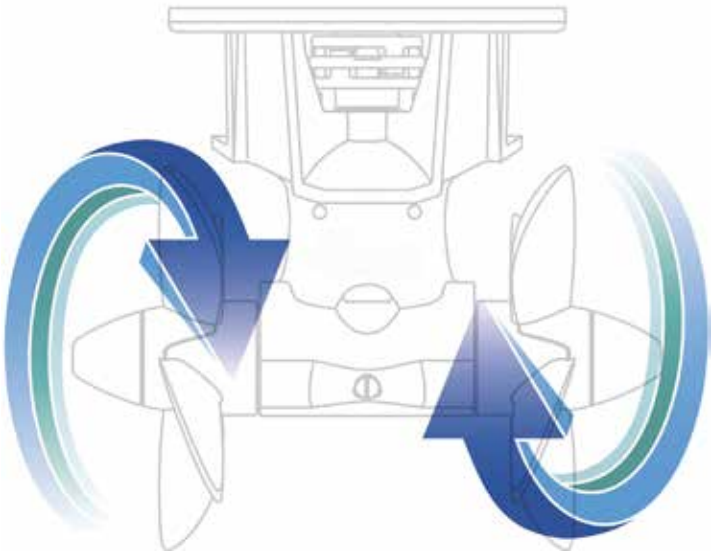
QS®
SEAMASTER

QS Seamaster has developed a complete and advanced line of DC, brushless, AC and hydraulic electric thrusters.
Designed by SAIM Marine, with almost thirty years of experience in supply, assistance, distribution and design of products and systems in the marine business, and built by Quick SPA, a manufacturer of high-tech systems, one of the main players in the nautical industry, manufacturer of innovative and reliable components.
As in the most famous and fascinating industrial collaborations, the aim of this cooperation is to respond to the ever-increasing demand for a technologically advanced product, with superior performance, but also for a sales, assistance and service network developed to offer an experience without stress in and to provide tailor-made solutions.
Built and designed entirely in Italy, the product range includes 30 to 1400 Kgf models for boats and yachts up to 220 ft.
QS Seamaster thrusters are available in DC, AC, brushless DC-AC or hydraulic version, for tunnel installation. They are also available in DC version or hydraulic for retractable models.

Technical features

- High efficiency and powerful motors
- Ignition Protected version available (up to 80Kgf)
- Elastic joint with an exclusive design
- Bronze gear leg designed by Quick with a special hydrodynamic profile
- Low maintenance: gear leg guaranteed against oil leaking
- Easily replaceable aluminum anodic protection
- 4 and 5 blade propellers designed specifically to ensure maximum performance and efficiency from each motor. Propellers made of special composite or in NiBrAl. All double propellers are counterrotating.



QSB - DC-AC BRUSHLESS THRUSTER RANGE, STANDARD PROPORTIONAL

QSB

	QSB 100-185	QSB 160-250	QSB 300-300
Thrust (Kgf)	105	160	300
Boat Lenght (ft)	35 - 55	50 - 72	70 -100
Boat Lenght (m)	12 - 17	15 - 22	22 - 30
Internal tunnel diameter (mm)	185	250	300
Propeller/Material	Double / Composite	Double / Composite	Double / Composite
Motor power (kW)	6,3	8	15
Voltage (V)	12*- 24	12*- 24	24*- 48
Weight (Kg)	28	44.9	64.1

* With booster for 12V boats or 24V boats (QSB 300)

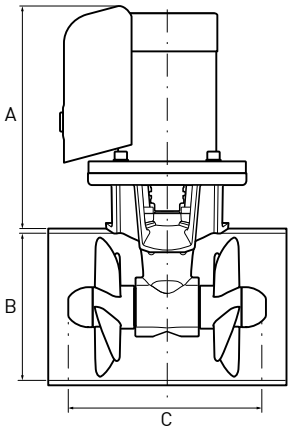
The QSB range, proportional thrusters without brushes or brushless, are equipped with the cutting-edge technology of 12/24/48V brushless electric motors

Key features:

- No carbon brushes.
- Extremely efficient with low operating consumption
- Proportional as standard, with analog or digital controls
- Silent operation
- Unlimited runtime
- Easy to install – Minimized maintenance
- Counter-rotating propellers

QSB Product Range

Thruster	A	B	C
QSB 100-185	345 mm (13" 37/64 in)	185 mm (7" 9/32 in")	267 mm (10" 33/64 in)
QSB 160-250	361 mm (14" 7/32 in)	250 mm (9" 27/32 in)	373 mm (14" 11/16 in)
QSB 300-300	361 mm (14" 7/32 in)	300 mm (11" 11/16 in")	434 mm (17" 3/32 in)



Double Propeller

QS - DC ELECTRIC THRUSTER RANGE, ON/OFF OR PROPORTIONAL

QS

	QS 30-110	QS 40-125	QS 50-140	QS 60-185	QS 80-185	QS 100-185
Thrust (Kgf)	30	40	50	60	80	100
Boat Lenght (ft)	16 - 26	26 - 34	27 - 37	29 - 38	35 - 48	35 - 55
Boat Lenght (m)	5 - 8	8 - 10.5	8 - 11	9 - 12	10 - 15	12 - 17
Internal tunnel diameter (mm)	110	125	140	185	185	185
Propeller/Material	Single / Composite	Single / Composite	Single/ Composite	Single / Composite	Double / Composite	Double / Composite
Motor power (kW)	1,3	2,2	2,4	3	4,3	6,3
Voltage (V)	12	12	12	12 - 24	12 - 24	12 - 24
Weight (Kg)	9,5	10.9	12.2	16.7	17.9	27.5

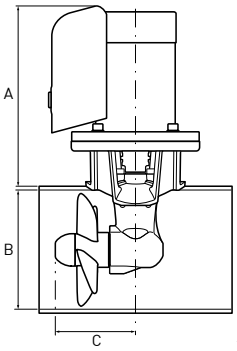
"QS" DC range thrusters are powered by advanced high-efficiency DC motors. A microprocessor control system is activated in advance in case of motor overheating, avoiding sudden interruptions of the thruster and ensuring its use.

Key features:

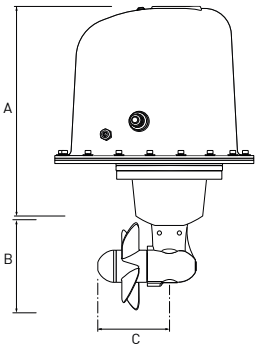
- All models - except QS300-300 -can be proportional or transformed into proportional in both analog/digital version with CAN-bus protocol
- All thrusters up to the QS80-185 can also be supplied in IP version (Ignition Protection)
- Models with double propellers are counter-rotating

QS Product Range

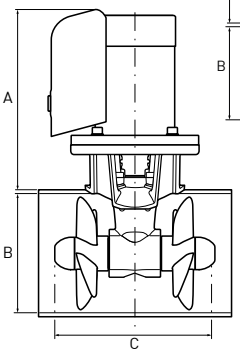
Thruster	A	B	C
QS 30-110 12V	240 mm (9" 29/64 in)	110 mm (4" 21/64 in)	84 mm (3" 5/16 in)
QS 40-125 12V	261 mm (10" 9/32 in)	125 mm (4")	84 mm (3" 5/16 in)
QS 40-125 IP	310 mm (12" 13/64 in)	125 mm (4")	84 mm (3" 5/16 in)
QS 50-140 12V	267 mm (10" 33/64 in)	140 mm (5" 1/2 in)	108 mm (4" 1/4 in)
QS 50-140 IP	315 mm (12" 13/32 in)	140 mm (5" 1/2 in)	108 mm (4" 1/4 in)
QS 60-185 12V	292 mm (11" 1/2 in)	185 mm (7" 9/32 in)	123 mm (4" 53/64 in)
QS 60-185 IP	359 mm (14" 9/64 in)	185 mm (7" 9/32 in)	123 mm (4" 53/64 in)
QS 60-185 24V	278 mm (10" 15/16 in)	185 mm (7" 9/32 in)	123 mm (4" 53/64 in)
QS 80-185 12V	329 mm (12")	185 mm (7" 9/32 in)	267 mm (10" 33/64 in)
QS 80-185 24V	278 mm (10" 15/16 in)	185 mm (7" 9/32 in)	267 mm (10" 33/64 in)
QS 80-185 IP	359 mm (14" 9/64 in)	185 mm (7" 9/32 in)	267 mm (10" 33/64 in)
QS 100-185 12V	410 mm (16" 9/64 in)	185 mm (7" 9/32 in)	267 mm (10" 33/64 in)
QS 100-185 24V	374 mm (14" 23/32 in)	185 mm (7" 9/32 in)	267 mm (10" 33/64 in)
QS 130-250 12V	390 mm (15" 23/64 in)	250 mm (9" 27/32 in)	373 mm (14" 11/16 in)
QS 130-250 24V	394 mm (15" 33/64 in)	250 mm (9" 27/32 in)	373 mm (14" 11/16 in)
QS 160-250 24V	397 mm (15" 5/8 in)	250 mm (9" 27/32 in)	373 mm (14" 11/16 in)
QS 220-250 24V	475 mm (18" 45/64 in)	250 mm (9" 27/32 in)	373 mm (14" 11/16 in)
QS 250-300 24V	482 mm (18" 31/32 in)	300 mm (11" 11/16 in)	434 mm (17" 3/32 in)
QS 300-300 48V	520 mm (20" 15/32 in)	300 mm (11" 11/16 in)	434 mm (17" 3/32 in)



Single Propeller



IP Model



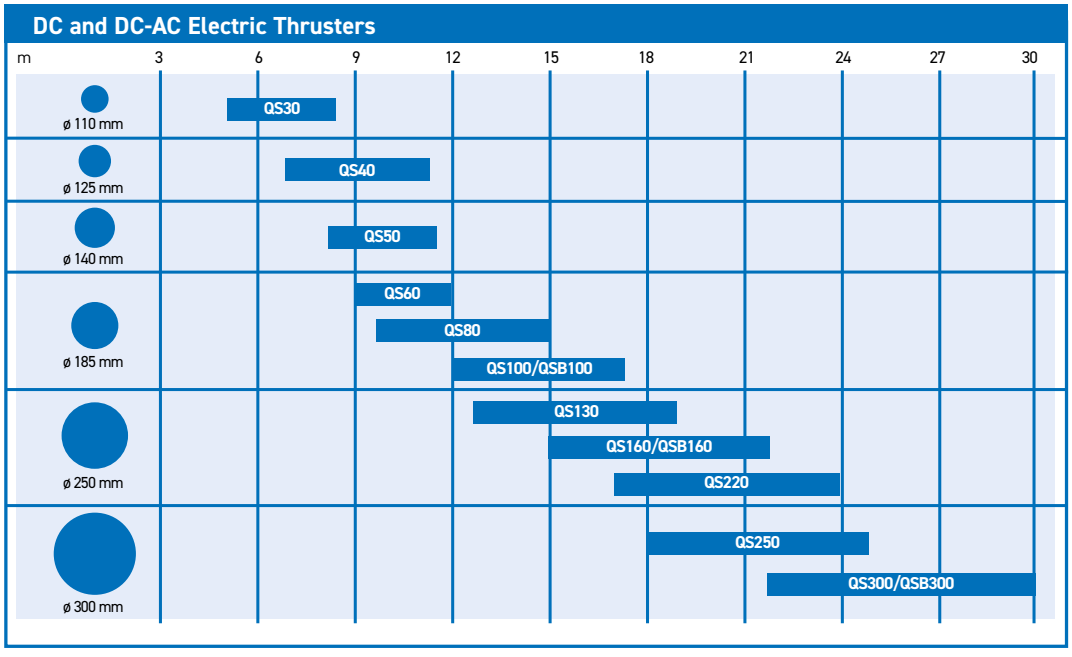
Double Propeller

QS 130-250	**QS 160-250**	**QS 220-250**	**QS 250-300**	**QS 300-300**
130	160	220	250	300
42 - 60	44 - 64	55 - 80	60 - 85	70 - 100
13 - 19	15 - 22	17 - 24	18 - 25	22 -30
250	250	250	300	300
Double / Composite	Double / Composite	Double / Composite	Double / Composite	Double / Composite
6,5	8	10	12	15
12 - 24	24	24	24	48
34.3	35	49	46.7	66.7

In order to have the best control and a total flexibility on each thruster model, the QS DC range is suitable to different types of controls:

- ON/OFF analogic pushbutton or joystick controls
- Analogic proportional joystick controls
- Digital proportional joystick controls (compatible with other systems)

THRUSTER DIMENSIONING



QSA - AC ELECTRIC THRUSTER RANGE, 3PH, STANDARD PROPORTIONAL

QSA

	QSA 240-250	QSA 300-300	QSA 320-300	QSA 360-300	QSA 400-300	QSA 450-386	QSA 520-386
Maximum Thrust (Kgf)	240	300	320	360	400	450	520
Boat Lenght (ft)	42 - 75	55-100	55 - 100	75-110	75 - 110	72 - 118	85 - 140
Boat Lenght (m)	13 - 23	18 - 31	18 - 31	22 - 35	22 - 35	22 - 37	25 - 40
Internal tunnel diameter (mm)	250	300	300	300	300	386	386
Propeller/Material	Double/Composite	Double/Composite	Double/NiBrAl	Double/NiBrAl	Double/NiBrAl	Double/Composite	Double/Composite
Motor power (kW)	15	15	15	22	22	30	37
Weight (Kg)	160	162	167	216	216	274	375
Type approval	-	-	RINA	RINA	RINA	RINA	RINA

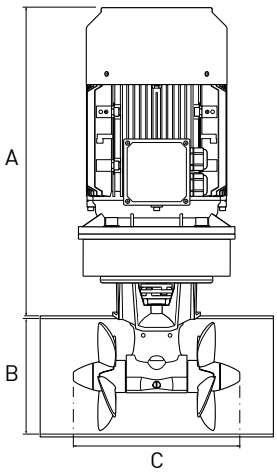
The AC thruster range, for medium to large vessels, take advantage of the three-phase onboard voltage (230/400).

Key features:

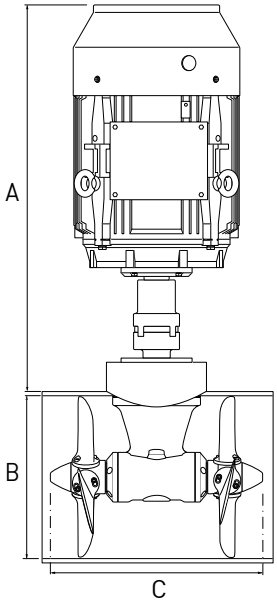
- Unlimited runtime
- Proportional systems as a standard
- Propeller made of special composite or NiBrAl (from model QSA320-300)
- RINA Type Approval (from QSA320-300)
- Counter-rotating propellers

QSA Product Range

Thruster	A	B	C
QSA 240-250	691 mm (27" 13/64 in)	250 mm (9" 27/32 in)	373 mm (14" 11/16")
QSA 300-300	701 mm (27" 19/32 in)	300 mm (11" 11/16 in)	434 mm (17" 3/32 in)
QSA 320-300	701 mm (27" 19/32 in)	300 mm (11" 11/16 in)	434 mm (17" 3/32 in)
QSA 360-300	772 mm (30" 25/64 in)	300 mm (11" 11/16 in)	434 mm (17" 3/32 in)
QSA 400-300	772 mm (30" 25/64 in)	300 mm (11" 11/16 in)	434 mm (17" 3/32 in)
QSA 450-386	924 mm (36" 3/8 in)	386 mm (15" 13/64 in)	508 mm (20" 5/64 in)
QSA 520-386	968 mm (38" 7/64 in)	386 mm (15" 13/64 in)	508 mm (20")
QSA 550-386 HD	902 mm (35" 33/64 in)	386 mm (15" 13/64 in)	566 mm (22" 9/32 in)
QSA 620-386 HD	927 mm (36" 1/2 in)	386 mm (15" 13/64 in)	566 mm (22" 9/32 in)
QSA 750-513	1100 mm (43" 5/16 in)	513 mm (20" 13/64 in)	750 mm (29" 17/32 in)
QSA 900-513	1100 mm (43" 5/16 in)	513 mm (20" 13/64 in)	750 mm (29" 17/32 in)
QSA 1100-513	1100 mm (43" 5/16 in)	513 mm (20" 13/64 in)	750 mm (29" 17/32 in)
QSA 1200-610	1117 mm (43" 31/32 in)	610 mm (24" 1/64 in)	748 mm (29" 29/64 in)
QSA 1400-610	1168 mm (45" 63/64 in)	610 mm (24" 1/64 in)	748 mm (29" 29/64 in)



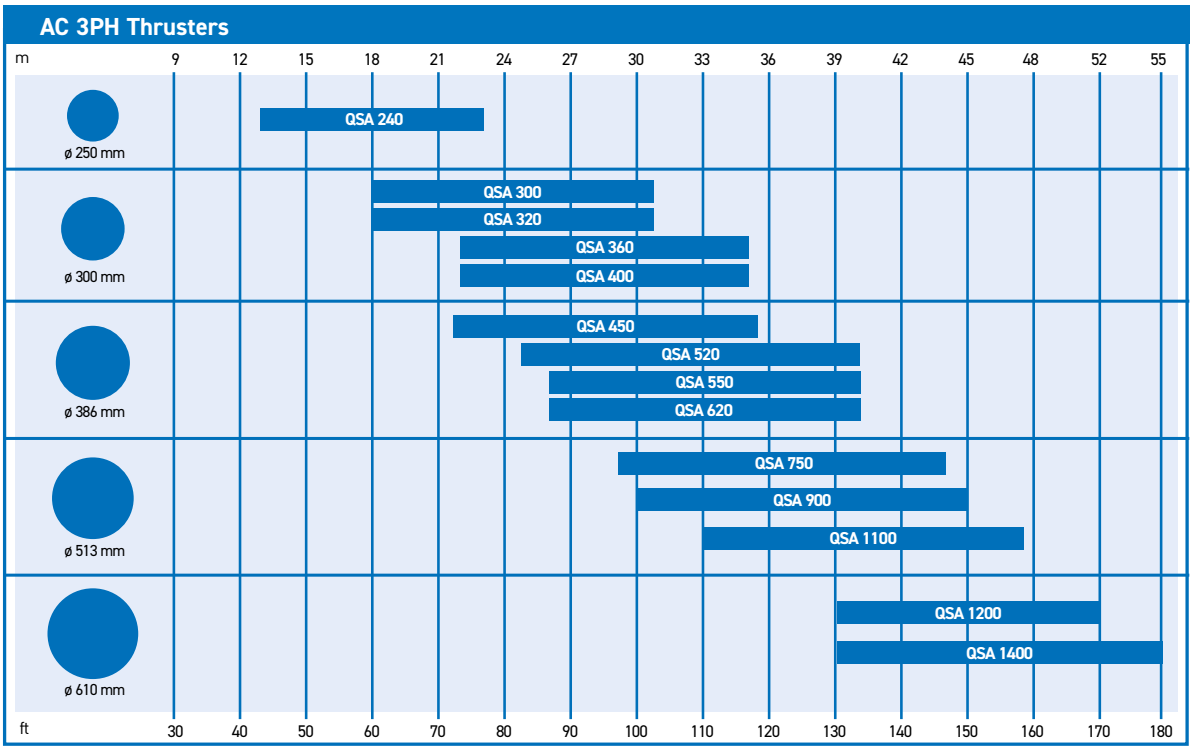
Diam. 250-300 mm



Diam. 386-513 mm

QSA 550-386 HD	QSA 620-386 HD	QSA 750-513	QSA 900-513	QSA 1100-513	QSA 1200-610	QSA 1400-610
550	620	750	900	1100	1200	1400
82-131	82-131	95 - 145	100 - 150	105 - 165	131 - 170	131 - 180
25-40	25-40	29 - 44	30 - 45	33 - 50	40 - 52	40 - 55
386	386	513	513	513	610	610
Double/NiBrAl	Double/NiBrAl	Double/NiBrAl	Double/NiBrAl	Double/NiBrAl	Double/NiBrAl	Double/NiBrAl
37	45	45	55	75	75	90
385	510	495	590	742	830	909
RINA	RINA	RINA	RINA	RINA	RINA	RINA

THRUSTER DIMENSIONING



QSH – HYDRAULIC THRUSTERS

QSH

	QSH 100-185	QSH 220-250	QSH 300-300	QSH 400-300	QSH 420-386
Thrust (Kgf)	105	220	300	400	420
Boat Lenght (ft)	33 - 60	50 - 76	76 - 100	82 - 115	85 - 118
Boat Lenght (m)	10 - 18	15 - 23	23 - 30	25 - 35	26 - 36
Internal tunnel diameter (mm)	185	250	300	300	386
Propeller/Material	Double / Composite	Double / Composite	Double / Composite	Double / NiBrAl	Double / Composite
Motor power (kW)	8	11.2	20	24	32
Weight (Kg)	8.9	17.3	27.6	40.8	56.5
Type approval	-	-	RINA	RINA	RINA

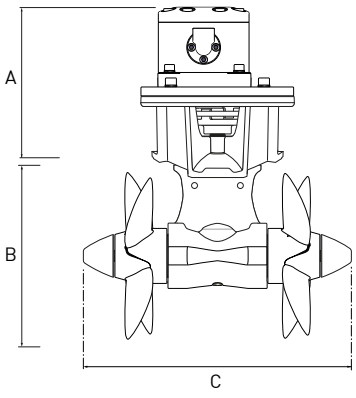
The QSH hydraulic thruster range, for medium to large vessels, is one of the most complete on the market. High-quality components and particularly compact and roomy tanks make the QSH range be among the top hydraulic maneuvering systems in the pleasure craft market.

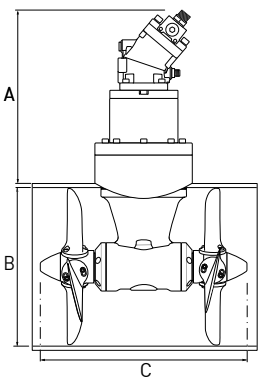
Key features:

- Unlimited runtime
- Proportional as a standard, digital control compatible with other systems
- Composite or NiBrAl propellers (starting from QSH 400-300)
- RINA Type Approval starting from QSH 300-300
- Counter-rotating propellers
- Power up to 1400 kg/f thrust

QSH Product Range

Thruster	A	B	C
QSH 100-185	177 mm (6" 31/32 in)	185 mm (7" 9/32 in)	267 mm (10" 33/64 in)
QSH 220-250	209 mm (8" 15/64 in)	250 mm (9" 27/32 in)	373 mm (14" 11/16 in)
QSH 300-300	246 mm (8" 15/64 in)	300 mm (11" 11/16 in)	436 mm (17" 11/64 in)
QSH 400-300	362 mm (14" 17/64 in)	300 mm (11" 11/16 in)	434 mm (17" 3/32 in)
QSH 420-386	395 mm (15" 09/16 in)	386 mm (15" 13/64 in)	508 mm (20")
QSH 450-386	445 mm (17" 33/64 in)	386 mm (15" 13/64 in)	508 mm (20")
QSH 550-386	395 mm (15" 09/16 in)	386 mm (15" 13/64 in)	566 mm (22" 9/32 in)
QSH 580-386	445 mm (17" 33/64 in)	386 mm (15" 13/64 in)	566 mm (22" 9/32 in)
QSH 1000-513	405 mm (15" 15/16 in)	513 mm (20" 13/64 in)	720 mm (28" 11/32 in)
QSH 1400-610	550 mm (22" 21/32 in)	610 mm (24" 1/64 in)	748 mm (29" 29/64 in)

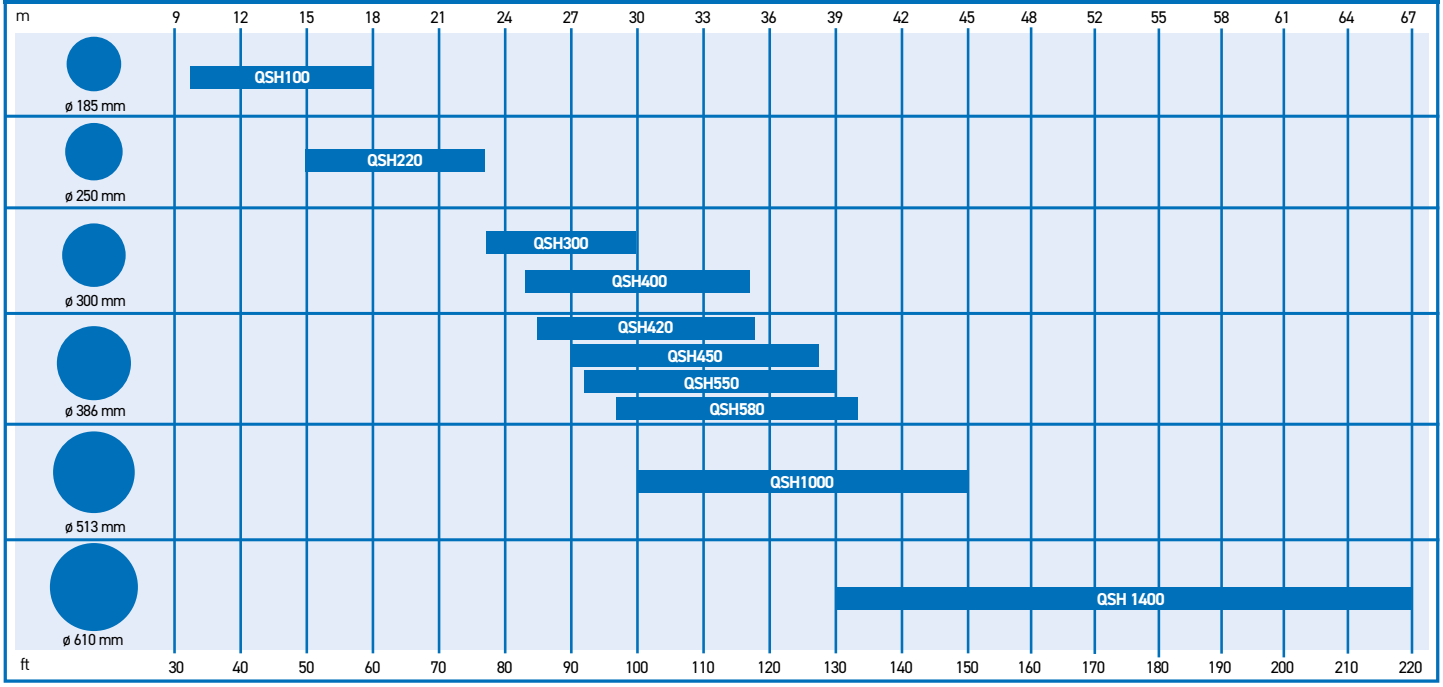




QSH 450-386	QSH 550-386	QSH 580-386	QSH 1000-513	QSH 1400-610
455	550	580	1000	1400
89 - 125	92 - 130	92 - 132	100 - 150	130-220
27 - 38	28 - 39	28 - 40	30 - 45	40-67
386	386	386	513	610
Double / NiBrAl	Double / Composite	Double / NiBrAl	Double / NiBrAl	Double / NiBrAl
34	41	41	60	90
69	74.2	76.7	173	235
RINA	RINA	RINA	RINA	RINA

THRUSTER DIMENSIONING

Hydraulic Thrusters



QSR - RETRACTABLE THRUSTERS

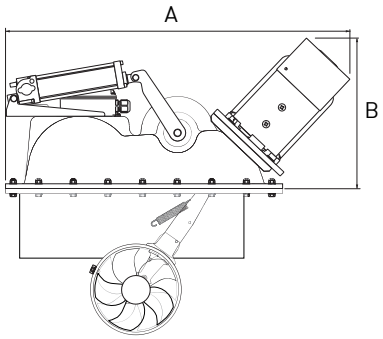
QSR

	QSR 80-185	QSR 100-185	QSR 160-250	QSR 230-250	QSR 300-300
Thrust (Kgf)	85	105	160	240	300
Boat Lenght (ft)	35 - 48	40 - 52	50 - 66	60 - 82	75-95
Boat Lenght (m)	10 - 15	12 - 16	15 - 20	18 - 25	23-28
Internal Tunnel Diameter (mm)	185	185	250	250	300
Propeller/Material	Double / Composite	Double / Composite	Double / Composite	Double / Composite	Double / Composite
Motor power (kW)	4,5	6,3	8	10	14
Voltage (V)	12 - 24	12 - 24	24	24	48
Weight (Kg)	37.9 - 40.5	46.5	82	97	135

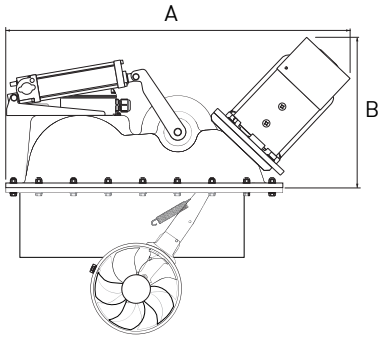
The QSR retractable thrusters can be both DC electric and hydraulic.
Designed to give minimal hydrodynamic turbulences (especially in sailboats applications) the QSR retractable thrusters take advantage of the same technology applied to the other ranges.
In DC version they can be provided in ON/OFF configuration.

QSR Product Range

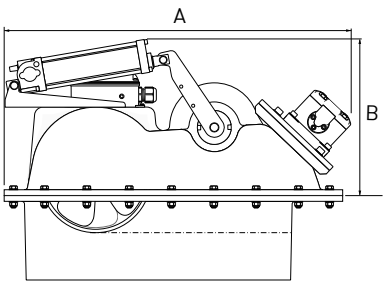
Thruster	A	B
QSR 80-185 12/24V	743 mm (29" 1/4 in)	323 mm (12" 23/32 in)
QSRH 80-185	628 mm (25" 1/8 in)	273 mm (10" 3/4 in)
QSR 100-185 12/24V	801 mm (31" 17/32 in)	384 mm (15" 1/8 in)
QSRH 100-185	628 mm (25" 1/8 in)	273 mm (10" 3/4 in)
QSR 160-250 24V	866 mm (34" 3/32 in)	443 mm (17" 7/16 in)
QSRH 160-250	754 mm (29" 11/16 in)	200 mm (11" 29/64 in)
QSR 230-250 24V	917 mm (36" 7/64 in)	515 mm (20" 9/32 in)
QSRH 230-250	754 mm (29" 11/16 in)	200 mm (11" 29/64 in)
QSRH 300-300	N.A.	N.A.



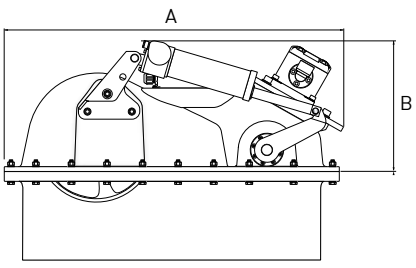
DC Retractable Thrusters Diam. 185 mm



DC Retractable Thrusters Diam. 250 mm



Hydraulic Rretractable Thrusters Diam. 185 mm

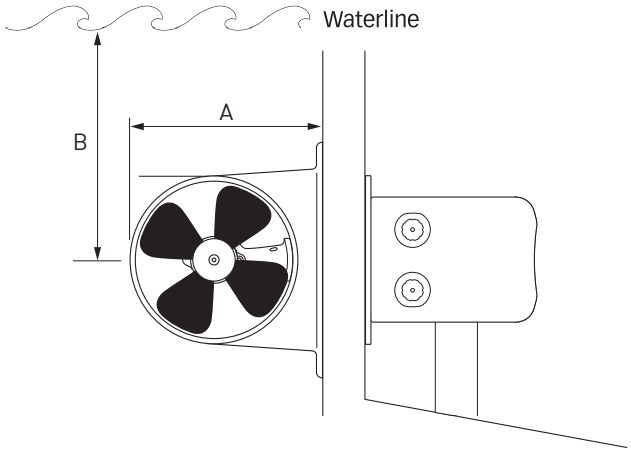


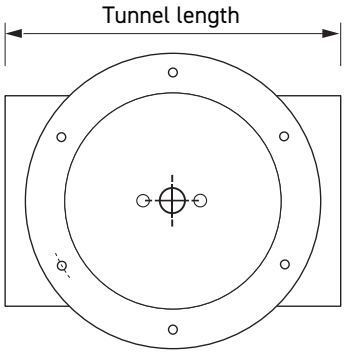
Hydraulic Rretractable Thrusters Diam. 250 mm

MEASUREMENTS

Stern Thrusters Tunnels

Diameter mm	A	B	Tunnel length
140	176 mm	175 mm	250 mm
185	262 mm	232 mm	340 mm
250	360 mm	313 mm	420 mm
300	380 mm	375 mm	490 mm
386	485 mm	483 mm	600 mm
513	631 mm	642 mm	760 mm
610	Available upon request		





APMS-SC

Speed controller for DC motors

Brush motors speed can be regulated in DC. The module can be governed by one or two APMS (Analogic Proportional Maneuvering System). The APMS-SC module allows to turn an ON/OFF thruster into a proportional system.

Advantages:

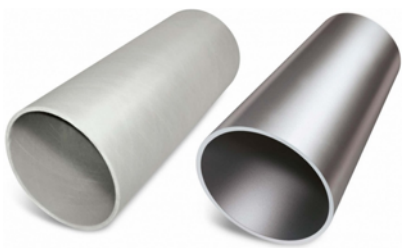
- High efficiency
- Low weight and compact dimension
- Wide range of compatible thrusters

Model	APMS-SC 400	APMS-SC 800
Input Voltage	9 - 16 VDC	9 - 32 VDC
Maximum output current	400 A	800 A
Operating temperature	-4°F ÷ +140°F with power derating over 122°F	
Cooling	Variable cooling fans	
Weight	4 Kg (8.8 lbs)	4.4 Kg (9.7 lbs)

TUNNELS

Type	GPR			STEEL E 355[2]		
Ø Tunnel	Thickness		Length[1]	Thickness		Length[1]
	mm	Inch	m - ft	mm	Inch	m - ft
110	5	3/16	0.75 - 1 - 1.5 - 2 - 3 m 2' 5" 33/64 3' 3" 3/8 4' 11" 3/64 6' 6" 3/4 9' 10" 1/8	5	3/16	0.75 - 1 - 1.5 - 2 - 3 m 2' 5" 33/64 3' 3" 3/8 4' 11" 3/64 6' 6" 3/4 9' 10" 1/8
125	5	3/16		4	5/32	
140	5	3/16		6.3	15/64	
185	5.5	7/32		4	5/32	
250	6.5	1/4		6.3	15/64	
300	9.5	3/8		11	27/64	
386	14	35/64		10	25/64	
513	16	5/8		22	7/8	
610	18	45/64		24	15/16	

(1) More lengths are available upon request
(2) Seamless round steel tubes for mechanical applications according to EN 10927 norm



ANALOGIC CONTROL PANELS

QS Seamaster offers an exclusive set of control panels. Available with push buttons or single and double joysticks, depending on the system installed, they have been designed and tested to withstand the most varied environmental and climatic conditions.
They offer great flexibility and ease of installation allowing multiple applications even in parallel.
An important safety feature is ensured by the priority and disabling of the station, both automatic.
The thruster is protected from polarity reversal, short outbound, prolonged activity of the thrusters and from the interruption of the control wiring.
Diagnostics and operation are characterized by acoustic signals (switchable).

QAJ0T
Dimension: 61.6 x 61.6 mm
(2.42" x 2.42")
ON/OFF analogic control panel for one thruster with pushbuttons

QAJ1T
Dimension: 61.6 x 61.6 mm
(2.42" x 2.42")
ON/OFF analogic control panel for one thruster with joystick

QAJ2T
Dimension: 65,8 x 117 mm
(2.59" x 4.60")
ON/OFF analogic control panel for two thrusters with joystick

APMS 1T
Dimension: 110 x 110 mm
(4.33" x 4.33")
Analogic proportional control panel for one thruster with joystick

APMS 2T
Dimension: 110 x 110 mm
(4.33" x 4.33")
Analogic proportional control panel for two thrusters with joystick

DIGITAL CONTROL PANELS

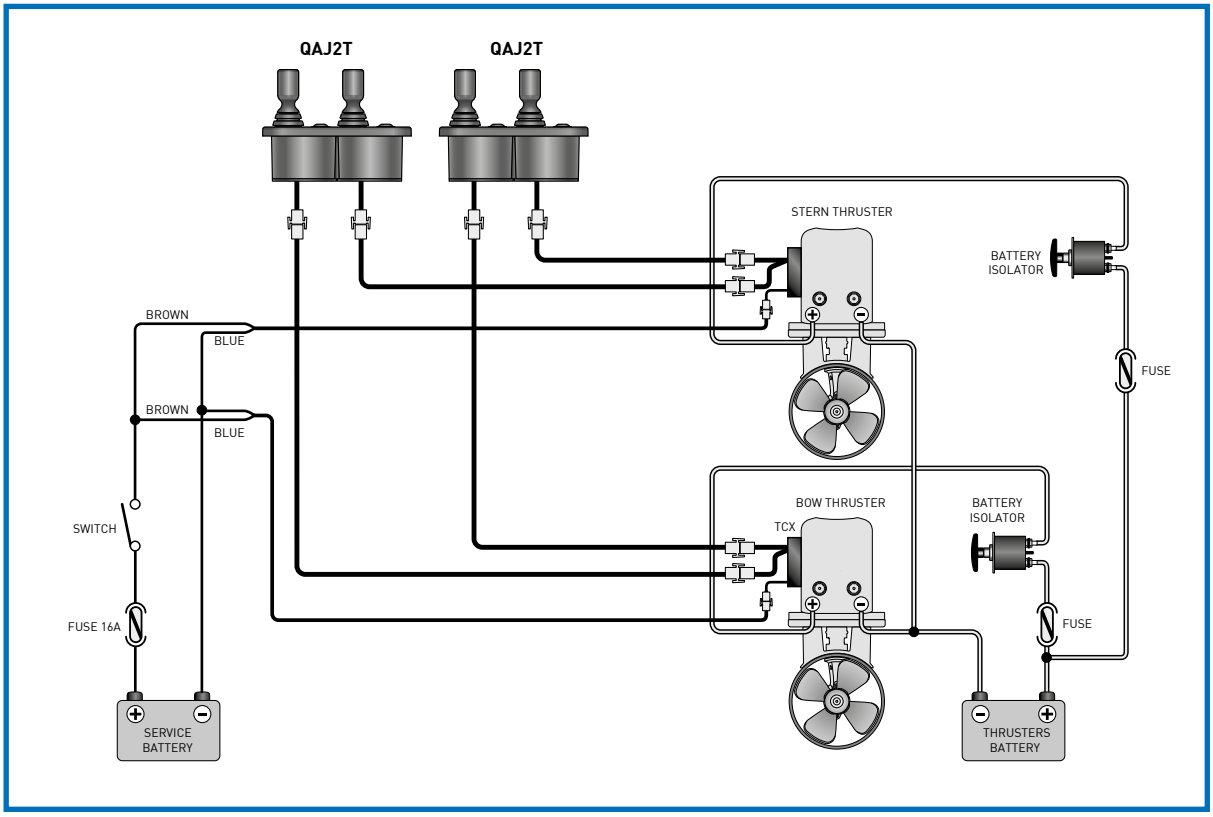
QS Seamaster offers a range of control panels for digital proportional systems DPMS (Digital Proportional Maneuvering System).
Flexibility and easy installation are main characteristics of the DPMS, the most advanced technology for thruster commands.
Standard supply for AC and hydraulic thrusters and optional feature for other systems, the DPMS is the most reliable, versatile and advanced system thanks to the CAN-bus standard use.
DPMS systems allow to connect different kind of thrusters, as shown in the following diagram (hybrid system: QSB – brushless thruster – and QS proportional DC thruster) and can be integrated with different networks and external systems.
The digital display (MSD) shows the necessary information and a useful diagnostic warning in case of troubleshooting.

DPMS 1T
Dimension: 110 x 110 mm
(4.33" x 4.33")
Digital proportional control panel for one thruster with joystick

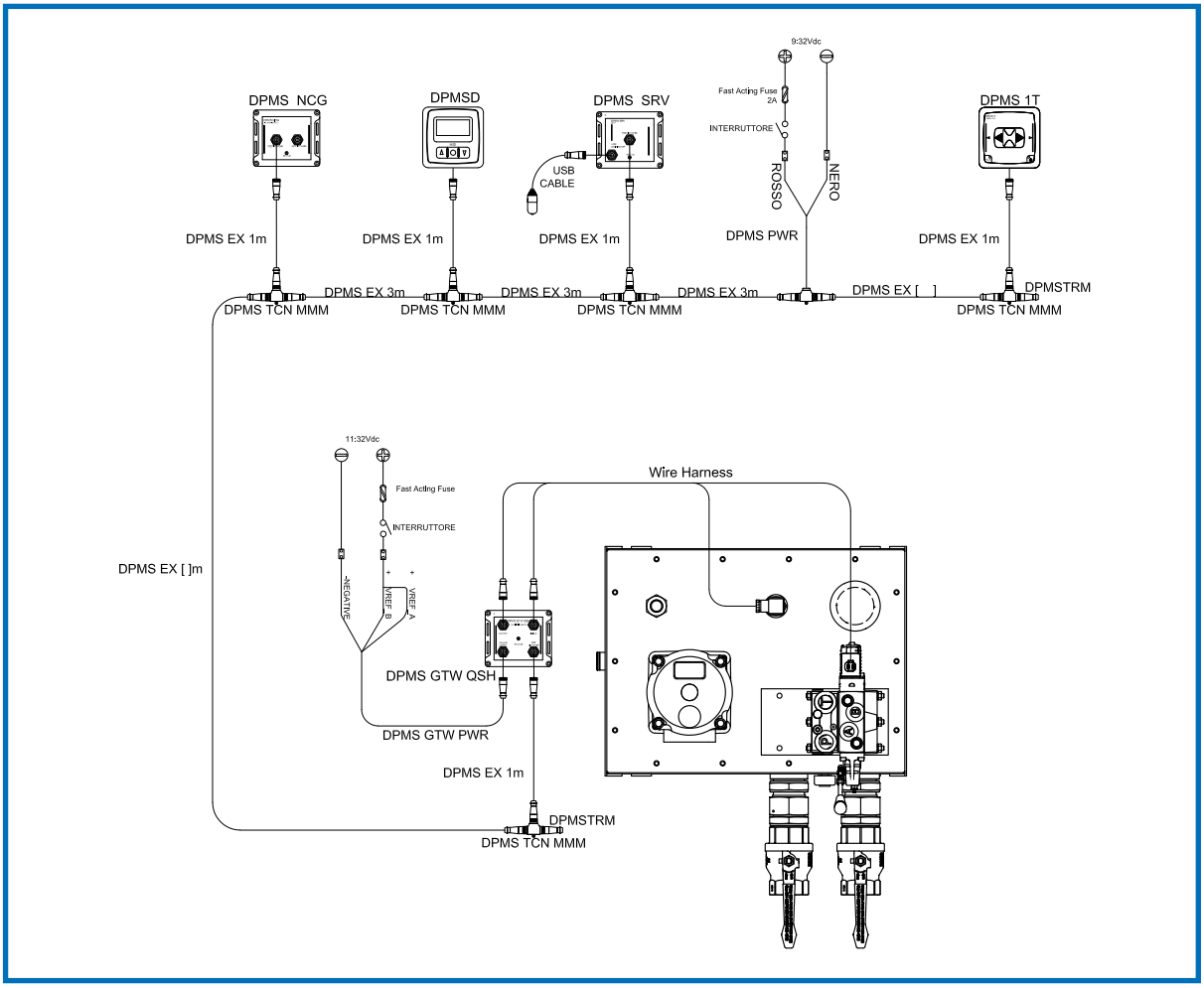
DPMS 2T
Dimension: 110 x 110 mm
(4.33" x 4.33")
Digital proportional control panel for two thrusters with joystick

MSD
Dimension: 110 x 110 mm
(4.33" x 4.33")
User interface/diagnostic for DPMS

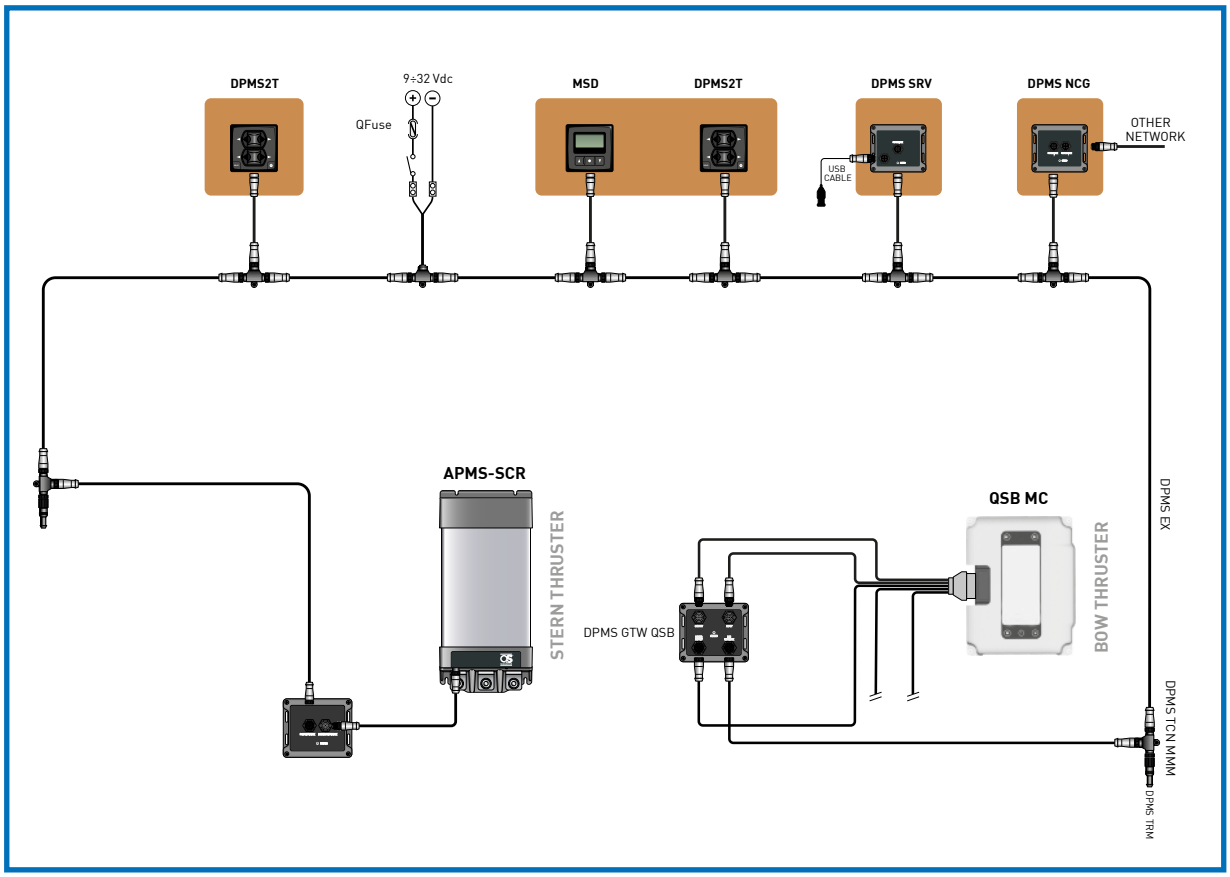
ON/OFF wiring diagram example



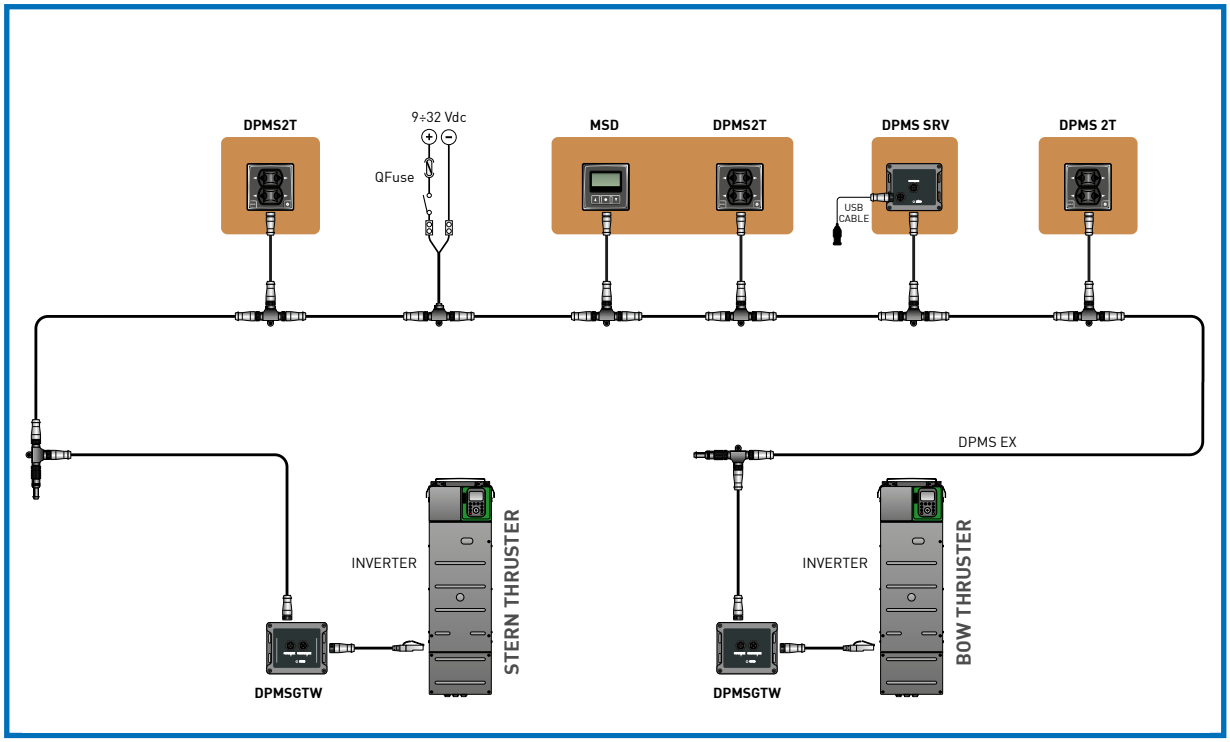
QSH system connections diagram example



Brushless – DC proportional thrusters link diagram with CAN-BUS commands example

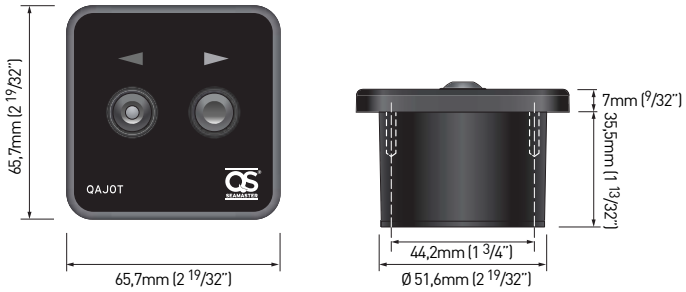


3ph thrusters installation diagram example

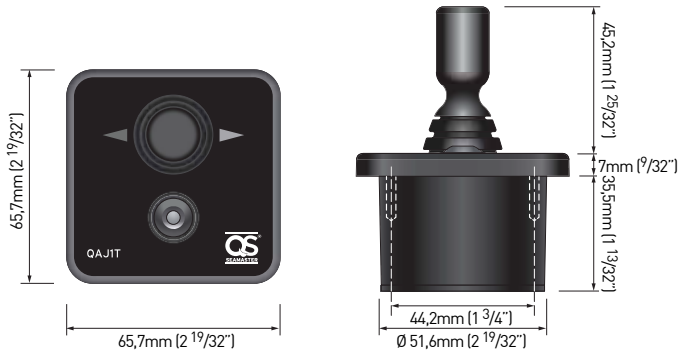


CONTROL PANELS

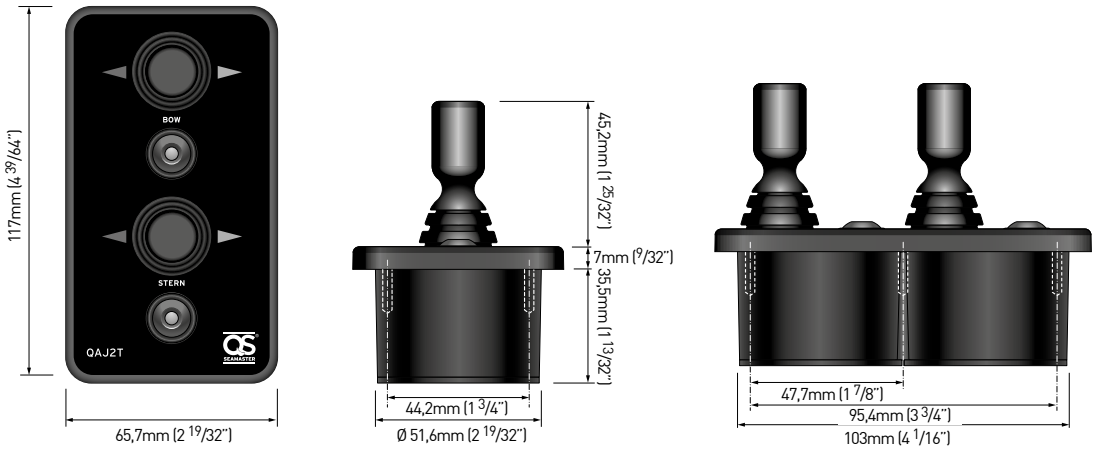
QAJ0T



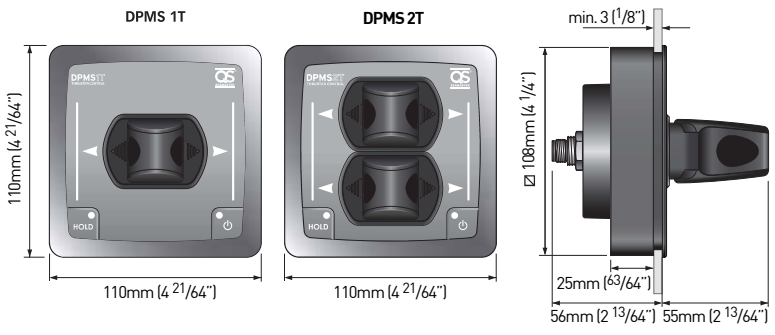
QAJ1T



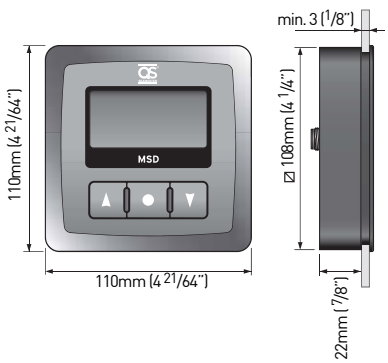
QAJ2T



APMS/DPMS



MSD



Ed. 08/23

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