

I Application

The range of the FMI agitators presents vertical direct motor-driven agitators. They are used in the processes of mixing, dissolution, dispersion and maintenance, whenever a powerful and high-speed agitation is required, in the food-processing, cosmetics, pharmaceutical or chemical industries. The most adequate finish is selected for every process.

The agitators are normally fitted to tanks of up to 20.000 L for work with low-viscosity products.

I Operating principle

The agitators are normally installed inside the tank either centrally with current deflectors, or offset so that the offsetting itself prevents the rotation of the stirred product.

The rotation of the propeller makes the fluid flow to the bottom and then up to the surface along the walls of the tank. The effect is promoted if the bottom of the tank is curved.

I Design and features

Vertical agitator.

Sealing: V-ring.

Bearing support.

Propeller attached to the shaft by Allen studbolts, and the shaft attached to the drive by means of a rigid coupling plate.

IEC B5 motor, 1500 rpm, IP 55, F-class insulation.

Max. power 75 kW.

Marine propeller (Type 10).

I Materials

Parts in contact with the product	AISI 316
V-ring	NBR
Lantern	Aluminium
Bearing support	GG-15
Surface finish	Ra ≤ 1,6 µm

I Options

Double flushed mechanical seal.

Retainer: FPM.

Shaft and propeller lined with plastic material for use with corrosive products.

Welded propeller with Ra ≤ 0,4 µm and Ra ≤ 0,8 µm surface finish.

Sawtooth turbine (cowles).

Motor shroud.

Motors with other protections.

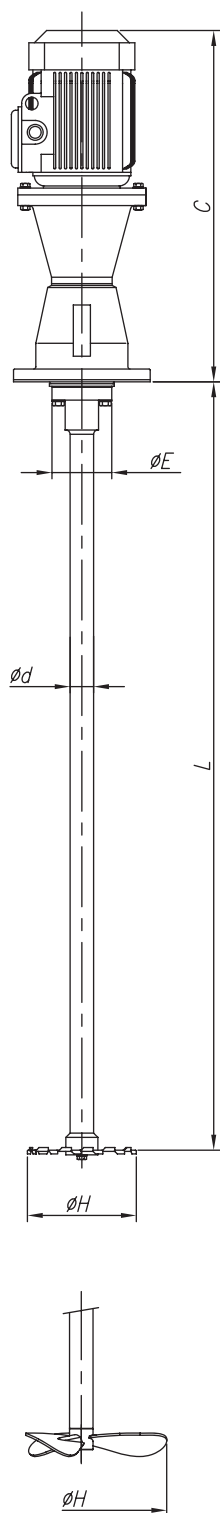
Motors: 950 or 750 rpm.



Sawtooth turbine



I Technical specifications and dimensions



Agitator	Motor power	Speed	Support	Dimensions						Agitator shaft		Type			
				Marine propeller	Sawtooth propeller	10	4								
	[kW]	[rpm]				C	ØE	Flange				Ød	L _{max}	ØH	ØH
						ØA	ØB	ØDN	ØG(
FMI-B-1.10-4022-200	2,2	1450	B	625	105	240	200	125	18 (8)	40	1800	200			
FMI-B-1.10-4030-200	3		C	685	125	265	225	150		45	2000	225			
FMI-C-1.10-4040-225	4			750								250			
FMI-C-1.10-4055-250	5,5		D	835	140	320	280	200		55	2200	275			
FMI-D-1.10-4075-250	7,5			1005											300
FMI-D-1.10-4110-275	11			1060											
FMI-D-1.10-4150-300	15														
FMI-D-1.10-4185-300	18,5		E	1165	160	375	335	250	18(12)	65	2400	325			
FMI-E-1.10-4220-325	22		B	625	105	240	200	125	18 (8)	40	1800		150		
FMI-B-1.4-4022-150	2,2		C	685	125	265	225	150		45	2000		200		
FMI-C-1.4-4040-200	4			750									255		
FMI-C-1.4-4055-200	5,5		D	835	140	320	280	200		55	2200		290		
FMI-D-1.4-4075-255	7,5			1005											330
FMI-D-1.4-4110-290	11			1060											
FMI-D-1.4-4150-330	15														
FMI-D-1.4-4185-330	18,5		E	1165	160	375	335	250	18(12)	65	2400				
FMI-E-1.4-4220-330	22		F	1285	220	490	445	350	23(12)	80	2500		390		
FMI-F-1.4-4300-390	30														