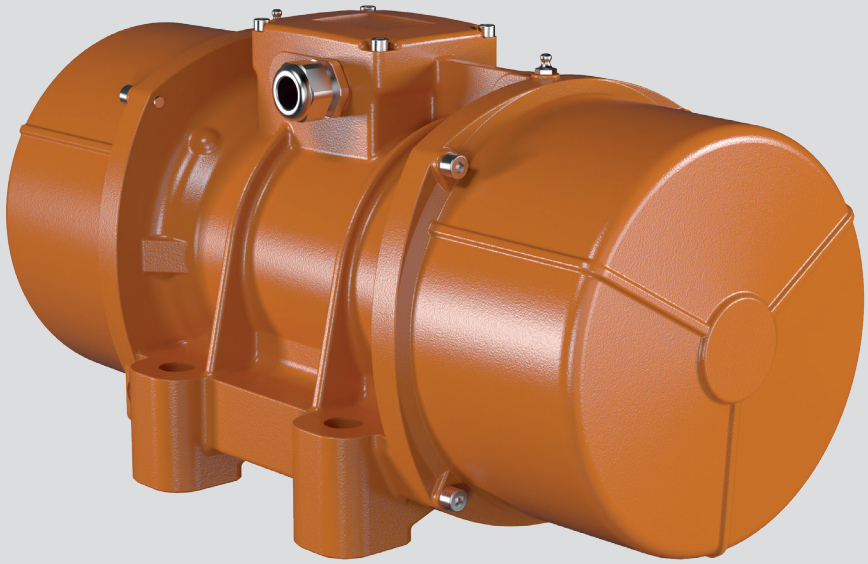
MVSI-E



Technical features

Power supply
Three-phase voltage from 220V to 690V, 50Hz or 60Hz; variable frequency (in presence of PTC thermistor) from 20Hz to the base frequency with constant torque load profile tipo PWM.

Polarity
2, 4, 6 and 8 poles.

Conformity with Standards and Regulations
ATEX Directive 2014/34/UE;
EN/IEC 60079-0, EN/IEC 60079-7,
EN/IEC 60079-31, EN/IEC 60034-1.

Controls
The components that affect protection are 100% accurately controlled and recorded.

Functioning
Continual service (S1) at maximum declared centrifugal force and electric power.

Centrifugal force
Range extended up to 11160 kgf. (109 kN), adjustable in a continuous linear mode with variation of the position of the eccentric weights.

Mechanical protection
IP 66 according to IEC/EN 60529.

Protection against mechanical impacts
IK 08 according to IEC/EN 62262.

Insulation class
Class F (155°C).

Tropicalization
Standard on all vibrators, with vacuum encapsulation up to size AF 33 and 35, with “drop by drop” trickle system for larger sizes.

Ambient temperature
From -20°C to +40°C, on request it is possible to have vibrators for max. ambient temperatures of +55°C.

Vibrator thermal protection
Standard PTC rated thermistor heat detectors 130°C from size 70, on request for smaller sizes. 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 at start-up.

Terminal box
Large terminal box to facilitate electrical connection.
Special shaped terminals allow for the power supply cable to be secured, whilst 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 vacuum encapsulating up to sizes AF33 and 35 included; using the “drop by drop” trickle system with class H resin for larger sizes.
The rotor is die cast aluminium.

Casing
In high-tensile aluminium alloy up to size 60, in spheroidal cast iron for larger sizes.

Bearing flange
Constructed in cast iron (spheroidal or grey) or in aluminium with steel bearing seat. The geometry of the flange transmits the load to the casing uniformly.

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

The MVSI-E series has been designed for use in industrial processes where explosive gas and dust particles are present. In compliance with ATEX Directive (2014/34/UE) and in compliance with IECEx Scheme.

In particular, the MVSI-E series can be used in areas 1 and 2 (gas) and in areas 21 and 22 (dusts):

Category: II2D & II2G

Level of protection:
Ex tb IIIC T...°C Db

Temperature class:

see tables

EC certificate:

LCIE 05 ATEX 6163 X

Zones of use:

21, 22

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

Eccentric weights
Allow adjustment of the centrifugal force. This adjustment is realized by a graduated scale, which expresses the centrifugal force as a percentage of the maximum centrifugal force.
A patented system, called ARS, prevents adjustment errors.

Weight covers
In aluminium alloy.

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

Other mounting bolt patterns are available. For further details please contact sales offices at Italvibras. The technical data and models listed in this catalogue are not binding. Italvibras reserves the right to modify them without prior notice.

Certifications

Compliance with the applicable European Union directives.

II2G II2D (2014/34/UE)
Ex e IIC T3/T4 Gb
Ex tb IIIC T...°C Db
EN 60079-0
EN 60079-7
EN 60079-31

Ex e IIC T3/T4 Gb
Ex tb IIIC T...°C Db
IEC 60079-0
IEC 60079-7
IEC 60079-31

Certification for Eurasian Customs Union
N° TC RU C-IT.ГБ08.B.02190

KOSHA Korea
Certificate n° 11-AVG BO-0346/7/8/9/50/51
Ex e IIT3/T4
Ex td A21 IP66