# **BTQ** series



## **SINGLE AND DOUBLE PROPELLER**

**BTQ110** 

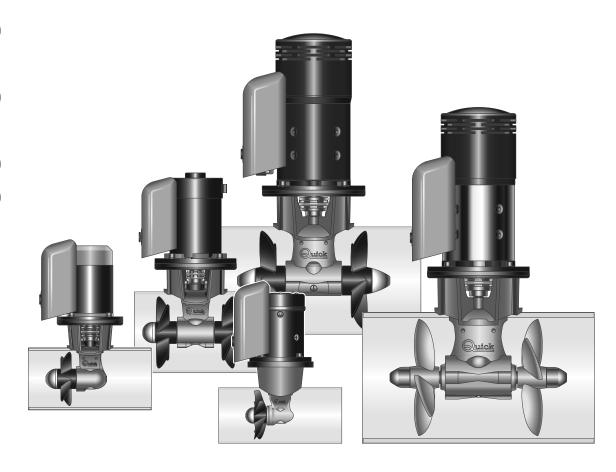
**BTQ125** 

**BTQ140** 

**BTQ185** 

**BTQ250** 

**BTQ300** 



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# BTQ series EN

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# 1 - Information about the product



## BEFORE USING THE THRUSTER, CAREFULLY READ THIS USER MANUAL. IF IN DOUBT, CONTACT YOUR NEAREST QUICK® DEALER.

QUICK® RESERVES THE RIGHT TO INTRODUCE CHANGES TO THE EQUIPMENT AND THE CONTENTS OF THIS MANUAL WITHOUT PRIOR NOTICE. IN CASE OF DISCREPANCIES OR ERRORS BETWEEN THE TRANSLATED TEXT AND THE ORIGINAL ITALIAN TEXT, PLEASE REFER TO THE ITALIAN TEXT.

## 1.1 - Technical data

MODELS		BTQ1102512	BTQ1253012	BTQ1254012	BTQ1403012	BTQ1404012
Propeller type				Single		
Tunnel Ø		110 mm (4" 21/64)	125 mm (5")	125 mm (5")	140 mm (5" 33/64)	140 mm (5" 33/64)
Motor Power		1,3 kW	1,5 kW	2,2 kW	1,5 kW	2,2 kW
Voltage		12 V	12 V	12 V	12 V	12 V
Fusible		130 A CNL DIN	225 A CNL DIN	325 A CNL DIN	150A CNL DIN	225A CNL DIN
Thrust		25 kgf (55.1 lb)	30 kgf (66.1 lb)	40 kgf (88.2 lb)	30 kgf (66.1 lb)	40 kgf (88.2 lb)
Weight		9,0 kg (19.8 lb)	10,0 kg (22.0 lb)	10,9 kg (24.0 lb)	11,3 kg (24.9 lb)	12,2 kg (26.8 lb)
Limit thickness va	lues of the tubes	min. 3 mm - max 7 mm (min. 1/8" - max 9/32")			min. 4,5 mm - max 6,5 mm (min. 11/64" - max 1/4")	
Recommended	L < 5 m	35 mm <sup>2</sup> (AWG 2)	50 mm <sup>2</sup> (AWG 1)	70 mm <sup>2</sup> (AWG 2/0)	35 mm <sup>2</sup> (AWG 2)	50 mm <sup>2</sup> (AWG 1)
cable section (*)	5,1 < L < 10 m	50 mm <sup>2</sup> (AWG 1)	70 mm <sup>2</sup> (AWG 2/0)	2 x 50 mm <sup>2</sup> (2 x AWG 1)	50 mm <sup>2</sup> (AWG 1)	70 mm <sup>2</sup> (AWG 2/0)
(**)	10,1 < L < 20 m	70 mm <sup>2</sup> (AWG 2/0)	95 mm <sup>2</sup> (AWG 3/0)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	70 mm <sup>2</sup> (AWG 2/0)	95 mm <sup>2</sup> (AWG 3/0)

MODELS		BTQ1805512	BTQ1805524	BTQ1807512	BTQ1807524	BTQ1809512	BTQ1809524
Propeller type				Sing	gola		
Tunnel Ø		185 mm (7" 18/64)	185 mm (7" 18/64)	185 mm (7" 18/64)	185 mm (7" 18/64)	185 mm (7" 18/64)	185 mm (7" 18/64)
Motor Power		3,0 kW	3,0 kW	4,0 kW	4,0 kW	6,0 kW	6,0 kW
Voltage		12 V	24 V	12 V	24 V	12 V	24 V
Fusible		250A CNL DIN	150A CNL DIN	350A CNL DIN	250A CNL DIN	350A CNL DIN	250A CNL DIN
Thrust		55 kgf (121.2 lb)	55 kgf (121,2 lb)	75 kgf (165.3 lb)	75 kgf (165.3 lb)	95 kgf (209.4 lb)	95 kgf (209.4 lb)
Weight		16,7 kg (36.8 lb)	16,9 kg (37.2 lb)	17,5 kg (38.6 lb)	19,6 kg (43.2 lb)	26,6 kg (58.6 lb)	24,2 kg (53.3 lb)
Limit thickness va	alues of the tubes	min. 4,5 mm - max 6,5 mm (min. 11/64" - max 1/4")					
Recommended cable section (*) (**)	L < 5 m	50 mm <sup>2</sup> (AWG 1)	35 mm <sup>2</sup> (AWG 2)	70 mm <sup>2</sup> (AWG 2/0)	50 mm <sup>2</sup> (AWG 1)	2 x 50 mm <sup>2</sup> (2 x AWG 1)	50 mm <sup>2</sup> (AWG 1)
	5,1 < L < 10 m	70 mm² (AWG 2/0)	50 mm <sup>2</sup> (AWG 1)	2 x 50 mm <sup>2</sup> (2 x AWG 1)	70 mm² (AWG 2/0)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	70 mm <sup>2</sup> (AWG 2/0)
	10,1 < L < 20 m	95 mm <sup>2</sup> (AWG 3/0)	70 mm <sup>2</sup> (AWG 2/0)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	95 mm <sup>2</sup> (AWG 3/0)	2 x 95 mm <sup>2</sup> (2 x AWG 3/0)	95 mm <sup>2</sup> (AWG 3/0)

<sup>(\*)</sup> L = positive cable + negative cable

<sup>(\*\*)</sup> Different solutions are allowed, provided they are supported by the connection terminals. Comply with the minimum area clearance recommended)



# 1 - Information about the product BTQ series EN

MODELS		BTQ1806512	BTQ1806524	BTQ1808512	BTQ1808524	BTQ1810512	BTQ1810524
Propeller type				2 counte	r rotating	•	
Tunnel Ø		185 mm 185 mm 185 mm 185 mm 185 mm (7" 18/64) (7" 18/64) (7" 18/64) (7" 18/64)				185 mm (7" 18/64)	
Motor Power		3,3 kW	3,3 kW	4,3 kW	4,3 kW	6,3 kW	6,3 kW
Voltage		12 V	24 V	12 V	24 V	12 V	24 V
Fusible		275A CNL DIN	175A CNL DIN	400A CNL DIN	275A CNL DIN	400A CNL DIN	275A CNL DIN
Thrust		65 kgf (143.3 lb)	65 kgf (143.3 lb)	85 kgf (187.4 lb)	85 kgf (187.4 lb)	105 kgf (231.5 lb)	105 kgf (231.5 lb)
Weight		17,6 kg (38.8 lb)	17,8 kg (39.2 lb)	17,9 kg (39.4 lb)	20,5 kg (45.1 lb)	27,5 kg (60.2 lb)	25,1 kg (55.3 lb)
Limit thickness va	lues of the tubes	min. 4,5 mm - max 6,5 mm (min. 11/64" - max 1/4")					
	L < 5 m	70 mm <sup>2</sup> (AWG 2/0)	50 mm <sup>2</sup> (AWG 1)	2 x 50 mm <sup>2</sup> (2 x AWG 1)	70 mm <sup>2</sup> (AWG 2/0)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	70 mm <sup>2</sup> (AWG 2/0)
Recommended cable section (*)	5,1 < L < 10 m	2 x 50 mm <sup>2</sup> (2 x AWG 1)	70 mm² (AWG 2/0)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	2 x 50 mm <sup>2</sup> (2 x AWG 1)	2 x 95 mm <sup>2</sup> (2 x AWG 3/0)	2 x 50 mm <sup>2</sup> (2 x AWG 1)
	10,1 < L < 20 m	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	95 mm² (AWG 3/0)	2 x 95 mm <sup>2</sup> (2 x AWG 3/0)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	2 x 120 mm <sup>2</sup> (2 x AWG 4/0)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)

MODELS		BTQ2512012	BTQ2512024	BTQ2514024	BTQ2524024		
Propeller type			2 counter rotating				
Tunnel Ø		250 mm (9" 27/32)	250 mm (9" 27/32)	250 mm (9" 27/32)	250 mm (9" 27/32)		
Motor Power		6,5 Kw	6,5 Kw	8 Kw	10 kW		
Voltage		12 V	24 V	24 V	24 V		
Fusible		500A CNL DIN	275A CNL DIN	275A CNL DIN 275A CNL DIN 5			
Thrust		120 kgf (265 lb)	120 kgf (265 lb) 140 kgf (308 lb) 2		240 kgf (529 lb)		
Weight		35,5 kg (78.2 lb)	35,5 kg (78.2 lb) 34,2 kg (75.4 lb) 34,2 kg (75.4 lb)		49,1 kg (108.2 lb)		
Limit thickness va	alues of the tubes	min. 6,5 mm - max 11 mm (min. 1/4" - max 7/16")					
Docommonded	L < 5 m	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	70 mm² (AWG 2/0)	70 mm² (AWG 2/0)	2 x 50 mm <sup>2</sup> (2 x AWG 1)		
Recommended cable section (*) (**)	5,1 < L < 10 m	2 x 95 mm² (2 x AWG 3/0)	2 x 50 mm <sup>2</sup> (2 x AWG 1)	2 x 50 mm <sup>2</sup> (2 x AWG 1)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)		
	10,1 < L < 20 m	2 x 120 mm <sup>2</sup> (2 x AWG 4/0)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	2 x 70 mm <sup>2</sup> (2 x AWG 2/0)	2 x 95 mm <sup>2</sup> (2 x AWG 3/0)		

MODELS		BTQ3025024	BTQ3027024	BTQ3030048
Propeller type		2 counte	r rotating	2 counter rotating (Nibral)
Tunnel Ø		300 mm (11" 13/16)	300 mm (11" 13/16)	300 mm (11" 13/16)
Motor Power		10 kW	12 kW	15 KW
Voltage		24 V	24 V	48 V
Fusible		400A CNL DIN	500A CNL DIN	500A CNL DIN
Thrust		250 kgf (551 lb)	270 kgf (595 lb)	300 kgf (661 lb)
Weight		46,7 kg (102.9 lb) 55,9 kg (123.2 lb)		66,7 kg (147.0 lb)
Limit thickness va	llues of the tubes	min. 9,5 mm - (min. 3/8" -	min, 9,5 mm - max 13,5 mm (min, 3/8" - max 17/32")	
Recommended	L < 5 m	70 mm <sup>2</sup> (AWG 2/0)	95 mm² (AWG 3/0)	95 mm <sup>2</sup> (AWG 3/0)
cable section (*) (**)	5,1 < L < 10 m	2 x 50 mm <sup>2</sup> (2 x AWG 1)	2 x 95 mm <sup>2</sup> (2 x AWG 3/0)	2 x 70 mm <sup>2</sup> (AWG 2/0)
	10,1 < L < 20 m	2 x 95 mm <sup>2</sup> (2 x AWG 3/0)	2 x 120 mm <sup>2</sup> (2 x AWG 4/0)	2 x 95 mm <sup>2</sup> (2 x AWG 3/0)

<sup>(\*)</sup> L = positive cable + negative cable (\*\*) Different solutions are allowed, provided they are supported by the connection terminals. Comply with the minimum area clearance recommended)

## 2.0 - Package contains the following parts

- Thruster
- Drill template
- Gasket
- O-ring (for assembly)
- Installation and use manual
- · Conditions of warranty

### 2.1 - Tools needed for installation

**BTO110/125** • Drill and drill bits Ø 7 mm (9/32") • Hollow mill Ø 25 mm (1")

• hexagonal male key 4 mm, 5 mm, 6 mm • Fork or polygonal key 10 mm

• Drill and drill bits Ø 7 mm (9/32") • Hollow mill Ø 27 mm (1" 1/16) **BTQ140** 

• hexagonal male key 4 mm, 5 mm, 6 mm • Fork or polygonal key 17 mm

• Drill and drill bits Ø 9 mm (3/8") • Hollow mill Ø 35 mm (1" 3/8) **BTQ185** 

• hexagonal male key 5 mm, 6 mm, 8 mm • Fork or polygonal key 19 mm

**BTQ250** • Drill and drill bits Ø 11 mm (7/16") • Hollow mill Ø 46 mm (1" 13/16)

• hexagonal male key 4 mm, 5 mm, 8 mm, 10 mm • Fork or polygonal key 24 mm

**BTQ300** • Drill and drill bits Ø 15 mm (19/32") • Hollow mill Ø 53 mm (2" 3/32)

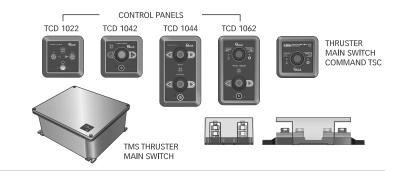
• hexagonal male key 4 mm, 5 mm, 8 mm, 12 mm • Fork or polygonal key 27 mm

## 2.2 - "Quick®" accessories recommended

• Remote control TCD 1022

• Remote control TCD 1042

- Remote control TCD 1044
- Remote control TCD 1062 with integrated line switch control
- TSC Thruster Main Switch Command
- TMS line switch control
- THF3 THF6 fuseholders





## 3 - Introduction

**BTQ** series

BEFORE USING THE THRUSTER READ THESE INSTRUCTIONS CAREFULLY. IF IN DOUBT, CONTACT YOUR NEAREST "QUICK®" DEALER.

## 3.0 Important notes

This manual contains Warning and/or Caution symbols that are important for safety. Comply with the recommendations provided herein.



Warning symbol concerning hazardous situations.



Caution symbol to avoid direct or indirect damage to the product.

This document contains the instructions that are necessary for boat manufacturers and marine equipment installers to assemble and commission the Thruster.



## 1 - Information about the product

BTQ series



#### 3.1 Precautions for the installer



## PROCEEDING WITH THE INSTALLATION IN GOOD LIGHT CONDITIONS.

We recommend using an appropriate personal protective equipment.

Quick® thrusters are not suitable for installation in potentially explosive environments and/or atmospheres.

Assembly and subsequent checks or repairs must only be carried out by qualified personnel.



THE PRODUCT MUST BE DISCONNECTED FROM THE ELECTRICAL SYSTEM BEFORE INSTALLING OR PROVIDING MAINTENANCE.

Quick takes no responsibility regarding the inadequate connection of the users to the electrical system and to the safety of the same.

## 3.2 - Installation requisites

It is strongly recommended to entrust a professional the predisposition and positioning of the tunnel in the hull. These instructions are generic, and do not show by any means the details of the operations of presetting the thruster, which falls under the competence of the shipyard. In case of problems caused by a defective installation, the installer will be held responsible.

Despite all components and moving mechanical parts are of high quality, the correct installation of the propulsion unit is fundamental for a safe and efficient use of the boat, as well as of the same propulsion unit.

Please note that the installation of such unit is an operation requiring experience as well as technical competence. It is recommended to entrust the installation to competent staff and to consult the manufacturer or naval architects to fully evaluate the entity of the work.



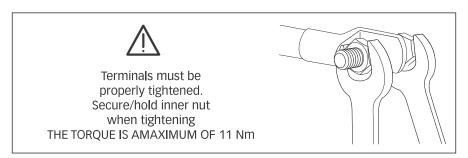
## 1 4 - Safety

**BTO** series

## 4.0 - Warnings



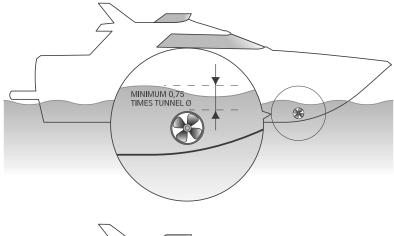
- Quick® Thrusters have been designed and constructed only for nautical use.
- Do not use these appliances for other uses.
- Quick® shall accept no responsibility for direct or indirect damages caused by improper use of the appliance or an improper installation.
- The Thruster is not designed to maintain loads generated in particular atmospheric conditions (storms).
- We recommend you entrust preparation and positioning of the tube on the hull to a skilled professional. These are generic instructions and do not give details of the preparatory operations for installing the tunnel, since this is the competence of the boatyard. The installer shall bear full responsibility for any problems caused by defective installation of the tunnel.
- Do not install the electric motor near easily inflammable objects.



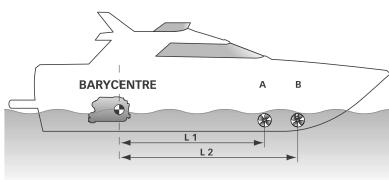


## 5.0 - Installation requisites

#### **The Tunnel**



- The position of the tunnel will depend on the interior and exterior shape of the boats bow.
- Optimal positioning of the tunnel will be in the bow and as low as possible, at least 0.75 times the tunnel diameter from the waterline

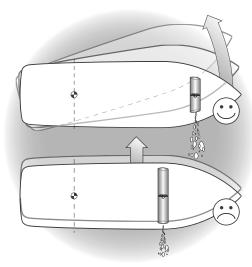


- To avoid cavitation in the propeller, the tunnel must be positioned as low as possible.
- The lever effect in the boat is proportional to the increase of the distance (L1 and L2) between the barycentre and the position of the tunnel A and B.

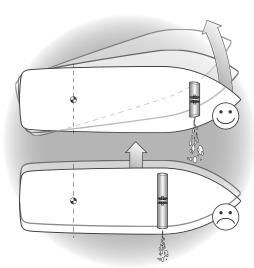


For greater lever effect prefer position B to position A.

#### **SINGLE PROPELLER**



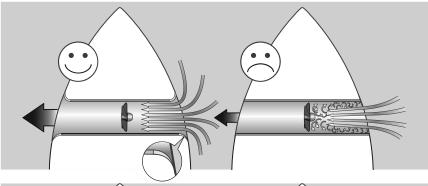
#### **DOUBLE PROPELLER**



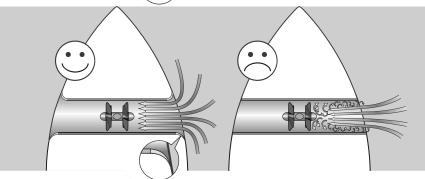
- An increase in the length of the tunnel increases the effect of the loss of charge, decreasing the nominal driving force.
- To limit losing charge, the optimal length is equal to 3-4 times the tube diameter; a ratio of up to 6 can be tolerated.

## 5.1 - The Tunnel

• The rounded ends of the tunnel limit the creation of turbulences and cavitations, improving performance of the propeller thrust and reducing noise levels to a minimum.



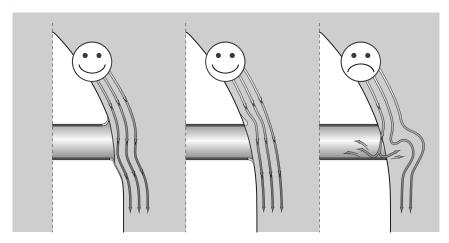
**SINGLE PROPELLER** 



**DOUBLE PROPELLER** 

• The force produced by the flow of the water when the boat is moving produces resistance on the rear face of the tunnel, which is an area exposed frontally to the water flow.

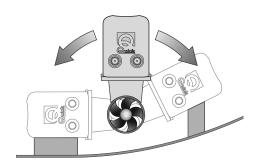
To limit this phenomenon, prepare an indentation in the rear part of the tunnel. Otherwise, create a deflector on the front part of the tunnel.





• If the tunnel is near the waterline, it is advisable to fit a grating at the end of the tube. The grating must have as large a vertical mesh as possible to avoid contrasting the propeller thrust. The vertical mesh prevents the entry of most of the floating objects.

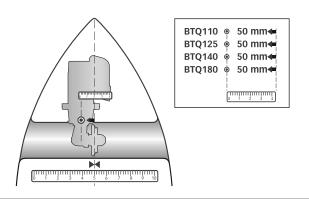
#### 5.2 - The Thruster



- The thruster can be installed at any angle within 90° from vertical.
- If the electric motor is positioned of necessity at an angle of more than 30° from vertical, a special support must be constructed.

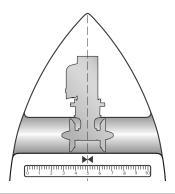
#### **SINGLE PROPELLER**

• To position the thruster in the tube, find the half-way point and move to the value shown in the table below so that the propeller is positioned exactly half way along the internal length of the tunnel.



#### **DOUBLE PROPELLER**

• To position the thruster in the tube, find the half-way point so that the flange is positioned exactly half way along the internal length of the tunnel.



- Use the flange to mark the centre of the holes on the
- Fix the drilling template on the reference points, making sure they are aligned with precision at the half-way point of the tube.

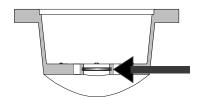


N.B. All holes must be exactly aligned with the halfway point of the tunnel, since tolerance between propeller and tunnel is minimal.

• Take care that there are no resin residues in the contact area between flange and tube; this could cause misalignment. Any resin residues and any other hindrance to correct contact must be removed by sandpaper.

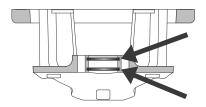
#### BTQ110/125

• Insert one o-ring into the special seat inside the flange.



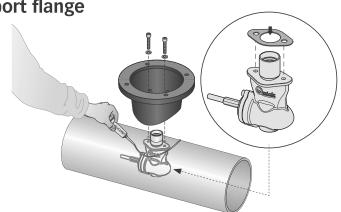
#### BTQ140/180/250/300

• Insert two o-rings into the special seats inside the flange.

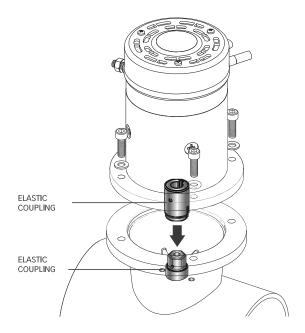


## 5.3.1 - BTQ110/125 Gearleg and motor support flange

- Proceed with fitting the gearleg with the special seal gasket.
- For further protection against the entry of water, apply silicone for nautical use around the point of contact between flange and tube.
- Fasten everything to the flange using the special screws and washers.

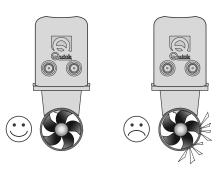


 Assemble the motor on the flange by joining the two elastic coupling halves.
 Fasten it with the provided 4 screws and washers.



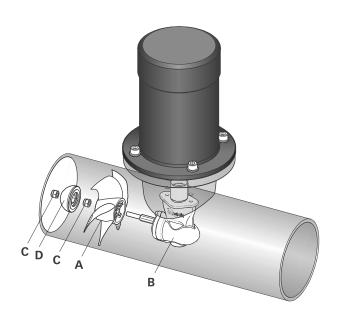
## 5.3.2 - втQ110/125 Propeller fitting

• Insert the propeller A in the gearleg B, fix the propeller with the self-locking nut C, insert anode D and lock it with the other self-locking nut C.



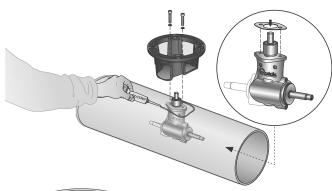


**WARNING**: on conclusion of assembly, make sure that the propeller is exactly positioned at the central point of the tunnel.



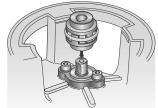
## 5.4.1 - BTQ140/180/250/300 Gearleg and motor support flange

- Proceed with fitting the gearleg with the special seal gasket.
- For further protection against the entry of water, apply silicone for nautical use around the point of contact between flange and tube.
- Fasten everything to the flange using the special screws and washers.





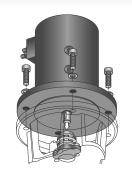
Grease the terminal part of the gearleg shaft; fit the small key into its seat.



• Insert the elastic joint in the terminal part of the gearleg shaft.

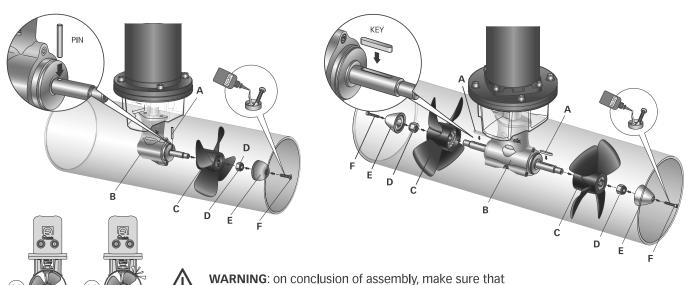


• Grease the terminal part of the gearleg shaft; fit the small key into its seat.



• Insert the motor onto the elastic joint; fasten it with the 4 screws and washers provided.

## 5.4.2 - BTQ140/180/250/300 Single and double propellers fitting



#### **Propeller/propellers fitting**

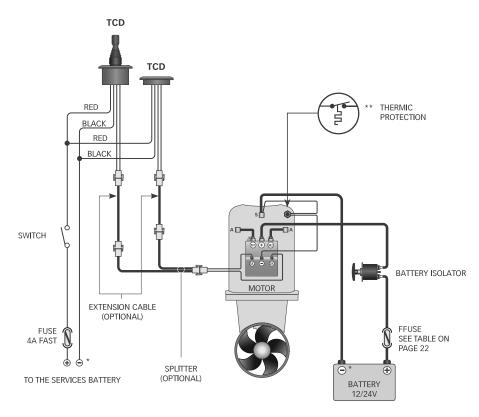
insert the drive pin or key A into the hole on the gearleg shaft B; assemble the propeller C to the gearleg, making it fit in correctly with the drive pin or key A; fix the propeller with the self-braking nut D.

the propeller is exactly positioned at the central point of the tunnel.

The anode E must be locked with the screw F soaked with building adhesive (such as Loctite).

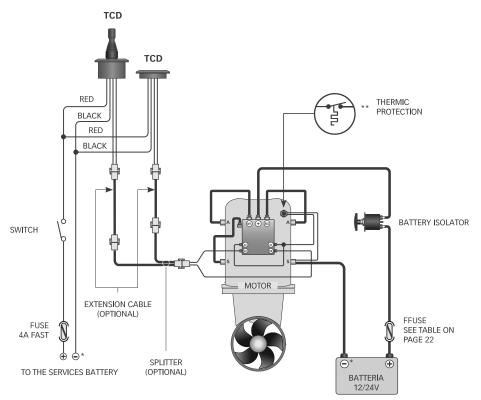
## 6.0 - Basic System BTQ110

**Example of connection** 



## 6.1 - Basic System BTQ125

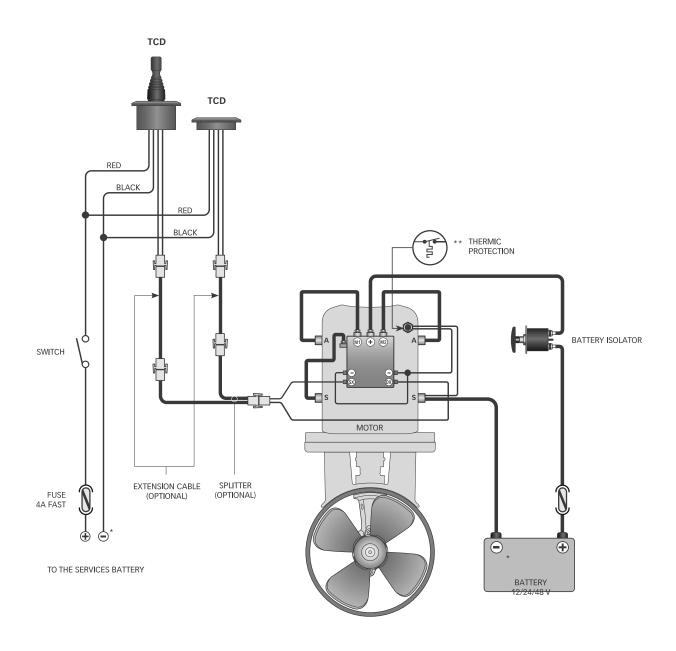
**Example of connection** 



- Common negative for the battery groups.
- \*\* WARNING: in case of overtemperature, the thermal protection on the motor will open and interrupt the negative contact on the solenoid unit. Wait as long as the system needs to reactivate.

## 6.2 - BTQ140/185/250/300 Basic System

**Example of connection** 



- \* Common negative for the battery groups.
- \*\* **WARNING**: in case of overtemperature, the thermal protection on the motor will open and interrupt the negative contact on the solenoid unit. Wait as long as the system needs to reactivate.

## **Control panel**

To install the control panel, consult the "TCD" instruction manuals.

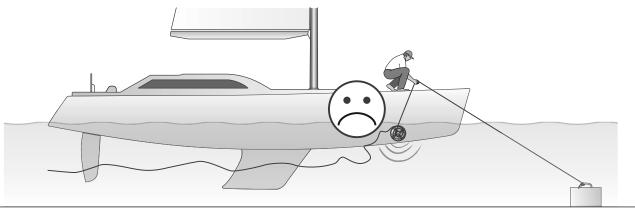
## 7.0 - Warnings



 This thruster is not designed for continuous use. It is equipped with protections which limit its operation at a maximum time span, as reported on the controls' manual.

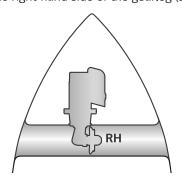
It is strongly forbidden to bypass or modify such protections in order to increase the operating time span, lest voiding the warranty and thus lifting any responsibility from Quick SPA.

- Make sure no swimmers or floating objects are in the vicinity before switching on the thruster.
- There must not be flammable materials in the peak or in the area where the Thruster motor is.
- Do not operate the bow thruster out of the water for more than 10 seconds.
- During mooring, it is recommended not to leave in the water any free line, which may be sucked in by the propellers, thus leading them to break.



#### **SINGOL PROPELLER**

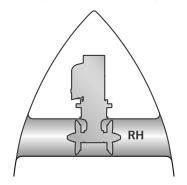
NOTE: the bow thruster must be installed with the RH propeller on the right-hand side of the gearleg (see figure).



In case the bow thruster needs to be installed on the opposite position, the connection of the two wires (blue and grey) to the control cable on the reversing contactor unit must be inverted.

#### **DOUBLE PROPELLER**

NOTE: the bow thruster must be installed with the RH propeller on the right-hand side of the gearleg (see figure).





8 - Usage

**BTQ** series

#### 8.0 - Use of bow thruster

Start-up happens following activation of a THC panel. To use the thruster refer to the manual of the THC control.

## 9.0 - Single/Double propeller maintenance

Quick® Thrusters are made in materials that are resistant to the sea environment: In any case, it is indispensable to periodically remove deposits that form on the outer surfaces to avoid corrosions, block and consequent system inefficiency.



WARNING: make sure that the power supply to the electric motor is not switched on when maintenance operations are carried out.



ACCORDING TO THE USE WE RECOMMEND CHECKING PERIODICALLY THE OIL SEALS AND IF NECESSARY REPLACING THEM.

Dismantle once a year, following the points below:

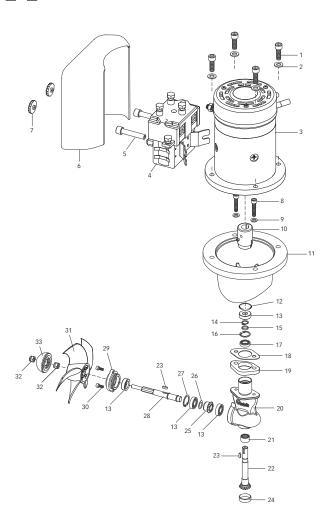
- Clean propellers, tunnel and gearleg.
- Replace the zinc anodes (carry out this operation more often if needed).
- Replace the propellers if damaged or worn out.
- Check the tightness of all screws.
- Ensure that there is no water seepage inside.
- Check that all electrical connections are well tightened and oxide-less.
- Check that the batteries are in good conditions.



WARNING: do not paint the anodes, the sealing and the gearleg's shafts where the propellers is lodged.



## 10 - Spare parts



## **BTQ** series

#### **SINGLE PROPELLER**

BTQ 1102512 BTQ 1253012 BTQ 1254012

- DESCRIPTION
- MOTOR MOUNTING SCREW
- MOTOR MOUNTING WASHER
- **MOTOR 1.5KW 12V** ЗА
- MOTOR 2,2 KW 12V
- REVERSING CONTACTOR UNIT T6411-12
- CARTER "A" SPACER
- CARTER REVERSING CONTACTOR UNIT
- FASTENERS CARTER REVERSING CONTACTOR UNIT
- 8 GEARLEG MOUNTING SCREW
- WASHER
- ELASTIC COUPLING HALVES BTQ 110-125 PL HEXAG 10
- 11 MOTOR FLANGE
- 12
- 13 OIL SEAL
- EXTERNAL CIRCLIP 14
- 15 SPACER SHAFT INTERNAL CIRCLIP
- 17 BEARING
- 18 GEARLEG GASKET
- 19 SPACER (NOT SUPPLIED BTQ110)
- 20 **GEARLEG**
- 21 BEARING
- CONIC COUPLE SHAFT 22
- 23 KFY
- 24 OIL SEAL
- CONIC COUPLE SPROCKET
- 26 WASHER
- 27 INTERNAL CIRCLIP
- GEARLEG OUTPUT SHAFT 28
- 29 MOTOR FLANGE
- SCREW 30
- PROPELLER
- 32 SELF-BRAKING NUT

#### **SINGLE PROPELLER**

BTQ 1403012

BTQ 1404012

BTQ 1805512

BTQ 1805524

BTQ 1807512

BTQ 1807524

BTQ 1809512

BTQ 1809524

#### **DOUBLE PROPELLER**

BTQ 1806512

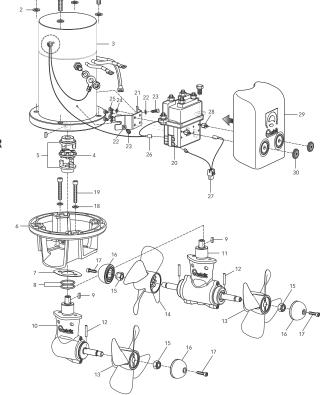
BTQ 1806524

BTQ 1808512

BTQ 1808524

BTQ 1810512

BTQ 1810524



## **DOUBLE PROPELLER**

BTQ 2512012

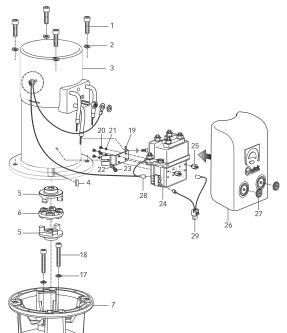
BTQ 2512024

BTQ 2514024

BTQ 2524024

BTQ 3025024 BTQ 3027024

BTQ 3030048



- DESCRIPTION NR
- MOTOR MOUNTING SCREW
- MOTOR MOUNTING WASHER
- MOTOR
- EVEN TENSION DEVICE
- HALF-JOINT
- MOTOR FLANGE
- GEARLEG GASKET
- KEY

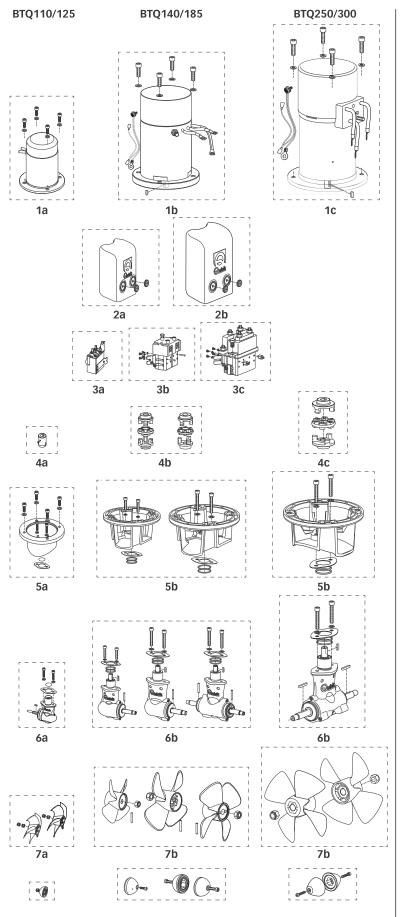
10

- GEARLEG SINGLE PROPELLER
- GEARLEG DOUBLE PROPELLER 11
- 12
- RIGHT PROPELLER (RH) 13
- 14 LEFT PROPELLER (LH)
- 15 FIXING NUT PROPELLER
- ANODE 16
- 17 SCREW ANODE
- 18 WASHER
- SCRFW 19
- REVERSING CONTACTOR 20
- REVERSING CONTACTOR BRACKET
- 22 WASHER
- 23 SCREW
- 24 GROWER
- 25 SCREW
- 26 THERMIC PROTECTION BTQ + CABLE
- COMMAND CABLE
- 28 CARTER SPACER B
- CARTER REVERSING CONTACTOR UNIT 29
- FASTENERS CARTER REVERSING CONTACTOR UNIT
- MOTOR MOUNTING SCREW
- MOTOR MOUNTING WASHER 2
- 3 MOTOR
- HALF-JOINT
- EVEN TENSION DEVICE
- MOTOR FLANGE
- O-RING
- GEARLEG GASKET
- GEARLEG
- 11 KEY
- RIGHT PROPELLER (RH) 12
- LEFT PROPELLER (LH)
- 14 SELF-BRAKING NUT
- 15 ANODE
- ANODE FIXING SCREW 16
- 17 GROWER
- 18 GEARLEG FIXING SCREW
- REVERSING CONTACTOR BRACKET
- 20 SCREW
- GROWER 21
- 22
- 23 SCREW
- REVERSING CONTACTOR 24
- CARTER SPACER B
- REVERSING CONTACTOR CARTER
- FIXING CARTER REVERSING CONTACTOR 27
- 28 THERMIC PROTECTION BTQ + CABLE
- COMMAND CABLE

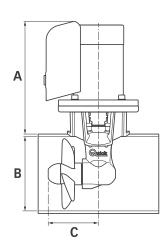


# BTQ series EN

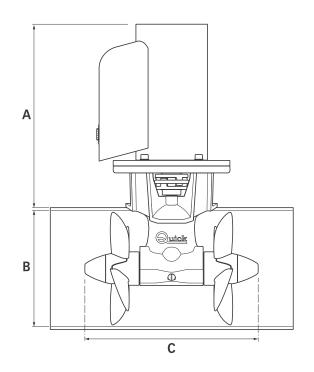




NR	DESCRIPTION	CODE
1a	OSP MOT 1300W 12V BTQ110-140+T	FVEMFEL13121400
	OSP MOT 1500W 12V BTQ125-140+T	FVEMFEL15121400
	OSP MOT 2200W 12V BTQ125-140+T	FVEMFEL22121400
1b	OSP MOTOR 1500W 12V BTQ125-140+T	FVEMFEL15121400
	OSP MOTOR 2200W 12V BTQ125-140+T	FVEMFEL22121400
	OSP MOTOR 3000W 12V BTQ185+T	FVEMFEL30121800
	OSP MOTOR 3000W 24V BTQ185+T	FVEMFEL30241800
	OSP MOTOR 3300W 12V BTQ185+T	FVEMFEL33121800
	OSP MOTOR 3300W 24V BTQ185+T	FVEMFEL33241800
	OSP MOTOR 4000W 12V BTQ185+T	FVEMFEL40121800
	OSP MOTOR 4000W 24V BTQ185+T	FVEMFEL40241800
	OSP MOTOR 4300W 12V BTQ185+T	FVEMFEL43121800
	OSP MOTOR 4300W 24V BTQ185+T	FVEMFEL43241800
	OSP MOTOR 6000W 12V BTQ185+T	FVEMFEL60121800
	OSP MOTOR 6000W 24V BTQ185+T	FVEMFEL60241800
	OSP MOTOR 6300W 12V BTQ185+T	FVEMFEL63121800
	OSP MOTOR 6300W 24V BTQ185+T	FVEMFEL63241800
1c	OSP MOTOR BT 6500W 12V BTQ250+T	FVEMFEL65122500
	OSP MOTOR BT 6500W 24V BTQ250 +T	FVEMFEL65242500
	OSP MOTOR BT 8000W 24V BTQ250 +T	FVEMFEL80242500
	OSP MOTOR BT 10KW 24V BTQ250 +T	FVEMFEL1K242500
	OSP MOTOR BT 10KW 24V BTQ300 +T	FVEMFEL1K243000
	OSP MOTOR BT 12KW 24V BTQ300 +T	FVEMFEL2K243000
	OSP MOTOR BT 15KW 48V BTQ300 +T	FVEMFEL5K483000
2a	OSP KIT CARTER 'A' BTQ	FVSGCARTABTQA00
2b	OSP KIT CARTER 'B' BTQ	FVSGCARTABTQB00
За	OSP KIT REVERSING CONTACTOR T6411-12 BTQ	FVST64111200A00
3b	OSP KIT REVERSING CONTACTOR 150A 12V	FVSGRCT15012A00
	OSP KIT REVERSING CONTACTOR 150A 24V	FVSGRCT15024A00
	OSP KIT REVERSING CONTACTOR 350A 12V	FVSGRCT35012A00
_	OSP KIT REVERSING CONTACTOR 350A 24V	FVSGRCT35024A00
4a	OSP KIT HALF-JOINT BTQ 110/125 PL ESAG	FVSGG110125PA00
4b	OSP KIT JOINT BTQ 140 30/40KG S	FVSGG141114SA00
	OSP KIT JOINT BTQ 185	FVSGG1851414A00
4c	OSP KIT JOINT BTQ 250	FVSGG2501919A00
_	OSP KIT JOINT BTQ 300	FVSGG3001924A00
5a	OSP KIT PROPELLER FLANGE BTQ110-125	FVSGFLBTQ110A00
5b	OSP KIT FLANGE FOR PROPELLER BTQ140	FVSGFLBTQ140A00
	OSP KIT FLANGE FOR PROPELLER BTQ185	FVSGFLBTQ185A00
5c	OSP KIT FLANGE FOR PROPELLER BTQ250	FVSGFLBTQ250A00
40	OSP KIT FLANGE FOR PROPELLER BTQ300	FVSGFLBTQ300A00
6a	OSP KIT GEARLEG BTQ110 OSP KIT GEARLEG BTQ125	FVSGGBBT1100A00 FVSGGBBT1250A00
6b	OSP KIT GEARLEG BTQ123	FVSGGBBT1230A00 FVSGGBBT1400A00
OD	OSP KIT GEARLEG BTQ 140	FVSGGBBT1400A00
	OSP KIT GEARLEG BTQ185 DP	FVSGGBBT185DA00
6C	OSP KIT GEARLEG BTQ250	FVSGGBBT155DA00
00	OSP KIT GEARLEG BTQ300	FVSGGBBT3000A00
7a	OSP KIT PROPELLER D110	FVSGEL110000A00
-	OSP KIT PROPELLER D125	FVSGEL125000A00
7b	OSP KIT PROPELLER D140 R	FVSGEL140R00A00
	OSP KIT PROPELLER D185 RH	FVSGEL185R00A00
	OSP KIT PROPELLER D185 LH	FVSGEL185L00A00
7c	OSP KIT PROPELLER D250 R	FVSGEL250R00A00
	OSP KIT PROPELLER D300 R	FVSGEL300R00A00
	OSP KIT PROPELLER D300 R NIBRAL	FVSGEL300RN0A00
	OSP KIT PROPELLER D250 L	FVSGEL250L00A00
	OSP KIT PROPELLER D300 L	FVSGEL300L00A00
	OSP KIT PROPELLER D300 L NIBRAL	FVSGEL300LN0A00
8a	OSP KIT PROPELLER ANODE BTQ110-125	FVSGANBTQ110A00
8b	OSP KIT ANODE FOR PROPELLER BTQ140	FVSGANBTQ140A00
	OSP KIT ANODES PROPELLER BTQ185	FVSGANBTQ185A00
0.0	•	
8c	OSP KIT ANODES PROPELLER BTQ250	FVSGANBTQ250A00
80	OSP KIT ANODES PROPELLER BTQ250 OSP KIT ANODES PROPELLER BTQ300	FVSGANBTQ250A00 FVSGANBTQ300A00
80		



SINGLE PROPELLER



**DOUBLE PROPELLER** 

#### **SINGLE PROPELLER**

BTQ110/125	BTQ1102512	BTQ1253012	BTQ1254012
Α	261 (10" 9/32)	261 (10" 9/32)	261 (10" 9/32)
В	110 (4 21/64)	125 (4")	125 (4")
С	84 (3 5/16)	84 (3 5/16)	84 (3 5/16)

BTQ140	BTQ1403012	BTQ1404012
Α	235 (9" 1/4)	264 (10" 25/64)
В	140 (5 1/2)	140 (5 1/2)
С	108 (4 1/4)	108 (4 1/4)

BTQ185	BTQ1805512	BTQ1805524	BTQ1807512	BTQ1807524	BTQ1809512	BTQ1809524
Α	292 (11" 1/2)	278 (10" 15/16)	329 (12")	280 (11")	410 (16" 9/64)	374 (14" 23/32)
В	185 (7" 9/32)	185 (7" 9/32)	185 (7" 9/32)	185 (7" 9/32)	185 (7" 9/32)	185 (7" 9/32)
С	116 (4" 9/16)	116 (4" 9/16)	116 (4" 9/16)	116 (4" 9/16)	116 (4" 9/16)	116 (4" 9/16)

#### **DOUBLE PROPELLER**

BTQ185 DP	BTQ1806512	BTQ1806524	BTQ1808512	BTQ1808524	BTQ1810512	BTQ1810524
Α	292 (11" 1/2)	278 (10" 15/16)	329 (12")	280 (11")	410 (16" 9/64)	374 (14" 23/32)
В	185 (7" 9/32)	185 (7" 9/32)	185 (7" 9/32)	185 (7" 9/32)	185 (7" 9/32)	185 (7" 9/32)
С	267 (10" 33/64)	267 (10" 33/64)	267 (10" 33/64)	267 (10" 33/64)	267 (10" 33/64)	267 (10" 33/64)

BTQ250	BTQ2512012	BTQ2512024	BTQ2514024	BTQ2524024
Α	393 (15" 15/32)	393 (15" 15/32)	397 (15" 5/8)	475 ( 18" 45/64)
В	250 (9" 27/32)	250 (9" 27/32)	250 (9" 27/32)	250 (9" 27/32)
С	373 (14" 11/16)	373 (14" 11/16)	373 (14" 11/16)	373 (14" 11/16)

BTQ300	BTQ3025024	BTQ3027024	BTQ3030048
Α	410 (16 9/64)	482 (18" 31/32)	520 (20 15/32)
В	300 (11 11/16)	300 (11 11/16)	300 (11 11/16)
С	434 (17" 3/32)	434 (17" 3/32)	434 (17" 3/32)



## 12 - Disposal of the product

**BTQ** series

As in installation, also at the end of product lifetime, the disassembly and scrapping operations must be performed by qualified personnel.

This product is made up of different types of material, some of which can be recycled while others must be disposed of. Seek information on the recycling and disposal systems envisaged by the local regulations in your area for this product category.

Some parts of the product may contain polluting or hazardous substances which, if disposed of into the environment, constitute serious environmental and health risks.



As indicated by the symbol, the product may not be disposed of as domestic waste. Sort the materials for disposal, according to the methods envisaged by current legislation in your area, or return the product to the retailer when purchasing an equivalent product.



Local legislation may include the application of serious fines in the event of improper disposal of this product.





BOW THRUSTERS BTQ110 - BTQ125 BTQ140 - BTQ185 BTQ250 - BTQ300



Codice di serie del prodotto / Product code and serial number

