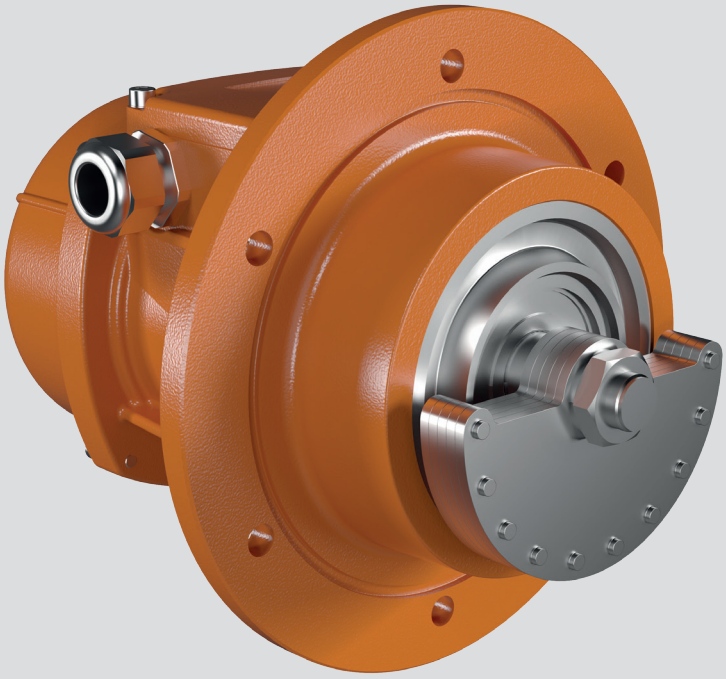
MTF-E



Technical features

Power supply
Three-phase voltage from 120V to 690V, 50Hz or 60Hz; variable frequency (in presence of PTC thermistor) from 20Hz to the base frequency with constant torque load profile type PWM.

Polarity
2 and 4 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 2615 kgf. (25.7 kN), with centrifugal force adjustable fby varying weights position.

Mechanical protection
IP 66 according to IEC/EN 60529; mechanical protection is ensured in the mounting phase of the vibrator onto the vibrating machine, by introducing the special seal into the seat on the coupling flange.

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 30, 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
On demand with PTC rated thermistor heat detectors 130°C. 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 at start-up.

Electrical connection box
The size guarantees passage of tools used for fixing the vibrator to the vibrating machine.

The electrical connection must be carried out using the relative connectors inserted inside the connection box and filling with insulating compound.

Electric motor
Three-phase asynchronous type. Designed for maximum starting torques and torque curves adapt for the specific requirements of vibrating machines. Insulated windings using vacuum encapsulating up to size 30; 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 50, in spheroidal cast iron for size 70.

Bearing flange
In cast iron (spheroidal or grey). The geometry of the flange transmits the load to the casing uniformly.

Bearings
The lower and upper bearings have been studied to support the relative load and therefore they have a particular geometry, especially designed and made for Italvibras.

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

The MTF-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 MTF-E series can be used in areas 1 and 2 (gas) and areas 21 and 22 (dusts) according to the layout and following features:

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

Eccentric weights
Allow greater adjustment of the centrifugal force, with phase shift of the lower weight assembly with respect to the upper group. This adjustment is eased by a graduated scale, which expresses the centrifugal force as a percentage of the maximum centrifugal force.

Weight covers
In aluminium alloy.

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

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

CE
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

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

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

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