

ABS flow booster XSB 900

The compact ABS flow boosters have been designed for a wide range of applications. The units are suitable to achieve flow pattern in large tanks and open waters for mixing and stirring applications.

Construction

The ABS flow booster XSB is designed as a compact, water pressure-tight unit including propeller and integrally lockable coupling system. The flow boosters are available in the material version: **Cast iron (EC)**

Motor

Premium Efficiency IE3, squirrel cage, 3-phase, 4-pole, 60 Hz, insulation class F (155 °C/311 °F), max. submergence 20 m (66 ft).

Propeller

Technically optimized, axially operating 3-blade propellers with very good self-cleaning effect for vibration-free operation. The propellers are designed to achieve high thrusts and therefore a high flow capacity in axial direction.

Solids deflection ring

The patented solids deflection ring protects the mechanical seal from damage by ingress of solids or fibrous matter.

Bearings

All bearings are lubricated-for-life and maintenance-free, with a calculated life time of more than 100,000 h.

Gearbox

Robust fatigue strength gearbox of high efficiency and very long operating life, oil lubricated.

Shaft sealing

Motor side dual radial seal, medium side silicon carbide mechanical seal independent of direction of rotation.
O-Rings / lip seals: NBR.

Seal monitoring

DI-system with a sensor in the junction box, oil chamber, motor, and gearbox.

Temperature monitoring

TCS-Thermo-Control-System with bimetallic contacts as thermal sensors in every phase of the stator give a timely warning or switch off the motor automatically before the permissible temperature limit e.g. due to overloading, high temperature medium, or other problem sources, has been exceeded.

Cable

10 m (32.8 ft) sewage resistant S1BN8-F.

Options

Explosion-proof version, seals in viton, cable protection sleeve, PTC or PT 100 in the stator.

Weight: XSB 900: 251 kg (553 lbs).

Concrete pedestal and coupling: 225 kg (496 lbs).

60 Hz



Motor data

Motor	PA 12/4	PA 18/4	PA 25/4
Rated power [kW / hp]	1.2 / 1.6	1.8 / 2.4	2.5 / 3.4
Rated current at 480 V [A]	2.4	3.2	4.0
Motor efficiency (%)	87.8	88.3	90.0
Speed [min ⁻¹]	82	104	130 - 146

Flow booster performance

Hydraulic No.	Propeller dia. mm / ft	Mixer power P _p in kW / hp	Motor kW / hp
XSB 931	900 / 3	0.5 / 0.7	1.2 / 1.6
XSB 932	900 / 3	1.1 / 1.5	1.8 / 2.4
XSB 933	900 / 3	2.2 / 3.0	2.5 / 3.4
XSB 934	900 / 3	2.75 / 3.7	2.5 / 3.4

Material

Part	Cast iron version
Motor housing	EN1563; EN-GJS-400-18 (GGG-40) /
Motor shaft	1.0060 (St 60-2) / ASTM / AISI A276
Propeller shaft	1.7225 fully encapsulated (42CrMo4)
Propeller	1.4571 (AISI 316)
Coupling bracket	DIN 17 445; 1.4408 / ASTM / AISI
Fasteners	1.4401 / ASTM / AISI 316