

Flygt 4460 Biogas Mixer

STURDY, ENERGY EFFICIENT MIXERS FOR OPTIMAL BIOGAS OUTPUT

The Flygt 4460 Biogas midsize mixer brings your biogas production to new heights. With its large diameter duplex steel propellers and superior hydraulic design running at low speeds, customers can be assured of maximum thrust, minimum power consumption and maintained substrate homogeneity.



Rugged Non-stop Performance

Flygt 4460's duplex steel propellers provide efficient and effective mixing of challenging digester content.

The propeller's spherical hub design ensures clog-free operation even with fibrous substrates.

Flygt motors and heavy-duty gearboxes guarantee reliability and non-stop performance.



High Efficiency in Biogas Media

Flygt 4460 is specifically made to perform in high yield stress and high viscosity liquids, providing effective mixing and low energy cost.



Adjustable Positioning

Installed on the dedicated biogas installation equipment BIS-1, with depth and angle adjustment, Flygt 4460 offers the most flexible configuration for proper digester operation, to optimize biogas production and avoid process disturbances.



Service Satisfaction Guaranteed

With Xylem's worldwide presence and its vast experience in biogas mixer installations all over the world, you can be assured of quick service turn-around times and spare part deliveries.

We can provide our know-how on application and process support from design to project execution and post-installation support. Thus, assuring you of Xylem's unparalleled service.

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Motor Data

- Type: Squirrel-cage 2-pole induction motor
- Frequency: 50Hz and 60Hz
- Voltage: 380-480 V
- Insulation class: H (180°C [356°F])

Materials

- Propeller blades: Stainless steel EN 1.4462
- Hub: Stainless steel, EN 1.4404/ASTM 316L
- Gear housing: Cast iron, ASTM 35B
- Stator housing: Cast iron, ASTM 35B
- Oil housing: Cast iron, ASTM 35B
- Shaft: Stainless steel, ASTM/AISI 431
- Oil, oil housing: Paraffin oil ISO VG32
- Oil, gear housing: Mineral oil with additives, viscosity close to ISO VG 680
- O-rings: Nitrile rubber
- Shaft outer seal: Corrosion resistant cemented carbide WCCR/WCCR

Cable

- Flygt SUBCAB®
- 10 or 20 m (30 or 60 ft)

Weight and dimensions

- Weight: max 269 kg (593 lb)
- Length, excl. bracket: max 1185 mm (46.65 in.)
Propeller diameter: 1250 mm (49.21 in.),
1000 mm (39.37 in)

Guide bar bracket

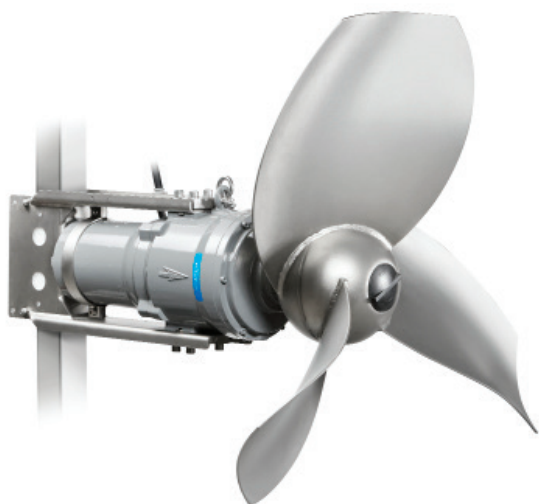
- 100×100 mm (4×4 in)
- 100×150 mm (4×6 in)

Mixer approvals

- 4460.010 CE, CSA
- 4460.090 EN/ATEX, FM
- 4460.020 CE, CSA

Application limits

- Liquid temperature: max 60°C (140°F)
- Liquid viscosity: max 5000 cp
- pH of the mixed liquid: 6 - 11
- Depth of immersion: max 20 m (65 ft)



Performance Data

| Mixer model | Rated output power | Propeller rpm | Propeller diameter | Thrust* |
|--------------|--------------------|---------------|--------------------|---------------|
| 4460.010/090 | 7.5 kW (50Hz) | 69 (50Hz) | 1250 mm (49 in.) | 2860 N (50Hz) |
| | 11 hp (60Hz) | 71 (60Hz) | | 2940 N (60Hz) |
| 4460.020 | 12 kW (50Hz) | 80 (50Hz) | 1250 mm (49 in.) | 3650 N (50Hz) |
| | 18.8 hp (60Hz) | 79 (60Hz) | | 3560 N (60Hz) |
| | 12 kW (50Hz) | 96 (50Hz) | 1000 mm (39 in.) | 2800 N (50Hz) |

*According to ISO 21630:2007