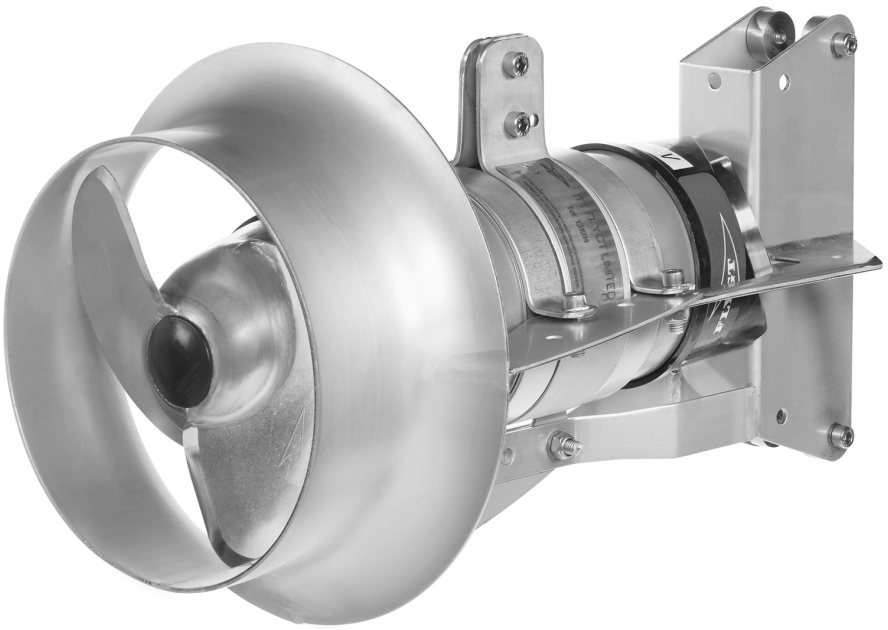
POMPDIRECT
T 0294-457712 info@pompdirect.nl www.flygtmixers.nl

Technical Specification



Flygt SR 4610-4620, 50 Hz

FLYGT

POMPDIRECT

Technical specification

Product description

Usage

Direct-drive mixer intended for mixing liquid and sludge containing fibers and solids where high thrust in relation to consumed power is wanted. The mixer is designed to be operated completely immersed in the liquid.

Denomination

Installation

- Guide bar system, 50×50 mm (2×2 in)
- Cantilever bar, 4610: OD 48.3 mm (1.9 in), 4620: OD 76.1 mm (3.0 in)

Application limits

Feature	Description
Liquid temperature	• Maximum 40°C (104°F) • Warm-liquid version 60°C (140°F), or 90°C (194°F)
Liquid viscosity	Maximum 5000 cp
pH	1 – 12
Depth of immersion	Maximum 20 m (65 ft)

Motor data

Feature	Description
Motor type	Squirrel-cage 4-pole induction motor
Frequency	50 Hz
Supply	1–phase (only 4620) or 3–phase
Starting method	• Direct on-line • VFD
Maximum starts per hour	30 evenly-spaced starts per hour
Voltage variation	• Continuously running: Maximum ±5% • Intermittently running: Maximum ±10%
Voltage imbalance between the phases	Maximum 2%
Stator insulation	In accordance with class F (155°C, 311°F)

Cables

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

Monitoring equipment

- Thermal contacts opening at 140°C (285°F)
- Leakage sensor in connection chamber (FLS), optional

Materials

Item	Material
Stator housing	Stainless steel ASTM 316L
Shaft	Stainless steel, ASTM/AISI 431

Item	Material
Oil housing	Vinyl ester based SMC
Cover	Vinyl ester based SMC
Lifting device	Stainless steel ASTM 316L
Jet ring	Stainless steel ASTM 316L
Oil	Paraffin oil ISO VG32
O-rings	Nitrile rubber as standard, fluorinated rubber for warm liquid versions.

Surface treatment

Stainless steel parts are blasted to a dull gray surface.

Mechanical face seals

The inner seal uses the patented Active Seal™ technology, which is a zero leakage seal, allowing no liquid to penetrate from the buffer fluid compartment to the stator housing of the mixer.

	Inner seal	Outer seal
Standard	Corrosion resistant cemented carbide (WCCR) / Aluminum oxide (Al_2O_3)	WCCR / WCCR
Optional	WCCR / Al_2O_3	Silicon carbide (RSiC) / RSiC

Hydraulic unit

Double-blade high efficiency clog-free propeller, stainless steel ASTM 316L. Diameter 210 mm (8.3 in).

- Optional version: Jet ring

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	Rotations per minute, rpm	Poles	Rated Power, kW	Rated hp	Rated Current, A	Starting Current, A	Power factor cosφ
4610	1380	4	0.90	1.2	2.0	9.0	0.88
4620	1385	4	1.5	2.0	3.8	17	0.80

Table 2: 230V, 50 Hz, 1-phase

Product	Rotations per minute, rpm	Poles	Rated Power, kW	Rated hp	Rated Current, A	Starting Current, A	Power factor cosφ
4620	1405	4	0.75	1.0	4.8	21	0.99

Thrust data

Detailed thrust data is available in Mixer Performance Data.

Performance according to ISO 21630:2007.

Table 3: 3-phase

Product	Rated shaft power, kW	F_{thrust}, N	Input power, kW
4610	0.9	80–200	0.55–0.95
4620	1.5	85–315	0.70–1.5

Table 4: 1-phase

Product	Rated shaft power, kW	F_{thrust}, N	Input power, kW
4620	0.75	90	0.55