg):	59



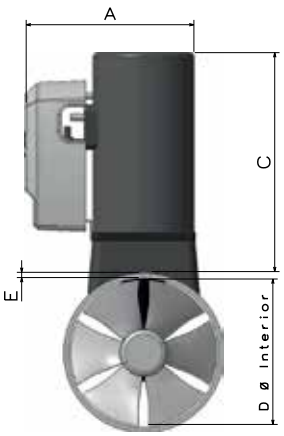
The electric tunnel CT300 & CT 325 are delivered complete with control system.

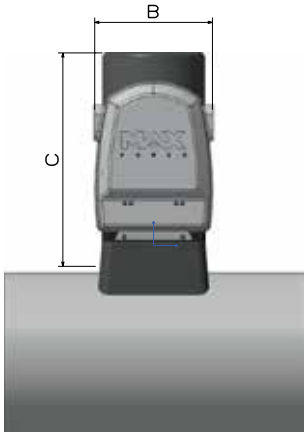
GRP tunnels

Please refer to page 33

Dimensions in mm

Model	A	B	C	D	E
CT 300	250	250	480	300	9 to 10
CT 325	250	250	480	315	9 to 10





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*


Ignition protected thrusters

Max Power's new 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.

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

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

Ignition protected thrusters

CT35-IP

Code: 317609

Voltage: 12V
Weight (kg): 11.6

CT45-IP

Code: 317610

Voltage: 12V
Weight (kg): 11.65

CT60-IP

Code: 317611

Voltage: 12V
Weight (kg): 17.3

CT80-IP

Code: 317613

Voltage: 12V
Weight (kg): 17.6

Code: 317614

Voltage: 24V
Weight (kg): 17.6

CT100-IP

Code: 317615

Voltage: 12V
Weight (kg): 27.2

CT125-IP

Code: 317616

Voltage: 24V
Weight (kg): 27.2

New Propellers

20% Less Noise

5% Higher Efficiency

Code: 35041 CT 35-IP & CT 45-IP

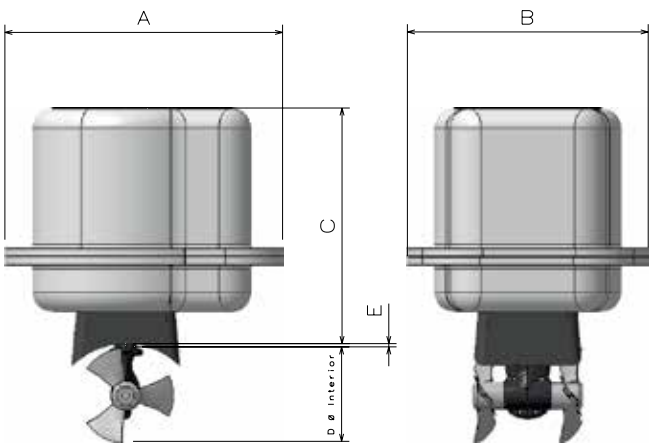
Code: 35040 CT 60-IP, CT 80-IP, CT 100-IP & CT 125-IP

GRP tunnels

Please refer to page 33

Dimensions in mm

Model	A	B	C	D	E
CT 35-IP	301	230	295	125	4 to 5
CT 45-IP					
CT 60-IP	320	255	375	185	6 to 7
CT 80-IP					
CT 100-IP	390	305	490	185	6 to 7
CT 125-IP					



Notes: : Images are not to scale.
For IP thruster specifications, see corresponding electric tunnel thruster model.


Hydraulic tunnel thrusters

Max Power's range of hydraulic tunnel thrusters are 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.

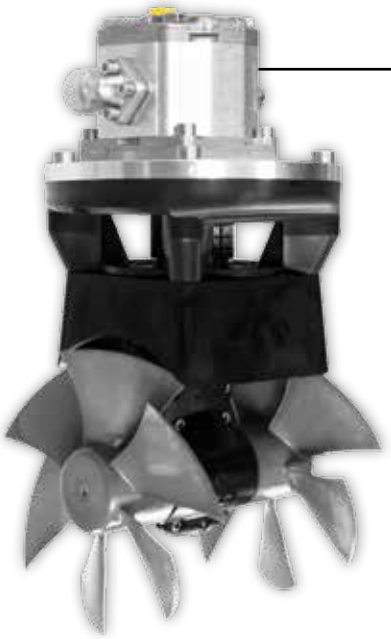
- Branded hydraulic components
- Long runtimes
- Water resistant
- Patented composite drive legs
- Zero maintenance
- Case hardened spiro-conical gears
- Line shields
- Electronic control boxes for unrivaled safety features

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.

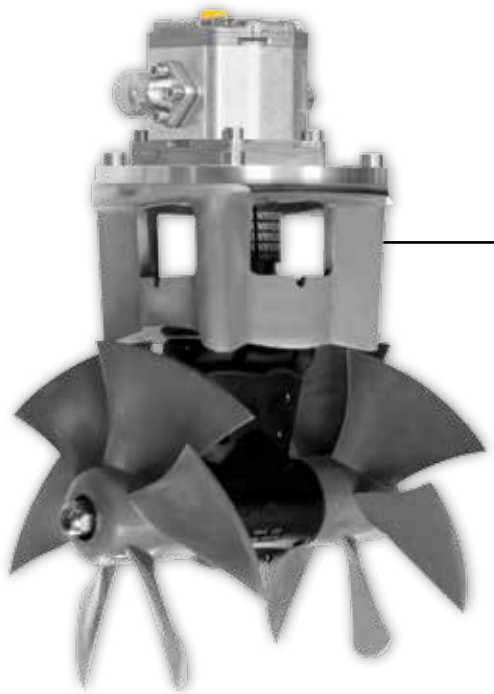


CT HYD 125

Code: 317588*
Max. thrust (kg/lbs)**: 140/308
Hydraulic power (kw): 13.5
Propellers: Duo
Weight (kg): 12

Code: 317590*
Max. thrust (kg/lbs)**: 120 / 264
Hydraulic power (kw): 11
Propellers: Duo
Weight (kg): 12

Code: 317589*
Max. thrust (kg/lbs)**: 90 / 198
Hydraulic power (kw): 7.5
Propellers: Duo
Weight (kg): 12



CT HYD 225

Code: 317591*
Max. thrust (kg/lbs)**: 200 / 441
Hydraulic power (kw): 13.5
Propellers: Duo
Weight (kg): 19

Code: 35040 CT HYD 125

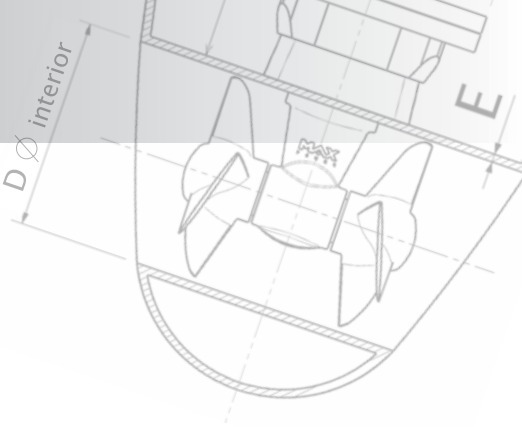
Code: 35042 CT HYD 225

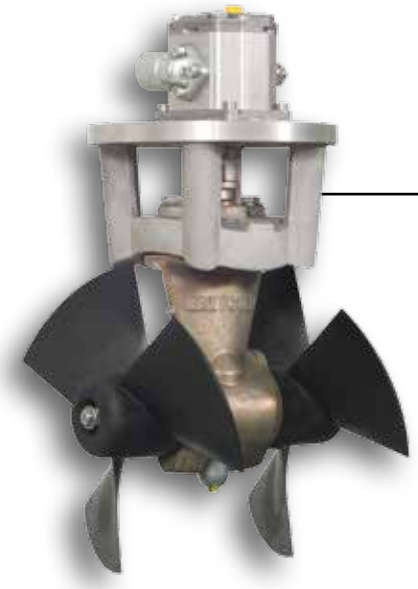
GRP tunnels
Please refer to page 33

Optional Accessories for hydraulic tunnel thrusters

Max Power Electronic Thruster Controller
Code: 315311

Only for Max Power Joystick.... page 30



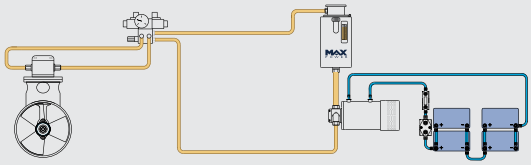


CT HYD 300

Code: 317607* / ***

Max. thrust (kg/lbs)**:	240/529
Hydraulic power (kw):	19.5
Propellers:	Duo
Weight (kg):	24

For connection with PTO or stand alone system



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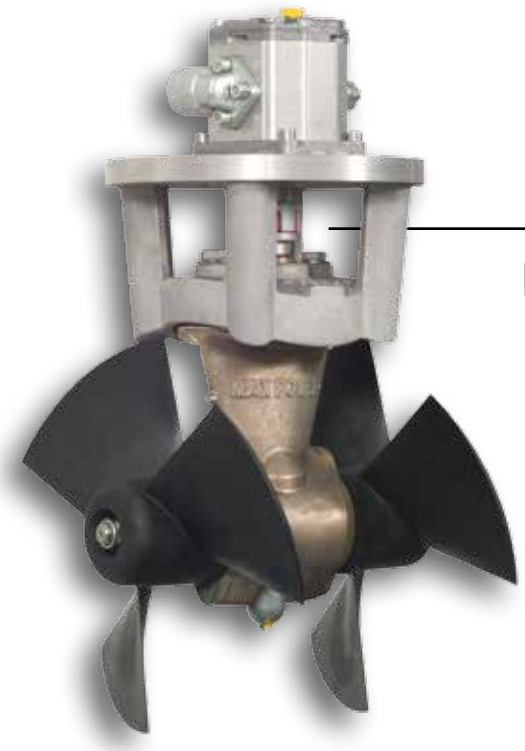


CT HYD 325

Code: 317598* / ***

Max. thrust (kg/lbs)**:	250 / 551
Hydraulic power (kw):	14
Propellers:	Duo
Weight (kg):	24

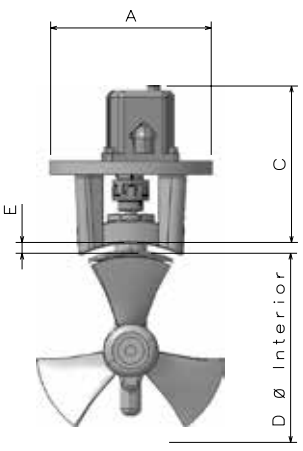
Code: 317599* / ***

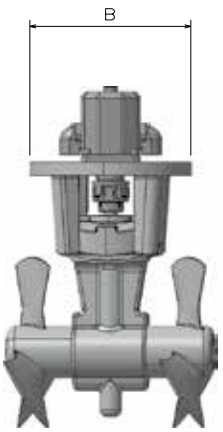
Max. thrust (kg/lbs)**:	275 / 606
Hydraulic power (kw):	20
Propellers:	Duo
Weight (kg):	24

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*

Dimensions in mm

Model	A	B	C	D	E
CT HYD 125	301	230	295	125	4 to 5
CT HYD 225	220	220	200	250	7 to 8
CT HYD 300	240	240	240	300	9 to 10
CT HYD 325	240	240	240	315	9 to 10





Stern pod thruster

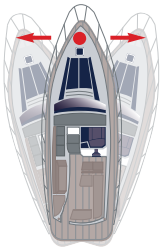
Dual propeller

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.

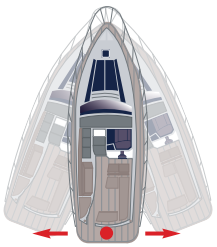
Combining a dry area on the stern with correct immersion depth and suficient access is often a challenge.

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 atmsphere of the bilge.
Entirely assembled and tested in our factory, Stern Pod units guarantee long term trouble-free opertion with only minimal maintenance care.

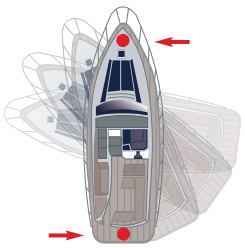


Bow thruster alone



Stern thruster alone

Bow & Stern thrusters



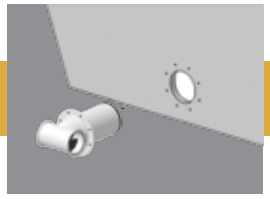
Bow & Stern thrusters

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

Case hardened spiro-conical gears.

Ignition protected and water resistant.

Watertight seals ensure extra protection

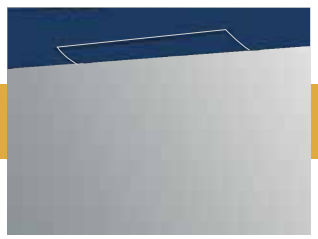


Easy external installation

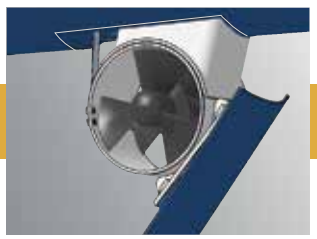

Electric retractable thrusters

Combining the cost effective simplicity of DC electrics 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 RetractTM 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 contactors

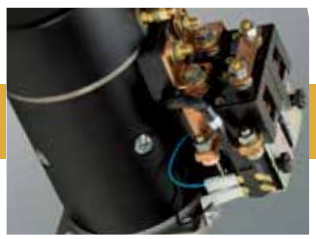


When retracted hull lines are left smooth and unaffected.

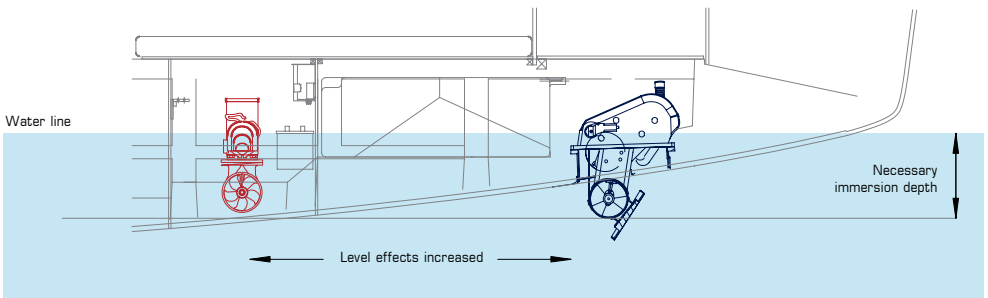


When deployed ideal immersion depth is achieved.

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



High specification electric motors. See page 8 for details.



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.

COMPACT RETRACT ™

Code: 317821

Voltage*:	12V
Thrust (kg/lbs)**:	70 / 154
Propellers:	Duo
Power (kw/hp):	4.79 / 6.4
Weight (kg):	40

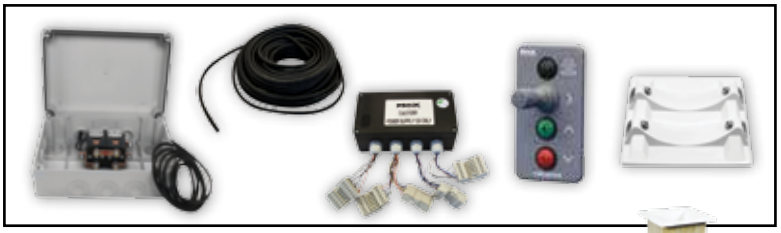
Code: 317822

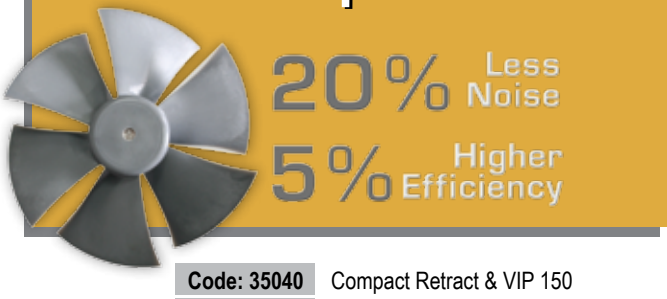
Voltage*:	24V
Thrust (kg/lbs)**:	85 / 187
Propellers:	Duo
Power (kw/hp):	5.28 / 7.1
Weight (kg):	40

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.

The compact retract is delivered complete with grey joystick, control system cable and support.

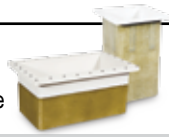




Mounting Base

Code: 311362 Aluminium flange

Code: 313760 GRP Mounting Base

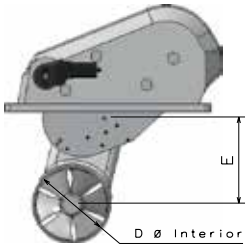


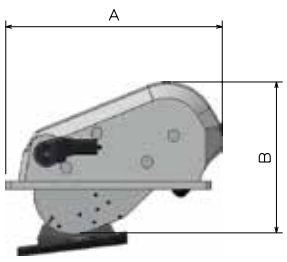
Code: 35040 Compact Retract & VIP 150

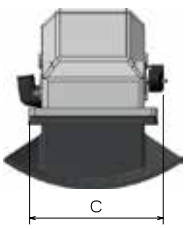
Code: 35042 VIP 250

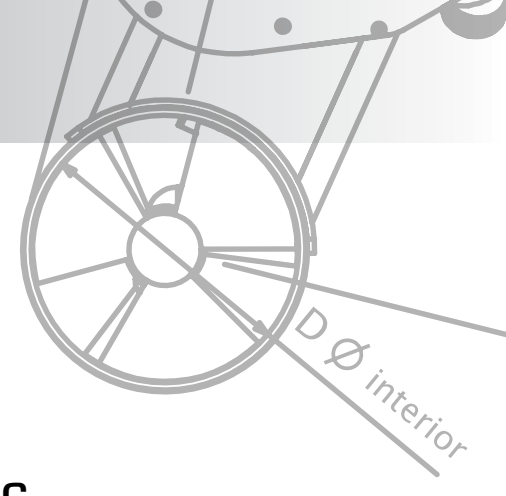
Dimensions in mm

Model	A	B	C	D	E
COMPACT RETRACT	555	388	385	185	241









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'

VIP 150 ELECTRIC

Code: 35023	
Voltage*:	12V
Thrust (kg/lbs)**:	96 / 212
Propellers:	Duo
Power (kw/hp):	7.1 / 9.5
Weight (kg):	40

Code: 35024	
Voltage*:	24V
Thrust (kg/lbs)**:	115 / 254
Propellers:	Duo
Power (kw/hp):	8.56 / 11.5
Weight (kg):	40

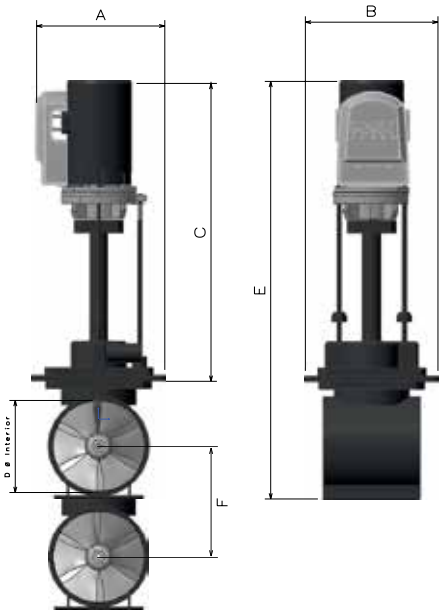
NEW VIP 250 ELECTRIC

Code: 35043	
Voltage*:	24V
Thrust (kg/lbs)**:	145 / 319
Propellers:	Duo
Power (kw/hp):	9,5 / 12,74
Weight (kg):	54

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

Mounting Base

Code: 35025	Aluminium flange
Code: 35026	GRP Mounting Base



Dimensions in mm

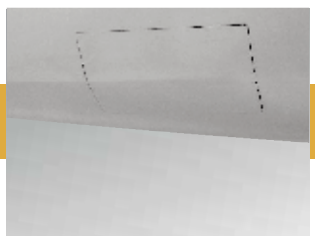
Model	A	B	C	D	E	F
VIP 150 ELECTRICAL	330	290	710	185	970	240
VIP 250 ELECTRICAL	360	360	765	250	1075	295

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.*

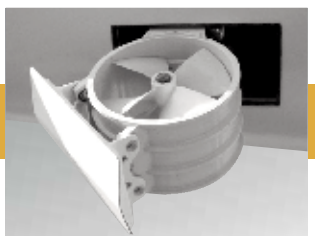
Hydraulic retractable thrusters

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 (RetractTM)
- Case hardened spiro-conical gears
- Lightweight design

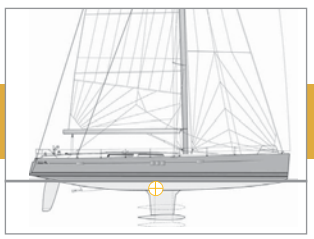


When retracted hull lines are left smooth and unaffected.



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.

VIP150 HYD

Code: 317702 - 12V control

Code: 317703 - 24V control

Max. thrust (kg/lbs)*:	120/264
Hydraulic power (kw):	10
Propellers:	Duo
Weight (kg):	28

VIP250 HYD

Code: 317705 - 24V control

Max. thrust (kg/lbs)*:	200 / 441
Hydraulic power (kw):	13.5
Propellers:	Duo
Weight (kg):	37

New Propellers

20% Less Noise

5% Higher Efficiency

Code: 35040 VIP 150 HYD

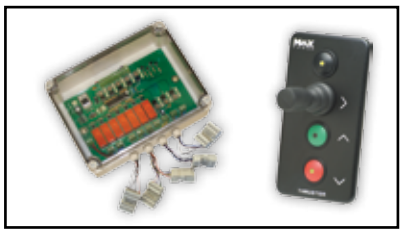
Code: 35042 VIP 250 HYD

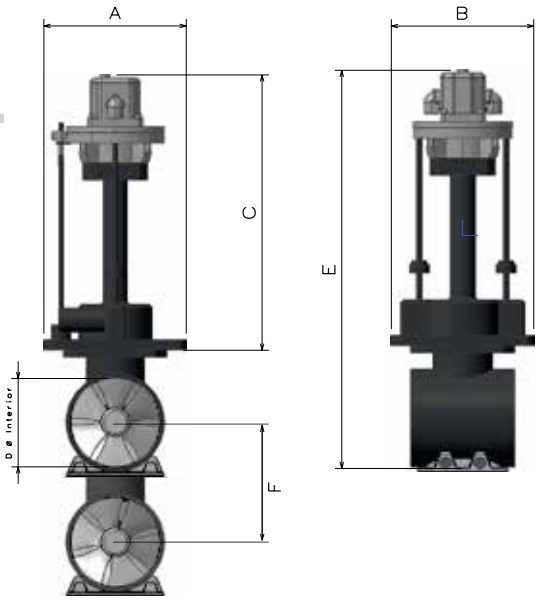
Notes: Images are not to scale

**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

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

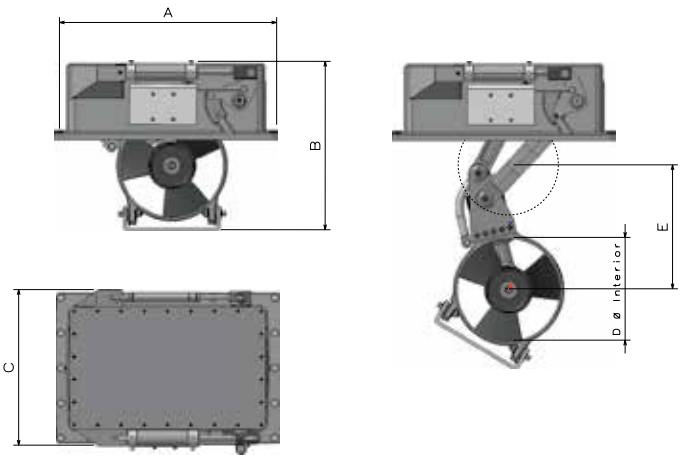




Dimensions in mm

Model	A	B	C	D	E	F
VIP 150 HYD	290	290	580	185	810	240
VIP 250 HYD	360	360	620	250	950	295

Hydraulic retractable thrusters



Dimensions in mm

Model	A	B	C	D	E
R 200	500	355	320	200	255
R 300	665	500	450	300	360
R 450	940	748	460	450	540
R 600	1210	967	985	600	772

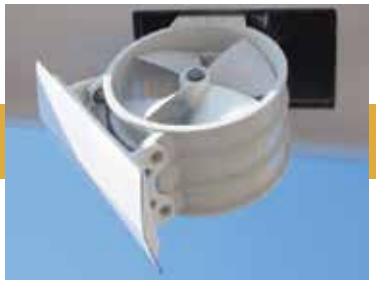
Custom Services

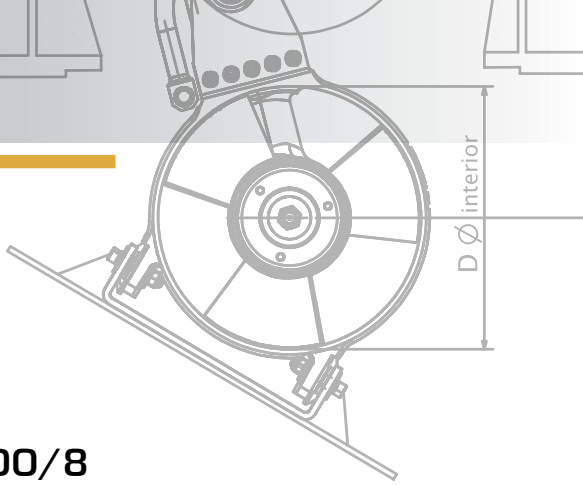
Several versions of each Retract™ model are available.

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**





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'.

Code: 317801* - 24V

Code: 317802* - 24V

Power ratings (hp):	10/17
Thrust:	10 kg per kw
Max. hydraulic power (kw):	13
Hydraulic power requirements (up to):	20 lpm / 220 bar 30 lpm / 250 bar
Power pack options:	PTO & 24V
Hydraulic motor:	Piston
Opening/closing mechanism:	Electric & manual
Propellers:	Duo, 2 blades
Weight (kg):	35

R300/15 - R300/21

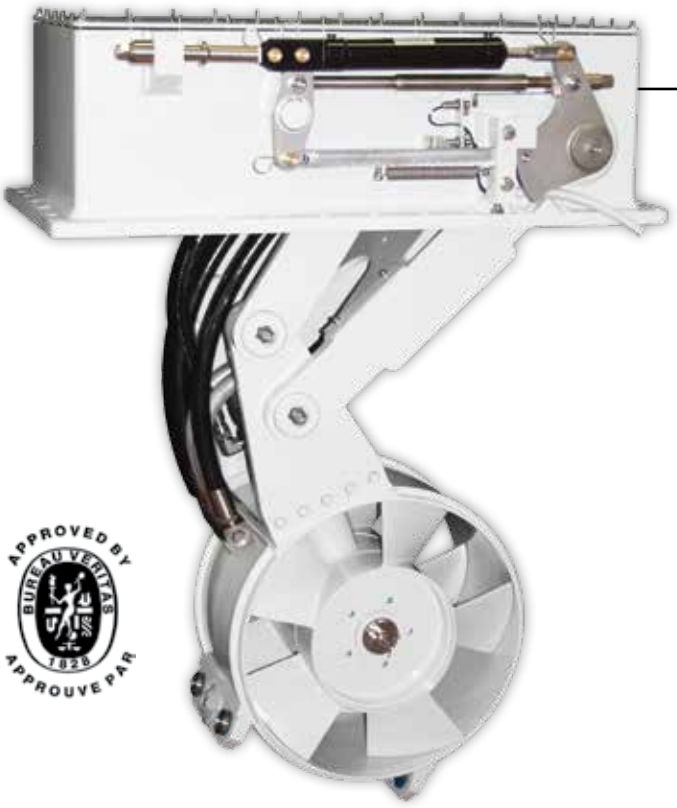
Newly redesigned, the R300 now benefits from evolutions already pioneered on the R450.
Both light & powerful this unit has been consistently specified by designers around the world for many years and is ideal for yachts from 60- 104'.

Code: 317807* - 24V

Code: 317809*

Power ratings (hp):	20/34
Thrust:	11 kg per kw
Max. hydraulic power (kw):	25
Hydraulic power requirements (up to):	35 lpm / 260 bar 55 lpm / 270 bar
Power pack options:	PTO & 24V
Hydraulic motor:	Piston
Opening/closing mechanism:	Hydraulic & gas spring
Propellers:	Duo, 3 blades
Weight (kg):	73

**Codes refer to full package units. For further details on full package units, assemblies and components, please refer to page 27.*



R450/34 - R450/40

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.

Code: 317813*

Code: 317814*

Power ratings (hp):	50/77
Thrust:	11 kg per kw
Max. hydraulic power (kw):	40
Hydraulic power requirements (up to):	Upon request
Power pack options:	PTO
Hydraulic motor:	Piston
Opening/closing mechanism:	Hydraulic & gas spring
Propellers:	Duo, 5 blades
Weight (kg):	165

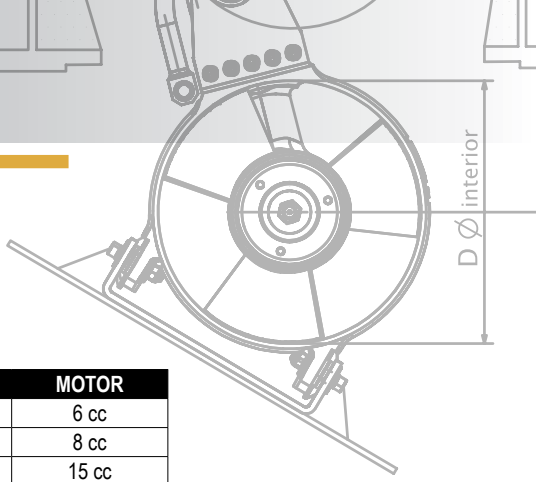
R600

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'.

Code: 317819*

Power ratings (hp):	75/110
Thrust:	12 kg per kw
Max. hydraulic power (kw):	83
Hydraulic power requirements (up to):	Upon request
Power pack options:	PTO
Hydraulic motor:	Piston
Opening/closing mechanism:	Twin Hydraulic
Propellers:	Mono, 4 blades
Weight (kg):	320

For further details on full package units, assemblies and components, please refer to page 27.



RETRACT RANGE: FULL PACKAGE UNITS, ASSEMBLIES & COMPONENTS

Model	Code	HP	KW	FLOW	PRESSURE	MOTOR
R200/6	317801	10,72	8	22 LPM	220 B	6 cc
R200/8	317802	16,08	12	30 LPM	240 B	8 cc
R300/15	317807	14,74	11	29 LPM	240 B	15 cc
R300/21	317809	23,59	17,6	44 LPM	240 B	21 cc
R450/34	317813	44,23	33	90 LPM	220 B	34 cc
R450/40	317814	54,06	40,33	110 LPM	220 B	40 cc
R600	317819	111,7	83,33	200 LPM	250 B	60 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)
	317819	RETRACT R600/60 (Thruster Assembly ONLY)
317813 **R450/34 & 317814-R450/40** 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

All parts can be ordered individualy

Control panels & Remote Control

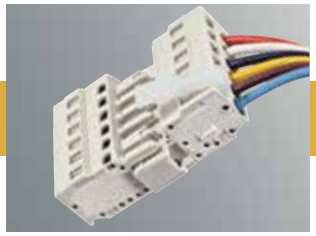
All control panels are specially designed for use with Max Power's complete range of tunnel and retractable thrusters. Fitted using a simple hole saw cut-out, panels are easy to install and benefit from a simple and easily replaceable weatherproof clip-on cover. Each panel is complete with both male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

Water resistant.

Easy to fit.

Easy to replace clip-on cover.



Reusable connections.

Control system safety features

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.

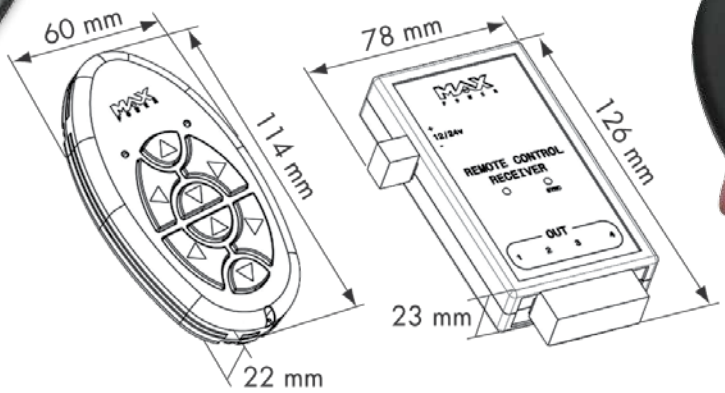
- Childproof activation
- Automatic shutdown after 30 minutes of inactivity
- Visible and audible motor overheat warning
- Motor overheat shutdown after prior warning
- Standard automatic battery isolator control
- Time delay switch between port and starboard thrust
- Software protection against short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

Max Power strongly recommends the installation of an automatic battery isolator device when installing thruster systems.

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



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 (receiver)	12-24Vdc	12-24Vdc	2pcs of 3V size CR2430	2 pcs of 3V size CR2430
Operative temperature	-10:+60	-10:+60	-10:+60	-10:+60	-10:+60	-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)	114x60x22 (transmitter) 126x78x23 (receiver)	126x78x23	126x78x23	114x60x22	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.*

Touch Panel

Code: 318200 - Black

Code: 318201 - Grey

Compatible with:
All tunnel thrusters

All our control panels are available in both black and grey

Joystick Simple

Code: 318202 - Black

Code: 318203 - Grey

Compatible with:
All tunnel thrusters

Joystick Double

Code: 318204 - Black

Code: 318205 - Grey

Compatible with:
All tunnel thrusters

Joystick

Code: 318206 - Black

Code: 318224 - Grey

Compatible with:
Compact Rectract
all VIP &
R200

Touch Panel Double

Code: 318233 - Black

Compatible with:
All retractable thrusters,
in combination with
318204 - 318205 - 318234

Joystick

Code: 318226 - Black

Compatible with:
R300 & R450

Control Panel Boat

Code: 318234 - Black

The Boat control panel simplifies the combined use of a bow and stern thruster. Full and simultaneous control of both thrusters is possible via one easy to use manipulator. Stepping the boat sideways or turning 360° on the spot become smooth, simple operations, and each thruster can still be used independently.

MAX POWER

THRUST IT TO THE **MAX**

...introduces its NEW 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.

Code	Description	Sectional Area (mm^2)	Temperature (°C)	Overall Diameter (mm)	Meters per reel	Uses
70351	Marine Cable, Single core, Tinned, 1x1,5mm^2, black	1,5	≤ 105	3	100	Indoor & Outdoor Lighting / Navigation Lights
70352	Marine Cable, Single core, Tinned, 1x1,5mm^2, red	1,5		3	100	
70353	Marine Cable, Single core, Tinned, 1x2,5mm^2, black	2,5		3.6	100	
70354	Marine Cable, Single core, Tinned, 1x2,5mm^2, red	2,5		3.6	100	
70355	Marine Cable, Single core, Tinned, 1x6mm^2, black	6		5	100	Medium Load Appliances / e.g Refrigerator
70356	Marine Cable, Single core, Tinned, 1x6mm^2, red	6		5	100	
70359	Marine Cable, Single core, Tinned, 1x16mm^2, black	16		10	50	Battery connections / Anchor Winch Supply
70360	Marine Cable, Single core, Tinned, 1x16mm^2, red	16		10	50	
70361	Marine Cable, Single core, Tinned, 1x25mm^2, black	25		11.5	50	
70362	Marine Cable, Single core, Tinned, 1x25mm^2, red	25		11.5	50	
70363	Marine Cable, Single core, Tinned, 1x35mm^2, black	35		13	50	
70364	Marine Cable, Single core, Tinned, 1x35mm^2, red	35		13	50	
70365	Marine Cable, Single core, Tinned, 1x50mm^2, black	50		15	30	
70366	Marine Cable, Single core, Tinned, 1x50mm^2, red	50		15	30	
70367	Marine Cable, Single core, Tinned, 1x70mm^2, black	70		17	30	
70370	Marine Cable, Single core, Tinned, 1x70mm^2, red	70		17	30	
70371	Marine Cable, Single core, Tinned, 1x95mm^2, black	95		20	30	
70372	Marine Cable, Single core, Tinned, 1x95mm^2, red	95		20	30	
70368	Marine Cable, Twin core, Tinned 2x1,5mm^2, black	1,5		7	100	Small loads / e.g. Lighting, small bildge pumps
70369	Marine Cable, Twin core, Tinned 2x2,5mm^2, black	2,5		9.4	100	

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)

Fuses (electric tunnel and retractable thrusters)

Max Power offers a range of calibrated fuses specifically selected model by model and tested to offer an increased level of protection **over standard ANL** fuses. Chosen taking into account each fuse's specific blow curve, Max Power fuses match the requirements of each thruster system.

Thruster model	CT35/45	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)							

Electric battery isolator

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

WARNING:
Please use original Max Power fuse and buttery isolator for warranty

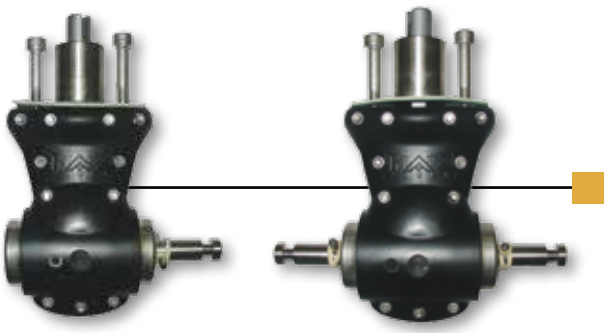
New Propellers

20% Less Noise

5% Higher Efficiency

Propellers

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



Legs

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

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

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.

Stern adapters

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.

Thruster model	CT35/45	CT60/80/100/125	CT165/225	CT 300	CT325
Tunnel diameter	125 mm	185 mm	250 mm	300 mm	315 mm
Tunnel length	Reference				
500 mm	**42546**	**-**	**-**	**-**	**-**
750 mm	**42547**	**42549**		**-**	**-**
1000 mm	**313804**	**42550**	**42553**	**-**	**-**
1250 mm	**313809**	**-**	**-**	**-**	**-**
1500 mm	**-**	**42551**	**42554**	**313811**	**35004**
2000 mm	**-**	**-**	**-**	**313812**	**42557**
2500 mm	**42548**	**42552**	**42555**	**-**	**-**
Stern adaptors	**315389**	**315392**	**315395**	**-**	**35015**
Stern adaptor fixation kit	**35016 (for all models)**				
Stern adaptor cowls	**315398**	**315399**	**315400**	**-**	**-**

Mounting bases

Mounting bases to suit all of our retractable thrusters are available to facilitate installation. Manufactured from isophtalic GRP, they can be easliy integrated into new builds or retro-fitted. Aluminium yachts are catered for with 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

Integrated hydraulic systems

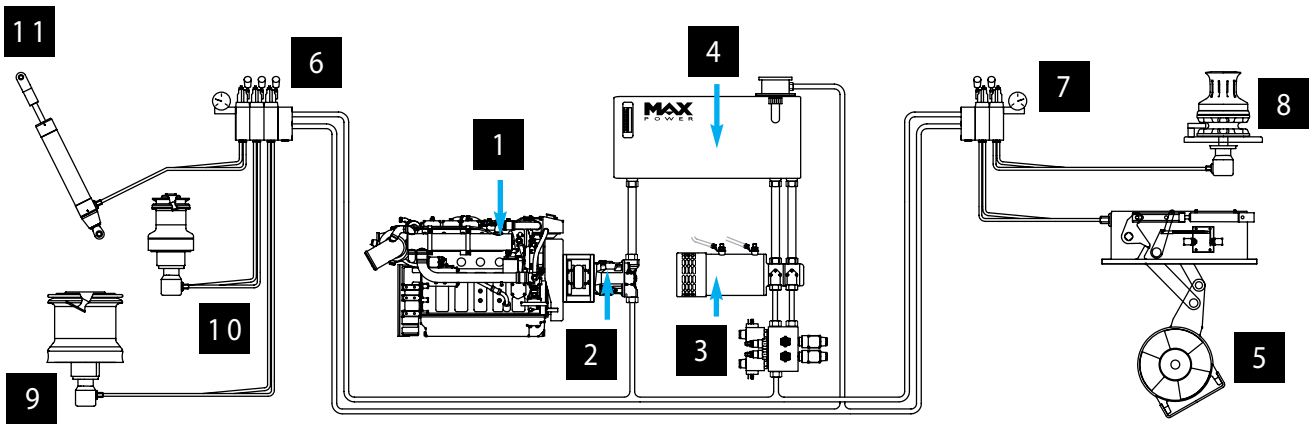
As of 2013, a strong partnership has been built among Lofrans' and Max Power thrusters creating a synergy in yacht control and maneuvering solutions.

As a natural evolution from simple stand-alone independent units, Max Power is able to offer fully integrated hydraulic systems for sailing 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 yacht manufacturers. Unique in their flexibility, Our systems are built using a common central line principle.

This means 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.

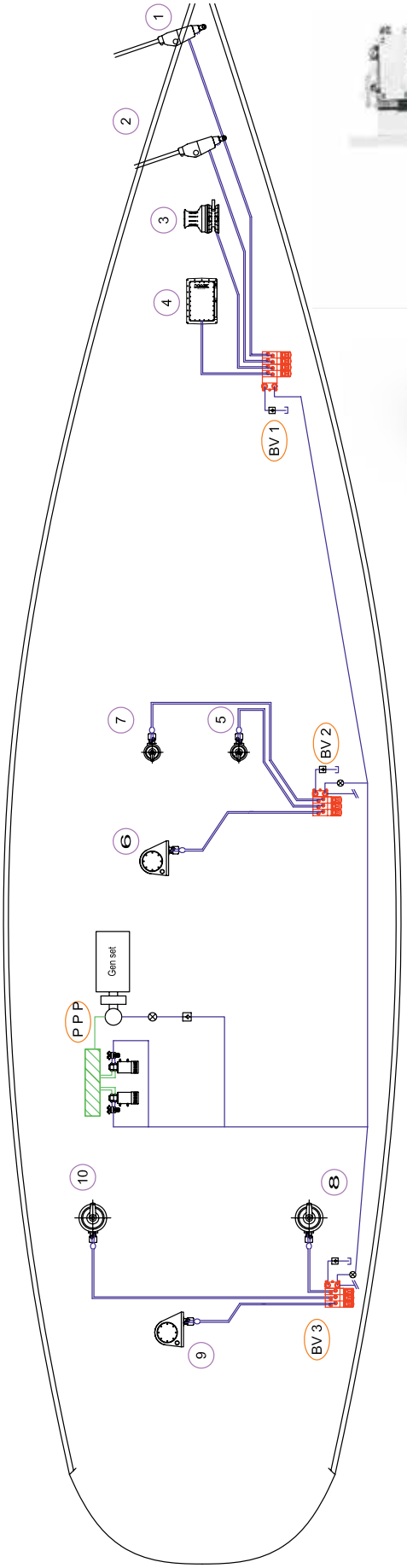
Sailing yacht power systems typically include one or several generator mounted hydraulic pumps and in addition will require a DC power pack for silent sailing and light maneuvering. The PowerValve™ power pack range used in our systems, offers exceptional flexibility and power efficiency over a wide range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



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

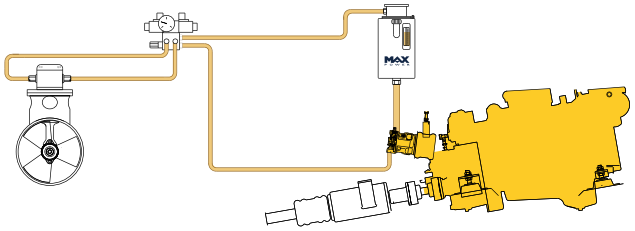
Code	316511	317908	317909	317907
Motor	1 x 8 KW	2 x 8 KW	1 x 13 KW	2 x 13 KW
Settings	3	6	3	6
Flow range	10 < 30 lt/min	10 < 60 lt/min	10 < 30 lt/min	10 < 60 lt/min
Pressure	140 < 214 bar			
Weight	35 kg	76 kg	39 kg	83 kg



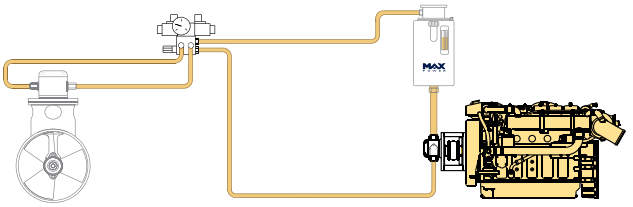
Max Power offers a complete range of hydraulic parts using only the best suppliers

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

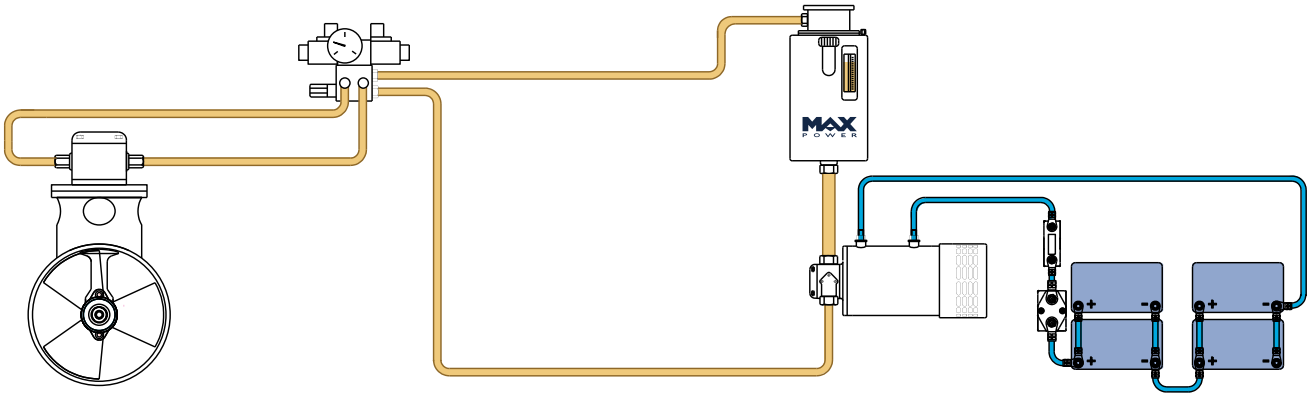


Fixed displacement pump fitted
to generator mounted PTO

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

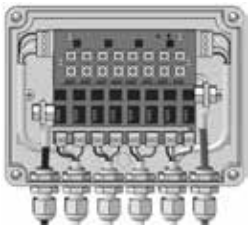
Whether run from a DC motor or an engine, Max Power can supply a full range of components including all necessary accessories such as a variety of oil tanks and control valves.
In both cases Max Power can advise and assist in the design of an efficient system suited to your needs.


Max Power Can Bus System

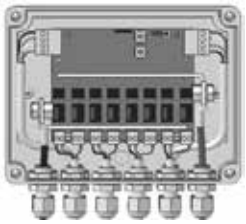
Functional Concept

When a hydraulic function is called, depending if the system is running on DC or PTO POWER, a specific sequence of valves & solenoids need to be energised. It is the electrical control system that does this in the **correct order & with the correct timing**.

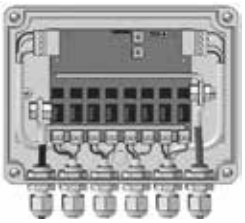
It is built using a modular construction incorporated 4 main types of control Modules these are as follows:



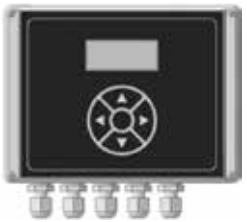
IN/OUT Control Module



DC PUMP Control Module

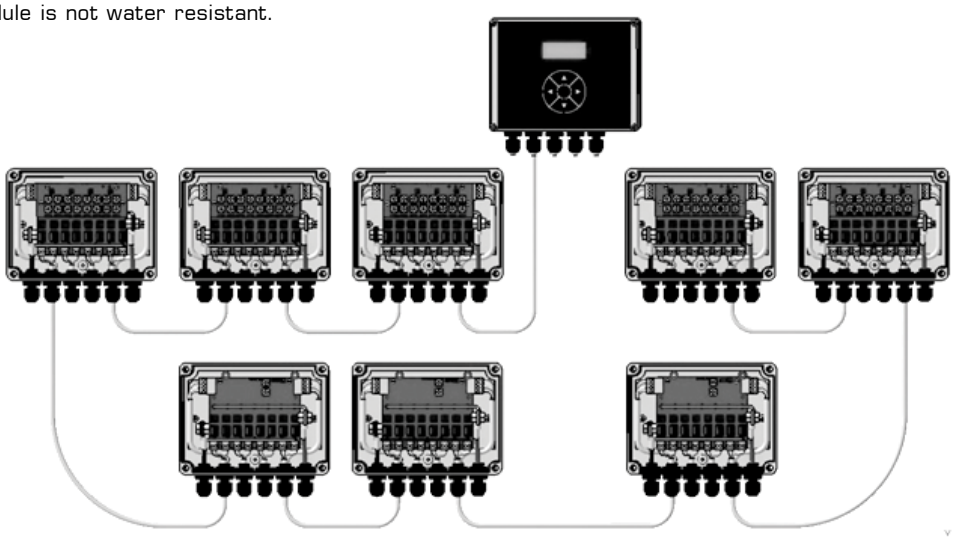


PTO Control Module



Main Control Module

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 many 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

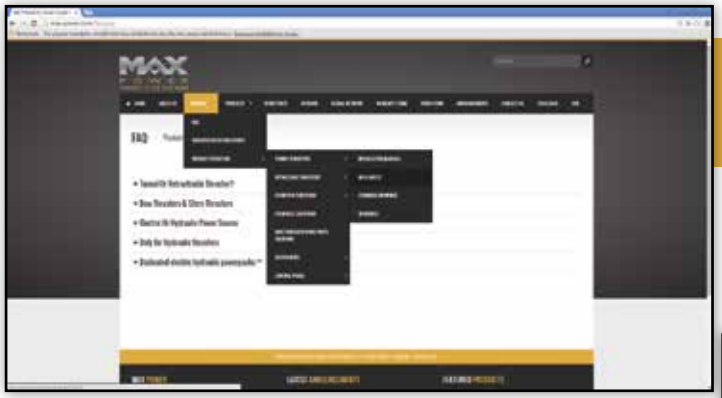


3. No PC setup is necessary! No programming is needed!
4. Simply user interface
5. System upgrades, adding control functions or pumps is simple and rapid

"MaxPower has been supplying us with thrusters and hydraulic power generation and distribution for 10 years now and we are very happy with their products. I really recommend their Power Pack and Canbus Monitoring which are compact, efficient, reliable, save a lot of wiring weight, allow full customization, give the flexibility to add more users or deck switches in the future without complicated rewiring which is quite useful. Great products."

Pascal Riera
Technical Project Manager (Systems) at Southern Wind Shipyard

www.max-power.com



ADVISOR

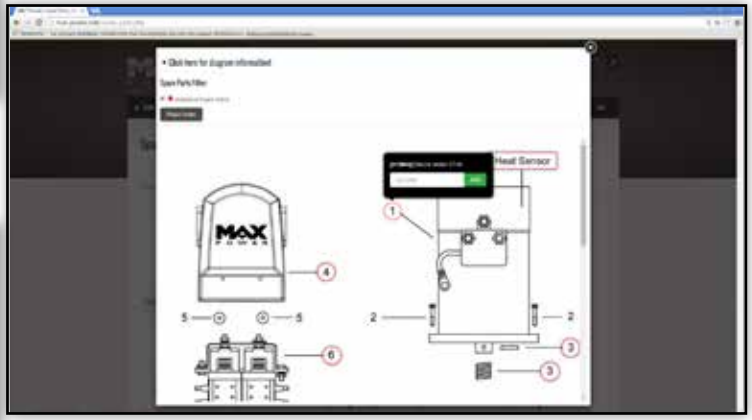
Complete library filled with up-to-date technical information, data and drawings

PRODUCTS

Comprehensive product selection packed with information.

SPARE PARTS

Exploded diagrams for complete range of thrusters



Simplified spare part selection - Send a spare parts request order directly to Max Power

Simple spare part ordering

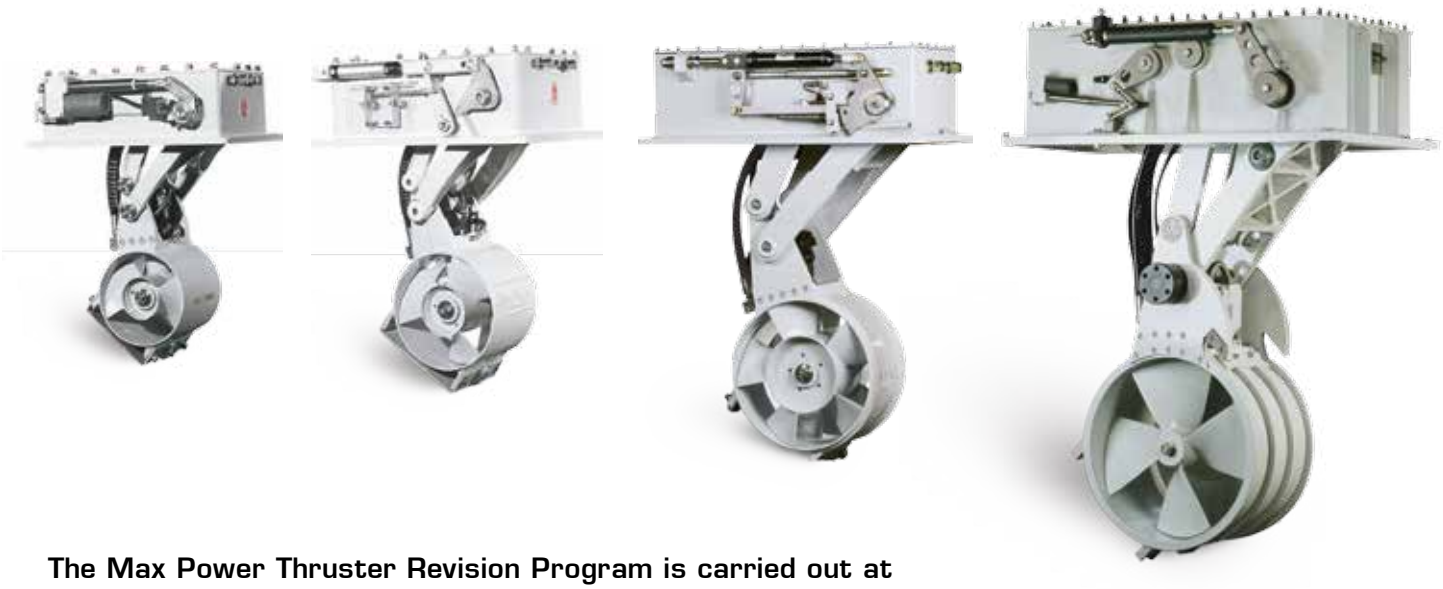
WARRANTY

Register your unit and take advantage of the warranty period.

DISTRIBUTION AND SERVICE

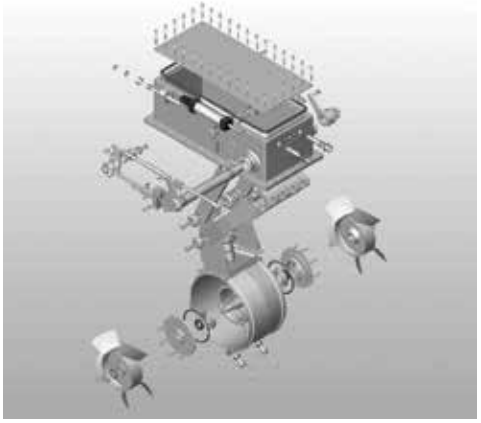
Global presence, local support

R-Range Hydraulic Thruster Revision



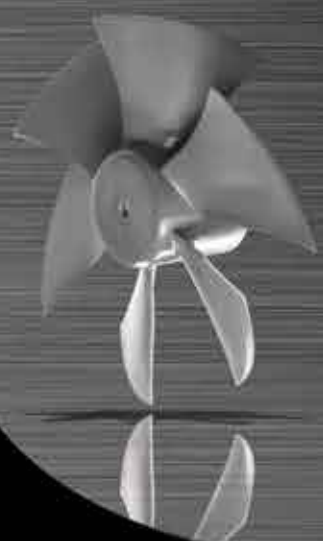
The Max Power Thruster Revision Program is carried out at our production facilities in Monza.

- 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 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.

Haben Sie Fragen zum Thema? Einfach ein Email an
verkauf@sailtec.de, oder 040-8229940 anrufen !



MAX POWER

A: Via Philips 5, 20900 Monza (MI), Italy
T: +39 039 2001973 - 936
F: +39 039 2004299
E: contact@max-power.com
W: www.max-power.com

SAILTEC

SAILTEC GmbH
Hasselbinnen 28 • D-22869 Schenefeld

Tel. +49-(0)40-8229940
Email info@sailtec.de • www.sailtec.de