

FB-100

HORIZONTAL BLENDER

USER'S MANUAL



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1. GENERAL INFORMATION

a. Description

In the blender design, it is possible to distinguish three parts or areas that define its build and operation. The top part consists of the hopper, solid-material area, and we can add powder using a butterfly valve with an adjustable handle. Optionally, the butterfly valve can be supplied with a pneumatic actuator. The middle area consists of the venturi, which is the blender's suction, and where the liquid is introduced. The mixing chamber, which is located in the bottom part, is where the liquid meets the powder and produces the mixture. FB-100 is of a compact design, with the hydraulic part joined to the motor, and clamp-type connections. The standard motor complies with IEC standards, with IP-55 protection and class F insulation. On request, the motors can be supplied with other protections. All the parts entering into contact with the product are manufactured in AISI 316L. This equipment is suitable for his use in food process.

b. Operating Principle

Horizontal blender is a compact unit, it consists of a centrifugal pump with a venturi system on the suction side and a hopper with a butterfly valve above the venturi to add solid / powder products to the pumped liquid. In this blender, the suction and venturi system are set horizontally.

The venturi system and the suction of the pump create a negative pressure at the base of the hopper. When the valve of the hopper opens, the solids are drawn from the hopper and are dissolved in the liquid when they pass through the pump casing.

To achieve the best possible dissolution, 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. In some cases, it can be used in-line depending on the solid product to add and the required level of dissolution.

c. Application

The horizontal blender is used to dissolve solid/powder products into a liquid, recirculated in a tank. The blender is limited to the suction of small amount of solids as it has no table for bags and the hopper is smaller than that of the table blender.

2. MAINTENANCE

a. GENERAL MAINTENANCE

Like any other machine, this blender requires maintenance. The instructions contained in this manual cover the identification and replacement of spare parts. The instructions have been prepared for maintenance personnel and for those responsible for the supply of spare parts.



Maintenance work can only be carried out by qualified personnel that are trained and equipped with the necessary resources to carrying out this work.



ALWAYS disconnect the mixer before starting on any maintenance.

b. Maintenance

- Inspect the blender regularly.
- Do not fail to keep the mixer clean.
- Check the state of the motor.
- Check the seal.
- Check the bearing on completing every process. In the event of coming across excessive wear and tear, it must be changed.

c. Lubrication

The lubrication of the bearings of the motor will be carried out according to the manufacturer's instructions.

d. Spare Parts

To order spare parts is necessary to indicate the type and serial number included on the mixer's characteristics plate, as well as the position and description of the part as found in technical specifications..

3. Technical Specification

a. Materials

Parts in contact with the product AISI 316L
 Other metal parts AISI 304
 Gasket EPDM
 Other Optional Seal Materials Consult your supplier

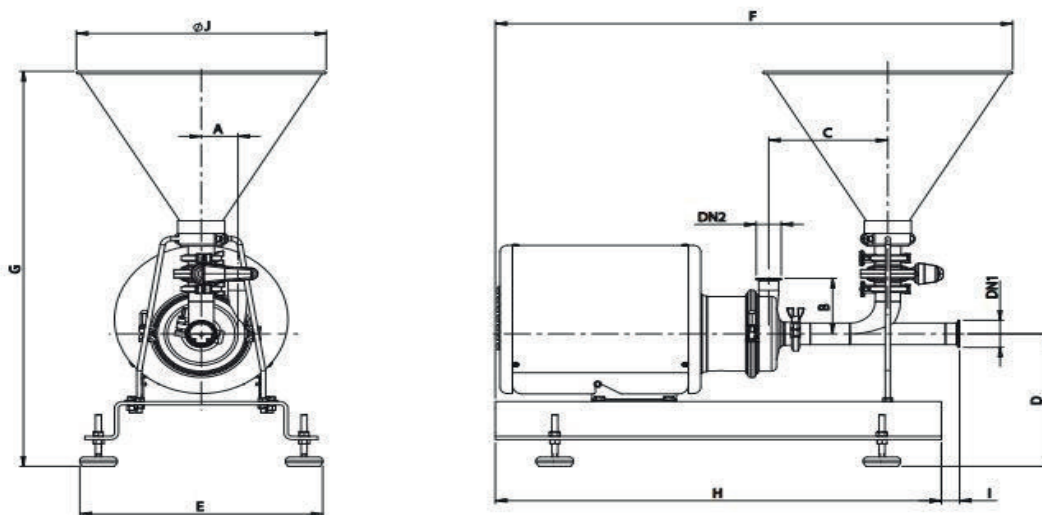
Mechanical Seal :
 Rotary Part Silicon Carbide (SiC)
 Stationary Part Silicon Carbide (SiC)
 Gasket EPDM

Surface Finish :
 Internal Bright polish $Ra \leq 0,8 \mu m$
 External Matt

b. Technical Information

Blender	FB-100-0120	FB-100-0126
Approximate Flow	20 m ³ /h	40 m ³ /h
Maximum solids capacity	1.300 kg/h	2000 kg/h
Pump	Centrifugal	Centrifugal
Motor	3 kw -3.000 rpm	5.5 kw -3.000 rpm
Hopper capacity	25 L	48 L
Hopper valve	Butterfly valve CLAMP	Butterfly valve CLAMP

c. Dimensions



TYPE	DN1	DN2	A	B	C	D	E	F	G	H	I	J
FB-100-0120	2"	1 1/2"	74	131	240	313	490	1045	933	505	37	505
FB-100-0126	2 1/2"	2"	72	145	322	325	490	1185	1060	605	40	605