

AGITATOR SPECIFICATION

2023-05-30

TOP ENTERING AGITATOR: 30V35

POS 1 (41254-1) Replacement of SCABA Agitator WA74-50, order 02.8765-0

Quantity: 1

AGITATION PURPOSE:

To prevent sedimentation, Keeping organic content homogeneous Municipal waste water, no rags

PRODUCTS INVOLVED:

TANK DIMENSIONS:

Height	5700 mm
Width	3600 mm
Length	5500 mm
Max liquid level	5000 mm
Min agitation level	2150 mm
Mounting level above bottom (M)	5900 mm

MEDIA DATA:

Herschel-Bulkley flow curve	$\tau = 0 + 5 \cdot (dv/dy)^{**1}$ mPas
Exp. in power law for visc. force	1
Average viscosity (at 26/s)	5 mPas
Maximum viscosity ratio	10
Maximum density difference	0.1
Maximum density	1.05 g/cm ³
Temperature	~5-20 degrees C

MOTOR:

Manufacturer/Type	SEW - DFR63M4
Power/Rotational speed	0.18 kW - 1500 rpm
Frequency/Voltage	50 Hz - 230/400 V
Protection	IP55
Material	Aluminium

The motor is equipped with rain guard.

Maximum noise level 70 dB

Stated noise level applicable only to motor-gear box. The combination with agitator housing and tank can give higher values.

GEAR BOX:

Manufacturer/Type	SEW - RF57
Outgoing rotational speed	25 rpm
Mounting position	V1(M4)

SHAFT:

Diameter	30 mm
Length	4500 mm
Shaft type	Solid
Material shaft	EN 1.4460

IMPELLERS:

Type	2SHP18
Diameter	1500 mm
Blade thickness	5 mm
Blade fastening	Welded
Material hub	EN 1.4460
Material blade	EN 1.4162
Hub fastening	Keyway
Height over bottom	1400 mm
Surface finish	De-scaled, chamfered edges
Smallest mounting opening	350 mm

PAINTING:

Motor	Alkyd (C3) NCS 1700
Gearbox	Alkyd (C3) NCS 1700

LOAD DATA:

Axial force	152 N
Torque	69 Nm
Bending moment	139 Nm
Total weight	73 kg

Use at least three times the above data for the dimensioning of the tank and agitator support

Min. allowed stiffness of mounting 52026 Nm/radian

INSTALLATION INSTRUCTION:

No.	45175
Measures	a=b, d=f, M=5900 mm, L=4500 mm

SPECIAL PRESUMPTIONS / OTHERS:

Outlet shall be placed in the bottom zone area.

It is not allowed to run the agitator in air

Mounting flange is not included in the delivery.

PERFORMANCE:

The total pumping capacity in water is 42 m³/min