

Introduction

Exalto is a well-experienced supplier of sterntubes. Through the years, Exalto have proved to be a reliable and innovative supplier to both the yachting and the professional industry. Exalto propulsion systems are fully in-house designed and produced. Exalto wide range of sterntubes consist of both standard and customized models. Depending on the chosen lubrication method, we can supply water, grease or oil lubricated sterntubes, either open or closed. Depending on the hull material or its construction method, we can provide sterntubes to be welded in place, fixed between bulkheads by clamp nuts or to be laminated in place. Also, for vessels that are produced to the standards of all well-established classification societies (e.g. Lloyds, BV, DNV and ABS), Exalto can supply sterntubes with the casting procedure or by boring. Exalto sterntubes are made of only the best quality materials (steel, stainless steel, brass, GRP and aluminium), to ensure the sterntubes meet our high quality standards. we are able to anticipate on the following aspects:

- Propeller calculation.
- Shaft inclination.
- Desired lubricant: water, grease or oil.
- Hull material and desired mounting system.
- Calculation of shaft diameter and taper size.
- Shaft sealing.
- Coupling.

Bearing Distance

The correct positioning of the bearings in the sterntube will reduce vibrations, noise and wear within the system. Correct bearing distances not only bring more comfort, it helps to ensure the reliability of your complete propulsion system! That is why the bearing distances are always the starting point when designing your propulsion system. However, if theory and practice do not match, we will always contact you.

Water Lubrication



MO Sterntube

The MO sterntube is an unique, modular and easy to install sterntube system. The system consists of a brass or aluminium inner tube and a steel outer tube that is welded into the hull. The inner tube slips inside the outer tube. It is held by especially designed rubber sleeves to diminish vibrations. The inner tube is locked in by means of a tube adapter and a sterntube nut. MO sterntubes are available in two models:

- Type "MOE", with a single aft bearing and -if necessary- a fore bearing.
- Type "MOV", an extended tube that is used when the tube's length and the bearing distance require a middle bearing. MOV sterntubes are supplied with one aft bearing, one middle bearing and -if necessary- one fore bearing.

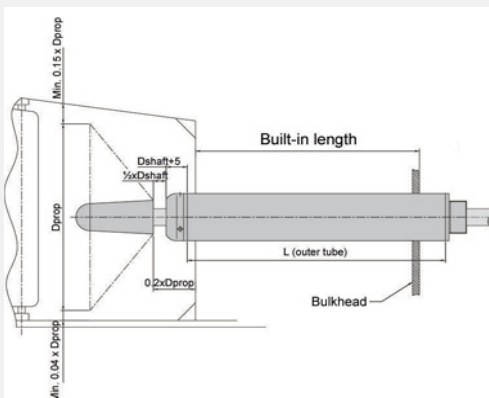
Because the MO sterntube is a modular system, it is easy to assemble and to dismantle. In this way, bearings are easily replaced when necessary. The inner tubes are available in both brass and aluminium in diameters of 25, 30, 35, 40, 45, 50, 60 and 70 mm.

Outer Tube

For MO Sterntubes

The outer tube is a seamless steel pipe. The table below shows the corresponding dimensions. For other tube dimensions (e.g. DIN) we can supply adapters.

Shaft diameter (mm)	Outer tube St.52 (mm)
25	70.0 x 4.5
30	82.5 x 6.3
35	88.9 x 6.3
40	95.0 x 6.3
45	108.0 x 6.3
50	114.3 x 6.3
60	127.0 x 7.1
70	139.7 x 7.1



Sterntubes to be welded in

Sterntube for water lubricated system. This conventional sterntube is made of St 52.3 steel, stainless steel or aluminium and welded into the hull. In order to prevent the bearings from being damaged by the welding heat, the tube is equipped with double walled welding ends. The weldable sterntube is available in two models:

- Model 02 (undivided) supplied with an aft bearing and - depending on the bearing distance - a fore bearing.
- Model 22 (divided) supplied with both an aft and a middle bearing and depending on the bearing distance a fore bearing.

On the outside, the weldable sterntube is coated with a primer. The front end will be machined to fit the shaft sealing of your choice. The possible seals for this type of sterntube are the Hollex seal, the flexible stuffing box or the Sure seal. The weldable sterntube is available in steel for shaft diameters from 25 up to 70 mm. Larger diameters and prices for tubes made of aluminium are available on request. The dimensions of the sterntube depend on the outer diameter of the bearings used.

Sterntubes with Clamping Fix

Sterntube for water lubricated system. This brass RG7 sterntube is the optimal solution for ships made from GRP, wood, woodcore or with a sandwich construction. The tube is mounted by means of two brass sterntube nuts, which encloses the tube. This sterntube is available in two models:

- Model 75 (undivided) supplied with an aft bearing and - depending on the bearing distance - a fore bearing.
- Model 78 (divided) supplied with both an aft and a middle bearing and - depending on the bearing distance - a fore bearing.

The front end of the brass sterntube is machined to fit the shaft sealing of your choice. The possible seals for this type of sterntube are the Hollex seal, the flexible stuffing box or the Sure seal.



Fast-Fix

The Exalto Fast-Fix offers you the ultimate installation convenience and flexibility and is suitable for traditional water-lubricated systems. The Exalto Fast-Fix system consists of a sea water resistant brass tube, a shell-less rubber bearing, two Fast-Fix clamp flanges, a Tides Marine Series One Seal, an Exalto 4462 stainless steel propeller shaft and OMM prop nut with zinc anode.

The Advantages of this Clamping Tube System at a Glance:

- The brass sterntube and the stainless steel 4462 tube shaft can be shortened at the front, in this way you can easily tailor the tube yourself.
- The narrow flanges were specifically designed for this system and can be built in almost everywhere.
- The bundled Series One seal does not only close perfectly but the silicone bellow also does not age.

Optional for this system is a forward bearing or bronze rubber bearing, a Centa M flexible coupling and a variety of suitable propellers.

Shaft diameter (mm)	Length tube (mm)	Length shaft (mm)	Cat.no
25	1000	1500	FASTFIX25/1000.STD
25	1250	2000	FASTFIX25/1250.STD
25	1500	2000	FASTFIX25/1500.STD
30	1000	1500	FASTFIX30/1000.STD
30	1250	2000	FASTFIX30/1250.STD
30	1500	2000	FASTFIX30/1500.STD



Fast-Fix E-Propulsion

The revolutionary Fast-Fix system is also suitable for electric propulsion. The Exalto Fast-Fix offers ultimate installation convenience and flexibility. The Exalto Fast-Fix propulsion system consists of a seawater resistant brass tube, a composite bearing, two FastFix clamp flanges, a Tides Marine Series One seal, an Exalto 4462 stainless steel propeller shaft and an OMM prop nut with zinc anode.

The Advantages of this Clamping Tube System at a Glance:

- The brass sterntube and the stainless steel 4462 tube shaft can be shortened at the front, in this way you can easily tailor the tube yourself.
- The narrow flanges were specifically designed for this system and can be built in almost everywhere.
- The bundled Series One seal does not only close perfectly but the silicone bellow also does not age.

Optional for this system is a forward bearing or bronze rubber bearing, a Centa M flexible coupling and a variety of suitable propellers.

Shaft diameter (mm)	Length tube (mm)	Length shaft (mm)	Cat.no. E-propulsion
25	1000	1500	FASTFIX25/1000.EP
25	1250	2000	FASTFIX25/1250.EP
25	1500	2000	FASTFIX25/1500.EP
30	1000	1500	FASTFIX30/1000.EP
30	1250	2000	FASTFIX30/1250.EP
30	1500	2000	FASTFIX30/1500.EP

Sterntubes to be laminated in

Sterntube for water lubricated system. Exalto's GRP sterntube is ideal to directly laminate into GRP vessels. This sterntube is available in model 61.1 with one aft bearing and in model 61.2 with both an aft and a fore bearing. GRP tubes are internally machined at the position of the bearings. The rubber bearings are fitted with Loctite. The front end of the tube is machined to fit the shaft sealing of your choice. The possible seals for this type of sterntube are the Hollex seal, the flexible stuffing box or the Sure seal. In some situations a STB seal can be fitted on request.

Grease Lubrication

Sterntubes to be welded in

Sterntube for grease lubricated system. This conventional sterntube is made of St 52.3 steel and welded into the hull. In order to prevent the bearings from being damaged by the welding heat, the tube is equipped with double walled welding ends. The weldable sterntube is available in two models:

- Model 02 (undivided) supplied with an aft grease lubricated brass bearing and (depending on the bearing distance) a fore bearing.
- Model 22 (divided) supplied with both an aft and a middle bearing and -depending on the bearing distance- a fore bearing.

On the inside, the weldable sterntube is sand blasted. The outside is coated with a primer. The front end will be machined to fit the shaft sealing of your choice. The possible seals for this type of sterntube are the greaseflex seal or the stuffing box. The Exalto sterntube is available in steel for shaft diameters from 25 up to 70 mm. Larger diameters are available on request. The dimensions of the sterntube depend on the outer diameter of the bearings used.

Sterntubes with Clamping Fix

Model 41

Sterntube for grease lubricated system. Model 41 is a steel sterntube that is threaded on both ends, to fit grease lubricated glands. The tube is mounted and closed in by the clamping flanges of the glands. The inner gland is equipped with a grease nipple. The inside of the tube is sand blasted and the outside is coated with a primer. The clampable sterntube is available for shaft diameters of 25, 30, 35, 40, 45 and 50 mm. On request, this tube is also available with 2V and BV Heavy Duty glands.

Sterntubes to be welded in

Oil Lubrication

Sterntube for oil lubricated system. This conventional sterntube is made of St 52.3 steel, stainless steel or aluminium and welded into the hull. In order to prevent the bearings from being damaged by the welding heat, the tube is equipped with double walled welding ends. The weldable sterntube is available in two models:

- Model 02 (undivided) supplied with an aft oil lubricated brass bearing and - depending on the bearing distance - a fore bearing.
- Model 22 (divided) supplied with both an aft and a middle bearing and - depending on the bearing distance - a fore bearing.

On the inside the sterntube is sand blasted. On the outside it is coated with a primer. The front end will be machined to fit the shaft sealing of your choice. The possible seals for this type of sterntube are the seal housings types SA, SV, SF, SB, SC and SD. The weldable sterntube is available in steel in shaft diameters of 25 up to 70 mm. Larger diameters and prices on aluminium and stainless steel are available on request. The dimensions of the sterntube depend on the outer diameter of the bearings used. All dimensions in mm.