

A technical drawing of a fan with a central motor and three blades. The drawing includes several dimension lines with arrows and labels: 'N' for the total width, 'E' for the motor height, 'C' for the base width, 'F' for the base depth, and 'H' for the fan height. The drawing is rendered in a light gray color.

■ **General Catalogue US019**

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■ Mechanical vibrators

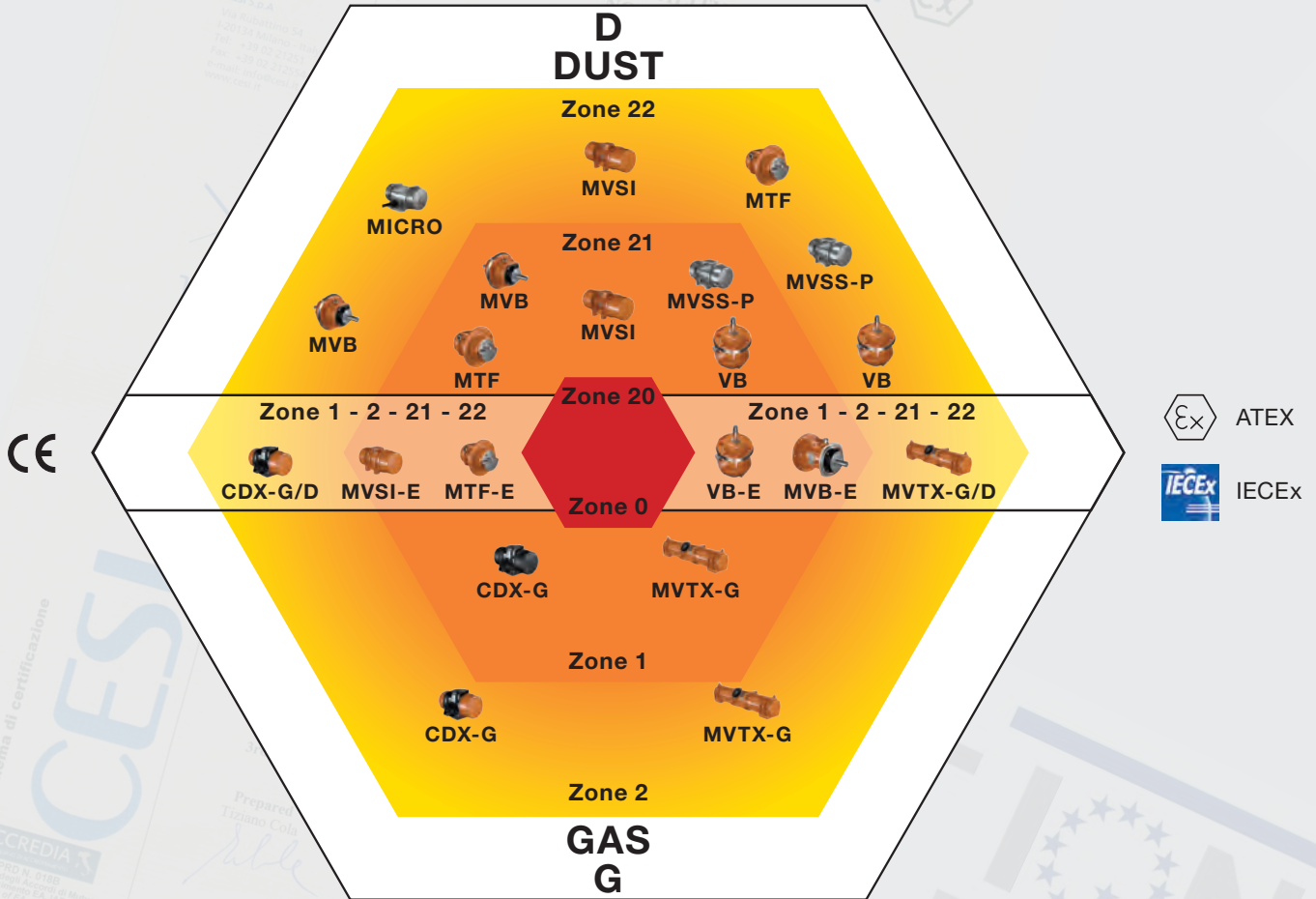
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Italvibras Guide to explosive atmospheres

Zone System



	CERTIFICATE FEATURES	PRODUCTS
	ATEX II2D – Ex tD A21 IP66 (Ex tb IIIC T.... °C Db)	MVSI, MTF, MVB, MVB-FLC, VB, MVSS-P
	ATEX II2D & II2G – Ex tb IIIC T....°C Db – Ex eb IIC T3/T4 Gb	MVSI-E, M3-E, MTF-E, MVB-E, MVB-E-FLC, VB-E
	ATEX II3D – Ex tc IIIC T100°C Dc	MICRO
	ATEX II2D & II2G – Ex tb IIIC T105°C Db – Ex db IIB 105°C Gb	MVTX-G/D
	ATEX II2G – Ex db IIB°C Gb	MVTX-G
	Ex tb IIIC T.... °C Db	MVSI, MTF, MVB, MVB-FLC, VB, MVSS-P
	Ex tb IIIC T....°C Db – Ex eb IIC T3/T4 Gb	MVSI-E, M3-E, MTF-E, MVB-E, MVB-E-FLC, VB-E
	Ex tb IIIC T120°C Db – Ex db IIB 120°C Gb	CDX-G/D (FS 35-40-50-60-70-80)
	Ex db IIB 160°C Gb	CDX-G (FS 35-40-50-60-70-80)
	Ex tb IIIC T105°C Db – Ex db IIB 105°C Gb	MVTX-G/D
	Ex db IIB°C Gb	MVTX-G

ATEX CESI

Production Quality Assurance Notification
Directive 2014/34/UE
CESI 00 ATEX 061 Q

CESI

IECEx Quality Assessment Report n. IT/CES/QAR08.0003

Others certifications:

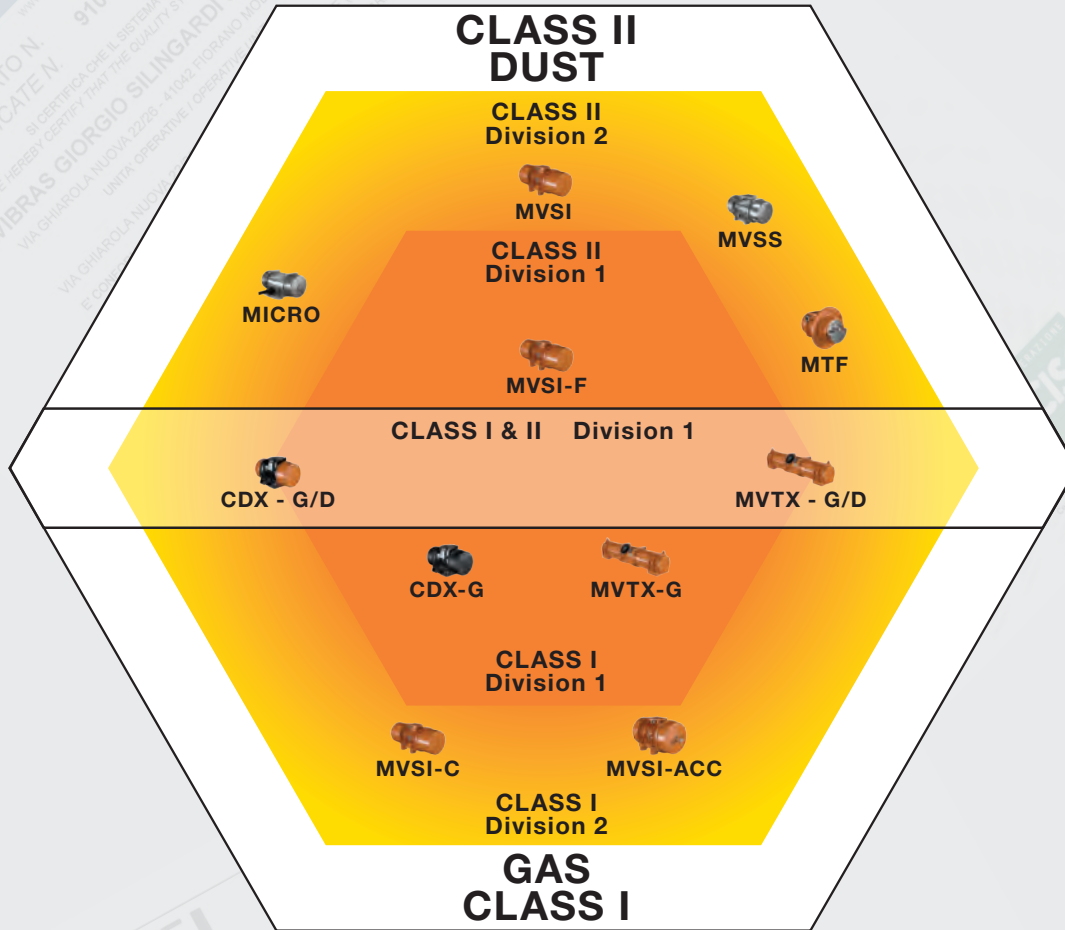




Compliance with regulations TR CU 012/2011 (explosive atmospheres for Eurasian Customs Union)

Compliance with Korean Certification requirements for explosive atmospheres

/ hazardous locations

Class / Division System



	CERTIFICATE FEATURES	PRODUCTS
	Class I, Div.1, Groups CD. Class II, Div.1, Groups EFG. T4 / T3C	CDX-G/D (FS 35-40-50-60-70-80), MVTX-G/D
	Class I, Div.1, Groups CD. T2C	CDX-G (FS 35-40-50-60-70-80)
	Class I, Div.1, Groups CD. T3 / T3C	MVTX-G
	Class I, Div.1, Groups CD. Class II, Div.1, Groups EFG. T4	CDX-G/D (FS 10-20-30)
	Class I, Div.2, Groups ABCD. T3C / T3A / T3	MVSI-C, MVSI-TS, MVSI-ACC, MTF-C, MVB-C, VB-C
	Class II, Div.1, Groups EF(T3) & G (T3B).	MVSI-F
	Class II, Div.2, Groups FG (T3B).	MVSI, MTF, MVSS



File Number: E129825



Legacy Number: 100948
Master Contract: 161432





Technical features

Power supply

Three-phase voltage from 24V to 690V, 50Hz or 60Hz or single-phase 100-130V, 60Hz and 200-240V, 50Hz (single-phase types are supplied without capacitor); suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

2, 4, 6 and 8 standard poles, 10 and 12 poles on request.

Conformity with 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

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 67200 lbs (300 kN), with centrifugal force adjustable by varying eccentric 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 vacuum encapsulation up to gr. AF 33 and 35, with "drop by drop" trickle system for larger sizes.

Ambient temperature

From -4°F to +104°F (-20°C to +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 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

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

Bearings

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

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.

The MVSI series represents the line of reference products for manufacturers of vibrating machines and plants operating in many industrial sectors and is made up of the largest range on the market, with centrifugal force values up to 67200 Kg (300kN).

It is characterized by the continuous technological evolution in view of a continuous improvement in performance.

The MVSI series is designed to guarantee high performance in all conditions of use and environment, on page 14 the various surface treatments available are described.

Category: II2D

Level of protection:

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

Temperature class:

see tables

UE certificate:

LCIE 05 ATEX 6163 X

Zones of use:

21, 22

Weight covers

Standard in aluminium alloy, on request stainless steel weight cover in AISI 304 may be available. See also executions on page 14. Split weight cover are available for many types, see MVSI-SC series.

Painting / Surface coating

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

On request on MVSI series other surface coatings may be available, see page 14.

Available also MVSS series with external components in stainless steel AISI 304, see page 40.

Other mounting bolt patterns are available. For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

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
Class II Div.2, Groups FG (T3B)



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 MVSI-F available on request
Class II Div.1, Groups EFG
Standard CAN/CSA – C22.2, UL 1004-1



Version MVSI-C 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.АЛ33.В.02527
N° TC RU C-IT.ГБ08.В.02190



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

2 poles - 3,000/3,600 rpm

Three-phase

DESCRIPTION						MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SIZE	SP	Ex II2D Temp. class	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In	
						50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz
600311	MVSI 36-380	MVSI 3/100-S02	00	•	120°C	1.05	1.05	268	386	11.4	11.4	0.18	0.18	0.35	0.30	2.68	3.00
600312	MVSI 36-480	MVSI 3/200-S02	01	•	120°C	1.76	1.41	447	515	12.8	12.1	0.18	0.18	0.35	0.30	2.68	3.00
600313	MVSI 36-660	MVSI 3/300-S02	10	•	120°C	2.61	1.96	664	717	19.8	18.9	0.24	0.26	0.60	0.50	3.47	4.20
600314	MVSI 36-1050	MVSI 3/500-S02	20	•	120°C	5.04	3.03	1284	1109	31.5	29.3	0.44	0.53	0.80	0.75	4.21	4.80
600366	MVSI 36-1500	MVSI 3/700-S02	20	•	120°C	6.05	4.03	1540	1478	31.9	30.8	0.44	0.53	0.80	0.75	4.21	4.80
600381	MVSI 36-1680	MVSI 3/800-S02	30	•	120°C	6.48	4.86	1649	1782	43.1	41.8	0.67	0.71	1.10	1.00	3.83	6.00
600513	MVSI 36-2530	MVSI 3/1100-S02	35	•	120°C	9.56	6.35	2431	2325	52.8	50.6	1.1	1.2	1.75	1.75	3.63	4.00
600491	MVSI 36-2900	MVSI 3/1300-S08	AF33	•	-	11.1	8.0	2838	2919	59.4	56.5	1.4	1.4	2.10	1.90	3.96	4.98
600504	MVSI 36-3500	MVSI 3/1500-S08	AF33	•	-	12.7	9.6	3234	3509	55.7	52.8	1.4	1.4	2.10	1.90	3.96	4.98
600502	MVSI 36-3280	MVSI 3/1600-S02	50	•	-	13.3	8.9	3399	3263	70.4	67.1	1.5	1.9	2.30	2.00	4.95	6.12
600503	MVSI 36-4080	MVSI 3/1800-S02	50	•	-	15.6	11.1	3964	4077	72.6	69.3	2.0	2.1	3.30	2.90	4.33	5.50
600256	MVSI 36-4100	MVSI 3/2010-S90	AF50	•	135°C	17.8	11.1	4530	4077	107	102	2.2	2.2	3.50	3.00	4.62	6.00
600257	MVSI 36-4910	MVSI 3/2310-S90	AF50	•	135°C	20.0	13.3	5095	4893	109	104	2.2	2.2	3.50	3.00	4.62	6.00
600470	MVSI 36-6860	MVSI 3/3200-S02	AF70	•	-	29.9	18.7	7605	6846	207	198	4.5	4.6	6.50	5.60	4.46	5.18
600471	MVSI 36-8240	MVSI 3/4000-S02	AF70	•	-	33.6	22.4	8558	8217	211	202	4.5	4.6	6.50	5.60	4.46	5.18
600472	MVSI 36-11000	MVSI 3/5000-S02	AF70	•	-	44.8	29.9	11411	10954	240	231	5.0	5.7	7.60	6.90	5.54	7.10
600276	MVSI 36-14000	MVSI 3/6510-S02	90	•	135°C	54.8	38.5	13985	14124	405	392	6.2	6.1	9.20	8.00	6.45	7.20
600201	MVSI 36-20000	MVSI 3/9000-S90	95	-	-	77.8	53.8	19815	19734	473	462	10.9	10.1	18.0	13.0	4.39	5.23

Single-phase

Code	Type	Type (EU)	SIZE	SP	Ex II2D Temp. class	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In	
						50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600311	MVSI 36-380	MVSI 3/100-S02	00	•	120°C	1.05	1.05	268	386	11.4	11.4	0.15	0.15	0.75	1.52	1.67	2.24
600312	MVSI 36-480	MVSI 3/200-S02	01	•	120°C	1.76	1.41	447	515	12.8	12.1	0.15	0.15	0.75	1.52	1.67	2.24
600313	MVSI 36-660	MVSI 3/300-S02	10	•	120°C	2.61	1.96	664	717	19.8	18.9	0.24	0.27	1.25	2.40	2.48	3.52
600314	MVSI 36-1050	MVSI 3/500-S02	20	•	120°C	5.04	3.03	1284	1109	31.5	29.3	0.46	0.48	2.30	4.50	3.35	4.22
600366	MVSI 36-1500	MVSI 3/700-S02	20	•	120°C	6.05	4.03	1540	1478	31.9	30.8	0.46	0.48	2.30	4.50	3.35	4.22
600381	MVSI 36-1680	MVSI 3/800-S02	30	•	120°C	6.48	4.86	1649	1782	43.1	41.8	0.60	0.68	3.25	7.00	4.00	4.14

* Working moment = 2 x static moment.

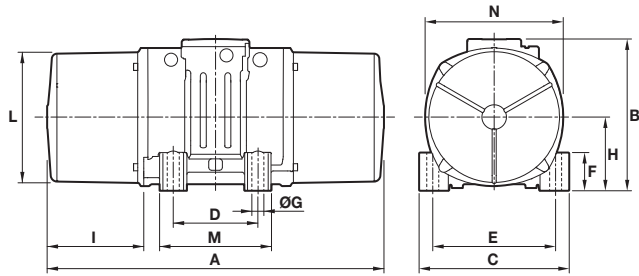


Fig. A

DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	Holes											Capacitor (µF)		Cable entry thread		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N		220V 50Hz	115V 60Hz
MVSI 36-380	A	8.31	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	1.81	4.06	3.86	4.61	-	-	M20x1.5
MVSI 36-480	A	9.25	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	2.28	4.06	3.86	4.61	-	-	M20x1.5
MVSI 36-660	A	10.04	6.73	5.98	3.54	4.92	0.51	4	1.10	2.87	2.13	5.00	5.04	5.55	-	-	M20x1.5
MVSI 36-1050	A	11.34	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	2.56	5.71	5.75	6.30	-	-	M25x1.5
MVSI 36-1500	A	11.34	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	2.56	5.71	5.75	6.30	-	-	M25x1.5
MVSI 36-1680	A	12.13	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	2.48	6.69	6.85	7.17	-	-	M25x1.5
MVSI 36-2530	A	17.13	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	4.63	7.36	6.38	7.99	-	-	M25x1.5
MVSI 36-2900	A	14.76	8.52	8.46	3.94	7.09	0.67	4	1.85	3.68	4.17	6.69	5.71	7.17	-	-	M25x1.5
MVSI 36-3500	A	14.76	8.52	8.46	3.94	7.09	0.67	4	1.85	3.68	4.17	6.69	5.71	7.17	-	-	M25x1.5
MVSI 36-3280	A	16.93	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	3.90	8.15	7.48	8.86	-	-	M25x1.5
MVSI 36-4080	A	16.93	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	3.90	8.15	7.48	8.86	-	-	M25x1.5
MVSI 36-4100	A	18.03	9.13	9.06	5.51	7.48	0.67	4	1.93	4.09	4.00	7.20	7.09	7.87	-	-	M25x1.5
MVSI 36-4910	A	18.03	9.13	9.06	5.51	7.48	0.67	4	1.93	4.09	4.00	7.20	7.09	7.87	-	-	M25x1.5
MVSI 36-6860	A	22.05	11.42	12.20	6.10	10.04	0.98	4	3.54	5.12	5.39	9.37	8.27	9.96	-	-	M25x1.5
MVSI 36-8240	A	22.05	11.42	12.20	6.10	10.04	0.98	4	3.54	5.12	5.39	9.37	8.27	9.96	-	-	M25x1.5
MVSI 36-11000	A	22.05	11.42	12.20	6.10	10.04	0.98	4	3.54	5.12	5.39	9.37	8.27	9.96	-	-	M25x1.5
MVSI 36-14000	A	26.77	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	6.30	12.99	10.63	13.78	-	-	M32x1.5
MVSI 36-20000	A	24.76	15.55	15.43	7.87	12.60	1.10	4	3.94	7.56	5.31	13.98	10.63	14.76	-	-	M32x1.5

Type	Fig.	Holes											Capacitor (µF)		Cable entry thread		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N		220V 50Hz	115V 60Hz
MVSI 36-380	A	8.31	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	1.81	4.06	3.86	4.61	10	28	M20x1.5
MVSI 36-480	A	9.25	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	2.28	4.06	3.86	4.61	10	35	M20x1.5
MVSI 36-660	A	10.04	6.73	5.98	3.54	4.92	0.51	4	1.10	2.87	2.13	5.00	5.04	5.55	16	25	M20x1.5
MVSI 36-1050	A	11.34	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	2.56	5.71	5.75	6.30	12.5	50	M25x1.5
MVSI 36-1500	A	11.34	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	2.56	5.71	5.75	6.30	12.5	-	M25x1.5
MVSI 36-1680	A	12.13	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	2.48	6.69	6.85	7.17	25	90	M25x1.5

la/In = ratio between start-up current and maximum current. ** Slot.
 Several sizes are available with different mounting bolt patterns. Please contact sales office at Italtibras.



4 poles - 1,500/1,800 rpm

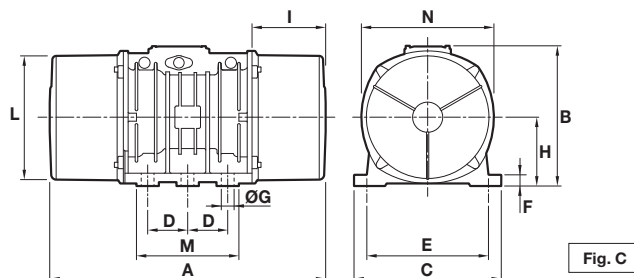
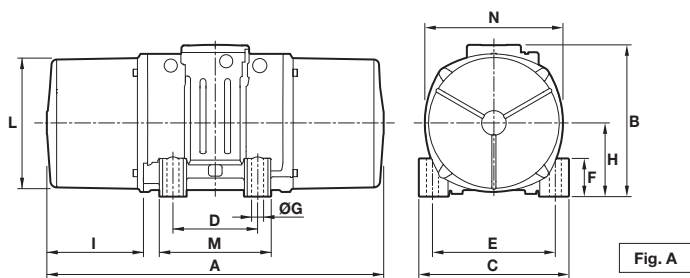
Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE	cSP	Ex II2D Temp. class	Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
						in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	HP	A	50Hz	60Hz
601340	MVSI 18-100	MVSI 15/35-S02	00	•	120°C	1.05	1.05	67.1	96.6	11.4	11.4	0.05	0.06	0.21	0.20	1.78	1.95
601341	MVSI 18-180	MVSI 15/80-S02	01	•	120°C	2.81	1.76	179	161	13.6	12.8	0.05	0.06	0.21	0.20	1.78	1.95
601366	MVSI 18-250	MVSI 15/100-S02	01	•	120°C	3.30	2.81	210	257	14.5	13.6	0.05	0.06	0.21	0.20	1.78	1.95
601367	MVSI 18-480	MVSI 15/200-S02	10	•	120°C	7.32	5.11	469	471	25.7	23.5	0.13	0.13	0.41	0.40	2.34	2.75
601372	MVSI 18-920	MVSI 15/400-S02	20	•	120°C	14.2	9.83	906	904	40.7	36.3	0.29	0.37	0.60	0.60	3.33	3.50
601373	MVSI 18-1310	MVSI 15/550-S02	20	•	120°C	19.0	14.2	1214	1302	45.5	40.7	0.29	0.37	0.60	0.60	3.33	3.50
601408	MVSI 18-1690	MVSI 15/700-S02	30	•	120°C	24.9	18.2	1584	1672	57.6	53.9	0.51	0.66	0.92	0.98	3.48	4.43
601513	MVSI 18-2280	MVSI 15/900-S02	30	•	120°C	31.0	24.9	1980	2281	63.8	57.6	0.51	0.66	0.92	0.98	3.48	3.43
601524	MVSI 18-2150	MVSI 15/1100-S02	35	•	120°C	36.1	23.6	2299	2160	71.5	67.1	0.54	0.67	0.95	0.95	4.45	4.89
601217	MVSI 18-3190	MVSI 15/1410-S02	40	•	120°C	48.8	34.8	3109	3188	90.6	82.5	1.0	1.2	1.45	1.50	4.10	4.20
601219	MVSI 18-3870	MVSI 15/1710-S02	50	•	135°C	62.2	42.2	3956	3865	105	93.5	1.1	1.2	2.00	1.90	4.29	4.89
601267	MVSI 18-4500	MVSI 15/2000-S02	50	•	135°C	71.0	48.8	4519	4473	111	97.9	1.3	1.5	2.50	2.30	4.30	4.90
601220	MVSI 18-5380	MVSI 15/2410-S08	60	•	150°C	83.6	58.6	5324	5377	154	140	1.8	1.9	3.20	3.00	6.09	7.23
601268	MVSI 18-6850	MVSI 15/3000-S08	60	•	135°C	107	74.6	6833	6835	176	156	2.0	2.2	3.80	3.50	6.50	7.50
601221	MVSI 18-8300	MVSI 15/3810-S02	70	•	135°C	133	89.9	8448	8237	262	242	2.4	2.8	3.90	3.90	7.11	6.92
601269	MVSI 18-9420	MVSI 15/4300-S02	70	•	135°C	150	102	9517	9350	271	257	2.7	3.3	4.80	4.65	5.90	7.10
601211	MVSI 18-10900	MVSI 15/5010-S02	80	•	135°C	173	119	11015	10870	354	337	4.0	3.7	6.00	5.00	7.02	8.00
601447	MVSI 18-13400	MVSI 15/6000-S02	80	•	135°C	195	146	12439	13365	360	341	4.0	3.7	6.00	5.00	7.02	8.00
601165	MVSI 18-14500	MVSI 15/7000-S02	90	•	135°C	226	158	14379	14520	458	429	6.7	7.0	10.5	9.00	6.48	7.67
601166	MVSI 18-17600	MVSI 15/9000-S90	95	□	135°C	283	197	18038	18003	495	462	7.6	8.9	11.6	11.5	5.43	5.57
601204	MVSI 18-19700	MVSI 15/9500-S02	97	□	135°C	291	214	18515	19615	673	642	8.0	9.2	12.2	12.0	6.56	6.67
601205	MVSI 18-25300	MVSI 15/11500-S02	100	□	135°C	395	275	25146	25227	946	904	11.5	12.2	17.5	15.5	7.03	8.00
601271	MVSI 18-32900	MVSI 15/14500-S02	100	□	135°C	488	359	31064	32868	1008	933	12.9	13.8	20.0	20.0	8.00	8.00

Single-phase

Code	Type	Type (EU)	SIZE	cSP	Ex II2D Temp. class	Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
						in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	HP	A	50Hz	60Hz
601340	MVSI 18-100	MVSI 15/35-S02	00	•	120°C	12.1	12.1	67.1	96.6	11.4	11.4	0.05	0.05	0.43	1.00	1.20	1.30
601341	MVSI 18-180	MVSI 15/80-S02	01	•	120°C	32.3	20.2	179	161	13.6	12.8	0.05	0.05	0.43	1.00	1.20	1.30
601366	MVSI 18-250	MVSI 15/100-S02	01	•	120°C	37.9	32.3	210	257	14.5	13.6	0.05	0.05	0.43	1.00	1.20	1.30
601367	MVSI 18-480	MVSI 15/200-S02	10	•	120°C	84.2	58.8	469	471	25.7	23.5	0.15	0.15	1.00	2.00	1.50	1.85
601372	MVSI 18-920	MVSI 15/400-S02	20	•	120°C	163	113	906	904	40.7	36.3	0.16	0.24	1.20	2.80	2.50	2.21
601373	MVSI 18-1310	MVSI 15/550-S02	20	•	120°C	219	163	1214	1302	45.5	40.7	0.16	0.24	1.20	2.80	2.50	2.21
601408	MVSI 18-1690	MVSI 15/700-S02	30	•	120°C	286	209	1584	1672	57.6	53.9	0.32	0.41	2.15	5.15	5.44	3.63

* Working moment = 2 x static moment. □ CSA certification on request, with feeding line included.



DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	Holes													Capacitor (µF)		Cable entry thread
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N	220V 50Hz	115V 60Hz	
MVSI 18-100	A	8.31	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	1.81	4.06	3.86	4.61	-	-	M20x1.5
MVSI 18-180	A	9.80	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	2.56	4.06	3.86	4.61	-	-	M20x1.5
MVSI 18-250	A	9.80	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	2.56	4.06	3.86	4.61	-	-	M20x1.5
MVSI 18-480	A	11.85	6.73	5.98	3.54	4.92	0.51	4	1.10	2.87	3.03	5.00	5.04	5.55	-	-	M20x1.5
MVSI 18-920	A	13.54	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	3.66	5.71	5.75	6.30	-	-	M25x1.5
MVSI 18-1310	A	15.20	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	4.49	5.71	5.75	6.30	-	-	M25x1.5
MVSI 18-1690	A	15.51	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	4.17	6.69	6.85	7.17	-	-	M25x1.5
MVSI 18-2280	A	15.51	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	4.17	6.69	6.85	7.17	-	-	M25x1.5
MVSI 18-2150	A	17.13	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	4.63	7.36	6.38	7.99	-	-	M25x1.5
MVSI 18-3190	A	17.64	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	4.25	8.15	7.48	8.86	-	-	M25x1.5
MVSI 18-3870	A	19.69	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	5.28	8.15	7.48	8.86	-	-	M25x1.5
MVSI 18-4500	A	22.60(50Hz) 19.69(60Hz)	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	6.73(50Hz) 5.28(60Hz)	8.15	7.48	8.86	-	-	M25x1.5
MVSI 18-5380	A	21.14	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	5.39	9.37	8.27	9.96	-	-	M25x1.5
MVSI 18-6850	A	24.29	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	6.97	9.37	8.27	9.96	-	-	M25x1.5
MVSI 18-8300	A	22.99	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	5.39	10.91	8.46	11.61	-	-	M25x1.5
MVSI 18-9420	A	26.22(50Hz) 22.99(60Hz)	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.01(50Hz) 5.39(60Hz)	10.91	8.46	11.61	-	-	M25x1.5
MVSI 18-10900	A	24.80	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	5.91	11.93	9.45	12.60	-	-	M32x1.5
MVSI 18-13400	A	24.80	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	5.91	11.93	9.45	12.60	-	-	M32x1.5
MVSI 18-14500	A	26.77	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	6.30	12.99	10.63	13.78	-	-	M32x1.5
MVSI 18-17600	A	24.76	15.55	15.43	7.87	12.60	1.10	4	3.94	7.56	5.30	13.98	10.63	14.76	-	-	M32x1.5
MVSI 18-19700	C	33.94	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	9.06	15.24	12.60	16.30	-	-	M32x1.5
MVSI 18-25300	C	38.98	17.87	20.87	5.51	17.32	1.77	6	1.50	9.06	9.45	16.65	14.57	17.64	-	-	M32x1.5
MVSI 18-32900	C	38.98	17.87	20.87	5.51	17.32	1.77	6	1.50	9.06	9.45	16.65	14.57	17.64	-	-	M32x1.5

Type	Fig.	Holes													Capacitor (µF)		Cable entry thread
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N	220V 50Hz	115V 60Hz	
MVSI 18-100	A	8.31	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	1.81	4.06	3.86	4.61	3.15	25	M20x1.5
MVSI 18-180	A	9.80	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	2.56	4.06	3.86	4.61	3.15	25	M20x1.5
MVSI 18-250	A	9.80	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	2.56	4.06	3.86	4.61	3.15	25	M20x1.5
MVSI 18-480	A	11.85	6.73	5.98	3.54	4.92	0.51	4	1.10	2.87	3.03	5.00	5.04	5.55	5	25	M20x1.5
MVSI 18-920	A	13.54	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	3.66	5.71	5.75	6.30	12◦ +20●	35	M25x1.5
MVSI 18-1310	A	15.20	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	4.49	5.71	5.75	6.30	12◦ +20●	35 +10●	M25x1.5
MVSI 18-1690	A	15.51	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	4.17	6.69	6.85	7.17	16◦ +80●	40◦ +120●	M25x1.5

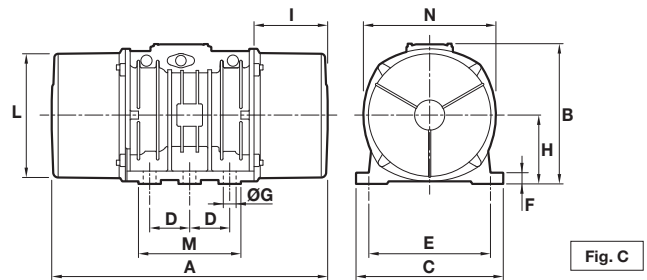
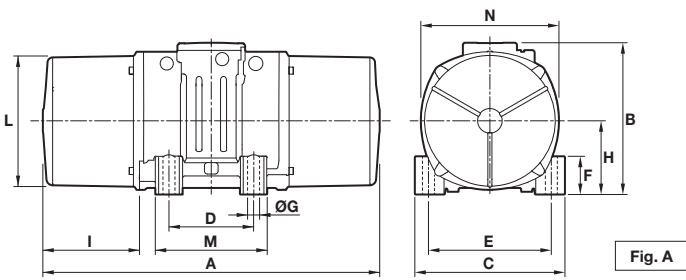
la/ln = ratio between start-up current and maximum current. ** Slot. ◯ Running capacitor / ● Additional capacitor only for start-up. Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.

6 poles - 1,000/1,200 rpm

Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE		 II2D Temp. class	Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
						50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602296	MVSI 12-110	MVSI 10/40-S02	10	•	120°C	2.61	2.61	74	106	19.8	19.8	0.07	0.12	0.30	0.30	1.90	2.07
602297	MVSI 12-300	MVSI 10/100-S02	10	•	120°C	7.32	7.32	207	299	26.2	26.2	0.07	0.12	0.30	0.30	1.90	2.07
602298	MVSI 12-580	MVSI 10/200-S02	20	•	120°C	14.2	14.2	403	581	39.8	39.8	0.13	0.16	0.50	0.50	2.72	3.10
602314	MVSI 12-760	MVSI 10/310-S02	30	•	120°C	24.9	18.2	706	744	56.5	52.8	0.29	0.36	0.72	0.68	2.63	2.79
602241	MVSI 12-1270	MVSI 10/400-S02	30	•	120°C	31.0	31.0	880	1267	63.8	63.8	0.29	0.36	0.72	0.68	2.63	2.79
602402	MVSI 12-1630	MVSI 10/550-S02	35	•	120°C	39.7	39.7	1126	1621	71.7	71.7	0.32	0.36	0.75	0.68	2.53	3.68
602403	MVSI 12-1660	MVSI 10/650-S02	35	•	-	50.4	39.7	1430	1621	78.1	71.7	0.32	0.36	0.95	0.88	3.16	3.86
602380	MVSI 12-1990	MVSI 10/810-S08	40	•	135°C	62.9	48.8	1780	1991	96.8	88.0	0.60	0.69	1.40	1.35	2.79	3.33
602381	MVSI 12-2540	MVSI 10/1110-S08	50	•	135°C	88.0	62.2	2490	2532	123	107	0.74	0.75	1.65	1.50	3.33	4.13
602382	MVSI 12-3110	MVSI 10/1400-S08	50	•	135°C	111	80.1	3133	3263	139	122	0.87	0.87	1.80	1.70	3.05	3.65
602406	MVSI 12-3410	MVSI 10/1610-S08	60	•	135°C	127	83.6	3604	3408	176	154	1.1	1.3	2.20	2.20	4.21	4.05
602407	MVSI 12-4700	MVSI 10/2100-S08	60	•	135°C	168	115	4739	4624	202	180	1.5	1.6	3.00	2.75	3.42	4.00
602167	MVSI 12-6050	MVSI 10/2610-S02	70	•	135°C	202	150	5722	6043	286	255	2.1	2.3	4.10	3.75	5.35	5.60
602230	MVSI 12-6600	MVSI 10/3000-S02	70	•	135°C	234	169	6615	6873	319	286	2.3	2.7	4.50	4.30	4.35	4.81
602154	MVSI 12-8450	MVSI 10/3810-S02	80	•	135°C	298	207	8417	8428	414	374	2.6	3.1	5.10	5.00	5.91	6.00
602204	MVSI 12-10400	MVSI 10/4700-S02	80	•	135°C	366	251	10342	10226	449	403	3.5	3.9	6.50	6.00	5.24	5.50
602350	MVSI 12-11400	MVSI 10/5150-S02	80	•	135°C	407	281	11506	11440	495	440	3.5	3.9	6.50	6.00	5.24	5.50
602138	MVSI 12-11700	MVSI 10/5200-S02	90	•	135°C	405	286	11458	11645	524	473	3.9	4.2	7.00	6.50	4.71	5.08
602351	MVSI 12-12300	MVSI 10/5700-S02	90	•	135°C	439	302	12430	12320	528	484	3.9	4.2	7.00	6.50	4.71	5.08
602091	MVSI 12-14400	MVSI 10/6500-S02	90	•	135°C	508	353	14359	14364	590	568	4.3	4.7	8.20	8.10	4.51	5.83
602136	MVSI 12-14500	MVSI 10/6600-S02 Δ	97	•	135°C	529	346	14958	14091	678	616	5.6	6.7	10.0	9.80	5.61	5.82
602352	MVSI 12-15400	MVSI 10/7000-S02	90	•	135°C	545	378	15429	15400	605	579	4.3	4.7	8.20	8.10	4.51	5.83
602092	MVSI 12-17600	MVSI 10/8000-S90	95	□	135°C	626	432	17701	17591	693	609	7.5	8.4	12.6	11.3	4.59	5.58
602093	MVSI 12-19100	MVSI 10/9000-S90	95	□	135°C	674	468	19065	19072	717	636	8.0	9.4	14.0	12.9	4.13	4.88
602137	MVSI 12-20100	MVSI 10/10000-S02	97	□	135°C	754	492	21329	20057	818	730	8.4	9.0	13.5	12.4	4.72	4.92
602349	MVSI 12-24400	MVSI 10/11200-S02	97	□	135°C	868	600	24552	24420	876	788	8.4	9.0	13.5	12.4	4.72	4.92
602134	MVSI 12-26500	MVSI 10/12000-S90 Δ	100	□	135°C	956	656	27047	26710	1100	979	10.1	11.0	16.3	15.0	5.21	5.73
602227	MVSI 12-29000	MVSI 10/13000-S02	97	□	135°C	1001	709	28307	28886	979	869	10.6	11.4	17.0	16.0	4.98	5.00
602142	MVSI 12-31000	MVSI 10/15000-S02	105	□	135°C	1101	756	31141	30809	1415	1331	12.1	13.4	19.0	18.0	5.88	5.78
602143	MVSI 12-37000	MVSI 10/17500-S02	105	□	135°C	1348	908	38119	36969	1520	1412	14.7	15.4	24.5	23.0	5.71	5.96
602244	MVSI 12-40000	MVSI 10/19500-S02	105	□	135°C	1560	994	44136	40480	1577	1430	14.7	15.4	24.5	23.0	5.71	5.96
602144	MVSI 12-45000	MVSI 10/22000-S90	110	□	-	1741	1090	49249	44458	2037	1971	20.6	20.4	33.0	25.5	4.67	5.88
602273	MVSI 12-55000	MVSI 10/25000-S90	110	□	-	1945	1286	55000	52360	2112	2042	20.6	20.4	33.0	25.5	4.67	5.88
602336	MVSI 12-67000	MVSI 10/30000-S02	120	-	-	2372	1631	67232	66440	2640	2310	28.7	30.0	40.0	38.0	4.89	5.39

* Working moment = 2 x static moment. Δ For special application. □ CSA certification on request, with feeding line included.

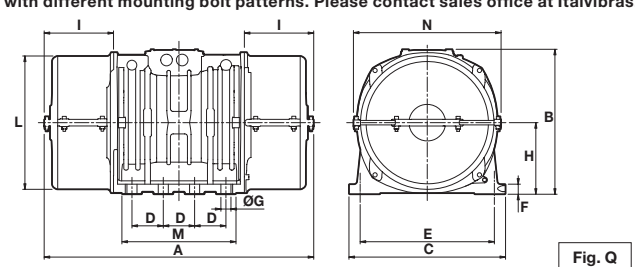
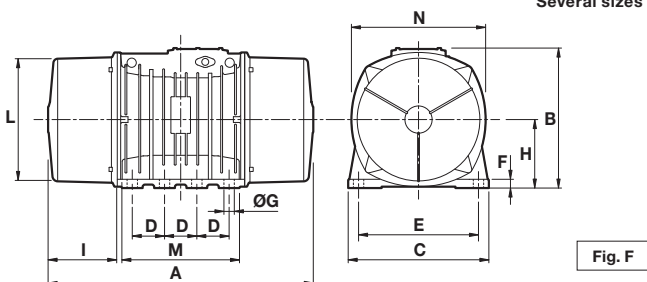


DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N*	F	H	I	L	M	N	Cable entry thread
MVSI 12-110	A	10.04	6.73	5.98	3.54	4.92	0.51	4	1.10	2.87	2.13	5.00	5.04	5.55	M20X1.5
MVSI 12-300	A	11.85	6.73	5.98	3.54	4.92	0.51	4	1.10	2.87	3.03	5.00	5.04	5.55	M20X1.5
MVSI 12-580	A	13.54	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	3.66	5.71	5.75	6.30	M25X1.5
MVSI 12-760	A	15.51	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	4.17	6.69	6.85	7.17	M25X1.5
MVSI 12-1270	A	15.51	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	4.17	6.69	6.85	7.17	M25X1.5
MVSI 12-1630	A	17.13	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	4.63	7.36	6.38	7.99	M25X1.5
MVSI 12-1660	A	18.90(50Hz) 17.13(60Hz)	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	5.51(50Hz) 4.63(60Hz)	7.36	6.38	7.99	M25X1.5
MVSI 12-1990	A	19.69(50Hz) 17.64(60Hz)	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	5.28(50Hz) 4.25(60Hz)	8.15	7.48	8.86	M25X1.5
MVSI 12-2540	A	22.60	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	6.73	8.15	7.48	8.86	M25X1.5
MVSI 12-3110	A	24.41(50Hz) 22.60(60Hz)	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	7.64(50Hz) 6.73(60Hz)	8.15	7.48	8.86	M25X1.5
MVSI 12-3410	A	24.29(50Hz) 21.14(60Hz)	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	6.97(50Hz) 5.39(60Hz)	9.37	8.27	9.96	M25X1.5
MVSI 12-4700	A	26.10(50Hz) 24.29(60Hz)	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	7.87(50Hz) 6.97(60Hz)	9.37	8.27	9.96	M25X1.5
MVSI 12-6050	A	26.22	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.01	10.91	8.46	11.61	M25X1.5
MVSI 12-6600	A	28.03	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.91	10.91	8.46	11.61	M25X1.5
MVSI 12-8450	A	28.90	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	7.95	11.93	9.45	12.60	M32X1.5
MVSI 12-10400	A	31.34	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	9.17	11.93	9.45	12.60	M32X1.5
MVSI 12-11400	A	32.52	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	9.76	11.93	9.45	12.60	M32X1.5
MVSI 12-11700	A	29.29	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	7.56	12.99	10.63	13.78	M32X1.5
MVSI 12-12300	A	33.07	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	M32X1.5
MVSI 12-14400	A	33.07	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	M32X1.5
MVSI 12-14500	C	29.53	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	6.85	15.24	12.60	16.30	M32X1.5
MVSI 12-15400	A	33.07	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	M32X1.5
MVSI 12-17600	A	34.25	15.55	15.43	7.87	12.60	1.10	4	3.94	7.56	10.04	13.98	10.63	14.76	M32X1.5
MVSI 12-19100	A	34.25	15.55	15.43	7.87	12.60	1.10	4	3.94	7.56	10.04	13.98	10.63	14.76	M32X1.5
MVSI 12-20100	C	33.94	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	9.06	15.24	12.60	16.30	M32X1.5
MVSI 12-24400	C	35.91	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	10.04	15.24	12.60	16.30	M32X1.5
MVSI 12-26500	C	38.98	17.87	20.87	5.51	17.32	1.77	6	1.50	9.06	9.45	16.65	14.57	17.64	M32X1.5
MVSI 12-29000	C	39.45	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	11.81	15.24	12.60	16.30	M32X1.5
MVSI 12-31000	F	37.80	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	7.87	19.13	20.08	20.31	M32X1.5
MVSI 12-37000	F	40.94	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	9.45	19.13	20.08	20.31	M32X1.5
MVSI 12-40000	F	44.09(50Hz) 40.95(60Hz)	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	11.02(50Hz) 9.45(60Hz)	19.13	20.08	20.31	M32X1.5
MVSI 12-45000	F	45.28	23.90	24.02	5.51	20.47	1.77	8	1.50	11.69	11.71	21.34	20.08	22.91	M32X1.5
MVSI 12-55000	F	45.28	23.90	24.02	5.51	20.47	1.77	8	1.50	11.69	11.71	21.34	20.08	22.91	M32X1.5
MVSI 12-67000	Q	47.44	25.51	27.56	5.51	23.62	1.77	8	1.77	12.60	12.20	23.62	20.08	25.98	M32X1.5

*Ia/In = ratio between start-up current and maximum current.
Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.

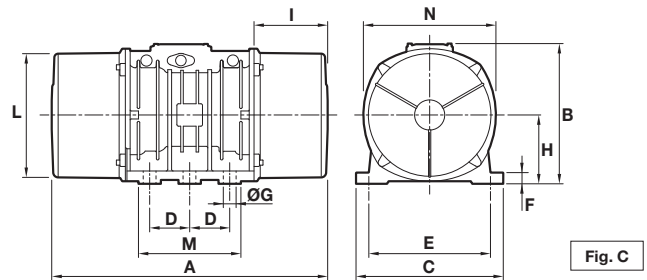
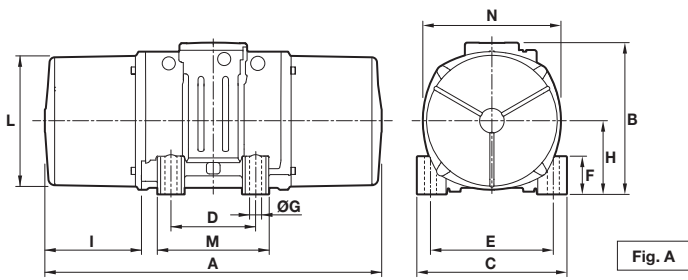


8 poles - 750/900 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE	II2D Temp. class	Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
					in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	HP	400V 50Hz	460V 60Hz	50Hz
602568	MVSI 9-340	MVSI 075/150-S02	20	• 130°C	14.2	14.2	229	328	39.8	39.8	0.15	0.20	0.85	0.76	2.13	2.11
602575	MVSI 9-590	MVSI 075/250-S02	30	• 130°C	24.9	24.9	398	572	57.6	57.6	0.25	0.28	1.10	1.05	2.03	2.29
602615	MVSI 9-910	MVSI 075/400-S02	35	• -	39.7	39.7	634	913	71.7	71.7	0.28	0.34	0.81	0.80	2.22	2.38
602616	MVSI 9-1160	MVSI 075/530-S02	35	• -	50.4	50.4	803	1162	79.2	79.2	0.28	0.34	0.81	0.80	2.22	2.38
602609	MVSI 9-1440	MVSI 075/660-S08	40	• 120°C	62.9	62.9	1003	1443	96.8	96.8	0.28	0.35	1.20	1.20	2.38	2.58
602610	MVSI 9-2030	MVSI 075/910-S08	50	• 120°C	88.0	88.0	1401	2017	123	123	0.29	0.40	1.40	1.30	2.38	2.85
602618	MVSI 9-2920	MVSI 075/1310-S08	60	• 150°C	127	127	2028	2919	176	176	0.87	1.1	2.20	2.20	2.63	3.41
602619	MVSI 9-3850	MVSI 075/1750-S08	60	• 135°C	168	168	2671	3843	202	202	1.0	1.2	2.60	2.26	2.78	3.04
602891	MVSI 9-4640	MVSI 075/2110-S02	70	• 135°C	202	202	3219	4635	286	286	1.4	1.8	4.10	4.20	3.55	2.95
602884	MVSI 9-6830	MVSI 075/3110-S02	80	• 135°C	298	298	4734	6818	414	414	2.0	2.0	5.40	5.20	3.98	4.62
602515	MVSI 9-8400	MVSI 075/3800-S02	80	• 135°C	366	366	5819	8378	449	449	2.5	3.0	6.00	6.00	4.00	4.20
602862	MVSI 9-9310	MVSI 075/4200-S02	90	• 135°C	405	405	6446	9280	524	524	2.7	3.2	6.50	6.50	3.84	4.00
602826	MVSI 9-11700	MVSI 075/5300-S02	90	• 135°C	508	508	8078	11631	590	590	4.0	4.3	8.20	7.85	3.87	5.35
602827	MVSI 9-14400	MVSI 075/6500-S90	95	□ 135°C	626	626	9957	14337	693	693	5.0	5.8	9.90	9.50	3.04	3.26
602551	MVSI 9-14500	MVSI 075/6800-S02 Δ	97	□ 135°C	638	638	10155	14623	722	722	5.6	6.0	10.5	10.0	3.12	3.30
602870	MVSI 9-21900	MVSI 075/10000-S02	97	□ 135°C	1077	954	17142	21861	964	922	7.1	8.5	13.2	12.0	3.33	3.92
602863	MVSI 9-24800	MVSI 075/12000-S90	100	□ 135°C	1201	1079	19116	24717	1188	1144	7.6	8.7	14.0	13.5	3.72	3.78
602871	MVSI 9-31000	MVSI 075/14000-S02	105	□ 135°C	1560	1348	24827	30879	1544	1496	10.2	11.0	21.0	19.5	4.99	5.44
602872	MVSI 9-38000	MVSI 075/17000-S02	105	□ 135°C	1855	1658	29520	37979	1661	1564	11.9	12.7	22.0	20.0	5.50	5.90
602873	MVSI 9-49000	MVSI 075/22000-S90	110	□ -	2490	2131	39611	48822	2233	2158	14.7	17.5	26.5	28.0	5.63	4.71
602535	MVSI 9-57000	MVSI 075/26000-S90	110	□ -	-	2490	-	57039	-	2233	-	17.4	-	28.0	-	4.71
602589	MVSI 9-67100	MVSI 075/30000-S02	120	□ -	4127	2908	65659	66616	3080	2816	25.0	-	43.0	-	6.00	-

* Working moment = 2 x static moment. Δ For special application. □ CSA certification on request, with feeding line included.



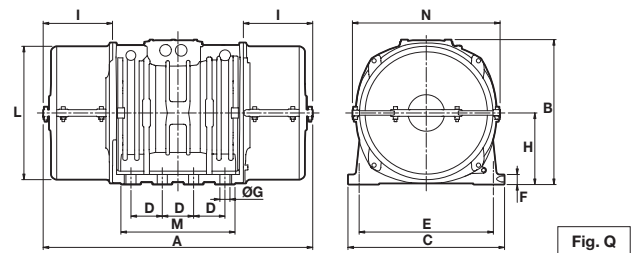
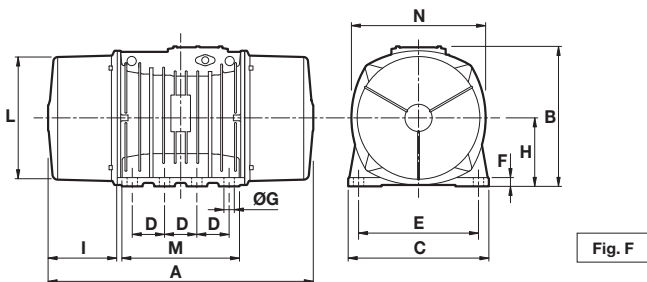
DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	Cable entry thread
MVSI 9-340	A	13.54	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	3.66	5.71	5.75	6.30	M25X1.5
MVSI 9-590	A	15.51	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	4.17	6.69	6.85	7.17	M25X1.5
MVSI 9-910	A	17.13	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	4.63	7.36	6.38	7.99	M25X1.5
MVSI 9-1160	A	18.90	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	5.51	7.36	6.38	7.99	M25X1.5
MVSI 9-1440	A	19.69	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	5.28	8.15	7.48	8.86	M25X1.5
MVSI 9-2030	A	22.60	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	6.73	8.15	7.48	8.86	M25X1.5
MVSI 9-2920	A	24.29	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	6.97	9.37	8.27	9.96	M25X1.5
MVSI 9-3850	A	26.10	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	7.87	9.37	8.27	9.96	M25X1.5
MVSI 9-4640	A	26.22	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.01	10.91	8.46	11.61	M25X1.5
MVSI 9-6830	A	28.90	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	7.95	11.93	9.45	12.60	M32X1.5
MVSI 9-8400	A	31.34	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	9.17	11.93	9.45	12.60	M32X1.5
MVSI 9-9310	A	29.29	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	7.56	12.99	10.63	13.78	M32X1.5
MVSI 9-11700	A	33.07	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	M32X1.5
MVSI 9-14400	A	34.25	15.55	15.43	7.87	12.60	1.10	4	3.94	7.56	10.04	13.98	10.63	14.76	M32X1.5
MVSI 9-14500	C	33.94	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	9.06	15.24	12.60	16.30	M32X1.5
MVSI 9-21900	C	39.45	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	11.81	15.24	12.60	16.30	M32X1.5
MVSI 9-24800	C	42.13	17.87	20.87	5.51	17.32	1.77	6	1.50	9.06	11.02	16.65	14.57	17.64	M32X1.5
MVSI 9-31000	F	40.94	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	9.45	19.13	20.08	20.31	M32X1.5
MVSI 9-38000	F	44.09	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	11.02	19.13	20.08	20.31	M32X1.5
MVSI 9-49000	F	45.28	23.90	24.02	5.51	20.47	1.77	8	1.50	11.69	11.71	21.34	20.08	22.91	M32X1.5
MVSI 9-57000	F	45.28	23.90	24.02	5.51	20.47	1.77	8	1.50	11.69	11.71	21.34	20.08	22.91	M32X1.5
MVSI 9-67100	Q	52.17	25.55	27.56	5.51	23.62	1.77	8	1.77	12.60	14.57	23.62	20.08	25.98	M32X1.5

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

Several sizes are available with different mounting bolt patterns. Please contact sales office at Italtibras.



■ MVSI



Technical features

Standard painting

Electrostatic surface treatment for all external components based on polymerised epoxy polyester powder in oven at 392°F (200°C).

Good resistance versus corrosion in normal operating conditions.

Salt spray tested for 500 hours.

■ MVSI-SS



Technical features

Standard painting with weight covers in stainless steel.

Casing and terminal box cover with electrostatic surface treatment based on polymerised epoxy polyester powder in oven at 392°F (200°C).

Weight covers in stainless steel AISI 304.

Excellent resistance versus corrosion in normal operating conditions.

Salt spray tested for 500 hours.

■ MVSI-SI



Technical features

STEEL IT polyurethane resin coating

Casing and terminal box cover have a special polyurethane resin coating with insertion of stainless steel leafing pigment AISI 316L.

Weight covers in stainless steel AISI 304.

All external hexagonal head screws are of stainless steel quality A2.

Coating is USDA approved for being used in the food sector where there is a high risk of accidental contact with processed food.

Salt spray tested for 500 hours.

Available for all models from all frame sizes.

■ MVSI-BR



Technical features

Ball burnishing treatment

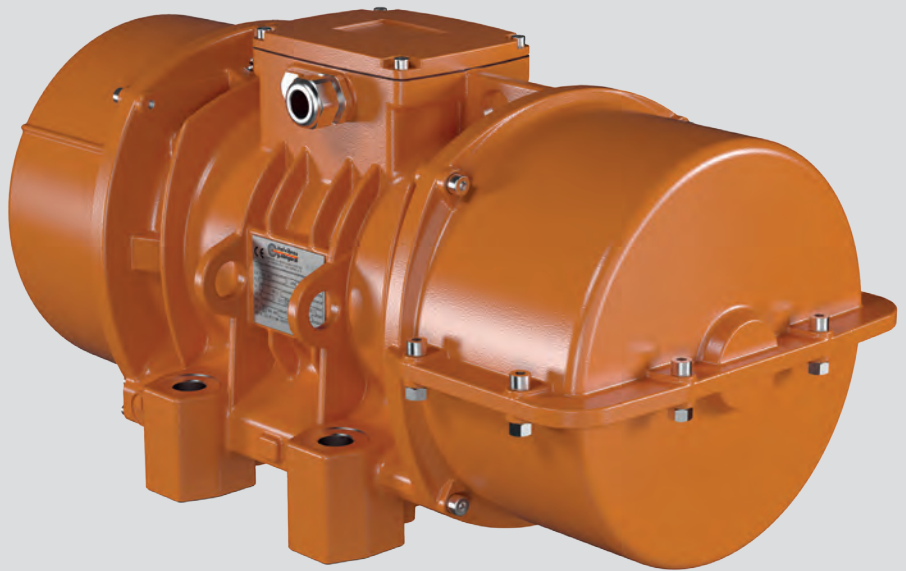
This treatment takes place without use of additional material on the casing and the terminal box cover, while weight covers are in stainless steel AISI 304.

Such treatment gives to the surfaces a polished aspect with hydrophobic effect which consistently improves their resistance to corrosion.

Suitable for environments where any painting or other surface coating have to be avoided as subject to frequent cleaning and sanitation, particularly in the chemical, pharmaceutical and food sectors.

Available on aluminium alloy electric vibrators, so up to frame size 60 included.

■ MVSI-SC



Technical features

Power supply

Three-phase voltage from 48V to 690V, 50Hz or 60Hz; suitable for use with an inverter from 20Hz to the base frequency, with constant torque load profile.

Polarity

4, 6 and 8 poles.

Conformity with Standards and Regulations

Low Voltage Directive 2006/95/EC;
EN/IEC 60034-1;
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 67200 lbs (300 kN), with centrifugal force adjustable by varying eccentric 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 to +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 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 correctly 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 vibrating machines.
Insulated windings using the “drop by drop” trickle system with class H resin.
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). The geometry of the flange transmits the load to the casing uniformly.

Bearings

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

Motor shaft

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

The MVSI-SC series, obtained directly from the MVSI series, is characterized by the split weight covers. The weight cover is divided into two halves that can be removed in a radial direction, instead of axial direction as it happens for standard weight cover. According to requirements it is possible to mount one or two split weight covers.

The MVSI-SC series is indispensable in those applications where the position of the vibrator in the vibrating machine makes it difficult to axially remove the weight cover, while it has space to carry this out in a radial direction.

MVSI-SC has range extended up to 67200 kgf (300kN).

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, dismountable to allow disassembly in a radial direction. On request vibrators can be supplied with 1 or 2 split covers.

Painting / Surface coating

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

On request on MVSI-SC series other surface coatings may be available, see page 14.

Other mounting bolt patterns are available. For further details please contact sales offices at Italtvibras.

The technical data and models listed in this catalogue are not binding. Italtvibras reserves the right to modify them without prior notice.

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



Version MVSI-SC-C 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.АЛ33.В.02527

4 poles - 1,500/1,800 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In		
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz	
601217	MVSI 18-3190-SC	MVSI 15/1410-S02-TS	40	•	48.8	34.8	3109	3188	92.8	84.7	1.0	1.2	1.45	1.50	4.10	4.20
601219	MVSI 18-3870-SC	MVSI 15/1710-S02-TS	50	•	62.2	42.2	3956	3865	107	95.7	1.1	1.2	2.00	1.90	4.29	4.89
601267	MVSI 18-4500-SC	MVSI 15/2000-S02-TS	50	•	71.0	48.8	4519	4473	113	100	1.3	1.5	2.50	2.30	4.30	4.90
601220	MVSI 18-5380-SC	MVSI 15/2410-S08-TS	60	•	83.6	58.6	5324	5377	156	142	1.8	1.9	3.20	3.00	6.09	7.23
601268	MVSI 18-6850-SC	MVSI 15/3000-S08-TS	60	•	107	74.6	6833	6835	178	158	2.0	2.2	3.80	3.50	6.50	7.50
601221	MVSI 18-8300-SC	MVSI 15/3810-S02-TS	70	•	133	89.9	8448	8237	264	244	2.4	2.8	3.90	3.90	7.11	6.92
601269	MVSI 18-9420-SC	MVSI 15/4300-S02-TS	70	•	150	102	9517	9350	273	260	2.7	3.3	4.80	4.65	5.90	7.10
601211	MVSI 18-10900-SC	MVSI 15/5010-S02-TS	80	•	173	119	11015	10870	356	339	4.0	3.7	6.00	5.00	7.02	8.00
601447	MVSI 18-13400-SC	MVSI 15/6000-S02-TS	80	•	195	146	12439	13365	362	343	4.0	3.7	6.00	5.00	7.02	8.00
601204	MVSI 18-19700-SC	MVSI 15/9500-S02-TS	97	□	291	214	18515	19615	675	645	8.0	9.0	12.2	12.0	6.56	6.67

* Working moment = 2 x static moment. □ CSA certification on request, with feeding line included.

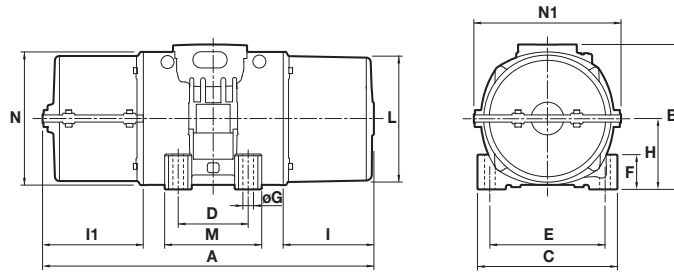


Fig. P

DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	A n. split covers		B	C	Holes										Cable entry thread		
		1	2			D	E	ØG	N°	F	H	I	L	M	N		I1	N1
MVSI 18-3190-SC	P	19.53	21.38	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	4.25	8.15	7.48	8.86	6.14	10.16	M25x1.5
MVSI 18-3870-SC	P	20.55	21.38	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	5.28	8.15	7.48	8.86	6.14	10.16	M25x1.5
MVSI 18-4500-SC	P	23.43(50Hz) 20.59(60Hz)	24.25(50Hz) 21.42(60Hz)	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	6.73(50Hz) 5.28(60Hz)	8.15	7.48	8.86	7.56(50Hz) 6.14(60Hz)	10.16	M25x1.5
MVSI 18-5380-SC	P	26.06	27.83	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	6.97	9.37	8.27	9.96	8.74	11.30	M25x1.5
MVSI 18-6850-SC	P	26.06	27.83	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	6.97	9.37	8.27	9.96	8.74	11.30	M25x1.5
MVSI 18-8300-SC	P	24.57	26.14	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	5.39	10.91	8.46	11.61	6.97	12.83	M25x1.5
MVSI 18-9420-SC	P	26.18(50Hz) 24.57(60Hz)	26.14	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.01(50Hz) 5.39(60Hz)	10.91	8.46	11.61	6.97	12.83	M25x1.5
MVSI 18-10900-SC	P	25.83	26.85	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	5.91	11.93	9.45	12.60	6.93	14.02	M32x1.5
MVSI 18-13400-SC	P	25.83	26.85	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	5.91	11.93	9.45	12.60	6.93	14.02	M32x1.5
MVSI 18-19700-SC	P	34.57	35.20	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	9.06	15.24	12.60	16.30	9.69	17.72	M32x1.5

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

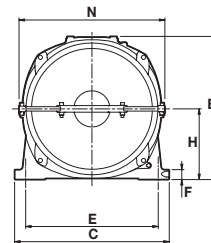
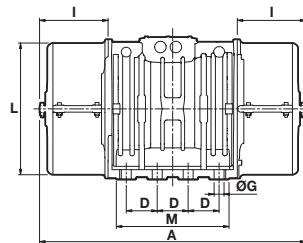
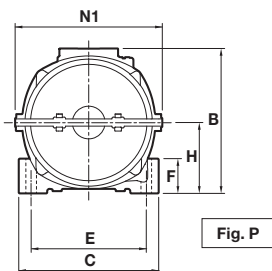
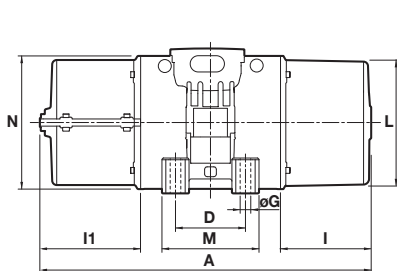
Several sizes are available with different mounting bolt patterns. Please contact sales office at Italtibras.

6 poles - 1,000/1,200 rpm

Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SIZE	CSA	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602380	MVSI 12-1990-SC	MVSI 10/810-S08-TS	40	•	62.9	48.8	1780	1991	108	99.0	0.60	0.69	1.40	1.35	2.53	3.68
602381	MVSI 12-2540-SC	MVSI 10/1110-S08-TS	50	•	88.0	62.2	2490	2532	142	127	0.74	0.75	1.65	1.50	3.33	4.13
602382	MVSI 12-3110-SC	MVSI 10/1400-S08-TS	50	•	111	80.1	3133	3263	141	124	0.87	0.87	1.80	1.70	3.05	3.65
602406	MVSI 12-3410-SC	MVSI 10/1610-S08-TS	60	•	127	83.6	3604	3408	178	156	1.1	1.3	2.20	2.20	4.21	4.05
602407	MVSI 12-4700-SC	MVSI 10/2100-S08-TS	60	•	168	115	4739	4624	205	183	1.5	1.6	3.00	2.75	3.42	4.00
602167	MVSI 12-6050-SC	MVSI 10/2610-S02-TS	70	•	202	150	5722	6043	288	257	2.1	2.3	4.10	3.75	5.35	5.60
602230	MVSI 12-6600-SC	MVSI 10/3000-S02-TS	70	•	234	169	6615	6873	321	288	2.3	2.7	4.50	4.30	4.35	4.81
602154	MVSI 12-8450-SC	MVSI 10/3810-S02-TS	80	•	298	207	8417	8428	416	376	2.6	3.1	5.10	5.00	5.91	6.00
602204	MVSI 12-10400-SC	MVSI 10/4700-S02-TS	80	•	366	251	10342	10226	451	405	3.5	3.9	6.50	6.00	5.24	5.50
602350	MVSI 12-11400-SC	MVSI 10/5150-S02-TS	80	•	/	281	/	11440	/	442	/	3.9	/	6.00	/	5.50
602138	MVSI 12-11700-SC	MVSI 10/5200-S02-TS	90	•	405	286	11458	11645	526	475	3.9	4.2	7.00	6.50	4.71	5.08
602351	MVSI 12-12300-SC	MVSI 10/5700-S02-TS	90	•	439	302	12430	12430	530	486	3.9	4.2	7.00	6.50	4.71	5.08
602091	MVSI 12-14400-SC	MVSI 10/6500-S02-TS	90	•	508	353	14359	14364	592	570	4.3	4.7	8.20	8.10	4.51	5.83
602352	MVSI 12-15400-SC	MVSI 10/7000-S02-TS	90	•	545	378	15429	15400	607	581	4.3	4.7	8.20	8.10	4.51	5.83
602092	MVSI 12-17600-SC	MVSI 10/8000-S90-TS	95	□	626	432	17701	17591	695	612	7.5	8.4	12.6	11.3	4.59	5.58
602093	MVSI 12-19100-SC	MVSI 10/9000-S90-TS	95	□	674	468	19065	19072	719	638	8.0	9.4	14.0	12.9	4.13	4.88
602137	MVSI 12-20100-SC	MVSI 10/10000-S02-TS	97	□	754	492	21329	20057	821	733	8.4	9.0	13.5	12.4	4.72	4.92
602227	MVSI 12-29000-SC	MVSI 10/13000-S02-TS	97	□	1001	709	28307	28886	981	871	10.6	11.4	17.0	16.0	4.98	5.00
602142	MVSI 12-31000-SC	MVSI 10/15000-S02-TS	105	□	1101	756	31141	30809	1417	1333	12.1	13.4	19.0	18.0	5.88	5.78
602143	MVSI 12-37000-SC	MVSI 10/17500-S02-TS	105	□	1348	908	38119	36969	1551	1443	14.7	15.4	24.5	23.0	5.71	5.96
602244	MVSI 12-40000-SC	MVSI 10/19500-S02-TS	105	□	1560	994	44136	40480	1564	1454	15.8	16.6	24.5	23.0	5.71	5.96
602144	MVSI 12-45000-SC	MVSI 10/22000-S90-TS	110	□	1741	1091	49249	44458	2037	1971	20.6	20.4	33.0	25.5	4.67	5.88
602273	MVSI 12-55000-SC	MVSI 10/25000-S90-TS	110	□	1945	1286	55000	52360	2112	2042	20.6	20.4	33.0	25.5	4.67	5.88
602336	MVSI 12-67000-SC	MVSI 10/30000-S02-TS	120	□	2372	1631	67104	66440	2662	2552	28.7	30.0	40.0	38.0	4.89	5.39

* Working moment = 2 x static moment. □ CSA certification on request, with feeding line included.



DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	A		B	C	D	E	ØG	N°	F	H	I	L	M	N	I1	N1	Cable entry thread
		1	2															
MVSI 12-1990-SC	P	20.55(50Hz) 19.53(60Hz)	21.38	9.69	9.06	5.51	7.48	0.67	4	1.77	4.57	5.28(50Hz) 4.25(60Hz)	8.15	7.48	8.86	6.14	10.16	M25x1.5
MVSI 12-2540-SC	P	23.43	24.25	9.69	9.06	5.51	7.48	0.67	4	1.77	4.57	6.73	8.15	7.48	8.86	7.56	10.16	M25x1.5
MVSI 12-3110-SC	P	25.24(50Hz) 23.43(60Hz)	26.06(50Hz) 24.25(60Hz)	9.69	9.06	5.51	7.48	0.67	4	1.77	4.57	7.64(50Hz) 6.73(60Hz)	8.15	7.48	8.86	8.47(50Hz) 7.56(60Hz)	10.16	M25x1.5
MVSI 12-3410-SC	P	26.06(50Hz) 24.49(60Hz)	27.83	9.69	10.83	5.51	7.48	0.67	4	2.76	5.12	6.97(50Hz) 5.39(60Hz)	9.37	8.27	9.96	8.74	11.30	M25x1.5
MVSI 12-4700-SC	P	26.97(50Hz) 26.06(60Hz)	27.83	9.69	10.83	5.51	7.48	0.67	4	2.76	5.12	7.87(50Hz) 6.97(60Hz)	9.37	8.27	9.96	8.74	11.30	M25x1.5
MVSI 12-6050-SC	P	28.27	30.31	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.01	10.91	8.46	11.61	9.06	12.83	M25x1.5
MVSI 12-6600-SC	P	29.17	30.31	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.91	10.91	8.46	11.61	9.06	12.83	M25x1.5
MVSI 12-8450-SC	P	29.84	30.79	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	7.95	11.93	9.45	12.60	8.90	14.02	M32x1.5
MVSI 12-10400-SC	P	32.36	33.39	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	9.17	11.93	9.45	12.60	10.20	14.02	M32x1.5
MVSI 12-11400-SC	P	32.95(60Hz)	33.39(60Hz)	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	9.29	11.93	9.45	12.60	10.20	14.02	M32x1.5
MVSI 12-11700-SC	P	32.20	35.12	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	7.56	12.99	10.63	13.78	10.47	15.04	M32x1.5
MVSI 12-12300-SC	P	34.09	35.12	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	10.47	15.04	M32x1.5
MVSI 12-14400-SC	P	34.09	35.12	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	10.47	15.04	M32x1.5
MVSI 12-15400-SC	P	34.09	35.12	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	10.47	15.04	M32x1.5
MVSI 12-17600-SC	P	35.28	36.30	15.55	15.43	7.87	12.60	1.10	4	3.94	7.56	10.04	13.98	10.63	14.76	11.06	16.14	M32x1.5
MVSI 12-19100-SC	P	35.28	36.30	15.55	15.43	7.87	12.60	1.10	4	3.94	7.56	10.04	13.98	10.63	14.76	11.06	16.14	M32x1.5
MVSI 12-20100-SC	P	34.57	35.20	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	9.06	15.24	12.60	16.30	9.69	17.72	M32x1.5
MVSI 12-29000-SC	P	40.04	40.63	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	11.81	15.24	12.60	16.30	12.40	17.72	M32x1.5
MVSI 12-31000-SC	P	40.55	43.31	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	7.87	19.49	20.08	20.31	10.63	22.28	M32x1.5
MVSI 12-37000-SC	P	42.13	43.31	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	9.45	19.49	20.08	20.31	10.63	22.28	M32x1.5
MVSI 12-40000-SC	P	45.28(50Hz) 42.13(60Hz)	46.46(50Hz) 43.31(60Hz)	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	11.02(50Hz) 9.45(60Hz)	19.49	20.08	20.31	12.21(50Hz) 10.63(60Hz)	22.28	M32x1.5
MVSI 12-45000-SC	P	46.26	47.24	23.90	24.02	5.51	20.47	1.77	8	1.50	11.69	11.73	21.34	20.08	22.91	12.72	24.25	M32x1.5
MVSI 12-55000-SC	P	46.26	47.24	23.90	24.02	5.51	20.47	1.77	8	1.50	11.69	11.73	21.34	20.08	22.91	12.72	24.25	M32x1.5
MVSI 12-67000-SC	Q	/	47.44	25.55	27.56	5.51	23.62	1.77	8	1.77	12.60	/	/	20.08	/	12.20	25.98	M32x1.5

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

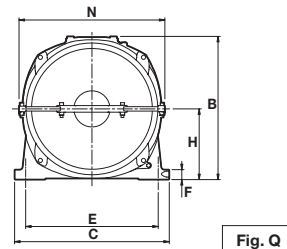
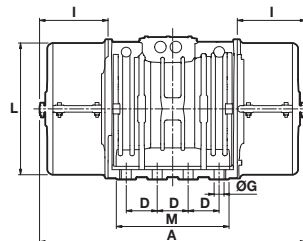
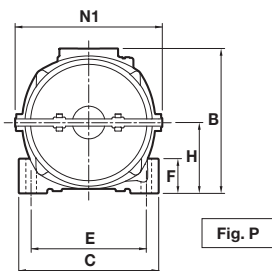
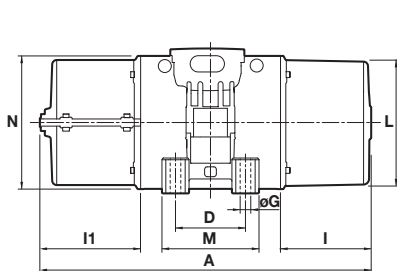
Several sizes are available with different mounting bolt patterns. Please contact sales office at Italtibras.

8 poles - 750/900 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE	Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In		
				in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	HP	400V 50Hz	460V 60Hz	50Hz	60Hz
602610	MVSI 9-2030-SC	MVSI 075/910-S08-TS	50	.	88.0	88.0	1401	2017	125	125	0.29	0.40	1.40	1.30	2.38	2.85
602618	MVSI 9-2920-SC	MVSI 075/1310-S08-TS	60	.	127	127	2028	2919	178	178	0.87	1.1	2.20	2.20	2.63	3.41
602619	MVSI 9-3850-SC	MVSI 075/1750-S08-TS	60	.	168	168	2671	3843	205	205	1.0	1.2	2.60	2.26	2.78	3.04
602891	MVSI 9-4640-SC	MVSI 075/2110-S02-TS	70	.	202	202	3219	4635	286	286	1.4	1.8	4.10	4.20	3.55	2.95
602884	MVSI 9-6830-SC	MVSI 075/3110-S02-TS	80	.	298	298	4734	6818	414	414	2.0	2.0	5.40	5.20	3.98	4.62
602515	MVSI 9-8400-SC	MVSI 075/3800-S02-TS	80	.	366	366	5819	8378	449	449	2.5	3.0	6.00	6.00	4.00	4.20
602862	MVSI 9-9310-SC	MVSI 075/4200-S02-TS	90	.	405	405	6446	9280	524	524	2.7	3.2	6.50	6.50	3.84	4.00
602826	MVSI 9-11700-SC	MVSI 075/5300-S02-TS	90	.	508	508	8078	11631	590	590	4.0	4.3	8.20	7.85	3.87	5.35
602827	MVSI 9-14400-SC	MVSI 075/6500-S90-TS	95	□	626	626	9957	14337	693	693	5.0	5.8	9.90	9.50	3.04	3.26
602551	MVSI 9-14500-SC	MVSI 075/6800-S02-TS	97	□	638	638	10155	14623	724	724	5.6	6.0	10.5	10.0	3.12	3.30
602870	MVSI 9-21900-SC	MVSI 075/10000-S02-TS	97	□	1077	954	17142	21861	964	922	7.1	8.5	13.2	12.0	3.33	3.92
602871	MVSI 9-31000-SC	MVSI 075/14000-S02-TS	105	□	1560	1348	24827	30879	1544	1496	10.2	11.0	21.0	19.5	4.99	5.44
602872	MVSI 9-38000-SC	MVSI 075/17000-S02-TS	105	□	1855	1658	29520	37979	1661	1564	11.9	12.7	22.0	20.0	5.50	5.90
602873	MVSI 9-49000-SC	MVSI 075/22000-S90-TS	110	□	2490	2131	39611	48822	2233	2158	14.7	17.5	26.5	28.0	5.63	4.71
602535	MVSI 9-57000-SC	MVSI 075/26000-S90-TS	110	□	-	2490	-	57039	-	2233	-	17.4	-	28.0	-	4.71
602589	MVSI 9-67100-SC	MVSI 075/30000-S02-TS	120	□	4127	2908	65659	66616	3080	2816	25.0	-	43.0	-	6.00	-

* Working moment = 2 x static moment. □ CSA certification on request, with feeding line included.



DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	A		B	C	Holes				F	H	I	L	M	N	I1	N1	Cable entry thread
		n. split covers	1			2	D	E	ØG									
MVSI 9-2030-SC	P	23.43	24.25	9.69	9.06	5.51	7.48	0.67	4	1.77	4.57	6.73	8.27	7.48	8.86	7.56	10.16	M25x1.5
MVSI 9-2920-SC	P	26.06	27.83	9.69	10.83	5.51	7.48	0.67	4	2.76	5.12	6.97	9.37	8.27	9.96	8.74	11.30	M25x1.5
MVSI 9-3850-SC	P	26.97	27.83	9.69	10.83	5.51	7.48	0.67	4	2.76	5.12	7.87	9.37	8.27	9.96	8.74	11.30	M25x1.5
MVSI 9-4640-SC	P	28.27	30.31	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.01	10.91	8.46	11.61	9.06	12.83	M25x1.5
MVSI 9-6830-SC	P	29.84	30.79	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	7.95	11.93	9.45	12.60	8.90	14.02	M32x1.5
MVSI 9-8400-SC	P	32.36	33.39	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	9.17	11.93	9.45	12.60	10.20	14.02	M32x1.5
MVSI 9-9310-SC	P	32.20	35.12	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	7.56	12.99	10.63	13.78	10.47	15.04	M32x1.5
MVSI 9-11700-SC	P	34.09	35.12	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	10.47	15.04	M32x1.5
MVSI 9-14400-SC	P	35.28	36.30	15.55	15.43	7.87	12.60	1.10	4	3.94	7.56	10.04	13.98	10.63	14.76	11.06	16.14	M32x1.5
MVSI 9-14500-SC	P	34.57	35.20	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	9.06	15.24	12.60	16.30	9.69	17.72	M32x1.5
MVSI 9-21900-SC	P	40.04	40.63	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	11.81	15.24	12.60	16.30	12.40	17.72	M32x1.5
MVSI 9-31000-SC	P	42.13	43.31	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	9.45	19.09	20.08	20.31	10.63	22.28	M32x1.5
MVSI 9-38000-SC	P	45.28	46.46	20.71	22.44	5.51	18.90	1.77	8	1.61	10.55	11.02	19.09	20.08	20.31	12.20	22.28	M32x1.5
MVSI 9-49000-SC	P	46.26	47.24	23.90	24.02	5.51	20.47	1.77	8	1.50	11.69	11.73	21.34	20.08	22.91	12.72	24.25	M32x1.5
MVSI 9-57000-SC	P	46.26	47.24	23.90	24.02	5.51	20.47	1.77	8	1.50	11.69	11.73	21.34	20.08	22.91	12.72	24.25	M32x1.5
MVSI 9-67100-SC	Q	/	52.17	25.55	27.56	5.51	23.62	1.77	8	1.77	12.60	/	/	20.08	/	14.57	25.98	M32x1.5

la/ln = ratio between start-up current and maximum current.
 Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.

■ MVSI-ACC



Technical features

Power supply

Three-phase voltage from 230V to 690V, 50Hz or 60Hz; suitable for use with an inverter from 20Hz to the base frequency, with constant torque load profile.

Polarity

All polarities available.

Conformity with Standards and Regulations

Low Voltage Directive 2006/95/EC;
EN/IEC 60034-1;
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

Adjustable in a continuous linear way by varying eccentric weight position.

Mechanical protection

To be defined depending by type.

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 vacuum encapsulation up to gr. AF 33 and 35, with “drop by drop” trickle system for larger sizes.

Ambient temperature

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

Vibrator thermal protection

With PTC rated thermistor heat detectors 266°F (130°C) from size 70. 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 correctly 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 size 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). 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.

The MVSI-ACC series, deriving directly from the MVSI series, is characterised by the motor shaft projecting from one side, allowing in-line coupling, between two equal vibrators.

The MVSI-ACC series is very useful for manufacturers of large screens and vibrating machines, or for plants that require very high centrifugal force values. With two vibrators of the MVSI-ACC series coupled in line, it is possible to double the centrifugal force of the single vibrator. Italtibras technical staff can help the user in the choice of the coupling as well as in the application of the vibrators. Upon request, it is possible to supply the shaft extension on both sides of the vibrator, so to enable the connection of three or more vibrators.

All MVSI vibrators can be manufactured in MVSI-ACC version, for details on shaft extension dimensions of different types contact Italtibras sales offices.

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, from the shaft extension side the weight cover may be only perforated or perforated and sectioned in two halves to allow cover opening in radial direction.

Painting / Surface coating

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

On request on MVSI-ACC series other surface coatings may be available, see page 14.

Other mounting bolt patterns are available. For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

Certifications



Compliance with the applicable European Union directives.



Certification for Eurasian Customs Union
N° TC N RU Д-IT.АЛ33.В.02527

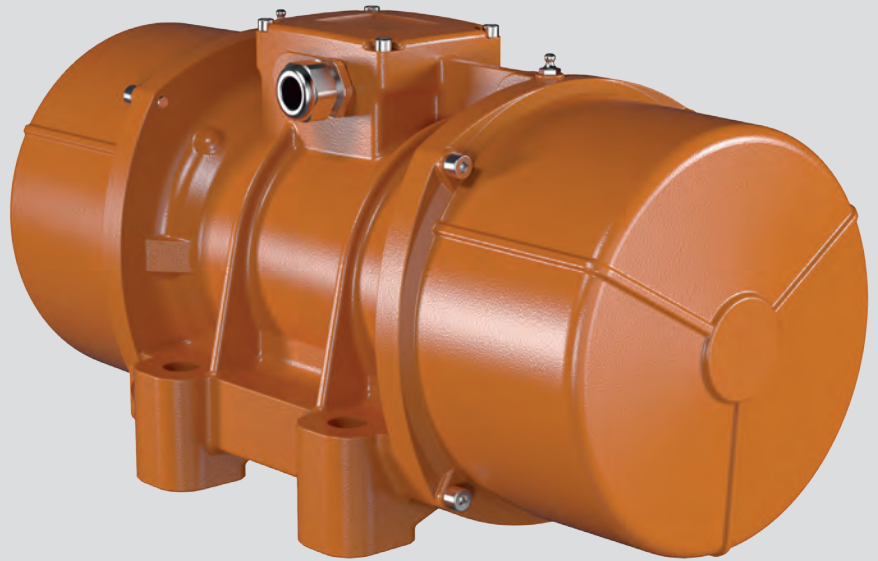


Standard CAN/CSA – C22.2, N°.100-95,
Certificate n° LR 100948
Class 4211 01 - Motors and generators
UL 1004-1 – Rotating Electrical Machines –
General Requirements



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

■ 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 type 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.

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

Range extended up to 24500 lbs (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 -4°F to +104°F (-20°C to +40°C), on request it is possible to have vibrators for max. ambient temperatures of 131°F (+55°C).

Vibrator thermal protection

Standard PTC rated thermistor heat detectors 266°F (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 Italtvibras, 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

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

Other mounting bolt patterns are available. For further details please contact sales offices at Italtvibras. The technical data and models listed in this catalogue are not binding. Italtvibras 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

2 poles - 3,000/3,600 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS									
Code	Type	Type (EU)	SIZE	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Temp. class (G)	Temp. class (D)	Power Input W		Power Output HP		Max. current A		tE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz		
6E0311	MVSI 36-380E-S02 Δ	MVSI 3/100E-S02	00	1.05	1.05	268	387	11.4	11.4	T3	120°C	180	180	0.16	0.16	-	-	30	2.68
										T4		105	105	0.11	0.11	-	-	20	3.48
6E0312	MVSI 36-480E-S02 Δ	MVSI 3/200E-S02	01	1.76	1.41	447	515	12.8	12.1	T3	120°C	180	180	0.16	0.16	-	-	30	2.68
6E0313	MVSI 36-660E-S02	MVSI 3/300E-S02	10	2.61	1.96	664	717	19.8	18.9	T3	120°C	260	270	0.28	0.28	0.57	0.50	18	3.50
										T4		230	230	0.23	0.23	0.48	0.41	12	4.20
6E0314	MVSI 36-1050E-S02	MVSI 3/500E-S02	20	5.04	3.03	1285	1109	31.5	29.3	T3	120°C	500	500	0.40	0.40	0.76	6.67	12	4.20
										T4		350	360	0.28	0.28	0.57	0.50	8	5.60
6E0381	MVSI 36-1680E-S02	MVSI 3/800E-S02	30	6.48	4.86	1650	1782	43.1	41.8	T3	120°C	550	570	0.54	0.54	0.95	0.83	12	4.20
										T4		390	400	0.39	0.39	0.72	0.64	8	5.52
6E0513	MVSI 36-2530E-S02	MVSI 3/1100E-S02	35	9.56	6.35	2431	2325	52.8	50.6	T3	120°C	550	600	0.47	0.47	0.86	0.75	15	3.88
										T4		460	500	0.39	0.39	0.76	0.67	11	4.37
6E0491	MVSI 36-2900E-S08	MVSI 3/1300E-S08	AF33	11.1	8.0	2838	2919	59.4	56.5	T4	200°C	700	750	0.67	0.67	1.24	1.07	6	6.40
6E0504	MVSI 36-3500E-S08	MVSI 3/1500E-S08	AF33	12.7	9.6	3234	3509	55.7	52.8	T4	200°C	700	750	0.67	0.67	1.24	1.07	6	6.40
6E0502	MVSI 36-3280E-S02	MVSI 3/1600E-S02	50	13.3	8.9	3399	3263	70.4	67.1	T3	200°C	1010	1070	0.96	0.96	1.62	1.40	6	9.29
										T4		830	910	0.88	0.88	1.43	1.25	6	7.30
6E0503	MVSI 36-4080E-S02	MVSI 3/1800E-S02	50	15.6	11.1	3964	4077	72.6	69.3	T3	200°C	1010	1070	0.96	0.96	1.62	1.40	6	9.29
6E0256	MVSI 36-4100E-S90	MVSI 3/2010E-S90	AF50	17.8	11.1	4530	4077	107	102	T3	200°C	1110	1150	1.29	1.29	1.90	1.66	7	5.90
6E0257	MVSI 36-4910E-S90	MVSI 3/2310E-S90	AF50	20.0	13.3	5095	4893	109	104	T3	200°C	1110	1150	1.29	1.29	1.90	1.66	7	5.90
6E0472	MVSI 36-11000E-S02	MVSI 3/5000E-S02	AF70	44.8	29.9	11411	10954	240	231	T3	135°C	3000	3000	3.48	3.48	4.75	4.20	5	8.00

* Working moment = 2 x static moment.

Δ Available only in versions 127/220V 50Hz three-phase, 200/346V 50Hz three-phase and 210/363V 60Hz three-phase.

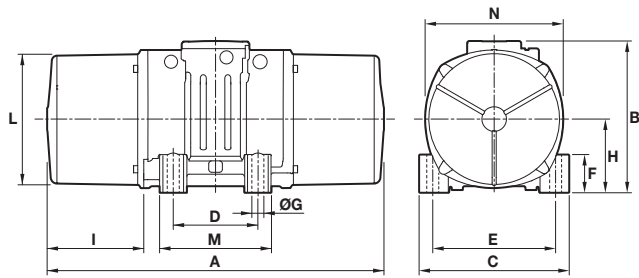


Fig. A

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	Cable entry thread
MVSI 36-380E-S02 Δ	A	8.31	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	1.81	4.06	3.86	4.61	M20x1.5
MVSI 36-480E-S02 Δ	A	9.25	5.91	4.92	2.44-2.91**	4.17	0.35	4	0.87	2.40	2.28	4.06	3.86	4.61	M20x1.5
MVSI 36-660E-S02	A	10.04	6.73	5.98	3.54	4.92	0.51	4	1.10	2.87	2.13	5.00	5.04	5.55	M20x1.5
MVSI 36-1050E-S02	A	11.34	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	2.56	5.71	5.75	6.30	M25x1.5
MVSI 36-1680E-S02	A	12.13	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	2.48	6.69	6.85	7.17	M25x1.5
MVSI 36-2530E-S02	A	17.13	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	4.63	7.36	6.38	7.99	M25x1.5
MVSI 36-2900E-S08	A	14.76	8.54	8.46	3.94	7.09	0.67	4	1.85	3.68	4.17	6.69	5.71	7.17	M25x1.5
MVSI 36-3500E-S08	A	14.76	8.54	8.46	3.94	7.09	0.67	4	1.85	3.68	4.17	6.69	5.71	7.17	M25x1.5
MVSI 36-3280E-S02	A	16.93	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	3.90	8.15	7.48	8.86	M25x1.5
MVSI 36-4080E-S02	A	16.93	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	3.90	8.15	7.48	8.86	M25x1.5
MVSI 36-4100E-S90	A	18.31	9.06	9.06	5.51	7.48	0.67	4	1.93	4.09	4.13	7.32	7.09	7.87	M25x1.5
MVSI 36-4910E-S90	A	18.31	9.06	9.06	5.51	7.48	0.67	4	1.93	4.09	4.13	7.32	7.09	7.87	M25x1.5
MVSI 36-11000E-S02	A	22.05	11.42	12.20	6.10	10.04	0.98	4	3.54	5.12	5.39	9.37	8.27	9.96	M25x1.5

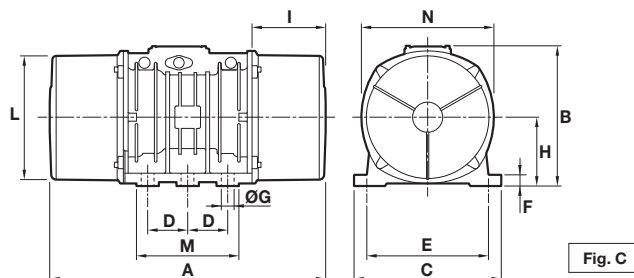
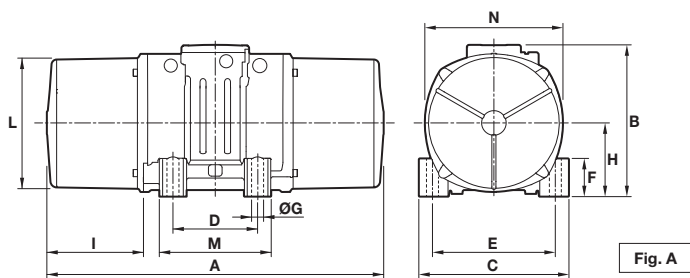
tE (s) = set time tE from IEC/EN 60079-7. Ia/In = ratio between start-up current and maximum current. ** Slot.
 Several sizes are available with different mounting bolt patterns. Please contact sales office at Italtibras.

4 poles - 1,500/1,800 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS									
Code	Type	Type (EU)	SIZE	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Temp. class (G)	Temp. class (D)	Power Input W		Power Output HP		Max. current A		tE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz		
6E1367	MVSI 18-480E-S02	MVSI 15/200E-S02	10	7.32	5.11	469	471	25.7	23.5	T3	120°C	203	-	0.12	-	0.45	-	35	2.04
										T4		170	175	0.13	0.13	0.39	0.40	28	2.34
6E1372	MVSI 18-920E-S02	MVSI 15/400E-S02	20	14.2	9.83	906	904	40.7	36.3	T3	120°C	300	320	0.27	0.31	0.57	0.52	18	3.33
										T4		285	270	0.24	0.27	0.52	0.46	16	3.63
6E1373	MVSI 18-1310E-S02	MVSI 15/550E-S02	20	19.0	14.2	1214	1302	45.5	40.7	T3	120°C	300	320	0.27	0.31	0.57	0.52	18	3.33
										T4		285	270	0.24	0.27	0.52	0.46	16	3.63
6E1408	MVSI 18-1690E-S02	MVSI 15/700E-S02	30	24.9	18.2	1584	1672	57.6	53.9	T3	120°C	460	500	0.42	0.51	0.86	0.85	17	3.5
										T4		360	420	0.32	0.42	0.72	0.70	12	4.2
6E1524	MVSI 18-2150E-S02	MVSI 15/1100E-S02	35	36.1	23.6	2299	2160	71.5	67.1	T4	120°C	370	450	0.38	0.46	0.81	0.83	13	4
6E1217	MVSI 18-3190E-S02	MVSI 15/1410E-S02	40	48.8	34.8	3109	3188	90.6	82.5	T3	120°C	900	950	0.88	0.98	1.38	1.32	13	4
										T4		630	700	0.62	0.68	1.05	1.00	8	5.36
6E1219	MVSI 18-3870E-S02	MVSI 15/1710E-S02	50	62.2	42.2	3956	3865	105	93.5	T3	120°C	1100	1150	0.98	1.07	1.90	1.82	9	4.95
										T4		630	700	0.64	0.71	1.33	1.27	5.5	7
6E1267	MVSI 18-4500E-S02	MVSI 15/2000E-S02	50	71.0	48.8	4519	4473	111	97.9	T3	150°C	1100	1150	0.98	1.07	1.90	1.82	9	4.95
										T4		630	700	0.64	0.71	1.33	1.27	5.5	7
6E1220	MVSI 18-5380E-S08	MVSI 15/2410E-S08	60	83.6	58.6	5324	5377	154	140	T3	150°C	1600	1700	1.80	1.97	3.04	3.20	7	6
										T4		1150	1250	1.18	1.30	2.47	2.30	5.5	7.5
6E1268	MVSI 18-6850E-S08	MVSI 15/3000E-S08	60	107	74.6	6833	6835	176	156	T3	150°C	1280	1150	1.34	1.61	3.14	3.10	5.5	7.42
										T4		1150	1400	1.21	1.45	2.85	2.85	5.5	8.16
6E1221	MVSI 18-8300E-S02	MVSI 15/3810E-S02	70	133	89.9	8448	8237	262	242	T3	135°C	2200	2400	2.39	2.63	3.71	3.50	6	7.17
										T4		1850	1950	2.01	2.21	3.14	3.00	6	8.42
6E1269	MVSI 18-9420E-S02	MVSI 15/4300E-S02	70	150	102	9517	9350	271	257	T3	135°C	2200	2400	2.39	2.63	3.71	3.50	6	7.17
										T4		1850	1950	2.01	2.21	3.14	3.00	6	8.42
6E1211	MVSI 18-10900E-S02	MVSI 15/5010E-S02	80	173	119	11015	10804	354	337	T3	135°C	3200	3700	3.43	3.75	5.70	5.45	6	7
6E1447	MVSI 18-13400E-S02	MVSI 15/6000E-S02	80	195	146	12439	13365	361	341	T3	135°C	3200	3700	3.43	3.75	5.70	4.45	6	7
6E1204	MVSI 18-19700E-S02	MVSI 15/9500E-S02	97	291	214	18515	19615	673	642	T3	135°C	7300	7900	7.94	8.71	11.60	11.0	5.5	7

* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	Cable entry thread
MVSI 18-480E-S02	A	11.85	6.73	5.98	3.54	4.92	0.51	4	1.10	2.87	3.03	5.00	5.04	5.55	M20x1.5
MVSI 18-920E-S02	A	13.54	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	3.66	5.71	5.75	6.30	M25x1.5
MVSI 18-1310E-S02	A	15.20	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	4.49	5.71	5.75	6.30	M25x1.5
MVSI 18-1690E-S02	A	15.51	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	4.17	6.69	6.85	7.17	M25x1.5
MVSI 18-2150E-S02	A	17.13	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	4.63	7.36	6.38	7.99	M25x1.5
MVSI 18-3190E-S02	A	17.64	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	4.25	8.15	7.48	8.86	M25x1.5
MVSI 18-3870E-S02	A	19.69	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	5.28	8.15	7.48	8.86	M25x1.5
MVSI 18-4500E-S02	A	22.60(50Hz) 19.69(60Hz)	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	6.73(50Hz) 5.28(60Hz)	8.15	7.48	8.86	M25x1.5
MVSI 18-5380E-S08	A	21.14	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	5.39	9.37	8.27	9.96	M25x1.5
MVSI 18-6850E-S08	A	24.29	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	6.97	9.37	8.27	9.96	M25x1.5
MVSI 18-8300E-S02	A	22.99	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	5.39	10.91	8.46	11.61	M25x1.5
MVSI 18-9420E-S02	A	26.22(50Hz) 22.99(60Hz)	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.01(50Hz) 5.39(60Hz)	10.91	8.46	11.61	M25x1.5
MVSI 18-10900E-S02	A	24.80	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	5.91	11.93	9.45	12.60	M32x1.5
MVSI 18-13400E-S02	A	24.80	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	5.91	11.93	9.45	12.60	M32x1.5
MVSI 18-19700E-S02	C	33.94	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	9.06	15.24	12.60	16.30	M32x1.5

tE (s) = set time tE from IEC/EN 60079-7. Ia/In = ratio between start-up current and maximum current. Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.

6 poles - 1,000/1,200 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS									
Code	Type	Type (EU)	SIZE	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Temp. class (G)	Temp. class (D)	Power Input W		Power Output HP		Max. current A		tE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz		
6E2298	MVSI 12-580E-S02	MVSI 10/200E-S02	20	14.2	14.2	403	581	39.8	39.8	T4	120°C	185	200	0.13	0.15	0.48	0.45	25	2.72
6E2314	MVSI 12-760E-S02	MVSI 10/310E-S02	30	24.9	18.2	706	744	56.5	52.8	T4	120°C	320	350	0.27	0.30	0.67	0.65	25	2.81
6E2402	MVSI 12-1630E-S02	MVSI 10/550E-S02	35	39.7	39.7	1126	1621	71.7	71.7	T4	120°C	350	380	0.32	0.35	0.71	0.68	26	2.4
6E2380	MVSI 12-1990E-S08	MVSI 10/810E-S08	40	62.9	48.8	1780	1991	96.8	88.0	T3	135°C	680	730	0.60	0.66	1.33	1.27	25	2.78
6E2381	MVSI 12-2540E-S08	MVSI 10/1110E-S08	50	88.0	62.2	2490	2532	123	107	T3	135°C	750	690	0.74	0.74	1.57	1.36	19	3.33
										T4	135°C	480	500	0.40	0.40	1.24	1.00	13	4.23
6E2382	MVSI 12-3110E-S08	MVSI 10/1400E-S08	50	111	80.1	3133	3263	139	122	T3	135°C	750	690	0.74	0.74	1.57	1.36	19	3.33
6E2406	MVSI 12-3410E-S08	MVSI 10/1610E-S08	60	127	83.6	3604	3408	176	154	T3	135°C	1100	1200	1.11	1.21	2.09	2.00	15	3.63
										T4	135°C	850	950	0.82	0.90	1.81	1.70	10	4.73
6E2407	MVSI 12-4700E-S08	MVSI 10/2100E-S08	60	168	115	4739	4624	202	180	T3	135°C	1500	1700	1.26	1.37	2.85	2.75	9	4.50
6E2167	MVSI 12-6050E-S02	MVSI 10/2610E-S02	70	202	150	5722	6043	286	255	T3	135°C	1960	2100	2.12	2.28	3.9	3.7	8	5.31
										T4	135°C	1770	1900	1.81	1.97	3.71	3.60	5	5.56
6E2230	MVSI 12-6600E-S02	MVSI 10/3000E-S02	70	234	169	6615	6873	319	286	T3	135°C	2200	2400	2.18	2.37	4.28	4.30	8	4.82
6E2154	MVSI 12-8450E-S02	MVSI 10/3810E-S02	80	298	207	8417	8428	414	374	T3	135°C	2200	2700	2.11	2.32	4.85	4.60	7	5.88
										T4	135°C	2000	2200	2.01	2.21	4.28	4.00	6	6.66
6E2204	MVSI 12-10400E-S02	MVSI 10/4700E-S02	80	366	251	10342	10226	449	403	T3	135°C	3100	3500	3.35	3.71	6.18	6.00	10	5.23
6E2350	MVSI 12-11400E-S02	MVSI 10/5150E-S02	80	407	281	11506	11440	495	440	T3	135°C	3100	3500	3.35	3.71	6.18	6.00	10	5.23
										T4	135°C	2550	3000	2.81	3.07	5.42	5.20	6	5.96
6E2138	MVSI 12-11700E-S02	MVSI 10/5200E-S02	90	405	286	11458	11645	524	473	T3	135°C	3500	3650	3.47	3.62	6.65	6.1	10	4.64
6E2351	MVSI 12-12300E-S02	MVSI 10/5700E-S02	90	439	302	12430	12320	528	484	T3	135°C	3500	3650	3.47	3.62	6.65	6.1	10	4.64
6E2136	MVSI 12-14500E-S02	MVSI 10/6600E-S02	97	529	346	14958	14091	678	616	T3	135°C	4200	4800	4.50	4.76	7.6	7	5.3	6.67
6E2137	MVSI 12-20100E-S02	MVSI 10/10000E-S02	97	754	492	21329	20057	818	730	T3	135°C	5400	5900	6.03	6.43	9.98	9.1	7	6
6E2349	MVSI 12-24400E-S02	MVSI 10/11200E-S02	97	868	600	24552	24420	876	788	T3	135°C	5400	5900	6.03	6.43	9.98	9.1	7	6

* Working moment = 2 x static moment.

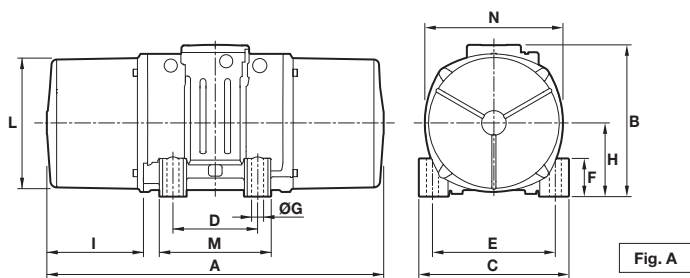


Fig. A

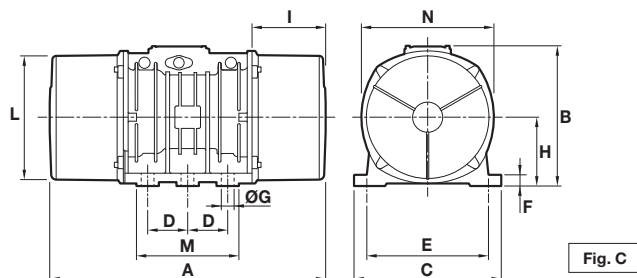


Fig. C

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	Cable entry thread
MVSI 12-580E-S02	A	13.54	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	3.66	5.71	5.51	6.30	M25x1.5
MVSI 12-760E-S02	A	15.51	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	4.17	6.69	6.85	7.17	M25x1.5
MVSI 12-1630E-S02	A	17.13	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	4.63	7.36	6.38	7.99	M25x1.5
MVSI 12-1990E-S08	A	19.69(50Hz) 17.64(60Hz)	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	5.28(50Hz) 4.25(60Hz)	8.15	7.48	8.86	M25x1.5
MVSI 12-2540E-S08	A	22.60	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	6.73	8.15	7.48	8.86	M25x1.5
MVSI 12-3110E-S08	A	24.41(50Hz) 22.60(60Hz)	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	7.64(50Hz) 6.73(60Hz)	8.15	7.48	8.86	M25x1.5
MVSI 12-3410E-S08	A	24.29(50Hz) 21.14(60Hz)	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	6.97(50Hz) 5.39(60Hz)	9.37	8.27	9.96	M25x1.5
MVSI 12-4700E-S08	A	26.10(50Hz) 24.29(60Hz)	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	7.87(50Hz) 6.97(60Hz)	9.37	8.27	9.96	M25x1.5
MVSI 12-6050E-S02	A	26.22	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.01	10.91	8.46	11.61	M25x1.5
MVSI 12-6600E-S02	A	28.03	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.91	10.91	8.46	11.61	M25x1.5
MVSI 12-8450E-S02	A	28.90	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	7.87	11.93	9.45	12.60	M32x1.5
MVSI 12-10400E-S02	A	31.34	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	9.17	11.93	9.45	12.60	M32x1.5
MVSI 12-11400E-S02	A	32.52	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	9.76	11.93	9.45	12.60	M32x1.5
MVSI 12-11700E-S02	A	29.29	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	7.56	12.99	10.63	13.78	M32x1.5
MVSI 12-12300E-S02	A	33.07	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	M32x1.5
MVSI 12-14500E-S02	C	29.53	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	6.85	15.24	12.60	16.30	M32x1.5
MVSI 12-20100E-S02	C	33.94	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	9.06	15.24	12.60	16.30	M32x1.5
MVSI 12-24400E-S02	C	35.91	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	10.04	15.24	12.60	16.30	M32x1.5

tE (s) = set time tE from IEC/EN 60079-7. Ia/In = ratio between start-up current and maximum current. Several sizes are available with different mounting bolt patterns. Please contact sales office at Italtibras.

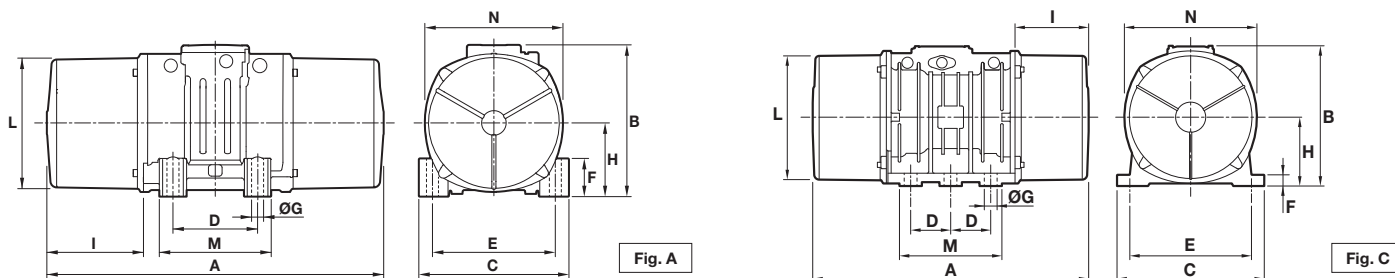


8 poles - 750/900 rpm

Three-phase

DESCRIPTION			MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS										
Code	Type	Type (EU)	SIZE	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Temp. class (G)	Temp. class (D)	Power Input W		Power Output HP		Max. current A		tE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			50Hz	60Hz	50Hz	60Hz	50Hz	460V 60Hz		
6E2568	MVSI 9-340E-S02	MVSI 075/150E-S02	20	14.2	14.2	229	328	39.8	39.8	T3	130°C	230	250	0.13	0.15	0.67	0.64	25	2.00
6E2575	MVSI 9-590E-S02	MVSI 075/250E-S02	30	24.9	24.9	398	572	57.6	57.6	T3	130°C	350	350	0.25	0.27	0.86	0.80	25	2.47
6E2615	MVSI 9-910E-S02	MVSI 075/400E-S02	35	39.7	39.7	634	913	71.7	71.7	T4	120°C	280	300	0.18	0.20	0.57	0.56	30	1.66
6E2609	MVSI 9-1440E-S08	MVSI 075/660E-S08	40	62.9	62.9	1003	1443	96.8	96.8	T3	120°C	500	525	0.37	0.40	1.14	1.10	30	2.15
6E2610	MVSI 9-2030E-S08	MVSI 075/910E-S08	50	88.0	88.0	1401	2017	123	123	T3 T4	120°C	600 450	670 500	0.45 0.30	0.51 0.34	1.33 1.14	1.30 1.10	30 25	2.14 2.50
6E2618	MVSI 9-2920E-S08	MVSI 075/1310E-S08	60	127	127	2028	2919	176	176	T3	150°C	950	1100	0.87	0.99	2.09	2.10	30	2.63
6E2891	MVSI 9-4640E-S02	MVSI 075/2110E-S02	70	202	202	3219	4635	286	286	T3	135°C	1500	1650	1.43	1.64	3.61	3.60	15	4.18
6E2884	MVSI 9-6830E-S02	MVSI 075/3110E-S02	80	297	297	4734	6818	414	414	T3	135°C	2000	2200	1.96	2.14	5.13	5.00	13	3.96
6E2515	MVSI 9-8400E-S02	MVSI 075/3800E-S02	80	366	366	5819	8378	449	449	T3	135°C	2500	3000	2.41	2.81	5.70	6.00	14	4.00
6E2862	MVSI 9-9310E-S02	MVSI 075/4200E-S02	90	405	405	6446	9280	524	524	T3	135°C	2630	2990	2.55	2.92	6.18	6.20	14	3.84
6E2826	MVSI 9-11700E-S02	MVSI 075/5300E-S02	90	508	508	8078	11631	590	590	T3	135°C	3520	3800	3.44	3.72	7.79	7.40	14	3.80
6E2870	MVSI 9-21900E-S02	MVSI 075/10000E-S02	97	1077	954	17142	21861	964	922	T3	135°C	5100	5800	5.49	6.03	11.40	11.00	17	3.50

* Working moment = 2 x static moment.



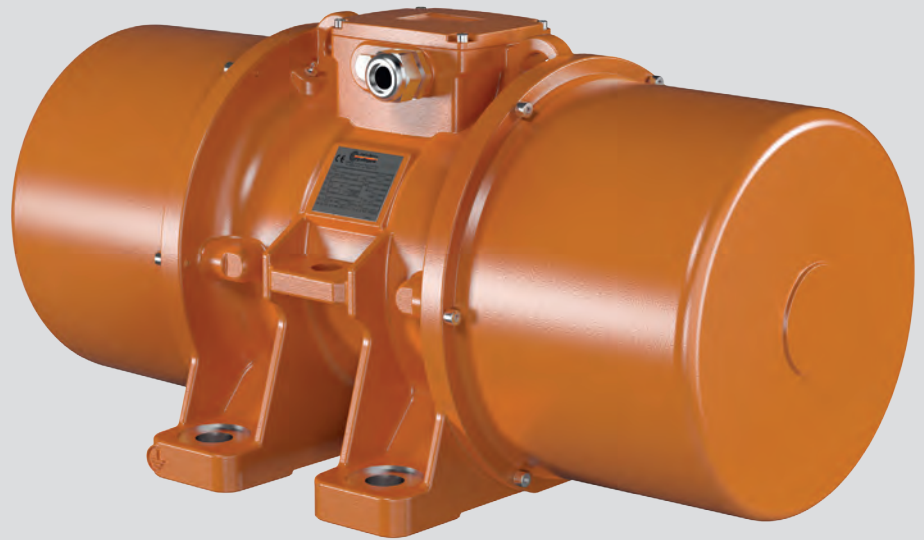
DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	Cable entry thread
MVSI 9-340E-S2	A	13.54	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	3.66	5.71	5.75	6.30	M25x1.5
MVSI 9-590E-S02	A	15.51	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	4.17	6.69	6.85	7.17	M25x1.5
MVSI 9-910E-S02	A	17.13	8.82	8.07	4.72	6.69	0.67	4	1.65	4.11	4.63	7.36	6.38	7.99	M25x1.5
MVSI 9-1440E-S08	A	19.69	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	5.28	8.15	7.48	8.86	M25x1.5
MVSI 9-2030E-S08	A	22.60	9.61	9.06	5.51	7.48	0.67	4	1.77	4.57	6.73	8.15	7.48	8.86	M25x1.5
MVSI 9-2920E-S08	A	24.29	10.71	10.83	6.10	8.86	0.87	4	2.76	5.12	6.97	9.37	8.27	9.96	M25x1.5
MVSI 9-4640E-S02	A	26.22	12.64	12.20	6.10	10.04	0.93	4	3.03	6.18	7.01	10.91	8.46	11.61	M25x1.5
MVSI 9-6830E-S02	A	28.90	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	7.95	11.93	9.45	12.60	M32x1.5
MVSI 9-8400E-S02	A	31.34	13.66	13.39	7.09	11.02	1.02	4	3.15	6.50	9.17	11.93	9.45	12.60	M32x1.5
MVSI 9-9310E-S02	A	29.29	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	7.56	12.99	10.63	13.78	M32x1.5
MVSI 9-11700E-S02	A	33.07	14.57	15.35	7.87	12.60	1.10	4	3.54	7.09	9.45	12.99	10.63	13.78	M32x1.5
MVSI 9-21900E-S02	C	39.45	17.20	18.11	4.92	14.96	1.54	6	1.38	8.46	11.81	15.24	12.60	16.30	M32x1.5

tE (s) = set time tE from IEC/EN 60079-7. Ia/In = ratio between start-up current and maximum current.
Several sizes are available with different mounting bolt patterns. Please contact sales office at Italtibras.

■ MVLS



Technical features

Power supply

Three phase tension from 200V to 690V at 50Hz or 60Hz; variable frequency from 20Hz to the nameplate frequency, at constant torque, with frequency inverter.

Polarities

8, 10 & 12 pole standard, 6 pole on request.

Reference Regulations and Directives

Low Voltage Directive 2006/95/CE;
EN/IEC 60034-1,
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 on the operating conditions. For detailed information, contact our technical assistance office.

Centrifugal force

Range extended to 20900 lbs (93.7 kN), adjustable in continuous linear mode varying the position of eccentric weights.

Mechanical protection

IP66 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.

Tropicalisation

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

Ambient temperature

From -4°F to +104°F (-20°C to +40°C); higher or lower temperatures are possible on request.

Vibrator thermal protection

With thermal detectors with thermistors PTC 266°F (130°C) as standard on the whole MVLS range. Upon request different temperatures thermistors are available, as well as bimetallic thermal protection and anti-condensation heaters.

Fixing of the vibrator

In all positions and therefore without any restriction.

Lubrication

All vibrators are correctly lubricated at the factory and do not require further lubrication at their 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 obtaining maximum torque values both at starting and when fully operational, to respond to the requirements of vibrating machines and particularly to those with dual mass for resonance systems. Insulated windings by means of the "drop by drop" trickle system with class H resin. The rotor is die cast aluminum (squirrel cage).

Casing

In spheroidal cast iron.

Bearing flange

Carried out in spheroidal graphite cast iron or lamellar graphite cast iron. Relevant design was studied to convey the load to the casing in a uniform way.

Bearings

Custom made with special profile especially designed for Italtvibras, suitable to withstand both high radial and axial loads.

Motor shaft

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

Eccentric weights

They allow adjustment of the centrifugal force. It is achieved by means of a graduated scale expressing it as a percentage of the maximum centrifugal force.

The MVLS range is therefore highly specified for dual mass resonance vibrating machines as well as traditional brute force vibrating machines.

The range offers different values of centrifugal force at different speeds up to 17900 lbs (80kN).

Weight covers

Standard in aluminum alloy.

Painting/Coating

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

For further details please contact Italtibras Technical Assistance.

Technical features and models mentioned in this catalogue are indicative and not binding. Italtibras reserves the right to modify them without any obligation.

Certifications



In conformity with the applicable European Community Directives.



CAN/CSA Rules - C22.2, N° 100-95, Certificate N° LR 100948 Class 4211 01 - Motors and generators UL1004-1 Rotational electric machines - General requirements Class II Div. 2, Groups FG (T3B)



MVLS-C version
Class I Div.2, Groups ABCD
CAN/CSA Rules - C22.2



Certification for the European-Asiatic Customs Union
N° TC N RU Д-IT.АЛ33.В.02527

8 poles - 750/900 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE	SP	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602531	MVLS 9-3320	MVLS 075/1500-S90	184	•	144	2295	3305	299		0.85	1.0	3.00	3.10	6.40	5.50	
602532	MVLS 9-5150	MVLS 075/2300-S90	215	•	224	3565	5133	396		1.7	2.0	5.10	5.10	4.10	4.30	
602533	MVLS 9-6890	MVLS 075/3000-S90	256	□	300	4775	6876	473		4.2	5.0	7.30	7.50	5.50	6.1	
602534	MVLS 9-9330	MVLS 075/4200-S90	256	□	406	6460	9303	506		6.3	7.5	12.20	12.00	5.70	6.20	
602536	MVLS 9-16600	MVLS 075/7500-S90	286	□	723	11496	16554	1023		8.3	10.0	13.40	14.30	8.90	9.00	

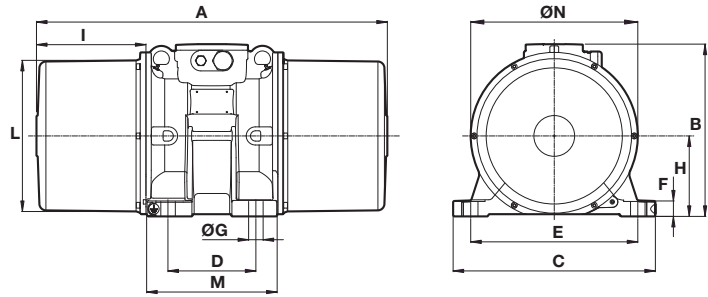
10 poles - 600/720 rpm

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE	SP	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602965	MVLS 7-1700	MVLS 06/800-S90	184	•	116	1180	1699	312		0.90	1.0	3.40	3.40	5.10	4.40	
602958	MVLS 7-3330	MVLS 06/1500-S90	184	•	226	2297	3308	334		0.90	1.0	3.40	3.40	5.10	4.40	
602966	MVLS 7-3290	MVLS 06/1490-S90	215	•	224	2282	3285	396		1.7	2.0	4.60	4.60	4.10	3.50	
602953	MVLS 7-5110	MVLS 06/2300-S90	215	•	348	3543	5102	427		1.7	2.0	4.60	4.60	4.10	3.50	
602968	MVLS 7-4400	MVLS 06/2000-S90	256	□	300	3054	4398	484		2.5	3.0	5.80	6.10	8.20	6.70	
602967	MVLS 7-6600	MVLS 06/2700-S90	256	□	406	4135	5954	506		2.6	3.0	6.80	8.40	10.3	7.30	
602959	MVLS 7-5940	MVLS 06/3000-S90	256	□	448	4567	6576	484		4.3	5.0	6.00	6.10	6.40	6.70	
602952	MVLS 7-9400	MVLS 06/4200-S90	256	□	643	6544	9423	653		4.3	5.0	8.60	8.40	7.00	7.30	
602946	MVLS 7-14700	MVLS 06/6600-S90	286	□	998	10159	14629	946		6.4	7.5	11.2	11.2	5.80	6.10	
602960	MVLS 7-18000	MVLS 06/8100-S90	286	□	1223	12456	17937	1067		8.3	10.0	13.3	14.0	7.00	5.70	
602987	MVLS 7-20000	MVLS 06/9500-S90	286	□	1434	14604	-	1137		9.2	-	15.0	-	7.50	-	

12 poles - 500/600 rpm

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE	SP	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602957	MVLS 6-2150	MVLS 05/1000-S90	184	•	210	1487	2141	319		0.70	0.80	3.70	3.80	3.30	3.30	
602949	MVLS 6-3310	MVLS 05/1500-S90	215	•	324	2292	3301	407		0.90	1.0	4.20	4.30	4.10	3.40	
602950	MVLS 6-5100	MVLS 05/2300-S90	256	□	499	3531	5085	495		1.7	2.0	6.40	6.50	3.80	3.90	
602951	MVLS 6-6600	MVLS 05/3000-S90	256	□	643	4544	6544	638		2.6	3.0	7.60	7.50	7.90	8.10	
602947	MVLS 6-9150	MVLS 05/4200-S90	286	□	898	6352	9147	878		4.3	5.0	8.30	8.60	6.60	6.90	
602948	MVLS 6-14600	MVLS 05/6600-S90	286	□	1434	10141	14604	1129		6.5	7.5	12.3	12.0	5.70	6.30	

* Working moment = 2 x static moment. □ CSA certification on request, with feeding line included.



DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	A	B	C	D	E	ØG	N°	F	H	I	L	M	ØN	Cable entry thread
MVLS 9-3320	25.98	12.44	13.39	6.30	11.02	1.02	4	0.98	5.91	8.27	10.75	9.29	12.44	M25x1.5
MVLS 9-5150	23.78	13.82	15.35	7.87	12.60	1.10	4	1.18	6.38	5.98	11.93	11.57	13.39	M32x1.5
MVLS 9-6890	31.42	15.91	18.11	7.87	14.96	1.30	4	1.38	7.20	9.80	13.54	11.57	14.96	M32x1.5
MVLS 9-9330	31.42	15.91	18.11	7.87	14.96	1.30	4	1.38	7.20	9.80	13.54	11.57	14.96	M32x1.5
MVLS 9-16600	35.12	19.80	20.79	7.87	17.32	1.30	4	1.38	9.37	11.10	16.85	12.13	18.11	M32x1.5

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	A	B	C	D	E	ØG	N°	F	H	I	L	M	ØN	Cable entry thread
MVLS 7-1700	25.98	12.44	13.39	6.30	11.02	1.02	4	0.98	5.91	8.27	10.75	9.29	12.44	M25x1.5
MVLS 7-3330	25.98	12.44	13.39	6.30	11.02	1.02	4	0.98	5.91	8.27	10.75	9.29	12.44	M25x1.5
MVLS 7-3290	27.95	13.82	15.35	7.87	12.60	1.10	4	1.18	6.38	8.07	11.93	11.57	13.39	M32x1.5
MVLS 7-5110	27.95	13.82	15.35	7.87	12.60	1.10	4	1.18	6.38	8.07	11.93	11.57	13.39	M32x1.5
MVLS 7-4400	31.42	15.91	18.11	7.87	14.96	1.30	4	1.38	7.20	9.80	13.54	11.57	14.96	M32x1.5
MVLS 7-6600	31.42	15.91	18.11	7.87	14.96	1.30	4	1.38	7.20	9.80	13.54	11.57	14.96	M32x1.5
MVLS 7-5940	31.42	15.91	18.11	7.87	14.96	1.30	4	1.38	7.20	9.80	13.54	11.57	14.96	M32x1.5
MVLS 7-9400	31.42	15.91	18.11	7.87	14.96	1.30	4	1.38	7.20	9.80	13.54	11.57	14.96	M32x1.5
MVLS 7-14700	35.12	19.80	20.79	7.87	17.32	1.30	4	1.38	9.37	11.10	16.85	12.13	18.11	M32x1.5
MVLS 7-18000	35.12	19.80	20.79	7.87	17.32	1.30	4	1.38	9.37	11.10	16.85	12.13	18.11	M32x1.5
MVLS 7-20000	35.12	19.80	20.79	7.87	17.32	1.30	4	1.38	9.37	11.10	16.85	12.13	18.11	M32x1.5

DIMENSIONAL SPECIFICATIONS (inches)

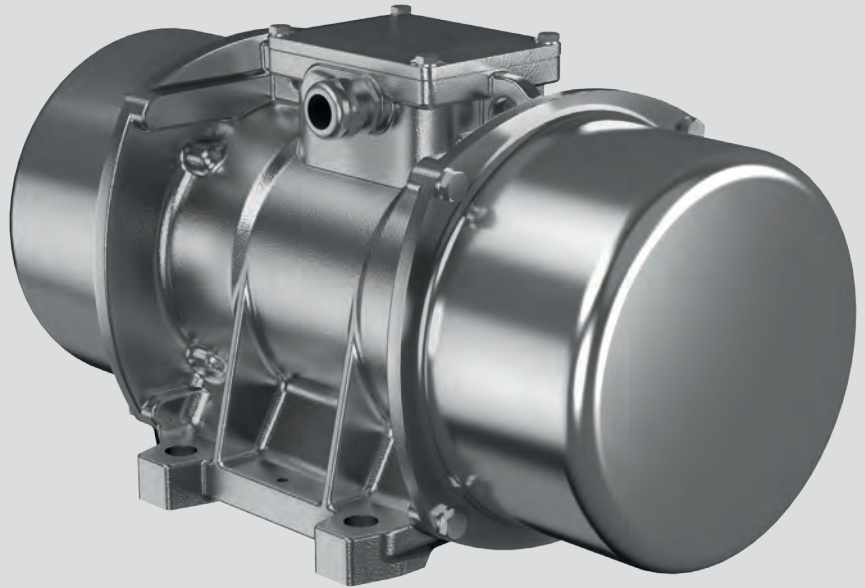
Holes

Type	A	B	C	D	E	ØG	N°	F	H	I	L	M	ØN	Cable entry thread
MVLS 6-2150	25.98	12.44	13.39	6.30	11.02	1.02	4	0.98	5.91	8.27	10.75	9.29	12.44	M25x1.5
MVLS 6-3310	27.95	13.82	15.35	7.87	12.60	1.10	4	1.18	6.38	8.07	11.93	11.57	13.39	M32x1.5
MVLS 6-5100	31.42	15.91	18.11	7.87	14.96	1.30	4	1.38	7.20	9.80	13.54	11.57	14.96	M32x1.5
MVLS 6-6600	31.42	15.91	18.11	7.87	14.96	1.30	4	1.38	7.20	9.80	13.54	11.57	14.96	M32x1.5
MVLS 6-9150	28.27	19.80	20.79	7.87	17.32	1.30	4	1.38	9.37	11.10	16.85	12.13	18.11	M32x1.5
MVLS 6-14600	35.12	19.80	20.79	7.87	17.32	1.30	4	1.38	9.37	12.05	16.85	12.13	18.11	M32x1.5

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



■ MVSS



Technical features

Power supply

Three-phase voltage from 24V to 690V, 50Hz or 60Hz or single-phase 100-130V, 60Hz and 200-240V, 50Hz (single-phase types are supplied without capacitor); suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

2, 4, 6 and 8 poles.

Conformity with Standards and Regulations

MVSS - Low Voltage Directive 2006/95/EC; EN/IEC 60034-1; UL 1004-1, CSA C22.2 No.100, NEMA MG-1.
MVSS-P - 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 9500 lbs (42.4 kN), with centrifugal force adjustable from 0 to 100%.

Mechanical protection

IP 66 according to IEC/EN 60529.

Insulation class

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

Tropicalization

Standard on all vibrators, with vacuum encapsulation up to size 35, with "drop by drop" trickle system for larger sizes.

Ambient temperature

From -4°F to 104°F (-20°C to +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) on size 70, on request for smaller sizes. For MVSS-P series PTC 266°F (130°C) are standard for all types. 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 fixed electrical connections, with terminal cover in stainless steel AISI 304. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

Electric motor

Three-phase and single-phase asynchronous type. Designed for maximum starting torques and torque curves specific to vibrating machines. Insulated windings using vacuum encapsulating up to size 35; using the "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminium.

Casing

In stainless steel AISI 304, ball burnishing surface treated to make the surface more hydrophobic.

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

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 Italtibras.

The MVSS stainless steel series vibrators are characterized by their total protection from liquids, dusts, aggressive agents and contaminants, thanks to the AISI 304 stainless steel casing and external components.

It is therefore suitable for use in all food, chemical, pharmaceutical and others environments where the outer surface can be subject to corrosion by atmospheric or chemical / bacterial agents.

Line MVSS-P is available for potentially explosive dust atmospheres in conformity with ATEX Directive 2014/34/UE.

Category: II2D

Level of protection:

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

Temperature class:

See table

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 continual 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 stainless steel AISI 304 with thickness measuring 1.2 to 1.5mm, to unite mechanical resistance to the guaranteed protection of stainless steel.

Surface treatment

Ball burnishing surface treatment to obtain a low roughness, hydrophobic, bright and uniform external surface.

Other features

Identification plate in AISI 316L stainless steel.

For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

Certifications MVSS



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
Class II Div.2, Groups FG (T3B)



Certification for Eurasian Customs Union
N° TC N RU Д-IT.АЛ33.В.02527

Certifications MVSS-P



Compliance with the applicable European Union directives.



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



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

2 poles - 3,000/3,600 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE	SF [®]	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600328	MVSS 36-380	MVSS 3/100-S02	00	•	1.05	1.05	268	386	17.2	17.2	0.18	0.18	0.35	0.30	2.68	3.00
600329	MVSS 36-480	MVSS 3/200-S02	01	•	1.76	1.41	447	515	18.0	17.6	0.18	0.18	0.35	0.30	2.68	3.00
600330	MVSS 36-660	MVSS 3/300-S02	10	•	2.61	1.96	664	717	27.5	26.4	0.24	0.26	0.60	0.50	3.47	4.20
600331	MVSS 36-1050	MVSS 3/500-S02	20	•	5.04	3.03	1284	1109	40.7	38.5	0.44	0.53	0.80	0.75	4.21	4.80
600515	MVSS 36-1660	MVSS 3/800-S08	30	•	6.48	4.86	1649	1782	55.0	52.8	0.67	0.70	1.10	1.00	3.83	6.00
600333	MVSS 36-2530	MVSS 3/1100-S02	35	•	9.56	6.35	2431	2334	66.0	63.8	1.1	1.2	1.75	1.75	3.63	4.00
600334	MVSS 36-3280	MVSS 3/1510-S02	40	•	13.3	8.87	3399	3263	87.1	83.6	1.5	1.9	2.30	2.00	4.95	6.12
600335	MVSS 36-4100	MVSS 3/2010-S02	50	•	17.8	11.1	4530	4077	107	102	2.2	2.2	3.50	3.00	4.62	6.00

Single-phase

Code	Type	Type (EU)	SIZE	SF [®]	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600328	MVSS 36-380	MVSS 3/100-S02	00	•	1.05	1.05	268	386	17.2	17.2	0.15	0.15	0.75	1.52	1.67	2.24
600329	MVSS 36-480	MVSS 3/200-S02	01	•	1.76	1.41	447	515	18.0	17.6	0.15	0.15	0.75	1.52	1.67	2.24
600330	MVSS 36-660	MVSS 3/300-S02	10	•	2.61	1.96	664	717	27.5	26.4	0.24	0.27	1.25	2.40	2.48	3.52
600331	MVSS 36-1050	MVSS 3/500-S02	20	•	5.04	3.03	1284	1109	40.7	38.5	0.46	0.48	2.30	4.50	3.35	4.22
600515	MVSS 36-1660	MVSS 3/800-S08	30	•	6.48	4.86	1649	1782	55.0	52.8	0.60	0.70	3.25	7.00	4.00	4.14

* Working moment = 2 x static moment.

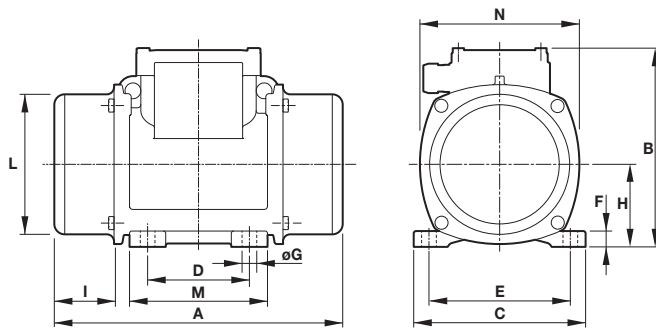


Fig. W

DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	Holes											Capacitor (µF)		Cable entry thread		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N		220V 50Hz	115V 60Hz
MVSS 36-380	W	8.23	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	1.77	3.94	3.94	4.61	-	-	M20x1.5
MVSS 36-480	W	8.86	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	2.09	3.94	3.94	4.61	-	-	M20x1.5
MVSS 36-660	W	10.04	6.93	5.98	3.54	4.92	0.51	4	0.55	2.87	2.13	4.88	4.80	5.55	-	-	M20x1.5
MVSS 36-1050	W	11.18	7.87	6.57	4.13	5.51	0.51	4	0.59	3.25	2.48	5.63	5.39	6.30	-	-	M25x1.5
MVSS 36-1660	W	12.13	8.07	8.07	4.72	6.69	0.67	4	0.67	3.68	2.48	6.61	6.22	7.17	-	-	M25x1.5
MVSS 36-2530	W	13.94	9.13	8.07	4.72	6.69	0.67	4	0.79	4.11	3.03	7.13	6.38	7.99	-	-	M25x1.5
MVSS 36-3280	W	17.24	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	4.06	7.91	7.09	8.86	-	-	M25x1.5
MVSS 36-4100	W	17.24	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	4.06	7.91	7.09	8.86	-	-	M25x1.5

Type	Fig.	Holes											Capacitor (µF)		Cable entry thread		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N		220V 50Hz	115V 60Hz
MVSS 36-380	W	8.23	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	1.77	3.94	3.94	4.61	10	28	M20x1.5
MVSS 36-480	W	8.86	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	2.09	3.94	3.94	4.61	10	35	M20x1.5
MVSS 36-660	W	10.04	6.93	5.98	3.54	4.92	0.51	4	0.55	2.87	2.13	4.88	4.80	5.55	16	25	M20x1.5
MVSS 36-1050	W	11.18	7.87	6.57	4.13	5.51	0.51	4	0.59	3.25	2.48	5.63	5.39	6.30	12.5	50	M25x1.5
MVSS 36-1660	W	12.13	8.07	8.07	4.72	6.69	0.67	4	0.67	3.68	2.48	6.61	6.22	7.17	25	90	M25x1.5

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



4 poles - 1,500/1,800 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In		
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz
601342	MVSS 18-100	MVSS 15/35-S02	00	•	1.05	1.05	67.1	96.6	17.2	17.2	0.05	0.06	0.21	0.20	1.78	1.95
601343	MVSS 18-180	MVSS 15/80-S02	01	•	2.81	1.76	179	161	19.8	19.1	0.05	0.06	0.21	0.20	1.78	1.95
601365	MVSS 18-250	MVSS 15/100-S02	01	•	3.30	2.81	210	257	20.7	19.8	0.05	0.06	0.21	0.20	1.78	1.95
601344	MVSS 18-480	MVSS 15/200-S02	10	•	7.32	5.11	469	471	34.8	33.0	0.13	0.13	0.41	0.40	2.34	2.75
601345	MVSS 18-920	MVSS 15/400-S02	20	•	14.2	9.83	906	904	49.5	47.7	0.29	0.37	0.60	0.60	3.33	3.50
601346	MVSS 18-1310	MVSS 15/550-S02	20	•	19.0	14.2	1214	1302	52.6	49.5	0.29	0.37	0.60	0.60	3.33	3.50
601526	MVSS 18-1670	MVSS 15/700-S08	30	•	24.9	18.2	1584	1672	70.4	67.5	0.50	0.70	0.92	0.98	3.48	4.43
601348	MVSS 18-2150	MVSS 15/1100-S02	35	•	36.1	23.6	2299	2160	92.4	82.5	0.50	0.70	0.95	0.95	4.45	4.89
601349	MVSS 18-3190	MVSS 15/1410-S02	40	•	48.8	34.8	3109	3188	117	110	1.0	1.2	1.45	1.50	4.10	4.20
601350	MVSS 18-3870	MVSS 15/1710-S02	50	•	62.2	42.2	3956	3865	129	120	1.1	1.2	2.00	1.90	4.29	4.89
601351	MVSS 18-4500	MVSS 15/2000-S02	50	•	71.0	48.8	4519	4473	154	150	1.3	1.5	2.50	2.30	4.30	4.90
601352	MVSS 18-5380	MVSS 15/2410-S02	60	•	83.6	58.6	5324	5377	180	167	1.8	1.9	3.20	3.00	6.09	7.23
601353	MVSS 18-6850	MVSS 15/3000-S02	60	•	107	74.6	6833	6835	202	196	2.0	2.2	3.80	3.50	6.50	7.50
601354	MVSS 18-8300	MVSS 15/3810-S02	70	•	133	89.9	8448	8237	253	242	2.4	2.8	3.90	3.90	7.11	6.92
601363	MVSS 18-9420	MVSS 15/4300-S02	70	•	150	102	9517	9350	268	257	2.7	3.3	4.80	4.65	5.90	7.10

Single-phase

Code	Type	Type (EU)	SIZE	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A		Ia/In		
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz	
601342	MVSS 18-100	MVSS 15/35-S02	00	•	1.05	1.05	67.1	96.6	17.2	17.2	0.05	0.05	0.43	1.00	1.20	1.30
601343	MVSS 18-180	MVSS 15/80-S02	01	•	2.81	1.76	179	161	19.8	19.1	0.05	0.05	0.43	1.00	1.20	1.30
601365	MVSS 18-250	MVSS 15/100-S02	01	•	3.30	2.81	210	257	20.7	19.8	0.05	0.05	0.43	1.00	1.20	1.30
601344	MVSS 18-480	MVSS 15/200-S02	10	•	7.32	5.11	469	471	34.8	33.0	0.15	0.15	1.00	2.00	1.50	1.85
601345	MVSS 18-920	MVSS 15/400-S02	20	•	14.2	9.83	906	904	49.5	47.7	0.16	0.24	1.20	2.80	2.50	2.21
601346	MVSS 18-1310	MVSS 15/550-S02	20	•	19.0	14.2	1214	1302	52.6	49.5	0.16	0.24	1.20	2.80	2.50	2.21
601526	MVSS 18-1670	MVSS 15/700-S08	30	•	24.9	18.2	1584	1672	55.0	50.6	0.32	0.41	2.15	5.15	5.44	3.63

* Working moment = 2 x static moment.

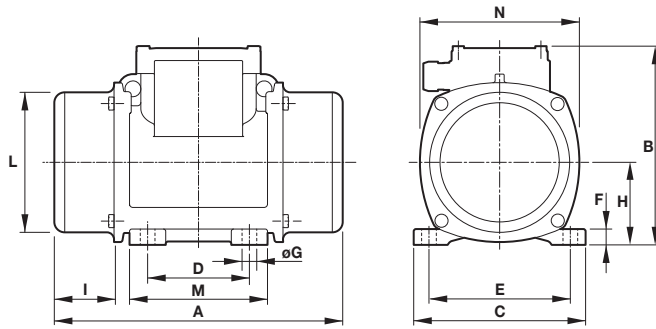


Fig. W

DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	Holes			Capacitor (µF)										Cable entry thread		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N		220V 50Hz	115V 60Hz
MVSS 18-100	W	8.23	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	1.77	3.94	3.94	4.61	-	-	M20x1.5
MVSS 18-180	W	9.49	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	2.40	3.94	3.94	4.61	-	-	M20x1.5
MVSS 18-250	W	9.49	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	2.40	3.94	3.94	4.61	-	-	M20x1.5
MVSS 18-480	W	11.61	6.93	5.98	3.54	4.92	0.51	4	0.55	2.87	2.91	4.88	4.80	5.55	-	-	M20x1.5
MVSS 18-920	W	13.39	7.87	6.57	4.13	5.51	0.51	4	0.59	3.25	3.58	5.63	5.39	6.30	-	-	M25x1.5
MVSS 18-1310	W	14.96	7.87	6.57	4.13	5.51	0.51	4	0.59	3.25	4.37	5.63	5.39	6.30	-	-	M25x1.5
MVSS 18-1670	W	15.04	8.07	8.07	4.72	6.69	0.67	4	0.67	3.68	3.94	6.61	6.22	7.17	-	-	M25x1.5
MVSS 18-2150	W	17.09	9.13	8.07	4.72	6.69	0.67	4	0.79	4.11	4.61	7.13	6.38	7.99	-	-	M25x1.5
MVSS 18-3190	W	17.40	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	4.13	7.91	7.09	8.86	-	-	M25x1.5
MVSS 18-3870	W	19.29	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	5.08	7.91	7.09	8.86	-	-	M25x1.5
MVSS 18-4500	W	22.05	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	6.46	7.91	7.09	8.86	-	-	M25x1.5
MVSS 18-5380	W	20.59	11.14	10.83	6.10	8.86	0.87	4	1.18	5.31	5.12	9.09	8.07	9.96	-	-	M25x1.5
MVSS 18-6850	W	23.66	11.14	10.83	6.10	8.86	0.87	4	1.18	5.31	6.65	9.09	8.07	9.96	-	-	M25x1.5
MVSS 18-8300	W	23.19	12.72	12.20	6.10	10.04	0.93	4	1.38	6.10	5.49	10.59	8.46	11.61	-	-	M25x1.5
MVSS 18-9420	W	23.19	12.72	12.20	6.10	10.04	0.93	4	1.38	6.10	5.49	10.59	8.46	11.61	-	-	M25x1.5

Type	Fig.	Holes			Capacitor (µF)										Cable entry thread		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N		220V 50Hz	115V 60Hz
MVSS 18-100	W	8.23	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	1.77	3.94	3.94	4.61	3.15	25	M20x1.5
MVSS 18-180	W	8.86	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	2.40	3.94	3.94	4.61	3.15	25	M20x1.5
MVSS 18-250	W	9.49	5.94	4.92	2.44-2.91**	4.17	0.35	4	0.39	2.40	2.40	3.94	3.94	4.61	3.15	25	M20x1.5
MVSS 18-480	W	11.61	6.93	5.98	3.54	4.92	0.51	4	0.55	2.87	2.91	4.88	4.80	5.55	5	25	M20x1.5
MVSS 18-920	W	13.39	7.87	6.57	4.13	5.51	0.51	4	0.59	3.25	3.58	5.63	5.39	6.30	12○ +20●	35	M25x1.5
MVSS 18-1310	W	14.96	7.87	6.57	4.13	5.51	0.51	4	0.59	3.25	4.37	5.63	5.39	6.30	12○ +20●	35○ +10●	M25x1.5
MVSS 18-1670	W	15.04	8.07	8.07	4.72	6.69	0.67	4	0.67	3.68	3.94	6.61	6.22	7.17	16○ +80●	40○ +120●	M25x1.5

la/ln = ratio between start-up current and maximum current. **Slot. ○Running capacitor / ●Additional capacitor only for start-up.
Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.

6 poles - 1,000/1,200 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE		Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
					in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	HP	400V 50Hz	460V 60Hz	50Hz
602283	MVSS 12-90	MVSS 10/40-S02	10	•	2.61	2.61	73.8	106	27.5	27.5	0.07	0.12	0.30	0.30	1.90	2.07
602284	MVSS 12-300	MVSS 10/100-S02	10	•	7.32	7.32	207	299	34.8	34.8	0.07	0.12	0.30	0.30	1.90	2.07
602285	MVSS 12-580	MVSS 10/200-S02	20	•	14.2	14.2	403	581	49.5	49.5	0.13	0.16	0.50	0.50	2.72	3.10
602405	MVSS 12-760	MVSS 10/310-S08	30	•	24.9	18.2	706	744	70.4	67.5	0.29	0.36	0.72	0.68	2.63	2.79
602417	MVSS 12-1630	MVSS 10/550-S08	35	•	39.7	39.7	1126	1621	95.7	95.7	0.32	0.36	0.75	0.68	2.53	3.68
602408	MVSS 12-1990	MVSS 10/810-S08	40	•	62.9	48.8	1780	1991	119	116	0.60	0.69	1.40	1.35	2.79	3.33
602409	MVSS 12-2530	MVSS 10/1110-S08	50	•	88.0	62.2	2490	2532	147	131	0.74	0.75	1.65	1.50	3.33	4.13
602410	MVSS 12-3100	MVSS 10/1400-S08	50	•	111	80.1	3133	3263	172	156	0.87	0.87	1.80	1.70	3.05	3.65
602411	MVSS 12-3410	MVSS 10/1610-S08	60	•	127	83.6	3604	3408	207	183	1.1	1.3	2.20	2.20	4.21	4.05
602412	MVSS 12-4700	MVSS 10/2100-S08	60	•	168	115	4739	4624	231	205	1.5	1.6	3.00	2.75	3.42	4.00
602293	MVSS 12-6050	MVSS 10/2610-S02	70	•	202	150	5722	6043	286	255	2.1	2.3	4.10	3.75	5.35	5.60
602294	MVSS 12-6600	MVSS 10/3000-S02	70	•	234	169	6615	6873	319	286	2.3	2.7	4.50	4.30	4.35	4.81

8 poles - 750/900 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS						
Code	Type	Type (EU)	SIZE		Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
					in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	HP	400V 50Hz	460V 60Hz	50Hz
602561	MVSS 9-340	MVSS 075/150-S02	20	•	14.2	14.2	229	328	49.5	49.5	0.15	0.20	0.85	0.76	2.13	2.11
602647	MVSS 9-550	MVSS 075/260-S08	35	•	23.9	23.9	383	550	75.9	75.9	0.33	0.34	0.81	0.80	2.22	2.38
602627	MVSS 9-910	MVSS 075/400-S08	35	•	39.7	39.7	634	913	90.2	90.2	0.33	0.34	0.81	0.80	2.22	2.38
602620	MVSS 9-1440	MVSS 075/660-S08	40	•	62.9	62.9	1003	1443	119	119	0.28	0.35	1.20	1.20	2.38	2.58
602621	MVSS 9-2030	MVSS 075/910-S08	50	•	88.0	88.0	1401	2017	147	147	0.29	0.40	1.40	1.30	2.38	2.85
602622	MVSS 9-2920	MVSS 075/1310-S08	60	•	127	127	2028	2919	207	207	0.87	1.1	2.20	2.20	2.63	3.41
602567	MVSS 9-4640	MVSS 075/2110-S02	70	•	202	202	3219	4635	286	286	1.4	1.8	4.10	4.20	3.55	2.95

* Working moment = 2 x static moment.

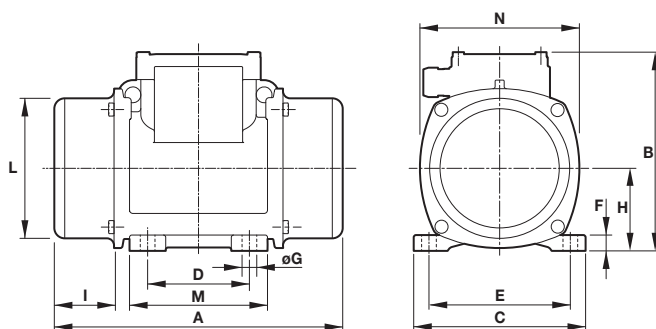


Fig. W

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	Cable entry thread
MVSS 12-90	W	10.04	6.93	5.98	3.54	4.92	0.51	4	0.55	2.87	2.13	4.88	4.80	5.55	M20X1.5
MVSS 12-300	W	11.61	6.93	5.98	3.54	4.92	0.51	4	0.55	2.87	2.91	4.88	4.80	5.55	M20X1.5
MVSS 12-580	W	13.39	7.87	6.57	4.13	5.51	0.51	4	0.59	3.25	3.58	5.63	5.39	6.30	M25X1.5
MVSS 12-760	W	15.04	8.07	8.07	4.72	6.69	0.67	4	0.67	3.68	3.94	6.61	6.22	7.17	M25X1.5
MVSS 12-1630	W	17.09	9.13	8.07	4.72	6.69	0.67	4	0.79	4.11	4.61	7.13	6.38	7.99	M25X1.5
MVSS 12-1990	W	19.29(50Hz) 17.40(60Hz)	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	5.08(50Hz) 4.13(60Hz)	7.91	7.09	8.86	M25X1.5
MVSS 12-2530	W	22.05	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	6.46	7.91	7.09	8.86	M25X1.5
MVSS 12-3100	W	23.86(50Hz) 22.05(60Hz)	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	7.36(50Hz) 6.46(60Hz)	7.91	7.09	8.86	M25X1.5
MVSS 12-3410	W	23.66(50Hz) 20.59(60Hz)	11.22	10.83	6.10	8.86	0.87	4	1.18	5.31	6.65(50Hz) 5.12(60Hz)	9.09	8.07	9.96	M25X1.5
MVSS 12-4700	W	25.79(50Hz) 23.66(60Hz)	11.22	10.83	6.10	8.86	0.87	4	1.18	5.31	7.72(50Hz) 6.65(60Hz)	9.09	8.07	9.96	M25X1.5
MVSS 12-6050	W	25.87(50Hz) 23.19(60Hz)	12.72	12.20	6.10	10.04	0.93	4	1.38	6.10	6.83(50Hz) 5.49(60Hz)	10.59	8.46	11.61	M25X1.5
MVSS 12-6600	W	27.80	12.72	12.20	6.10	10.04	0.93	4	1.38	6.10	7.80	10.59	8.46	11.61	M25X1.5

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	Cable entry thread
MVSS 9-340	W	13.39	7.87	6.57	4.13	5.51	0.51	4	0.59	3.25	3.58	5.63	5.39	6.30	M25X1.5
MVSS 9-550	W	13.94	9.13	8.07	4.72	6.69	0.67	4	0.79	4.11	3.03	7.13	6.38	7.17	M25X1.5
MVSS 9-910	W	17.17	9.13	8.07	4.72	6.69	0.67	4	0.79	4.11	4.65	7.13	6.38	7.99	M25X1.5
MVSS 9-1440	W	19.29	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	5.08	7.91	7.09	8.86	M25X1.5
MVSS 9-2030	W	22.05	9.65	9.06	5.51	7.48	0.67	4	0.98	4.57	6.46	7.91	7.09	8.86	M25X1.5
MVSS 9-2920	W	23.66	11.22	10.83	6.10	8.86	0.87	4	1.18	5.31	6.65	9.09	8.07	9.96	M25X1.5
MVSS 9-4640	W	25.87	12.72	12.20	6.10	10.04	0.93	4	1.38	6.10	6.83	10.59	8.46	11.61	M25X1.5

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



MICRO



Technical features

Power supply

Three-phase voltage from 24V to 480V (except M-16), 50Hz or 60Hz or single phase 100-130V, 200-240V, 50/60Hz (in the standard single-phase version, the capacitor is already included in a case along the power supply cable); suitable for use with an inverter from 20 to 60Hz to the base frequency with constant torque load profile.

Polarity

2 poles.

Conformity with 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 143 lbs (638N), with centrifugal force adjustable by varying eccentric weight position.

Mechanical protection

IP 65 according to IEC/EN 60529.

Insulation class

Class F (155°C).

Tropicalization

Standard on all vibrators.

Ambient temperature

From -4°F to +104°F (-20°C to +40°C).

Fixing of the vibrator

In all positions and therefore without restriction.

Lubrication

Sealed ball bearings, lubricated "for life".

Electric motor

Three-phase and single-phase asynchronous type. The model M-16 can only be supplied in the single-phase version and does not require a capacitor. Models M-60 and M-140 can be supplied both in three-phase and single-phase versions. The capacitor is already included in a case along the power supply cable.

Casing

In high-tensile light aluminium alloy with polished surface. Different fixing holes available.

Eccentric weights

Thin plate-type, allow step-by-step adjustment through variation of the number of weights mounted or their rotation.

Three-phase

DESCRIPTION			MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SR [®]	Ex IIC3D Temp. class	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220-240V 50Hz	100-120V 60Hz
600449	M-60	M3/20-S02	□	100°C	0.17	0.17	44	64	4.3	4.3	0.05	0.05	0.15	0.15
600450	M-140	M3/45-S02	□	100°C	0.39	0.39	99	143	4.8	4.8	0.06	0.06	0.16	0.16

Single-phase

Code	Type	Type (EU)	SR [®]	Ex IIC3D Temp. class	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max current A	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220-240V 50Hz	100-120V 60Hz
600448	M-16	M3/4-S02	-	100°C	0.035	0.035	8.8	13	2.0	2.0	0.03	0.03	0.13	0.30
600449	M-60	M3/20-S02	□	100°C	0.17	0.17	44	64	4.3	4.3	0.05	0.05	0.17	0.42
600450	M-140	M3/45-S02	□	100°C	0.39	0.39	99	143	4.8	4.8	0.06	0.06	0.20	0.46

* Working moment = 2 x static moment. □ CSA certification on request, with feeding line included.

The MICRO series has been designed for continual industrial service in processes where a reduced centrifugal force and reduced overall vibrator size are required.

MICRO vibrators are used in many applications in feeding, transport, screening, sizing, separation processes, compaction in the automatic machines used in the chemical industry, food industry, pharmaceuticals, packaging and automation in general.

The MICRO series has been conceived to guarantee higher performance in all conditions and environments and complies with the most recent EN international standards for use in atmospheres with potentially explosive powders. In particular, the MICRO series can be used in area 22.

Category: II 3 D

Level of protection:

Ex tc IIIC T100°C Dc

Temperature class:

T100°C

Zone of use:

22

Weight covers

In stainless steel AISI 304.

Other features

All Micro series standard models are supplied with a power supply cable (2 meters for M-60 and M-140, 1 meter for M-16 and, in the models requiring it, a capacitor inserted into a special enclosure in-line with the cable. CSA certification can be supplied on request and the supplied product is not equipped with a capacitor (neither along the cable nor in other positions), therefore the user must install one as per Standard.

For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

Certifications



Compliance with the applicable European Union directives.



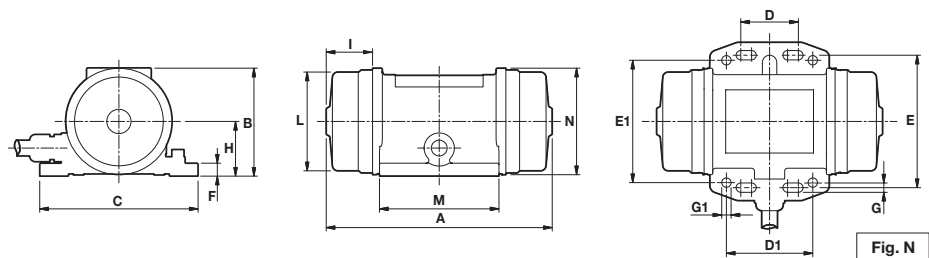
II3D (2014/34/UE)
Ex tc IIIC T100°C Db
EN 60079-0
EN 60079-31



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
Class II Div.2, Groups FG (T3B)



Certification for Eurasian Customs Union
N° TC N RU Д-IT.АЛ33.В.02527
N° TC RU C-IT.ГБ08.В.02190



DIMENSIONAL SPECIFICATIONS (inches)

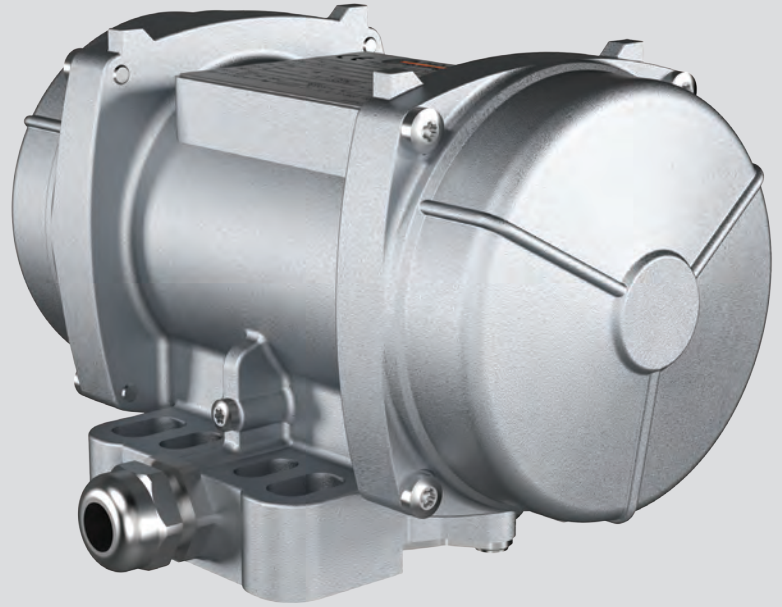
Holes

Type	Fig.	A	B	C	D	D1	E	E1	F	G	ØG1	N°	H	I	L	M	N	Cable entry thread
M-60	N	6.18	2.95	4.33	0.98-1.58	2.36	3.62	3.35	0.35	0.26	0.26	8	1.50	1.30	2.72	3.27	2.91	M16x1.5
M-140	N	6.77	2.95	4.33	0.98-1.58	2.36	3.62	3.35	0.35	0.26	0.26	8	1.50	1.59	2.72	3.27	2.91	M16x1.5

Holes

Type	Fig.	A	B	C	D	D1	E	E1	F	G	ØG1	N°	H	I	L	M	N	Cable entry thread
M-16	N	4.45	2.62	3.54	0.98-1.58	-	2.95	-	0.35	0.22	-	4	1.34	0.98	2.36	2.32	2.56	M12x1.5
M-60	N	6.18	2.95	4.33	0.98-1.58	2.36	3.62	3.35	0.35	0.26	0.26	8	1.50	1.30	2.72	3.27	2.91	M16x1.5
M-140	N	6.77	2.95	4.33	0.98-1.58	2.36	3.62	3.35	0.35	0.26	0.26	8	1.50	1.59	2.72	3.27	2.91	M16x1.5

■ M3



Technical features

Power supply

Three-phase voltage from 24V to 690V, 50Hz or 60Hz or single-phase 100-130V, 60Hz and 200-240V, 50Hz; suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

2 and 4 poles.

Conformity with 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 up to 660 kgf (2.94 kN). Centrifugal force can be changed by adjusting 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 vacuum encapsulation.

Ambient temperature

From -4°F to +104°F (-20°C to +40°C).

Vibrator thermal protection

On request with PTC thermistor rated heat detectors 130°C.

Fixing of the vibrator

In all positions and therefore without restriction.

Lubrication

Sealed ball bearings, lubricated "for life".

Terminal box

The terminal box is positioned underneath the vibrator, on the same side as the fixing base. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

Electric motor

Three-phase or single-phase asynchronous type. Insulated windings using vacuum encapsulating.

The rotor is die cast aluminium.

Casing

In high-tensile aluminium alloy, with sand blasted surface. Multiholes fixing base allow different fixing patterns.

Designed for continuous industrial duty, the M3 series features a compact shape, reduced overall dimensions (in comparison to MVS1 series) and the terminal box underneath, ensuring high electrical protection in dusty environments. Multi-holes mounting feet enable M3 series to match several existing mounting plates. M3 series motors comply with the most recent international standards for use in explosive dust atmospheres. Particularly M3 series can be used in zones 21 and 22.

Category: II 2 D

Level of protection:

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

Temperature class:

T120°C

Zones of use:

21, 22

Bearing flange

In ductile cast iron.

The geometry of the flange transmits the load to the casing uniformly.

Motor shaft

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

Eccentric weights

Easily adjustable from 100% down to 0.

Weight covers

Made in die cast, high strength aluminium alloy with accurate surface sand blasting.

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.



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
Class II Div.2, Groups FG (T3B)



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



Certification for Eurasian Customs Union
N° TC N RU Д-IT.АЛ33.В.02527
N° TC RU C-IT.ГБ08.В.02190



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

2 poles - 3,000/3,600 rpm

Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SIZE		Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
					in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	HP	400V 50Hz	460V 60Hz	50Hz
600467	M3-190	M3/65-S02	00	• 120°C	0.56	0.56	142	205	9.5	9.5	0.12	0.11	0.27	0.23	3.43	3.90
600465	M3-300	M3/105-S02	00	• 120°C	0.84	0.84	213	308	11.4	11.4	0.18	0.18	0.35	0.30	2.68	3.00
600462	M3-650	M3/205-S02	00	• 120°C	1.76	1.76	447	645	13.2	13.2	0.18	0.18	0.35	0.30	2.68	3.00
600461	M3-670	M3/305-S02	00	• 120°C	2.59	1.76	660	645	13.9	13.2	0.18	0.18	0.35	0.30	2.68	3.00

Single-phase

Code	Type	Type (EU)	SIZE		Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
					in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600467	M3-190	M3/65-S02	00	• 120°C	0.56	0.56	142	205	9.5	9.5	0.09	0.09	0.56	1.52	2.24	2.24
600465	M3-300	M3/105-S02	00	• 120°C	0.84	0.84	213	308	11.4	11.4	0.15	0.15	0.75	1.52	1.67	2.24
600462	M3-650	M3/205-S02	00	• 120°C	1.76	1.76	447	645	13.2	13.2	0.15	0.15	0.75	1.52	1.67	2.24
600461	M3-670	M3/305-S02	00	• 120°C	2.59	1.76	660	645	13.9	13.2	0.15	0.15	0.75	1.52	1.67	2.24

4 poles - 1,500/1,800 rpm

Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SIZE		Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
					in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601514	M15-100	M15/36-S02	00	• 120°C	1.05	1.05	67.1	96.4	11.9	11.9	0.05	0.06	0.21	0.20	1.78	1.95
601515	M15-180	M15/81-S02	00	• 120°C	2.59	1.76	165	161	13.9	13.2	0.05	0.06	0.21	0.20	1.78	1.95

Single-phase

Code	Type	Type (EU)	SIZE		Static moment*		Centrifugal force		Weight		Power Output		Max current		Ia/In	
					in-lbs	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
601514	M15-100	M15/36-S02	00	• 120°C	1.05	1.05	67.1	96.4	11.9	11.9	0.05	0.05	0.43	1.00	1.20	1.30
601515	M15-180	M15/81-S02	00	• 120°C	2.59	1.76	165	161	13.9	13.2	0.05	0.05	0.43	1.00	1.20	1.30

* Working moment = 2 x static moment. Ia/In = ratio between start-up current and maximum current.

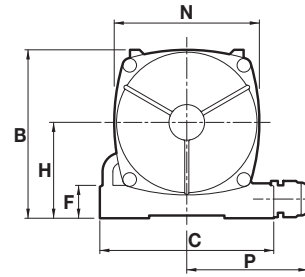
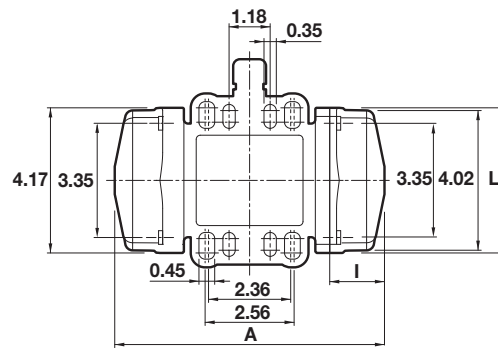


Fig. M1

DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	Multi-hole			Holes				Capacitor (µF)		Cable entry thread							
		A	B	C	D	E	ØG	N°	F	H		I	ØL	M	N	P	220V 50Hz	115V 60Hz
M3-190	M1	7.76			See drawing	0.35	4	0.94	2.76	1.57		4.17	3.39	4.17	3.48	-	-	M20x1.5
M3-300	M1	8.31	4.84	5.00						1.85								
M3-650	M1	9.25								2.32								
M3-670	M1	9.25								2.32								

Type	Fig.	Multi-hole			Holes				Capacitor (µF)		Cable entry thread							
		A	B	C	D	E	ØG	N°	F	H		I	ØL	M	N	P	220V 50Hz	115V 60Hz
M3-190	M1	7.76			See drawing	0.35	4	0.94	2.76	1.57		4.17	3.39	4.17	3.48	10	28	M20x1.5
M3-300	M1	8.31	4.84	5.00						1.85								
M3-650	M1	9.25								2.32								
M3-670	M1	9.25								2.32								

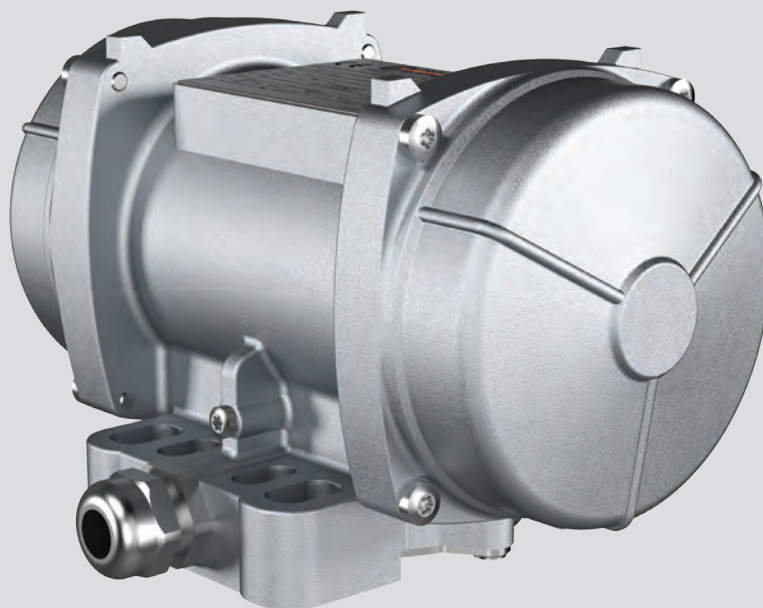
DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	Multi-hole			Holes				Capacitor (µF)		Cable entry thread						
		A	B	C	D	E	ØG	N°	F	H		I	ØL	M	N	P	220V 50Hz
M15-100	M1	8.43			See drawing	0.35	4	0.94	2.76	2.32	4.17	3.39	4.17	3.48	-	-	M20X1.5
M15-180	M1	9.25	4.84	5.00													

Type	Fig.	Multi-hole			Holes				Capacitor (µF)		Cable entry thread						
		A	B	C	D	E	ØG	N°	F	H		I	ØL	M	N	P	220V 50Hz
M15-100	M1	8.43			See drawing	0.35	4	0.94	2.76	2.32	4.17	3.39	4.17	3.48	3.15	25	M20X1.5
M15-180	M1	9.25	4.84	5.00													



M3-E



Technical features

Power supply

Three-phase voltage 127/220V 50Hz, 200/346V 50Hz, or 210/363V 60 Hz; variable frequency (in presence of PTC thermistor) from 20Hz to the base frequency with constant torque load profile.

Polarity

2 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.

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

Range up to 660 kgf (2.94 kN). Centrifugal force can be changed by adjusting 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 vacuum encapsulation.

Ambient temperature

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

Vibrator thermal protection

On request with PTC thermistor rated heat detectors 266°F (130°C).

Fixing of the vibrator

In all positions and therefore without restriction. The terminal box is positioned underneath the vibrator, on the same side as the fixing base.

Lubrication

Sealed ball bearing, lubricated "for life".

Terminal box

The terminal box is positioned underneath the vibrator, on the same side as the fixing base. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

Electric motor

Three-phase asynchronous type. Insulated windings using vacuum encapsulating. The rotor is die cast aluminium.

Casing

In high-tensile aluminium alloy, with sand-blasted surface. Multiholes fixing base allow different fixing patterns.

2 poles - 3,000/3,600 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS									
Code	Type	Type (EU)	SIZE	Static moment*		Centrifugal force		Weight		Temp. class (G)	Temp. class (D)	Power Input		Power Output		Max. current		tE (s)	Ia/In
				in-lbs		50Hz	60Hz	50Hz	60Hz			50Hz	60Hz	W	HP	50Hz	60Hz		
6E0467	M3/65E-S02	M3/65E-S02	00	0.56	0.56	142	205	9.5	9.5	T4	120°C	105	105	0.107	0.107	0.47	0.29	20	3.48
6E0465	M3/105E-S02	M3/105E-S02	00	0.84	0.84	213	308	11.4	11.4			3.68							
6E0462	M3/205E-S02	M3/205E-S02	00	1.76	1.76	447	645	13.2	13.2			3.68							
6E0461	M3/305E-S02	M3/305E-S02	00	2.59	1.76	660	645	13.9	13.2			3.68							

* Working moment = 2 x static moment.

tE (s) = set time tE from IEC/EN 60079-7.

The M3-E is designed for use in industrial processes in environments with a potentially explosive atmosphere, caused by gas and dust, in compliance with ATEX Directive (2014/34/UE).

In particular, the M3-E can be used in areas 1 and 2 (gas) and in areas 21 and 22 (dusts) according to the layout and the following features:

Category: II2D & II2G

Level of protection:

Ex tb IIIC T120°C Db

Ex e IIC T4 Gb

Temperature class:

Gas: T4 (135°C)

Dust: 120°C

Zones of use:

1, 2, 21, 22

Bearing flange

In ductile cast iron. The geometry of the flange transmits the load to the casing uniformly.

Motor shaft

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

Eccentric weights

Easily adjustable from 100% down to 0.

Weight covers

Made in die cast, high strength aluminum alloy with accurate surface sand blasting.

Other features

For the M3-E series, the user must fill the terminal box with suitable silicone, after having performed the connection.

Certifications



Compliance with the applicable European Union directives.



Ex tb IIIC T120°C Db
IEC 60079-0
IEC 60079-31



II2G II2D (2014/34/UE)
Ex e IIC T4 Gb
Ex tb IIIC T120°C Db
EN 60079-0
EN 60079-7
EN 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

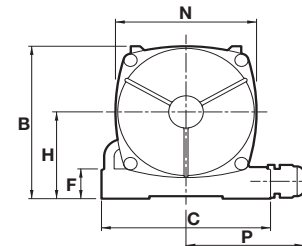
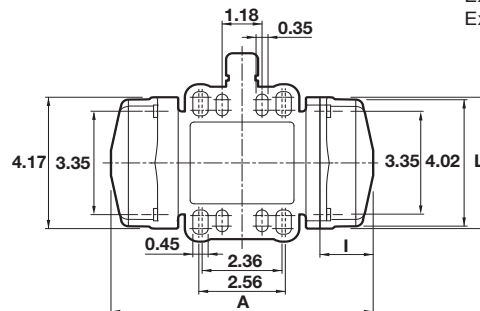


Fig. M1

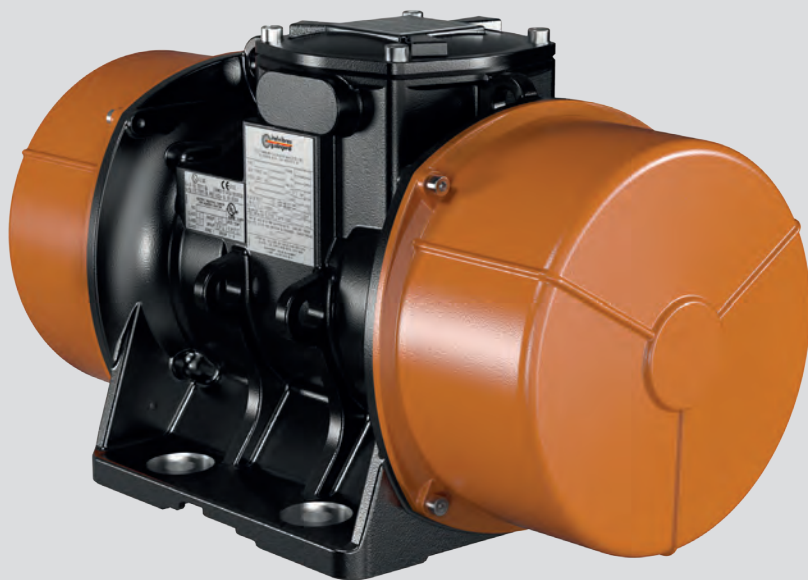
DIMENSIONAL SPECIFICATIONS (inches)

Multi-hole Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	P	Cable entry thread
M3/65E-S02	M1	7.76									1.57					
M3/105E-S02	M1	8.31									1.85					
M3/205E-S02	M1	9.25	4.84	5.00		See drawing	0.35	4	0.945	2.756	2.32	4.173	3.386	4.173	3.484	M20x1.5
M3/305E-S02	M1	9.25									2.32					

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

CDX



The CDX explosion proof vibrators have been designed for use in industrial processes with a potentially explosive atmosphere.

The enclosure of the CDX vibrators is characterized by increased thickness and joints to prevent the transmission of an internal explosion to the surrounding area.

The CDX series is characterized and enhanced by many different certifications, depending on the vibrator model, as shown in these pages.

Technical features

Power supply

Three-phase voltage from 24V to 690V (limit at 600V for UL and CSA certifications), 50Hz or 60Hz, or single-phase 100-130V 60Hz and 200-240V 50Hz; suitable for use with a PWM inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

2, 4, 6 and 8 poles.

Conformity with Standards and Regulations

ATEX Directive 2014/34/UE;
EN/IEC 60079-0, EN/IEC 60079-1,
EN/IEC 60079-31, UL 674-886, CSA C22.2.
See also tables.

Quality Controls

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

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 to 49200 lbs (220 kN), with centrifugal force adjustable from 0 to 100%.

Mechanical protection

IP66 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 35, with "drop by drop" trickle system for larger sizes.

Ambient temperature

From -4°F to +104°F (-20°C to +40°C). See also approval table for other ambient temperatures.

Vibrator thermal protection

With thermal protector at 266°F (130°C) for the entire CDX range, or on request with PTC thermistors rated heat detectors 266°F (130°C).

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. The terminal cover, with increased thickness, is constructed to contain internal explosions. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

Electric motor

Three-phase and single-phase asynchronous type. Insulated windings using vacuum encapsulating up to size 35; using the "drop by drop" trickle system with Class H resin for the larger sizes. The rotor is die cast aluminium.

Casing

In high-tensile aluminium alloy up to size 30, in spheroidal cast iron for larger sizes.

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

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.

The CDX-G series, available in CDX frame sizes 35 to 80, is specifically designed for use in industrial processes in a potentially explosive gas atmosphere, among other applications they are commonly used on oil and gas drilling rigs. The CDX-G series has weight covers and terminal box covers with special protection coatings; weight covers can be supplied in stainless steel upon request.



Approvals	series CDX	series CDX-G
	Class I, Groups CD. Class II, Groups EFG. Temp. Class T4 (135°C) (Amb. Temp. -20°C÷+40°C)	Class I, Groups CD. Temp. Class T2C (230°C) (Amb. Temp. -20°C÷+60°C)
	ATEX II2G Ex d IIB 120°C Gb II2D Ex tb IIIC T120°C Db (Amb. Temp. -20°C÷+40°C)	ATEX II2G Ex d IIB 160°C Gb (Amb. Temp. -20°C÷+60°C)
	Ex d IIB 120°C Gb Ex tb IIIC T120°C Db (Amb. Temp. -20°C÷+40°C)	Ex d IIB 160°C Gb (Amb. Temp. -20°C÷+60°C)
Notes	Version with Amb. Temp. -20°C to +60°C and other temperature classes is available.	Version with cULus temperature class T3C (160°C) with thermal protection is available.

Weight covers

In aluminium alloy.
Special coatings provided on CDX-G types.
On request available also in stainless steel for CDX-G types.

Painting

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

Other features

The CDX series is supplied without cable gland and with NPT threaded conduit opening.

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

Certifications



Compliance with the applicable European Union directives.



Certificate: E129825
Class I, Groups CD
Class II, Groups EFG
Temp. Class T4 (135°C)
UL Standard N°674-886, CSA C22.2



Certificate: DEMKO 07 ATEX 0612032X
II2D Ex tb IIIC T120°C Db
II2G Ex d IIB 120°C Gb
ATEX Directive 2014/34/UE
EN 60079-0, EN 60079-1, EN 60079-31



Certificate: IECEX UL 09.0034X
Ex tb IIIC T120°C Db
Ex d IIB 120°C Gb
IEC 60079-0, IEC 60079-1, IEC 60079-31



Certificate: LR 100948
Class I, Groups CD
Class II, Groups EFG
Temp. Class T4 (135°C)
CSA Standard C22.2, UL N°674-886



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



KOSHA Korea
Certificati n° 11-AV4BO-0353/4/5/6/7/8/60
Ex d IIB 120°C
Ex td A21 IP66 T120°C



2 poles - 3,000/3,600 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS												
Code	Type	Type (EU)	SIZE	Certifications					Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Input W		Power Output HP		Max. current A		Ia/In	
				●	○	●	●	●	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600384	CDX 36-650	CDX 3/300-G/D	10	●					2.61	1.96	664	717	25.3	24.2	260	270	0.24	0.25	0.60	0.50	3.47	4.20
600385	CDX 36-1040	CDX 3/500-G/D	20	●					5.04	3.03	1284	1109	37.4	35.2	450	500	0.44	0.52	0.80	0.75	4.21	4.80
600387	CDX 36-1660	CDX 3/800-G/D	30	●					6.48	4.86	1649	1782	51.3	49.3	650	685	0.67	0.70	1.10	1.00	3.83	6.00
600389	CDX 36-2530	CDX 3/1100-G/D	35	●	●	●	●		9.56	6.35	2431	2334	74.8	72.6	600	710	0.64	0.74	0.90	0.93	4.78	4.96
600437	CDX 36-3530	CDX 3/1500-G/D	50	●	●	●	●		14.0	9.65	3575	3524	119	113	1000	1200	1.1	1.2	1.62	1.72	6.00	6.32
600317	CDX 36-4600	CDX 3/2100-G/D	50	●	●	●	●		18.2	12.5	4651	4576	132	129	1000	1260	1.2	1.5	1.71	1.85	6.95	7.19
600320	CDX 36-5060	CDX 3/2300-G/D	60	●	●	●	●		19.3	13.8	4919	5060	182	175	2000	2200	2.0	2.2	3.23	3.20	7.47	8.60
600323	CDX 36-7040	CDX 3/3200-G/D	70	●	●	●	●		29.9	18.7	7605	6846	251	242	3100	3250	3.4	3.4	5.23	5.00	6.37	8.00
600486	CDX 36-10500	CDX 3/4700-G/D	80	●	●	●	●		40.8	28.6	10362	10472	328	317	4500	4500	4.9	4.9	7.13	6.60	6.53	7.00

Single-phase

Code	Type	Type (EU)	SIZE	Certifications					Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Input W		Power Output HP		Max. current A		Ia/In	
				●	○	●	●	●	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600384	CDX 36-650	CDX 3/300-G/D	10	●					2.61	1.96	664	717	25.3	24.2	280	280	0.24	0.27	1.25	2.40	2.48	3.52
600385	CDX 36-1040	CDX 3/500-G/D	20	●					5.04	3.03	1284	1109	37.4	35.2	500	500	0.46	0.47	2.30	4.50	3.35	4.22
600387	CDX 36-1660	CDX 3/800-G/D	30	●					6.48	4.86	1649	1782	51.3	49.3	700	750	0.60	0.67	3.25	7.00	4.00	4.14

4 poles - 1,500/1,800 rpm

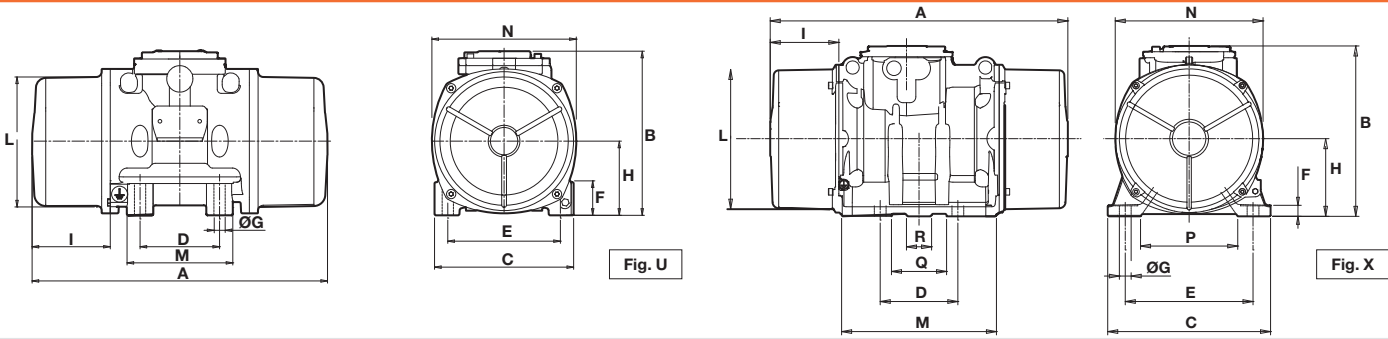
Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS												
Code	Type	Type (EU)	SIZE	Certifications					Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Input W		Power Output HP		Max. current A		Ia/In	
				●	○	●	●	●	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601409	CDX 18-470	CDX 15/200-G/D	10	●					7.32	5.11	469	471	30.8	28.6	170	170	0.13	0.13	0.41	0.40	2.34	2.75
601410	CDX 18-910	CDX 15/400-G/D	20	●					14.2	9.83	906	904	47.1	44.0	300	350	0.29	0.37	0.60	0.60	3.33	3.50
601411	CDX 18-1300	CDX 15/550-G/D	20	●					19.0	14.2	1214	1302	50.2	47.1	300	350	0.29	0.37	0.60	0.60	3.33	3.50
601412	CDX 18-1670	CDX 15/700-G/D	30	●					24.9	18.2	1584	1672	66.7	63.8	525	665	0.51	0.66	0.92	0.98	3.48	3.43
601413	CDX 18-2150	CDX 15/1100-G/D	35	●	●	●	●		36.1	23.6	2299	2160	101	91.3	520	660	0.49	0.59	0.81	0.88	4.65	4.84
601424	CDX 18-3190	CDX 15/1410-G/D	50	●	●	●	●		48.8	34.8	3109	3188	139	129	750	1000	0.73	0.99	1.35	1.50	5.59	5.60
601328	CDX 18-3850	CDX 15/1710-G/D	50	●	●	●	●		62.2	42.2	3956	3865	149	144	1050	1300	1.2	1.5	1.81	1.90	5.09	5.46
601358	CDX 18-4400	CDX 15/2000-G/D	50	●	●	●	●		71.0	48.8	4519	4473	160	147	1050	1300	1.2	1.5	1.81	1.90	5.09	5.46
601329	CDX 18-5380	CDX 15/2410-G/D	60	●	●	●	●		83.6	58.6	5324	5377	216	202	1500	1650	1.7	2.0	2.95	2.90	7.80	7.76
601330	CDX 18-8300	CDX 15/3810-G/D	70	●	●	●	●		133	89.9	8448	8237	306	295	2270	2250	2.5	2.5	3.80	3.50	6.84	8.09
601623	CDX 18-9420	CDX 15/9420	70	●	●	●	●		150	102	9517	9350	315	301	2270	2250	2.5	2.5	3.80	3.50	6.84	8.09
601487	CDX 18-10900	CDX 15/5010-G/D	80	●	●	●	●		173	119	11015	10870	378	363	2800	2800	2.8	2.8	4.75	4.40	6.74	7.20

Single-phase

Code	Type	Type (EU)	SIZE	Certifications					Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Input W		Power Output HP		Max. current A		Ia/In	
				●	○	●	●	●	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
601409	CDX 18-470	CDX 15/200-G/D	10	●					7.32	5.11	469	471	30.8	28.6	210	230	0.15	0.16	1.00	2.00	1.50	1.85
601410	CDX 18-910	CDX 15/400-G/D	20	●					14.17	9.83	906	904	47.1	44.0	240	320	0.16	0.24	1.20	2.80	2.50	2.50
601401	CDX 18-1300	CDX 15/550-G/D	20	●					19.04	14.17	1214	1302	50.2	47.1	240	320	0.16	0.24	1.20	2.80	2.50	2.50
601412	CDX 18-1670	CDX 15/700-G/D	30	●					24.87	18.17	1584	1672	66.7	63.8	450	550	0.32	0.40	2.15	5.15	5.44	3.63

* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	Holes								Capacitor (µF)								Cable entry		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N	P	Q	R		220V 50Hz	115V 60Hz
CDX 36-650	U	10.04	7.52	5.98	3.54	4.92	13	4	1.10	3.05	2.13	5.12	5.04	5.91	-	-	-	-	-	NPT 1/2"
CDX 36-1040	U	11.34	8.58	6.57	4.13	5.51	13	4	1.18	3.54	2.56	5.91	5.51	6.89	-	-	-	-	-	NPT 1/2"
CDX 36-1660	U	12.36	9.09	8.07	4.72	6.69	17	4	1.77	4.02	2.60	6.97	6.38	7.87	-	-	-	-	-	NPT 1/2"
CDX 36-2530	U	17.56	9.80	8.27	4.72	6.69	17	4	2.05	4.41	4.65	7.56	6.30	8.58	-	-	-	-	-	NPT 3/4"
CDX 36-3530	X	20.47	10.98	9.25	5.51	7.48	22	4	0.71	4.57	5.28	8.27	9.69	8.86	5.51	3.15	-	-	-	NPT 3/4"
CDX 36-4600	X	20.47	10.98	9.25	5.51	7.48	22	4	0.71	4.57	5.28	8.27	9.69	8.86	5.51	3.15	-	-	-	NPT 3/4"
CDX 36-5060	X	22.52	12.28	10.83	6.10	8.86	22	4	0.87	5.31	5.75	9.41	10.79	9.96	6.65	4.13	1.97	-	-	NPT 3/4"
CDX 36-7040	X	23.39	13.50	12.80	6.10	10.04	23.5	4	0.87	6.10	5.39	10.98	12.36	11.61	7.64	4.33	1.97	-	-	NPT 3/4"
CDX 36-10500	X	25.12	14.13	13.98	7.09	11.02	26	4	0.87	6.50	6.06	11.93	12.60	12.60	7.80	4.72	1.97	-	-	NPT 3/4"

Type	Fig.	Holes								Capacitor (µF)								Cable entry		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N	P	Q	R		220V 50Hz	115V 60Hz
CDX 36-650	U	10.04	7.52	5.98	3.54	4.92	0.51	4	1.10	3.05	2.13	5.12	5.04	5.91	-	-	-	16	25	NPT 1/2"
CDX 36-1040	U	11.34	8.58	6.57	4.13	5.51	0.51	4	1.18	3.54	2.56	5.91	5.51	6.89	-	-	-	12.5	50	NPT 1/2"
CDX 36-1660	U	12.36	9.09	8.07	4.72	6.69	0.67	4	1.77	4.02	2.60	6.97	6.38	7.87	-	-	-	25	90	NPT 1/2"

DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	Holes								Capacitor (µF)								Cable entry		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N	P	Q	R		220V 50Hz	115V 60Hz
CDX 18-470	U	11.85	7.52	5.98	3.54	4.92	0.51	4	1.10	3.05	3.03	5.12	5.04	5.91	-	-	-	-	-	NPT 1/2"
CDX 18-910	U	13.78	8.58	6.57	4.13	5.51	0.51	4	1.18	3.54	3.78	5.91	5.51	6.89	-	-	-	-	-	NPT 1/2"
CDX 18-1300	U	15.43	8.58	6.57	4.13	5.51	0.51	4	1.18	3.54	4.61	5.91	5.51	6.89	-	-	-	-	-	NPT 1/2"
CDX 18-1670	U	15.51	9.09	8.07	4.72	6.69	0.67	4	1.77	4.02	4.17	6.97	6.38	7.87	-	-	-	-	-	NPT 1/2"
CDX 18-2150	U	17.56	9.80	8.27	4.72	6.69	0.67	4	2.05	4.41	4.65	7.56	6.30	8.58	-	-	-	-	-	NPT 3/4"
CDX 18-3190	X	20.47	10.98	9.25	5.51	7.48	0.87	4	0.71	4.57	5.28	8.27	9.69	8.86	5.51	3.15	-	-	-	NPT 3/4"
CDX 18-3850	X	20.47	10.98	9.25	5.51	7.48	0.87	4	0.71	4.57	5.28	8.27	9.69	8.86	5.51	3.15	-	-	-	NPT 3/4"
CDX 18-4400	X	23.39(50Hz) 20.47(60Hz)	10.98	9.25	5.51	7.48	0.87	4	0.71	4.57	6.73(50Hz) 5.28(60Hz)	8.27	9.69	8.86	5.51	3.15	-	-	-	NPT 3/4"
CDX 18-5380	X	22.52	12.28	10.83	6.10	8.86	0.87	4	0.87	5.31	5.75	9.41	10.79	9.96	6.65	4.13	1.97	-	-	NPT 3/4"
CDX 18-8300	X	23.39	13.50	12.80	6.10	10.04	0.93	4	0.87	6.10	5.39	10.98	12.36	11.61	7.64	4.33	1.97	-	-	NPT 3/4"
CDX 18-9420	X	23.39(50Hz) 20.47(60Hz)	13.50	12.80	6.10	10.04	0.93	4	0.87	6.10	7.01(50Hz) 5.39(60Hz)	10.98	12.36	11.61	7.64	4.33	1.97	-	-	NPT 3/4"
CDX 18-10900	X	25.12	14.13	13.98	7.09	11.02	1.02	4	0.87	6.50	6.06	11.93	12.60	12.60	7.80	4.72	1.97	-	-	NPT 3/4"

Type	Fig.	Holes								Capacitor (µF)								Cable entry		
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N	P	Q	R		220V 50Hz	115V 60Hz
CDX 18-470	U	11.85	7.52	5.98	3.54	4.92	0.51	4	1.10	3.05	3.03	5.12	5.04	5.91	-	-	-	5	25	NPT 1/2"
CDX 18-910	U	13.78	8.58	6.57	4.13	5.51	0.51	4	1.18	3.54	3.78	5.91	5.51	6.89	-	-	-	12 ^o +20 ^o	35	NPT 1/2"
CDX 18-1300	U	15.43	8.58	6.57	4.13	5.51	0.51	4	1.18	3.54	4.61	5.91	5.51	6.89	-	-	-	12 ^o +20 ^o	35 ^o +10 ^o	NPT 1/2"
CDX 18-1670	U	15.51	9.09	8.07	4.72	6.69	0.67	4	1.77	4.02	4.17	6.97	6.38	7.87	-	-	-	16 ^o +80 ^o	40 ^o +120 ^o	NPT 1/2"

la/ln = ratio between start-up current and maximum current. ^o Start-up capacitor / [•] Running capacitor. Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.

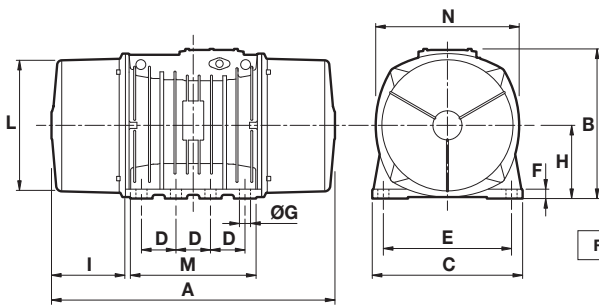


Fig. F

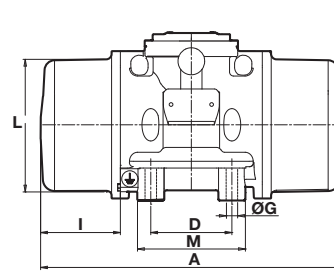


Fig. U

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	P	Q	R	Cable entry
CDX 12-110	U	10.04	7.52	5.98	3.54	4.92	0.51	4	1.10	3.05	2.13	5.12	5.04	5.91	-	-	-	NPT 1/2"
CDX 12-220	U	11.85	7.52	5.98	3.54	4.92	0.51	4	1.10	3.05	3.03	5.12	5.04	5.91	-	-	-	NPT 1/2"
CDX 12-575	U	13.78	8.58	6.57	4.13	5.51	0.51	4	1.18	3.54	3.78	5.91	5.51	6.89	-	-	-	NPT 1/2"
CDX 12-750	U	15.51	9.09	8.07	4.72	6.69	0.67	4	1.77	4.02	4.17	6.97	6.38	7.87	-	-	-	NPT 1/2"
CDX 12-1630	U	17.56	9.80	8.27	4.72	6.69	0.67	4	2.05	4.41	4.65	7.56	6.30	8.58	-	-	-	NPT 3/4"
CDX 12-1990	X	23.39(50Hz) 20.47(60Hz)	10.98	9.25	5.51	7.48	0.87	4	0.71	4.57	6.73(50Hz) 5.28(60Hz)	8.27	9.69	8.86	5.51	3.15	-	NPT 3/4"
CDX 12-2530	X	23.39(50Hz) 20.47(60Hz)	10.98	9.25	5.51	7.48	0.87	4	0.71	4.57	6.73(50Hz) 5.28(60Hz)	8.27	9.69	8.86	5.51	3.15	-	NPT 3/4"
CDX 12-3410	X	24.96(50Hz) 22.52(60Hz)	12.28	10.83	6.10	8.86	0.87	4	0.87	5.31	6.97(50Hz) 5.75(60Hz)	9.41	10.79	9.96	6.65	4.13	1.97	NPT 3/4"
CDX 12-6050	X	26.61	13.50	12.80	6.10	10.04	0.93	4	0.87	6.10	7.01	10.98	12.36	11.61	7.64	4.33	1.97	NPT 3/4"
CDX 12-8450	X	28.90	14.13	13.98	7.09	11.02	1.02	4	0.87	6.50	7.95	11.93	12.60	12.60	7.80	4.72	1.97	NPT 3/4"
CDX 12-45000	F	45.28	24.17	24.02	5.51	20.47	1.77	8	1.50	11.69	11.71	21.34	20.08	22.91	-	-	-	NPT 1"

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	P	Q	R	Cable entry
CDX 9-330	U	13.78	8.58	6.57	4.13	5.51	0.51	4	1.18	3.54	3.78	5.91	5.51	6.89	-	-	-	NPT 1/2"
CDX 9-570	U	15.51	9.09	8.07	4.72	6.69	0.67	4	1.77	4.02	4.17	6.97	6.38	7.87	-	-	-	NPT 1/2"
CDX 9-910	U	17.56	9.80	8.27	4.72	6.69	0.67	4	2.05	4.41	4.65	7.56	6.30	8.58	-	-	-	NPT 3/4"
CDX 9-1440	X	23.39	10.98	9.25	5.51	7.48	0.87	4	0.71	4.57	6.73	8.27	9.69	8.86	5.51	3.15	-	NPT 3/4"
CDX 9-2020	X	23.39	10.98	9.25	5.51	7.48	0.87	4	0.71	4.57	6.73	8.27	9.69	8.86	5.51	3.15	-	NPT 3/4"
CDX 9-2920	X	24.96	12.28	10.83	6.10	8.86	0.87	4	0.87	5.31	6.97	9.41	10.79	9.96	6.65	4.13	1.97	NPT 3/4"
CDX 9-4640	X	26.61	13.50	12.80	6.10	10.04	0.93	4	0.87	6.10	7.01	10.98	12.36	11.61	7.64	4.33	1.97	NPT 3/4"
CDX 9-6830	X	28.90	14.13	13.98	7.09	11.02	1.02	4	0.87	6.50	7.95	11.93	12.60	12.60	7.80	4.72	1.97	NPT 3/4"
CDX 9-49000	F	45.28	24.17	24.02	5.51	20.47	1.77	8	1.50	11.69	11.71	21.34	20.08	22.91	-	-	-	NPT 1"

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

Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.

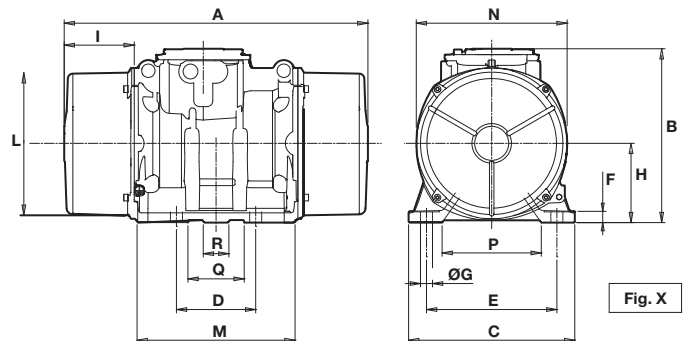


Fig. X

■ MVT/MVTX



These vibrators are available both in the MVT standard version and in the MVTX explosion-proof version.

They are commonly used on screens in various industrial sectors and the MVTX version has been designed for environments with potentially explosive atmospheres with particular reference to the oil field.

MVTX series is characterized by increased thickness and joints to prevent transmission of an internal explosion to the surrounding area.

Technical features

Power supply

Three-phase voltage up to 690V (maximum 600V for cULus), 50Hz or 60Hz (fixed) or variable frequency drive from 20Hz to the base frequency with constant torque load profile.

Polarity

4 poles typical. 2, 6, 8 poles are also available.

Conformity with Standards and Regulations

ATEX Directive 2014/34/UE;
EN/IEC 60079-0, EN/IEC 60079-1,
EN/IEC 60079-31, UL 674-886, CSA C22.2.
See also tables.

Quality Controls

The components that affect protection mode are 100% accurately controlled and report is recorded for complete traceability.

Functioning

Continuous service (S1) at maximum declared centrifugal force and electric power. Intermittent services are also possible, for detailed information contact our technical assistance office.

Centrifugal force

Range extended to 17400 lbs (77.8 kN), with centrifugal force adjustable by hand tools to find better screen performance.

Mechanical protection

IP66 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 screen vibrators with "drop by drop" trickle system.

Ambient temperature

From -4°F to +104°F (-20°C to +40°C).

Vibrator thermal protection

MVTX series equipped with 266°F (130°C) bimetallic thermal protector or, on request, with 266°F (130° PTC) thermistors. Thermal protection not included in MVT and MVTX-G series vibrators (available on request).

Fixing of the vibrator

Typical horizontal.

Lubrication

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

Terminal box

Large fixed electrical connections. The terminal cover, with increased thickness, is designed to guarantee the seal with flame path joint for MVTX and MVTX-G series.

Electric motor

Three-phase asynchronous type. Insulated windings using the "drop by drop" trickle system with Class H resin. The rotor is die cast aluminum.

Casing

Made in three parts. Central part in high-tensile aluminium alloy, external parts in aluminum or spheroidal cast iron.

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 Italtibras, suitable to support both high radial and axial loads.

Motor shaft




Treated steel alloy (Isothermic hardening) resistant to stress.



The MVTX series is characterized by the cULus, ATEX, IECEx and EAC certifications.

The MVTX-G series is also derived from the MVTX series, specifically designed only for potentially explosive gas atmospheres, which are widely used on screen for drilling platforms and other applications.

The MVTX-G series is characterized by different temperature classes, see specifications alongside.

Approvals	series MVTX	series MVTX-G
	Class I, Groups CD. Class II, Groups EFG. Temp. Class T4 (135°C) (Amb. Temp. -20°C÷+40°C)	Class I, Groups CD. Temp. Class T3 (200°C) (Amb. Temp. -20°C÷+60°C)
	ATEX II2G Ex d IIB 120°C Gb II2D Ex tb IIIC T105°C Db (Amb. Temp. -20°C÷+40°C)	ATEX II2G Ex d IIB 150°C Gb (Amb. Temp. -20°C÷+60°C)
	Ex d IIB 105°C Gb Ex tb IIIC T105°C Db (Amb. Temp. -20°C÷+40°C)	Ex d IIB 150°C Gb (Amb. Temp. -20°C÷+60°C)
Notes	Version with Amb. Temp. -20°C to +60°C and other temperature classes is available.	Version with cULus temperature class 125°C (ATEX & IECEx) and T3C - 160°C (cULus) with thermal protection is available.

Eccentric weights

Allow continual adjustment of the centrifugal force as a percentage of the maximum.

Weight covers

In aluminum alloy.

Painting

Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at 392°F (200°C).

Tested in salt spray for 500 hours.

Other features

The MVT and MVTX series are supplied without cable gland and with NPT threaded conduit opening.

Other mounting bolt patterns are available.

For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

Certifications



Compliance with the applicable European Union directives.



Certificate: IECEx UL 11.0043X
Ex tb IIIC T105°C Db
Ex d IIB 105°C Gb
IEC 60079-0, IEC 60079-1, IEC 60079-31



Certificate: E129825
Class I, Groups CD
Class II, Groups EFG
Temp. Class T4 (135°C)
UL Standard N°674-886, CSA C22.2



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



Certificate: DEMKO 12 ATEX 1103487X
II2D Ex tb IIIC T105°C Db
II2G Ex d IIB 105°C Gb
ATEX Directive 2014/34/UE
EN 60079-0, EN 60079-1, EN 60079-31

4 poles - 1,500/1,800 rpm

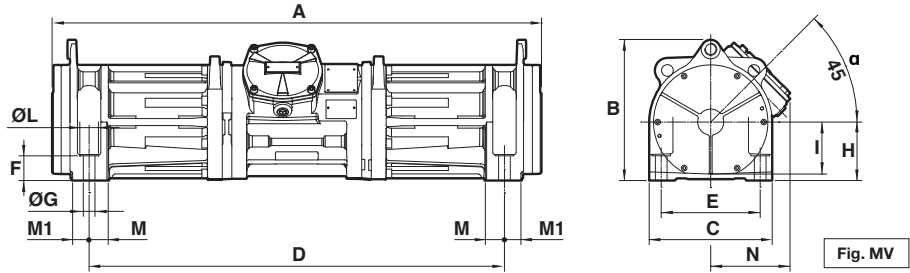
Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SIZE	Static moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Output HP		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz
601535	MVT 18-7700	MVT 15/3500-S08	70	119	82.7	7590	7700	372	348	2.5	2.5	3.90	3.90	7.11	6.92
601646	MVT 18-9700	MVT 15/4400-S08	70	152	106	9680	9680	392	365	2.5	2.5	3.90	3.90	7.11	6.92
601537	MVT 18-10900	MVT 15/5000-S08	80	173	121	11015	11051	517	484	3.7	3.7	6.00	5.00	7.02	8.00
601648	MVT 18-17500	MVT 15/7900-S08	90	274	191	17446	17446	627	594	-	-	-	-	-	-

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS											
Code	Type	Type (EU)	SIZE	Certifications				Static Moment* in-lbs		Centrifugal force lbs		Weight lbs		Power Input W		Power Output HP		Max. Current A		Ia/In	
								50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz
601573	MVTX 18-7700	MVTX 15/3500-G/D	70	•	•	•	•	119	82.7	7590	7700	372	348	2270	2250	2.5	2.5	4.00	3.50	6.50	8.10
601649	MVTX 18-9700	MVTX 15/4400-G/D	70	•	•	•	•	152	106	9680	9680	392	365	2270	2250	2.5	2.5	4.00	3.50	6.50	8.10
601574	MVTX 18-10900	MVTX 15/5000-G/D	80	•	•	•	•	173	121	11015	11051	517	484	3140	3130	3.5	3.5	5.40	4.85	7.80	9.90
601575	MVTX 18-17500	MVTX 15/7900-G/D	90	•	•	•	•	274	191	17446	17446	627	594	3650	4000	4.3	4.7	6.50	6.20	7.70	8.90

* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	D1	E	ØG	N°	F	H	I	ØL	M	M1	N	N1	α	Cable entry
MVT 18-7700	MV	44.49	12.80	11.18	37.76	-	9.00	1.06	4	2.24	5.31	4.72	1.69	1.73	1.50	7.24	-	45°	NPT 3/4"
MVT 18-9700	MV	44.49	12.80	11.18	37.76	-	9.00	1.06	4	2.24	5.31	4.72	1.69	1.73	1.50	7.24	-	45°	NPT 3/4"
MVT 18-10900	MV2	58.31	14.45	11.18	44.09	4.02	9.25	0.87	8	2.28	6.30	4.72	1.57	-	1.83	7.64	12.09	45°	NPT 3/4"
MVT 18-17500	MV2	56.57	15.71	12.99	31.50	9.45	11.02	0.87	8	2.28	7.09	4.72	1.57	-	1.83	6.73	13.78	60°	NPT 3/4"

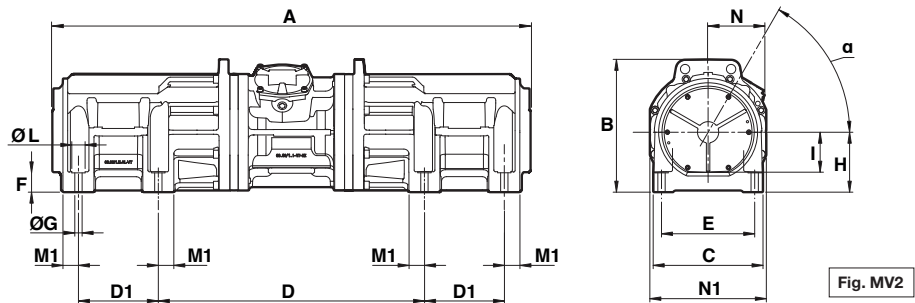
DIMENSIONAL SPECIFICATIONS (inches)

Holes

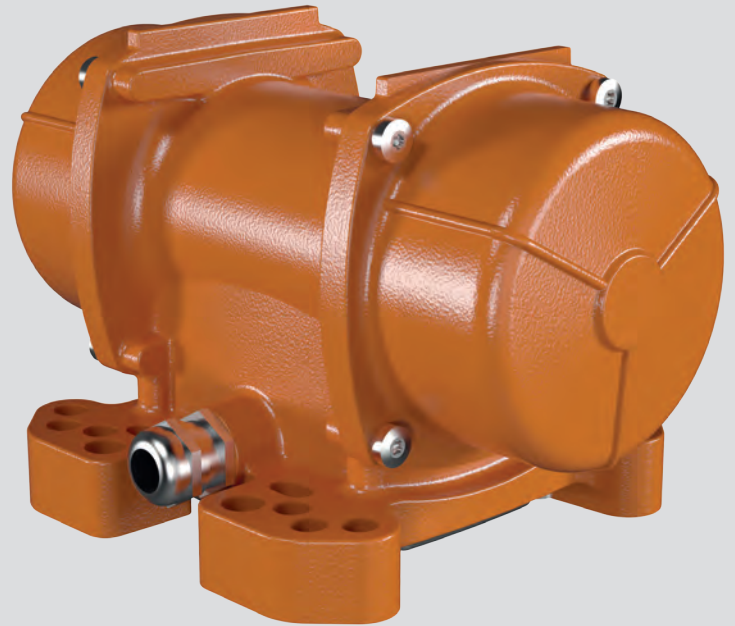
Type	Fig.	A	B	C	D	D1	E	ØG	N°	F	H	I	ØL	M	M1	N	N1	α	Cable entry
MVTX 18-7700	MV	44.49	12.80	11.18	37.76	-	9.00	1.06	4	2.24	5.31	4.72	1.69	1.73	1.50	7.24	-	45°	NPT 3/4"
MVTX 18-9700	MV	44.49	12.80	11.18	37.76	-	9.00	1.06	4	2.24	5.31	4.72	1.69	1.73	1.50	7.24	-	45°	NPT 3/4"
MVTX 18-10900	MV2	58.31	14.45	11.18	44.09	4.02	9.25	0.87	8	2.28	6.30	4.72	1.57	-	1.83	7.64	12.09	45°	NPT 3/4"
MVTX 18-17500	MV2	56.57	15.71	12.99	31.50	9.45	11.02	0.87	8	2.28	7.09	4.72	1.57	-	1.83	6.73	13.78	60°	NPT 3/4"

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

Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.



MVCC



Technical features

Power supply

In direct current at 12 or 24V.

Conformity with Standards and Regulations

Electromagnetic Compatibility Directive 2014/30/UE; EN 61000-6-2, EN 61000-6-4, EN 13309, EN 60034-1.

Functioning

Continuous (S1) or intermittent duty at maximum declared centrifugal force and electric power.

Centrifugal force

Range extended up to 3300 lbs (14,9 kN), with centrifugal force adjustable by varying weights position.

Mechanical protection

IP 66 according to IEC/EN 60529.

Protection against mechanical impacts

IK 08 according to IEC/EN 62262.

Ambient temperature

From -4°F to +104°F (-20°C to +40°C).

Fixing of the vibrator

In all positions and therefore without restriction.

Lubrication

Sealed ball bearings, lubricated "for life".

Terminal box

On MF models it's positioned underneath the vibrator, on the same side as the fixing base.

Electric motor

For models 36-270 and 36-470, but in extension to the larger sizes, asynchronous three-phase type with vacuum insulated winding supplied in direct current through an electronic card included in the vibrator.

Casing

In high-tensile aluminium alloy.

Bearing flange

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

Motor shaft

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

Eccentric weights

Enable continuous adjustment of the centrifugal force.

Weight covers

In aluminum alloy for models 36-270, 36-470 and 36-1100; in AISI 304 stainless steel for other types.

Painting

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

Direct current

DESCRIPTION				MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS		
Code	Type	Type (EU)	rpm	Static Moment*	Centrifugal force	Weight	Power Output	Max. Current	
				in-lbs	lbs	lbs	HP	12V	24V
600418	MVCC 36-270 S08 MH	MVCC 3/100-S08 MF	3000	1.05	268	12.5	0.16	8.00	4.00
600419	MVCC 36-470 S08 MH	MVCC 3/200-S08 MF	3000	1.76	447	13.9	0.16	8.00	4.00
600469	MVCC 36-1100	MVCC 3/500	3000	5.04	1285	28.6	0.29	22.5	11.3
600405	MVCC 36-2500	MVCC 3/1200	3600	6.78	2486	44.0	0.58	-	22.0
600464	MVCC 36-3350	MVCC 3/1500	3600	9.13	3344	46.2	0.58	-	22.0

* Working moment = 2 x static moment.

The new MVCC series of direct current vibrators has been designed for use in areas where network electricity is not available. In particular for hoppers, silos and gatecontrols and roll-on roll-off vehicles (concrete mixers, pumps for concrete, plasterers, salt distributors, gravel spreader, fertiliser spreader, hauled silos, industrial sweeper filters). Through continuous evolution of the direct current range, Italtibras has attained a patent for the invention of the new concept with power delivery through the electronic card, included in the vibrator.

The MF models have a multi-hole fixing base to adapt to different centre distances of drilling.

Other features

The MVCC series is supplied with a special high-resistance synthetic rubber power supply cable measuring 2.5 m.

For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

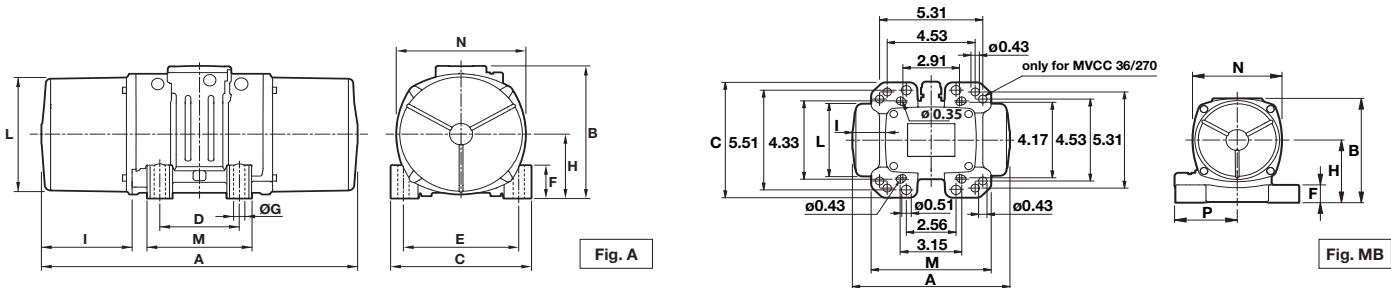
Certifications



Compliance with the applicable European Union directives.



Certification for Eurasian Customs Union
N° TC N RU Д-IT.АЛ33.В.02527

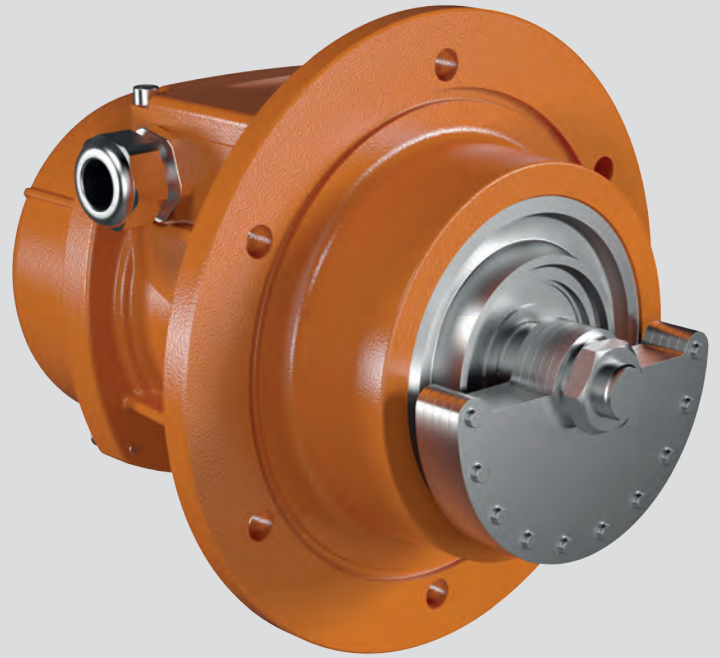


DIMENSIONAL SPECIFICATIONS (inches)

Holes

Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N	P	Cable entry
MB	8.15	5.77	6.38	See drawing MB				0.98	3.46	1.81	4.06	6.22	4.61	3.15	M20x1.5
MB	9.09	5.77	6.38	See drawing MB				0.98	3.46	2.28	4.06	6.22	4.61	3.15	M20x1.5
A	11.34	7.99	6.57	4.13	5.51	0.51	4	1.18	3.25	2.56	5.71	5.75	6.30	-	M25x1.5
A	12.13	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	2.48	6.61	6.85	7.17	-	M25x1.5
A	12.13	8.31	8.07	4.72	6.69	0.67	4	1.77	3.68	2.48	6.61	6.85	7.17	-	M25x1.5

■ MTF



Technical features

Power supply

Three-phase voltage from 24V to 690V, 50Hz or 60Hz or single-phase 100-130V, 60Hz and 200-240V, 50Hz (single-phase types are supplied without capacitor); suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

2 or 4 poles, other polarities on request.

Conformity with 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 5750 lbs (25.7 kN), with centrifugal force adjustable by 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), class H (180°C) on request.

Tropicalization

Standard on all vibrators, with vacuum encapsulation up to size 30, with "drop by drop" trickle system for larger sizes.

Ambient temperature

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

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.

Electrical connection box

The small 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.

Electric motor

Three-phase asynchronous type. Designed for maximum starting torques and torque curves specific to requirements of vibrating machines. Insulated windings through vacuum encapsulating up to size 30; using "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

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

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 series, made up of vertical vibrators with lateral flange and with weight protection covers fixed to the opposite part to the flange, adopts innovative technical solutions that increase performance and reliability.

Typically used in circular screens and in small and medium-size sieves, these vibrators are supplied with lamellar or clamped eccentric weights, with easy adjustability.

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

Category: II2D

Level of protection:

Ex tD A21 T...°C IP66 (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, on request stainless steel cover in AISI 304 is available.

Painting / Surface coating

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

On request also on MTF series other surface coatings may be available, see page 14.

For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

Certifications



Compliance with the applicable European Union directives.



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



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

Class II Div.2, Groups FG (T3B)



Version MTF-C 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.АЛ33.В.02527

N° TC RU C-IT.ГБ08.В.02190



KOSHA Korea

Certificate n° 11-AVG BO-0359

Ex td A21 IP66

2 poles - 3,000/3,600 rpm

Three-phase

DESCRIPTION						MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SIZE	IP	Ex II2D Temp. class	Centrifugal force (A/B)*		Weight		Power Output		Max. current		Ia/In	
						50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600375	MTF 36-190	MTF 3/65-S02	00	-	120°C	68.2/68.2	96.8/96.8	11.9	11.9	0.12	0.11	0.27	0.23	3.43	3.90
600369	MTF 36-480	MTF 3/200-S02	01	•	120°C	224/224	257/257	16.6	16.1	0.18	0.18	0.35	0.30	2.68	3.00
600370	MTF 36-660	MTF 3/300-S02	10	•	120°C	332/332	359/359	24.8	24.1	0.24	0.26	0.60	0.50	3.47	4.20
600378	MTF 36-1050	MTF 3/500-S02	20	•	120°C	642/642	554/554	33.2	31.2	0.44	0.53	0.80	0.75	4.21	4.80
600456	MTF 36-1500	MTF 3/700-S02	20	•	120°C	770/770	739/739	33.6	31.6	0.44	0.53	0.80	0.75	4.21	4.80
600380	MTF 36-1680	MTF 3/800-S02	30	•	120°C	825/825	891/891	37.6	36.5	0.67	0.71	1.10	1.00	3.83	6.00
600285	MTF 36-2530	MTF 3/1100-S90	40	•	120°C	1217/1217	1166/1166	57.5	55.3	1.0	1.2	1.70	1.60	6.79	7.00

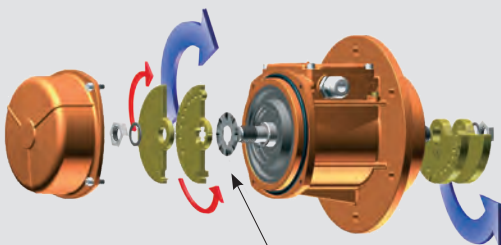
Single-phase

Code	Type	Type (EU)	SIZE	IP	Ex II2D Temp. class	Centrifugal force (A/B)*		Weight		Power Output		Max. current		Ia/In	
						50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600375	MTF 36-190	MTF 3/65-S02	00	-	120°C	68.2/68.2	96.8/96.8	11.9	11.9	0.09	0.09	0.56	1.52	2.24	2.24
600369	MTF 36-480	MTF 3/200-S02	01	-	120°C	224/224	257/257	16.5	16.1	0.15	0.15	0.75	1.52	1.67	2.24
600370	MTF 36-660	MTF 3/300-S02	10	-	120°C	332/332	359/359	24.6	24.0	0.24	0.27	1.25	2.40	2.48	3.52
600378	MTF 36-1050	MTF 3/500-S02	20	-	120°C	642/642	554/554	33.0	31.0	0.46	0.48	2.30	4.50	3.35	4.22
600456	MTF 36-1500	MTF 3/700-S02	20	-	120°C	770/770	739/739	33.4	31.5	0.46	0.48	2.30	4.50	3.35	4.22
600380	MTF 36-1680	MTF 3/800-S02	30	-	120°C	825/825	891/891	37.4	36.3	0.60	0.68	3.25	7.00	4.00	4.14

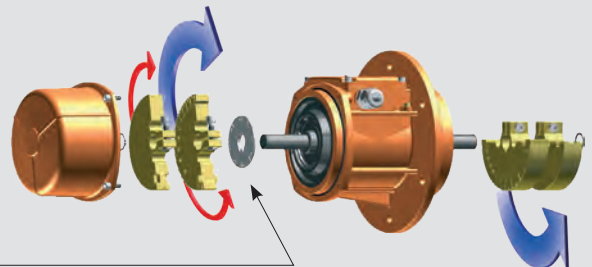
* Listed as A/B: total centrifugal force is the sum of centrifugal force of top weights (A) and centrifugal force of bottom weights (B). Ia/In = ratio between start-up current and maximum current.

Weight adjustment

Frontal fixing weights



Clamp fixing weights



Graduated disks for upper and lower weight group phase shift

Regulation between upper and lower weight groups

Single weight phase shift

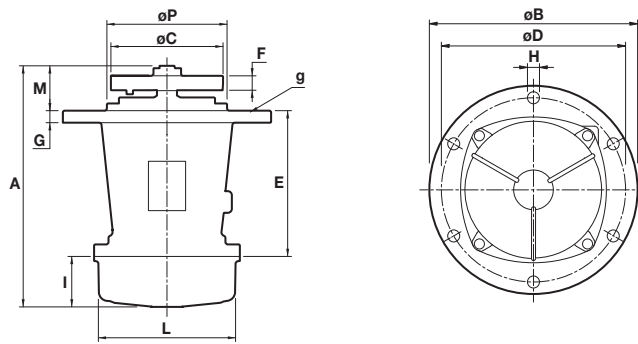


Fig. G

DIMENSIONAL SPECIFICATIONS (inches)

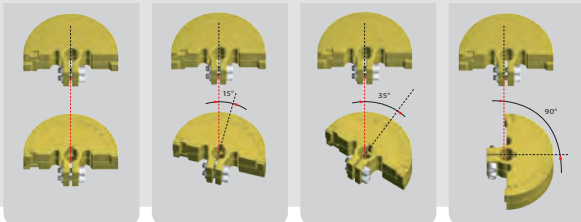
Type	Fig.	Holes											Capacitor (µF)				Seal g	
		A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	220V 50Hz	115V 60Hz		Cable entry thread
MTF 36-190	G	7.52	5.12	3.39	4.29	0.33	4	5.08	0.31	0.39	1.57	4.17	0.87	-	-	-	M20x1.5	OR 3350
MTF 36-480	G	8.90	8.33	3.66	7.40	0.47	4	5.67	0.79(50Hz) 0.63(60Hz)	0.39	2.28	4.06	0.93	-	-	-	M20x1.5	OR 4650
MTF 36-660	G	9.72	8.46	4.49	7.36	0.47	4	7.07	0.63(50Hz) 0.47(60Hz)	0.51	2.13	5.00	0.53	-	-	-	M20x1.5	OR 4625
MTF 36-1050	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.79(50Hz) 0.47(60Hz)	0.47	2.56	5.71	3.56	6.38	-	-	M25x1.5	OR 4700
MTF 36-1500	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.95(50Hz) 0.63(60Hz)	0.47	2.56	5.71	3.56	6.38	-	-	M25x1.5	OR 4700
MTF 36-1680	G	11.85	10.24	6.06	9.06	0.59	6	7.17	0.63(50Hz) 0.47(60Hz)	0.59	2.48	6.69	2.20	5.91	-	-	M25x1.5	OR 4800
MTF 36-2530	G	15.08	10.98	5.71	10.00	0.55	4	-	1.22(50Hz) 0.83(60Hz)	0.69	2.26	-	2.48	9.02	-	-	M25x1.5	-

Type	Fig.	Holes											Capacitor (µF)				Seal g	
		A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	220V 50Hz	115V 60Hz		Cable entry thread
MTF 36-190	G	7.52	5.12	3.39	4.29	0.33	4	5.08	0.31	0.39	1.57	4.17	0.87	-	10	28	M20x1.5	OR 3350
MTF 36-480	G	8.90	8.33	3.66	7.40	0.47	4	5.67	0.79(50Hz) 0.63(60Hz)	0.39	2.28	4.06	0.93	-	10	35	M20x1.5	OR 4650
MTF 36-660	G	9.72	8.46	4.49	7.36	0.47	4	7.07	0.63(50Hz) 0.47(60Hz)	0.51	2.13	5.00	0.53	-	16	25	M20x1.5	OR 4625
MTF 36-1050	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.79(50Hz) 0.47(60Hz)	0.47	2.56	5.71	3.56	6.38	12.5	50	M25x1.5	OR 4700
MTF 36-1500	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.95(50Hz) 0.63(60Hz)	0.47	2.56	5.71	3.56	6.38	12.5	50	M25x1.5	OR 4700
MTF 36-1680	G	11.85	10.24	6.06	9.06	0.59	6	7.17	0.63(50Hz) 0.47(60Hz)	0.59	2.48	6.69	2.20	5.91	25	90	M25x1.5	OR 4800

Force line direction



Mass group relative regulation



4 poles - 1,500/1,800 rpm

Three-phase

DESCRIPTION						MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS					
Code	Type	Type (EU)	SIZE	SP	II2D Temp. class	Centrifugal force (A/B)*		Weight		Power Output		Max. current		Ia/In	
						50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601446	MTF 18-170	MTF 15/80-S02	01	-	120°C	88/88	81.4/81.4	15.0	14.3	0.05	0.06	0.21	0.20	1.78	1.95
601403	MTF 18-480	MTF 15/200-S02	10	•	120°C	233/163	235/235	30.8	29.0	0.13	0.13	0.41	0.40	2.34	2.75
601405	MTF 18-920	MTF 15/400-S02	20	•	120°C	451/312	451/451	45.3	43.6	0.29	0.37	0.60	0.60	3.33	3.50
601406	MTF 18-1310	MTF 15/550-S02	20	•	120°C	607/451	649/649	48.4	45.3	0.29	0.37	0.60	0.60	3.33	3.50
601407	MTF 18-1690	MTF 15/700-S02	30	•	120°C	792/579	836/836	57.2	53.9	0.51	0.66	0.92	0.98	3.48	3.43
601280	MTF 18-2150	MTF 15/1100-S90	40	•	120°C	1109/1109	1080/1080	79.2	69.1	1.0	1.2	1.45	1.50	4.10	4.20
601379	MTF 18-2700	MTF 15/1710-S02-VRS	50	•	150°C	1967/708	1932/781	96.8	91.3	1.1	1.2	2.00	1.90	4.29	4.89
601380	MTF 18-3100	MTF 15/2000-S02-VRS	50	•	170°C	2246/785	2237/858	106	100	1.3	1.5	2.50	2.30	4.30	4.90
601381	MTF 18-5700	MTF 15/3810-S02-VRS	70	•	135°C	4198/1555	4118/1580	220	205	2.4	2.8	3.90	3.90	7.11	6.92

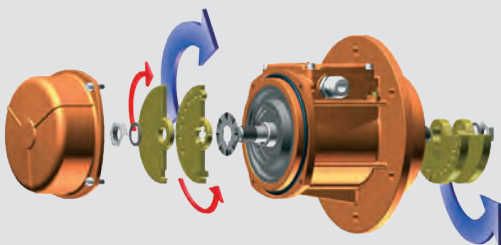
Single-phase

Code	Type	Type (EU)	SIZE	SP	II2D Temp. class	Centrifugal force (A/B)*		Weight		Power Output		Max. current		Ia/In	
						50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
601446	MTF 18-170	MTF 15/80-S02	01	-	120°C	88/88	81.4/81.4	15.0	14.3	0.05	0.05	0.43	1.00	1.20	1.3
601403	MTF 18-480	MTF 15/200-S02	10	-	120°C	233/163	235/235	30.8	29.0	0.15	0.15	1.00	2.00	1.50	1.85
601405	MTF 18-920	MTF 15/400-S02	20	-	120°C	451/312	451/451	45.3	43.6	0.16	0.24	1.20	2.80	2.50	2.5
601406	MTF 18-1310	MTF 15/550-S02	20	-	120°C	607/451	649/649	48.4	45.3	0.16	0.24	1.20	2.80	2.50	2.5
601407	MTF 18-1690	MTF 15/700-S02	30	-	120°C	792/579	836/836	57.2	53.9	0.32	0.41	2.15	5.15	5.44	3.63

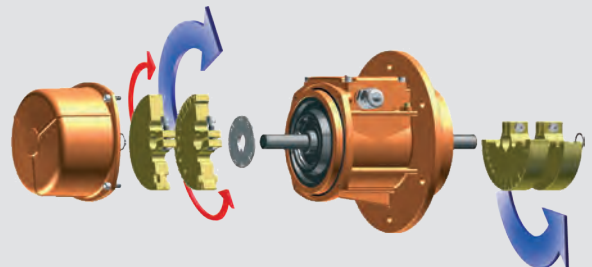
* Listed as A/B: total centrifugal force is the sum of centrifugal force of top weights (A) and centrifugal force of bottom weights (B). Ia/In = ratio between start-up current and maximum current.

Weight adjustment

Frontal fixing weights



Clamp fixing weights



Graduated disks for upper and lower weight group phase shift

Regulation between upper and lower weight groups

Single weight phase shift

Fig. G

DIMENSIONAL SPECIFICATIONS (inches)

Type	Fig.	A	ØB	ØC	Holes			Capacitor (µF)										
					ØD	ØH	N°	E	F	G	I	L	M	ØP	220V 50Hz	115V 60Hz	Cable entry thread	Seal g
MTF 18-170	G	9.49	8.33	3.66	7.40	0.47	4	5.67	1.26(50Hz) 0.79(60Hz)	0.39	2.56	4.06	1.26	-	-	-	M20x1.5	OR 4650
MTF 18-480	G	11.52	8.46	4.49(50Hz) 4.25(60Hz)	7.36	0.47	4	7.07	1.89(50Hz) 1.58(60Hz)	0.51	3.03	5.00	1.42	-	-	-	M20x1.5	OR 4625
MTF 18-920	G	13.21	9.65	5.12	8.07	0.47	6	4.88	2.32(50Hz) 1.65(60Hz)	0.47	3.66	5.71	4.67	6.38	-	-	M25x1.5	OR 4700
MTF 18-1310	G	14.82	9.65	5.12	8.07	0.47	6	4.88	3.11(50Hz) 2.32(60Hz)	0.47	4.49	5.71	5.45	6.38	-	-	M25x1.5	OR 4700
MTF 18-1690	G	14.98	10.24	6.06	9.06	0.59	6	7.17	2.32(50Hz) 1.81(60Hz)	0.59	4.17	6.69	3.64	5.91	-	-	M25x1.5	OR 4800
MTF 18-2150	G	16.89	10.98	7.48	10.00	0.55	4	-	1.93	0.69	2.26	-	-	9.02	-	-	M25x1.5	-
MTF 18-2700	G	19.21	13.78	7.48	11.42	0.67	6	9.13	3.31(50Hz) 2.24(60Hz)	0.98	5.28	8.23	4.80	6.77	-	-	M25x1.5	-
MTF 18-3100	G	19.69(50Hz) 19.21(60Hz)	13.78	7.60	11.42	0.67	6	9.13	3.94(50Hz) 2.68(60Hz)	0.98	5.28	8.23	5.24(50Hz) 4.80(60Hz)	6.77	-	-	M25x1.5	-
MTF 18-5700	G	24.17	16.14	9.84(50Hz) 9.61(60Hz)	13.78	0.87	6	12.20	3.07(50Hz) 2.24(60Hz)	1.06	7.01	11.02	4.96	9.21	-	-	M25x1.5	-

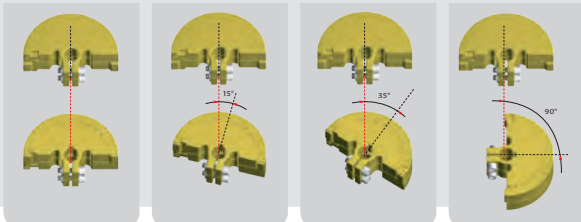
Type	Fig.	A	ØB	ØC	Holes			Capacitor (µF)										
					ØD	ØH	N°	E	F	G	I	L	M	ØP	220V 50Hz	115V 60Hz	Cable entry thread	Seal g
MTF 18-170	G	9.49	8.33	3.66	7.40	0.47	4	5.67	1.26(50Hz) 0.79(60Hz)	0.39	2.56	4.06	1.26	-	3.15	25	M20x1.5	OR 4650
MTF 18-480	G	11.52	8.46	4.49(50Hz) 4.25(60Hz)	7.36	0.47	4	7.07	1.89(50Hz) 1.58(60Hz)	0.51	3.03	5.00	1.42	-	5	25	M20x1.5	OR 4625
MTF 18-920	G	13.21	9.65	5.12	8.07	0.47	6	4.88	2.32(50Hz) 1.65(60Hz)	0.47	3.66	5.71	4.67	6.38	12 ^o +20 ^o ●	35	M20x1.5	OR 4700
MTF 18-1310	G	14.82	9.65	5.12	8.07	0.47	6	4.88	3.11(50Hz) 2.32(60Hz)	0.47	4.49	5.71	5.45	6.38	12 ^o +20 ^o ●	35 ^o +10 ^o ●	M20x1.5	OR 4700
MTF 18-1690	G	14.98	10.24	6.06	9.06	0.59	6	7.17	2.32(50Hz) 1.81(60Hz)	0.59	4.17	6.69	3.64	5.91	16 ^o +80 ^o ●	40 ^o +120 ^o ●	M25x1.5	OR 4800

○ Running capacitor / ● Additional capacitor only for start-up.

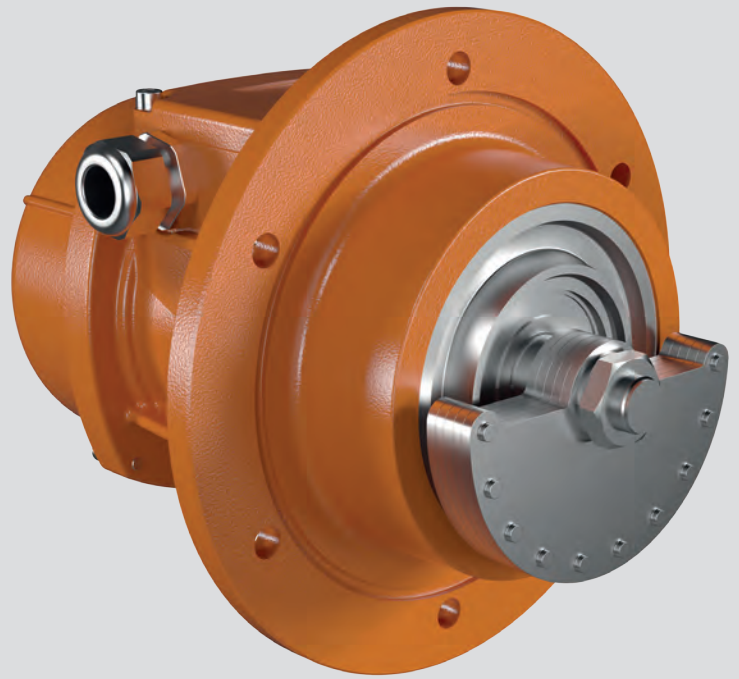
Force line direction



Mass group relative regulation



■ 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.

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

Range extended up to 5750 lbs (25.7 kN), with centrifugal force adjustable by 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 -4°F to +104°F (-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 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.

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 Italtibras.

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 392°F (200°C). Tested in salt spray for 500 hours.

For further details please contact sales offices at Italtvibras.

The technical data and models listed in this catalogue are not binding. Italtvibras 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

2 poles - 3,000/3,600 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS							
Code	Type	Type (EU)	SIZE	Centrifugal force (A/B)*		Weight		Temp. class (G)	Temp. class (D)	Power Input		Power Output		Max. current		IE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz			W	HP	A	A				
6E0369	MTF 36-480E-S02	MTF 3/200E-S02	01	224/224	257/257	16.5	16.1	T3	120°C	180	180	0.16	0.16	-	-	30	2.68
6E0370	MTF 36-660E-S02	MTF 3/300E-S02	10	332/332	359/359	24.6	24.0	T3 T4	120°C	260 230	270 230	0.28 0.23	0.28 0.23	0.57 0.48	0.50 0.41	18	3.50 4.20
6E0378	MTF 36-1050E-S02	MTF 3/500E-S02	20	642/642	554/554	33.0	31.0	T3 T4	120°C	500 350	500 360	0.40 0.28	0.40 0.28	0.76 0.57	6.67 0.50	12	4.20 5.60
6E0456	MTF 36-1500E-S02	MTF 3/700E-S02	20	770/770	739/739	33.4	31.5	T3 T4	120°C	500 350	500 360	0.40 0.28	0.40 0.28	0.76 0.57	6.67 0.50	8	4.20 5.60
6E0380	MTF 36-1680E-S02	MTF 3/800E-S02	30	825/825	891/891	37.4	36.3	T3 T4	120°C	550 390	570 400	0.54 0.39	0.54 0.39	0.95 0.72	0.83 0.64	12	4.20 5.52
6E0285	MTF 36-2530E-S90	MTF 3/1100E-S90	40	1217/1217	1166/1166	57.2	55.0	T4	120°C	830	910	0.88	0.88	1.43	1.25	6	7.30

4 poles - 1,500/1,800 rpm

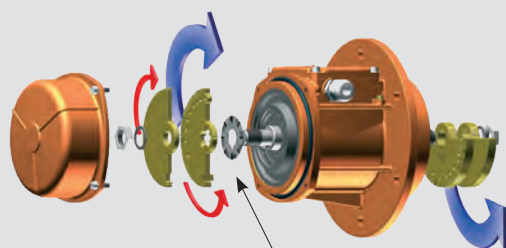
Code	Type	Type (EU)	SIZE	Centrifugal force (A/B)*		Weight		Temp. class (G)	Temp. class (D)	Power Input		Power Output		Max. current		IE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz			W	HP	A	A				
6E1403	MTF 18-480E-S02	MTF 15/200E-S02	10	233/163	235/235	30.8	29.0	T3 T4	120°C	203	-	0.12	-	0.45	-	35	2.04
6E1405	MTF 18-920E-S02	MTF 15/400E-S02	20	451/312	451/451	45.3	43.6	T3 T4	120°C	300 285	320 270	0.27 0.24	0.31 0.27	0.57 0.52	0.52 0.46	18	3.33 3.63
6E1406	MTF 18-1310E-S02	MTF 15/550E-S02	20	607/451	649/649	48.4	45.3	T3 T4	120°C	300 285	320 270	0.27 0.24	0.31 0.27	0.57 0.52	0.52 0.46	18	3.33 3.63
6E1407	MTF 18-1690E-S02	MTF 15/700E-S02	30	792/579	836/836	57.2	53.9	T3 T4	120°C	460 360	500 420	0.42 0.32	0.51 0.28	0.86 0.72	0.85 0.70	17	3.50 4.20
6E1280	MTF 18-2150E-S90	MTF 15/1100E-S90	40	1109/1109	1080/1080	79.2	69.1	T3 T4	120°C	900 630	950 700	0.88 0.62	0.98 0.68	1.38 1.05	1.32 1.00	13	4.00 5.36
6E1379	MTF 18-2700E-S02	MTF 15/1710E-S02-VRS	50	1967/708	1932/781	96.8	91.3	T3 T4	150°C	1100 630	1150 700	0.98 0.64	1.07 0.71	1.90 1.33	1.82 1.27	9	4.95 7.00
6E1380	MTF 18-3100E-S02	MTF 15/2000E-S02-VRS	50	2246/785	2237/858	106	100	T3 T4	150°C	1100 630	1150 700	0.98 0.64	1.07 0.71	1.90 1.33	1.82 1.27	9	4.95 7.00
6E1381	MTF 18-8700E-S02	MTF 15/3810E-S02-VRS	70	4198/1555	4118/1580	220	205	T3 T4	135°C	2200 1850	2400 1950	2.39 2.01	2.63 2.21	3.71 3.14	3.50 3.00	6	7.17 8.42

* Listed as A/B: total centrifugal force is the sum of centrifugal force of top weights (A) and centrifugal force of bottom weights (B).

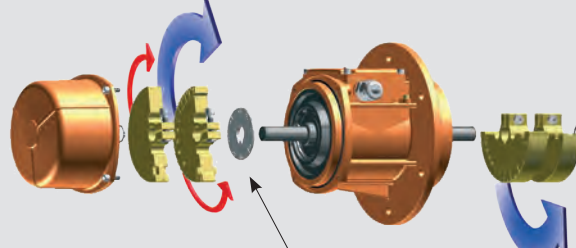
○ Available only in versions 127/220V 50Hz three-phase, 200/346V 50Hz three-phase and 210/363V 60Hz three-phase.

Weight adjustment

Frontal fixing weights



Clamp fixing weights



Graduated disks for upper and lower weight group phase shift



Regulation between upper and lower weight groups



Single weight phase shift

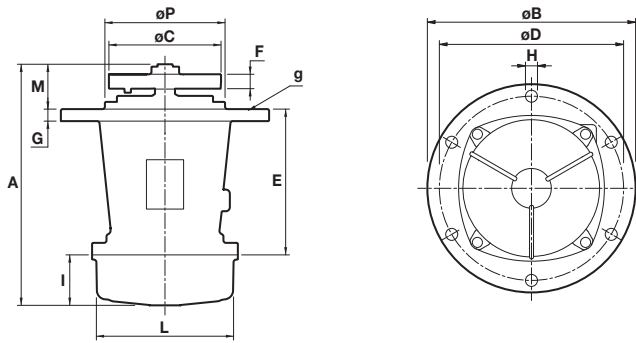


Fig. G

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	Cable entry thread	Seal g
MTF 36-480E-S02 ◊	G	8.90	8.33	3.66	7.40	0.47	4	5.67	0.79(50Hz) 0.63(60Hz)	0.39	2.28	4.06	0.93	-	M20x1.5	OR 4650
MTF 36-660E-S02	G	9.72	8.46	4.49	7.36	0.47	4	7.07	0.63(50Hz) 0.47(60Hz)	0.51	2.13	5.00	0.53	-	M20x1.5	OR 4625
MTF 36-1050E-S02	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.79(50Hz) 0.47(60Hz)	0.47	2.56	5.71	3.56	6.38	M25x1.5	OR 4700
MTF 36-1500E-S02	G	11.00	9.65	5.20	8.07	0.47	6	4.88	0.95(50Hz) 0.63(60Hz)	0.47	2.56	5.71	3.56	6.38	M25x1.5	OR 4700
MTF 36-1680E-S02	G	11.85	10.24	6.06	9.06	0.59	6	7.17	0.63(50Hz) 0.47(60Hz)	0.59	2.48	6.69	2.20	5.91	M25x1.5	OR 4800
MTF 36-2530E-S90	G	15.08	10.98	5.71	10.00	0.55	4	-	1.22(50Hz) 0.83(60Hz)	0.69	2.26	-	2.48	9.02	M25x1.5	-

Holes

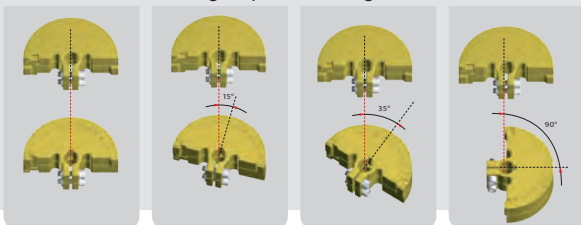
Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	Cable entry thread	Seal g
MTF 18-480E-S02	G	11.52	8.46	4.49(50Hz) 4.25(60Hz)	7.36	0.47	4	7.07	1.89(50Hz) 1.58(60Hz)	0.51	3.03	5.00	1.42	-	M20x1.5	OR 4625
MTF 18-920E-S02	G	13.21	9.65	5.12	8.07	0.47	6	4.88	2.32(50Hz) 1.65(60Hz)	0.47	3.66	5.71	4.67	6.38	M25x1.5	OR 4700
MTF 18-1310E-S02	G	14.82	9.65	5.12	8.07	0.47	6	4.88	3.11(50Hz) 2.32(60Hz)	0.47	4.49	5.71	5.45	6.38	M25x1.5	OR 4700
MTF 18-1690E-S02	G	14.98	10.24	6.06	9.06	0.59	6	7.17	2.32(50Hz) 1.81(60Hz)	0.59	4.17	6.69	3.64	5.91	M25x1.5	OR 4800
MTF 18-2150E-S90	G	16.89	10.98	7.48	10.00	0.55	4	-	1.93	0.69	2.26	-	-	9.02	M25x1.5	-
MTF 18-2700E-S02	G	19.21	13.78	7.48	11.42	0.67	6	9.13	3.31(50Hz) 2.24(60Hz)	0.98	5.28	8.23	4.80	6.77	M25x1.5	-
MTF 18-3100E-S02	G	19.69(50Hz) 19.21(60Hz)	13.78	7.60	11.42	0.67	6	9.13	3.94(50Hz) 2.68(60Hz)	0.98	5.28	8.23	5.24(50Hz) 4.80(60Hz)	6.77	M25x1.5	-
MTF 18-8700E-S02	G	614	16.14	9.84(50Hz) 9.61(60Hz)	13.78	0.87	6	12.20	3.07(50Hz) 2.24(60Hz)	1.06	7.01	11.02	4.96	9.21	M25x1.5	-

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

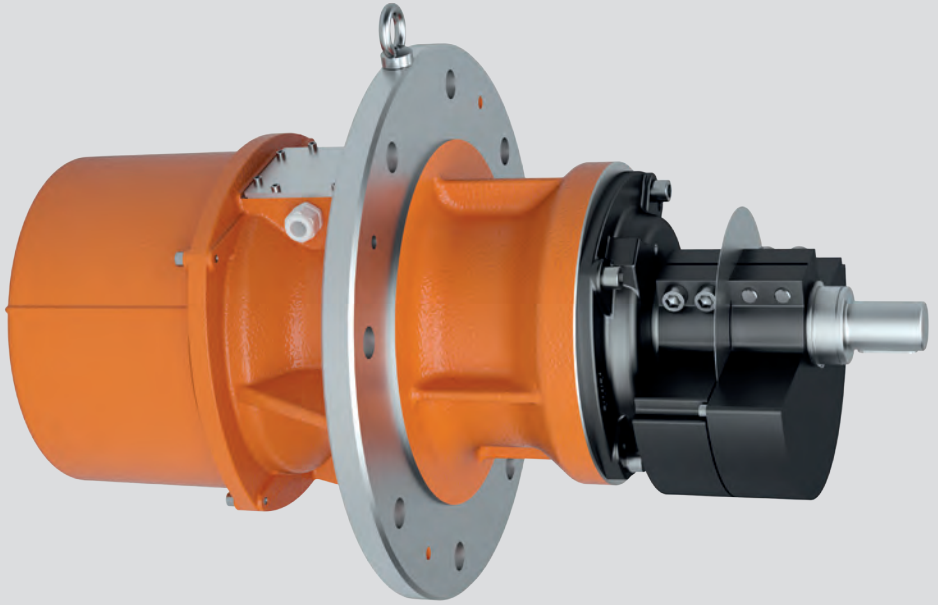
Force line direction



Mass group relative regulation



■ MTF-ACC



Technical features

Power supply

Three phase tension from 220V to 690V at 50Hz or 60Hz; variable frequency from 20Hz to the nameplate frequency, at constant torque, with frequency inverter.

Polarities

6 pole standard, 4 & 8 pole on request, depending on frame size.

Reference Regulations and Directives

Low Voltage Directive 2006/95/CE; EN/IEC 60034-1.

Functioning

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

Centrifugal force

Range extended to 44000 lbs (197 kN), adjustable varying the position of eccentric weights.

Mechanical protection

IP66 according to IEC/EN 60529.

Protection against mechanical impacts

IK 08 according to IEC/EN 62262.

Insulation class

Class F (155°C).

Tropicalisation

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

Ambient temperature

From -4°F to +104°F (-20°C to +40°C); higher or lower temperatures are possible on request.

Vibrator thermal protection

With thermal detectors with thermistors PTC 266°F (130°C). Upon request different temperatures thermistors are available and anti-condensation heaters.

Fixing of the vibrator

Typical fixing of these vibrators on inclined screens is horizontal, with connecting shaft and joints between the two motor-vibrators in order to keep the weights synchronized. The joints and the connecting shaft are not part of the standard supply but on demand only.

Lubrication

All vibrators are correctly lubricated at the factory and do not require further lubrication at their start-up in normal operating conditions.

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 obtaining maximum torque values both at starting to respond to the requirements of vibrating machines. Insulated windings by means of the "drop by drop" trickle system with class H resin. The rotor is die cast aluminum (squirrel cage).

Casing

In spheroidal cast iron, with connecting flange for a solid connection to the vibrating machine.

Bearing flange

Carried out in spheroidal graphite cast iron. Relevant design was studied to convey the load to the casing in a uniform way

Bearings

Custom made with special profile especially designed for Italtvibras, suitable to withstand both high radial and axial loads

Motor shaft

In treated steel alloy (isothermal hardening) resistant to high stresses. One side extension to allow linear coupling through joint.

The new MTF-ACC Series consists of flange mounted electric vibrators with shaft extension on one side and weight protection cover on the opposite side. This vibrator is designed for use on horizontal or inclined screens of medium and large dimensions.

The MTF-ACC vibrators are easy to install, they are normally fixed to the sides of the screen by means of a side flange and the two shafts are mechanically connected in-line through a shaft and dynamic elastic joints.

With two MTF-ACC motor-vibrators coupled in-line up to 88000 lbs (394kN) of centrifugal force can be reached.

The Italtibras technical staff is able to assist with the selection of the connecting shaft as well of the dynamic joints coupling and of course with the application of the motor-vibrators.

Eccentric weights

Allow adjustment of the centrifugal force. It is achieved by means of a graduated scale expressing it as a percentage of the maximum centrifugal force.

Weight covers

In aluminum alloy. On several sizes split covers are also available to enable opening in radial direction.

Painting

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

For further details please contact Italtibras Technical Assistance.

Technical features and models mentioned in this catalogue are indicative and not binding. Italtibras reserves the right to modify them without any obligation.

Certifications



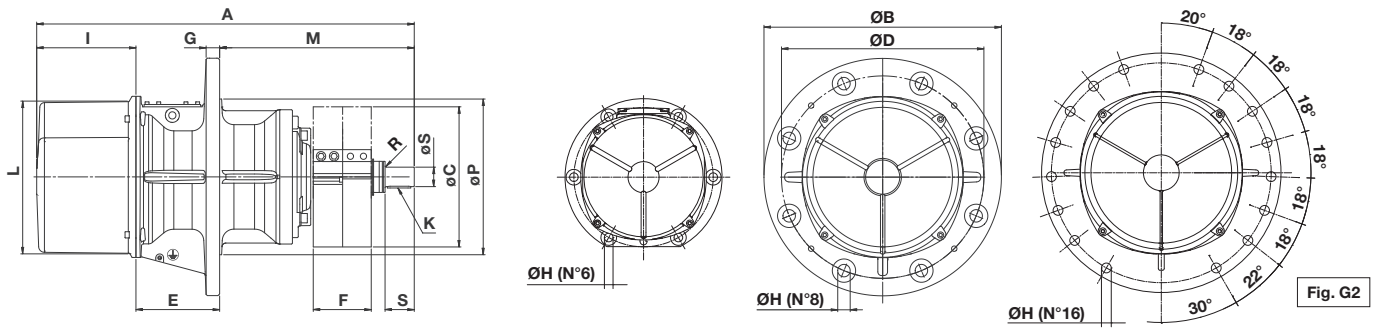
In conformity with the applicable Communitarian Directives.

6 poles - 1,000/1,200 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Code	Type	Type (UE)	SIZE	Static moment		Centrifugal force		Weight		Power Output		Max current		Ia/In	
				in-lbs		lbs		lbs		HP		A			
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602013	MTF 12-11400-ACC	MTF 10/5150-S02-ACC	80	407	281	11506	11440	506	451	3.50	3.90	6.50	6.00	5.24	5.50
602001	MTF 12-14500-ACC	MTF 10/6600-S02-ACC	97	529	346	14960	14091	695	634	5.60	6.70	10.0	9.80	5.61	5.82
602498	MTF 12-20100-ACC	MTF 10/10000-S02-ACC	97	754	492	21331	20057	924	838	8.40	9.00	13.5	12.4	4.72	4.92
602305	MTF 12-24400-ACC	MTF 10/11200-S02-ACC	97	868	600	24552	24420	961	884	8.40	9.00	13.5	12.4	4.72	4.92
602217	MTF 12-26500-ACC	MTF 10/12000-S09-RF-ACC	105	930	652	26319	26558	1463	1342	10.1	11.0	16.3	15.0	5.21	5.73
602101	MTF 12-29000-ACC	MTF 10/13000-S02-ACC	97	1001	709	28307	28886	1067	902	10.6	11.4	17.0	16.0	4.98	5.00
602002	MTF 12-31000-ACC	MTF 10/15000-S09-RF-ACC	105	1101	756	31141	30809	1518	1430	12.1	13.4	19.0	18.0	5.88	5.78
602218	MTF 12-37000-ACC	MTF 10/17500-S09-RF-ACC	105	1348	908	38119	36969	1650	1540	14.7	15.4	24.5	23.0	5.71	5.96
602009	MTF 12-40000-ACC	MTF 10/19500-S09-RF-ACC	105	1560	994	44136	40480	1672	1562	14.7	15.4	24.5	23.0	5.71	5.96

* Working moment = 2 x static moment RF = Water circulation cooling possibility in high temperature environments.



DIMENSIONAL FEATURES (inches)

Holes

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	ØS	S	R	K key
MTF 12-11400-ACC	G2	34.06	15.75	11.02	13.98	0.87	6	8.46	6.77 (50Hz) 4.72 (60Hz)	0.91	9.76	11.97	15.83	11.89	1.57	2.13	-	0.47x0.31x0.79
MTF 12-14500-ACC	G2	32.09	24.02	14.17	20.47	1.26	8	8.46	4.09 (50Hz) 2.87 (60Hz)	1.34	6.85	15.24	16.77	15.75	1.97	3.15	-	0.55x0.35x2.36
MTF 12-20100-ACC	G2	38.19	24.02	14.17	20.47	1.26	8	8.46	5.79 (50Hz) 3.78 (60Hz)	1.34	10.04	15.24	19.69	15.75	1.97	2.95	-	0.55x0.35x2.36
MTF 12-24400-ACC	G2	38.19	24.02	14.17	20.47	1.26	8	8.46	6.77 (50Hz) 4.80 (60Hz)	1.34	10.04	15.24	19.69	15.75	1.97	2.95	-	0.55x0.35x2.36
MTF 12-26500-ACC	G2	43.11	24.02	17.48	22.05	0.98	16	11.02	4.21 (50Hz) 3.74 (60Hz)	1.57	7.87	19.13	24.21	17.52	2.56	5.51	-	0.79x0.47x3.54
MTF 12-29000-ACC	G2	41.73	24.02	13.98	20.47	1.26	8	8.46	8.27 (50Hz) 6.38 (60Hz)	1.34	11.81	15.24	21.46	15.75	1.97	2.95	-	0.55x0.35x2.36
MTF 12-31000-ACC	G2	44.61	24.02	17.48 (50Hz) 16.54 (60Hz)	22.05	0.98	16	11.02	4.57 (50Hz) 3.74 (60Hz)	1.57	7.87	19.13	25.71	17.52	3.15	7.60	0.43	0.87x0.55x2.76
MTF 12-37000-ACC	G2	46.42	24.02	17.48 (50Hz) 16.54 (60Hz)	22.05	0.98	16	11.02	5.59 (50Hz) 4.49 (60Hz)	1.57	9.45	19.13	25.94	17.52	3.15	6.65	0.43	0.87x0.55x2.76
MTF 12-40000-ACC	G2	47.99	24.02	17.48	22.05	0.98	16	11.02	6.61 (50Hz) 4.17 (60Hz)	1.57	11.02	19.13	25.94	17.52	3.15	6.65	0.43	0.87x0.55x2.76

la/In = ratio between start-up current and max current.

■ 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.

Conformity with 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 aluminium.

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 Italtibras, 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 Italtibras sales office). Lamellar for clamped eccentric weight have an ample possibility of

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.

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

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.

For further details please contact sales offices at Italtvibras.

The technical data and models listed in this catalogue are not binding. Italtvibras reserves the right to modify them without prior notice.

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.АЛ33.В.02527
N° TC RU C-IT.ГБ08.В.02190



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

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

Three-phase

DESCRIPTION							MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS				
Code	Type	Type (UE)	SIZE	 II2D Classe temp.	Available versions	Centrifugal force		Weight	Power Output		Max current		Ia/In	
						50Hz	60Hz		lbs	lbs	HP	A	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

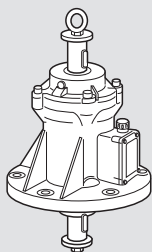
MVB-FLC 4 poles - 1,500/1,800 rpm

Code	Type	Type (UE)	SIZE	 II2D Classe temp.	Available versions	Centrifugal force		Weight	Power Output		Max current		Ia/In	
						50Hz	60Hz		lbs	lbs	HP	A	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.

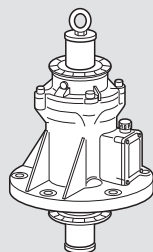
Versions

Version A



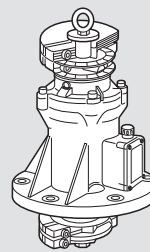
Basic model.

Version B



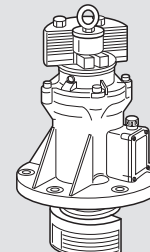
Basic model with angle disc.

Version C



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

Version D



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

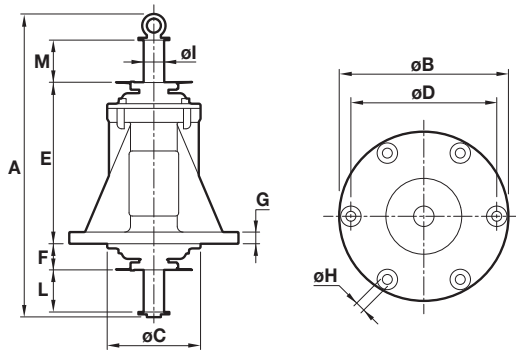


Fig. I

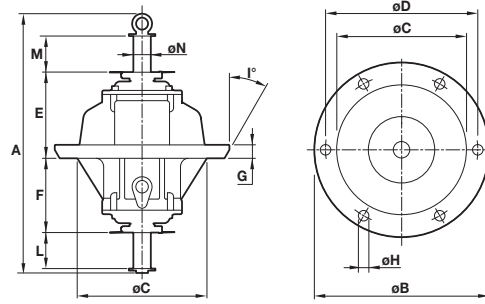


Fig. L

DIMENSIONAL 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

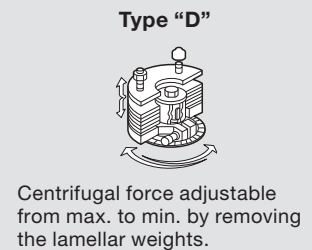
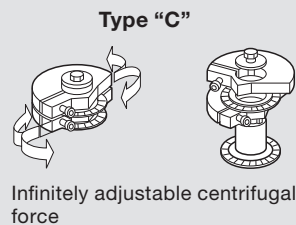
Holes

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

la/ln = 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.



■ 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.

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.

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 request 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 aluminium.

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 Italtvibras, 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 Italtvibras 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.

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.

In particular, these vibrators can be used in areas 1 and 2 (gas) and in areas 21 and 22 (dusts) according to the layout and the following features:

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

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.

For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras 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 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.ГБ08.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 4 poles - 1,500/1,800 rpm

Three-phase

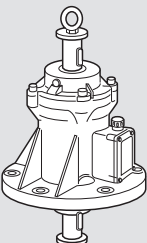
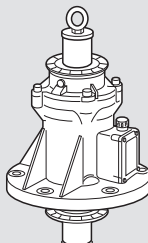
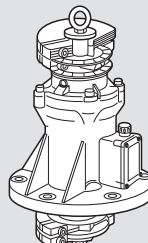
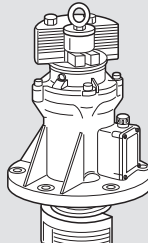
DESCRIPTION					MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS								
Code	Type	Type (UE)	SIZE	Available versions	Centrifugal force		Weight	Temp. class (G)	Temp. class (D)	Power Input		Power Output		Max current		tE (s)	Ia/In
					50Hz	60Hz				W	HP	A	A				
6E1226	MVB 18-1510E*	MVB 1510/15-E*	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		tE (s)	Ia/In
					50Hz	60Hz				W	HP	A	A				
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

<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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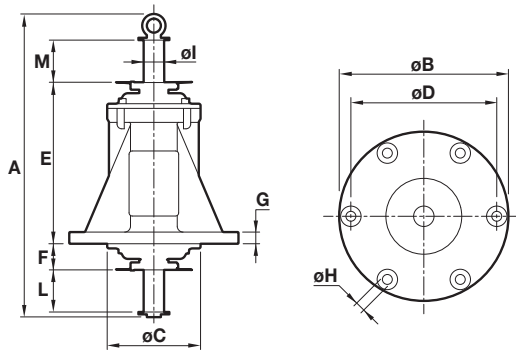


Fig. I

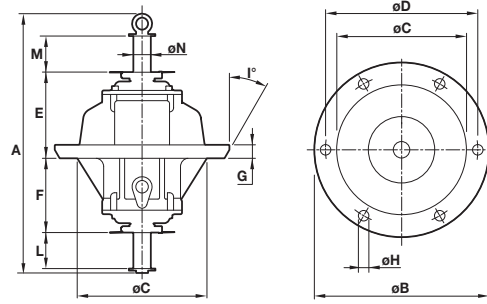


Fig. L

DIMENSIONAL 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

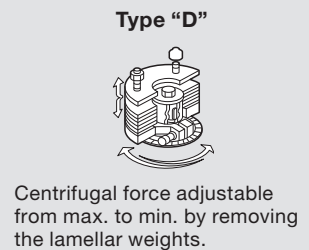
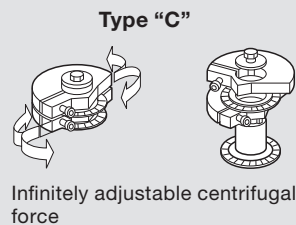
Holes

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.



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.

Conformity with 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 are available on request.

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 tapered 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.

4 poles - 1,500/1,800 rpm Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS							
Code	Type	Type (EU)	  I12D Temp. class	rpm		Centrifugal force lbs		Weight lbs	Power Output HP		Max current A		Ia/In		
				50Hz	60Hz	50Hz	60Hz		50Hz	60Hz	400V 50Hz	480V 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

Certifications

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



Compliance with the applicable European Union directives.



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



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



Version VB-C 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.АЛ33.В.02527
N° TC RU C-IT.ГБ08.В.02190



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



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

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

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 Italtibras, 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.

For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

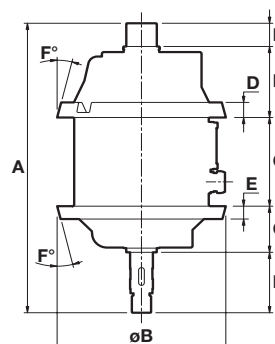


Fig. H

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

la/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. In particular, 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.

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.

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

Range extended up to 11000 lbs (49 kN), eccentric weights not included.

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 request it is possible to have vibrators for maximum ambient temperatures of 131°F (+55°C).

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 tapered 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 aluminium.

4 poles - 1,500/1,800 rpm Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS								
Code	Type	Type (EU)	Poles	Centrifugal force		Weight		Temp. class (G)	Temp. class (D)	Power Output		Max current		tE (s)	Ia/In	
				rpm	lbs	lbs	HP			A						
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V	460V	50Hz	60Hz			
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

Certifications

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



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.В.02190



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

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.

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.

For further details please contact sales offices at Italvibras.

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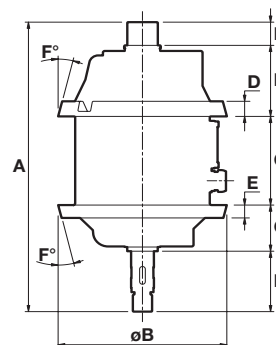


Fig. H

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.



Technical features

Functioning

VR rotational motion exciters have a spheroidal cast iron body, within which two bearings support a shaft with eccentric weights fitted at either end, generating the declared centrifugal force.

Static moment, thus centrifugal force, are adjustable by means of additional weight inserts in steel or lead.

Bearings are lubricated by oil bath, which must be inserted by the end user.

The typical application is with two VR exciters coupled together by means of a cardan shaft, with each VR fitted at either side of the machine.

They are available in executions 1U and 2U, with one joint and two joints respectively.

The rotation of the shaft of the exciter with two joints (2U) is obtained by means of an external drive, connecting to the shaft by means of a joint, generally a cardan (recommended).

The external drive can be an electric motor, or hydraulic or other, to be connected directly to the joint by means of belts and pulleys and can have variable speed in function of the exciter specifications.

Conformity to Directives

In the application field of the Machinery Directive 2006/42/EC, the VR rotational motion exciters can be considered as “partly completed machinery”.

Static moment

The total static moment of a pair of VR exciters varies from 373 to 6386 in-lbs depending on the model.

For each single model the static moment can be set thanks to the additional steel or lead inserts.

Centrifugal force

Up to 130200 lbs (581 kN) by pair of VR exciters.

Ambient temperature

From -40°F to +158°F (-40°C to +70°C).

Mounting position

VR exciters can be mounted with the shafts in horizontal position.

Lubrication

Oil bath lubricated bearings. Each exciter is supplied without oil which has to be inserted by the end user following relevant instructions as per Manual.

Driving system

The movement is transmitted by an external driving system coupled to the shaft of the 2U version VR by means of a joint, generally a Cardan (recommended).

The external driving system can be an electric motor, a hydraulic motor or other type of motor, directly coupled or by belts and pulleys.

Casing

In spheroidal cast iron.

Bearings

Spherical double crown roller bearings, high rated lifetime at maximum load.

Motor shaft

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

Eccentric weights

Steel or cast iron eccentric weights, additional steel or lead insert weights.

Weight cover

The VR oscillators are equipped with one weight cover on the side which remain to the external to protect the rotating weight

Painting

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

The VR series of rotational motion exciters are designed for use in pairs, on vibrating machines or medium and large sizes.

The technical choices made in the design have allowed an excellent containment of noise as well as a long service life.

Centrifugal force setting is simple through the choice of additional insert weights.

With the VR exciters it is possible to obtain a unidirectional vibration with high values of centrifugal force by fitting two pairs of VR oscillators in parallel on the vibrating machine.

Other features

The VR Italtibras exciters are supplied with:

- coupling flange according to DIN standards on the shaft
- additional weights, based on the requested weight setting
- oil level inspection hole, magnetic plugs and breathing plug with valve
- technical handbook for use and maintenance.

On request Italtibras can supply the complete driving system, including joints, shaft extension and electric motor.

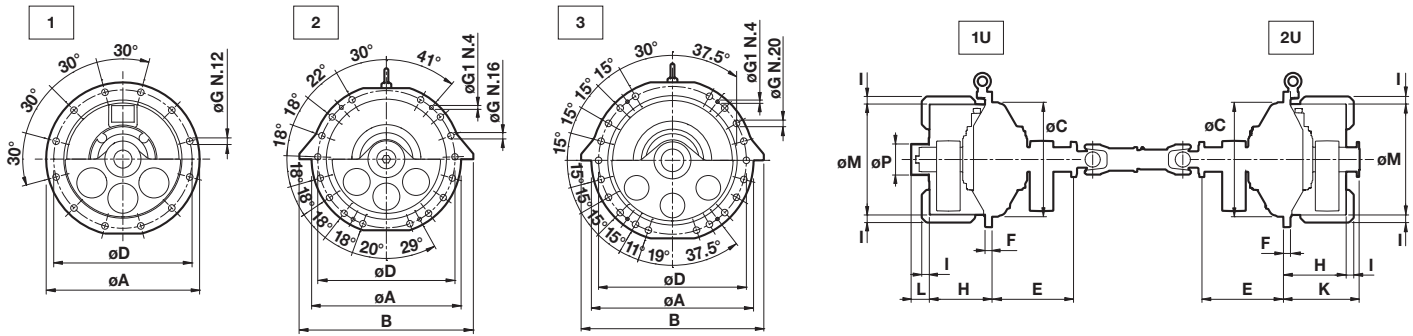
Different fixing distances can be available.

Contact Italtibras Sales Service.

Technical features and models mentioned in this catalogue are indicative and not binding. Italtibras reserves the right to modify them without any obligation.

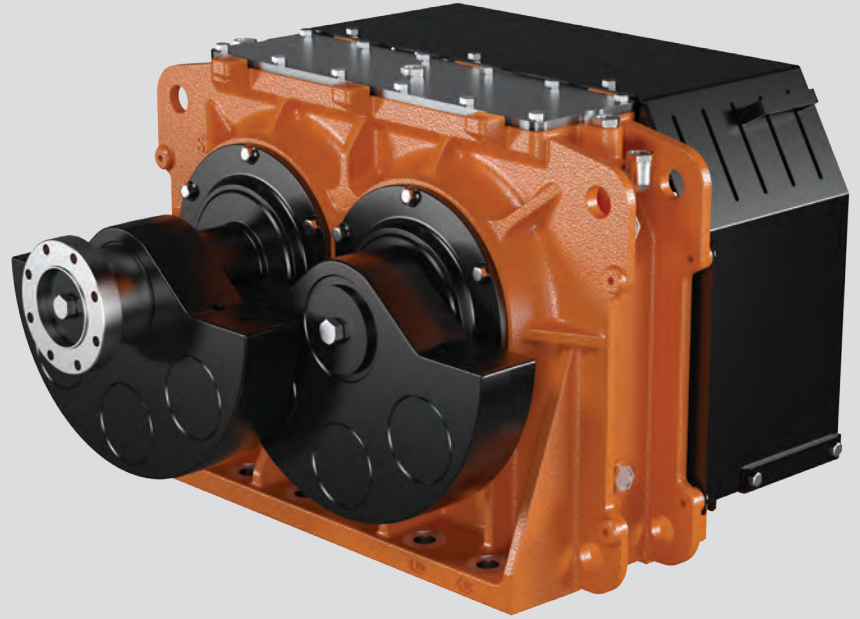
DESCRIPTION					SPECIFICATIONS					
Code	Execution	Type	Type (EU)	SIZE	Additional weights setting	Static moment lbs	Max RPM	Centrifugal force lbs	Weight lbs	Drive Motor Rating HP
0605043	1U	VR 12-5000	VR 5000/6-S08	280	Min	373	1500	23810	315+315	7.5
0605044	2U				Max	843	1000	23891	377+377	
0605048	1U	VR 12-8000	VR 8000/6-S08	297	Min	715	1600	51864	525+525	15
0605049	2U				Max	1352	1213	56350	597+597	
0605046	1U	VR 12-10000	VR 10000/6-S08	297	Min	905	1444	53484	562+562	15
0605047	2U				Max	1713	1094	58114	653+653	
0605050	1U	VR 12-11500	VR 11500/6-S08	297	Min	1049	1354	54520	595+595	20
0605051	2U				Max	1989	1000	56394	701+701	
0605052	1U	VR 12-14000	VR 14000/6-S08	310	Min	1540	1334	77647	825+825	20
0605053	2U				Max	2439	1092	82453	915+915	
0605054	1U	VR 12-17500	VR 17500/6-S08	310	Min	1625	1303	78198	842+842	25.0
0605055	2U				Max	3058	1000	86642	992+992	
0605056	1U	VR 9-19000	VR 19000/8-S08	310	Min	1772	1255	79080	866+866	20 (8 poles)
0605057	2U				Max	3308	957	85848	1025+1025	
0605058	1U	VR 12-27500	VR 27500/6-S08	320	Min	3441	1074	112502	1393+1393	40
0605059	2U				Max	4796	980	130514	1500+1500	
0605060	1U	VR 9-37000	VR 37000/8-S08	320	Min	3789	1030	113935	1453+1453	40 (8 poles)
0605061	2U				Max	6386	820	121695	1654+1654	

* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (inches)

Type	Ref.	Fixing														
		ϕA	B	ϕC	ϕD	ϕG	$\phi G1$	E	F	H	I	K	L	ϕM	ϕP	
VR 12-5000	1	20.08	-	15.75	18.11	0.87	-	10.73	0.98	7.97	1.28	9.94	2.64	16.34	3.82	
VR 12-8000	2	24.02	27.95	19.29	22.05	1.02	0.63	12.97	1.18	9.78	1.28	11.99	3.07	18.62	5.24	
VR 12-10000	2	24.02	27.95	19.29	22.05	1.02	0.63	13.74	1.18	10.57	1.28	12.76	3.07	18.62	5.24	
VR 12-11500	2	24.02	27.95	19.29	22.05	1.02	0.63	14.33	1.18	11.26	1.28	13.35	3.07	18.62	5.24	
VR 12-14000	2	24.02	27.95	19.29	22.05	1.02	0.63	16.34	1.18	12.99	1.28	15.35	3.19	20.00	5.51	
VR 12-17500	2	24.02	27.95	19.29	22.05	1.02	0.63	16.34	1.18	12.99	1.28	15.35	3.19	20.00	5.51	
VR 9-19000	2	24.02	27.95	19.29	22.05	1.02	0.63	16.34	1.18	12.99	1.28	15.35	3.19	20.00	5.51	
VR 12-27500	3	31.10	35.04	24.80	28.35	1.26	0.63	18.25	1.38	14.41	1.28	16.99	3.27	24.41	6.42	
VR 9-37000	3	31.10	35.04	24.80	28.35	1.26	0.63	18.25	1.38	14.41	1.28	16.99	3.27	24.41	6.42	



Technical features

Functioning

VU linear motion exciters are composed of a casing (central body) that, by means of 4 bearings supports two shafts, synchronized by two helicoidal ground gears. The eccentric weights are mounted at the end of both shafts, rotating synchronized in opposite sense, determining a resulting unidirectional centrifugal force perpendicular to the mounting surface of the exciter.

Conformity with Standards and Regulations

In the application field of the Machinery Directive 2006/42/EC, the VU linear motion exciters can be considered as “partly completed machinery”.

Static moment

From 273 to 10393 in-lbs. The static moment of eccentric weights can be adjusted by means of the additional weights.

Centrifugal Force

Up to 161000 lbs (718 kN).

Ambient temperature

From -40°F to +158°F (-40°C to +70°C).

Exciter mounting position

VU exciters can be mounted in all positions, always with the shafts in horizontal position.

Lubrication

Gears and bearings are oil splash / spray lubricated.

Driving system

The movement is transmitted by an external driving system coupled with the driving shaft by means of a joint, generally a Cardan joint (recommended). The external driving system can be an electric motor, a hydraulic motor or other motor type, directly coupled or by belts and pulleys.

Casing

In spheroidal cast iron.

Bearings

Spherical roller bearings, highest quality, long rated lifetime in conditions of maximum load.

Shafts

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

Eccentric weights / additional weights

Eccentric weights in steel, additional weights in steel and/or lead.

Weight covers

All exciters are equipped with two weight covers for protection from rotating parts.

Painting

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

Other features

The VU Italvibras exciters are supplied with:

- coupling flange according to DIN standard on the driving shaft (on request a second flange on the opposite side);
- additional weights, based on the requested weights setting;
- oil level dipstick, magnetic plugs and breather plug with valve;
- technical handbook for use and maintenance.

The VU series linear motion exciters manufactured by Italtvibras have been designed for medium and large size vibrating machines operating in many industrial processes.

The state of the art design and components selected offer reliable performance and low operating noise, resulting in a longer lifetime for bearings and gears.

Model VU exciters can be mounted in line (connected through cardan shafts), in order to achieve higher centrifugal forces.

Italtvibras competence and experience, in the vibration field by over 50 years, are the best guarantee for reliability and safety of the VU series exciters.

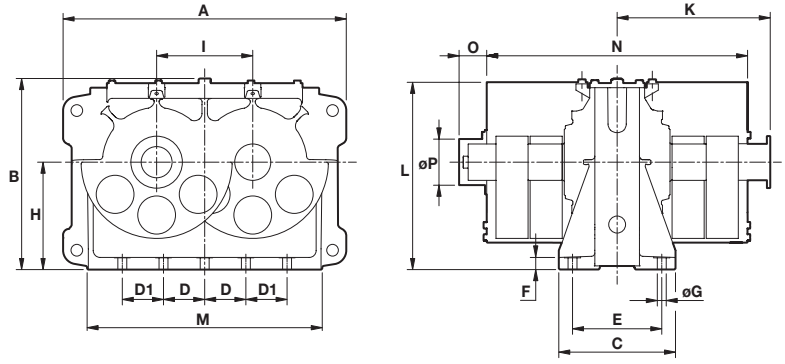
The VU linear motion exciters are completely designed, manufactured and tested in Italy.

On request Italtvibras can supply the complete driving system including joints, shaft extension and electric motor.

Other mounting bolt patterns are available. For further details please contact sales offices at Italtvibras.

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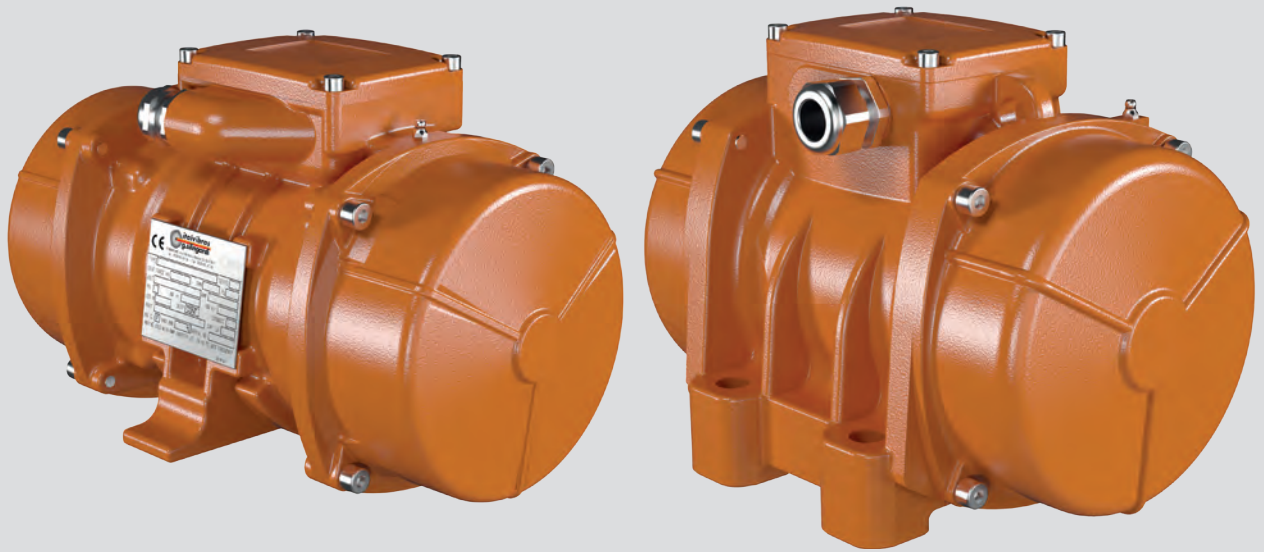
DESCRIPTION				SPECIFICATIONS						
Code	Type	Type (EU)	Frame	Additional weights setting	Static moment		Centrifugal Force lbs	Weight lbs	Drive Motor Rating (HP)	
					in-lbs	Max RPM			1 VU	2 VU
0605033	VU 12-5000	VU 5000/6-S08	270	Min	273	1475	16838	529	4.0	10
				Max	473	1163	18097	584		
0605021	VU 12-8000	VU 8000/6-S08	280	Min	359	1534	24055	657	7.5	15
				Max	701	1098	24055	750		
0605020	VU 12-10000	VU 10000/6-S08	280	Min	373	1500	23830	664	7.5	15
				Max	843	1000	23830	787		
0605022	VU 12-14000	VU 14000/6-S08	295	Min	664	1460	40241	948	10	20
				Max	1213	1080	40241	1080		
0605032	VU 12-16000	VU 16000/6-S08	295	Min	692	1430	40241	955	15	25
				Max	1387	1000	39342	1122		
0605023	VU 12-18000	VU 18000/6-S08	297	Min	715	1600	51931	1241	15	25
				Max	1563	1138	57551	1431		
0605025	VU 12-23000	VU 23000/6-S08	297	Min	905	1500	57776	1391	20	40
				Max	1990	1000	56652	1634		
0605024	VU 9-27000	VU 27000/8-S08	297	Min	1049	1323	51931	1387	15	30
				Max	2316	890	51931	1671		
0605026	VU 12-33000	VU 33000/6-S08	310	Min	1535	1335	77559	1973	25	50
				Max	2833	1000	80257	2216		
0605028	VU 12-38000	VU 38000/6-S08	310	Min	1778	1262	80257	2092	25	50
				Max	3294	927	80257	2377		
0605027	VU 9-42000	VU 42000/8-S08	310	Min	1744	1200	71265	2092	25	50
				Max	3657	828	71265	2460		
0605034	VU 9-60000	VU 60000/8-S08	320	Min	3441	1000	97568	3199	40	75
				Max	5266	815	99366	3483		
0605029	VU 9-74000	VU 74000/8-S08	320	Min	3789	1000	107459	3351	40	100
				Max	6386	770	107459	3754		
0605041	VU 9-103000	VU 103000/8-S08	360	Min	5118	1000	145227	5000	60	125
				Max	8952	750	142754	5481		
0605042	VU 9-120000	VU 120000/8-S08	360	Min	5733	980	156243	5214	76	150
				Max	10393	740	161414	5798		



Dimensional specifications (inches)

Type	A	B	C	D	D1	E	ØG	N°	F	H	I	K	L	M	N	O	ØP
VU 12-5000	25.79	16.14	9.84	1x7.48	2x4.33	6.50	0.87	8x3/4"	0.98	8.86	8.27	12.62	16.04	21.46	20.87	2.74	3.82
VU 12-8000	27.56	17.85	10.24	1x7.48	2x4.33	6.50	0.87	8x3/4"	1.18	9.45	9.13	13.01	17.42	22.64	21.85	2.74	3.82
VU 12-10000	27.56	17.85	10.24	1x7.48	2x4.33	6.50	0.87	8x3/4"	1.18	9.45	9.13	13.05	17.42	22.64	21.85	2.74	3.82
VU 12-14000	29.92	20.02	10.63	1x8.66	2x4.33	7.48	1.02	8x1"	1.18	11.02	10.08	15.31	19.59	25.20	26.38	2.74	4.21
VU 12-16000	29.92	20.02	10.63	1x8.66	2x4.33	7.48	1.02	8x1"	1.18	11.02	10.08	15.31	19.59	25.20	26.38	2.74	4.21
VU 12-18000	32.48	21.71	13.39	4x4.72	-	10.24	1.02	10x1"	1.38	12.20	11.02	16.02	21.28	26.97	26.97	3.17	5.24
VU 12-23000	32.48	21.71	13.39	4x4.72	-	10.24	1.02	10x1"	1.38	12.20	11.02	17.56	21.28	26.97	29.92	3.17	5.24
VU 9-27000	32.48	21.71	13.39	4x4.72	-	10.24	1.02	10x1"	1.38	12.20	11.02	18.74	21.28	26.97	32.28	3.17	5.24
VU 12-33000	36.42	24.76	14.96	5x4.72	-	11.81	1.26	12x1 1/8"	1.38	13.78	12.60	18.76	24.33	30.31	32.09	3.27	5.63
VU 12-38000	36.42	24.76	14.96	5x4.72	-	11.81	1.26	12x1 1/8"	1.38	13.78	12.60	20.10	24.33	30.31	34.84	3.27	5.63
VU 9-42000	36.42	24.76	14.96	5x4.72	-	11.81	1.26	12x1 1/8"	1.38	13.78	12.60	20.65	24.33	30.31	36.02	3.27	5.63
VU 9-60000	42.13	27.87	18.50	4x4.72	2x5.91	15.35	1.26	14x1 1/8"	1.38	15.35	14.57	19.65	27.50	36.22	38.19	1.18	8.19
VU 9-74000	42.13	27.87	18.50	4x4.72	2x5.91	15.35	1.26	14x1 1/8"	1.38	15.35	14.57	23.31	27.50	36.22	41.14	3.35	6.34
VU 9-103000	50.39	32.68	19.69	1x11.02	4x6.30	16.14	1.54	12x1 3/8"	1.77	18.11	17.32	24.78	32.32	44.68	42.32	4.55	7.87
VU 9-120000	50.39	32.68	19.69	1x11.02	4x6.30	16.14	1.54	12x1 3/8"	1.77	18.11	17.32	26.04	32.32	44.68	44.88	4.55	7.87

ITV-VR / ITVAF



Technical features

Power supply

Three-phase voltage from 24V to 690V at the various frequencies, depending on the type and series. For the power supply of the vibrators it is possible to use electronic frequency drives or electromechanical frequency converters.

Conformity with Standards and Regulations

Low Voltage Directive 2014/35/UE;
EN/IEC 60034-1; UL 1004-1, CSA C22.2
No.100, NEMA MG-1.

Operation

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

Centrifugal force

Range extended up to 11660 lbs (52 kN) with force output adjustable 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).

Tropicalization

Standard on all vibrators, with vacuum encapsulation up to size AF33 and for frame size AF70, with “drop by drop” trickle system for sizes AF50 and AF68. (on request vacuum encapsulated winding may be supplied for these two frame sizes).

Ambient temperature

To operate correctly, from -4°F to +104°F (-20°C to +40°C).

Vibrator thermal protection

With PTC rated thermistor heat detectors 266°F (130°C) installed as part of the standard assembly size AF70 onwards. Also on request thermistors with different temperatures and anti-condensation heaters can be assembled on the lower sizes.

Fixing of the vibrator

In all positions and therefore without restriction. Two different types of connection are available for the ITV-VR and ITVAF series: fixed connection, where the electric vibrators are connected to the structure by bolts through fixing holes and the RS cradle connection, where the electric vibrators are connected to the structure with the standardized cradle type RS2 except for frame size AF10, for this the cradle fixing is type RS1.

Lubrication

All the electric vibrators are correctly lubricated in our factory and need no further lubrication at start-up.

Terminal box

Generously sized to make the electrical connections easier. Special shaped terminals allow to fix the power supply cable.

Electric motor

Three-phase asynchronous type. Insulated windings using vacuum encapsulating up to size AF33 and for AF70; using the “drop by drop” trickle system with class H resin for frame sizes AF50 and AF68. The rotor is die cast aluminium.

Casing

In high tensile strength aluminium alloy for frame sizes AF10 and AF33. In spheroidal cast iron for sizes AF33 (600245), AF50, AF68 and AF70, designed to optimize strength and performance at high speeds.

Bearings

A special shape, exclusively designed and made for Italtibras and able to bear strong loads at high speeds.

Motor shaft

in treated steel alloy (isothermic hardening) able to withstand high stress.

Eccentric weights

Specially shaped lamellar type that can be easily adjusted.

The ITV-VR and ITVAF electric vibrators series are suitable to be applied in plants and machines in the concrete and prefabrication fields, and in all sectors where high speeds are required.

In detail

- ITV-VR variable frequency series: the vibrators are able to supply up to 5300 kgf (52kN) of centrifugal force at frequencies variable from 0 to 6000rpm.
- ITVAF fixed frequency series: fixed frequency vibrators (6000 or 9000 rpm) provide centrifugal force up to 6160 lbs (27.5 kN).

Both are available with either fixed or cradle connection.

Upon request Italtibras can supply solutions to supply ITVAF and ITV-VR vibrators: frequency drives, control panels, fixed or movable, electromechanical or electronic control panels, manually controlled or via radio control, etc., depending on the needs of the plant.

Weight covers

In aluminium alloy except for frame size AF10 where covers are in stainless steel AISI 304.

Painting

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

Upon request Italtibras can supply solutions to supply ITVAF and ITV-VR vibrators: frequency drives, control panels, fixed or movable, electromechanical or electronic control panels, manually controlled or via radio control, etc., depending on the needs of the plant.

For further details please contact sales offices at Italtibras.

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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



Certification for Eurasian Customs Union
N° TC N RU Д-IT.АЛ33.В.02527

ITV-VR fixed connection

Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS				
Code	Type	Type (EU)	SIZE		Vibrating range (rpm)	Centrifugal force (lbs)	Weight (lbs)	Power Output (HP)	Max. current (A)			Ia/In
									42V	100Hz	400V	
600500	ITV-VR/3500-S08	ITV-VR/1210-S08	AF33	•	0-6000	3459	50.7	1.10	21.0	2.30	4.48	
600507	ITV-VR/4400-S08	ITV-VR/2010-S08	AF33	•	0-6000	4409	59.5	1.80	27.0	2.90	5.00	
600248	ITV-VR/5500	ITV-VR/2510	AF50	-	0-6000	5512	90.4	2.40	35.0	3.90	6.15	
600249	ITV-VR/5500-V*	ITV-VR/2510-V*	AF50	-	4500-6000	5512	90.4	2.40	35.0	3.90	6.15	
600208	ITV-VR/7300*	ITV-VR/3300*	AF68	-	4500-6000	7275	163	4.00	-	7.20	5.10	
600514	ITV-VR/36-11000-S02	ITV-VR/5000-S02	AF70	-	0-4500	11684	231	5.50	-	8.00	5.30	

ITV-VR RS cradle connection

Code	Type	Type (EU)	Gr.		Vibrating range (rpm)	Centrifugal force (lbs)	Weight (lbs)	Power Output (HP)	Max. current (A)			Ia/In
									42V	100Hz	400V	
600508	ITV-VR/3500-RS-S08	ITV-VR/1210-RS-S08	AF33	•	0-6000	3459	46.3	1.10	21	2.3	4.48	
600245	ITV-VR/4400-RS	ITV-VR/2010-RS	AF33	•	0-6000	4409	61.7	1.80	27	2.9	5.00	

* Special ventilated type for heavy service.

ITVAF fixed connection

Three-phase

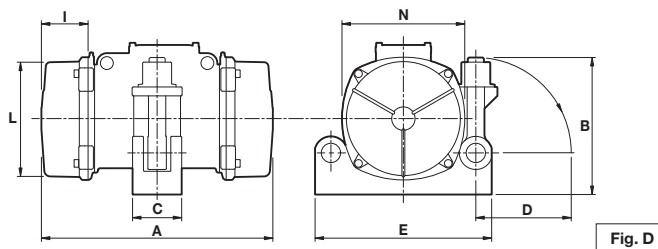
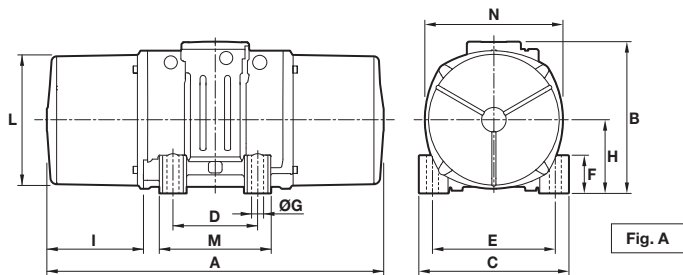
DESCRIPTION					MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS									
Code	Type	Type (EU)	Gr.		Vibrating range (rpm)	Centrifugal force (lbs)	Weight (lbs)	Power Output (HP)	Max. current (A)								
									200Hz	150Hz	100Hz	Ia/In					
									42V	250V	42V	250V	400V				
603050	ITVAF 6/1350-S02	ITVAF 6/600-S02	AF10	-	6000	1345	17.6	0.47	9.50	1.60	-	-	1.60	4.50			
603053	ITVAF 6/2400-S08	ITVAF 6/1220-S08	AF33	-	6000	2414	50.7	1.23	23.0	3.85	-	-	3.90	6.04			
603054	ITVAF 6/3250-S08	ITVAF 6/1510-S08	AF33	-	6000	3272	55.1	1.78	29.0	4.90	-	-	4.80	7.10			
603037	ITVAF 6/4400-S90 ◦	ITVAF 6/2010-S90	AF50	-	6000	4361	88.2	2.28	35.0	5.90	-	-	5.90	8.00			
603010	ITVAF 6/6000 ◦	ITVAF 6/3300°	AF68	-	6000	6173	163	4.00	-	-	-	-	11.0	5.10			
604041	ITVAF 9/2700-S08	ITVAF 9/1110-S08	AF33	-	9000	2712	48.5	1.21	-	-	18	-	1.85	8.52			
604042	ITVAF 9/3250-S08	ITVAF 9/1510-S08	AF33	-	9000	3272	52.9	1.63	-	-	24	4.0	2.50	10.40			

ITVAF RS cradle connection

Code	Type	Type (EU)	Gr.		Vibrating range (rpm)	Centrifugal force (lbs)	Weight (lbs)	Power Output (HP)	Max. current (A)								
									200Hz	150Hz	100Hz	Ia/In					
									42V	250V	42V	250V	400V				
603055	ITVAF 6/2400-RS-S08	ITVAF 6/1220-RS-S08	AF33	-	6000	2414	46	1.23	23	3.85	-	-	3.9	6.04			
603056	ITVAF 6/3250-RS-S08	ITVAF 6/1510-RS-S08	AF33	-	6000	3272	51	1.78	29	4.90	-	-	4.8	7.10			
604043	ITVAF 9/2700-RS-S08	ITVAF 9/1110-RS-S08	AF33	-	9000	2712	44	1.21	-	-	18	-	1.85	8.52			
604044	ITVAF 9/3250-RS-S08	ITVAF 9/1510-RS-S08	AF33	-	9000	3272	49	1.63	-	-	24	4.0	2.50	10.40			

◦ Only supplied at 250V-100Hz, ventilated type, IP44 protection.

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



DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N
ITV-VR/3500-S08	A	11.38	8.52	8.46	3.94	7.09	0.67	4	1.85	3.68	2.48	6.69	5.71	7.17
ITV-VR/4400-S08	A	14.76	8.52	8.46	3.94	7.09	0.67	4	1.85	3.68	4.17	6.69	5.71	7.17
ITV-VR/5500	A	18.03	9.13	9.06	5.51	7.48	0.67	4	1.93	4.09	4.00	7.20	7.09	7.87
ITV-VR/5500-V*	A	18.39	9.13	9.06	5.51	7.48	0.67	4	1.93	4.09	4.17	9.45	7.09	9.76
ITV-VR/7300*	A	20.79	10.51	12.20	6.10	10.04	0.93	4	4.80	4.53	5.51	10.43	8.46	10.83
ITV-VR/36-11000-S02	A	22.05	11.42	12.20	6.10	10.04	0.98	4	3.54	5.12	5.39	9.37	8.27	9.96

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N
ITV-VR/3500-RS-S08	D	11.38	7.44	3.27	5.51	9.45	-	-	-	-	2.48	6.69	-	7.17
ITV-VR/4400-RS	D	13.98	7.44	3.27	5.51	9.45	-	-	-	-	3.21	6.46	-	-

DIMENSIONAL SPECIFICATIONS (inches)

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N
ITVAF 6/1350-S02	A	10.04	7.05	5.98	3.54	4.92	0.51	4	1.10	2.87	2.13	4.88	5.04	5.55
ITVAF 6/2400-S08	A	11.38	8.52	8.46	3.94	7.09	0.67	4	1.85	3.68	2.48	6.69	5.71	7.17
ITVAF 6/3250-S08	A	14.76	8.52	8.46	3.94	7.09	0.67	4	1.85	3.68	4.17	6.69	5.71	7.17
ITVAF 6/4400-S90°	A	18.03	9.06	9.06	5.51	7.48	0.67	4	1.93	4.09	4.00	7.32	7.09	7.87
ITVAF 6/6000°	A	20.79	10.51	12.20	6.10	10.04	0.93	4	4.80	4.53	5.51	10.43	8.46	10.83
ITVAF 9/2700-S08	A	11.38	8.52	8.46	3.94	7.09	0.67	4	1.85	3.68	2.48	6.69	5.71	7.17
ITVAF 9/3250-S08	A	14.76	8.52	8.46	3.94	7.09	0.67	4	1.85	3.68	4.17	6.69	5.71	7.17

Holes

Type	Fig.	A	B	C	D	E	ØG	N°	F	H	I	L	M	N
ITVAF 6/2400-RS-S08	D	11.38	7.44	3.27	5.51	9.45	-	-	-	-	2.48	6.69	-	7.17
ITVAF 6/3250-RS-S08	D	14.76	7.44	3.27	5.51	9.45	-	-	-	-	4.17	6.69	-	7.17
ITVAF 9/2700-RS-S08	D	11.38	7.44	3.27	5.51	9.45	-	-	-	-	2.48	6.69	-	7.17
ITVAF 9/3250-RS-S08	D	14.76	7.44	3.27	5.51	9.45	-	-	-	-	4.17	6.69	-	7.17

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