



Energy-saving submersible agitators TSR



APPLICATION

Applications are in municipal and industrial waste water treatment, biogas generation, industrial process technology and agriculture.

Submersible agitator for liquids with up to 12% dry matter content and maximum substrate temperature 140 °F.

MOTOR

Motor: 60 Hz, 480 V, other voltages on request.
Protection class IP 68, immersion depth up to 65 ft.
Temperature monitoring in the motor winding.

SEALING SYSTEM

Highly wear-resistant silicium carbide mechanical seal.
Upstream labyrinth seal to prevent penetration by disruptive substances. Submersible agitator housing with easily replaceable wearing ring.

EX ZONE

Authorized for Zone 1
CSA, ATEX and IECEx certification
Type of motor protection: pressure encapsulation (flameproof)

PROPELLER

High efficiency 3-blade propeller.
Material: stainless steel ss304
Optional: hardened immersion edges

GUIDE RAIL CONNECTION

4 roller carriage for 4,7" x 4,7" stainless guide rail,
other carriages on request.

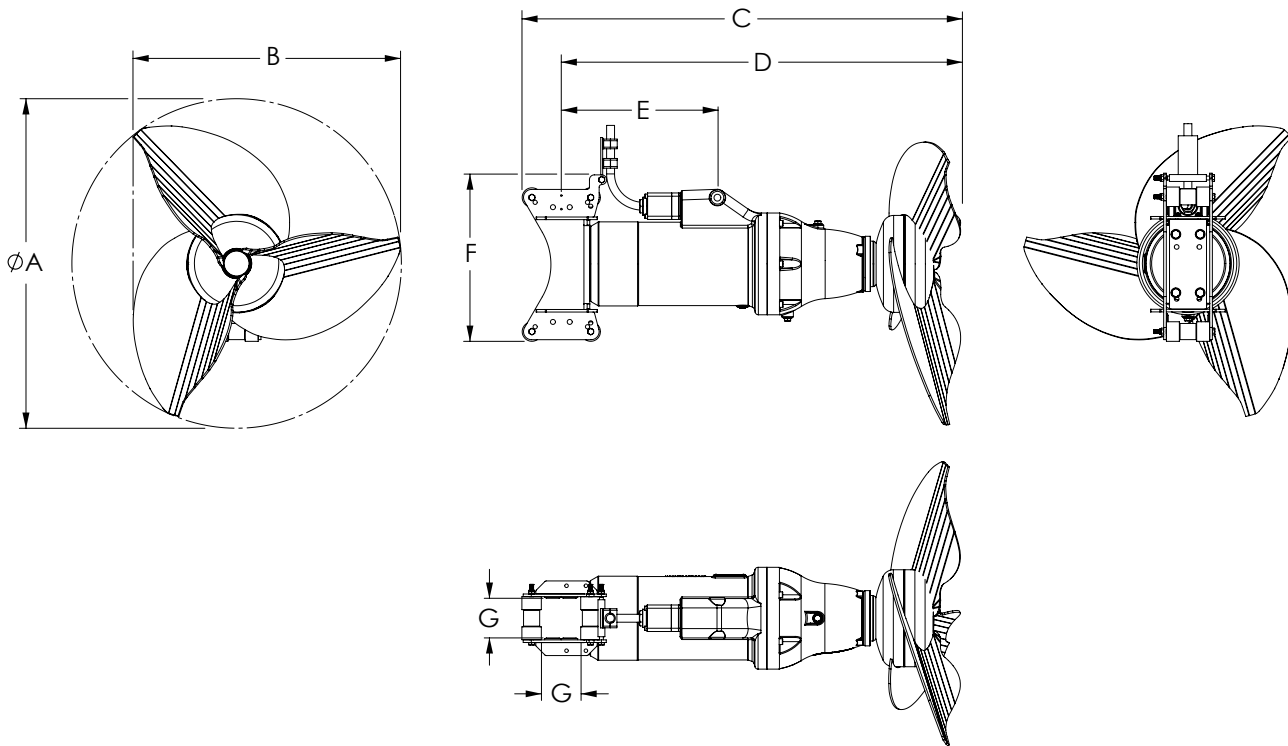
CORROSION PROTECTION

Siloxane coating (two component) for standard applications.
Optional: ceramic coating for aggressive substrates

ELECTRIC CABLE

Standard length 49 ft, other lengths on request.
Jacket outside diameter approx. Ø 1"





DIMENSIONS AND WEIGHTS

| Type | A | B | C | D | E | F | G | Weight* |
|-------------|------|------|------|------|------|------|-----|---------|
| | in | in | in | in | in | in | in | lbs |
| TSR 74-160 | 33.1 | 26.9 | 57.9 | 53.1 | 19.1 | 20.3 | 4.8 | 448 |
| TSR 114-160 | 35.8 | 28.9 | 57.9 | 53.1 | 19.1 | 20.3 | 4.8 | 490 |
| TSR 166-160 | 37.8 | 30.8 | 57.9 | 53.1 | 19.1 | 20.3 | 4.8 | 534 |

*Agitator without carriage

TECHNICAL DATA

| Type | Power rating | Frequency | Current rating* | Propeller speed | Axial thrust | Circulating rate ** |
|-------------|--------------|-----------|-----------------|-----------------|--------------|---------------------|
| | HP (kW) | Hz | A | rpm | lbf | gal/min |
| TSR 74-160 | 10 (7.5) | 60 | 11.5 | 190 | 540 | 12,927 |
| TSR 114-160 | 15 (11) | 60 | 17.1 | 190 | 765 | 16,665 |
| TSR 166-160 | 22 (16) | 60 | 28.5 | 190 | 967 | 19,773 |
| TSR 166-160 | 22 (16) | 60 | 23 *** | 190 | 967 | 19,773 |

* At 480 V, other voltages on request

** Circulating rate according to ISO 21630:2007

*** At 600V