



AIR Fertigung-Technologie GmbH & Co. KG
Your partner for innovative propulsion solution.

Product information

AIR InlineThruster

propeller + motor = 2 in 1

The **InlineThruster** offers you the advantage of an electric motor and a propeller in a powerful unit. Due to that combination you get enormous reduction in weight and space. A gearbox and a shaft are not necessary anymore.

Our units are available in the following sizes and power ranges, incl. frequency converter and controller:

| Unit- size | ILT 240-4 | ILT 240-20 | ILT 380-10 | ILT380-50 | ILT 550-20 | ILT 550-100 |
|--------------------|-----------|------------|------------|-----------|------------|-------------|
| Inner/ tube Ø [mm] | 240 | 240 | 380 | 380 | 550 | 550 |
| Power * [kW] | 4 | 20 | 10 | 50 | 20 | 100 |
| Rev. [1/min] | 610 | 1044 | 897 | 1534 | 610 | 1044 |
| max.thrust [kN] | 1,14 | 3,33 | 2,85 | 8,34 | 5,80 | 16,95 |
| Outer Ø [mm] | 450 | 450 | 525 | 525 | 800 | 800 |
| Width [mm] | 180 | 350 | 165 | 280 | 200 | 350 |

* variations are possible

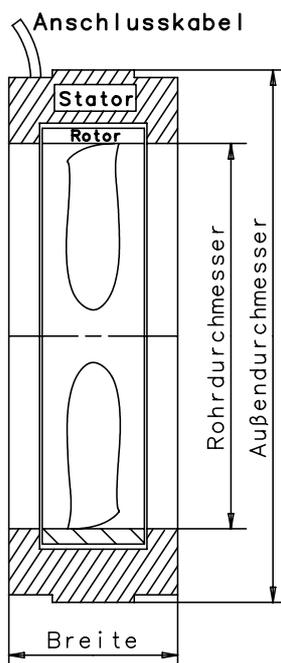
subject to change without notice

The new design of the **InlineThrusters** includes some more advantages.

The arrangement of the blades on the outer ring reduces damages due to ropes or other subjects in the water. Furthermore it reduces noise producing cavitation to a minimum. If there will be damage on a single blade, it can easily be changed separately.

The **InlineThruster**, as a compact unit, can be installed subsequently at any time, as a bow or stern thruster or soon as main- or auxiliary drive.

schematic setup:



The **InlineThruster** consists of a stator in the outer ring and a rotor or propeller.

The mounting of the rotor is realized by proven water-lubricated floating bearings with high abrasion resistance.

The **InlineThruster** is designed, so that our service crew can replace the bearings for servings and repair anywhere.

Power supply requirements:

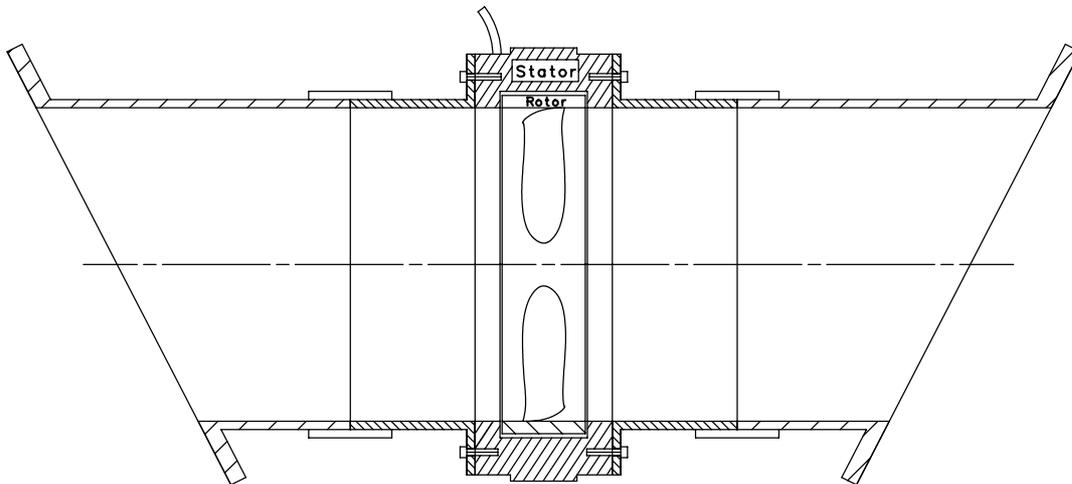
The minimum electrical feed-in for the ***InlineThruster*** according to the power is shown in the following table:

| power | minimum feed-in |
|-----------|-----------------|
| to 5 kW | 24 V DC |
| to 10 kW | 230 V AC |
| to 250 kW | 400 V AC |

Mounting arrangement proposal as a bow or stern thruster:

Option a)

Flanges bolted on the ***InlineThruster*** are bond with the tube.



Option b)

The ***InlineThruster*** is mounted into a floated box which is arranged and fixed centrally into the tube. The advantage of this option is that the ***InlineThruster*** is easily accessible. So the vehicle doesn't necessarily have to be removed out of the water to be serviced or repaired.

