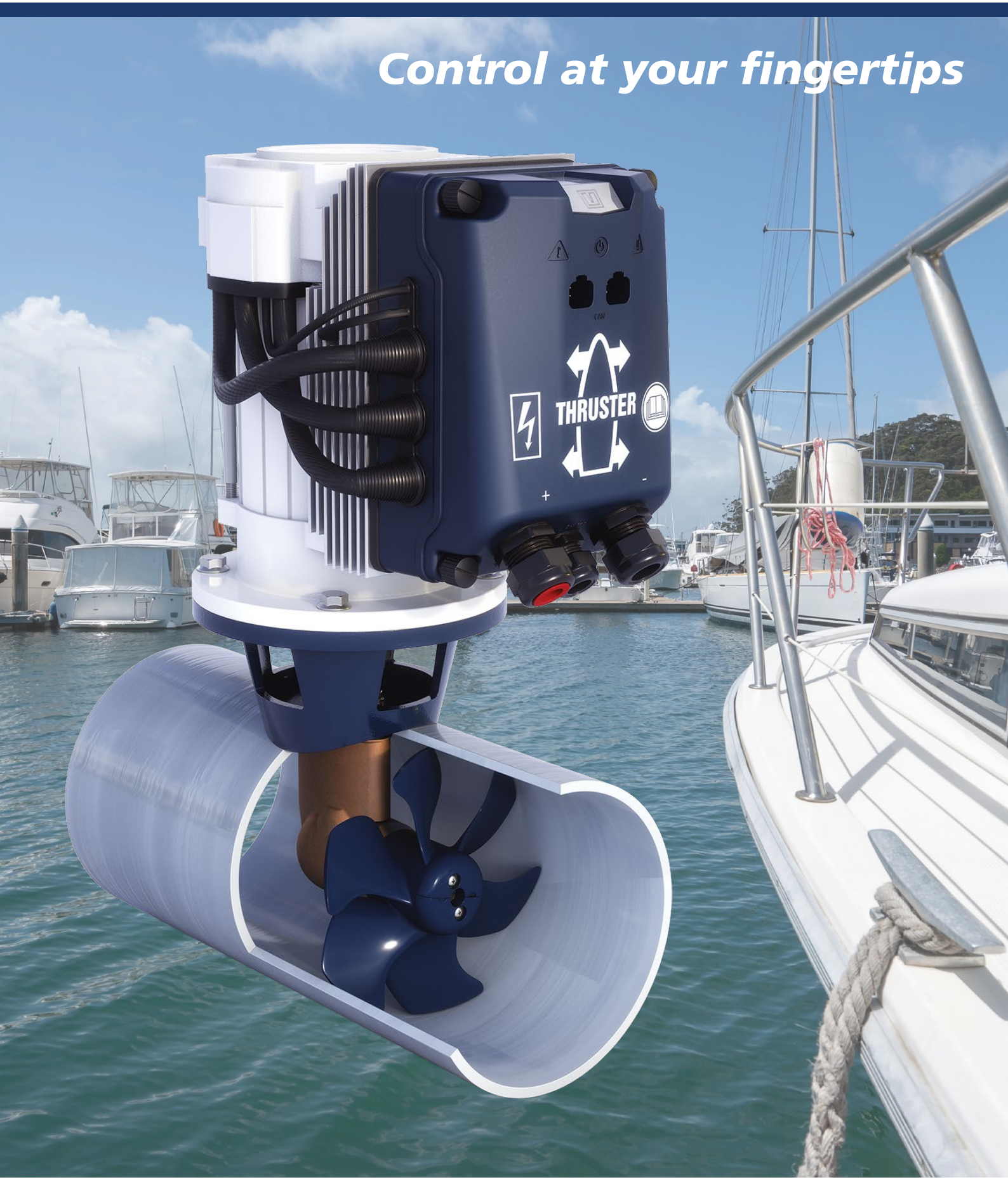
BOW PRO Thrusters

Control at your fingertips



BOW PRO proportional bow and stern thrusters

Revolutionary concept matched with proven technology

Our new BOW PRO is a one of a kind thruster, which is standard fully proportional controlled. This thruster is equipped with brushless induction motors. Therefore the bow / stern thruster motor is maintenance-free and has much longer runtimes compared to conventional DC thrusters.

The BOW PRO thruster is V-CAN canbus controlled by the patented VETUS motor controller (MCV), which features built-in over temp and low battery protection. Those built-in safeties combined with the brushless induction motor make the BOW PRO thruster series highly resistant to abuse and ideal for every boater in the most difficult manoeuvring situations.

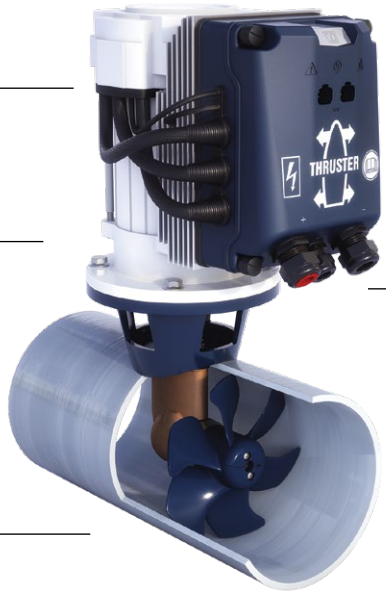
BOW PRO thrusters utilize the same propellers and gearboxes proven in VETUS thrusters for over 30 years. Upgrading a boat with an existing thruster to a BOW PRO thruster is easily accommodated as the BOW PRO thruster was made to share tunnel sizes with current VETUS thrusters as well as many other brands.

Fully proportional control

Digitally controlled by (patented) MCV motor controller

Maintenance-free brushless induction motor

Built-in over-temp and low battery protection



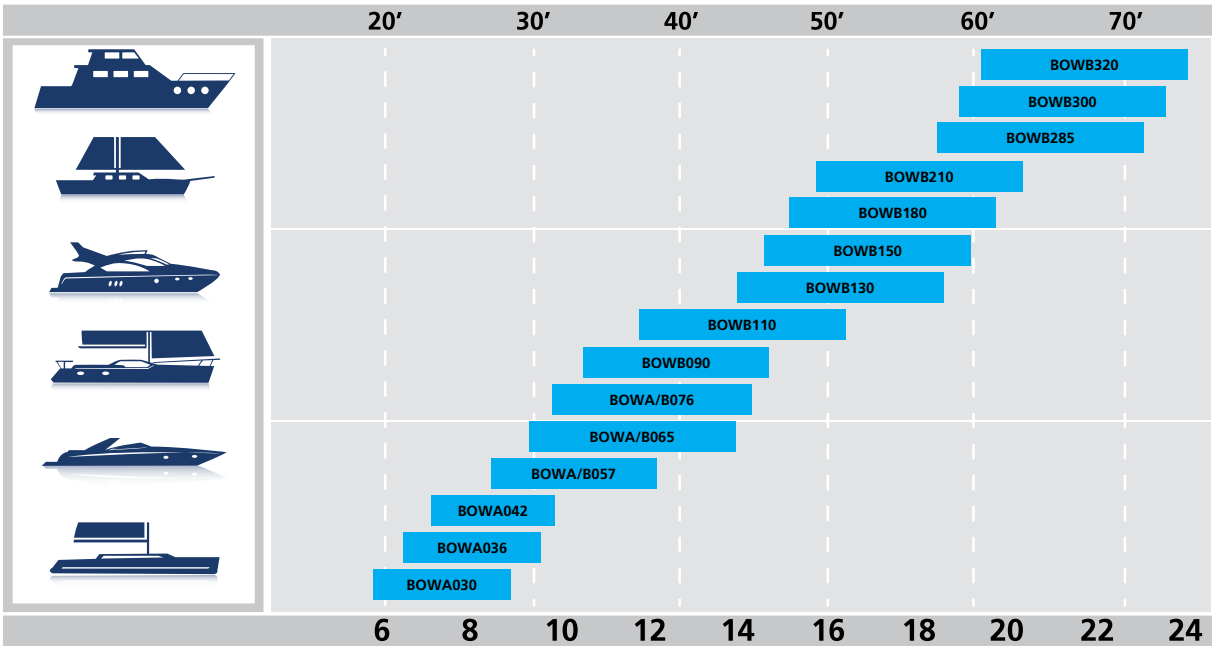
*Unlimited runtimes**

Connectivity to devices with canbus carrying signals possible

Available with lock-and-hold controls

Highly efficient thruster system

Interchangeable with existing thrusters (shared tunnel sizes)



* BOW PRO thrusters will run continuously for 6 or 10 minutes (dependent on thruster model) at full power, after that the power may reduce. At less than full power setting, run time is greatly enhanced. To achieve these results installation instructions must be adhered.

BOW PRO series: BOWA

The complete BOW PRO thrusters range starts with the BOWA series. The BOWA series are very compact, need little maintance, are easy to install and deliver great performance.

- A range of thrusters with thrust outputs ranging from 30 kgf to 76 kgf
- Battery powered at 12 VDC
- Runtime of minimal 6 minutes at full power and even longer runtimes at reduced power



BOWA0361



BOWA0761

BOW PRO series - Type	BOWA0301	BOWA0361	BOWA0421	BOWA0571	BOWA0651	BOWA0761
Thrust (kgf)*	30	36	42	57	65	76
Power (kw-hp)	1,2 - 1,6	1,2 - 1,6	2,7 - 3,7	2,7 - 3,7	2,7 - 3,7	2,7 - 3,7
Brushless AC motor	✓	✓	✓	✓	✓	✓
Advised boat length (ft - m)	<24' / <7	20'-30'/6-10	26'-37'/8-11,5	26'-39'/8-12	27'-40'/8-12,5	30'-45'/10-14
Tunnel diameter (mm - inch)	110 - 4,33"	125 - 4,92"	125 - 4,92"	150 - 5,9"	185 - 7,3"	185 - 7,3"
Weight excl. tunnel (kg)	24	24	35	35	35	35
Operating time, continuously max per hour in minutes**	10	10	10	6	10	6
For DC system V	12	12	12	12	12	12
Battery main switch: model BATSW / type BPMAIN	250/12	250/12	250/12	250/12	250/12	250/12
Main fuse	250	355	355	355	355	425

BOW PRO Boosted series: BOWB

At the top of this advanced range of thrusters, VETUS offers the BOW PRO Boosted (BOWB) series. These thrusters include an exclusive built in DC-to-DC smart charger function that allows 24 VDC thruster battery banks to be charged by a 12 VDC power supply and in the case of 48 VDC BOWB, to be charged from an existing 24 VDC power supply. BOWB thrusters do this through a third charge connection on the thruster. This charge connection is constantly monitored and is only activated once the voltage level of the charging source reaches a suitable level. This feature prevents the charging source from being depleted, such as the engine starting bank. They then boost that input to a higher voltage and regulate it in a smart way to charge the thruster supply bank. In practice, this means you are able to connect the 24 VDC BOW PRO Boosted with a 12 VDC power supply to charge its battery bank. The built in smart three stage charging process ensures that the thruster batteries are kept at their optimum level.

Connecting the BOW PRO Boosted directly to a 24 or 48 VDC power supply is also possible.

- A range of thrusters with thrust outputs ranging from 57 kgf to 320 kgf
- Battery powered at 24 VDC (or 48 VDC)
- Runtime of 10 minutes at full power and even longer runtimes at reduced power
- MCV motor controller with integrated boost charger 12/24 VDC (or 24/48 VDC)

BOW PRO Boosted Type	BOWB057	BOWB065	BOWB076	BOWB090	BOWB110	BOWB130
Thrust (kgf)*	57	65	76	90	110	130
Power (kw-hp)	3,1 - 4,1	3,1 - 4,1	3,1 - 4,1	5,7 - 8	5,7 - 8	5,7 - 8
Brushless ac motor	✓	✓	✓	✓	✓	✓
Advised boat length (ft - m)	26'-39'/8-12	27'-40'/8-12,5	30'-45'/10-14	36'-55'/11,5-17	36'-56'/11,5-18	40'-60'/12,5-18
Tunnel diameter (mm - inch)	150 -5,9"	185 - 7,3"	185 - 7,3"	185 - 7,3"	185 - 7,3"	185 - 7,3"
Weight excl. tunnel (kg)	28	29	29	33	33	33
Operating time, continuously max per hour in minutes**	10	10	10	10	10	10
For DC system (Volt)	12/24	12/24	12/24	12/24	12/24	12/24
Battery main switch: model BATSW / type BPMAIN	250/24	250/24	250/24	250/24	250/24	250/24
Main fuse	250	300	250	250	355	355

* When the BOW PRO is operating within the set boundaries, the thrust output is not affected by voltage drop (10.5-15 VDC, 21-30 VDC, 41-60 VDC).

** BOW PRO thrusters will run continuously for 6 or 10 minutes (dependent on thruster model) at full power, after that the power may reduce. At less than full power setting, run time is greatly enhanced. To achieve these results installation instructions must be adhered.

Battery state of charge, battery cable size, ambient temperature and other factors can affect thruster performance. Advise for battery cable length per model see page 6.

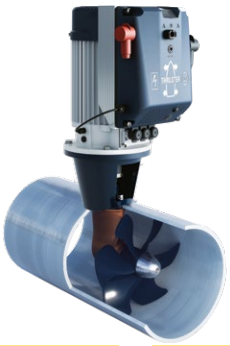
BOW PRO Boosted series: BOWB



BOWB150



BOWB180



BOWB300

NEW! NEW! NEW!

BOW PRO Boosted Type	BOWB150	BOWB180	BOWB210	BOWB285	BOWB300	BOWB320
Thrust (kgf)*	150	180	210	285	300	320
Power (kw-hp)	5,7 - 8	11 - 15	11 - 15	18,4 - 25	18,4 - 25	18,4 - 25
Brushless ac motor	✓	✓	✓	✓	✓	✓
Advised boat length (ft - m)	40'-60'/12,5-18	44'-68/15-20	50'-75'/16-22	60'-100'/20-30	60'-100'/20-30	60'-100'/20-30
Tunnel diameter (mm - inch)	250 - 9,8"	250 - 9,8"	250 - 9,8"	300 - 11,8"	300 - 11,8"	300 - 11,8"
Weight excl. tunnel (kg)	38	45	45	on request	on request	on request
Operating time, continuously max per hour in minutes**	10	10	10	10	10	10
For DC system (Volt)	12/24	24/48	24/48	24/48	24/48	24/48
Battery main switch: model BATSW / type BPMAIN	250/24	250	250	600	600	600
Main fuse	355	355	355	355	355	355

BOW PRO 48 VDC series

The increasing popularity of environmentally friendly boats with 48 VDC electric propulsion required the development of thrusters running at the same voltage, and these BOW PROs are designed to meet that need. The 48 VDC BOW PRO thrusters offers all the advantages of the standard BOW PRO; available in several propeller and tunnel diameters and are more than powerful enough to turn your runabout in the desired direction.

- A range of smaller thrusters with thrust outputs ranging from 30 kgf to 76 kgf
- A range of bigger thrusters with thrust outputs ranging from 180 to 320 kgf
- Battery powered at 48 VDC
- Runtime of 10 minutes at full power and even longer runtimes at reduced power

BOW PRO series - Type	BOWA0304	BOWA0364	BOWA0574	BOWA0764
Thrust (kgf)*	30	36	57	76
Power (kw-hp)	1,2 - 1,6	1,2 - 1,6	3,1 - 4,2	3,1 - 4,2
Brushless AC motor	✓	✓	✓	✓
Advised boat length (ft - m)	<24' / <7	20'-30'/6-10	26'-39'/8-12	30'-45'/10-14
Tunnel diameter (mm - inch)	110 - 4,33"	125 - 4,92"	150 - 5,9"	185 - 7,3"
Weight excl. tunnel (kg)	24	24	35	35
Operating time, continuously max p/h in minutes full power**	10	10	10	10
For DC system (Volt)	48	48	48	48
Battery main switch: model BATSW / type BPMAIN	250	250	250	250
Main fuse	125	125	125	125

* When the BOW PRO is operating within the set boundaries, the thrust output is not affected by voltage drop (10.5-15V, 21-30V, 41-60V).

** BOW PRO thrusters will run continuously for 6 or 10 minutes (dependent on thruster model) at full power, after that the power may reduce. At less than full power setting, run time is greatly enhanced. To achieve these results installation instructions must be adhered.

Battery state of charge, battery cable size, ambient temperature and other factors can affect thruster performance. Advise for battery cable length per model see page 6.

BOW PRO 48 VDC series

BOW PRO series - Type	BOWB180	BOWB210	BOWB285	BOWB300	BOWB320
Thrust (kgf)*	180	210	285	300	320
Power (kw-hp)	11 - 15	11 - 15	18,4 - 25	18,4 - 25	18,4 - 25
Brushless AC motor	✓	✓	✓	✓	✓
Advised boat length (ft - m)	44'-68/15-20	50'-75'/16-22	60'-100'/20-30	60'-100'/20-30	60'-100'/20-30
Tunnel diameter (mm - inch)	250 - 9,8"	250 - 9,8"	300 - 11,8"	300 - 11,8"	300 - 11,8"
Weight excl. tunnel (kg)	45	45	on request	on request	on request
Operating time, continuously max p/h in minutes full power**	10	10	10	10	10
For DC system (Volt)	24/48	24/48	24/48	24/48	24/48
Battery main switch: model BATSW / type BPMAIN	250	250	600	600	600
Main fuse	355	355	355	355	355

* When the BOW PRO is operating within the set boundaries, the thrust output is not affected by voltage drop (10.5-15 VDC, 21-30 VDC, 41-60 VDC).

** BOW PRO thrusters will run continuously for 6 or 10 minutes (dependent on thruster model) at full power, after that the power may reduce. At less than full power setting, run time is greatly enhanced. To achieve these results installation instructions must be adhered.

Battery state of charge, battery cable size, ambient temperature and other factors can affect thruster performance. Advise for battery cable length per model see page 6.

BOWHPCK

High power connection kit

The BOWHPCK is a connection kit for bow thrusters in the VETUS BOW PRO series. This connection kit is used to simplify the implementation of big diameter supply wires. When using diameters 95 mm² (AWG 0) or above this kit is required.





Electrical installation specifications for bow and stern thrusters

The total battery capacity and minimum diameter of the battery cables must be sufficient for the thruster's current draw in use and the voltage drop must not exceed certain values. We therefore recommend you to consult the table below when planning your new thruster system.

Thruster	Current	Voltage (DC)	Min. batt CCA	Min. batt Ah	Total length of positive and negative cables together (m)										
			(EN)	(C20)	25 mm²	35 mm²	50 mm²	70 mm²	95 mm²	120 mm²	2x 70 mm²	150 mm²	2x 95 mm²	2x 120 mm²	2x 150 mm²
BOWA0301	199	12	333	(1x) 90Ah	NA	6 m	8,6 m	12 m	16,4 m	20,6 m	24 m	25,8 m	32,7 m	41,3 m	51,6 m
BOWA0304	80	48	185	(4x) 60Ah	42,8 m	60 m	85,7 m	120 m	162,9 m	205 m	---	---	---	---	---
BOWA0361	273	12	500	(1x) 170Ah	NA	NA	6,3 m	8,8 m	11,9 m	15 m	17,6 m	18,8 m	23,8 m	30 m	37,6 m
BOWA0364	71	12	185	(4x) 60Ah	48,2 m	67,6 m	96,5 m	135,2 m	183,5 m	231,8 m	---	---	---	---	---
BOWA0421	250	12	475	(1x) 145Ah	NA	4,8 m	6,9 m	9,6 m	13 m	16,5 m	19,2 m	20,5 m	26 m	33 m	41,1 m
BOWA0571	337	12	750	(1x) 185Ah	NA	NA	5 m	7,1 m	9,7 m	12,2 m	14,2 m	15,2 m	19,3 m	24,4 m	30,5 m
BOWA0574	90	48	205	(4x) 60Ah	38 m	53,3 m	76,2 m	106,7 m	144,8 m	182,9 m	213,3 m	---	---	---	---
BOWA0651	271	12	500	(1x) 170Ah	NA	NA	6,3 m	8,9 m	11,9 m	15,1 m	17,6 m	18,9 m	23,9 m	30 m	37,9 m
BOWA0761	368	12	925	(1x) 200Ah	NA	NA	4,5 m	6,5 m	8,7 m	11,1 m	12,8 m	13,9 m	17,4 m	22 m	27,9 m
BOWA0764	93	48	205	(4x) 60Ah	37,7 m	53,1 m	76 m	106,3 m	144,4 m	182,5 m	213 m	---	---	---	---
BOWB057	189	24	325	(2x) 90Ah	NA	12,6 m	18,1 m	25,3 m	34,5 m	43,5 m	50,8 m	54,4 m	68,9 m	87 m	108,8 m
BOWB065	137	24	225	(2x) 90Ah	NA	17,5 m	25 m	35 m	47,5 m	60 m	70 m	75 m	95 m	120 m	150 m
BOWB076	184	24	350	(2x) 90Ah	NA	13 m	18,6 m	26 m	35 m	44,7 m	52,1 m	55,9 m	70,8 m	89,4 m	111,8 m
BOWB090	220	24	400	(2x) 145Ah	NA	NA	15,5 m	21,8 m	29,6 m	37,4 m	43,6 m	46,8 m	59,2 m	74,8 m	93,5 m
BOWB110	330	24	600	(2x) 170Ah	NA	NA	10,4 m	14,5 m	19,7 m	24,9 m	29 m	31,2 m	39,5 m	49,8 m	62,3 m
BOWB130	350	24	925	(2x) 185Ah	NA	NA	4,9 m	6,8 m	9,3 m	11,8 m	13,7 m	19,7 m	18,6 m	23,5 m	29,4 m
BOWB150	276	24	500	(2x) 170Ah	NA	NA	6,3 m	8,7 m	11,8 m	14,7 m	17,4 m	18,7 m	23,5 m	29,2 m	37,6 m
BOWB180	289	48	525	(4x) 185Ah	NA	NA	23,7 m	33,2 m	45,1 m	56,9 m	66,4 m	71,2 m	90,2 m	113,8 m	122,5 m
BOWB210	300	48	550	(4x) 185Ah	NA	NA	22,9 m	32 m	43,4 m	54,9 m	64 m	68,6 m	86,9 m	109,7 m	118 m
BOWB285	375	48	1050	(4x) 220Ah	NA	NA	4 m	6 m	8 m	10,5 m	11,5 m	13 m	16 m	20 m	24 m
BOWB300	385	48	1050	(4x) 220Ah	NA	NA	3,5 m	5 m	7 m	9 m	11 m	12,5 m	15 m	19 m	23 m
BOWB320	400	48	1050	(4x) 220Ah	NA	NA	NA	3,52 m	6 m	8 m	10,5 m	12 m	14 m	18 m	22 m
BOWB Boost charge	80	12	NA	NA	10,7 m	15 m	21,4 m	30 m	40,7 m	51,4 m	60 m	64,3 m	81,4 m	102,9 m	128,6 m
	40	24	NA	NA	21,4 m	30 m	42,9 m	60 m	81,4 m	102,9 m	120 m	128,6 m	162,9 m	205,7 m	---



Control panels for bow and stern thrusters

The BOW PRO thruster is digitally controlled by proprietary CANBUS protocol V-CAN. There are three fully proportional control panels available for the BOW PRO thruster series; one basic paddle panel and one panel with lock-and-hold function. With the press of a button, you are able to lock the thrust at any desired speed, freeing you to step away from the control panel to tie up your boat. A feature that makes single handed docking much easier.

VETUS also offers a new double control panel with lock-and-hold function which controls the bow and stern thruster either individually or simultaneously. Rotating the joystick will operate them in opposite directions to rotate the boat on its axis.

Specifications

- Compact design and high quality materials
- Safe and easy proportional control of your boat
- Aluminium bezel
- Quick installation in Ø 75 mm cut-out hole
- Waterproof housing IP65
- V-CAN CANBUS protocol compliant
- Twin connector for multiple stations
- Status indicator
- Can be flush mounted
- With thruster lock and hold function (BPPJA and DBPPJA)



BPPJA



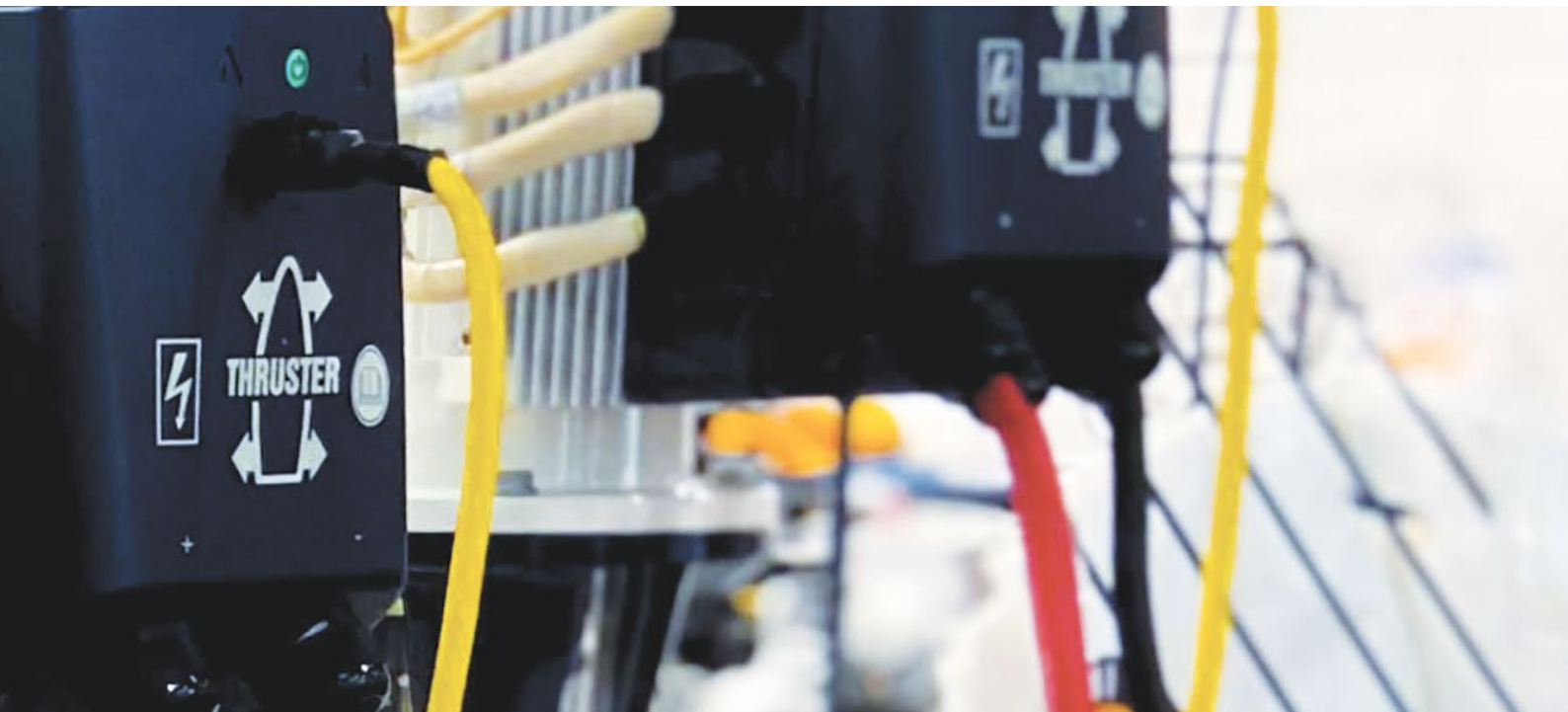
BPPPA

NEW!



DBPPJA

Type	Description	Voltage (DC)	Front panel (mm)	Bezel	Ingression protected	Built-in depth (mm)	Cut-out size (mm)	Child protection
BPPJA	Proportional control for the BOW PRO with lock and hold function (CAN BUS)	12 (V-CAN)	85 x 85	Aluminium	IP65	120	Ø 75	✓
BPPPA	Proportional control for the BOW PRO (CAN BUS)	12 (V-CAN)	85 x 85	Aluminium	IP65	90	Ø 75	✓
DBPPJA	Double thruster panel (proportional, CAN)	12 (V-CAN)	85 x 85	Aluminium	IP65	120	Ø 76	✓

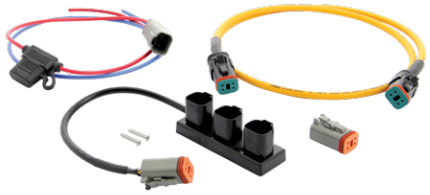


Accessories for bow and stern thrusters

Installation set BPROASET

When installing a BOW PRO (BOWA) a few components are required to activate V-CAN communication. These components are put together in a installation set and include following items.

Type	Description
BPCABCPC	Power supply cable
CANVT	CAN bus termination resistor
BPCAB1HF	CAN cable 1 metre - Halogen free
BPCANHUB	CAN bus 3-point hub



In addition to this installation set a V-CAN connection cable between the thruster unit and control panel is required. These cables are shown below.

BPROASET

Installation set BPROBSET

When installing a BOW PRO (BOWB) a few components are required to activate V-CAN communication. These components are put together in a installation set and include following items.

Type	Description
BPCABCPC	Power supply cable
CANVT	CAN bus termination resistor
BPCAB1HF	CAN cable 1 metre - Halogen free



In addition to this installation set a V-CAN connection cable between the thruster unit and control panel is required. These cables are shown below.

BPROBSET

V-CAN connection cables

Available in six different lengths for use with BOW PRO and RIMDRIVE installations.

Type	Description
BPCAB1HF	CAN cable 1 m Halogen free
BPCAB5HF	CAN cable 5 m Halogen free
BPCAB10HF	CAN cable 10 m Halogen free
BPCAB15HF	CAN cable 15 m Halogen free
BPCAB20HF	CAN cable 20 m Halogen free
BPCAB25HF	CAN cable 25 m Halogen free



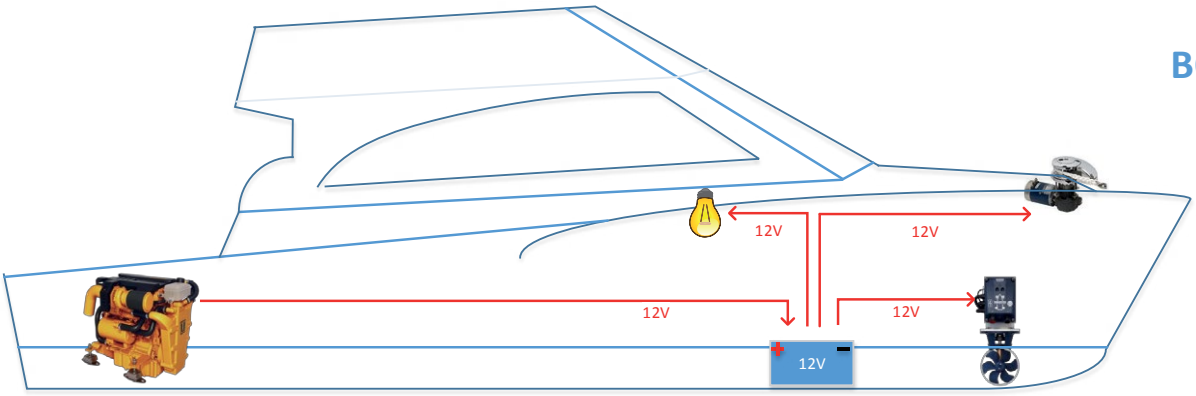
BPCAB..HF

Examples of BOW PRO series thruster installations

BOW PRO Boosted thrusters are unique machines with intelligent motor controllers, in some applications providing more than just optimal boat control. Below we illustrate a couple of the many possible arrangements in installation.

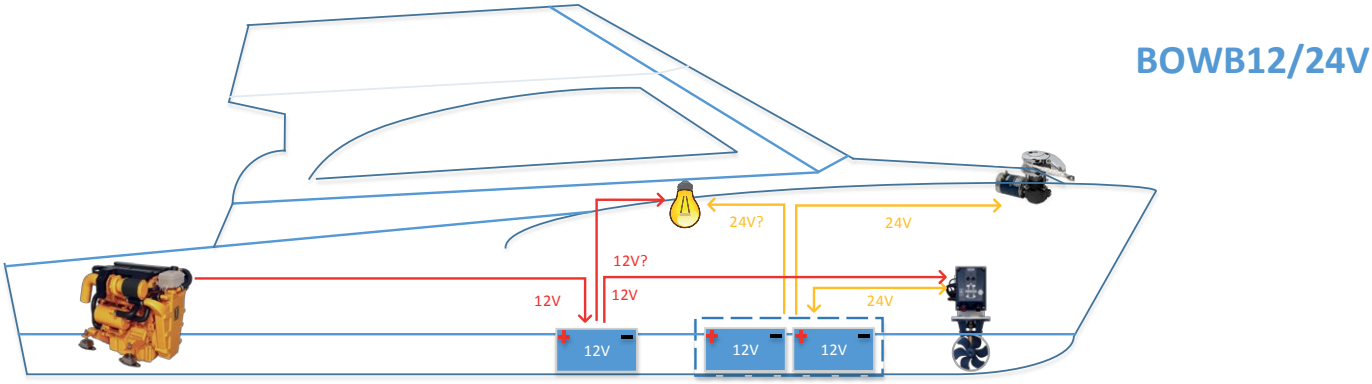
Regular 12 VDC connection (BOWA)

This is the scenario where the BOW PRO (BOWA) thrusters are installed just like every other thruster. The alternator delivers its output (either 12 VDC, 24 VDC or 48 VDC) to the battery bank, which then distributes it to the various energy users. Plain and simple - the motor controller offers you the advantage of proportional control and unlimited runtime*.



Boosted connection (BOWB): secondary power system

Here is where things get interesting: the 12 VDC alternator of the propulsion engine feeds the main battery, which in turn feeds the BOW PRO Boosted (BOWB) motor controller. This converts the 12 VDC input to a 24 VDC charging current for the secondary battery bank. Depending on which battery bank you choose, this gives you the freedom to choose between 12 VDC and 24 VDC on board equipment. From the 24 VDC power bank you can use high efficiency 24 VDC equipment such as windlasses and power winches. At the higher voltage and consequent lower amperage, your boat can use smaller battery cables, making equipment like winches easier to accommodate. However if 12 VDC equipment is already installed on your boat, you can also choose to stick with the 12 VDC system. The choice is yours! In short the addition of a BOW PRO Boosted thrusters enables a secondary power system on board from your regular 12 VDC alternator!

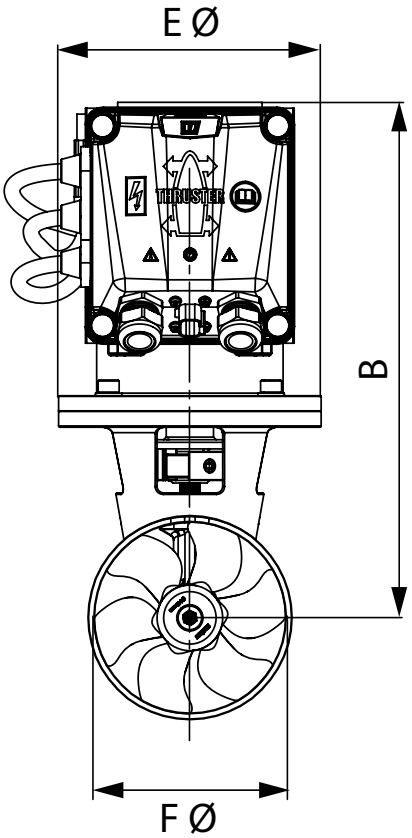


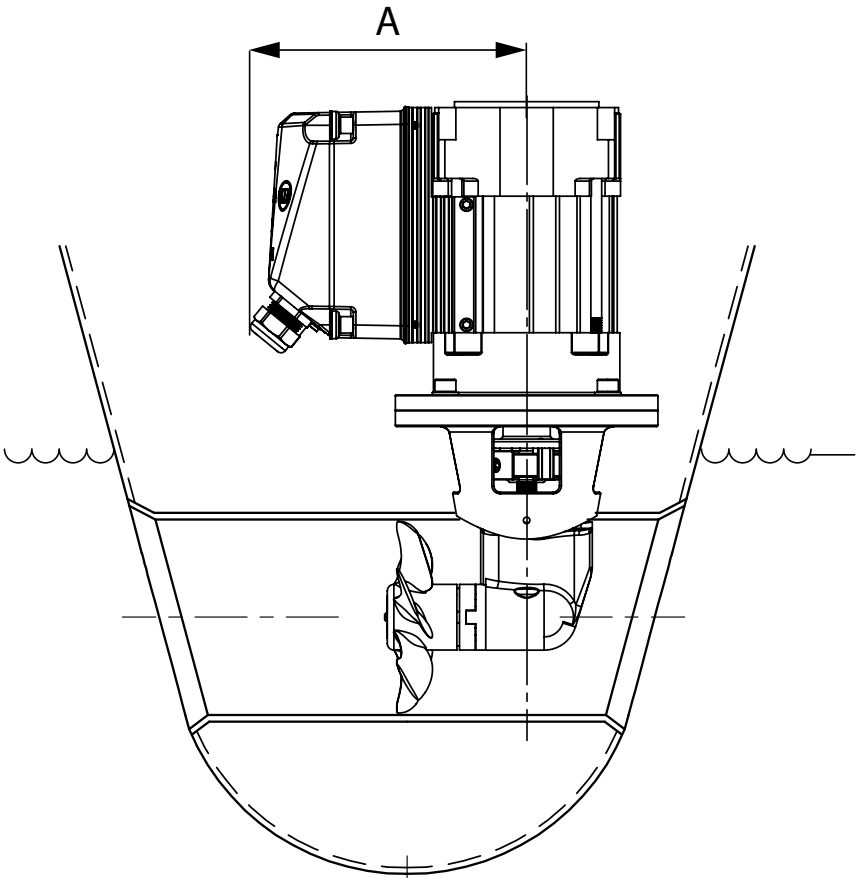
* BOW PRO thrusters will run continuously for 6 or 10 minutes (dependent on thruster model) at full power, after that the power may reduce. At less than full power setting, run time is greatly enhanced. To achieve these results installation instructions must be adhered.

Dimensions of all BOW PRO Thrusters (in mm)

SERIES	BOWA	BOWA	BOWA	BOWA BOWB	BOWA BOWB	BOWA BOWB	BOWA BOWB	BOWB
Output	**30 kgf**	**36 kgf**	**42 kgf**	**57 kgf**	**65 kgf**	**76 kgf**	**90 kgf**	**110 kgf**
A	210	210	210	210	210	210	282	282
B	350	358	378	393	413	413	452	452
E Ø	200	200	200	200	200	200	200	200
F Ø	110	125	125	150	185	185	185	185

SERIES	BOWB	BOWB	BOWB	BOWB	BOWB	BOWB	BOWB
Output	**130 kgf**	**150 kgf**	**180 kgf**	**210 kgf**	**285 kgf**	**300 kgf**	**320 kgf**
A	282	282	282	282	250	250	250
B	452	507	528	528	740	740	740
E Ø	200	200	240	240	258	258	258
F Ø	185	250	250	250	300	300	300







BOW PRO series compared to

The technical advantage over existing thrusters are significant when compared with our competitors:

Comparison	BOW PRO 301	Sidepower SEP30S	Quick	Lewmar
Thrust, N (lbf)	300 (66)	300 (66)	300 (66)	280 (61)
Efficiency >80%	✓	No	No	No
CANBUS	✓	✓	No	No
Proportional	✓	✓	No	No
Brushless	✓	No	No	No
Input voltage	12 V or 24 V	12 V or 24 V	12 V or 24 V	12 V or 24 V
Operating time	Unlimited*	5 min	N/A	N/A

Comparison	BOW PRO BOOSTED 90	Sidepower SEP80	Quick BTQ185-95	Maxpower CT80	Lewmar 185TT5.0
Thrust, N (lbf)	900 (198)	800 (176)	950 (209)	690 (152)	820 (181)
Efficiency >80%	✓	No	No	No	No
CANBUS	✓	✓	No	No	No
Proportional	✓	✓	Optional	Optional	No
Brushless	✓	No	No	No	No
Input voltage	12 V & 24 V	12 V or 24 V	12 V or 24 V	12 V or 24 V	12 V or 24 V
Operating time	Unlimited*	5 min	N/A	2-3 min	N/A



* BOW PRO thrusters will run continuously for 6 or 10 minutes (dependent on thruster model) at full power, after that the power may reduce. At less than full power setting, run time is greatly enhanced. To achieve these results installation instructions must be adhered.

3 year warranty, unique in the market!

All VETUS boat equipment products come with a 3 year warranty. As a result of our long experience, careful choice of materials and stringent quality controls, we have the confidence to offer this warranty. For advice, installation and service you can always rely on our worldwide network of VETUS dealers.