

ABS flow booster XSB 2750

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 squirrel cage, 3-phase, 4-pole 50 Hz, insulation class F (155 °C), max. submergence 20 m.

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 and in the 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 sewage resistant S1BN8-F.

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

Weight: XSB 2231, 2531, 2731 = 315 kg. XSB 2232, 2233, 2532, 2533, 2732, 2733 = 320 kg. Weight concrete pedestal and coupling device: 980 kg.

50 Hz



Motor data

Motor	PA 55/4	PA 75/4
Rated power (kW)	5.5	7.5
Rated current at 400 V (A)	11.8	15.4
Motor efficiency (%)	89.6	90.4
Propeller speed (min ⁻¹)	53	57/60/64

Flow booster performance table

Hydraulic No.	Propeller dia. in mm	Mixer power P _p in kW	Motor kW
XSB 2731	2750	4.8	5.5
XSB 2732	2750	5.8	7.5
XSB 2733	2750	7.0	7.5
XSB 2531	2500	4.6	5.5
XSB 2532	2500	5.6	7.5
XSB 2533	2500	6.7	7.5
XSB 2231	2200	4.6	5.5
XSB 2232	2200	5.5	7.5
XSB 2233	2200	6.5	7.5

Material

Part	Cast iron version
Motor housing	EN1563; EN-GJS-400-18 (GGG-40)
Motor shaft	1.0060 (St 60-2)
Propeller shaft	1.7225 fully encapsulated (42CrMo4)
Propeller	Composite material (glass fibre, resin, gel coat)
Coupling bracket	DIN 17 445; 1.4408 (CF-8M), (AISI 316)
Fasteners	1.4401 (AISI 316)