



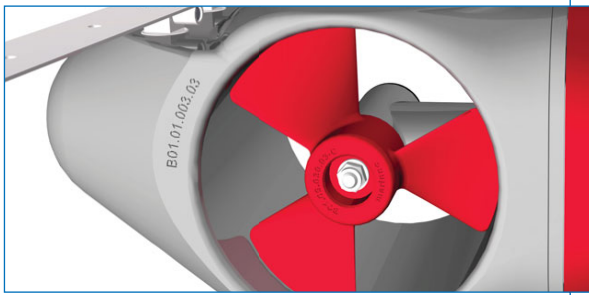
SALES / DISTRIBUTOR

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THE DETAILS



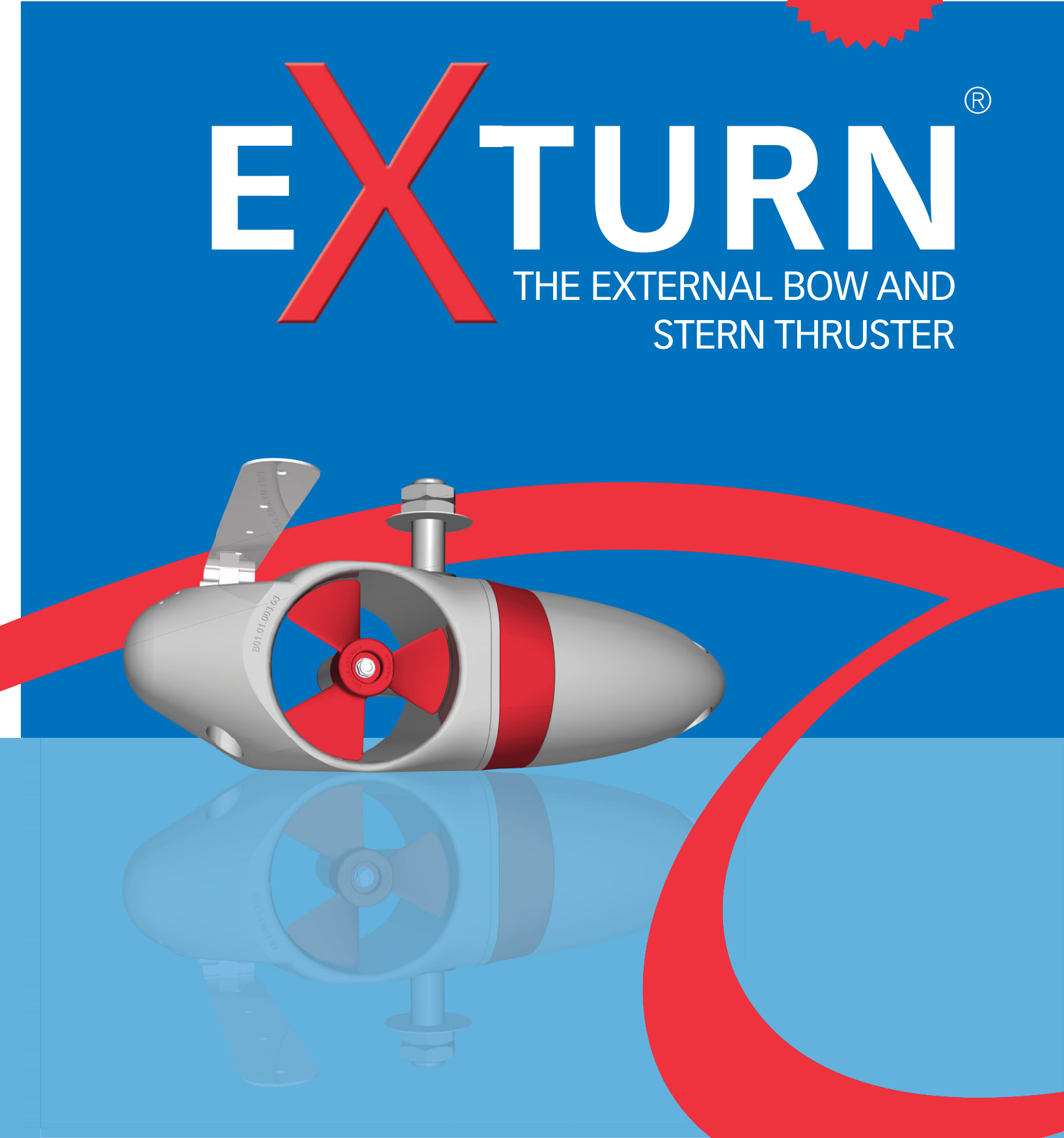
- Length: 55 cm
- Weight: 19 kg
- Diameter: 16,5 x 16,5 cm
- Control via touch panel, joystick or remote control
- Seawater-resistant aluminium housing
- Absolutely maintenance-free



THE PERFORMANCE SPECS

Model	Power (kW)	Thrust (kgf)	Voltage (V)	Nominal Current (A)	Rec. boat size (m)	Rec. boat size (ft.)
EXTURN 130	1,3	25	12	140	6 - 8	19 - 26
EXTURN 180	1,8	40	12	187	8 - 10	26 - 33
EXTURN 230	2,3	53	24	120	9,5 - 12	31 - 40
EXTURN 300	3,0	67	24	175	11 - 14	36 - 46
EXTURN 400*	4,0	85	12	-	13,5 - 17	44 - 56
EXTURN 600*	6,0	120	24	-	16 - 20	52 - 66

* in preparation



EXTURN®

THE EXTERNAL BOW AND STERN THRUSTER

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THE INNOVATION

Compact, practical, high-performance. EXTURN combines functionality and luxury beyond any comparison and offers boat owners unprecedented safety and comfort. A brilliant idea, year-long development work and tests lasting for months, amongst others in the firm-intern flow test channel, resulted in the innovative alternative to all known thruster systems: EXTURN - the external bow and stern thruster.

By reducing the complete mechanism to a minimum size and moving it to the outside - ideally streamlined, MARINNO succeeded to equip boat types which were excluded from this benefit until now: small boats, elder boats, wooden boats, or houseboats. And this with unmatched flexibility and simplicity. Because MARINNO has the intention to revolutionize the market for innovative boat equipment.

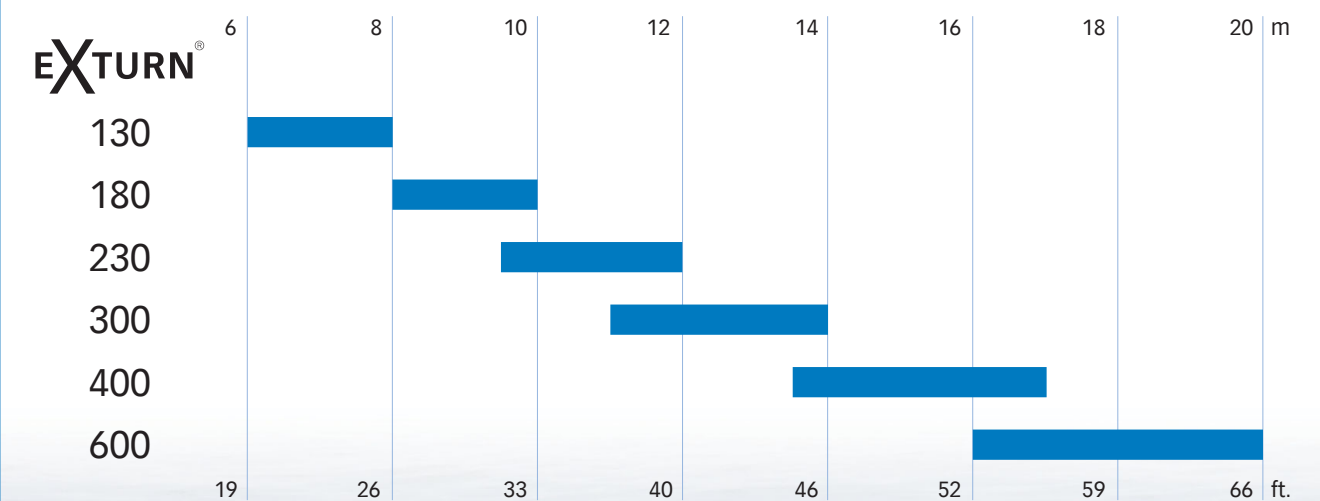


THE RIGHT CHOICE

The EXTURN bow and stern thruster is mountable onto any boat of size between 6 and 20 m independently of hull shape, type of drive and draught:

- Sailboats
- Motorboats
- Houseboats
- Catamarans

EXTURN is offered in 6 different power levels to ensure the ideal solution for any boat type and size within this bandwidth. Essential parameters for the right power level choice are hull shape, boat length, boat weight, freeboard, operational area (coast or inland waters) and wind force.



THE ADVANTAGES

The unique MARINNO bow and stern thruster technology EXTURN offers boat owners significant advantages:

- **minimum assembly work** due to external installation
- suitable **for nearly any boat type and hull shape**
- **flexible positioning on any place of the hull (bow, stern)** - therefore highest efficiency with full flexibility
- **after-sales mounting** without installation of a transverse tunnel
- **no space required** in the boat interior
- **optimal efficiency** due to ideal positioning
- **longer runtime** due to water cooling
- **mounting within a day** due to no GRP drying period
- **minimal noise emission** due to external mounting
- also the ideal solution for **wooden boats and houseboats**
- **3 year full guarantee**



THE MOUNTING

The EXTURN bow and stern thruster is mounted outside of the hull, for optimization of the rotation angle and highest efficiency on the outermost position of the boat's bow or stern. EXTURN is mounted by one threaded bolt which is designed as a hollow shaft and serves as the cable run. This bolt is supplied with a special pressure-tight sealing thread which closes the drilled hole automatically.



An enclosed mounting kit with flexible butt straps for any kind of hull gives EXTURN the required stability. When mounting the thruster no GRP work is needed, so there are no drying periods to consider. The required space in the interior of the boat is reduced to a minimum.

THE MOUNTING VARIANTS

Due to its unique flexibility EXTURN is mountable on any position of the hull and can therefore be used as bow and stern thruster respectively:



Sailboat B ... mounting as bow thruster
Sailboat S ... mounting as stern thruster



Motorboat B ... mounting as bow thruster
Motorboat S1 ... mounting as stern thruster
Motorboat S2 ... mounting as stern thruster „bathing platform“
Motorboat S3 ... mounting as stern thruster „vertical transom“