

MVB/MVB-FLC



The MVB series is made up of vertical vibrators with lateral flange and shaft projecting on both sides.

The MVB-FLC series is made up of vertical vibrators with central flange and shaft projecting on both sides. These vibrators are typically used in circular screens and medium-size and large sieves, and can be supplied in 4 different versions: A, B, C, D (see page 70) according to the type of eccentric weights supplied with the vibrator and which must be mounted by the user. Size 50 is only available in B, C and D versions.

The size 50 complies with the most recent IEC and EN international standards for use in atmospheres with potentially explosive powders. In particular, the size 50 series can be used in areas 21 and 22.

Technical features

Power supply

Three-phase voltage from 220V to 690V, 50Hz or 60Hz; suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

4 poles.

Conformity with European Directives

Low Voltage 2006/95/EC,
ATEX 94/9/EC (only size 50).

Reference Regulations

EN 60034-1, IEC/EN 61241-0, IEC/EN 61241-1

Functioning

Continual service (S1) at maximum declared centrifugal force and electric power. Intermittent services are also possible depending on the type of vibrator and the operating conditions. For detailed information, contact our technical assistance office.

Centrifugal force

Range extended up to 7000 Kgf. (68.7 KN), with centrifugal force adjustable from 0 to 100%.

Mechanical protection

IP 66 according to IEC 529, EN 60529.

Protection against mechanical impacts

IK 08 according to IEC 68, EN 50102.

Insulation class

Class F (155°C), class H (180°C) on request.

Tropicalization

Standard on all vibrators with "drop by drop" trickle system.

Ambient temperature

From -20°C a +40°C. Versions for higher or lower temperatures are available on request.

Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C (DIN 44081-44082) from size 80, on request for smaller sizes. Also on request thermistors with different temperatures and anti-condensation heaters.

Fixing of the vibrator

In all positions and therefore without restriction.

Lubrication

All vibrators are lubricated in the factory and do not require further lubrication if used in normal operating conditions ("FOR LIFE" lubrication). In heavy duty operating conditions periodical re-lubrication may be applied.

Terminal box

Large fixed electrical connections. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

Electric motor

Three-phase asynchronous type. Designed for maximum starting torques and torque curves specific to requirements of vibrating machines. Insulated windings using "drop by drop" trickle system with class H resin. The rotor is die cast aluminium.

Casing

In spheroidal cast iron to have high strength and optimal elasticity.

Bearing flange

Constructed in spheroidal cast iron. The geometry of the flange transmits the load to the casing uniformly.

Bearings

Custom made with particular geometry, especially designed for Italtvibras, suitable to support both high radial and axial loads.

Motor shaft

In treated steel alloy (Isothermic hardening) resistant to stress.

Type: MVB SIZE.50, MVB-FLC SIZE.50

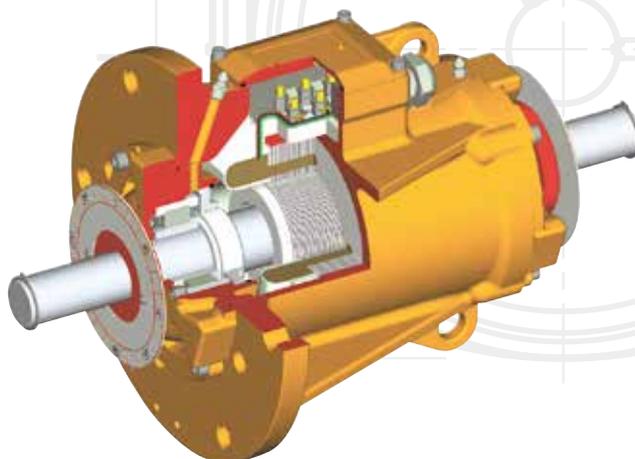
Category: II 2 D

Level of protection: tD A21 IP66

Temperature class: 150°C

EC certificate: LCIE 05 ATEX 6163 X

Zones of use: 21, 22



Eccentric weights

The weights are not provided in the delivery and must be ordered separately (ask Italtibras sales office). Lamellar for clamped centric weight have an ample possibility of adjustment: the particular adjustment system adopted allows to obtain phase shift from 0 to 180° of the group of upper weights with respect to the group of lower weights and to have ample adjustment of the centrifugal force within the same group of weights.

Weight covers

Not envisioned in the MVB and MVB-FLC series.

Painting

Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at 200°C. Tested in salt spray for 500 hours.

Stainless steel protection

On request, corrosion high grade protection (stainless steel micro suspensions in a polyurethanic paint) is available.

Certifications



Regulation CAN/CSA - C22.2 N. 100-95, file n° LR100948 Class 4211 01 – Motors and generators.



Certificate of Conformity n° IECEX CES 09.0001X following standards IEC 61241-0, IEC 61241-1.



Mechanical protection IP66 (EN 60529), protection against impacts IK 08 (EN 50102)



Comply with the applicable European Union directives



II 2 D, tD A21 IP66
IEC/EN 61241-0, IEC/EN 61241-1
Certificate n. LCIE 05 ATEX 6163X



KOSHA Korea
Certificate n° 11-AVG BO-0359
Ex td A21 IP66



Certificate GOST-R n° POCC IT.AB72. B03026, standards GOST R 51330.0-99, GOST R 51330.8-99, GOST R IEC 61241-1-1-99



Upon request available version MVB-C / MVB-C-FLC
Class I, Div. 2, Groups ABCD
Standards CAN/CSA-C22.2