

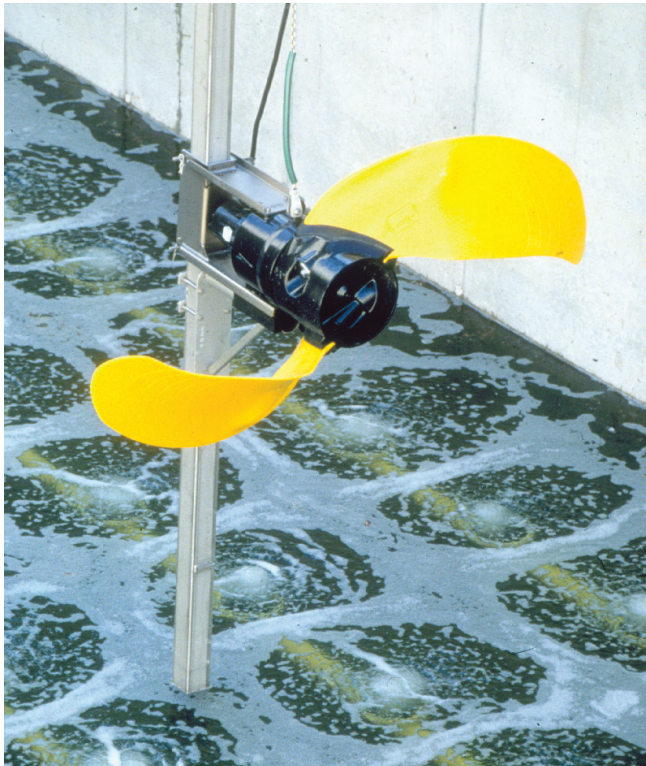


4410

Submersible Mixer

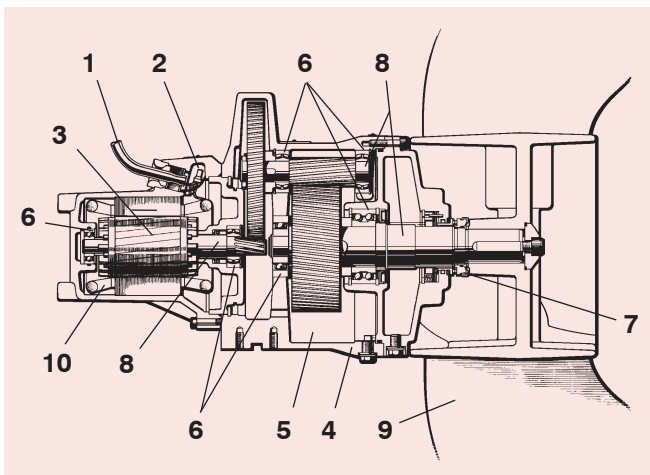
Gear Driven Mixer

Nominal Thrusts: 350 to 2,300 N



Applications:


The 4410 is used for mixing and current creation in wastewater aeration tanks. Also used for blending, flocculation, fish farming and de-icing applications.



Materials of Construction:

Major castings in Cast Iron ASTM A48 Class 35B

Approvals:

CSA tested and approved to UL Standard for Safety #778. 

Specifications

1. Cable

SubCab cable. Jacket is Chlorinated Polyethylene rubber, Insulation is Ethylene Propylene rubber.

2. Junction box

The junction box is completely sealed off from the surrounding mixed media by utilizing an O-ring around the perimeter of the junction box sealing interface.

3. Motor

Flygt motors are tested according to IEC 34-1. Dry shell type, NEMA design B, induction squirrel cage motor. Motor insulation is Class H with a maximum working temperature of 180°C (356°F). The stator is cooled by the mixed media surrounding the stator casing.

4. Gear box

The gear box is a two-stage cylindrical helical gear box equipped with high precision low loaded gears. The gears are designed according to AGMA for 100,000 hours of operation.

5. Oil casing

An environmentally friendly white paraffin based, FDA approved non-toxic, oil lubricates and cools the seals between the liquid and the electric motor. Pressure build-up within the oil casing is reduced by means of a built-in air volume.

6. Bearings

The motor shaft is supported by an inner single-row deep-groove ball bearing and an outer double-row roller bearing. The intermediate shaft is supported by two double-row roller bearings. The propeller shaft is supported by an inner single-row deep-groove ball bearing and an outer double-row angular contact ball bearing. All bearings are designed for more than 100,000 hours of operation.

7. Shaft seals

The mixer has one mechanical seal and two lip seals.

8. Shafts

The motor is delivered with the rotor as an integral part. The shafts are completely sealed and will not come into contact with the mixed media.

9. Propeller

The propeller blade is made of fiberglass reinforced polyurethane. The propeller shaft is constructed of 316 stainless steel.

The propeller is nonclogging and designed with backward curved propeller blades. It is designed to deliver the greatest possible mixing effect in relation to motor output.

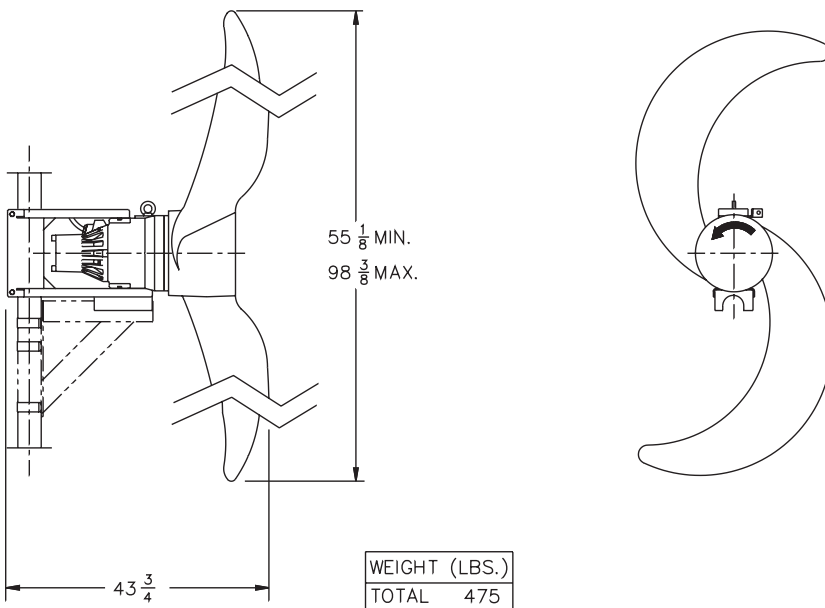
10. Monitoring system

The stator incorporates three thermal switches connected in series. The thermal switches open at 125°C (260°F).

Flygt products are affiliated with the following associations:



4410



Propeller Performance Range - (contact Flygt for availability of additional propellers)

Prop. Code	Ø	Poles	Max. Motor HP Rating	Shaft *HP	Power Input (kW)	Motor Speed (RPM)	Prop. Speed (RPM)	Prop. Dia. (inches)	Nominal Thrust (N)
447	3	4	3.5	1.1	1.05	1675	30	55-1/8	650
440	3	4	3.5	2.2	2.17	1675	30	98-3/8	2,300
607	3	6	1.5	0.6	0.54	1135	21	55-1/8	350
600	3	6	1.5	1.1	1.07	1135	21	98-3/8	1,290

Flygt has a full range of 4 pole propellers with flows between 14,900 and 55,000 GPM
Flygt has a full range of 6 pole propellers with flows between 10,800 and 38,200 GPM

*Horsepower consumed at the motor shaft between motor and gear in clear water.

Motor Data

Rated Output Power HP (kW)	Ø	Volts nom.	Full Load Amps	Locked Rotor Amps	Locked Rotor KVA	NEC Code Letter	Rated Input Power kW	Poles/RPM	Cable Size	Cable Part Number	Max. Cable Length (FT.)
1.5 (1.1)	3	200	6.0	27.6	9.6	H	1.5	6/1135	4G2.5+2x1.5 0.69"-(17.5 mm)	94 20 59	260
		230	5.4	24.0	330						
		460	2.9	12.0	1235						
		575	2.1	10.0	2130						
3.5 (2.6)	3	200	12.0	55.2	19.1	F	3.4	4/1690	4G2.5+2x1.5 0.69"-(17.5 mm)	94 20 59	120
		230	10.0	48.0							150
		460	5.0	24.0							620
		575	4.1	19.2							950

HP	Efficiency			Power Factor			Electrical Service Specifications
	100% Load	75% Load	50% Load	100% Load	75% Load	50% Load	
1.5	68.0	67.5	63.0	0.67	0.58	0.46	Voltage Tolerances: ±5% (Rated Output), ±10% (without overheating) Frequency Tolerance: ±5% Voltage Balance (Phase to Phase): ±1% VFD Compatible.
3.5	77.0	78.5	77.0	0.83	0.77	0.66	

Xylem Inc., Flygt products, reserves the right to modify performance, specifications or design without notice.

Xylem Inc., U.S.A.

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