



SR 4530, 50 Hz

Technical Specification

Product Description

Usage

Mixer with three blade propeller and reduction gear. Intended for mixing liquid and sludge containing fibres and solids where very high thrust in relation to consumed power is wanted. The mixer is designed to be operated completely immersed in the liquid.

Denomination

Standard version	Explosion proof version
4530.010	4530.090

Installation

Single guide bar system, 100×100 mm (4×4 inches), or 100×150 mm (4×6 inches) square bars

Tripod guide bar system, 100×100 mm (4×4 inches)

Application limits

Feature	Description
Liquid temperature	Maximum 40°C, (104°F)
Liquid viscosity	Maximum 5000 cp
pH	6 - 11
Depth of immersion	Maximum 20 m (65 ft)

Motor data

Feature	Description
Motor type	Squirrel-cage 4-pole induction motor
Frequency	50 Hz
Supply	3-phase
Starting method	<ul style="list-style-type: none"> • Direct on-line • Star-delta • VFD
Maximum starts per hour	30 evenly-spaced starts per hour
Voltage variation	<ul style="list-style-type: none"> • Continuously running: Maximum ±5% • Intermittently running: Maximum ±10%
Voltage imbalance between the phases	Maximum 2%
Stator insulation	In accordance with class H (180°C, 356°F), trickle impregnated

Cables

- SUBCAB® heavy-duty submersible cable
- SUBCAB® screened heavy-duty submersible cable

Monitoring equipment

- Thermal contacts opening at 125°C, (257°F)
- Leakage sensor in stator housing (FLS), optional
- Leakage sensor in oil housing (CLS), optional

Materials

Item	Material
Gear housing	Cast iron, ASTM 35B
Stator housing	Cast iron, ASTM 35B
Oil housing	Cast iron, ASTM 35B
Shaft	Stainless steel, ASTM/AISI 431
Propeller	Aluminum, AA A413.0
Hub	Aluminum, AA A413.0
Lifting device	Stainless steel ASTM 316L
Stand unit	Stainless steel ASTM 316L
Oil, oil housing	Paraffin oil ISO VG32
Oil, gear housing	Mineral oil with additives, viscosity close to ISO VG 220
O-rings	Nitrile rubber

Surface treatment

Aluminum parts	Cast iron parts
Finishing coat: Wear resistant epoxy powder coating Color: <ul style="list-style-type: none"> • Navy Grey on propeller hub • Banana Yellow on propeller blades 	Finishing coat: <ul style="list-style-type: none"> • Two pack oxiran ester paint • Optional version: Corrosion resistant primer • Optional version: Wear resistant epoxy paint Color: Navy Grey

Mechanical face seals

Inner seal	Outer seal
Lip seal	Corrosion resistant cemented carbide (WCCR) / WCCR

Hydraulic unit

Thin-sectioned, non-clogging, backswept propeller with double-curved blades.

Dimensions and weight

See the dimensional drawing.

Options and accessories

- Installation systems
- Lifting equipment
- Special cables
- Zinc anodes
- Electrical equipment such as control panels, monitoring equipment, variable frequency drives

Motor Rating

Table 1: 400V, 50 Hz, 3-phase

Product	Propeller diameter, maximum mm	Rotations per minute, rpm	Poles	Rated Power, kW	Rated Current, A	Starting Current, A	Power factor $\cos\varphi$
4530	1200	1465	4	2.3	5.6	40	0.70
4530	1200	1420	4	4.3	9.1	38	0.84

Thrust Data

SR 4530

Table 2: 50 Hz, 4-pole 3-phase, 2.3 kW

RPM	88			109			120		
Propeller diameter, mm	F_{thrust} N	P_{in} kW	Prop. code	F_{thrust} N	P_{in} kW	Prop. code	F_{thrust} N	P_{in} kW	Prop. code
1200	800	1.03	410	1220	1.78	430	1470	2.36	450

Table 3: 50 Hz, 4-pole 3-phase, 4.3 kW (1 of 2)

RPM	88			109			120			130		
Propeller diameter, mm	F_{thrust} N	P_{in} kW	Prop. code	F_{thrust} N	P_{in} kW	Prop. code	F_{thrust} N	P_{in} kW	Prop. code	F_{thrust} N	P_{in} kW	Prop. code
1200	800	1.03	410	1220	1.78	430	1470	2.36	450	1740	3.15	470

Table 4: 50 Hz, 4-pole 3-phase, 4.3 kW, RPM from 135 (2 of 2)

RPM	137			145		
Propeller diameter, mm	F_{thrust} N	P_{in} kW	Prop. code	F_{thrust} N	P_{in} kW	Prop. code
1200	1930	3.81	480	2140	4.46	490

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- 2) A leading global water technology company

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The original instruction is in English. All non-English instructions are translations of the original instruction.

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