

ME-6100

Tank Bottom Mixer



APPLICATION

The ME-6100 series of the high shear bottom of the tank mixers present a highly hygienic solution for the processes of dispersion, emulsifying, homogenisation and disintegration of solids in the food-processing, cosmetics, pharmaceutical and fine chemistry industries.

These mixers can be used either in open or closed tanks at atmospheric pressure or under pressure/vacuum.

The bottom of the tank mixers are designed for the applications of the highly viscous media and intended for work with anchor type agitators.

OPERATING PRINCIPLE

The high speed and adjusted tolerances between the rotor and the stator result in high suction potential, the product is suctioned and driven to the centre of the head.

The product is suctioned from the upper part of the head and the rotor thrusts it radially. Passing through the opening of the stator the product is mechanically sheared, the particles are sheared by the rotor at high speeds. And finally this flow is hydraulically sheared leaving the stator through the slots at a high speed.

DESIGN AND FEATURES

High shear, particle size reduction to less than 100 microns.

Access to the mechanical seal from the inside of the tank.

Single sanitary mechanical seal.

Possibility to replace the stator without disassembling the mixer.

The circulation is promoted as the stator is geometrically higher than the rotor.

Different model of stators are easily interchangeable.

Motors: IEC B5, IP 55, F-class insulation.

Easy cleaning and sterilisation (CIP/SIP).

Slotted head.

TECHNICAL SPECIFICATIONS

Materials

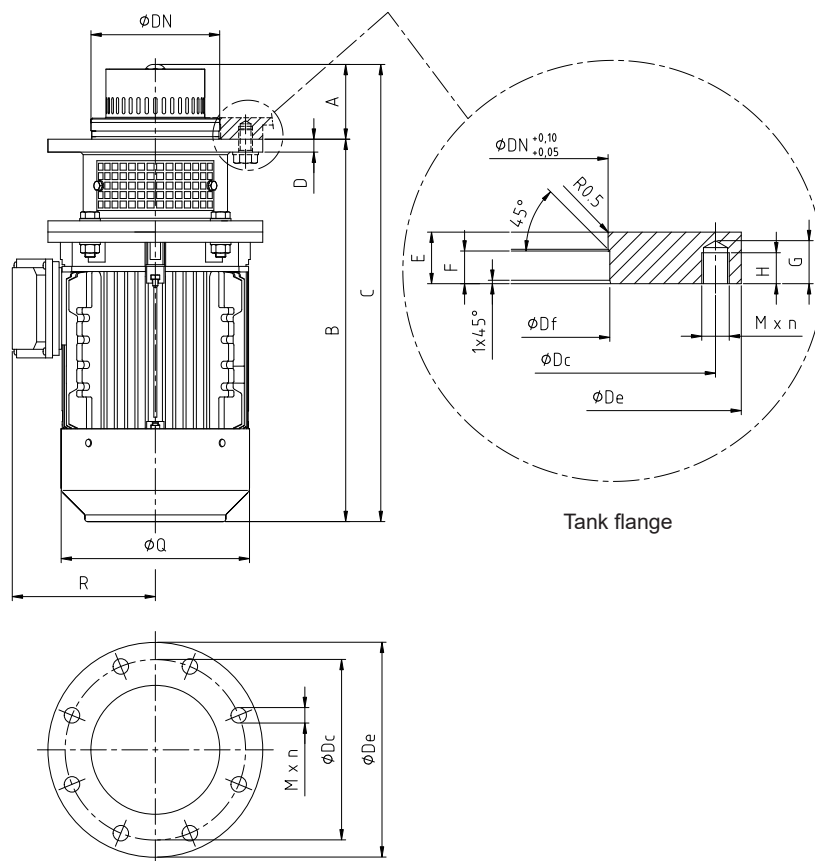
Parts in contact with the product	1.4404 (AISI 316L)
Other steel parts	1.4301 (AISI 304)

Gaskets in contact with the product	EPDM
Mechanical seal	C/SiC/EPDM
Surface finish	
Internal	Ra ≤ 0,8 µm

OPTIONS

- Double mechanical seal.
- Flushed mechanical seal.
- Disintegrating stator.
- Fine screen stator.
- Bare shaft construction for big size models and transmission by pulleys and belts.
- Ra ≤ 0.4 µm surface finish for pharmaceutical applications.
- Other motor protections.

DIMENSIONS



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Model	Motor	A	B	C	D	Q	Tank flange								kg		
							ØDe	ØDc	ØDf	ØDN	E	F	G	H		M x n	
ME-6103	T-90	82	355	455	18	180	200	160	133,5	131,5						M16x4	35
ME-6105	T-112		436	535		236					25	12	21	15			55
ME-6110	T-132	87	492	595	15	261	250	210	152	150							100
ME-6125	T-160		656	810		310										M16x8	145
	T-180	108	730	885	26	349	330	300	177	175	30	15	27	20			235
ME-6130	T-180	144	733	925					241	239							255

Dimensions in mm

QUICK SELECTION TABLE

Approximate selection table. The selection can vary according to the application.

Model	Motor			Tank Volume [L]		
	Size	Power [kW]	Speed [rpm]	1 cP	3000 cP	Additional agitation 3000 cP
ME-6103	T-90	2,2	3000	300	100	300
ME-6105	T-112	4		750	300	750
ME-6110	T-132	7,5	3000	1500	750	1500
ME-6125	T-160	18,5		2000	1000	2000
		22			1200	2200
ME-6130	T-180	22	1500	2500	1500	2500