

I Application

Mixblend blenders are used to add solids that tend to clump when mixed with liquids. Unlike many other blender models, the advantage of this blender is that it is suitable for use with products with higher concentrations of gums and thickening agents. It is ideal for solids such as gums, pectins and other thickening agents. Its field of application is limited to adding small amounts of solids that are dispersed and sheared quickly into the product.

I Operating principle

The Mixblend blender is a compact unit, comprised of an in-line mixer with a venturi system for suction and a hopper with a butterfly valve above the venturi system to add the solids to the liquid flowing through the mixer. The suction and venturi system are set horizontally in this blender.

The venturi system creates negative pressure at the base of the hopper. When the hopper valve opens, the solids are drawn and easily dissolved as they pass through the mixer housing.

It is recommended to recirculate the product (batch production) until all the solid/powder product is suctioned in and then, when the solid product is completely incorporated into the liquid product, continue recirculating the product for a while to ensure the most homogeneous dissolution possible.

I Design and features

Simple and versatile unit for fast and homogeneous mixing of a wide range of solids without any contact with the air.

Hygienic design.

Single mechanical seal.

ISO 2852 Clamp connections for easy assembly/disassembly.

Butterfly valve for the hopper.

Cleaning and disinfection without disassembly.



I Technical specifications

Materials:

Parts in contact with the product	AISI 316L
Other metal parts	AISI 304
Gaskets	EPDM

Mechanical seal:

Rotary part	Silicon carbide (SiC)
Stationary part	Silicon carbide (SiC)
Gaskets	EPDM

Surface finish:

Internal	Bright polish $Ra \leq 0.8 \mu m$
External	Matt

Blender	MB-05	MB-10
Approximate flow rate	20 m ³ /h	30 m ³ /h
Maximum solids intake	1300 kg/h *	2000 kg/h *
Blender base	ME-4105	ME-4110
Motor (3000 rpm)	4 kW	7.5 kW
Maximum temperature	65°C	65°C
Connections (suction/propulsion)	CLAMP	CLAMP
Hopper capacity	25 litres	48 litres
Hopper valve	CLAMP butterfly valve	CLAMP butterfly valve

* The intake of solids can vary depending on their properties.

I Options

Double mechanical seal.

Gaskets in FPM or PTFE.

DIN, SMS connections.

Drain port.

Vibrator for hopper.

Pneumatically actuated valve + hygienic low level sensor for solids.

Hygienic upper level sensor for solids.

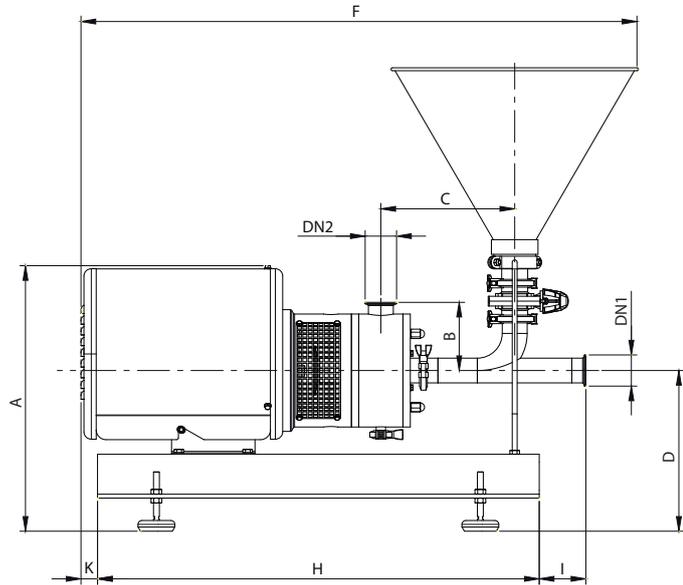
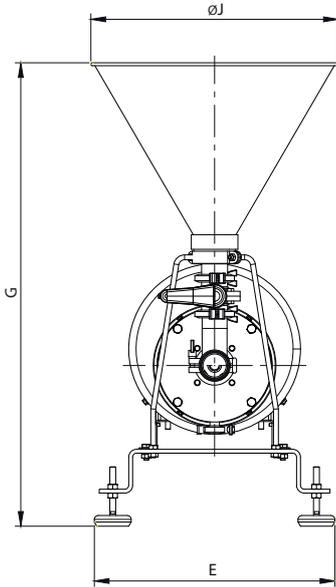
Control panel for the vibrator, level sensors and automatic valve.

Mounted on a cart with or without control panel.

Grid for the hopper.



I Dimensions



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Blender	Hopper volume (l)	Motor (kW)	DN1	DN2	A	B	C	D	E	F	G	H	I	ØJ	K	Weight (kg)
MB-05	25	4	2"	2"	545	140	273	330	490	1133	952	900	95	505	34	135
MB-10	48	7,5	2½"	2½"	563	140	196	330	490	1263	1012	1200	26	605	74	172

