

MIX

Horizontal Blender

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.

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.

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.



TECHNICAL SPECIFICATIONS

Materials

Parts in contact with the product	AISI 304 (1.4404)
Other steel parts	AISI 304 (1.4301)
Gaskets in contact with the product	EPDM

Mechanical Seal

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

Surface Finish

Internal and hopper	Bright polish $Ra \leq 0,8 \mu m$
Stationary Part	Silicon carbide (SiC)
External, structure and upper base	Matt

Blender

Approximate flow rate
Maximum solids intake
Blender base
Motor (3000 rpm)
Maximum temperature
Connections (suction/propulsion)
Hopper capacity
Hopper valve

MB-05

20 m³/h
1300 kg/h *
ME-4105
4 kW
65°C
CLAMP
25 L
CLAMP Butterfly valve

MB-10

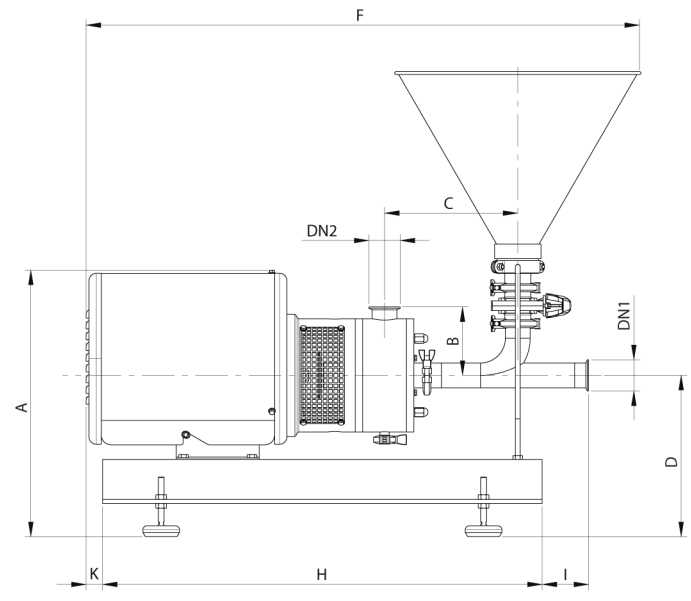
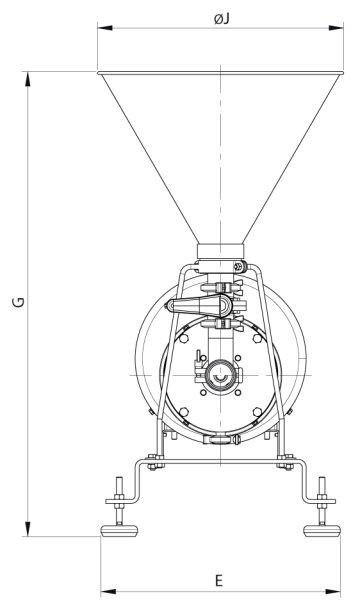
30 m³/h
2000 kg/h *
ME-4110
7.5 kW
65°C
CLAMP
48 L
CLAMP Butterfly valve

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

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

DIMENSIONS



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