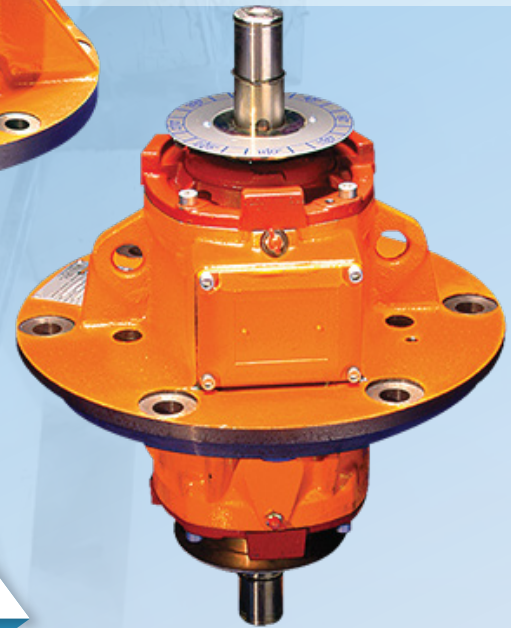
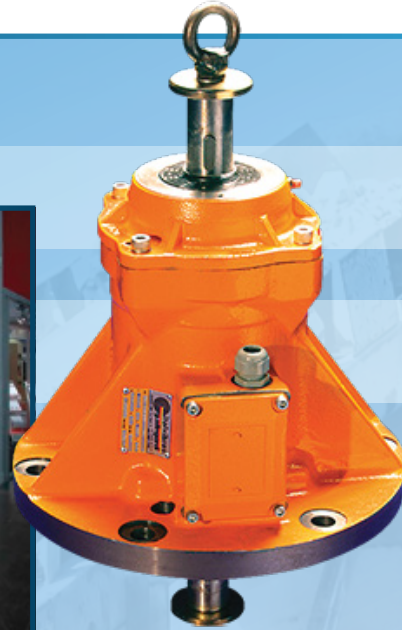


AIRMATIC®

WE'LL HANDLE IT.



VB SERIES

Flange Mounted Electric Vibrators

AIRMATIC

284 Three Tun Rd. Malvern, PA 19355

215.333.5600

infocenter@airmatic.com

airmatic.com

Foot Mounted Electric Rotary Vibrators generate vibratory force by producing waves of energy from a shaft mounted set of adjustable, unbalanced weights rotating within a cylindrical housing to provide reliable, consistent speed and force output. The heavier the weights, and the faster the weights rotate - the greater the vibratory force output. While all Electric Rotary Vibrators operate at consistently low noise levels, there are multiple models that vary in: Material of construction and electrical hazard classification; Size; Style; Lubrication needs; Speed, amplitude and centrifugal force output based on fixed or variable frequency motor controls; and Product finish. AIRMATIC's product line depth enables us to meet the varied needs of any manufacturing, processing or packaging application, any OEM industry requirement, or any industrial environment demand.



AIRMATIC founded in 1944, is a woman-owned Industrial Distributor, with installation and maintenance capabilities, offering equipment, machinery, and shop supplies to the Industrial, Construction, Utility, Government, and Commercial Markets. Our products and services are sold through three business units:

The **MATERIALS MANAGEMENT GROUP** provides products and services to industries that convey, store, transport, and process powders and bulk solids from aggregates, cement, and chemicals to foods, grains, metals, power generation, and waste water treatment applications;

The **SERVICE GROUP** provides fabrication, installation, and maintenance services to improve bulk materials handling efficiency; mechanical clean-out services for silos and hoppers to eliminate material flow problems; and shop repair/rebuilding and modifications services of products sold by the Company.

The **TOOL GROUP** provides power tools, personal protective equipment, materials-handling equipment, shop equipment and MRO supplies used for production, fabrication, assembly, metal removal, maintenance, and storage in manufacturing, construction, utility, and commercial applications.

Our Customers tell us that by choosing AIRMATIC to solve their problems, they gain increased productivity, decreased costs, and a safer, cleaner work environment.



ITALVIBRAS is an Italian company with more than 50 years of experience in electric vibrators. Designing and manufacturing its full range of products internally, and focusing relentlessly on quality, Italvibras has come to be recognized as a world leader in the industry. The company maintains facilities in France, Germany, Spain, and the United States. Its U.S. headquarters are in Princeton, Illinois.

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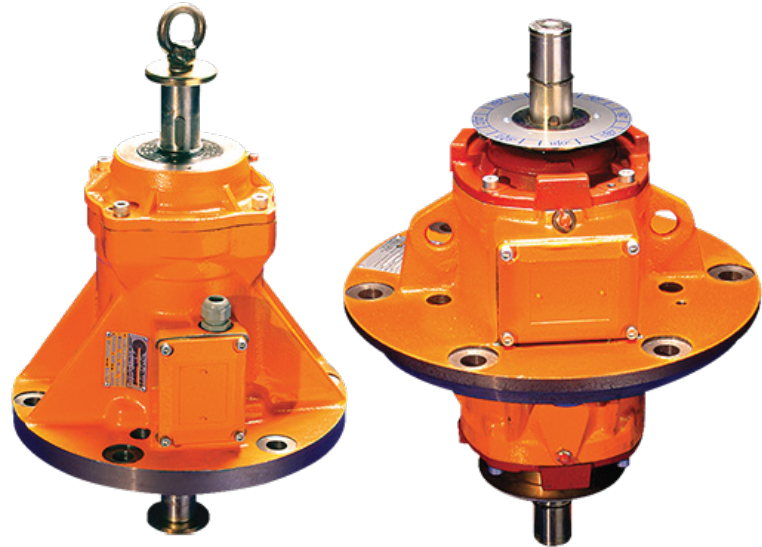
MVB / MVB-FLC

The MVB series is made up of vertical vibrators, featuring a lateral flange and the shaft projecting from both sides.

The MVB-FLC series is made up of vertical vibrators, featuring a central flange and the shaft projecting from 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 according to the type of eccentric weights supplied with the vibrator and which must be mounted by the user.

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



MVB / MVB-FLC 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.

Standards and Regulations

Low Voltage Directive 2006/95/EC; ATEX Directive 2014/34/UE; EN/IEC 60034-1, EN/IEC 60079-0, EN/IEC 60079-31, UL 1004-1, CSA C22.2 No.100, NEMA MG-1.

Functioning

Continuous 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 15400 lbs (68.7 kN), with centrifugal force adjustable from by varying weights position.

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), class H (180°C) on request.

Tropicalization

Standard on all vibrators with “drop by drop” trickle system.

Ambient temperature

From -4°F to +104°F (-20°C a +40°C). Versions for higher or lower temperatures are available on request.

Vibrator thermal protection

Standard PTC rated thermistor heat detectors 266°F (130°C) from size 80, on request for smaller sizes. Also on request thermistors with different temperatures and anti-condensation heaters.

Fixing of the vibrator

Typically for vertical mounting, anyway possible to install 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 “drop by drop” trickle system with class H resin. The rotor is die cast aluminum.

Casing

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

Bearing flange

In spheroidal or grey cast iron. 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.

Motor shaft

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

Eccentric weights

The weights are not provided in the delivery and must be ordered separately.

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 provided in the MVB and MVB-FLC series.

Painting

Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at 392°F (200°C). Tested in salt spray for 500 hours.

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

Category: II 2 D

Level of protection:

Ex tD A21 T...°C IP66 (Ex tb IIIC T...°C Db)

Temperature class:

T150°C

Zones of use:

21, 22

Certifications



Compliance with the applicable European Union directives.



Standard CAN/CSA – C22.2, N°.100-95, Certificate n° LR 100948
Class 4211 01 - Motors and generators
UL 1004-1 – Rotating Electrical Machines – General Requirements



II2D (2014/34/UE)
Ex tD A21 T...°C IP66 (Ex tb IIIC T...°C Db)
EN 60079-0
EN 60079-31



Ex tD A21 T...°C IP66 (Ex tb IIIC T...°C Db)
IEC 60079-0
IEC 60079-31



Version MVB-C and MVB-C-FLC available on request
Class I Div.2, Groups ABCD
Standard CAN/CSA – C22.2



Certification for Eurasian Customs Union
N° TC N RU Д-IT.А133.В.02527
N° TC RU C-IT.ГБ08.В.02190



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

MVB / MVB-FLC



MVB 4 poles - 1,500/1,800 rpm

Three-phase

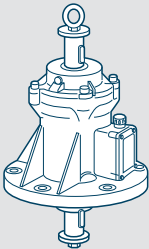
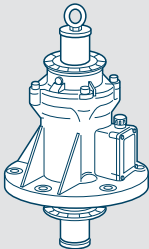
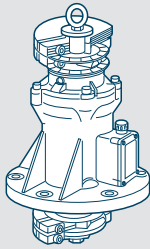
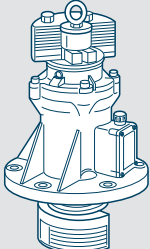
DESCRIPTION							MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS				
Code	Type	Type (UE)	SIZE	I12D Ex Classe temp.	Available versions	Centrifugal force		Weight	Power Output		Max current		Ia/In	
						lbs	lbs		HP	A	50Hz	60Hz	50Hz	60Hz
601226	MVB 18-1510*	MVB 1510/15*	50	• 150°C	B, C, D	3300	3300	91,3	1.1	1.2	2.10	2.00	3.76	4.50
601628	MVB 18-2510*	MVB 2510/15*	60	• /	B, C, D	5940	5940	139	2.3	2.9	3.90	4.10	5.60	5.81
601130	MVB 18-4500	MVB 4500/15	80	• /	A, B, C, D	9900	9900	233	4.4	4.6	6.70	5.80	4.48	4.18
601131	MVB 18-7000	MVB 7000/15	90	• /	A, B, C, D	15400	15400	352	7.4	7.5	11.8	10.2	6.19	6.73

MVB-FLC 4 poles - 1,500/1,800 rpm

Code	Type	Type (UE)	SIZE	I12D Ex Classe temp.	Available versions	Centrifugal force		Weight	Power Output		Max current		Ia/In	
						lbs	lbs		HP	A	50Hz	60Hz	50Hz	60Hz
601225	MVB 18-1510*-FLC	MVB 1510/15-FLC*	50	• 150°C	B, C, D	3300	3300	120	1.1	1.2	2.10	2.00	3.76	4.50
601629	MVB 18-2510*-FLC	MVB 2510/15-FLC*	60	• /	B, C, D	5940	5940	139	2.3	2.9	3.90	4.10	5.60	5.81
601135	MVB 18-4500-FLC	MVB 4500/15-FLC	80	• /	A, B, C, D	9900	9900	233	4.4	4.6	6.70	5.80	4.48	4.18
601136	MVB 18-7000-FLC	MVB 7000/15-FLC	90	• /	A, B, C, D	15400	15400	352	7.4	7.5	11.8	10.2	6.19	6.73

* The lifting rings are obtained in the casing, there are no eyebolts on the shaft.

Versions

<p>Version A</p>  <p>Basic model.</p>	<p>Version B</p>  <p>Basic model with angle disc.</p>	<p>Version C</p>  <p>Basic model with angle disc and weights type C (clamped).</p>	<p>Version D</p>  <p>Basic model with angle disc and weights type D (lamellar).</p>
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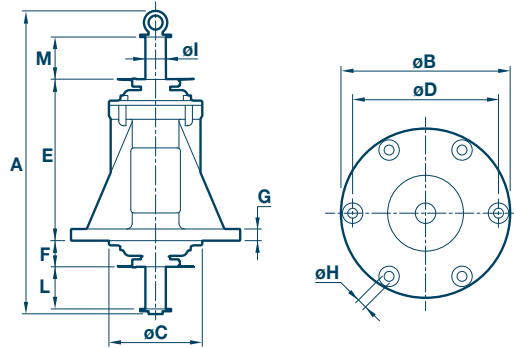


Fig. I

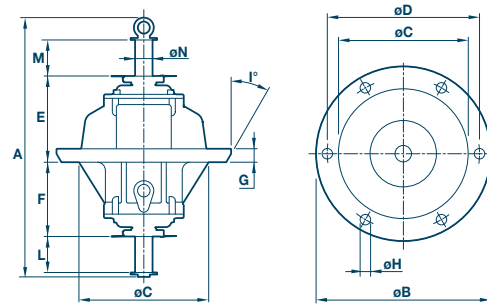


Fig. L

DIMENSIONAL FEATURES (inches)

Holes

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	ØI	L	M	Cable entry
MVB 18-1510*	I	18.74	11.42	6.73	9.84	0.67	6	10.94	1.81	0.79	1.38	2.80	2.80	M25x1.5
MVB 18-2510*	I	23.11	13.78	7.80	12.01	0.83	6	12.36	2.01	0.98	1.57	4.17	4.17	M25x1.5
MVB 18-4500	I	26.14	15.75	9.45	13.98	0.93	6	13.39	2.76	1.18	2.05	2.95	2.95	M25x1.5
MVB 18-7000	I	29.02	20.00	12.36	17.24	0.98	8	15.24	3.43	1.34	2.05	3.11	3.11	M25x1.5

Holes

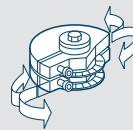
Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	ØI	L	M	ØN	Cable entry
MVB 18-1510*-FLC	L	18.74	13.78	10.24	12.01	0.83	6	6.85	5.91	1.06	1.18	2.80	2.80	1.38	M25x1.5
MVB 18-2510*-FLC	L	23.11	13.78	10.24	12.01	0.83	6	7.80	6.61	0.87	1.18	4.17	4.17	1.57	M25x1.5
MVB 18-4500-FLC	L	26.14	15.75	12.20	13.98	0.93	6	8.66	7.48	1.18	0.59	2.95	2.95	2.05	M25x1.5
MVB 18-7000-FLC	L	29.02	20.00	13.70	17.24	0.98	8	9.96	8.74	1.28	1.18	3.11	3.11	2.05	M25x1.5

Ia/I_n = ratio between start-up current and maximum current.

Each C type weight group (in twos) is adjustable by phase shifting one in respect to the other. Each D type weight group (lamellars) is adjustable by removing one or more lamellar elements.

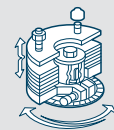
Weight adjustment: the weights at the two ends of the shaft can be staggered as required, with reference to the graduated discs on the shaft itself.

Type "C"



Infinitely adjustable centrifugal force

Type "D"



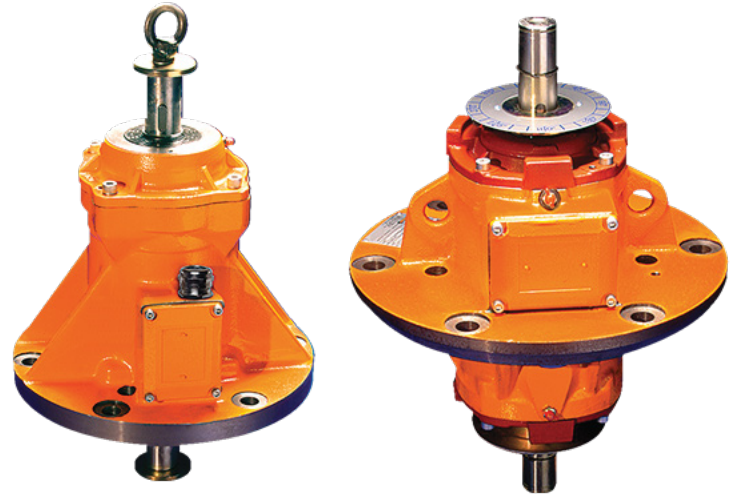
Centrifugal force adjustable from max. to min. by removing the lamellar weights.

MVB-E / MVB-E-FLC

The MVB-E and MVB-E-FLC flanged vibrator series have been designed for use in industrial processes where explosive gas and dust particles are present, in compliance with ATEX Directive (2014/34/UE) and with IECEx Scheme.

These vibrators can be supplied in B, C, D versions (see page 70) according to the eccentric weights supplied with the vibrator and to be mounted by the user.

These vibrators can be used in areas 1 and 2



MVB-E / MVB-E-FLC 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 type PWM.

Polarity

4 poles.

Standards and Regulations

ATEX Directive 2014/34/UE;
EN/IEC 60079-0, EN/IEC 60079-7,
EN/IEC 60079-31, EN/IEC 60034-1.

Quality Controls

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

Functioning

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

Centrifugal force

3300 lbs (14.7 kN), adjustable with variation 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 with “drop by drop” trickle system.

Ambient temperature

From -4°F to +104°F (-20°C to +40°C), on re-quest it is possible to have vibrators for max. ambient temperature of 131°F (+55°C).

Vibrator thermal protection

On demand with PTC rated thermistor heat detectors 266°F (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.

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 “drop by drop” trickle system with class H resin. The rotor is die cast aluminum.

Casing

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

Bearing flange

In spheroidal or grey cast iron.
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.

Motor shaft

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

Eccentric weights

The weights are not provided in the delivery and must be ordered separately (ask Italvibras sales office). Lamellar for clamped eccentric 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. (gas) and in areas 21 and 22 (dusts) according to the layout and the following features:

Weight covers

Not provided in the MVB-E and MVB-E-FLC series.

Painting

Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at 392°F (200°C). Tested in salt spray for 500 hours.

Tipo: MVB-E gr.50, MVB-E-FLC gr.50

Category II 2D & II 2G

Level of protection:
Ex tb IIIC T150°C Db
Ex e IIC T3/T4 Gb

Temperature class:
Gas: T3 (200°C or T4 (135°C)
Dust: 150°C

Zones of use:
1, 2, 21, 22

Certifications



Compliance with the applicable European Union directives.



II2G II2D (2014/34/UE)
Ex e IIC T3/T4 Gb
Ex tb IIIC T150°C Db
EN 60079-0
EN 60079-7
EN 60079-31



Ex e IIC T3/T4 Gb
Ex tb IIIC T150°C Db
EN 60079-0
EN 60079-7
EN 60079-31



Certification for Eurasian Customs Union
N° TC RU C-IT.Г508.B.02190



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

MVB-E / MVB-E-FLC



MVB-E 4 poles - 1,500/1,800 rpm

Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS								
Code	Type	Type (UE)	SIZE	Available versions	Centrifugal force		Weight	Temp. class (G)	Temp. class (D)	Power Input		Power Output		Max current		t ^E (s)	Ia/In
					50Hz	60Hz				W	HP	A	Ia/In				
6E1226	MVB 18-1510E*	MVB 1510/15-E*	50	B, C, D	3300	3300	91.3	T3	150°C	1100	1150	0.98	1.07	1.90	1.82	9	4.95
										630	700	0.64	0.71	1.33	1.27	5.5	7.00

MVB-E-FLC 4 poles - 1,500/1,800 rpm

DESCRIPTION					MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS								
Code	Type	Type (EU)	SIZE	Available versions	Centrifugal force		Weight	Classe temp. (G)	Classe temp. (D)	Power Input		Power Output		Max current		t ^E (s)	Ia/In
					50Hz	60Hz				W	HP	A	Ia/In				
6E1225	MVB 18-1510E-FLC*	MVB 1510/15-E-FLC*	50	B, C, D	3300	3300	91.3	T3	150°C	1100	1150	0.98	1.07	1.90	1.82	9	4.95
										630	700	0.64	0.71	1.33	1.27	5.5	7.00

* The lifting rings are obtained in the casing, there are no eyebolts on the shaft.

Versions

Version A
Basic model.

Version B
Basic model with angle disc.

Version C
Basic model with angle disc and weights type C (clamped).

Version D
Basic model with angle disc and weights type D (lamellar).

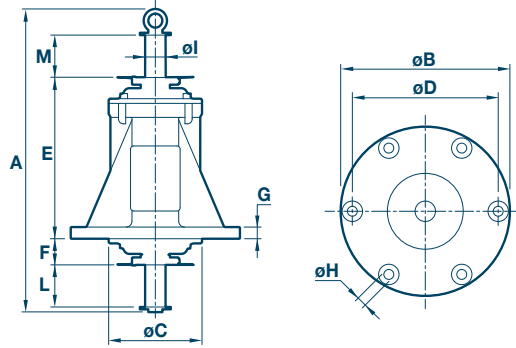


Fig. I

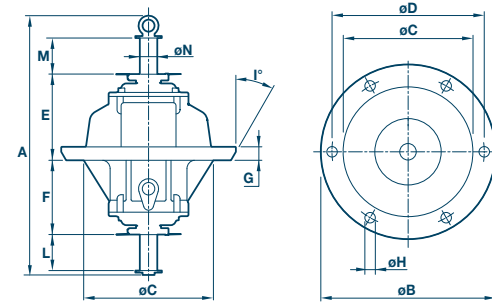


Fig. L

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	øB	øC	øD	øH	N°	E	F	G	øI	L	M	Cable entry
MVB 18-1510E*	I	18.74	11.42	6.73	9.84	0.67	6	10.94	1.81	0.79	1.38	2.80	2.80	M25x1.5

Holes

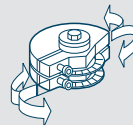
Type	Fig.	A	øB	øC	øD	øH	N°	E	F	G	øI	L	M	øN	Cable entry
MVB 18-1510E-FLC*	L	18.74	13.78	10.24	12.01	0.83	6	6.85	5.91	1.06	1.18	2.80	2.80	1.38	M25x1.5

tE (s) = set time tE from IEC/EN 60079-7. Ia/In = ratio between start-up current and maximum current.

Each C type weight group (in twos) is adjustable by phase shifting one in respect to the other. Each D type weight group (lamellars) is adjustable by removing one or more lamellar elements.

Weight adjustment: the weights at the two ends of the shaft can be staggered as required, with reference to the graduated discs on the shaft itself.

Type "C"



Infinitely adjustable centrifugal force

Type "D"



Centrifugal force adjustable from max. to min. by removing the lamellar weights.

VB

The VB series is made up of vertical vibrators which feature a double conical flange. These vibrators are typically used in circular screens and in medium-size and large sieves.

They are supplied without eccentric weights, which must be realised and mounted by the manufacturer of the vibrating machine.

The VB series complies with the most recent IEC and EN international standards for use in atmospheres with potentially explosive dust particles. In particular, the VB 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 and 6 poles.

Standards and Regulations

Low Voltage Directive 2006/95/EC; ATEX Directive 2014/34/UE; EN/IEC 60034-1, EN/IEC 60079-0, EN/IEC 60079-31, UL 1004-1, CSA C22.2 No.100, NEMA MG-1.

Functioning

Continuous 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

Proportioned for a centrifugal force equal to 11000 lbs (49 kN), with eccentric weights not included, to be made by the user.

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), class H (180°C) on request.

Tropicalization

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

Ambient temperature

From -4°F to +104°F (-20°C to +40°C). Versions for higher or lower temperatures available on request.

4 poles - 1,500/1,800 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	Ex II2D Temp. class	rpm		Centrifugal force lbs		Weight lbs	Power Output HP		Max current A		Ia/In		
				50Hz	60Hz	50Hz	60Hz		50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz	
601650	VB 18-2200	VB 15/2200-D	-	-	1500	1800	4850	4850	146	1.5	1.8	2.60	3.00	3.84	4.00
601223	VB 18-2510	VB 15/2510-D	•	150°C	1500	1800	5512	5512	150	2.0	2.5	3.60	4.10	3.50	3.58
601651	VB 18-3000	VB 15/3000-D	-	-	1500	1800	6614	6614	172	3.0	3.2	5.90	6.00	6.78	7.00
601378	VB 18-5000-LM	VB 15/5000-LM	-	135°C	1500	1800	11023	11023	223	4.0	3.7	6.00	5.00	7.02	8.00

6 poles - 1,000/1,200 rpm

Three-phase

602171	VB 12-2510	VB 10/2510-D	•	150°C	-	1200	-	5512	150	-	1.9	-	3.22	-	3.27
602056	VB 12-5500	VB 10/5500-D	-	-	-	1200	-	12125	243	-	5.0	-	7.70	-	5.00

Vibrator thermal protection

Standard PTC rated thermistor heat detectors 266°F (130°C) for VB 18/5000-LM, on request for smaller sizes. Also on request thermistors with different temperatures, bimetallic thermal protections, and anti-condensation heaters.

Fixing of the vibrator

Typical vertical assembly with double tape-red flange.

Lubrication

All vibrators are lubricated in the factory and do not require further lubrication at start-up.

Terminal 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. Special shaped terminals allow to fix the power supply cable, protecting it from loosening. Category: II 2 D

Level of protection:

Ex tD A21 T...°C IP66 (Ex tb IIIC T...°C Db)

Temperature class: see tables
Zones of use: 21, 22

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 aluminum.

Casing

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

Bearing flange

The two flanges, made in spheroidal cast iron, are characterized by external tapered diameter for fixing in the vibrating machine.

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. On request both shaft ends may be modified to be adapted to the user weights.

Eccentric weights

Not provided, to be made and mounted by the user.

Weight covers

Not provided.

Painting

Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at 392°F (200°C). Tested in salt spray for 500 hours.

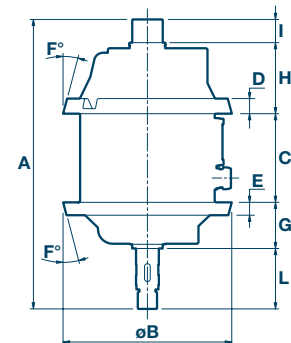


Fig. H

DIMENSIONAL FEATURES (inches)

Type	Fig.	A	ØB	C	D	E	F°	G	H	I	L	Cable entry
VB 18-2200	H	20.37	11.06	6.24	1.06	0.91	14	3.25	5.00	1.63	4.25	M32x1.5
VB 18-2510	H	20.37	11.06	6.24	1.06	0.91	14	3.25	5.00	1.63	4.25	M32x1.5
VB 18-3000	H	20.59	11.12	5.98	0.98	0.98	14	4.45	5.10	1.50	3.56	M25x1.5
VB 18-5000-LM	H	21.85	13.46	8.19	1.89	1.89	25	4.33	4.69	1.89	2.76	M25x1.5
VB 12-2510	H	20.37	11.06	6.24	1.06	0.91	14	3.25	5.00	1.63	4.25	M32x1.5
VB 12-5500	H	23.90	11.12	8.50	0.98	0.98	14	4.69	5.65	1.50	3.56	M32x1.5

Ia/In = ratio between start-up current and maximum current.

VB-E

The double-conical flange VB-E vibrators have 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.

They are supplied without eccentric weights, which must be realised and mounted by the manufacturer of the vibrating machine. These vibrators can be used in areas 1 and 2 (gas) and in areas 21 and 22 (dusts) according to the layout and following features:

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 type PWM.

Polarity

4 poles.

Standards and Regulations

ATEX Directive 2014/34/UE;
EN/IEC 60079-0, EN/IEC 60079-7,
EN/IEC 60079-31, EN/IEC 60034-1.

Quality Controls

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

Functioning

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

4 poles - 1,500/1,800 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS					ELECTRICAL SPECIFICATIONS							
Code	Type	Type (EU)	Poles	rpm		Centrifugal force		Weight	Temp. class (G)	Temp. class (D)	Power Output		Max current		tE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz				50Hz	60Hz	HP	A		
6E1223	VB 18-2510E	VB 15/2510-D-E	4	1500	1800	5512	5512	150	T3	150°C	1.9	2.0	2.85	2.80	7	6.70
									T4		1.4	1.5	2.38	2.30	6	7.76
6E1378	VB 18-5000E-LM	VB 15/5000E-LM	4	1500	1800	11023	11023	223	T3	135°C	3.4	3.8	5.70	5.45	6	7.00



Vibrator thermal protection

Standard PTC rated thermistor heat detectors 266°F (130°C) for VB 18/5000E-LM, on request for smaller sizes.

Also on request thermistors with different temperatures, bimetallic thermal protections and anti-condensation heaters.

Fixing of the vibrator

Typical vertical assembly with double tape-red flange.

Lubrication

All vibrators are lubricated in the factory and do not require further lubrication at start-up.

Terminal 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.

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” system with class H resin. The rotor is die cast aluminum.

Category: II 2D & II 2G

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

Ex e IIC T3/T4 Gb

Temperature class: See Table

Zones of use: 1, 2, 21, 22

Casing

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

Bearing flange

The two flanges, made in spheroidal cast iron, are characterized by external tapered diameter for fixing in the vibrating machine.

Bearings

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

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.Г508.B.02190



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

Category: II 2D & II 2G

Level of protection:

Ex tb IIIC T...°C Db

Ex e IIC T3/T4 Gb

Temperature class:

See Table

Zones of use:

1, 2, 21, 22

Motor shaft

In treated steel alloy (Isothermic hardening) resistant to stress. On request both shaft ends may be modified to be adapted to the user weights.

Eccentric weights

Not provided, to be made and mounted by the user.

Weight covers

Not provided.

Painting

Electrostatic surface treatment based on polymerized epoxy polyester powder in oven at 392°F (200°C). Tested in salt spray for 500 hours.

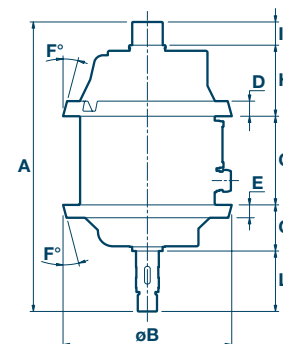


Fig. H

DIMENSIONAL FEATURES (inches)

Type	Fig.	A	ØB	C	D	E	F°	G	H	I	L	Cable entry
VB 18-2510E	H	20.37	11.06	6.00	1.06	0.91	14	3.25	5.00	1.63	4.25	M32x1.5
VB 18-5000E-LM	H	21.85	13.46	8.19	1.89	1.89	25	4.19	4.33	2.38	2.76	M25x1.5

tE (s) = set time tE from IEC/EN 60079-7. Ia/In = ratio between start-up current and maximum current.

AIRMATIC®

WE'LL HANDLE IT.

AIRMATIC founded in 1944, is a woman-owned Industrial Distributor, with installation and maintenance capabilities, offering equipment, machinery, and shop supplies to the Industrial, Construction, Utility, Government, and Commercial Markets. Our products and services are sold through three business units:

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The **SERVICE GROUP** provides fabrication, installation, and maintenance services to improve bulk materials handling efficiency; mechanical clean-out services for silos and hoppers to eliminate material flow problems; and shop repair/rebuilding and modifications services of products sold by the Company.

The **TOOL GROUP** provides power tools, personal protective equipment, materials-handling equipment, shop equipment and MRO supplies used for production, fabrication, assembly, metal removal, maintenance, and storage in manufacturing, construction, utility, and commercial applications.

Our Customers tell us that by choosing AIRMATIC to solve their problems, they gain increased productivity, decreased costs, and a safer, cleaner work environment.



ITALVIBRAS is an Italian company with more than 50 years of experience in electric vibrators. Designing and manufacturing its full range of products internally, and focusing relentlessly on quality, Italvibras has come to be recognized as a world leader in the industry. The company maintains facilities in France, Germany, Spain, and the United States. Its U.S. headquarters are in Princeton, Illinois.

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