

The background of the page features a large, light gray technical drawing of a fan. The drawing shows the fan's profile, including the blades and the central hub. Several dimension lines with arrows are overlaid on the drawing, labeled with the letters 'N', 'E', and 'C'. 'N' is at the top, indicating the total width. 'E' is at the bottom, indicating the width of the central hub. 'C' is at the bottom, indicating the total width of the fan's body. The text 'General Catalogue EN019' is centered over the drawing.

■ **General Catalogue EN019**



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## ■ Mechanical vibrators

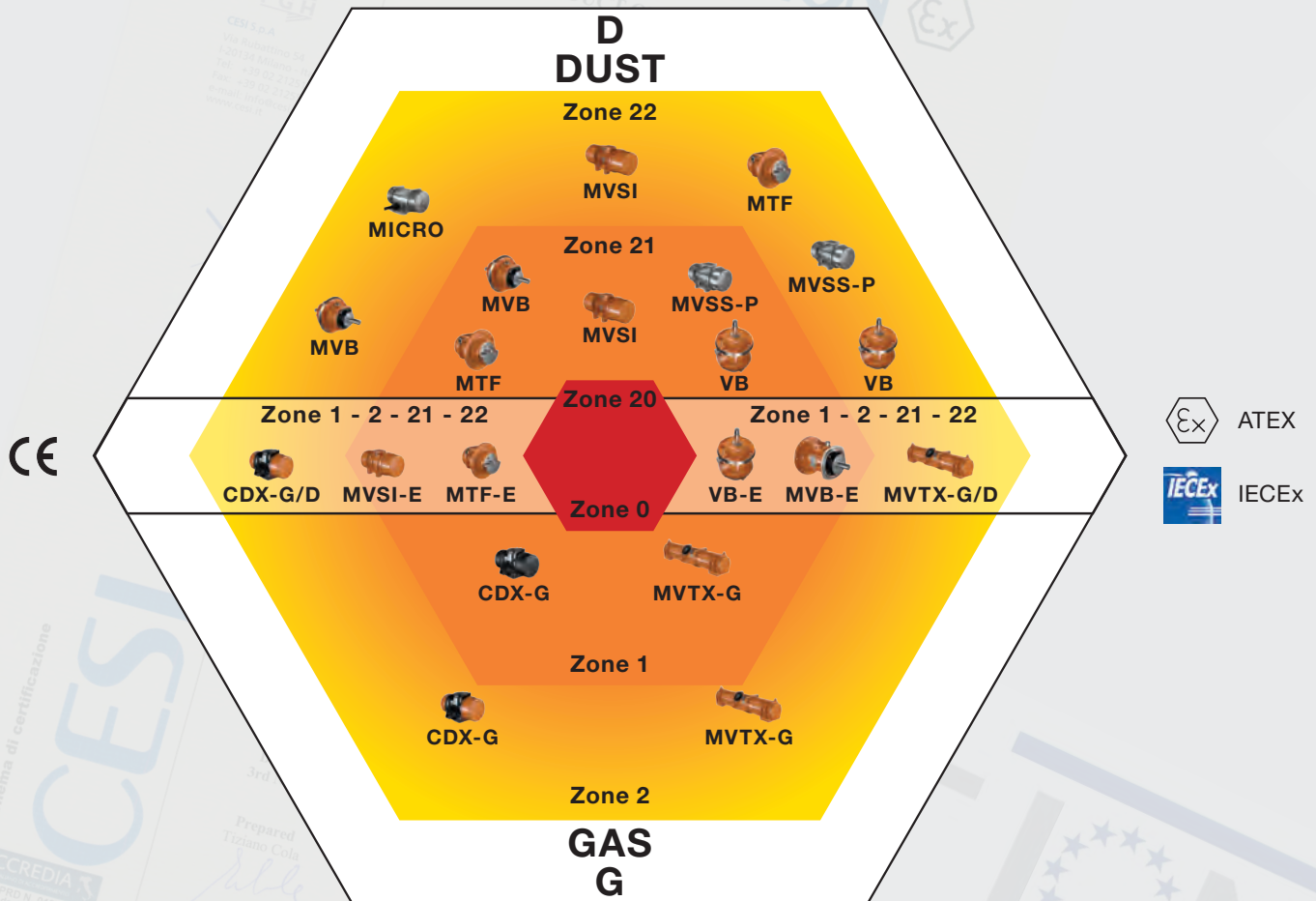
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# Italvibras Guide to explosive atmospheres

## Zone System



	CERTIFICATE FEATURES	PRODUCTS
	ATEX II2D – Ex td A21 IP66 (Ex tb IIIC T.... °C Db)	MVSI, MTF, MVB, MVB-FLC, VB, MVSS
	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
	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**



**CESI**

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

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

Others certifications:



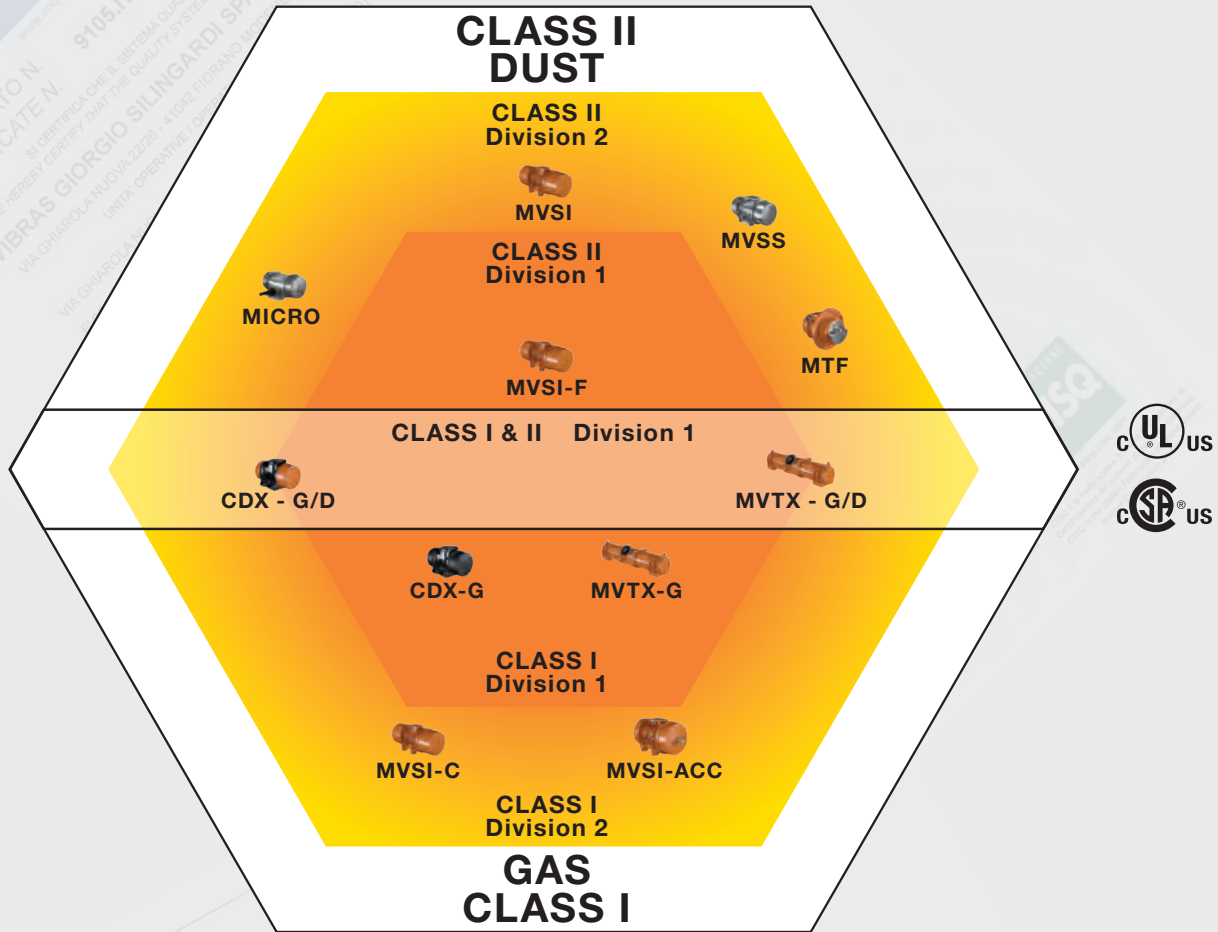
Compliance with regulations TR CU 012/2011 (explosive atmospheres for Eurasian Customs Union)





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 30500 kgf. (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 -20°C to +40°C. Versions for higher or lower temperatures are available on request.

### Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C from size 70, on request for smaller sizes. On request, thermistors with different temperatures and anti-condensation heaters.

### Fixing of the vibrator

In all positions and therefore without restriction.

### Lubrication

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

### Terminal box

Large terminal box to facilitate electrical connection. Special shaped terminals allow for the power supply cable to be secured, whilst protecting it from loosening.

### Electric motor

Three-phase asynchronous type. Designed for maximum starting torques and torque curves specific to requirements of vibrating machines. Insulated windings using vacuum encapsulating up to sizes AF33 and 35 included; using the "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminium.

### Casing

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

### Bearing flange

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 Italtvibras, 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 30500 Kgf (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-TS series.

#### Painting / Surface coating

Electrostatic surface treatment based on epoxy polyester powder polymerised in oven at 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	SIZE	II2D Temp. class	Static moment* kgmm		Centrifugal force kg kN				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600311	MVSI 3/100-S02	00	• 120°C	12,1	12,1	<b>122</b>	<b>176</b>	<b>1,20</b>	<b>1,72</b>	5,2	5,2	180	180	0,35	0,30	2,68	3,00
600312	MVSI 3/200-S02	01	• 120°C	20,2	16,2	<b>203</b>	<b>234</b>	<b>1,99</b>	<b>2,29</b>	5,8	5,5	180	180	0,35	0,30	2,68	3,00
600313	MVSI 3/300-S02	10	• 120°C	30,0	22,5	<b>302</b>	<b>326</b>	<b>2,96</b>	<b>3,20</b>	9,0	8,6	260	270	0,60	0,50	3,47	4,20
600314	MVSI 3/500-S02	20	• 120°C	58,0	34,8	<b>584</b>	<b>504</b>	<b>5,72</b>	<b>4,94</b>	14,3	13,3	450	500	0,80	0,75	4,21	4,80
600366	MVSI 3/700-S02	20	• 120°C	69,6	46,4	<b>700</b>	<b>672</b>	<b>6,87</b>	<b>6,59</b>	14,5	14,0	450	500	0,80	0,75	4,21	4,80
600381	MVSI 3/800-S02	30	• 120°C	74,5	55,9	<b>750</b>	<b>810</b>	<b>7,35</b>	<b>7,94</b>	19,6	19,0	650	685	1,10	1,00	3,83	6,00
600513	MVSI 3/1100-S02	35	• 120°C	110	73,0	<b>1105</b>	<b>1057</b>	<b>10,8</b>	<b>10,4</b>	24,0	23,0	1000	1200	1,75	1,75	3,63	4,00
600491	MVSI 3/1300-S08	AF33	• -	128	91,6	<b>1290</b>	<b>1327</b>	<b>12,7</b>	<b>13,0</b>	27,0	25,7	1300	1350	2,10	1,90	3,96	4,98
600504	MVSI 3/1500-S08	AF33	• -	146	110	<b>1470</b>	<b>1595</b>	<b>14,4</b>	<b>15,6</b>	25,3	24,0	1300	1350	2,10	1,90	3,96	4,98
600502	MVSI 3/1600-S02	50	• -	153	102	<b>1545</b>	<b>1483</b>	<b>15,2</b>	<b>14,5</b>	32,0	30,5	1400	1450	2,30	2,00	4,95	6,12
600503	MVSI 3/1800-S02	50	• -	179	128	<b>1802</b>	<b>1853</b>	<b>17,7</b>	<b>18,2</b>	33,0	31,5	2000	2000	3,30	2,90	4,33	5,50
600256	MVSI 3/2010-S90	AF50	• 135°C	205	128	<b>2059</b>	<b>1853</b>	<b>20,2</b>	<b>18,2</b>	48,7	46,3	2200	2200	3,50	3,00	4,62	6,00
600257	MVSI 3/2310-S90	AF50	• 135°C	230	153	<b>2316</b>	<b>2224</b>	<b>22,7</b>	<b>21,8</b>	49,6	47,1	2200	2200	3,50	3,00	4,62	6,00
600470	MVSI 3/3200-S02	AF70	• -	344	215	<b>3457</b>	<b>3112</b>	<b>33,9</b>	<b>30,5</b>	94,0	90,0	4000	4000	6,50	5,60	4,46	5,18
600471	MVSI 3/4000-S02	AF70	• -	387	258	<b>3890</b>	<b>3735</b>	<b>38,2</b>	<b>36,6</b>	96,0	92,0	4000	4000	6,50	5,60	4,46	5,18
600472	MVSI 3/5000-S02	AF70	• -	515	344	<b>5187</b>	<b>4979</b>	<b>50,9</b>	<b>48,8</b>	109	105	5000	5000	7,60	6,90	5,54	7,10
600276	MVSI 3/6510-S02	90	• 135°C	630	443	<b>6357</b>	<b>6420</b>	<b>62,4</b>	<b>63,0</b>	184	178	5500	5500	9,20	8,00	6,45	7,20
600201	MVSI 3/9000-S90	95	- -	895	619	<b>9007</b>	<b>8970</b>	<b>88,4</b>	<b>88,0</b>	215	210	10000	9300	18,0	13,0	4,39	5,23

### Single-phase

Code	Type	SIZE	II2D Temp. class	Static moment* kgmm		Centrifugal force kg kN				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600311	MVSI 3/100-S02	00	• 120°C	12,1	12,1	<b>122</b>	<b>176</b>	<b>1,20</b>	<b>1,72</b>	5,2	5,2	165	165	0,75	1,52	1,67	2,24
600312	MVSI 3/200-S02	01	• 120°C	20,2	16,2	<b>203</b>	<b>234</b>	<b>1,99</b>	<b>2,29</b>	5,8	5,5	165	165	0,75	1,52	1,67	2,24
600313	MVSI 3/300-S02	10	• 120°C	30,0	22,5	<b>302</b>	<b>326</b>	<b>2,96</b>	<b>3,20</b>	9,0	8,6	280	280	1,25	2,40	2,48	3,52
600314	MVSI 3/500-S02	20	• 120°C	58,0	34,8	<b>584</b>	<b>504</b>	<b>5,72</b>	<b>4,94</b>	14,3	13,3	500	500	2,30	4,50	3,35	4,22
600366	MVSI 3/700-S02	20	• 120°C	69,6	46,4	<b>700</b>	<b>672</b>	<b>6,87</b>	<b>6,59</b>	14,5	14,0	500	500	2,30	4,50	3,35	4,22
600381	MVSI 3/800-S02	30	• 120°C	74,5	55,9	<b>750</b>	<b>810</b>	<b>7,35</b>	<b>7,94</b>	19,6	19,0	700	750	3,25	7,00	4,00	4,14

\* Working moment = 2 x static moment.



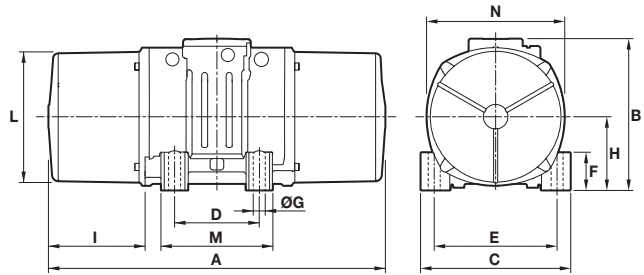


Fig. A

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Capacitor (µF)		Cable entry thread
							ØG	N°							220V 50Hz	115V 60Hz	
MVSI 3/100-S02	A	211	150	125	62-74**	106	9	4	22	61	46	103	98	117	-	-	M20x1,5
MVSI 3/200-S02	A	235	150	125	62-74**	106	9	4	22	61	58	103	98	117	-	-	M20x1,5
MVSI 3/300-S02	A	255	171	152	90	125	13	4	28	73	54	127	128	141	-	-	M20x1,5
MVSI 3/500-S02	A	288	203	167	105	140	13	4	30	82,5	65	145	146	160	-	-	M25x1,5
MVSI 3/700-S02	A	288	203	167	105	140	13	4	30	82,5	65	145	146	160	-	-	M25x1,5
MVSI 3/800-S02	A	308	211	205	120	170	17	4	45	93,5	63	170	174	182	-	-	M25x1,5
MVSI 3/1100-S02	A	435	224	205	120	170	17	4	42	104,5	117,5	187	162	203	-	-	M25x1,5
MVSI 3/1300-S08	A	375	217	215	100	180	17	4	47	93,5	106	170	145	182	-	-	M25x1,5
MVSI 3/1500-S08	A	375	217	215	100	180	17	4	47	93,5	106	170	145	182	-	-	M25x1,5
MVSI 3/1600-S02	A	430	244	230	140	190	17	4	45	116	99	207	190	225	-	-	M25x1,5
MVSI 3/1800-S02	A	430	244	230	140	190	17	4	45	116	99	207	190	225	-	-	M25x1,5
MVSI 3/2010-S90	A	458	232	230	140	190	17	4	49	104	101,5	183	180	200	-	-	M25x1,5
MVSI 3/2310-S90	A	458	232	230	140	190	17	4	49	104	101,5	183	180	200	-	-	M25x1,5
MVSI 3/3200-S02	A	560	290	310	155	255	25	4	90	130	137	238	210	253	-	-	M25x1,5
MVSI 3/4000-S02	A	560	290	310	155	255	25	4	90	130	137	238	210	253	-	-	M25x1,5
MVSI 3/5000-S02	A	560	290	310	155	255	25	4	90	130	137	238	210	253	-	-	M25x1,5
MVSI 3/6510-S02	A	680	370	390	200	320	28	4	90	180	160	330	270	350	-	-	M32x1,5
MVSI 3/9000-S90	A	629	395	392	200	320	28	4	100	192	135	355	270	375	-	-	M32x1,5

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Capacitor (µF)		Cable entry thread
							ØG	N°							220V 50Hz	115V 60Hz	
MVSI 3/100-S02	A	211	150	125	62-74**	106	9	4	22	61	46	103	98	117	10	28	M20x1,5
MVSI 3/200-S02	A	235	150	125	62-74**	106	9	4	22	61	58	103	98	117	10	35	M20x1,5
MVSI 3/300-S02	A	255	171	152	90	125	13	4	28	73	54	127	128	141	16	25	M20x1,5
MVSI 3/500-S02	A	288	203	167	105	140	13	4	30	82,5	65	145	146	160	12,5	50	M25x1,5
MVSI 3/700-S02	A	288	203	167	105	140	13	4	30	82,5	65	145	146	160	12,5	-	M25x1,5
MVSI 3/800-S02	A	308	211	205	120	170	17	4	45	93,5	63	170	174	182	25	90	M25x1,5

$I_a/I_n$  = ratio between start-up current and maximum current. \*\* Slot.  
Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.

## 4 poles - 1.500/1.800 rpm

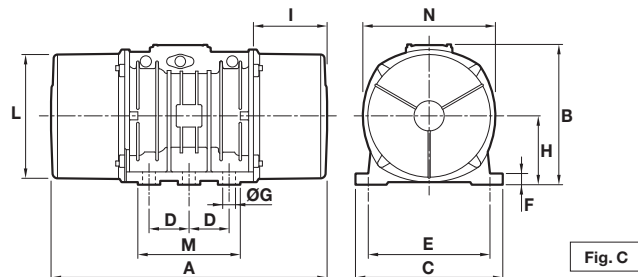
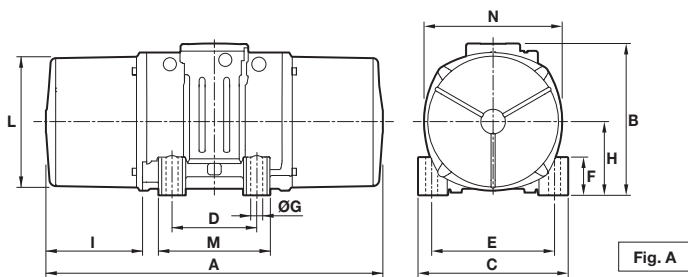
### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	II2D Temp. class	Static moment* kgmm		Centrifugal force kg kN				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601340	MVSI 15/35-S02	00	• 120°C	12,1	12,1	<b>30,5</b>	<b>43,9</b>	<b>0,30</b>	<b>0,43</b>	5,2	5,2	85	95	0,21	0,20	1,78	1,95
601341	MVSI 15/80-S02	01	• 120°C	32,3	20,2	<b>81,2</b>	<b>73,2</b>	<b>0,80</b>	<b>0,72</b>	6,2	5,8	85	95	0,21	0,20	1,78	1,95
601366	MVSI 15/100-S02	01	• 120°C	37,9	32,3	<b>95,3</b>	<b>117</b>	<b>0,93</b>	<b>1,15</b>	6,6	6,2	85	95	0,21	0,20	1,78	1,95
601367	MVSI 15/200-S02	10	• 120°C	84,2	58,8	<b>213</b>	<b>214</b>	<b>2,09</b>	<b>2,10</b>	11,7	10,7	170	170	0,41	0,40	2,34	2,75
601372	MVSI 15/400-S02	20	• 120°C	163	113	<b>412</b>	<b>411</b>	<b>4,04</b>	<b>4,03</b>	18,5	16,5	300	350	0,60	0,60	3,33	3,50
601373	MVSI 15/550-S02	20	• 120°C	219	163	<b>552</b>	<b>592</b>	<b>5,42</b>	<b>5,81</b>	20,7	18,5	300	350	0,60	0,60	3,33	3,50
601408	MVSI 15/700-S02	30	• 120°C	286	209	<b>720</b>	<b>760</b>	<b>7,06</b>	<b>7,46</b>	26,2	24,5	525	665	0,92	0,98	3,48	4,43
601513	MVSI 15/900-S02	30	• 120°C	357	286	<b>900</b>	<b>1037</b>	<b>8,83</b>	<b>10,2</b>	29,0	26,2	525	665	0,92	0,98	3,48	3,43
601524	MVSI 15/1100-S02	35	• 120°C	415	271	<b>1045</b>	<b>982</b>	<b>10,3</b>	<b>9,63</b>	32,5	30,5	550	680	0,95	0,95	4,45	4,89
601217	MVSI 15/1410-S02	40	• 120°C	561	400	<b>1413</b>	<b>1449</b>	<b>13,9</b>	<b>14,2</b>	41,2	37,5	900	1050	1,45	1,50	4,10	4,20
601219	MVSI 15/1710-S02	50	• 135°C	715	485	<b>1798</b>	<b>1757</b>	<b>17,6</b>	<b>17,2</b>	47,8	42,5	1100	1200	2,00	1,90	4,29	4,89
601267	MVSI 15/2000-S02	50	• 135°C	817	561	<b>2054</b>	<b>2033</b>	<b>20,1</b>	<b>19,9</b>	50,5	44,5	1350	1450	2,50	2,30	4,30	4,90
601220	MVSI 15/2410-S08	60	• 150°C	962	674	<b>2420</b>	<b>2444</b>	<b>23,7</b>	<b>24,0</b>	70,0	63,5	1600	1700	3,20	3,00	6,09	7,23
601268	MVSI 15/3000-S08	60	• 135°C	1235	858	<b>3106</b>	<b>3107</b>	<b>30,5</b>	<b>30,5</b>	80,0	71,0	1900	2000	3,80	3,50	6,50	7,50
601221	MVSI 15/3810-S02	70	• 135°C	1526	1034	<b>3840</b>	<b>3744</b>	<b>37,7</b>	<b>36,7</b>	119	110	2200	2500	3,90	3,90	7,11	6,92
601269	MVSI 15/4300-S02	70	• 135°C	1720	1173	<b>4326</b>	<b>4250</b>	<b>42,4</b>	<b>41,7</b>	123	117	2500	2800	4,80	4,65	5,90	7,10
601211	MVSI 15/5010-S02	80	• 135°C	1990	1364	<b>5007</b>	<b>4941</b>	<b>49,1</b>	<b>48,5</b>	161	153	3600	3400	6,00	5,00	7,02	8,00
601447	MVSI 15/6000-S02	80	• 135°C	2248	1677	<b>5654</b>	<b>6075</b>	<b>55,5</b>	<b>59,6</b>	164	155	3600	3400	6,00	5,00	7,02	8,00
601165	MVSI 15/7000-S02	90	• 135°C	2598	1822	<b>6536</b>	<b>6600</b>	<b>64,1</b>	<b>64,7</b>	208	195	6000	6000	10,5	9,00	6,48	7,67
601166	MVSI 15/9000-S90	95	□ 135°C	3260	2260	<b>8199</b>	<b>8183</b>	<b>80,4</b>	<b>80,3</b>	225	210	7000	8000	11,6	11,5	5,43	5,57
601204	MVSI 15/9500-S02	97	□ 135°C	3346	2462	<b>8416</b>	<b>8916</b>	<b>82,6</b>	<b>87,5</b>	306	292	7500	8500	12,2	12,0	6,56	6,67
601205	MVSI 15/11500-S02	100	□ 135°C	4544	3166	<b>11430</b>	<b>11467</b>	<b>113</b>	<b>112</b>	430	411	10000	10500	17,5	15,5	7,03	8,00
601271	MVSI 15/14500-S02	100	□ 135°C	5614	4126	<b>14120</b>	<b>14940</b>	<b>138</b>	<b>147</b>	458	424	11000	12000	20,0	20,0	8,00	8,00

### Single-phase

Code	Type	SIZE	II2D Temp. class	Static moment* kgmm		Centrifugal force kg kN				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
601340	MVSI 15/35-S02	00	• 120°C	12,1	12,1	<b>30,5</b>	<b>43,9</b>	<b>0,30</b>	<b>0,43</b>	5,2	5,2	90	100	0,43	1,00	1,20	1,30
601341	MVSI 15/80-S02	01	• 120°C	32,3	20,2	<b>81,2</b>	<b>73,2</b>	<b>0,80</b>	<b>0,72</b>	6,2	5,8	90	100	0,43	1,00	1,20	1,30
601366	MVSI 15/100-S02	01	• 120°C	37,9	32,3	<b>95,3</b>	<b>117</b>	<b>0,93</b>	<b>1,15</b>	6,6	6,2	90	100	0,43	1,00	1,20	1,30
601367	MVSI 15/200-S02	10	• 120°C	84,2	58,8	<b>213</b>	<b>214</b>	<b>2,09</b>	<b>2,10</b>	11,7	10,7	210	230	1,00	2,00	1,50	1,85
601372	MVSI 15/400-S02	20	• 120°C	163	113	<b>412</b>	<b>411</b>	<b>4,04</b>	<b>4,03</b>	18,5	16,5	240	320	1,20	2,80	2,50	2,21
601373	MVSI 15/550-S02	20	• 120°C	219	163	<b>552</b>	<b>592</b>	<b>5,42</b>	<b>5,81</b>	20,7	18,5	240	320	1,20	2,80	2,50	2,21
601408	MVSI 15/700-S02	30	• 120°C	286	209	<b>720</b>	<b>760</b>	<b>7,06</b>	<b>7,46</b>	26,2	24,5	450	550	2,15	5,15	5,44	3,63

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



DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Capacitor (µF)		Cable entry thread
							ØG	N°							220V 50Hz	115V 60Hz	
MVSI 15/35-S02	A	211	150	125	62-74**	106	9	4	22	61	46	103	98	117	-	-	M20x1,5
MVSI 15/80-S02	A	249	150	125	62-74**	106	9	4	22	61	65	103	98	117	-	-	M20x1,5
MVSI 15/100-S02	A	249	150	125	62-74**	106	9	4	22	61	65	103	98	117	-	-	M20x1,5
MVSI 15/200-S02	A	301	171	152	90	125	13	4	28	73	77	127	128	141	-	-	M20x1,5
MVSI 15/400-S02	A	344	203	167	105	140	13	4	30	82,5	93	145	146	160	-	-	M25x1,5
MVSI 15/550-S02	A	386	203	167	105	140	13	4	30	82,5	114	145	146	160	-	-	M25x1,5
MVSI 15/700-S02	A	394	211	205	120	170	17	4	45	93,5	106	170	174	182	-	-	M25x1,5
MVSI 15/900-S02	A	394	211	205	120	170	17	4	45	93,5	106	170	174	182	-	-	M25x1,5
MVSI 15/1100-S02	A	435	224	205	120	170	17	4	42	104,5	117,5	187	162	203	-	-	M25x1,5
MVSI 15/1410-S02	A	448	244	230	140	190	17	4	45	116	108	207	190	225	-	-	M25x1,5
MVSI 15/1710-S02	A	500	244	230	140	190	17	4	45	116	134	207	190	225	-	-	M25x1,5
MVSI 15/2000-S02	A	574(50Hz) 500(60Hz)	244	230	140	190	17	4	45	116	171(50Hz) 134(60Hz)	207	190	225	-	-	M25x1,5
MVSI 15/2410-S08	A	537	272	275	155	225	22	4	70	130	137	238	210	253	-	-	M25x1,5
MVSI 15/3000-S08	A	617	272	275	155	225	22	4	70	130	177	238	210	253	-	-	M25x1,5
MVSI 15/3810-S02	A	584	321	310	155	255	23,5	4	77	157	137	277	215	295	-	-	M25x1,5
MVSI 15/4300-S02	A	666(50Hz) 584(60Hz)	321	310	155	255	23,5	4	77	157	178(50Hz) 137(60Hz)	277	215	295	-	-	M25x1,5
MVSI 15/5010-S02	A	630	347	340	180	280	26	4	80	165	150	303	240	320	-	-	M32x1,5
MVSI 15/6000-S02	A	630	347	340	180	280	26	4	80	165	150	303	240	320	-	-	M32x1,5
MVSI 15/7000-S02	A	680	370	390	200	320	28	4	90	180	160	330	270	350	-	-	M32x1,5
MVSI 15/9000-S90	A	629	395	392	200	320	28	4	100	192	134,5	355	270	375	-	-	M32x1,5
MVSI 15/9500-S02	C	862	437	460	125	380	39	6	35	215	230	387	320	414	-	-	M32x1,5
MVSI 15/11500-S90	C	990	454	530	140	440	45	6	38	230	240	423	370	448	-	-	M32x1,5
MVSI 15/14500-S90	C	990	454	530	140	440	45	6	38	230	240	423	370	448	-	-	M32x1,5

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Capacitor (µF)		Cable entry thread
							ØG	N°							220V 50Hz	115V 60Hz	
MVSI 15/35-S02	A	211	150	125	62-74**	106	9	4	22	61	46	103	98	117	3,15	25	M20x1,5
MVSI 15/80-S02	A	249	150	125	62-74**	106	9	4	22	61	65	103	98	117	3,15	25	M20x1,5
MVSI 15/100-S02	A	249	150	125	62-74**	106	9	4	22	61	65	103	98	117	3,15	25	M20x1,5
MVSI 15/200-S02	A	301	171	152	90	125	13	4	28	73	77	127	128	141	5	25	M20x1,5
MVSI 15/400-S02	A	344	203	167	105	140	13	4	30	82,5	93	145	146	160	12○ +20●	35	M25x1,5
MVSI 15/550-S02	A	386	203	167	105	140	13	4	30	82,5	114	145	146	160	12○ +20●	35○ +10●	M25x1,5
MVSI 15/700-S02	A	394	211	205	120	170	17	4	45	93,5	106	170	174	182	16○ +80●	40○ +120●	M25x1,5

Ia/I<sub>n</sub> = 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 Italtibras.

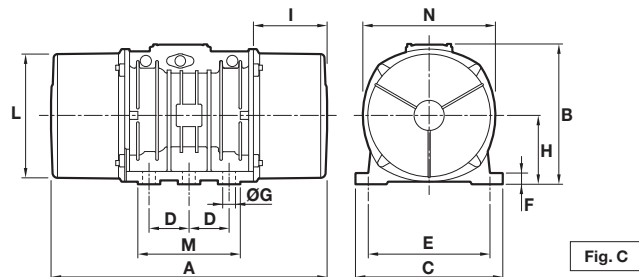
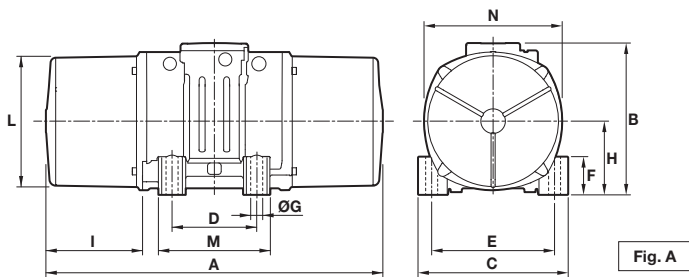


## 6 poles - 1.000/1.200 rpm

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	 I12D Temp. class	Static moment* kgmm		Centrifugal force kg      kN				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602296	MVSI 10/40-S02	10	• 120°C	30,0	30,0	<b>33,5</b>	<b>48,3</b>	<b>0,33</b>	<b>0,47</b>	9,0	9,0	120	135	0,30	0,30	1,90	2,07
602297	MVSI 10/100-S02	10	• 120°C	84,2	84,2	<b>94,3</b>	<b>136</b>	<b>0,93</b>	<b>1,33</b>	11,9	11,9	120	135	0,30	0,30	1,90	2,07
602298	MVSI 10/200-S02	20	• 120°C	163	163	<b>183</b>	<b>264</b>	<b>1,80</b>	<b>2,59</b>	18,1	18,1	185	205	0,50	0,50	2,72	3,10
602314	MVSI 10/310-S02	30	• 120°C	286	209	<b>321</b>	<b>338</b>	<b>3,15</b>	<b>3,32</b>	25,7	24,0	350	380	0,72	0,68	2,63	2,79
602241	MVSI 10/400-S02	30	• 120°C	357	357	<b>400</b>	<b>576</b>	<b>3,93</b>	<b>5,65</b>	29,0	29,0	350	380	0,72	0,68	2,63	2,79
602402	MVSI 10/550-S02	35	• 120°C	457	457	<b>512</b>	<b>737</b>	<b>5,02</b>	<b>7,23</b>	32,6	32,6	350	380	0,75	0,68	2,53	3,68
602403	MVSI 10/650-S02	35	• -	580	457	<b>650</b>	<b>737</b>	<b>6,37</b>	<b>7,23</b>	35,5	32,6	350	380	0,95	0,88	3,16	3,86
602380	MVSI 10/810-S08	40	• 135°C	723	561	<b>809</b>	<b>905</b>	<b>7,94</b>	<b>8,88</b>	44,0	40,0	680	760	1,40	1,35	2,79	3,33
602381	MVSI 10/1110-S08	50	• 135°C	1012	715	<b>1132</b>	<b>1151</b>	<b>11,1</b>	<b>11,3</b>	55,8	48,8	750	750	1,65	1,50	3,33	4,13
602382	MVSI 10/1400-S08	50	• 135°C	1274	921	<b>1424</b>	<b>1483</b>	<b>14,0</b>	<b>14,5</b>	63,0	55,5	950	1000	1,80	1,70	3,05	3,65
602406	MVSI 10/1610-S08	60	• 135°C	1464	962	<b>1638</b>	<b>1549</b>	<b>16,1</b>	<b>15,2</b>	80,0	70,0	1100	1300	2,20	2,20	4,21	4,05
602407	MVSI 10/2100-S08	60	• 135°C	1927	1318	<b>2154</b>	<b>2102</b>	<b>21,1</b>	<b>20,6</b>	92,0	82,0	1500	1770	3,00	2,75	3,42	4,00
602167	MVSI 10/2610-S02	70	• 135°C	2326	1720	<b>2601</b>	<b>2747</b>	<b>25,5</b>	<b>26,9</b>	130	116	1960	2100	4,10	3,75	5,35	5,60
602230	MVSI 10/3000-S02	70	• 135°C	2690	1940	<b>3007</b>	<b>3124</b>	<b>29,5</b>	<b>30,6</b>	145	130	2200	2400	4,50	4,30	4,35	4,81
602154	MVSI 10/3810-S02	80	• 135°C	3422	2380	<b>3826</b>	<b>3831</b>	<b>37,5</b>	<b>37,6</b>	188	170	2500	3000	5,10	5,00	5,91	6,00
602204	MVSI 10/4700-S02	80	• 135°C	4206	2887	<b>4701</b>	<b>4648</b>	<b>46,1</b>	<b>46,0</b>	204	183	3200	3600	6,50	6,00	5,24	5,50
602350	MVSI 10/5150-S02	80	• 135°C	4678	3230	<b>5230</b>	<b>5200</b>	<b>51,3</b>	<b>51,0</b>	225	200	3200	3600	6,50	6,00	5,24	5,50
602138	MVSI 10/5200-S02	90	• 135°C	4658	3288	<b>5208</b>	<b>5293</b>	<b>51,1</b>	<b>51,9</b>	238	215	3800	4000	7,00	6,50	4,71	5,08
602351	MVSI 10/5700-S02	90	• 135°C	5044	3478	<b>5650</b>	<b>5600</b>	<b>55,4</b>	<b>54,9</b>	240	220	3800	4000	7,00	6,50	4,71	5,08
602091	MVSI 10/6500-S02	90	• 135°C	5838	4055	<b>6527</b>	<b>6529</b>	<b>64,0</b>	<b>64,0</b>	268	258	4300	5000	8,20	8,10	4,51	5,83
602136	MVSI 10/6600-S02 Δ	97	• 135°C	6083	3979	<b>6799</b>	<b>6405</b>	<b>66,7</b>	<b>62,8</b>	308	280	5000	5900	10,0	9,80	5,61	5,82
602352	MVSI 10/7000-S02	90	• 135°C	6272	4348	<b>7013</b>	<b>7000</b>	<b>68,8</b>	<b>68,7</b>	275	263	4300	5000	8,20	8,10	4,51	5,83
602092	MVSI 10/8000-S90	95	□ 135°C	7197	4967	<b>8046</b>	<b>7996</b>	<b>78,9</b>	<b>78,4</b>	315	277	7000	7500	12,6	11,3	4,59	5,58
602093	MVSI 10/9000-S90	95	□ 135°C	7752	5385	<b>8666</b>	<b>8669</b>	<b>85,0</b>	<b>85,0</b>	326	289	7500	8200	14,0	12,9	4,13	4,88
602137	MVSI 10/10000-S02	97	□ 135°C	8673	5664	<b>9695</b>	<b>9117</b>	<b>95,1</b>	<b>89,4</b>	372	332	7600	8000	13,5	12,4	4,72	4,92
602349	MVSI 10/11200-S02	97	□ 135°C	9983	6896	<b>11160</b>	<b>11100</b>	<b>109</b>	<b>109</b>	398	358	7600	8000	13,5	12,4	4,72	4,92
602134	MVSI 10/12000-S90 Δ	100	□ 135°C	10996	7543	<b>12294</b>	<b>12141</b>	<b>119</b>	<b>119</b>	500	445	9000	9500	16,3	15,0	5,21	5,73
602227	MVSI 10/13000-S02	97	□ 135°C	11510	8158	<b>12867</b>	<b>13130</b>	<b>126</b>	<b>129</b>	445	395	9600	10000	17,0	16,0	4,98	5,00
602142	MVSI 10/15000-S02	105	□ -	12662	8700	<b>14155</b>	<b>14004</b>	<b>139</b>	<b>137</b>	643	605	10600	11270	19,0	18,0	5,88	5,78
602143	MVSI 10/17500-S02	105	□ -	15500	10439	<b>17327</b>	<b>16804</b>	<b>170</b>	<b>165</b>	691	642	13000	13700	24,5	23,0	5,71	5,96
602244	MVSI 10/19500-S02	105	□ -	17947	11430	<b>20062</b>	<b>18400</b>	<b>197</b>	<b>181</b>	717	650	13000	13700	24,5	23,0	5,71	5,96
602144	MVSI 10/22000-S90	110	□ -	20025	12533	<b>22386</b>	<b>20208</b>	<b>220</b>	<b>198</b>	926	896	19000	19000	33,0	25,5	4,67	5,88
602273	MVSI 10/25000-S90	110	□ -	22364	14785	<b>25000</b>	<b>23800</b>	<b>245</b>	<b>233</b>	960	928	19000	19000	33,0	25,5	4,67	5,88
602336	MVSI 10/30000-S02	120	-	27285	18760	<b>30560</b>	<b>30200</b>	<b>300</b>	<b>296</b>	1200	1050	24000	25800	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.

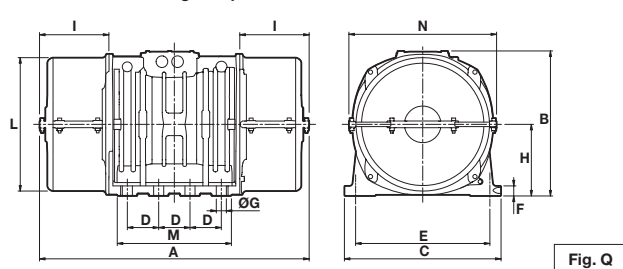
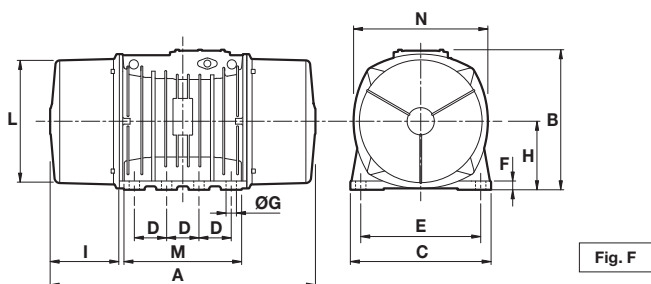


DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Cable entry thread
							ØG	N°							
MVSI 10/40-S02	A	255	171	152	90	125	13	4	28	73,0	54,0	127	128	141	M20X1,5
MVSI 10/100-S02	A	301	171	152	90	125	13	4	28	73,0	77,0	127	128	141	M20X1,5
MVSI 10/200-S02	A	344	203	167	105	140	13	4	30	82,5	93,0	145	146	160	M25X1,5
MVSI 10/310-S02	A	394	211	205	120	170	17	4	45	93,5	106	170	174	182	M25X1,5
MVSI 10/400-S02	A	394	211	205	120	170	17	4	45	93,5	106	170	174	182	M25X1,5
MVSI 10/550-S02	A	435	224	205	120	170	17	4	42	104,5	117,5	187	162	203	M25X1,5
MVSI 10/650-S02	A	480(50Hz) 435(60Hz)	224	205	120	170	17	4	42	104,5	140(50Hz) 117,5(60Hz)	187	162	203	M25X1,5
MVSI 10/810-S08	A	500(50Hz) 574(60Hz)	244	230	140	190	17	4	45	116	134(50Hz) 108(60Hz)	207	190	225	M25X1,5
MVSI 10/1110-S08	A	574	244	230	140	190	17	4	45	116	171	207	190	225	M25X1,5
MVSI 10/1400-S08	A	620(50Hz) 574(60Hz)	244	230	140	190	17	4	45	116	194(50Hz) 171(60Hz)	207	190	225	M25X1,5
MVSI 10/1610-S08	A	617(50Hz) 537(60Hz)	272	275	155	225	22	4	70	130	177(50Hz) 137(60Hz)	238	210	253	M25X1,5
MVSI 10/2100-S08	A	663(50Hz) 617(60Hz)	272	275	155	225	22	4	70	130	200(50Hz) 177(60Hz)	238	210	253	M25X1,5
MVSI 10/2610-S02	A	666	321	310	155	255	23,5	4	77	157	178	277	215	295	M25X1,5
MVSI 10/3000-S02	A	712	321	310	155	255	23,5	4	77	157	201	277	215	295	M25X1,5
MVSI 10/3810-S02	A	734	347	340	180	280	26	4	80	165	202	303	240	320	M32X1,5
MVSI 10/4700-S02	A	796	347	340	180	280	26	4	80	165	233	303	240	320	M32X1,5
MVSI 10/5150-S02	A	826	347	340	180	280	26	4	80	165	248	303	240	320	M32X1,5
MVSI 10/5200-S02	A	744	370	390	200	320	28	4	90	180	192	330	270	350	M32X1,5
MVSI 10/5700-S02	A	840	370	390	200	320	28	4	90	180	240	330	270	350	M32X1,5
MVSI 10/6500-S02	A	840	370	390	200	320	28	4	90	180	240	330	270	350	M32X1,5
MVSI 10/6600-S02	C	750	437	460	125	380	39	6	35	215	174	387	320	414	M32X1,5
MVSI 10/7000-S02	A	840	370	390	200	320	28	4	90	180	240	330	270	350	M32X1,5
MVSI 10/8000-S90	A	870	395	392	200	320	28	4	100	192	255	355	270	375	M32X1,5
MVSI 10/9000-S90	A	870	395	392	200	320	28	4	100	192	255	355	270	375	M32X1,5
MVSI 10/10000-S02	C	862	437	460	125	380	39	6	35	215	230	387	320	414	M32X1,5
MVSI 10/11200-S02	C	912	437	460	125	380	39	6	35	215	255	387	320	414	M32X1,5
MVSI 10/12000-S90	C	990	454	530	140	440	45	6	38	230	240	423	370	448	M32X1,5
MVSI 10/13000-S02	C	1002	437	460	125	380	39	6	35	215	300	387	320	414	M32X1,5
MVSI 10/15000-S02	F	960	526	570	140	480	45	8	41	268	200	486	510	516	M32X1,5
MVSI 10/17500-S02	F	1040	526	570	140	480	45	8	41	268	240	486	510	516	M32X1,5
MVSI 10/19500-S02	F	1120(50Hz) 1040(60Hz)	526	570	140	480	45	8	41	268	280(50Hz) 240(60Hz)	486	510	516	M32X1,5
MVSI 10/22000-S90	F	1150	607	610	140	520	45	8	38	297	298	542	510	582	M32X1,5
MVSI 10/25000-S90	F	1150	607	610	140	520	45	8	38	297	298	542	510	582	M32X1,5
MVSI 10/30000-S02	Q	1205	648	700	140	600	45	8	45	320	310	600	510	660	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 Italtibras.

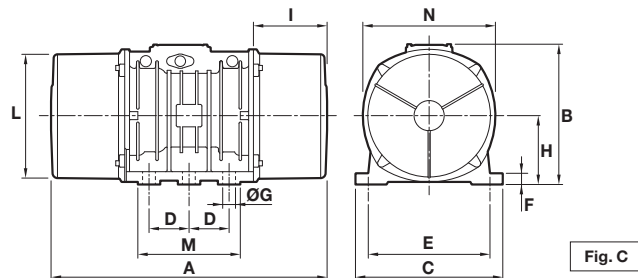
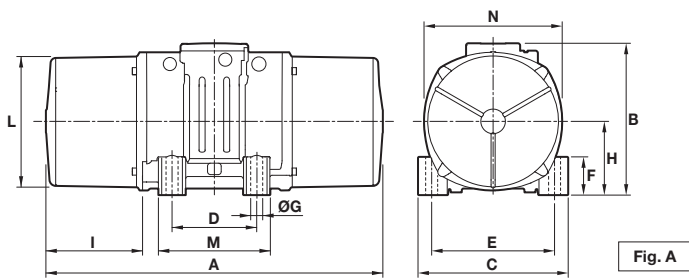


## 8 poles - 750/900 rpm

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS							
Code	Type	SIZE	II2D Temp. class	Static moment* kgmm		Centrifugal force kg / kN				Weight kg		Max input power W		Max. current A		Ia/In			
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz		
602568	MVSI 075/150-S02	20	• 130°C	163	163	<b>104</b>	<b>149</b>	<b>1,02</b>	<b>1,46</b>	18,1	18,1	230	250	0,85	0,76	2,13	2,11		
602575	MVSI 075/250-S02	30	• 130°C	286	286	<b>181</b>	<b>260</b>	<b>1,76</b>	<b>2,55</b>	26,2	26,2	350	380	1,10	1,05	2,03	2,29		
602615	MVSI 075/400-S02	35	• -	457	457	<b>288</b>	<b>415</b>	<b>2,83</b>	<b>4,07</b>	32,6	32,6	375	410	0,81	0,80	2,22	2,38		
602616	MVSI 075/530-S02	35	• -	580	580	<b>365</b>	<b>528</b>	<b>3,60</b>	<b>5,20</b>	36,0	36,0	375	410	0,81	0,80	2,22	2,38		
602609	MVSI 075/660-S08	40	• 120°C	723	723	<b>456</b>	<b>656</b>	<b>4,47</b>	<b>6,44</b>	44,0	44,0	400	450	1,20	1,20	2,38	2,58		
602610	MVSI 075/910-S08	50	• 120°C	1012	1012	<b>637</b>	<b>917</b>	<b>6,25</b>	<b>9,00</b>	55,8	55,8	400	500	1,40	1,30	2,38	2,85		
602618	MVSI 075/1310-S08	60	• 150°C	1464	1464	<b>922</b>	<b>1327</b>	<b>9,04</b>	<b>13,0</b>	80,0	80,0	950	1100	2,20	2,20	2,63	3,41		
602619	MVSI 075/1750-S08	60	• 135°C	1927	1927	<b>1214</b>	<b>1747</b>	<b>11,9</b>	<b>17,1</b>	92,0	92,0	1100	1300	2,60	2,26	2,78	3,04		
602891	MVSI 075/2110-S02	70	• 135°C	2326	2326	<b>1463</b>	<b>2107</b>	<b>14,4</b>	<b>20,7</b>	130	130	1500	1790	4,10	4,20	3,55	2,95		
602884	MVSI 075/3110-S02	80	• 135°C	3422	3422	<b>2152</b>	<b>3099</b>	<b>21,1</b>	<b>30,4</b>	188	188	2000	2300	5,40	5,20	3,98	4,62		
602515	MVSI 075/3800-S02	80	• 135°C	4206	4206	<b>2645</b>	<b>3808</b>	<b>25,9</b>	<b>37,4</b>	204	204	2500	3000	6,00	6,00	4,00	4,20		
602862	MVSI 075/4200-S02	90	• 135°C	4658	4658	<b>2930</b>	<b>4218</b>	<b>28,7</b>	<b>41,4</b>	238	238	2800	3350	6,50	6,50	3,84	4,00		
602826	MVSI 075/5300-S02	90	• 135°C	5838	5838	<b>3672</b>	<b>5287</b>	<b>36,0</b>	<b>51,9</b>	268	268	4000	4300	8,20	7,85	3,87	5,35		
602827	MVSI 075/6500-S90	95	□ 135°C	7197	7197	<b>4526</b>	<b>6517</b>	<b>44,4</b>	<b>63,9</b>	315	315	4900	5800	9,90	9,50	3,04	3,26		
602551	MVSI 075/6800-S02 Δ	97	□ 135°C	7340	7340	<b>4616</b>	<b>6647</b>	<b>45,3</b>	<b>65,2</b>	328	328	5600	6000	10,5	10,0	3,12	3,30		
602870	MVSI 075/10000-S02	97	□ 135°C	12390	10973	<b>7792</b>	<b>9937</b>	<b>76,4</b>	<b>97,5</b>	438	419	6800	7450	13,2	12,0	3,33	3,92		
602863	MVSI 075/12000-S90	100	□ 135°C	13816	12407	<b>8689</b>	<b>11235</b>	<b>85,2</b>	<b>110</b>	540	520	7600	8300	14,0	13,5	3,72	3,78		
602871	MVSI 075/14000-S02	105	□ -	17946	15500	<b>11285</b>	<b>14036</b>	<b>111</b>	<b>138</b>	702	680	9200	9600	21,0	19,5	4,99	5,44		
602872	MVSI 075/17000-S02	105	□ -	21337	19064	<b>13418</b>	<b>17263</b>	<b>132</b>	<b>169</b>	755	711	10400	11140	22,0	20,0	5,50	5,90		
602873	MVSI 075/22000-S90	110	□ -	28633	24508	<b>18005</b>	<b>22192</b>	<b>177</b>	<b>218</b>	1015	981	12500	16200	26,5	28,0	5,63	4,71		
602535	MVSI 075/26000-S90	110	□ -	-	28633	-	<b>25927</b>	-	<b>254</b>	-	1015	-	16200	-	28,0	-	4,71		
602589	MVSI 075/30000-S02	120	□ -	47465	33440	<b>29845</b>	<b>30280</b>	<b>293</b>	<b>297</b>	1400	1280	24400	-	43,0	-	6,00	-		

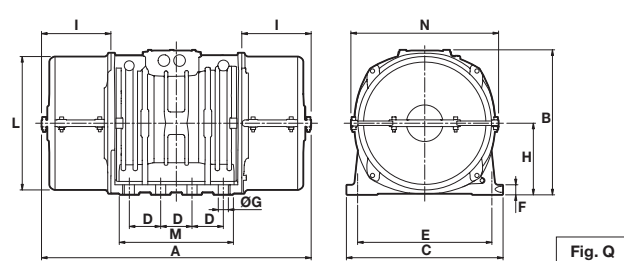
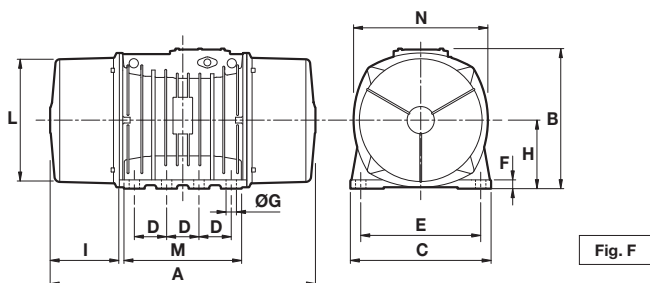
\* Working moment = 2 x static moment.    Δ For special application.    □ CSA certification on request, with feeding line included.



DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Cable entry thread
							ØG	N°							
MVSI 075/150-S02	A	344	203	167	105	140	13	4	30	82,5	93	145	146	160	M25X1,5
MVSI 075/250-S02	A	394	211	205	120	170	17	4	45	93,5	106	170	174	182	M25X1,5
MVSI 075/400-S02	A	435	224	205	120	170	17	4	42	104,5	117,5	187	162	203	M25X1,5
MVSI 075/530-S02	A	480	224	205	120	170	17	4	42	104,5	140	187	162	203	M25X1,5
MVSI 075/660-S08	A	500	244	230	140	190	17	4	45	116	134	207	190	225	M25X1,5
MVSI 075/910-S08	A	574	244	230	140	190	17	4	45	116	171	207	190	225	M25X1,5
MVSI 075/1310-S08	A	617	272	275	155	225	22	4	70	130	177	238	210	253	M25X1,5
MVSI 075/1750-S08	A	663	272	275	155	225	22	4	70	130	200	238	210	253	M25X1,5
MVSI 075/2110-S02	A	666	321	310	155	255	23,5	4	77	157	178	277	215	295	M25X1,5
MVSI 075/3110-S02	A	734	347	340	180	280	26	4	80	165	202	303	240	320	M32X1,5
MVSI 075/3800-S02	A	796	347	340	180	280	26	4	80	165	233	303	240	320	M32X1,5
MVSI 075/4200-S02	A	744	370	390	200	320	28	4	90	180	192	330	270	350	M32X1,5
MVSI 075/5300-S02	A	840	370	390	200	320	28	4	90	180	240	330	270	350	M32X1,5
MVSI 075/6500-S90	A	870	395	392	200	320	28	4	100	192	255	355	270	375	M32X1,5
MVSI 075/6800-S02 Δ	C	862	437	460	125	380	39	6	35	215	230	387	320	414	M32X1,5
MVSI 075/10000-S02	C	1002	437	460	125	380	39	6	35	215	300	387	320	414	M32X1,5
MVSI 075/12000-S90	C	1070	454	530	140	440	45	6	38	230	280	423	370	448	M32X1,5
MVSI 075/14000-S02	F	1040	526	570	140	480	45	8	41	268	240	486	510	516	M32X1,5
MVSI 075/17000-S02	F	1120	526	570	140	480	45	8	41	268	280	486	510	516	M32X1,5
MVSI 075/22000-S90	F	1150	607	610	140	520	45	8	38	297	298	542	510	582	M32X1,5
MVSI 075/26000-S90	F	1150	607	610	140	520	45	8	38	297	298	542	510	582	M32X1,5
MVSI 075/30000-S02	Q	1325	649	700	140	600	45	8	45	320	370	600	510	660	M32X1,5

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





## ■ MVSI



### Technical features

#### Standard painting

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

Good resistance versus corrosion in normal operating conditions.

Salt spray tested for 500 hours.

## ■ MVSI-S



### 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 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 and concerns 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 motor-vibrators, so up to frame size 60 included.

# ■ MVSII-TS



## 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

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 30500 kgf. (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 -20°C to +40°C. Versions for higher or lower temperatures are available on request.

### Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C from size 70, on request for smaller sizes. On request, thermistors with different temperatures and anti-condensation heaters.

### Fixing of the vibrator

In all positions and therefore without restriction.

### Lubrication

All vibrators are 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-TS series, obtained directly from the MVSI series, is characterised 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-TS 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-TS has range extended up to 30500kgf (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 displit covers.

#### Painting / Surface coating

Electrostatic surface treatment based on epoxy polyester powder polymerised in oven at 200°C. Tested in salt spray fro 500 hours. On request on MVSI-TS 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.



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-TS-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

# MVSI-TS



## 4 poles - 1.500/1.800 rpm

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	CSA*	Static moment* kgmm		Centrifugal force kN				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601217	MVSI 15/1410-S02-TS	40	•	561	400	<b>1413</b>	<b>1449</b>	<b>13,9</b>	<b>14,2</b>	42,2	38,5	900	1050	1,45	1,50	4,10	4,20
601219	MVSI 15/1710-S02-TS	50	•	715	485	<b>1798</b>	<b>1757</b>	<b>17,6</b>	<b>17,2</b>	48,8	43,5	1100	1200	2,00	1,90	4,29	4,89
601267	MVSI 15/2000-S02-TS	50	•	817	561	<b>2054</b>	<b>2033</b>	<b>20,1</b>	<b>19,9</b>	51,5	45,5	1350	1450	2,50	2,30	4,30	4,90
601220	MVSI 15/2410-S08-TS	60	•	962	674	<b>2420</b>	<b>2444</b>	<b>23,7</b>	<b>24,0</b>	71,0	64,5	1600	1700	3,20	3,00	6,09	7,23
601268	MVSI 15/3000-S08-TS	60	•	1235	858	<b>3106</b>	<b>3107</b>	<b>30,5</b>	<b>31,0</b>	81,0	72,0	1900	2000	3,80	3,50	6,50	7,50
601221	MVSI 15/3810-S02-TS	70	•	1526	1034	<b>3840</b>	<b>3744</b>	<b>37,7</b>	<b>36,7</b>	120	111	2200	2500	3,90	3,90	7,11	6,92
601269	MVSI 15/4300-S02-TS	70	•	1720	1173	<b>4326</b>	<b>4250</b>	<b>42,4</b>	<b>41,7</b>	124	118	2500	2800	4,80	4,65	5,90	7,10
601211	MVSI 15/5010-S02-TS	80	•	1990	1364	<b>5007</b>	<b>4941</b>	<b>49,1</b>	<b>48,5</b>	162	154	3600	3400	6,00	5,00	7,02	8,00
601447	MVSI 15/6000-S02-TS	80	•	2248	1677	<b>5654</b>	<b>6075</b>	<b>55,5</b>	<b>59,6</b>	165	156	3600	3400	6,00	5,00	7,02	8,00
601204	MVSI 15/9500-S02-TS	97	□	3346	2462	<b>8416</b>	<b>8916</b>	<b>82,6</b>	<b>87,5</b>	307	293	7500	8500	12,2	12,0	6,56	6,67

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

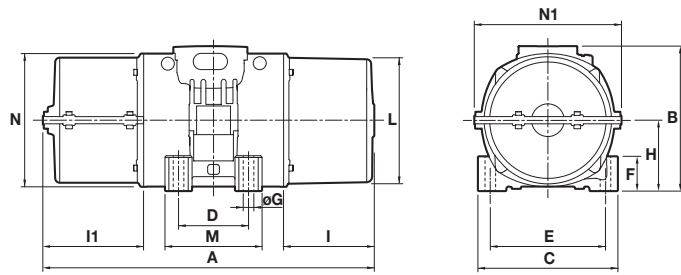


Fig. P

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A n. split covers		B	C	D	E	Holes		F	H	I	L	M	N	I1	N1	Cable entry thread
		1	2					ØG	N°									
MVSI 15/1410-S02-TS	P	496	543	244	230	140	190	17	4	45	116	108	207	190	225	156	258	M25x1,5
MVSI 15/1710-S02-TS	P	522	543	244	230	140	190	17	4	45	116	134	207	190	225	156	258	M25x1,5
MVSI 15/2000-S02-TS	P	595(50Hz) 523(60Hz)	616(50Hz) 544(60Hz)	244	230	140	190	17	4	45	116	171(50Hz) 134(60Hz)	207	190	225	192(50Hz) 156(60Hz)	258	M25x1,5
MVSI 15/2410-S08-TS	P	662	707	272	275	155	225	22	4	70	130	177	238	210	253	222	287	M25x1,5
MVSI 15/3000-S08-TS	P	662	707	272	275	155	225	22	4	70	130	177	238	210	253	222	287	M25x1,5
MVSI 15/3810-S02-TS	P	624	664	321	310	155	255	23,5	4	77	157	137	277	215	295	177	326	M25x1,5
MVSI 15/4300-S02-TS	P	665(50Hz) 624(60Hz)	664	321	310	155	255	23,5	4	77	157	178(50Hz) 137(60Hz)	277	215	295	177	326	M25x1,5
MVSI 15/5010-S02-TS	P	656	682	347	340	180	280	26	4	80	165	150	303	240	320	176	356	M32x1,5
MVSI 15/6000-S02-TS	P	656	682	347	340	180	280	26	4	80	165	150	303	240	320	176	356	M32x1,5
MVSI 15/9500-S02-TS	P	878	894	437	460	125	380	39	6	35	215	230	387	320	414	246	450	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 Italtibras.

# MVSI-TS



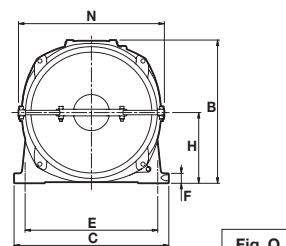
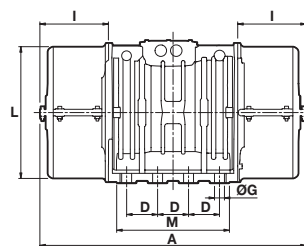
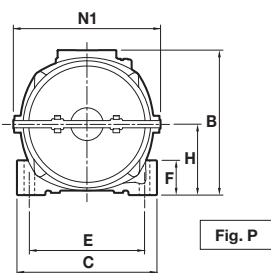
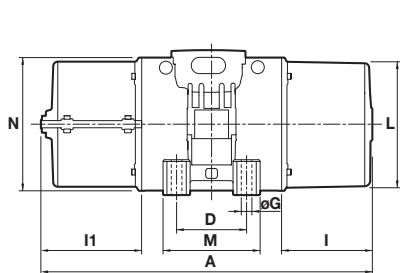
## 6 poles - 1.000/1.200 rpm

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	CSA*	Static moment* kgmm		Centrifugal force kN				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602380	MVSI 10/810-S08-TS	40	•	723	561	<b>809</b>	<b>905</b>	<b>7,94</b>	<b>8,88</b>	49,0	45,0	680	760	1,40	1,35	2,53	3,68
602381	MVSI 10/1110-S08-TS	50	•	1012	715	<b>1132</b>	<b>1151</b>	<b>11,1</b>	<b>11,3</b>	64,5	57,5	750	750	1,65	1,50	3,33	4,13
602382	MVSI 10/1400-S08-TS	50	•	1274	921	<b>1424</b>	<b>1483</b>	<b>14,0</b>	<b>14,5</b>	64,0	56,5	950	1000	1,80	1,70	3,05	3,65
602406	MVSI 10/1610-S08-TS	60	•	1464	962	<b>1638</b>	<b>1549</b>	<b>16,1</b>	<b>15,2</b>	81,0	71,0	1100	1300	2,20	2,20	4,21	4,05
602407	MVSI 10/2100-S08-TS	60	•	1927	1318	<b>2154</b>	<b>2102</b>	<b>21,1</b>	<b>20,6</b>	93,0	83,0	1500	1770	3,00	2,75	3,42	4,00
602167	MVSI 10/2610-S02-TS	70	•	2326	1720	<b>2601</b>	<b>2747</b>	<b>25,5</b>	<b>26,9</b>	131	117	1960	2100	4,10	3,75	5,35	5,60
602230	MVSI 10/3000-S02-TS	70	•	2690	1940	<b>3007</b>	<b>3124</b>	<b>29,5</b>	<b>30,6</b>	146	131	2200	2400	4,50	4,30	4,35	4,81
602154	MVSI 10/3810-S02-TS	80	•	3422	2380	<b>3826</b>	<b>3831</b>	<b>37,5</b>	<b>37,6</b>	189	171	2500	3000	5,10	5,00	5,91	6,00
602204	MVSI 10/4700-S02-TS	80	•	4206	2887	<b>4701</b>	<b>4648</b>	<b>46,1</b>	<b>46,0</b>	205	184	3200	3600	6,50	6,00	5,24	5,50
602350	MVSI 10/5150-S02-TS	80	•	/	3230	/	<b>5200</b>	/	<b>51,0</b>	/	201	/	3600	/	6,00	/	5,50
602138	MVSI 10/5200-S02-TS	90	•	4658	3288	<b>5208</b>	<b>5293</b>	<b>51,1</b>	<b>51,9</b>	239	216	3800	4000	7,00	6,50	4,71	5,08
602351	MVSI 10/5700-S02-TS	90	•	5044	3478	<b>5650</b>	<b>5650</b>	<b>55,4</b>	<b>54,9</b>	241	221	3800	4000	7,00	6,50	4,71	5,08
602091	MVSI 10/6500-S02-TS	90	•	5838	4055	<b>6527</b>	<b>6529</b>	<b>64,0</b>	<b>64,0</b>	269	259	4300	5000	8,20	8,10	4,51	5,83
602352	MVSI 10/7000-S02-TS	90	•	6272	4348	<b>7013</b>	<b>7000</b>	<b>68,8</b>	<b>68,7</b>	276	264	4300	5000	8,20	8,10	4,51	5,83
602092	MVSI 10/8000-S90-TS	95	□	7197	4967	<b>8046</b>	<b>7996</b>	<b>78,9</b>	<b>78,4</b>	316	278	7000	7500	12,6	11,3	4,59	5,58
602093	MVSI 10/9000-S90-TS	95	□	7752	5385	<b>8666</b>	<b>8669</b>	<b>85,0</b>	<b>85,0</b>	327	290	7500	8200	14,0	12,9	4,13	4,88
602137	MVSI 10/10000-S02-TS	97	□	8673	5664	<b>9695</b>	<b>9117</b>	<b>95,1</b>	<b>89,4</b>	373	333	7600	8000	13,5	12,4	4,72	4,92
602227	MVSI 10/13000-S02-TS	97	□	11510	8158	<b>12867</b>	<b>13130</b>	<b>126</b>	<b>129</b>	446	396	9600	10000	17,0	16,0	4,98	5,00
602142	MVSI 10/15000-S02-TS	105	□	12662	8700	<b>14155</b>	<b>14004</b>	<b>139</b>	<b>137</b>	644	606	10600	11270	19,0	18,0	5,88	5,78
602143	MVSI 10/17500-S02-TS	105	□	15500	10439	<b>17327</b>	<b>16804</b>	<b>170</b>	<b>165</b>	705	656	13000	13700	24,5	23,0	5,71	5,96
602244	MVSI 10/19500-S02-TS	105	□	17947	11430	<b>20062</b>	<b>18400</b>	<b>197</b>	<b>181</b>	711	661	13000	13700	24,5	23,0	5,71	5,96
602144	MVSI 10/22000-S90-TS	110	□	20025	12553	<b>22386</b>	<b>20208</b>	<b>220</b>	<b>198</b>	926	896	19000	19000	33,0	25,5	4,67	5,88
602273	MVSI 10/25000-S90-TS	110	□	22364	14785	<b>25000</b>	<b>23800</b>	<b>245</b>	<b>233</b>	960	928	19000	19000	33,0	25,5	4,67	5,88
602336	MVSI 10/30000-S02-TS	120	□	27285	18760	<b>30502</b>	<b>30200</b>	<b>299</b>	<b>296</b>	1210	1160	24000	25800	40,0	38,0	4,89	5,39

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





DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A		B	C	D	E	ØG	N°	F	H	I	L	M	N	I1	N1	Cable entry thread
		n. split covers																
		1	2															
MVSI 10/810-S08-TS	P	522(50Hz) 496(60Hz)	543	246	230	140	190	17	4	45	116	134(50Hz) 108(60Hz)	207	190	225	156	258	M25x1,5
MVSI 10/1110-S08-TS	P	595	616	246	230	140	190	17	4	45	116	171	207	190	225	192	258	M25x1,5
MVSI 10/1400-S08-TS	P	641(50Hz) 595(60Hz)	662(50Hz) 616(60Hz)	246	230	140	190	17	4	45	116	194(50Hz) 171(60Hz)	207	190	225	215(50Hz) 192(60Hz)	258	M25x1,5
MVSI 10/1610-S08-TS	P	662(50Hz) 622(60Hz)	707	246	275	140	190	17	4	70	130	177(50Hz) 137(60Hz)	238	210	253	222	287	M25x1,5
MVSI 10/2100-S08-TS	P	685(50Hz) 662(60Hz)	707	246	275	140	190	17	4	70	130	200(50Hz) 177(60Hz)	238	210	253	222	287	M25x1,5
MVSI 10/2610-S02-TS	P	718	770	321	310	155	255	23,5	4	77	157	178	277	215	295	230	326	M25x1,5
MVSI 10/3000-S02-TS	P	741	770	321	310	155	255	23,5	4	77	157	201	277	215	295	230	326	M25x1,5
MVSI 10/3810-S02-TS	P	758	782	347	340	180	280	26	4	80	165	202	303	240	320	226	356	M32x1,5
MVSI 10/4700-S02-TS	P	822	848	347	340	180	280	26	4	80	165	233	303	240	320	259	356	M32x1,5
MVSI 10/5150-S02-TS	P	837(60Hz)	848(60Hz)	347	340	180	280	26	4	80	165	236	303	240	320	259	356	M32x1,5
MVSI 10/5200-S02-TS	P	818	892	370	390	200	320	28	4	90	180	192	330	270	350	266	382	M32x1,5
MVSI 10/5700-S02-TS	P	866	892	370	390	200	320	28	4	90	180	240	330	270	350	266	382	M32x1,5
MVSI 10/6500-S02-TS	P	866	892	370	390	200	320	28	4	90	180	240	330	270	350	266	382	M32x1,5
MVSI 10/7000-S02-TS	P	866	892	370	390	200	320	28	4	90	180	240	330	270	350	266	382	M32x1,5
MVSI 10/8000-S90-TS	P	896	922	395	392	200	320	28	4	100	192	255	355	270	375	281	410	M32x1,5
MVSI 10/9000-S90-TS	P	896	922	395	392	200	320	28	4	100	192	255	355	270	375	281	410	M32x1,5
MVSI 10/10000-S02-TS	P	878	894	437	460	125	380	39	6	35	215	230	387	320	414	246	450	M32x1,5
MVSI 10/13000-S02-TS	P	1017	1032	437	460	125	380	39	6	35	215	300	387	320	414	315	450	M32x1,5
MVSI 10/15000-S02-TS	P	1030	1100	526	570	140	480	45	8	41	268	200	495	510	516	270	566	M32x1,5
MVSI 10/17500-S02-TS	P	1070	1100	526	570	140	480	45	8	41	268	240	495	510	516	270	566	M32x1,5
MVSI 10/19500-S02-TS	P	1150(50Hz) 1070(60Hz)	1180(50Hz) 1100(60Hz)	526	570	140	480	45	8	41	268	280(50Hz) 240(60Hz)	495	510	516	310(50Hz) 270(60Hz)	566	M32x1,5
MVSI 10/22000-S90-TS	P	1175	1200	607	610	140	520	45	8	38	297	298	542	510	582	323	616	M32x1,5
MVSI 10/25000-S90-TS	P	1175	1200	607	610	140	520	45	8	38	297	298	542	510	582	323	616	M32x1,5
MVSI 10/30000-S02-TS	Q	/	1205	649	700	140	600	45	8	45	320	/	/	510	/	310	660	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-TS

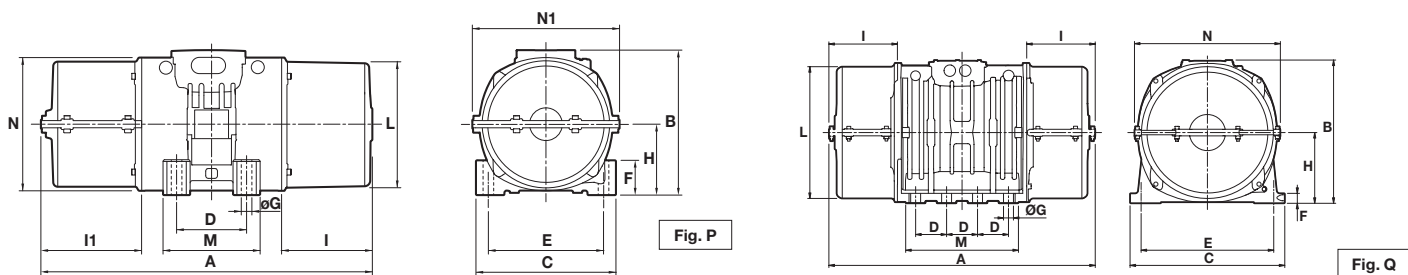


## 8 poles - 750/900 rpm

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	SP*	Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602610	MVSI 075/910-S08-TS	50	•	1012	1012	<b>637</b>	<b>917</b>	<b>6,30</b>	<b>9,00</b>	56,8	56,8	400	500	1,40	1,30	2,38	2,85
602618	MVSI 075/1310-S08-TS	60	•	1464	1464	<b>922</b>	<b>1327</b>	<b>9,04</b>	<b>13,0</b>	81,0	81,0	950	1100	2,20	2,20	2,63	3,41
602619	MVSI 075/1750-S08-TS	60	•	1927	1927	<b>1214</b>	<b>1747</b>	<b>11,9</b>	<b>17,1</b>	93,0	93,0	1100	1300	2,60	2,26	2,78	3,04
602891	MVSI 075/2110-S02-TS	70	•	2326	2326	<b>1463</b>	<b>2107</b>	<b>14,4</b>	<b>20,7</b>	130	130	1500	1790	4,10	4,20	3,55	2,95
602884	MVSI 075/3110-S02-TS	80	•	3422	3422	<b>2152</b>	<b>3099</b>	<b>21,1</b>	<b>30,4</b>	188	188	2000	2300	5,40	5,20	3,98	4,62
602515	MVSI 075/3800-S02-TS	80	•	4206	4206	<b>2645</b>	<b>3808</b>	<b>25,9</b>	<b>37,4</b>	204	204	2500	3000	6,00	6,00	4,00	4,20
602862	MVSI 075/4200-S02-TS	90	•	4658	4658	<b>2930</b>	<b>4218</b>	<b>28,7</b>	<b>41,4</b>	238	238	2800	3350	6,50	6,50	3,84	4,00
602826	MVSI 075/5300-S02-TS	90	•	5838	5838	<b>3672</b>	<b>5287</b>	<b>36,0</b>	<b>51,9</b>	268	268	4000	4300	8,20	7,85	3,87	5,35
602827	MVSI 075/6500-S90-TS	95	□	7197	7197	<b>4526</b>	<b>6517</b>	<b>44,4</b>	<b>63,9</b>	315	315	4900	5800	9,90	9,50	3,04	3,26
602551	MVSI 075/6800-S02-TS	97	□	7340	7340	<b>4616</b>	<b>6647</b>	<b>45,3</b>	<b>65,2</b>	329	329	5600	6000	10,5	10,0	3,12	3,30
602870	MVSI 075/10000-S02-TS	97	□	12390	10973	<b>7792</b>	<b>9937</b>	<b>76,4</b>	<b>97,5</b>	438	419	6800	7450	13,2	12,0	3,33	3,92
602871	MVSI 075/14000-S02-TS	105	□	17946	15500	<b>11285</b>	<b>14036</b>	<b>111</b>	<b>138</b>	702	680	9200	9600	21,0	19,5	4,99	5,44
602872	MVSI 075/17000-S02-TS	105	□	21337	19064	<b>13418</b>	<b>17263</b>	<b>132</b>	<b>169</b>	755	711	10400	11140	22,0	20,0	5,50	5,90
602873	MVSI 075/22000-S90-TS	110	□	28633	24508	<b>18005</b>	<b>22192</b>	<b>177</b>	<b>218</b>	1015	981	12500	16200	26,5	28,0	5,63	4,71
602535	MVSI 075/26000-S90-TS	110	□	-	28633	-	<b>25927</b>	-	<b>254</b>	-	1015	-	16200	-	28,0	-	4,71
602589	MVSI 075/30000-S02-TS	120	□	47465	33440	<b>29845</b>	<b>30280</b>	<b>293</b>	<b>297</b>	1400	1280	24400	-	43,0	-	6,00	-

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



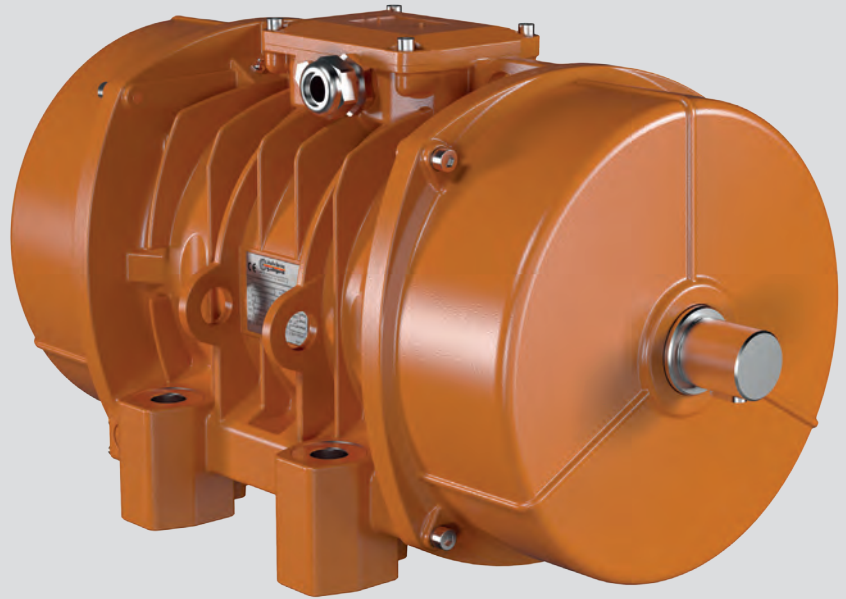
DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A		B	C	D	E	Holes		F	H	I	L	M	N	I1	N1	Cable entry thread
		n. split covers	1					2	ØG									
MVSI 075/910-S08-TS	P	595	616	246	230	140	190	17	4	45	116	171	210	190	225	192	258	M25x1,5
MVSI 075/1310-S02-TS	P	662	707	246	275	140	190	17	4	70	130	177	238	210	253	222	287	M25x1,5
MVSI 075/1750-S02-TS	P	685	707	246	275	140	190	17	4	70	130	200	238	210	253	222	287	M25x1,5
MVSI 075/2110-S02-TS	P	718	770	321	310	155	255	23,5	4	77	157	178	277	215	295	230	326	M25x1,5
MVSI 075/3110-S02-TS	P	758	782	347	340	180	280	26	4	80	165	202	303	240	320	226	356	M32x1,5
MVSI 075/3800-S02-TS	P	822	848	347	340	180	280	26	4	80	165	233	303	240	320	259	356	M32x1,5
MVSI 075/4200-S02-TS	P	818	892	370	390	200	320	28	4	90	180	192	330	270	350	266	382	M32x1,5
MVSI 075/5300-S02-TS	P	866	892	370	390	200	320	28	4	90	180	240	330	270	350	266	382	M32x1,5
MVSI 075/6500-S90-TS	P	896	922	395	392	200	320	28	4	100	192	255	355	270	375	281	410	M32x1,5
MVSI 075/6800-S02-TS	P	878	894	437	460	125	380	39	6	35	215	230	387	320	414	246	450	M32x1,5
MVSI 075/10000-S02-TS	P	1017	1032	437	460	125	380	39	6	35	215	300	387	320	414	315	450	M32x1,5
MVSI 075/14000-S02-TS	P	1070	1100	526	570	140	480	45	8	41	268	240	485	510	516	270	566	M32x1,5
MVSI 075/17000-S02-TS	P	1150	1180	526	570	140	480	45	8	41	268	280	485	510	516	310	566	M32x1,5
MVSI 075/22000-S90-TS	P	1175	1200	607	610	140	520	45	8	38	297	298	542	510	582	323	616	M32x1,5
MVSI 075/26000-S90-TS	P	1175	1200	607	610	140	520	45	8	38	297	298	542	510	582	323	616	M32x1,5
MVSI 075/30000-S02-TS	Q	/	1325	649	700	140	600	45	8	45	320	/	/	510	/	370	660	M32x1,5

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

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

# ■ MVSII-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

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

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

### Mechanical protection

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

### Vibrator thermal protection

With PTC rated thermistor heat detectors 130°C.  
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, using a 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 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 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

# ■ MVSII-E



## Technical features

### Power supply

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

### Polarity

2, 4, 6 and 8 poles.

### Conformity with Standards and Regulations

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

### Controls

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

### Functioning

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

### Centrifugal force

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

### Mechanical protection

IP 66 according to IEC/EN 60529.

### Protection against mechanical impacts

IK 08 according to IEC/EN 62262.

### Insulation class

Class F (155°C).

### Tropicalization

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

### Ambient temperature

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

### Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C from size 70, on request for smaller sizes. On request, thermistors with different temperatures and anti-condensation heaters.

### Fixing of the vibrator

In all positions and therefore without restriction.

### Lubrication

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

### Terminal box

Large terminal box to facilitate electrical connection. Special shaped terminals allow for the power supply cable to be secured, whilst protecting it from loosening.

### Electric motor

Three-phase asynchronous type. Designed for maximum starting torques and torque curves specific to requirements of vibrating machines. Insulated windings using vacuum encapsulating up to sizes AF33 and 35 included; using the "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminium.

### Casing

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

### Bearing flange

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

### Bearings

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

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

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

**Category:** II2D & II2G

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

**Temperature class:**  
see tables

**EC certificate:**  
LCIE 05 ATEX 6163 X

**Zones of use:**  
21, 22

#### Motor shaft

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

#### Eccentric weights

Allow adjustment of the centrifugal force. This adjustment is realized by a graduated scale, which expresses the centrifugal force as a percentage of the maximum centrifugal force.

A patented system, called ARS, prevents adjustment errors.

#### Weight covers

In aluminium alloy.

#### Painting / Surface coating

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

**Other mounting bolt patterns are available. For further details please contact sales offices at 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	SIZE	Static moment*		Centrifugal force				Weight		Temp. class (G)	Temp. class (D)	Max input power		Power rating		Max. current		tE (s)	Ia/In
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			50Hz	60Hz	50Hz	60Hz	400V/50Hz	460V/60Hz		
6E0311	MVSI 3/100E-S02 Δ	00	12,1	12,1	122	176	1,20	1,72	5,2	5,2	T3	120°C	180	180	120	120	-	-	30	2,68
											T4		105	105	80	80	-	-	20	3,48
6E0312	MVSI 3/200E-S02 Δ	01	20,2	16,2	203	234	1,99	2,29	5,8	5,5	T3	120°C	180	180	120	120	-	-	30	2,68
6E0313	MVSI 3/300E-S02	10	30,0	22,5	302	326	2,96	3,20	9,0	8,6	T3	120°C	260	270	210	210	0,57	0,50	18	3,50
											T4		230	230	172	172	0,48	0,41	12	4,20
6E0314	MVSI 3/500E-S02	20	58,0	34,8	584	504	5,72	4,94	14,3	13,3	T3	120°C	500	500	300	300	0,76	6,67	12	4,20
											T4		350	360	210	210	0,57	0,50	8	5,60
6E0381	MVSI 3/800E-S02	30	74,5	55,9	750	810	7,35	7,94	19,6	19,0	T3	120°C	550	570	405	405	0,95	0,83	12	4,20
											T4		390	400	290	290	0,72	0,64	8	5,52
6E0513	MVSI 3/1100E-S02	35	110	73,0	1105	1057	10,8	10,4	24,0	23,0	T3	120°C	550	600	350	350	0,86	0,75	15	3,88
											T4		460	500	290	290	0,76	0,67	11	4,37
6E0491	MVSI 3/1300E-S08	AF33	128	91,6	1290	1327	12,7	13,0	27,0	25,7	T4	200°C	700	750	500	500	1,24	1,07	6	6,40
6E0504	MVSI 3/1500E-S08	AF33	146	110	1470	1595	14,4	15,6	25,3	24,0	T4	200°C	700	750	500	500	1,24	1,07	6	6,40
6E0502	MVSI 3/1600E-S02	50	153	102	1545	1483	15,2	14,5	32,0	30,5	T3	200°C	1010	1070	720	720	1,62	1,40	6	9,29
											T4		830	910	660	660	1,43	1,25	6	7,30
6E0503	MVSI 3/1800E-S02	50	179	128	1802	1853	17,7	18,2	33,0	31,5	T3	200°C	1010	1070	720	720	1,62	1,40	6	9,29
6E0256	MVSI 3/2010E-S90	AF50	205	128	2059	1853	20,2	18,2	48,7	46,3	T3	200°C	1110	1150	960	960	1,90	1,66	7	5,90
6E0257	MVSI 3/2310E-S90	AF50	230	153	2316	2224	22,7	21,8	49,6	47,1	T3	200°C	1110	1150	960	960	1,90	1,66	7	5,90
6E0472	MVSI 3/5000E-S02	AF70	515	344	5187	4979	50,9	48,8	109	105	T3	135°C	3000	3000	2600	2600	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.

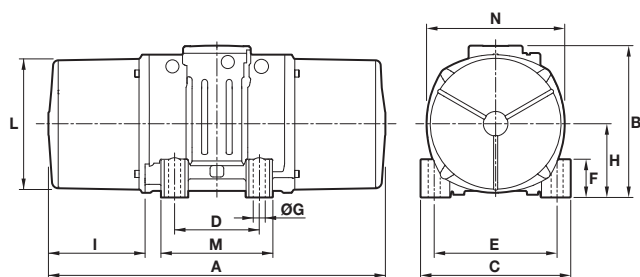


Fig. A

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Holes				F	H	I	L	M	N	Cable entry thread
					D	E	ØG	N°							
MVSI 3/100E-S02 Δ	A	211	150	125	62-74**	106	9	4	22	61	46	103	98	117	M20x1,5
MVSI 3/200E-S02 Δ	A	235	150	125	62-74**	106	9	4	22	61	58	103	98	117	M20x1,5
MVSI 3/300E-S02	A	255	171	152	90	125	13	4	28	73	54	127	128	141	M20x1,5
MVSI 3/500E-S02	A	288	203	167	105	140	13	4	30	82,5	65	145	146	160	M25x1,5
MVSI 3/800E-S02	A	308	211	205	120	170	17	4	45	93,5	63	170	174	182	M25x1,5
MVSI 3/1100E-S02	A	435	224	205	120	170	17	4	42	104,5	117,5	187	162	203	M25x1,5
MVSI 3/1300E-S08	A	375	217	215	100	180	17	4	47	93,5	106	170	145	182	M25x1,5
MVSI 3/1500E-S08	A	375	217	215	100	180	17	4	47	93,5	106	170	145	182	M25x1,5
MVSI 3/1600E-S02	A	430	244	230	140	190	17	4	45	116	99	207	190	225	M25x1,5
MVSI 3/1800E-S02	A	430	244	230	140	190	17	4	45	116	99	207	190	225	M25x1,5
MVSI 3/2010E-S90	A	465	230	230	140	190	17	4	49	104	105	186	180	200	M25x1,5
MVSI 3/2310E-S90	A	465	230	230	140	190	17	4	49	104	105	186	180	200	M25x1,5
MVSI 3/5000E-S02	A	560	290	310	155	255	25	4	90	130	137	238	210	253	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.

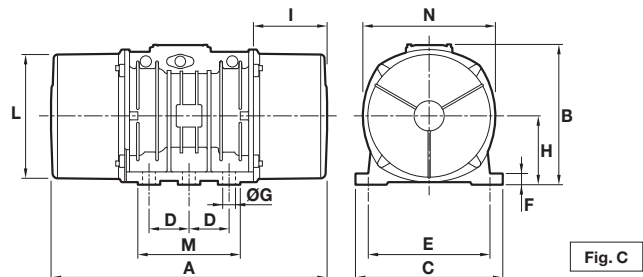
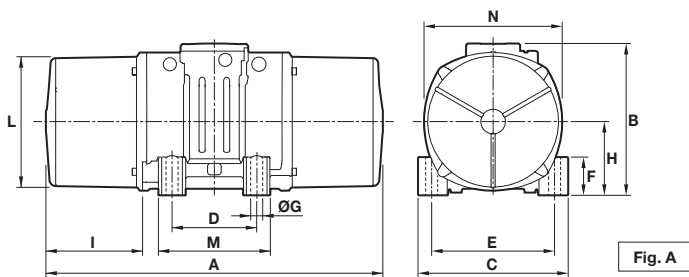


## 4 poles - 1.500/1.800 rpm

### Three-phase

DESCRIPTION			MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS									
Code	Type	SIZE	Static moment*		Centrifugal force				Weight		Temp. class (G)	Temp. class (D)	Max input power		Power rating		Max. current			Ia/In
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			W	W	W	W	A	A	tE (s)	
6E1367	MVSI 15/200E-S02	10	84,2	58,8	<b>213</b>	<b>214</b>	<b>2,09</b>	<b>2,10</b>	11,7	10,7	T3	120°C	203	-	90	-	0,45	-	35	2,04
			T4	170	175	94	95	0,39	0,40	28	2,34									
6E1372	MVSI 15/400E-S02	20	163	113	<b>412</b>	<b>411</b>	<b>4,04</b>	<b>4,03</b>	18,5	16,5	T3	120°C	300	320	200	230	0,57	0,52	18	3,33
			T4	285	270	180	200	0,52	0,46	16	3,63									
6E1373	MVSI 15/550E-S02	20	219	163	<b>552</b>	<b>592</b>	<b>5,42</b>	<b>5,81</b>	20,7	18,5	T3	120°C	300	320	200	230	0,57	0,52	18	3,33
			T4	285	270	180	200	0,52	0,46	16	3,63									
6E1408	MVSI 15/700E-S02	30	286	209	<b>720</b>	<b>760</b>	<b>7,06</b>	<b>7,46</b>	26,2	24,5	T3	120°C	460	500	310	380	0,86	0,85	17	3,5
			T4	360	420	240	310	0,72	0,70	12	4,2									
6E1524	MVSI 15/1100E-S02	35	415	271	<b>1045</b>	<b>982</b>	<b>10,3</b>	<b>9,63</b>	32,5	30,5	T4	120°C	370	450	285	340	0,81	0,83	13	4
6E1217	MVSI 15/1410E-S02	40	561	400	<b>1413</b>	<b>1449</b>	<b>13,9</b>	<b>14,2</b>	41,2	37,5	T3	120°C	900	950	660	730	1,38	1,32	13	4
			T4	630	700	460	505	1,05	1,00	8	5,36									
6E1219	MVSI 15/1710E-S02	50	715	485	<b>1798</b>	<b>1757</b>	<b>17,6</b>	<b>17,2</b>	47,8	42,5	T3	120°C	1100	1150	730	800	1,90	1,82	9	4,95
			T4	630	700	480	530	1,33	1,27	5,5	7									
6E1267	MVSI 15/2000E-S02	50	817	561	<b>2054</b>	<b>2033</b>	<b>20,1</b>	<b>19,9</b>	50,5	44,5	T3	150°C	1100	1150	730	800	1,90	1,82	9	4,95
			T4	630	700	480	530	1,33	1,27	5,5	7									
6E1220	MVSI 15/2410E-S08	60	962	674	<b>2420</b>	<b>2444</b>	<b>23,7</b>	<b>24,0</b>	70,0	63,5	T3	150°C	1600	1700	1340	1470	3,04	3,20	7	6
			T4	1150	1250	880	970	2,47	2,30	5,5	7,5									
6E1268	MVSI 15/3000E-S08	60	1235	858	<b>3106</b>	<b>3107</b>	<b>30,5</b>	<b>30,5</b>	80,0	71,0	T3	150°C	1280	1150	1000	1200	3,14	3,10	5,5	7,42
			T4	1150	1400	900	1080	2,85	2,85	5,5	8,16									
6E1221	MVSI 15/3810E-S02	70	1526	1034	<b>3840</b>	<b>3744</b>	<b>37,7</b>	<b>36,7</b>	119	110	T3	135°C	2200	2400	1780	1960	3,71	3,50	6	7,17
			T4	1850	1950	1500	1650	3,14	3,00	6	8,42									
6E1269	MVSI 15/4300E-S02	70	1720	1173	<b>4326</b>	<b>4250</b>	<b>42,4</b>	<b>41,7</b>	123	117	T3	135°C	2200	2400	1780	1960	3,71	3,50	6	7,17
			T4	1850	1950	1500	1650	3,14	3,00	6	8,42									
6E1211	MVSI 15/5010E-S02	80	1990	1364	<b>5007</b>	<b>4911</b>	<b>49,1</b>	<b>48,5</b>	161	153	T3	135°C	3200	3700	2560	2800	5,70	5,45	6	7
6E1447	MVSI 15/6000E-S02	80	2248	1677	<b>5654</b>	<b>6075</b>	<b>55,5</b>	<b>59,6</b>	164	155	T3	135°C	3200	3700	2560	2800	5,70	4,45	6	7
6E1204	MVSI 15/9500E-S02	97	3346	2462	<b>8416</b>	<b>8916</b>	<b>82,6</b>	<b>87,5</b>	306	292	T3	135°C	7300	7900	5925	6500	11,60	11,0	5,5	7

\* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Holes				F	H	I	L	M	N	Cable entry thread
					D	E	ØG	N°							
MVSI 15/200E-S02	A	301	171	152	90	125	13	4	28	73	77	127	128	141	M20x1,5
MVSI 15/400E-S02	A	344	203	167	105	140	13	4	30	82,5	93	145	146	160	M25x1,5
MVSI 15/550E-S02	A	386	203	167	105	140	13	4	30	82,5	114	145	146	160	M25x1,5
MVSI 15/700E-S02	A	394	211	205	120	170	17	4	45	93,5	106	170	174	182	M25x1,5
MVSI 15/1100E-S02	A	435	224	205	120	170	17	4	42	104,5	117,5	187	162	203	M25x1,5
MVSI 15/1410E-S02	A	448	244	230	140	190	17	4	45	116	108	207	190	225	M25x1,5
MVSI 15/1710E-S02	A	500	244	230	140	190	17	4	45	116	134	207	190	225	M25x1,5
MVSI 15/2000E-S02	A	574(50Hz) 500(60Hz)	244	230	140	190	17	4	45	116	171(50Hz) 134(60Hz)	207	190	225	M25x1,5
MVSI 15/2410E-S08	A	537	272	275	155	225	22	4	70	130	137	238	210	253	M25x1,5
MVSI 15/3000E-S08	A	617	272	275	155	225	22	4	70	130	177	238	210	253	M25x1,5
MVSI 15/3810E-S02	A	584	321	310	155	255	23,5	4	77	157	137	277	215	295	M25x1,5
MVSI 15/4300E-S02	A	666(50Hz) 584(60Hz)	321	310	155	255	23,5	4	77	157	178(50Hz) 137(60Hz)	277	215	295	M25x1,5
MVSI 15/5010E-S02	A	630	347	340	180	280	26	4	80	165	150	303	240	320	M32x1,5
MVSI 15/6000E-S02	A	630	347	340	180	280	26	4	80	165	150	303	240	320	M32x1,5
MVSI 15/9500E-S02	C	862	437	460	125	380	39	6	35	215	230	387	320	414	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.

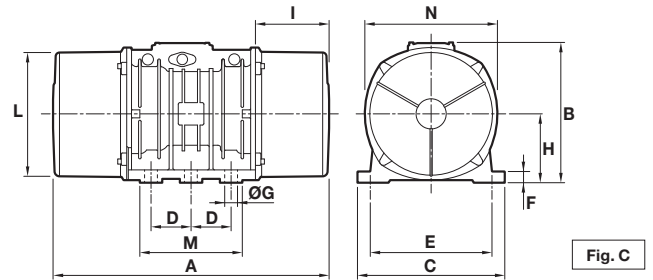
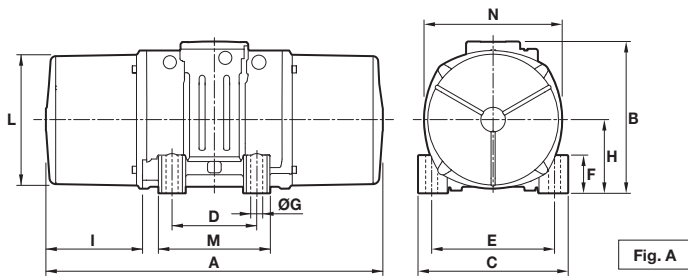


## 6 poles - 1.000/1.200 rpm

### Three-phase

DESCRIPTION			MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS									
Code	Type	SIZE	Static moment*		Centrifugal force				Weight		Temp. class (G)	Temp. class (D)	Max input power		Power rating		Max. current		tE (s)	Ia/In
			kgmm	kg	kg	kN	kg	kg	W	W			A	A						
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz		
6E2298	MVSI 10/200E-S02	20	163	163	183	264	1,80	2,59	18,1	18,1	T4	120°C	185	200	100	110	0,48	0,45	25	2,72
6E2314	MVSI 10/310E-S02	30	286	209	321	338	3,15	3,32	25,7	24,0	T4	120°C	320	350	201	221	0,67	0,65	25	2,81
6E2402	MVSI 10/550E-S02	35	457	457	512	737	5,02	7,23	32,6	32,6	T4	120°C	350	380	240	264	0,71	0,68	26	2,4
6E2380	MVSI 10/810E-S08	40	723	561	809	905	7,94	8,88	44,0	40,0	T3 T4	135°C	680 500	730 540	448 290	490 320	1,33 1,05	1,27 1,00	25 17	2,78 3,54
6E2381	MVSI 10/1110E-S08	50	1012	715	1132	1151	11,1	11,3	55,8	48,8	T3 T4	135°C	750 480	690 500	550 300	550 300	1,57 1,24	1,36 1,00	19 13	3,33 4,23
6E2382	MVSI 10/1400E-S08	50	1274	921	1424	1483	14,0	14,5	63,0	55,5	T3 T4	135°C	750 480	690 500	550 300	550 300	1,57 1,24	1,36 1,00	19 13	3,33 4,23
6E2406	MVSI 10/1610E-S08	60	1464	962	1638	1549	16,1	15,2	80,0	70,0	T3 T4	135°C	1100 850	1200 950	825 615	900 675	2,09 1,81	2,00 1,70	15 10	3,63 4,73
6E2407	MVSI 10/2100E-S08	60	1927	1318	2154	2102	21,1	20,6	92,0	82,0	T3 T4	135°C	1500 1050	1700 1200	940 750	1020 820	2,85 2,19	2,75 2,10	9 8	4,50 4,89
6E2167	MVSI 10/2610E-S02	70	2326	1720	2601	2747	25,5	26,9	130	116	T3	135°C	1960	2100	1580	1700	3,9	3,7	8	5,31
6E2230	MVSI 10/3000E-S02	70	2690	1940	3007	3124	29,5	30,6	145	130	T3 T4	135°C	2200 1770	2400 1900	1630 1350	1770 1470	4,28 3,71	4,30 3,60	8 5	4,82 5,56
6E2154	MVSI 10/3810E-S02	80	3422	2380	3826	3831	37,5	37,6	188	170	T3 T4	135°C	2200 2000	2700 2200	1575 1500	1730 1650	4,85 4,28	4,60 4,00	7 6	5,88 6,66
6E2204	MVSI 10/4700E-S02	80	4206	2887	4701	4648	46,1	46,0	204	183	T3 T4	135°C	3100 2550	3500 3000	2500 2100	2770 2290	6,18 5,42	6,00 5,20	10 6	5,23 5,96
6E2350	MVSI 10/5150E-S02	80	4678	3230	5230	5200	51,3	51,0	225	200	T3 T4	135°C	3100 2550	3500 3000	2500 2100	2770 2290	6,18 5,42	6,00 5,20	10 6	5,23 5,96
6E2138	MVSI 10/5200E-S02	90	4658	3288	5208	5293	51,1	51,9	238	215	T3	135°C	3500	3650	2590	2700	6,65	6,1	10	4,64
6E2351	MVSI 10/5700E-S02	90	5044	3478	5650	5600	55,4	54,9	240	220	T3	135°C	3500	3650	2590	2700	6,65	6,1	10	4,64
6E2136	MVSI 10/6600E-S02	97	6083	3979	6799	6405	66,7	62,8	308	280	T3	135°C	4200	4800	3360	3550	7,6	7	5,3	6,67
6E2137	MVSI 10/10000E-S02	97	8673	5664	9695	9117	95,1	89,4	372	332	T3	135°C	5400	5900	4500	4800	9,98	9,1	7	6
6E2349	MVSI 10/11200E-S02	97	9983	6896	11160	11100	109	109	398	358	T3	135°C	5400	5900	4500	4800	9,98	9,1	7	6

\* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Holes				F	H	I	L	M	N	Cable entry thread
					D	E	ØG	N°							
MVSI 10/200E-S02	A	344	203	167	105	140	13	4	30	82,5	93,0	145	140	160	M25x1,5
MVSI 10/310E-S02	A	394	211	205	120	170	17	4	45	93,5	106	170	174	182	M25x1,5
MVSI 10/550E-S02	A	435	224	205	120	170	17	4	42	104,5	117,5	187	162	203	M25x1,5
MVSI 10/810E-S08	A	500(50Hz) 448(60Hz)	244	230	140	190	17	4	45	116	134(50Hz) 108(60Hz)	207	190	225	M25x1,5
MVSI 10/1110E-S08	A	574	244	230	140	190	17	4	45	116	171	207	190	225	M25x1,5
MVSI 10/1400E-S08	A	620(50Hz) 574(60Hz)	244	230	140	190	17	4	45	116	194(50Hz) 171(60Hz)	207	190	225	M25x1,5
MVSI 10/1610E-S08	A	617(50Hz) 537(60Hz)	272	275	155	225	22	4	70	130	177(50Hz) 137(60Hz)	238	210	253	M25x1,5
MVSI 10/2100E-S08	A	663(50Hz) 617(60Hz)	272	275	155	225	22	4	70	130	200(50Hz) 177(60Hz)	238	210	253	M25x1,5
MVSI 10/2610E-S02	A	666	321	310	155	255	23,5	4	77	157	178	277	215	295	M25x1,5
MVSI 10/3000E-S02	A	712	321	310	155	255	23,5	4	77	157	201	277	215	295	M25x1,5
MVSI 10/3810E-S02	A	734	347	340	180	280	26	4	80	165	200	303	240	320	M32x1,5
MVSI 10/4700E-S02	A	796	347	340	180	280	26	4	80	165	233	303	240	320	M32x1,5
MVSI 10/5150E-S02	A	826	347	340	180	280	26	4	80	165	248	303	240	320	M32x1,5
MVSI 10/5200E-S02	A	744	370	390	200	320	28	4	90	180	192	330	270	350	M32x1,5
MVSI 10/5700E-S02	A	840	370	390	200	320	28	4	90	180	240	330	270	350	M32x1,5
MVSI 10/6600E-S02	C	750	437	460	125	380	39	6	35	215	174	387	320	414	M32x1,5
MVSI 10/10000E-S02	C	862	437	460	125	380	39	6	35	215	230	387	320	414	M32x1,5
MVSI 10/11200E-S02	C	912	437	460	125	380	39	6	35	215	255	387	320	414	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.



# MVSI-E



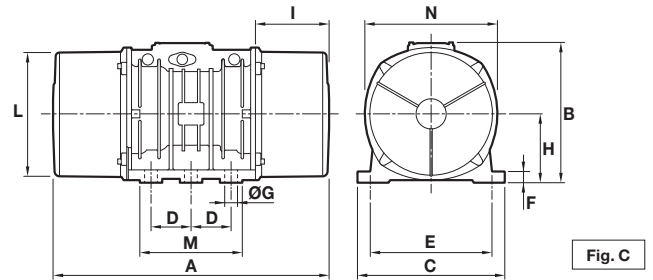
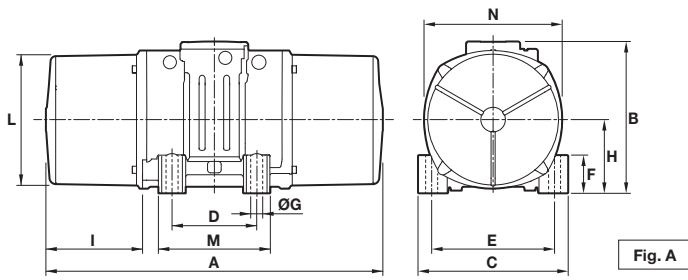
## 8 poles - 750/900 rpm

### Three-phase

DESCRIPTION			MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS										
Code	Type	SIZE	Static moment*		Centrifugal force				Weight		Temp. class (G)	Temp. class (D)	Max input power		Power rating		Max. current			tE (s)	Ia/In
			kgmm	kgmm	kg	kg	kN	kN	kg	kg			W	W	W	W	A	A	A		
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz			
6E2568	MVSI 075/150E-S02	20	163	163	104	149	1,02	1,46	18,1	18,1	T3	130°C	230	250	100	110	0,67	0,64	25	2,00	
6E2575	MVSI 075/250E-S02	30	286	286	181	260	1,76	2,55	26,2	26,2	T3	130°C	350	350	190	205	0,86	0,80	25	2,47	
6E2615	MVSI 075/400E-S02	35	457	457	288	415	2,83	4,07	32,6	32,6	T4	120°C	280	300	135	150	0,57	0,56	30	1,66	
6E2609	MVSI 075/660E-S08	40	723	723	456	656	4,47	6,44	44,0	44,0	T3	120°C	500	525	275	302	1,14	1,10	30	2,15	
6E2610	MVSI 075/910E-S08	50	1012	1012	637	917	6,25	9,00	55,8	55,8	T3 T4	120°C	600 450	670 500	336 225	380 255	1,33 1,14	1,30 1,10	30 25	2,14 2,50	
6E2618	MVSI 075/1310E-S08	60	1464	1464	922	1327	9,04	13,00	80,0	80,0	T3	150°C	950	1100	646	740	2,09	2,10	30	2,63	
6E2891	MVSI 075/2110E-S02	70	2326	2326	1463	2107	14,40	20,70	130	130	T3	135°C	1500	1650	1065	1225	3,61	3,60	15	4,18	
6E2884	MVSI 075/3110E-S02	80	3421	3421	2152	3099	21,10	30,40	188	188	T3	135°C	2000	2200	1460	1600	5,13	5,00	13	3,96	
6E2515	MVSI 075/3800E-S02	80	4206	4206	2645	3808	25,90	37,40	204	204	T3	135°C	2500	3000	1800	2100	5,70	6,00	14	4,00	
6E2862	MVSI 075/4200E-S02	90	4658	4658	2930	4218	28,70	41,40	238	238	T3	135°C	2630	2990	1900	2180	6,18	6,20	14	3,84	
6E2826	MVSI 075/5300E-S02	90	5838	5838	3672	5287	36,00	51,90	268	268	T3	135°C	3520	3800	2570	2775	7,79	7,40	14	3,80	
6E2870	MVSI 075/10000E-S02	97	12390	10973	7792	9937	76,40	97,50	438	419	T3	135°C	5100	5800	4100	4500	11,40	11,00	17	3,50	

\* Working moment = 2 x static moment.



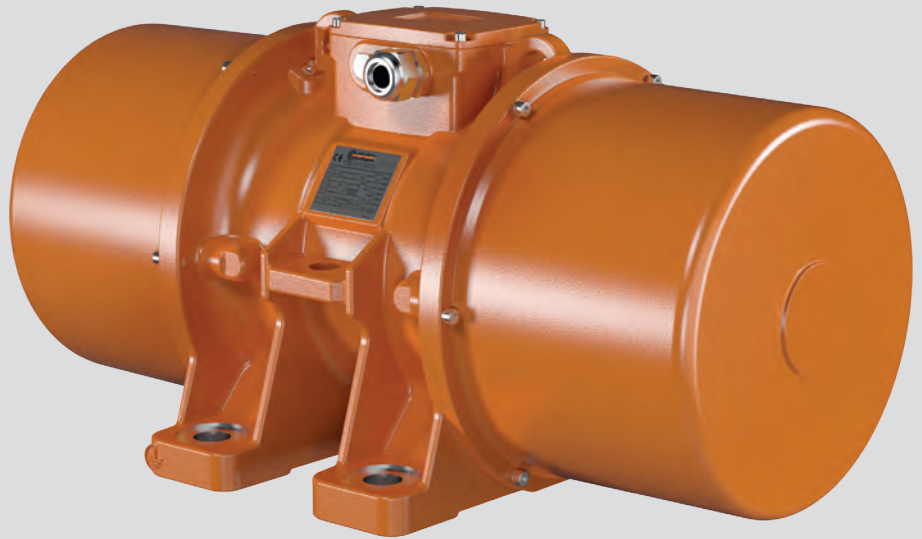


DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	Holes														Cable entry thread
		A	B	C	D	E	ØG	N°	F	H	I	L	M	N		
MVSI 075/150E-S02	A	344	203	167	105	140	13	4	30	82,5	93	145	146	160	M25x1,5	
MVSI 075/250E-S02	A	394	211	205	120	170	17	4	45	93,5	106	170	174	182	M25x1,5	
MVSI 075/400E-S02	A	435	224	205	120	170	17	4	42	104,5	117,5	187	162	203	M25x1,5	
MVSI 075/660E-S08	A	500	244	230	140	190	17	4	45	116	134	207	190	225	M25x1,5	
MVSI 075/910E-S08	A	574	244	230	140	190	17	4	45	116	171	207	190	225	M25x1,5	
MVSI 075/1310E-S08	A	617	272	275	155	225	22	4	70	130	177	238	210	253	M25x1,5	
MVSI 075/2110E-S02	A	666	321	310	155	255	23,5	4	77	157	178	277	215	295	M25x1,5	
MVSI 075/3110E-S02	A	734	347	340	180	280	26	4	80	165	202	303	240	320	M32x1,5	
MVSI 075/3800E-S02	A	796	347	340	180	280	26	4	80	165	233	303	240	320	M32x1,5	
MVSI 075/4200E-S02	A	744	370	390	200	320	28	4	90	180	192	330	270	350	M32x1,5	
MVSI 075/5300E-S02	A	840	370	390	200	320	28	4	90	180	240	330	270	350	M32x1,5	
MVSI 075/10000E-S02	C	1002	437	460	125	380	39	6	35	215	300	387	320	414	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.





## 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

Continual 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 9500 kgf. (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 -20°C to +40°C; higher or lower temperatures are possible on request.

### Vibrator thermal protection

With thermal detectors with thermistors PTC 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 Series was specifically designed to supply high torque values and power for applications at low speed, from 900 down to 500 rpm. The MVLS range is therefore highly indicated for dual mass resonance vibrating machines besides being suitable for traditional brute force vibrating machines.

The range offers different values of centrifugal force at different speeds up to 8150kg (80kN).

#### Weight covers

Standard in aluminum alloy.

#### Painting/Coating

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

**For further details please contact 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.



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



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



## 8 poles - 750/900 rpm

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	CSA*	Static moment*		Centrifugal force				Weight		Max input power		Max. current		Ia/In	
				kgmm	kg	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	W	W	400V 50Hz	460V 60Hz	50Hz	60Hz
602531	MVLS 075/1500-S90	184	•	1659	<b>1043</b>	<b>1502</b>	<b>10,2</b>	<b>14,7</b>	136	136	820	1000	3,00	3,10	6,40	5,50	
602532	MVLS 075/2300-S90	215	•	2577	<b>1620</b>	<b>2333</b>	<b>15,9</b>	<b>22,9</b>	180	180	1640	1940	5,10	5,10	4,10	4,30	
602533	MVLS 075/3000-S90	256	□	3452	<b>2171</b>	<b>3126</b>	<b>21,3</b>	<b>30,7</b>	215	215	3720	4500	7,30	7,50	5,50	6,1	
602534	MVLS 075/4200-S90	256	□	4670	<b>2936</b>	<b>4229</b>	<b>28,8</b>	<b>41,5</b>	230	230	5600	6600	12,20	12,00	5,70	6,20	
602536	MVLS 075/7500-S90	286	□	8310	<b>5225</b>	<b>7524</b>	<b>51,2</b>	<b>73,8</b>	465	465	7000	8550	13,40	14,30	8,90	9,00	

## 10 poles - 600/720 rpm

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	CSA*	Static moment*		Centrifugal force				Weight		Max input power		Max. current		Ia/In	
				kgmm	kg	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	W	W	400V 50Hz	460V 60Hz
602965	MVLS 06/800-S90	184	•	1333	<b>536</b>	<b>772</b>	<b>5,3</b>	<b>7,6</b>	142	142	900	1000	3,40	3,40	5,10	4,40	
602958	MVLS 06/1500-S90	184	•	2595	<b>1044</b>	<b>1504</b>	<b>10,2</b>	<b>14,7</b>	152	152	900	1000	3,40	3,40	5,10	4,40	
602966	MVLS 06/1490-S90	215	•	2577	<b>1037</b>	<b>1493</b>	<b>10,2</b>	<b>14,6</b>	180	180	1850	2180	4,60	4,60	4,10	3,50	
602953	MVLS 06/2300-S90	215	•	4002	<b>1611</b>	<b>2319</b>	<b>15,8</b>	<b>22,7</b>	194	194	1850	2180	4,60	4,60	4,10	3,50	
602968	MVLS 06/2000-S90	256	□	3450	<b>1388</b>	<b>1999</b>	<b>13,6</b>	<b>19,6</b>	220	220	2400	2930	5,80	6,10	8,20	6,70	
602967	MVLS 06/2700-S90	256	□	4670	<b>1879</b>	<b>2706</b>	<b>18,4</b>	<b>26,5</b>	230	230	3800	4500	6,80	8,40	10,3	7,30	
602959	MVLS 06/3000-S90	256	□	5158	<b>2076</b>	<b>2989</b>	<b>20,4</b>	<b>29,3</b>	220	220	2520	2930	6,00	6,10	6,40	6,70	
602952	MVLS 06/4200-S90	256	□	7391	<b>2974</b>	<b>4283</b>	<b>29,2</b>	<b>42,0</b>	297	297	3875	4500	8,60	8,40	7,00	7,30	
602946	MVLS 06/6600-S90	286	□	11475	<b>4618</b>	<b>6650</b>	<b>45,3</b>	<b>65,2</b>	430	430	5760	6680	11,2	11,2	5,80	6,10	
602960	MVLS 06/8100-S90	286	□	14069	<b>5662</b>	<b>8153</b>	<b>55,5</b>	<b>80,0</b>	485	485	6910	8450	13,3	14,0	7,00	5,70	
602987	MVLS 06/9500-S90	286	□	16495	<b>6638</b>	<b>9559</b>	<b>65,1</b>	<b>93,7</b>	517	517	7800	-	15,0	-	-	-	

## 12 poles - 500/600 rpm

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	CSA*	Static moment*		Centrifugal force				Weight		Max input power		Max. current		Ia/In	
				kgmm	kg	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	W	W	400V 50Hz	460V 60Hz
602957	MVLS 05/1000-S90	184	•	2418	<b>676</b>	<b>973</b>	<b>6,6</b>	<b>9,5</b>	145	145	810	960	3,70	3,80	3,30	3,30	
602949	MVLS 05/1500-S90	215	•	3728	<b>1042</b>	<b>1500</b>	<b>10,2</b>	<b>14,7</b>	185	185	1140	1320	4,20	4,30	4,10	3,40	
602950	MVLS 05/2300-S90	256	□	5743	<b>1605</b>	<b>2311</b>	<b>15,7</b>	<b>22,7</b>	225	225	1850	2270	6,40	6,50	3,80	3,90	
602951	MVLS 05/3000-S90	256	□	7391	<b>2066</b>	<b>2974</b>	<b>20,3</b>	<b>29,2</b>	290	290	2625	3100	7,60	7,50	7,90	8,10	
602947	MVLS 05/4200-S90	286	□	10332	<b>2887</b>	<b>4158</b>	<b>28,3</b>	<b>40,8</b>	399	399	3735	4500	8,30	8,60	6,60	6,90	
602948	MVLS 05/6600-S90	286	□	16495	<b>4610</b>	<b>6638</b>	<b>45,2</b>	<b>65,1</b>	513	513	5960	6800	12,3	12,0	5,70	6,30	

\* Working moment = 2 x static moment.

□ CSA certification on request, with feeding line included.

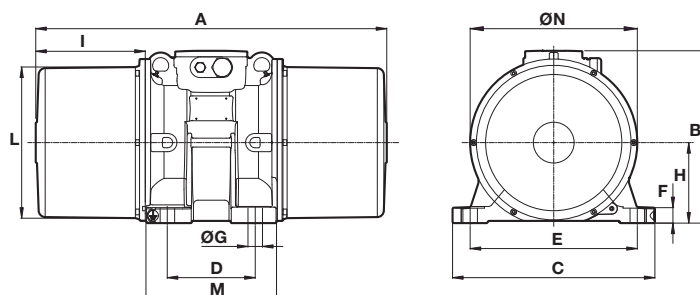


Fig. V

DIMENSIONAL SPECIFICATIONS (mm)

Type	A	B	C	D	E	Holes		F	H	I	L	M	ØN	Cable entry thread
						ØG	N°							
MVLS 075/1500-S90	660	316	340	160	280	27	4	25	150	210	273	236	316	M25x1,5
MVLS 075/2300-S90	604	351	390	200	320	28	4	30	162	152	303	294	340	M32x1,5
MVLS 075/3000-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 075/4200-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 075/7500-S90	892	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5

DIMENSIONAL SPECIFICATIONS (mm)

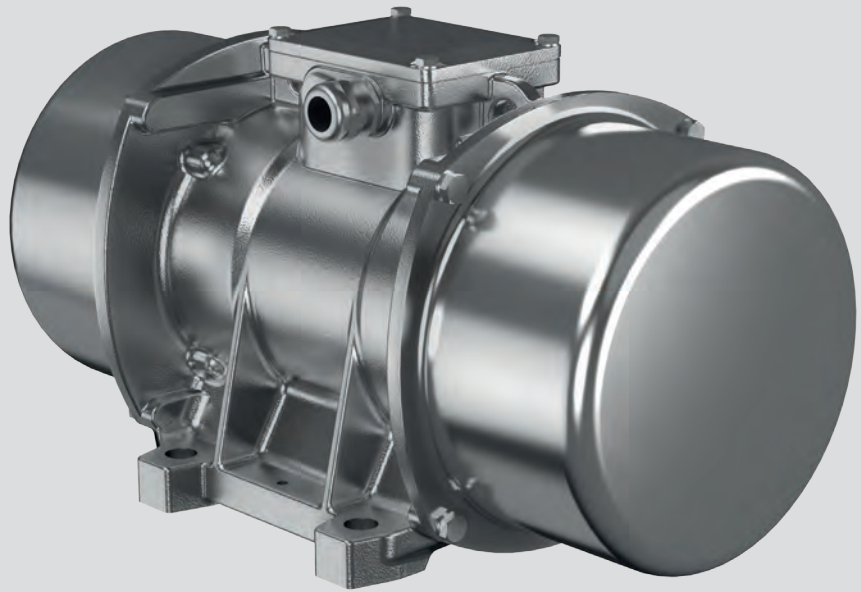
Type	A	B	C	D	E	Holes		F	H	I	L	M	ØN	Cable entry thread
						ØG	N°							
MVLS 06/800-S90	660	316	340	160	280	27	4	25	150	210	273	236	316	M25x1,5
MVLS 06/1500-S90	660	316	340	160	280	27	4	25	150	210	273	236	316	M25x1,5
MVLS 06/1490-S90	710	351	390	200	320	28	4	30	162	205	303	294	340	M32x1,5
MVLS 06/2300-S90	710	351	390	200	320	28	4	30	162	205	303	294	340	M32x1,5
MVLS 06/2000-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 06/2700-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 06/3000-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 06/4200-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 06/6600-S90	892	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5
MVLS 06/8100-S90	892	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5
MVLS 06/9500-S90	892	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5

DIMENSIONAL SPECIFICATIONS (mm)

Type	A	B	C	D	E	Holes		F	H	I	L	M	ØN	Cable entry thread
						ØG	N°							
MVLS 05/1000-S90	660	316	340	160	280	27	4	25	150	210	273	236	316	M25x1,5
MVLS 05/1500-S90	710	351	390	200	320	28	4	30	162	205	303	294	340	M32x1,5
MVLS 05/2300-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 05/3000-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 05/4200-S90	718	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5
MVLS 05/6600-S90	892	503	528	200	440	33	4	35	238	306	428	308	460	M32x1,5

Ia/I<sub>n</sub> = ratio between start-up current and maximum current.





## 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

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 4300 kgf. (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 -20°C to +40°C. Versions for higher or lower temperatures are available on request.

### Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C on size 70, on request for smaller sizes. For MVSS-P series PTC 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 board 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:**

si veda tabella

**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, hydrofobic, 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.А133.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	SIZE		Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600328	<b>MVSS 3/100-S02</b>	00	•	12,1	12,1	<b>122</b>	<b>176</b>	<b>1,20</b>	<b>1,72</b>	7,80	7,80	180	180	0,35	0,30	2,68	3,00
600329	<b>MVSS 3/200-S02</b>	01	•	20,2	16,2	<b>203</b>	<b>234</b>	<b>1,99</b>	<b>2,29</b>	8,20	8,00	180	180	0,35	0,30	2,68	3,00
600330	<b>MVSS 3/300-S02</b>	10	•	30,0	22,5	<b>302</b>	<b>326</b>	<b>2,96</b>	<b>3,20</b>	12,5	12,0	260	270	0,60	0,50	3,47	4,20
600331	<b>MVSS 3/500-S02</b>	20	•	58,0	34,8	<b>584</b>	<b>504</b>	<b>5,72</b>	<b>4,94</b>	18,5	17,5	450	500	0,80	0,75	4,21	4,80
600515	<b>MVSS 3/800-S08</b>	30	•	74,5	55,9	<b>750</b>	<b>810</b>	<b>7,35</b>	<b>7,94</b>	25,0	24,0	650	685	1,10	1,00	3,83	6,00
600333	<b>MVSS 3/1100-S02</b>	35	•	110	73,0	<b>1105</b>	<b>1061</b>	<b>10,8</b>	<b>10,4</b>	30,0	29,0	1000	1200	1,75	1,75	3,63	4,00
600334	<b>MVSS 3/1510-S02</b>	40	•	153	102	<b>1545</b>	<b>1483</b>	<b>15,2</b>	<b>14,5</b>	39,6	38,0	1400	1450	2,30	2,00	4,95	6,12
600335	<b>MVSS 3/2010-S02</b>	50	•	205	128	<b>2059</b>	<b>1853</b>	<b>20,2</b>	<b>18,2</b>	48,7	46,3	2200	2200	3,50	3,00	4,62	6,00

### Single-phase

Code	Type	SIZE		Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600328	<b>MVSS 3/100-S02</b>	00	•	12,1	12,1	<b>122</b>	<b>176</b>	<b>1,20</b>	<b>1,72</b>	7,80	7,80	165	165	0,75	1,52	1,67	2,24
600329	<b>MVSS 3/200-S02</b>	01	•	20,2	16,2	<b>203</b>	<b>234</b>	<b>1,99</b>	<b>2,29</b>	8,20	8,00	165	165	0,75	1,52	1,67	2,24
600330	<b>MVSS 3/300-S02</b>	10	•	30,0	22,5	<b>302</b>	<b>326</b>	<b>2,96</b>	<b>3,20</b>	12,5	12,0	280	280	1,25	2,40	2,48	3,52
600331	<b>MVSS 3/500-S02</b>	20	•	58,0	34,8	<b>584</b>	<b>504</b>	<b>5,72</b>	<b>4,94</b>	18,5	17,5	500	500	2,30	4,50	3,35	4,22
600515	<b>MVSS 3/800-S08</b>	30	•	74,5	55,9	<b>750</b>	<b>810</b>	<b>7,35</b>	<b>7,94</b>	25,0	24,0	700	750	3,25	7,00	4,00	4,14

\* Working moment = 2 x static moment.

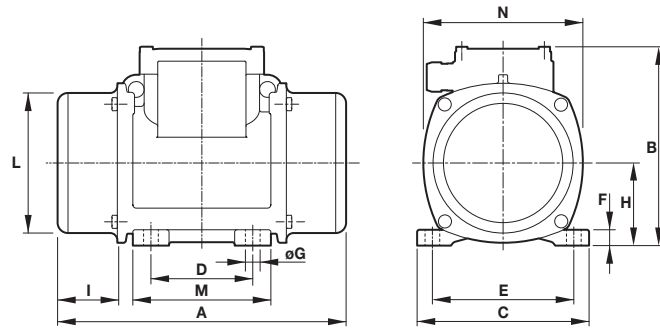


Fig. W

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Capacitor (µF)		Cable entry thread
							ØG	N°							220V 50Hz	115V 60Hz	
MVSS 3/100-S02	W	209	151	125	62-74**	106	9	4	10	61	45	100	100	117	-	-	M20x1,5
MVSS 3/200-S02	W	225	151	125	62-74**	106	9	4	10	61	53	100	100	117	-	-	M20x1,5
MVSS 3/300-S02	W	255	176	152	90	125	13	4	14	73	54	124	122	141	-	-	M20x1,5
MVSS 3/500-S02	W	284	200	167	105	140	13	4	15	82,5	63	143	137	160	-	-	M25x1,5
MVSS 3/800-S08	W	308	205	205	120	170	17	4	17	93,5	63	168	158	182	-	-	M25x1,5
MVSS 3/1100-S02	W	354	232	205	120	170	17	4	20	104,5	77	181	162	203	-	-	M25x1,5
MVSS 3/1510-S02	W	438	245	230	140	190	17	4	25	116	103	201	180	225	-	-	M25x1,5
MVSS 3/2010-S02	W	438	245	230	140	190	17	4	25	116	103	201	180	225	-	-	M25x1,5

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Capacitor (µF)		Cable entry thread
							ØG	N°							220V 50Hz	115V 60Hz	
MVSS 3/100-S02	W	209	151	125	62-74**	106	9	4	10	61	45	100	100	117	10	28	M20x1,5
MVSS 3/200-S02	W	225	151	125	62-74**	106	9	4	10	61	53	100	100	117	10	35	M20x1,5
MVSS 3/300-S02	W	255	176	152	90	125	13	4	14	73	54	124	122	141	16	25	M20x1,5
MVSS 3/500-S02	W	284	200	167	105	140	13	4	15	82,5	63	143	137	160	12,5	50	M25x1,5
MVSS 3/800-S08	W	308	205	205	120	170	17	4	17	93,5	63	168	158	182	25	90	M25x1,5

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

## 4 poles - 1.500/1.800 rpm

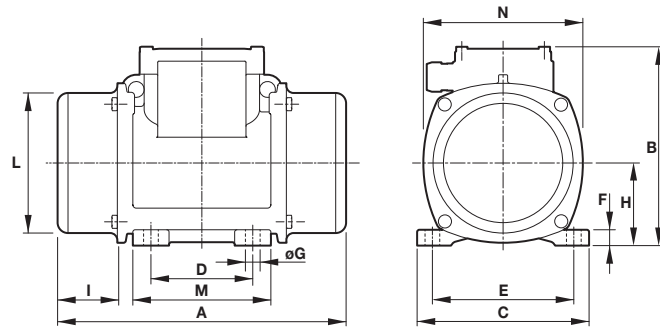
### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE		Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601342	<b>MVSS 15/35-S02</b>	00	•	12,1	12,1	<b>30,5</b>	<b>43,9</b>	<b>0,30</b>	<b>0,43</b>	7,80	7,80	85	95	0,21	0,20	1,78	1,95
601343	<b>MVSS 15/80-S02</b>	01	•	32,3	20,2	<b>81,2</b>	<b>73,2</b>	<b>0,80</b>	<b>0,72</b>	9,00	8,70	85	95	0,21	0,20	1,78	1,95
601365	<b>MVSS 15/100-S02</b>	01	•	37,9	32,3	<b>95,3</b>	<b>117</b>	<b>0,93</b>	<b>1,15</b>	9,40	9,00	85	95	0,21	0,20	1,78	1,95
601344	<b>MVSS 15/200-S02</b>	10	•	84,2	58,8	<b>213</b>	<b>214</b>	<b>2,09</b>	<b>2,10</b>	15,8	15,0	170	170	0,41	0,40	2,34	2,75
601345	<b>MVSS 15/400-S02</b>	20	•	163	113	<b>412</b>	<b>411</b>	<b>4,04</b>	<b>4,03</b>	22,5	21,7	300	350	0,60	0,60	3,33	3,50
601346	<b>MVSS 15/550-S02</b>	20	•	219	163	<b>552</b>	<b>592</b>	<b>5,42</b>	<b>5,81</b>	23,9	22,5	300	350	0,60	0,60	3,33	3,50
601526	<b>MVSS 15/700-S08</b>	30	•	286	209	<b>720</b>	<b>760</b>	<b>7,06</b>	<b>7,46</b>	32,0	30,7	525	665	0,92	0,98	3,48	4,43
601348	<b>MVSS 15/1100-S02</b>	35	•	415	271	<b>1045</b>	<b>982</b>	<b>10,3</b>	<b>9,63</b>	42,0	37,5	550	680	0,95	0,95	4,45	4,89
601349	<b>MVSS 15/1410-S02</b>	40	•	561	400	<b>1413</b>	<b>1449</b>	<b>13,9</b>	<b>14,2</b>	53,0	50,0	900	1050	1,45	1,50	4,10	4,20
601350	<b>MVSS 15/1710-S02</b>	50	•	715	485	<b>1798</b>	<b>1757</b>	<b>17,6</b>	<b>17,2</b>	58,5	54,5	1100	1200	2,00	1,90	4,29	4,89
601351	<b>MVSS 15/2000-S02</b>	50	•	817	561	<b>2054</b>	<b>2033</b>	<b>20,1</b>	<b>19,9</b>	70,0	68,0	1350	1450	2,50	2,30	4,30	4,90
601352	<b>MVSS 15/2410-S02</b>	60	•	962	674	<b>2420</b>	<b>2444</b>	<b>23,7</b>	<b>24,0</b>	82,0	76,0	1600	1700	3,20	3,00	6,09	7,23
601353	<b>MVSS 15/3000-S02</b>	60	•	1235	858	<b>3106</b>	<b>3107</b>	<b>30,5</b>	<b>30,5</b>	92,0	89,0	1900	2000	3,80	3,50	6,50	7,50
601354	<b>MVSS 15/3810-S02</b>	70	•	1526	1034	<b>3840</b>	<b>3744</b>	<b>37,7</b>	<b>36,7</b>	115	110	2200	2500	3,90	3,90	7,11	6,92
601363	<b>MVSS 15/4300-S02</b>	70	•	1720	1173	<b>4326</b>	<b>4250</b>	<b>42,4</b>	<b>41,7</b>	122	117	2500	2800	4,80	4,65	5,90	7,10

### Single-phase

Code	Type	SIZE		Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
601342	<b>MVSS 15/35-S02</b>	00	•	12,1	12,1	<b>30,5</b>	<b>43,9</b>	<b>0,30</b>	<b>0,43</b>	7,80	7,80	90	100	0,43	1,00	1,20	1,30
601343	<b>MVSS 15/80-S02</b>	01	•	32,3	20,2	<b>81,2</b>	<b>73,2</b>	<b>0,80</b>	<b>0,72</b>	9,00	8,70	90	100	0,43	1,00	1,20	1,30
601365	<b>MVSS 15/100-S02</b>	01	•	37,9	32,3	<b>95,3</b>	<b>117</b>	<b>0,93</b>	<b>1,15</b>	9,40	9,00	90	100	0,43	1,00	1,20	1,30
601344	<b>MVSS 15/200-S02</b>	10	•	84,2	58,8	<b>213,0</b>	<b>214</b>	<b>2,09</b>	<b>2,10</b>	15,8	15,0	210	230	1,00	2,00	1,50	1,85
601345	<b>MVSS 15/400-S02</b>	20	•	163	113	<b>412</b>	<b>411</b>	<b>4,04</b>	<b>4,03</b>	22,5	21,7	240	320	1,20	2,80	2,50	2,21
601346	<b>MVSS 15/550-S02</b>	20	•	219	163	<b>552</b>	<b>592</b>	<b>5,4</b>	<b>5,81</b>	23,9	22,5	240	320	1,20	2,80	2,50	2,21
601526	<b>MVSS 15/700-S08</b>	30	•	286	209	<b>720</b>	<b>760</b>	<b>7,06</b>	<b>7,46</b>	25,0	23,0	450	550	2,15	5,15	5,44	3,63

\* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Holes				Capacitor (µF)						Cable entry thread		
					D	E	ØG	N°	F	H	I	L	M	N		220V 50Hz	115V 60Hz
MVSS 15/35-S02	W	209	151	125	62-74**	106	9	4	10	61	45	100	100	117	-	-	M20x1,5
MVSS 15/80-S02	W	241	151	125	62-74**	106	9	4	10	61	61	100	100	117	-	-	M20x1,5
MVSS 15/100-S02	W	241	151	125	62-74**	106	9	4	10	61	61	100	100	117	-	-	M20x1,5
MVSS 15/200-S02	W	295	176	152	90	125	13	4	14	73	74	124	122	141	-	-	M20x1,5
MVSS 15/400-S02	W	340	200	167	105	140	13	4	15	82,5	91	143	137	160	-	-	M25x1,5
MVSS 15/550-S02	W	380	200	167	105	140	13	4	15	82,5	111	143	137	160	-	-	M25x1,5
MVSS 15/700-S08	W	382	205	205	120	170	17	4	17	93,5	100	168	158	182	-	-	M25x1,5
MVSS 15/1100-S02	W	434	232	205	120	170	17	4	20	104,5	117,0	181	162	203	-	-	M25x1,5
MVSS 15/1410-S02	W	442	245	230	140	190	17	4	25	116	105	201	180	225	-	-	M25x1,5
MVSS 15/1710-S02	W	490	245	230	140	190	17	4	25	116	129	201	180	225	-	-	M25x1,5
MVSS 15/2000-S02	W	560	245	230	140	190	17	4	25	116	164	201	180	225	-	-	M25x1,5
MVSS 15/2410-S02	W	523	283	275	155	225	22	4	30	135	130	231	205	253	-	-	M25x1,5
MVSS 15/3000-S02	W	601	283	275	155	225	22	4	30	135	169	231	205	253	-	-	M25x1,5
MVSS 15/3810-S02	W	589	323	310	155	255	23,5	4	35	155	139,5	269	215	295	-	-	M25x1,5
MVSS 15/4300-S02	W	589	323	310	155	255	23,5	4	35	155	139,5	269	215	295	-	-	M25x1,5

Type	Fig.	A	B	C	Holes				Capacitor (µF)						Cable entry thread		
					D	E	ØG	N°	F	H	I	L	M	N		220V 50Hz	115V 60Hz
MVSS 15/35-S02	W	209	151	125	62-74**	106	9	4	10	61	45	100	100	117	3,15	25	M20x1,5
MVSS 15/80-S02	W	225	151	125	62-74**	106	9	4	10	61	61	100	100	117	3,15	25	M20x1,5
MVSS 15/100-S02	W	241	151	125	62-74**	106	9	4	10	61	61	100	100	117	3,15	25	M20x1,5
MVSS 15/200-S02	W	295	176	152	90	125	13	4	14	73	74	124	122	141	5	25	M20x1,5
MVSS 15/400-S02	W	340	200	167	105	140	13	4	15	82,5	91	143	137	160	12◦ +20●	35	M25x1,5
MVSS 15/550-S02	W	380	200	167	105	140	13	4	15	82,5	111	143	137	160	12◦ +20●	35◦ +10●	M25x1,5
MVSS 15/700-S08	W	382	205	205	120	170	17	4	17	93,5	100	168	158	182	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

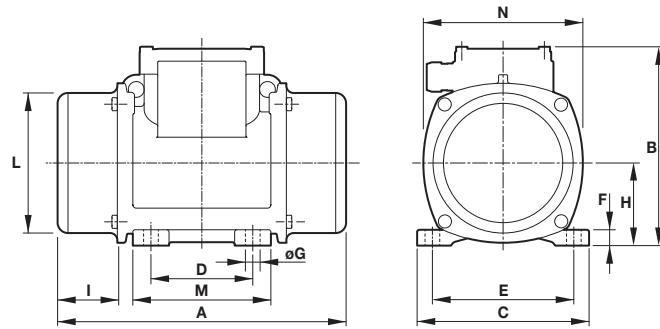
### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	SP®	Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602283	MVSS 10/40-S02	10	•	30,0	30,0	<b>33,5</b>	<b>48,3</b>	<b>0,33</b>	<b>0,47</b>	12,5	12,5	120	135	0,30	0,30	1,90	2,07
602284	MVSS 10/100-S02	10	•	84,2	84,2	<b>94,3</b>	<b>136</b>	<b>0,93</b>	<b>1,33</b>	15,8	15,8	120	135	0,30	0,30	1,90	2,07
602285	MVSS 10/200-S02	20	•	163	163	<b>183</b>	<b>264</b>	<b>1,80</b>	<b>2,59</b>	22,5	22,5	185	205	0,50	0,50	2,72	3,10
602405	MVSS 10/310-S08	30	•	286	209	<b>321</b>	<b>338</b>	<b>3,15</b>	<b>3,32</b>	32,0	30,7	350	380	0,72	0,68	2,63	2,79
602417	MVSS 10/550-S08	35	•	457	457	<b>512</b>	<b>737</b>	<b>5,02</b>	<b>7,23</b>	43,5	43,5	350	380	0,75	0,68	2,53	3,68
602408	MVSS 10/810-S08	40	•	723	561	<b>809</b>	<b>905</b>	<b>7,94</b>	<b>8,88</b>	54,0	52,6	680	760	1,40	1,35	2,79	3,33
602409	MVSS 10/1110-S08	50	•	1012	715	<b>1132</b>	<b>1151</b>	<b>11,1</b>	<b>11,3</b>	67,0	59,5	750	750	1,65	1,50	3,33	4,13
602410	MVSS 10/1400-S08	50	•	1274	921	<b>1424</b>	<b>1483</b>	<b>14,0</b>	<b>14,5</b>	78,0	71,0	950	1000	1,80	1,70	3,05	3,65
602411	MVSS 10/1610-S08	60	•	1464	962	<b>1638</b>	<b>1549</b>	<b>16,1</b>	<b>15,2</b>	94,0	83,0	1100	1300	2,20	2,20	4,21	4,05
602412	MVSS 10/2100-S08	60	•	1927	1318	<b>2154</b>	<b>2102</b>	<b>21,1</b>	<b>20,6</b>	105	93,0	1500	1770	3,00	2,75	3,42	4,00
602293	MVSS 10/2610-S02	70	•	2326	1720	<b>2601</b>	<b>2747</b>	<b>25,5</b>	<b>26,9</b>	130	116	1960	2100	4,10	3,75	5,35	5,60
602294	MVSS 10/3000-S02	70	•	2690	1940	<b>3007</b>	<b>3124</b>	<b>29,5</b>	<b>30,6</b>	145	130	2200	2400	4,50	4,30	4,35	4,81

## 8 poles - 750/900 rpm

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	SP®	Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602561	MVSS 075/150-S02	20	•	163	163	<b>104</b>	<b>149</b>	<b>1,02</b>	<b>1,46</b>	22,5	22,5	230	250	0,85	0,76	2,13	2,11
602647	MVSS 075/260-S08	35	•	275	275	<b>174</b>	<b>250</b>	<b>1,71</b>	<b>2,45</b>	34,5	34,5	375	410	0,81	0,80	2,22	2,38
602627	MVSS 075/400-S08	35	•	457	457	<b>288</b>	<b>415</b>	<b>2,83</b>	<b>4,07</b>	41,0	41,0	375	410	0,81	0,80	2,22	2,38
602620	MVSS 075/660-S08	40	•	723	723	<b>456</b>	<b>656</b>	<b>4,47</b>	<b>6,44</b>	54,0	54,0	400	450	1,20	1,20	2,38	2,58
602621	MVSS 075/910-S08	50	•	1012	1012	<b>637</b>	<b>917</b>	<b>6,25</b>	<b>9,00</b>	67,0	67,0	400	500	1,40	1,30	2,38	2,85
602622	MVSS 075/1310-S08	60	•	1464	1464	<b>922</b>	<b>1327</b>	<b>9,04</b>	<b>13,0</b>	94,0	94,0	950	1100	2,20	2,20	2,63	3,41
602567	MVSS 075/2110-S02	70	•	2326	2326	<b>1463</b>	<b>2107</b>	<b>14,4</b>	<b>20,7</b>	130	130	1500	1790	4,10	4,20	3,55	2,95

\* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	Holes											Cable entry thread		
		A	B	C	D	E	ØG	N°	F	H	I	L		M	N
<b>MVSS 10/40-S02</b>	<b>W</b>	255	176	152	<b>90</b>	<b>125</b>	<b>13</b>	<b>4</b>	14	73	54	124	122	141	M20x1,5
<b>MVSS 10/100-S02</b>	<b>W</b>	295	176	152	<b>90</b>	<b>125</b>	<b>13</b>	<b>4</b>	14	73	74	124	122	141	M20x1,5
<b>MVSS 10/200-S02</b>	<b>W</b>	340	200	167	<b>105</b>	<b>140</b>	<b>13</b>	<b>4</b>	15	82,5	91	143	137	160	M25x1,5
<b>MVSS 10/310-S08</b>	<b>W</b>	382	205	205	<b>120</b>	<b>170</b>	<b>17</b>	<b>4</b>	17	93,5	100	168	158	182	M25x1,5
<b>MVSS 10/550-S02</b>	<b>W</b>	434	232	205	<b>120</b>	<b>170</b>	<b>17</b>	<b>4</b>	20	104,5	117	181	162	203	M25x1,5
<b>MVSS 10/810-S08</b>	<b>W</b>	490(50Hz) 442(60Hz)	245	230	<b>140</b>	<b>190</b>	<b>17</b>	<b>4</b>	25	116	129(50Hz) 105(60Hz)	201	180	225	M25x1,5
<b>MVSS 10/1110-S08</b>	<b>W</b>	560	245	230	<b>140</b>	<b>190</b>	<b>17</b>	<b>4</b>	25	116	164	201	180	225	M25x1,5
<b>MVSS 10/1400-S08</b>	<b>W</b>	606(50Hz) 560(60Hz)	245	230	<b>140</b>	<b>190</b>	<b>17</b>	<b>4</b>	25	116	187(50Hz) 164(60Hz)	201	180	225	M25x1,5
<b>MVSS 10/1610-S08</b>	<b>W</b>	601(50Hz) 523(60Hz)	285	275	<b>155</b>	<b>225</b>	<b>22</b>	<b>4</b>	30	135	169(50Hz) 130(60Hz)	231	205	253	M25x1,5
<b>MVSS 10/2100-S08</b>	<b>W</b>	655(50Hz) 601(60Hz)	285	275	<b>155</b>	<b>225</b>	<b>22</b>	<b>4</b>	30	135	196(50Hz) 169(60Hz)	231	205	253	M25x1,5
<b>MVSS 10/2610-S02</b>	<b>W</b>	657(50Hz) 589(60Hz)	323	310	<b>155</b>	<b>255</b>	<b>23,5</b>	<b>4</b>	35	155	173,5(50Hz) 139,5(60Hz)	269	215	295	M25x1,5
<b>MVSS 10/3000-S02</b>	<b>W</b>	706	323	310	<b>155</b>	<b>255</b>	<b>23,5</b>	<b>4</b>	35	155	198	269	215	295	M25x1,5

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	Holes											Cable entry thread		
		A	B	C	D	E	ØG	N°	F	H	I	L		M	N
<b>MVSS 075/150-S02</b>	<b>W</b>	340	200	167	<b>105</b>	<b>140</b>	<b>13</b>	<b>4</b>	15	82,5	91	143	137	160	M25X1,5
<b>MVSS 075/260-S08</b>	<b>W</b>	354	232	205	<b>120</b>	<b>170</b>	<b>17</b>	<b>4</b>	20	104,5	77	181	162	182	M25X1,5
<b>MVSS 075/400-S02</b>	<b>W</b>	436	232	205	<b>120</b>	<b>170</b>	<b>17</b>	<b>4</b>	20	104,5	118	181	162	203	M25X1,5
<b>MVSS 075/660-S08</b>	<b>W</b>	490	245	230	<b>140</b>	<b>190</b>	<b>17</b>	<b>4</b>	25	116	129	201	180	225	M25X1,5
<b>MVSS 075/910-S08</b>	<b>W</b>	560	245	230	<b>140</b>	<b>190</b>	<b>17</b>	<b>4</b>	25	116	164	201	180	225	M25X1,5
<b>MVSS 075/1310-S08</b>	<b>W</b>	601	285	275	<b>155</b>	<b>225</b>	<b>22</b>	<b>4</b>	30	135	169	231	205	253	M25X1,5
<b>MVSS 075/2110-S02</b>	<b>W</b>	657	323	310	<b>155</b>	<b>255</b>	<b>23,5</b>	<b>4</b>	35	155	173,5	269	215	295	M25X1,5

la/ln = ratio between start-up current and maximum current.

# MICRO



## Technical features

### Power supply

Three-phase voltage from 24V to 480V (except M3/4), 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

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 to 65 Kgf. (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 -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 M3/4 model can only be supplied in the single-phase version and does not require a capacitor. Models M3/20 and M3/45 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	SE®	Ex IIC3D Temp. class	Static moment*		Centrifugal force				Weight		Max input power		Max. current	
				kgmm	kgmm	kg	N	kg	kg	W	A	W	A		
600449	M3/20-S02	□	100°C	2,0	2,0	20	29	196	284	1,97	1,97	35	35	0,15	
600450	M3/45-S02	□	100°C	4,5	4,5	45	65	441	638	2,20	2,20	45	45	0,16	

## Single-phase

Code	Type	SE®	Ex IIC3D Temp. class	Static moment*		Centrifugal force				Weight		Max input power		Max. current	
				kgmm	kgmm	kg	N	kg	kg	W	A	W	A		
600448	M3/4-S02	-	100°C	0,4	0,4	4	6	39	59	0,92	0,92	24	24	0,13	0,30
600449	M3/20-S02	□	100°C	2,0	2,0	20	29	196	284	1,97	1,97	35	35	0,17	0,42
600450	M3/45-S02	□	100°C	4,5	4,5	45	65	441	638	2,20	2,20	45	45	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 metres for M3/20-S02 and M3/45-S02, 1 metre for M3/4-S02) 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.



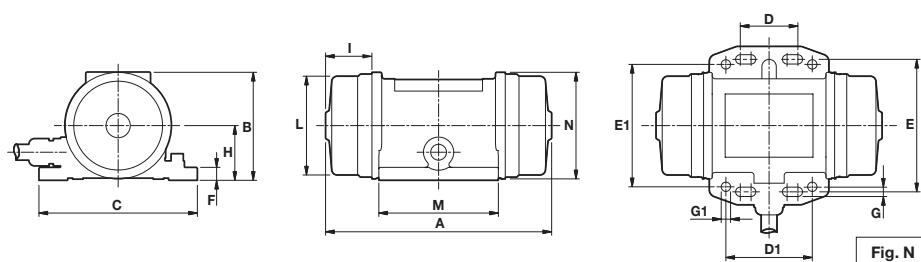
II3D (2014/34/UE)  
Ex tc IIIC T100°C Db  
EN 60079-0  
EN 60079-31



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

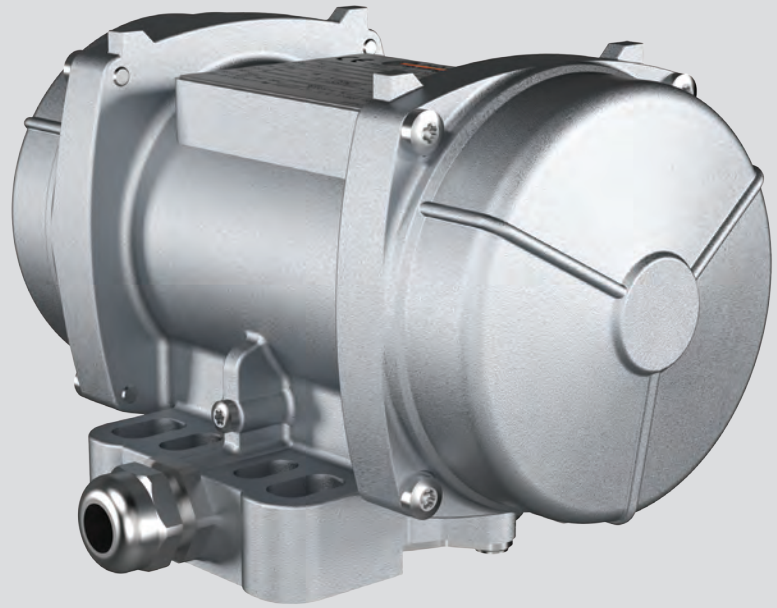


#### DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Holes										Cable entry thread			
					D	D1	E	E1	F	G	ØG1	N°	H	I		L	M	N
M3/20-S02	N	157	75	110	25-40	60	92	85	9	6,5	6,5	8	38	33	69	83	74	M16x1,5
M3/45-S02	N	172	75	110	25-40	60	92	85	9	6,5	6,5	8	38	40,5	69	83	74	M16x1,5

Type	Fig.	A	B	C	Holes										Cable entry thread			
					D	D1	E	E1	F	G	ØG1	N°	H	I		L	M	N
M3/4-S02	N	113	66,5	90	25-40	-	75	-	9	5,5	-	4	34	25	60	59	65	M12x1,5
M3/20-S02	N	157	75	110	25-40	60	92	85	9	6,5	6,5	8	38	33	69	83	74	M16x1,5
M3/45-S02	N	172	75	110	25-40	60	92	85	9	6,5	6,5	8	38	40,5	69	83	74	M16x1,5





## 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

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 up to 311 kgf (3.05 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 -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 MVSI 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.Г508.В.02190



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

# M3



## 2 poles - 3.000/3.600 rpm

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	II2D Temp. class	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600467	M3/65-S02	00	• 120°C	6,43	6,43	<b>64,7</b>	<b>93,1</b>	<b>0,635</b>	<b>0,913</b>	4,30	4,30	120	120	0,27	0,23	3,43	3,90
600465	M3/105-S02	00	• 120°C	9,64	9,64	<b>97</b>	<b>140</b>	<b>0,95</b>	<b>1,37</b>	5,20	5,20	180	180	0,35	0,30	2,68	3,00
600462	M3/205-S02	00	• 120°C	20,2	20,2	<b>203</b>	<b>293</b>	<b>2,00</b>	<b>2,87</b>	6,00	6,00	180	180	0,35	0,30	2,68	3,00
600461	M3/305-S02	00	• 120°C	29,8	20,2	<b>300</b>	<b>293</b>	<b>2,94</b>	<b>2,87</b>	6,30	6,00	180	180	0,35	0,30	2,68	3,00

### Single-phase

Code	Type	SIZE	II2D Temp. class	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600467	M3/65-S02	00	• 120°C	6,43	6,43	<b>64,7</b>	<b>93,1</b>	<b>0,635</b>	<b>0,913</b>	4,30	4,30	110	110	0,56	1,52	2,24	2,24
600465	M3/105-S02	00	• 120°C	9,64	9,64	<b>97</b>	<b>140</b>	<b>0,95</b>	<b>1,37</b>	5,20	5,20	165	165	0,75	1,52	1,67	2,24
600462	M3/205-S02	00	• 120°C	20,2	20,2	<b>203</b>	<b>293</b>	<b>2,00</b>	<b>2,87</b>	6,00	6,00	165	165	0,75	1,52	1,67	2,24
600461	M3/305-S02	00	• 120°C	29,8	20,2	<b>300</b>	<b>293</b>	<b>2,94</b>	<b>2,87</b>	6,30	6,00	165	165	0,75	1,52	1,67	2,24

## 4 poles - 1.500/1.800 rpm

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	II2D Temp. class	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601514	M15/36-S02	00	• 120°C	12,1	12,1	<b>30,5</b>	<b>43,8</b>	<b>0,30</b>	<b>0,43</b>	5,40	5,40	85	95	0,21	0,20	1,78	1,95
601515	M15/81-S02	00	• 120°C	29,8	20,2	<b>75,0</b>	<b>73,0</b>	<b>0,74</b>	<b>0,72</b>	6,30	6,0	85	95	0,21	0,20	1,78	1,95

### Single-phase

Code	Type	SIZE	II2D Temp. class	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
601514	M15/36-S02	00	• 120°C	12,1	12,1	<b>30,5</b>	<b>43,8</b>	<b>0,30</b>	<b>0,43</b>	5,40	5,40	90	100	0,43	1,00	1,20	1,30
601515	M15/81-S02	00	• 120°C	29,8	20,2	<b>75,0</b>	<b>73,0</b>	<b>0,74</b>	<b>0,72</b>	6,30	6,0	90	100	0,43	1,00	1,20	1,30

\* Working moment = 2 x static moment. Ia/In = rapporto fra corrente di avviamento e corrente max.

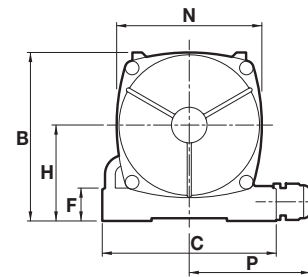
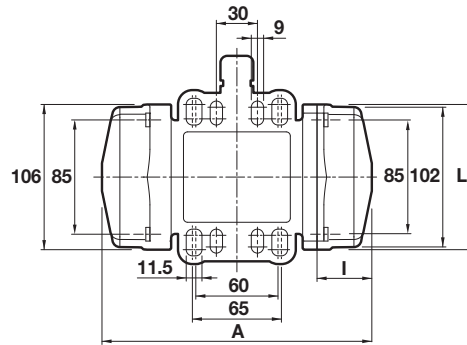


Fig. M1

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Multi-hole		Holes		F	H	I	ØL	M	N	P	Capacitor (µF)		Cable entry thread
					D	E	ØG	N°								220V 50Hz	115V 60Hz	
M3/65-S02	M1	197			See drawing	9	4	24	70	40	106	86	106	88,5	-	-	M20x1,5	
M3/105-S02	M1	211	123	127														47
M3/205-S02	M1	235																59
M3/305-S02	M1	235																59

Type	Fig.	A	B	C	Multi-hole		Holes		F	H	I	ØL	M	N	P	Capacitor (µF)		Cable entry thread
					D	E	ØG	N°								220V 50Hz	115V 60Hz	
M3/65-S02	M1	197			See drawing	9	4	24	70	40	106	86	106	88,5	10	28	M20x1,5	
M3/105-S02	M1	211	123	127														47
M3/205-S02	M1	235																59
M3/305-S02	M1	235																59

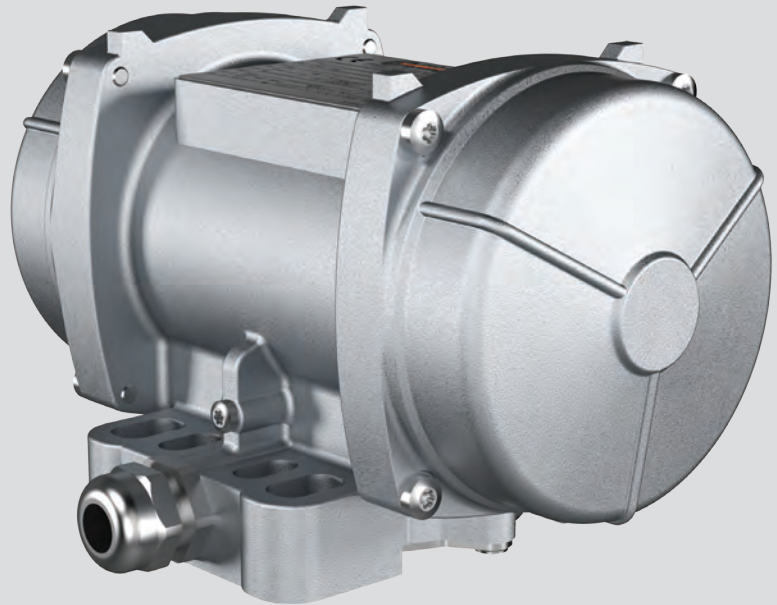
DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Multi-hole		Holes		F	H	I	ØL	M	N	P	Capacitor (µF)		Cable entry thread
					D	E	ØG	N°								220V 50Hz	115V 60Hz	
M15/36-S02	M1	214	123	127	See drawing	9	4	24	70	59	106	86	106	88,5	-	-	M20X1,5	
M15/81-S02	M1	235																

Type	Fig.	A	B	C	Multi-hole		Holes		F	H	I	ØL	M	N	P	Capacitor (µF)		Cable entry thread
					D	E	ØG	N°								220V 50Hz	115V 60Hz	
M15/36-S02	M1	214	123	127	See drawing	9	4	24	70	59	106	86	106	88,5	3,15	25	M20X1,5	
M15/81-S02	M1	235																



# 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.

### Controls

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

### Functioning

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

### Centrifugal force

Range up to 311 kgf (3.05 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 -20°C to +40°C, on request it is possible to have vibrators for max. ambient temperatures of +55°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. 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	SIZE	Static moment* kgmm		Centrifugal force				Peso kg		Temp class (G)	Temp class (D)	Max input power W		Power rating W		Max. current A		tE (s)	Ia/In
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz		
6E0467	M3/65E-S02	00	6,43	6,43	64,7	93,1	0,635	0,913	4,30	4,30	T4	120°C	105	105	80	80	0,47	0,29	20	3,48
6E0465	M3/105E-S02	00	9,64	9,64	97,0	140	0,95	1,37	5,20	5,20										3,68
6E0462	M3/205E-S02	00	20,2	20,2	203	293	2,00	2,87	6,00	6,00										3,68
6E0461	M3/305E-S02	00	29,8	20,2	300	293	2,94	2,87	6,30	6,00										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 (94/9/EC).

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)

**Powders:**

T120°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.



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



Ex tb IIIC T120°C Db  
IEC 60079-0  
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

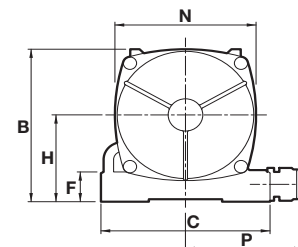
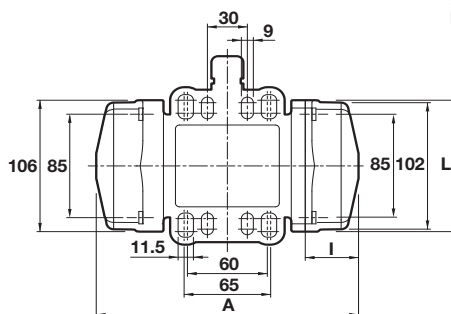
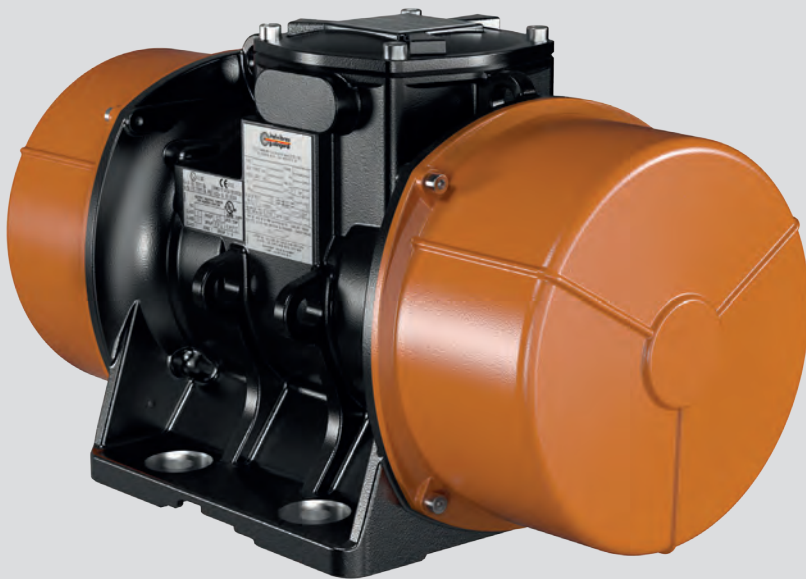


Fig. M1

#### DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	Multi-hole			Holes		ØG	N°	F	H	I	L	M	N	P	Cable entry thread
		A	B	C	D	E										
M3/65E-S02	M1	197			See drawing	9	9	4	24	70	40	106	86	106	88,5	M20x1,5
M3/105E-S02	M1	211	123	127							47					
M3/205E-S02	M1	235									59					
M3/305E-S02	M1	235									59					

la/ln = rapporto fra corrente di avviamento e corrente max.



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 characterised by increased thickness and joints to prevent the transmission of an internal explosion to the surrounding area.

The CDX series is characterised 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.

### Controls

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

### 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 to 22400 kgf. (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 -20°C to +40°C. See also approval table for other ambient temperatures.

### Vibrator thermal protection

With thermal protector at 130°C for the entire CDX range, or on request with PTC thermistors rated heat detectors 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 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 CDX-G series, obtained by the CDX frame sizes 35 to 80 series, 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 II 2D 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)
<b>Notes</b>	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 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 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: 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.B.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	SIZE	Certifications					Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Power rating W		Max. current A		Ia/In	
			●	○	●	●	●	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600384	CDX 3/300-G/D	10	●					30,0	22,5	<b>302</b>	<b>326</b>	<b>2,96</b>	<b>3,20</b>	11,5	11,0	260	270	180	190	0,60	0,50	3,47	4,20
600385	CDX 3/500-G/D	20	●					58,0	34,8	<b>584</b>	<b>504</b>	<b>5,72</b>	<b>4,94</b>	17,0	16,0	450	500	330	390	0,80	0,75	4,21	4,80
600387	CDX 3/800-G/D	30	●					74,5	55,9	<b>750</b>	<b>810</b>	<b>7,35</b>	<b>7,94</b>	23,3	22,4	650	685	500	520	1,10	1,00	3,83	6,00
600389	CDX 3/1100-G/D	35	●	●	●	●	●	110	73,0	<b>1105</b>	<b>1061</b>	<b>10,8</b>	<b>10,4</b>	34,0	33,0	600	710	480	550	0,90	0,93	4,78	4,96
600437	CDX 3/1500-G/D	50	●	●	●	●	●	161	111	<b>1625</b>	<b>1602</b>	<b>15,9</b>	<b>17,7</b>	53,9	51,4	1000	1200	850	925	1,62	1,72	6,00	6,32
600317	CDX 3/2100-G/D	50	●	●	●	●	●	209	144	<b>2114</b>	<b>2080</b>	<b>20,7</b>	<b>20,4</b>	59,8	58,5	1000	1260	900	1095	1,71	1,85	6,95	7,19
600320	CDX 3/2300-G/D	60	●	●	●	●	●	222	159	<b>2236</b>	<b>2300</b>	<b>21,9</b>	<b>22,5</b>	82,5	79,5	2000	2200	1500	1606	3,23	3,20	7,47	8,60
600323	CDX 3/3200-G/D	70	●	●	●	●	●	344	215	<b>3457</b>	<b>3112</b>	<b>33,9</b>	<b>30,5</b>	114	110	3100	3250	2570	2570	5,23	5,00	6,37	8,00
600486	CDX 3/4700-G/D	80	●	●	●	●	●	469	329	<b>4710</b>	<b>4760</b>	<b>46,2</b>	<b>46,7</b>	149	144	4500	4500	3680	3680	7,13	6,60	6,53	7,00

### Single-phase

Code	Type	SIZE	Certifications					Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Power rating W		Max. current A		Ia/In	
			●	○	●	●	●	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz		
600384	CDX 3/300-G/D	10	●					30,0	22,5	<b>302</b>	<b>326</b>	<b>2,96</b>	<b>3,20</b>	11,5	11,0	280	280	180	200	1,25	2,40	2,48	3,52
600385	CDX 3/500-G/D	20	●					58,0	34,8	<b>584</b>	<b>504</b>	<b>5,72</b>	<b>4,94</b>	17,0	16,0	500	500	340	350	2,30	4,50	3,35	4,22
600387	CDX 3/800-G/D	30	●					74,5	55,9	<b>750</b>	<b>810</b>	<b>7,35</b>	<b>7,94</b>	23,3	22,4	700	750	450	500	3,25	7,00	4,00	4,14

## 4 poles - 1.500/1.800 rpm

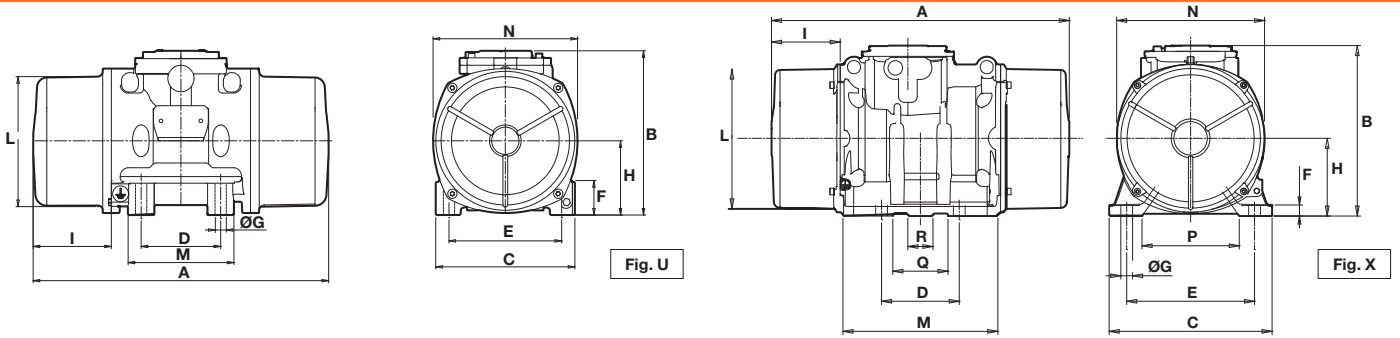
### Three-phase

DESCRIPTION			MECHANICAL SPECIFICATIONS												ELECTRICAL SPECIFICATIONS								
Code	Type	SIZE	Certifications					Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Power rating W		Max. current A		Ia/In	
			●	○	●	●	●	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601409	CDX 15/200-G/D	10	●					84,2	58,8	<b>213</b>	<b>214</b>	<b>2,09</b>	<b>2,10</b>	14,0	13,0	170	170	95	95	0,41	0,40	2,34	2,75
601410	CDX 15/400-G/D	20	●					163	113	<b>412</b>	<b>411</b>	<b>4,04</b>	<b>4,03</b>	21,4	20,0	300	350	215	275	0,60	0,60	3,33	3,50
601411	CDX 15/550-G/D	20	●					219	163	<b>552</b>	<b>592</b>	<b>5,42</b>	<b>5,81</b>	22,8	21,4	300	350	215	275	0,60	0,60	3,33	3,50
601412	CDX 15/700-G/D	30	●					286	209	<b>720</b>	<b>760</b>	<b>7,06</b>	<b>7,46</b>	30,3	29,0	525	665	380	490	0,92	0,98	3,48	3,43
601413	CDX 15/1100-G/D	35	●	●	●	●	●	415	271	<b>1045</b>	<b>982</b>	<b>10,3</b>	<b>9,63</b>	46,0	41,5	520	660	369	442	0,81	0,88	4,65	4,84
601424	CDX 15/1410-G/D	50	●	●	●	●	●	561	400	<b>1413</b>	<b>1449</b>	<b>13,9</b>	<b>14,2</b>	63,4	58,8	750	1000	548	740	1,35	1,50	5,59	5,60
601328	CDX 15/1710-G/D	50	●	●	●	●	●	715	485	<b>1798</b>	<b>1757</b>	<b>17,6</b>	<b>17,2</b>	67,8	65,3	1050	1300	882	1105	1,81	1,90	5,09	5,46
601358	CDX 15/2000-G/D	50	●	●	●	●	●	817	561	<b>2054</b>	<b>2033</b>	<b>20,1</b>	<b>19,9</b>	72,8	66,8	1050	1300	882	1105	1,81	1,90	5,09	5,46
601329	CDX 15/2410-G/D	60	●	●	●	●	●	962	674	<b>2420</b>	<b>2444</b>	<b>23,7</b>	<b>24,0</b>	98,0	92,0	1500	1650	1305	1485	2,95	2,90	7,80	7,76
601330	CDX 15/3810-G/D	70	●	●	●	●	●	1526	1034	<b>3840</b>	<b>3744</b>	<b>37,7</b>	<b>36,7</b>	139	134	2270	2250	1839	1845	3,80	3,50	6,84	8,09
601623	CDX 15/4300-G/D	70	●	●	●	●	●	1720	1173	<b>4326</b>	<b>4250</b>	<b>42,4</b>	<b>41,7</b>	143	137	2270	2250	1839	1845	3,80	3,50	6,84	8,09
601487	CDX 15/5010-G/D	80	●	●	●	●	●	1990	1364	<b>5007</b>	<b>4941</b>	<b>49,1</b>	<b>48,5</b>	172	165	2800	2800	2100	2100	4,75	4,40	6,74	7,20

### Single-phase

Code	Type	SIZE	Certifications					Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Power rating W		Max. current A		Ia/In	
			●	○	●	●	●	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz		
601409	CDX 15/200-G/D	10	●					84,2	58,8	<b>213</b>	<b>214</b>	<b>2,09</b>	<b>2,10</b>	14,0	13,0	210	230	110	120	1,00	2,00	1,50	1,85
601410	CDX 15/400-G/D	20	●					163	113	<b>412</b>	<b>411</b>	<b>4,04</b>	<b>4,03</b>	21,4	20,0	240	320	120	180	1,20	2,80	2,50	2,50
601401	CDX 15/550-G/D	20	●					219	163	<b>552</b>	<b>592</b>	<b>5,42</b>	<b>5,81</b>	22,8	21,4	240	320	120	180	1,20	2,80	2,50	2,50
601412	CDX 15/700-G/D	30	●					286	209	<b>720</b>	<b>760</b>	<b>7,06</b>	<b>7,46</b>	30,3	29,0	450	550	240	300	2,15	5,15	5,44	3,63

\* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	P	Q	R	Capacitor (µF)		Cable entry
							ØG	N°										220V 50Hz	115V 60Hz	
CDX 3/300-G/D	U	255	191	152	90	125	13	4	28	77,5	54	130	128	150	-	-	-	-	-	NPT 1/2"
CDX 3/500-G/D	U	288	218	167	105	140	13	4	30	90	65	150	140	175	-	-	-	-	-	NPT 1/2"
CDX 3/800-G/D	U	314	231	205	120	170	17	4	45	102	66	177	162	200	-	-	-	-	-	NPT 1/2"
CDX 3/1100-G/D	U	446	249	210	120	170	17	4	52	112	118	192	160	218	-	-	-	-	-	NPT 3/4"
CDX 3/1500-G/D	X	520	279	235	140	190	22	4	18	116	134	210	246	225	140	80	-	-	-	NPT 3/4"
CDX 3/2100-G/D	X	520	279	235	140	190	22	4	18	116	134	210	246	225	140	80	-	-	-	NPT 3/4"
CDX 3/2300-G/D	X	572	312	275	155	225	22	4	22	135	146	239	274	253	169	105	50	-	-	NPT 3/4"
CDX 3/3200-G/D	X	594	343	325	155	255	23,5	4	22	155	137	279	314	295	194	110	50	-	-	NPT 3/4"
CDX 3/4700-G/D	X	638	359	355	180	280	26	4	22	165	154	303	320	320	198	120	50	-	-	NPT 3/4"

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	P	Q	R	Capacitor (µF)		Cable entry
							ØG	N°										220V 50Hz	115V 60Hz	
CDX 3/300-G/D	U	255	191	152	90	125	13	4	28	77,5	54	130	128	50	-	-	-	16	25	NPT 1/2"
CDX 3/500-G/D	U	288	218	167	105	140	13	4	30	90	65	150	140	175	-	-	-	12,5	50	NPT 1/2"
CDX 3/800-G/D	U	314	231	205	120	170	17	4	45	102	66	177	162	200	-	-	-	25	90	NPT 1/2"

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	P	Q	R	Capacitor (µF)		Cable entry
							ØG	N°										220V 50Hz	115V 60Hz	
CDX 15/200-G/D	U	301	191	152	90	125	13	4	28	77,5	77	130	128	150	-	-	-	-	-	NPT 1/2"
CDX 15/400-G/D	U	350	218	167	105	140	13	4	30	90	96	150	140	175	-	-	-	-	-	NPT 1/2"
CDX 15/550-G/D	U	392	218	167	105	140	13	4	30	90	117	150	140	175	-	-	-	-	-	NPT 1/2"
CDX 15/700-G/D	U	394	231	205	120	170	17	4	45	102	106	177	162	200	-	-	-	-	-	NPT 1/2"
CDX 15/1100-G/D	U	446	249	210	120	170	17	4	52	112	118	192	160	218	-	-	-	-	-	NPT 3/4"
CDX 15/1410-G/D	X	520	279	235	140	190	22	4	18	116	134	210	246	225	140	80	-	-	-	NPT 3/4"
CDX 15/1710-G/D	X	520	279	235	140	190	22	4	18	116	134	210	246	225	140	80	-	-	-	NPT 3/4"
CDX 15/2000-G/D	X	594(50Hz) 520(60Hz)	279	235	140	190	22	4	18	116	171(50Hz) 134(60Hz)	210	246	225	140	80	-	-	-	NPT 3/4"
CDX 15/2410-G/D	X	572	312	275	155	225	22	4	22	135	146	239	274	253	169	105	50	-	-	NPT 3/4"
CDX 15/3810-G/D	X	594	343	325	155	255	23,5	4	22	155	137	279	314	295	194	110	50	-	-	NPT 3/4"
CDX 15/4300-G/D	X	676(50Hz) 594(60Hz)	343	325	155	255	23,5	4	22	155	178(50Hz) 137(60Hz)	279	314	295	194	110	50	-	-	NPT 3/4"
CDX 15/5010-G/D	X	638	359	355	180	280	26	4	22	165	154	303	320	320	198	120	50	-	-	NPT 3/4"

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	P	Q	R	Capacitor (µF)		Cable entry
							ØG	N°										220V 50Hz	115V 60Hz	
CDX 15/200-G/D	U	301	191	152	90	125	13	4	28	77,5	77	130	128	150	-	-	-	5	25	NPT 1/2"
CDX 15/400-G/D	U	350	218	167	105	140	13	4	30	90	96	150	140	175	-	-	-	12 <sup>o</sup> +20 <sup>●</sup>	35	NPT 1/2"
CDX 15/550-G/D	U	392	218	167	105	140	13	4	30	90	117	150	140	175	-	-	-	12 <sup>o</sup> +20 <sup>●</sup>	35 <sup>o</sup> +10 <sup>●</sup>	NPT 1/2"
CDX 15/700-G/D	U	394	231	205	120	170	17	4	45	102	106	177	162	200	-	-	-	16 <sup>o</sup> +80 <sup>●</sup>	40 <sup>o</sup> +120 <sup>●</sup>	NPT 1/2"

la/In = ratio between start-up current and maximum current. <sup>o</sup> Start-up capacitor / <sup>●</sup> Running capacitor.  
 Several sizes are available with different mounting bolt patterns. Please contact sales office at Italvibras.



## 6 poles - 1.000/1.200 rpm

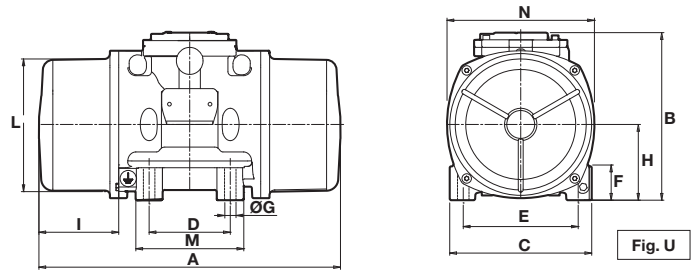
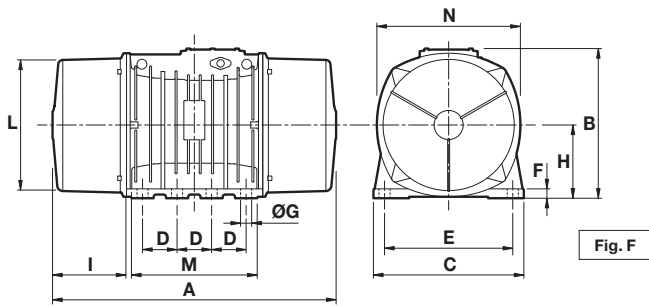
### Three-phase

DESCRIPTION			Certifications	MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS							
Code	Type	SIZE		Static moment* kgmm	Centrifugal force kg kN				Weight kg		Max input power W		Power rating W		Max. current A		Ia/In		
			50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz		
602315	CDX 10/40-G/D	10	•	30,0	30,0	<b>33,5</b>	<b>48,3</b>	<b>0,33</b>	<b>0,47</b>	11,5	11,5	120	135	50	90	0,30	0,30	1,90	2,07
602316	CDX 10/100-G/D	10	•	84,2	84,2	<b>94,0</b>	<b>136</b>	<b>0,93</b>	<b>1,33</b>	14,0	14,0	120	135	50	90	0,30	0,30	1,90	2,07
602317	CDX 10/200-G/D	20	•	163	163	<b>183</b>	<b>264</b>	<b>1,80</b>	<b>2,59</b>	21,4	21,4	185	205	100	120	0,50	0,50	2,72	3,10
602318	CDX 10/310-G/D	30	•	286	209	<b>321</b>	<b>338</b>	<b>3,15</b>	<b>3,32</b>	30,3	29	350	380	220	270	0,72	0,68	2,63	2,79
602320	CDX 10/550-G/D	35	• • • •	457	457	<b>512</b>	<b>737</b>	<b>5,02</b>	<b>7,23</b>	47,5	47,5	300	310	220	230	0,57	0,61	3,89	3,77
602325	CDX 10/810-G/D	50	• • • •	723	561	<b>809</b>	<b>905</b>	<b>7,94</b>	<b>8,88</b>	68,5	63,2	570	680	370	442	1,24	1,30	4,00	3,69
602274	CDX 10/1110-G/D	50	• • • •	1012	715	<b>1132</b>	<b>1151</b>	<b>11,1</b>	<b>11,3</b>	76,8	69,8	700	870	483	548	1,52	1,65	4,15	4,24
602277	CDX 10/1610-G/D	60	• • • •	1464	962	<b>1638</b>	<b>1549</b>	<b>16,1</b>	<b>15,2</b>	109	98	1040	1250	738	913	2,09	2,10	4,93	5,24
602280	CDX 10/2610-G/D	70	• • • •	2326	1720	<b>2601</b>	<b>2747</b>	<b>25,5</b>	<b>26,9</b>	150	136	1725	1800	1470	1470	3,80	3,70	5,40	6,03
602365	CDX 10/3810-G/D	80	• • • •	3422	2380	<b>3826</b>	<b>3831</b>	<b>37,5</b>	<b>37,6</b>	205	187	2100	2300	1700	1850	4,75	4,75	4,19	4,67
602201	CDX 10/22000-G	110	•	20025	12533	<b>22386</b>	<b>20208</b>	<b>220</b>	<b>198</b>	928	898	15600	19000	11800	14700	25,2	25,5	5,70	5,88

## 8 poles - 750/900 rpm

DESCRIPTION			Certifications	MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS							
Code	Type	SIZE		Static moment* kgmm	Centrifugal force kg kN				Weight kg		Max input power W		Power rating W		Max. current A		Ia/In		
			50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	50Hz 60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz		
602576	CDX 075/150-G/D	20	•	163	163	<b>104</b>	<b>149</b>	<b>1,02</b>	<b>1,46</b>	21,4	21,4	230	250	110	120	0,85	0,76	2,13	2,11
602577	CDX 075/250-G/D	30	•	286	286	<b>181</b>	<b>260</b>	<b>1,76</b>	<b>2,55</b>	30,3	30,3	350	380	190	210	1,10	1,05	2,03	2,29
602578	CDX 075/400-G/D	35	• • • •	457	457	<b>288</b>	<b>415</b>	<b>2,83</b>	<b>4,07</b>	47,5	47,5	300	300	150	150	0,57	0,58	2,47	2,50
602581	CDX 075/660-G/D	50	• • • •	723	723	<b>456</b>	<b>656</b>	<b>4,47</b>	<b>6,44</b>	68,5	68,5	340	340	184	184	0,87	0,90	2,87	3,11
602552	CDX 075/910-G/D	50	• • • •	1012	1012	<b>637</b>	<b>917</b>	<b>6,25</b>	<b>9,00</b>	74,8	74,8	420	500	231	260	1,00	1,10	2,91	2,91
602555	CDX 075/1310-G/D	60	• • • •	1464	1464	<b>922</b>	<b>1327</b>	<b>9,04</b>	<b>13,0</b>	109	109	750	850	480	560	1,52	1,90	3,68	3,05
602558	CDX 075/2110-G/D	70	• • • •	2326	2326	<b>1463</b>	<b>2107</b>	<b>14,4</b>	<b>20,7</b>	150	150	1480	1500	1036	1100	3,52	3,45	3,58	3,91
602602	CDX 075/3110-G/D	80	• • • •	3421	3421	<b>2152</b>	<b>3099</b>	<b>21,1</b>	<b>30,4</b>	205	205	1850	2100	1320	1400	4,85	5,00	4,21	4,70
602513	CDX 075/22000-G	110	•	28633	24508	<b>18005</b>	<b>22192</b>	<b>177</b>	<b>218</b>	1015	981	10000	13000	8100	10300	21,4	22,0	6,97	5,50

\* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (mm)

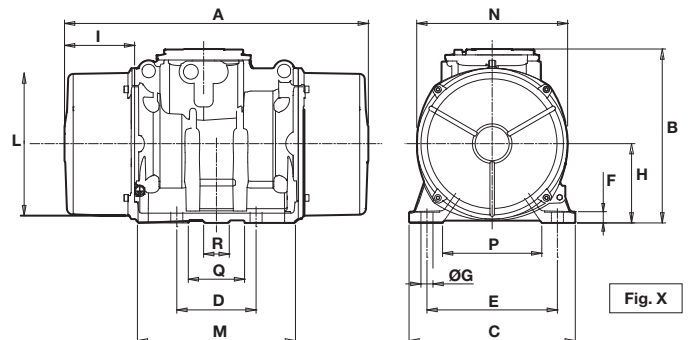
Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	P	Q	R	Cable entry
							ØG	N°										
CDX 10/40-G/D	U	255	191	152	90	125	13	4	28	77,5	54	130	128	150	-	-	-	NPT 1/2"
CDX 10/100-G/D	U	301	191	152	90	125	13	4	28	77,5	77	130	128	150	-	-	-	NPT 1/2"
CDX 10/200-G/D	U	350	218	167	105	140	13	4	30	90	96	150	140	175	-	-	-	NPT 1/2"
CDX 10/310-G/D	U	394	231	205	120	170	17	4	45	102	106	177	162	200	-	-	-	NPT 1/2"
CDX 10/550-G/D	U	446	249	210	120	170	17	4	52	112	118	192	160	218	-	-	-	NPT 3/4"
CDX 10/810-G/D	X	594(50Hz) 520(60Hz)	279	235	140	190	22	4	18	116	171(50Hz) 134(60Hz)	210	246	225	140	80	-	NPT 3/4"
CDX 10/1110-G/D	X	594(50Hz) 520(60Hz)	279	235	140	190	22	4	18	116	171(50Hz) 134(60Hz)	210	246	225	140	80	-	NPT 3/4"
CDX 10/1610-G/D	X	634(50Hz) 572(60Hz)	312	275	155	225	22	4	22	135	177(50Hz) 146(60Hz)	239	274	253	169	105	50	NPT 3/4"
CDX 10/2610-G/D	X	676	343	325	155	255	23,5	4	22	155	178	279	314	295	194	110	50	NPT 3/4"
CDX 10/3810-G/D	X	734	359	355	180	280	26	4	22	165	202	303	320	320	198	120	50	NPT 3/4"
CDX 10/22000-G	F	1150	614	610	140	520	45	8	38	297	297,5	542	510	582	-	-	-	NPT 1"

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	P	Q	R	Cable entry
							ØG	N°										
CDX 075/150-G/D	U	350	218	167	105	140	13	4	30	90	96	150	140	175	-	-	-	NPT 1/2"
CDX 075/250-G/D	U	394	231	205	120	170	17	4	45	102	106	177	162	200	-	-	-	NPT 1/2"
CDX 075/400-G/D	U	446	249	210	120	170	17	4	52	112	118	192	160	218	-	-	-	NPT 3/4"
CDX 075/660-G/D	X	594	279	235	140	190	22	4	18	116	171	210	246	225	140	80	-	NPT 3/4"
CDX 075/910-G/D	X	594	279	235	140	190	22	4	18	116	171	210	246	225	140	80	-	NPT 3/4"
CDX 075/1310-G/D	X	634	312	275	155	225	22	4	22	135	177	239	274	253	169	105	50	NPT 3/4"
CDX 075/2110-G/D	X	676	343	325	155	255	23,5	4	22	155	178	279	314	295	194	110	50	NPT 3/4"
CDX 075/3110-G/D	X	734	359	355	180	280	26	4	22	165	202	303	320	320	198	120	50	NPT 3/4"
CDX 075/22000-G	F	1150	614	610	140	520	45	8	38	297	297,5	542	510	582	-	-	-	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.



# ■ 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 characterised by increased thickness and joints to prevent transmission of an internal ignition source 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.

### 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 7930 kgf. (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 -20°C to +40°C.

### Vibrator thermal protection

MVTX series equipped with 130°C bimetallic thermal protector or, on request, with 130°C 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 terminal box to facilitate electrical connection. 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 Italtvibras, suitable to support both high radial and axial loads.

### Motor shaft




Treated steel alloy (Isothermic hardening) resistant to stress.



The MVTX series is characterised 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 characterised 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 II 2D 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)
<b>Notes</b>	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 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 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.B.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

# MVT / MVTX



## 4 poles - 1.500/1.800 rpm

### Three-phase

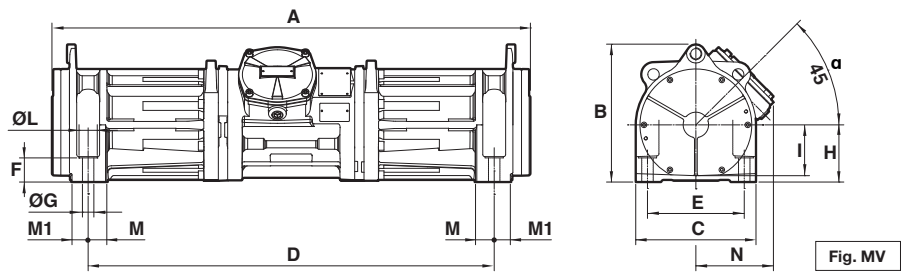
DESCRIPTION			MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	Static moment* kgmm		Centrifugal force kg				Weight kg		Power rating W		Max. current A		Ia/In	
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601535	MVT 15/3500-S08	70	1369	951	<b>3450</b>	<b>3500</b>	<b>33,8</b>	<b>34,3</b>	169	158	2200	2500	3,90	3,90	7,11	6,92
601646	MVT 15/4400-S08	70	1750	1215	<b>4400</b>	<b>4400</b>	<b>43,2</b>	<b>43,2</b>	178	166	2200	2500	3,90	3,90	7,11	6,92
601537	MVT 15/5000-S08	80	1990	1387	<b>5007</b>	<b>5023</b>	<b>49,1</b>	<b>49,3</b>	235	220	3600	3400	6,00	5,00	7,02	8,00
601648	MVT 15/7900-S08	90	3147	2191	<b>7930</b>	<b>7930</b>	<b>77,8</b>	<b>77,8</b>	285	270	-	-	-	-	-	-

### Three-phase

DESCRIPTION			Certifications UL US Ex IECEx EAC	MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS										
Codice	Type	SIZE		Static moment* kgmm		Centrifugal force kg				Weight kg		Max input power W		Power rating W		Max. current A		Ia/In				
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz				
601573	MVTX 15/3500-G/D	70	•	•	•	•	1369	951	<b>3450</b>	<b>3500</b>	<b>33,8</b>	<b>34,3</b>	169	158	2270	2250	1840	1870	4,00	3,50	6,50	8,10
601649	MVTX 15/4400-G/D	70	•	•	•	•	1750	1215	<b>4400</b>	<b>4400</b>	<b>43,2</b>	<b>43,2</b>	178	166	2270	2250	1840	1870	4,00	3,50	6,50	8,10
601574	MVTX 15/5000-G/D	80	•	•	•	•	1990	1387	<b>5007</b>	<b>5023</b>	<b>49,1</b>	<b>49,3</b>	235	220	3140	3130	2600	2600	5,40	4,85	7,80	9,90
601575	MVTX 15/7900-G/D	90	•	•	•	•	3147	2191	<b>7930</b>	<b>7930</b>	<b>77,8</b>	<b>77,8</b>	285	270	3650	4000	3212	3520	6,50	6,20	7,70	8,90

\* Working moment = 2 x static moment.





DIMENSIONAL SPECIFICATIONS (mm)

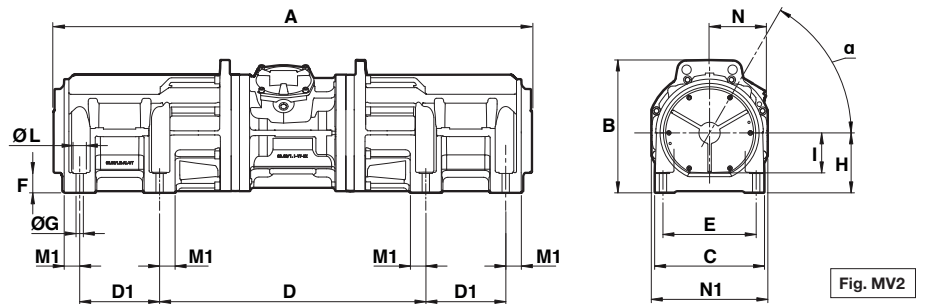
Type	Fig.	A	B	C	D	Holes				F	H	I	ØL	M	M1	N	N1	α	Cable entry
						D1	E	ØG	N°										
MVT 15/3500-S08	MV	1130	325	284	959	-	228,5	27	4	57	135	120	43	44	38	184	-	45°	NPT 3/4"
MVT 15/3500-S08	MV	1130	325	284	959	-	228,5	27	4	57	135	120	43	44	38	184	-	45°	NPT 3/4"
MVT 15/5000-S08	MV2	1481	367	284	1120	102	235	22	8	58	160	120	40	-	46,5	194	307	45°	NPT 3/4"
MVT 15/7900-S08	MV2	1437	399	330	800	240	280	22	8	58	180	120	40	-	46,5	171	350	60°	NPT 3/4"

DIMENSIONAL SPECIFICATIONS (mm)

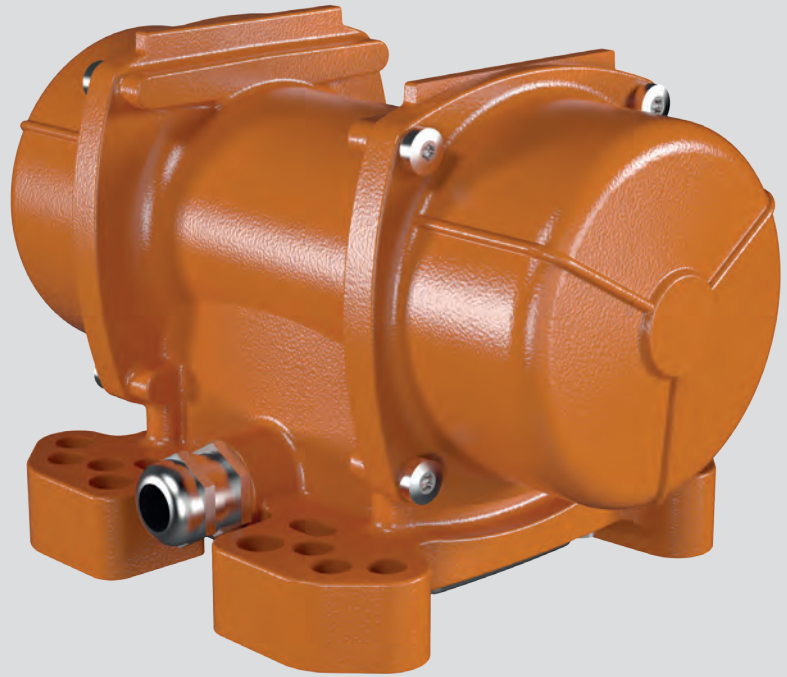
Type	Fig.	A	B	C	D	Holes				F	H	I	ØL	M	M1	N	N1	α	Cable entry
						D1	E	ØG	N°										
MVTX 15/3500-G/D	MV	1130	325	284	959	-	228,5	27	4	57	135	120	43	44	38	184	-	45°	NPT 3/4"
MVTX 15/4400-G/D	MV	1130	325	284	959	-	228,5	27	4	57	135	120	43	44	38	184	-	45°	NPT 3/4"
MVTX 15/5000-G/D	MV2	1481	367	284	1120	102	235	22	8	58	160	120	40	-	46,5	194	307	45°	NPT 3/4"
MVTX 15/7900-G/D	MV2	1437	399	330	800	240	280	22	8	58	180	120	40	-	46,5	171	350	60°	NPT 3/4"

I<sub>a</sub>/I<sub>n</sub> = ratio between start-up current and maximum current.

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







## 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 1520 kgf. (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 -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 3/100 and 3/200, 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 aluminium alloy for models 3/100-MF, 3/200-MF and 3/500; in AISI 304 stainless steel for other types.

### Painting

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

## Direct current

DESCRIPTION			MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS		
Code	Type	rpm	Static moment*	Centrifugal force		Weight	Power rating	Max. current	
			kgmm	kg	kN	kg	W	12V	24V
600418	MVCC 3/100-S08 MF	3000	12,1	122	1,20	5,7	190	8,00	4,00
600419	MVCC 3/200-S08 MF	3000	20,2	203	1,99	6,3	190	8,00	4,00
600469	MVCC 3/500	3000	58,0	584	5,72	13,0	270	22,5	11,3
600405	MVCC 3/1200	3600	78,0	1130	11,1	20,0	530	-	22,0
600464	MVCC 3/1500	3600	105	1520	14,9	21,0	530	-	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.

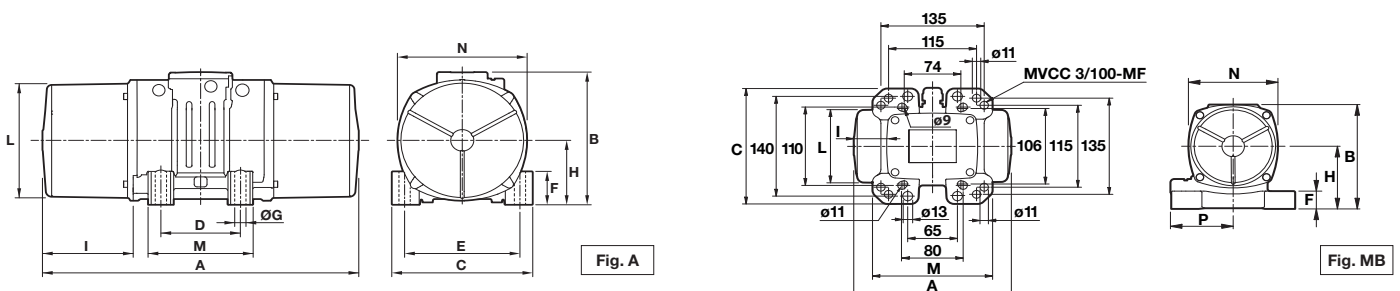
#### Certifications



Compliance with the applicable European Union directives.

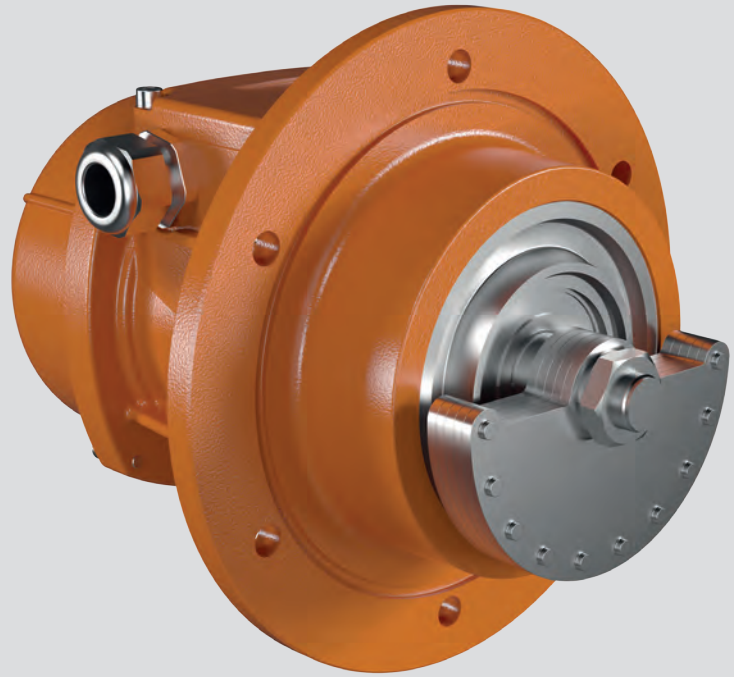


Certification for Eurasian Customs Union  
N° TC N RU Д-IT.АЛ33.В.02527



#### DIMENSIONAL SPECIFICATIONS (mm)

Fig.	A	B	C	Holes				F	H	I	L	M	N	P	Cable entry
				D	E	ØG	N°								
<b>MB</b>	207	146,5	162	See drawing MB				25	88	46	103	158	117	80	M20x1,5
<b>MB</b>	231	146,5	162	See drawing MB				25	88	58	103	158	117	80	M20x1,5
<b>A</b>	288	203	167	105	140	13	4	30	82,5	65	145	146	160	-	M25x1,5
<b>A</b>	308	211	205	120	170	17	4	45	93,5	63	168	174	182	-	M25x1,5
<b>A</b>	308	211	205	120	170	17	4	45	93,5	63	168	174	182	-	M25x1,5



## 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

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 2615 kgf. (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 -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 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 Italtvibras.

### Motor shaft

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

The new MTF (MTF-S02) 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, which regulation is particularly easy.

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 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 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.



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

# MTF



## 2 poles - 3.000/3.600 rpm

### Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS							
Code	Type	SIZE	SP	Ex II2D Temp. class	Centrifugal force (A/B)*				Weight		Max input power		Max. current		Ia/In	
					kg	60Hz	50Hz	60Hz	kg	60Hz	W	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600375	MTF 3/65-S02	00	-	120°C	31/31	44/44	0,30/0,30	0,43/0,43	5,4	5,4	120	120	0,27	0,23	3,43	3,90
600369	MTF 3/200-S02	01	•	120°C	102/102	117/117	1,00/1,00	1,15/1,15	7,5	7,3	180	180	0,35	0,30	2,68	3,00
600370	MTF 3/300-S02	10	•	120°C	151/151	163/163	1,48/1,48	1,60/1,60	11,2	10,9	260	270	0,60	0,50	3,47	4,20
600378	MTF 3/500-S02	20	•	120°C	292/292	252/252	2,86/2,86	2,47/2,47	15,0	14,1	450	500	0,80	0,75	4,21	4,80
600456	MTF 3/700-S02	20	•	120°C	350/350	336/336	3,43/3,43	3,30/3,30	15,2	14,3	450	500	0,80	0,75	4,21	4,80
600380	MTF 3/800-S02	30	•	120°C	375/375	405/405	3,67/3,67	3,97/3,97	17,0	16,5	650	685	1,10	1,00	3,83	6,00
600285	MTF 3/1100-S90	40	•	120°C	553/553	530/530	5,42/5,42	5,20/5,20	26,0	25,0	940	1130	1,70	1,60	6,79	7,00

### Single-phase

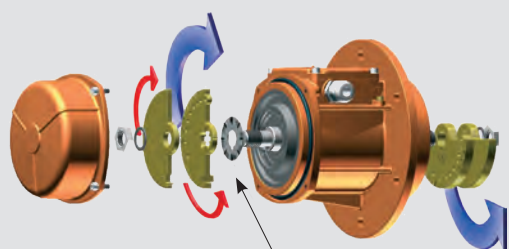
Code	Type	SIZE	SP	Ex II2D Temp. class	Centrifugal force (A/B)*				Weight		Max input power		Max. current		Ia/In	
					kg	60Hz	50Hz	60Hz	kg	60Hz	W	60Hz	220V 50Hz	115V 60Hz	50Hz	60Hz
600375	MTF 3/65-S02	00	-	120°C	31/31	44/44	0,30/0,30	0,43/0,43	5,4	5,4	110	110	0,56	1,52	2,24	2,24
600369	MTF 3/200-S02	01	-	120°C	102/102	117/117	1,00/1,00	1,15/1,15	7,5	7,3	165	165	0,75	1,52	1,67	2,24
600370	MTF 3/300-S02	10	-	120°C	151/151	163/163	1,48/1,48	1,60/1,60	11,2	10,9	280	280	1,25	2,40	2,48	3,52
600378	MTF 3/500-S02	20	-	120°C	292/292	252/252	2,86/2,86	2,47/2,47	15,0	14,1	500	500	2,30	4,50	3,35	4,22
600456	MTF 3/700-S02	20	-	120°C	350/350	336/336	3,43/3,43	3,30/3,30	15,2	14,3	500	500	2,30	4,50	3,35	4,22
600380	MTF 3/800-S02	30	-	120°C	375/375	405/405	3,67/3,67	3,97/3,97	17,0	16,5	700	750	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).

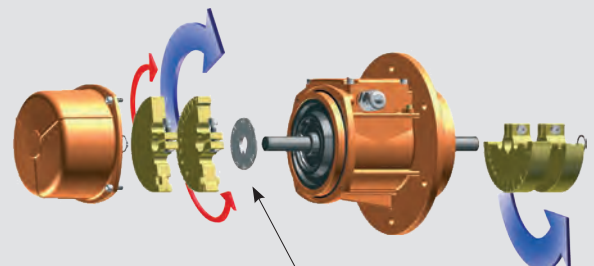
Ia/In = ratio between start-up current and maximum current.

## 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

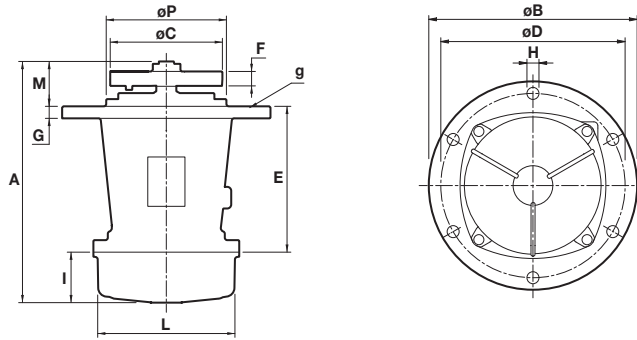


Fig. G

DIMENSIONAL SPECIFICATIONS (mm)

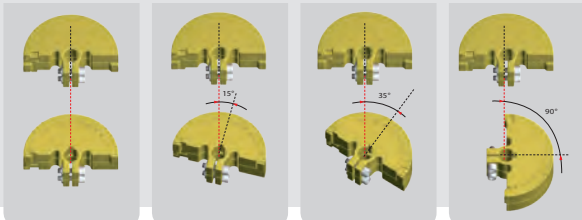
Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	Capacitor (µF)		Cable entry thread	Seal g
															220V 50Hz	115V 60Hz		
MTF 3/65-S02	G	191	130	86	109	8,5	4	129	8	10	40	106	22	-	-	-	M20x1,5	OR 3350
MTF 3/200-S02	G	226	211,5	93	188	12	4	144	20(50Hz) 16(60Hz)	10	58	103	23,5	-	-	-	M20x1,5	OR 4650
MTF 3/300-S02	G	247	215	114	187	12	4	179,5	16(50Hz) 12(60Hz)	13	54	127	13,5	-	-	-	M20x1,5	OR 4625
MTF 3/500-S02	G	279,5	245	132	205	12	6	124	20(50Hz) 12(60Hz)	12	65	145	90,5	162	-	-	M25x1,5	OR 4700
MTF 3/700-S02	G	279,5	245	132	205	12	6	124	24(50Hz) 16(60Hz)	12	65	145	90,5	162	-	-	M25x1,5	OR 4700
MTF 3/800-S02	G	301	260	154	230	15	6	182	16(50Hz) 12(60Hz)	15	63	170	56	150	-	-	M25x1,5	OR 4800
MTF 3/1100-S90	G	383	279	145	254	14	4	-	31(50Hz) 21(60Hz)	17,5	57,5	-	63	229	-	-	M25x1,5	-

Tipo	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I	L	M	ØP	Capacitor (µF)		Cable entry thread	Seal g
															220V 50Hz	115V 60Hz		
MTF 3/65-S02	G	191	130	86	109	8,5	4	129	8	10	40	106	22	-	10	28	M20x1,5	OR 3350
MTF 3/200-S02	G	226	211,5	93	188	12	4	144	20(50Hz) 16(60Hz)	10	58	103	23,5	-	10	35	M20x1,5	OR 4650
MTF 3/300-S02	G	247	215	114	187	12	4	179,5	16(50Hz) 12(60Hz)	13	54	127	13,5	-	16	25	M20x1,5	OR 4625
MTF 3/500-S02	G	279,5	245	132	205	12	6	124	20(50Hz) 12(60Hz)	12	65	145	90,5	162	12,5	50	M25x1,5	OR 4700
MTF 3/700-S02	G	279,5	245	132	205	12	6	124	24(50Hz) 16(60Hz)	12	65	145	90,5	162	12,5	50	M25x1,5	OR 4700
MTF 3/800-S02	G	301	260	154	230	15	6	182	16(50Hz) 12(60Hz)	15	63	170	56	150	25	90	M25x1,5	OR 4800

Force line direction



Mass group relative regulation





# MTF



## 4 poles - 1.500/1.800 rpm

### Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS							
Code	Type	SIZE	Ex II2D Temp. class	Temp. class	Centrifugal force (A/B)*				Weight		Max input power		Max. current		Ia/In	
					kg	kN	kg	kN	50Hz	60Hz	50Hz	60Hz	W	W	A	A
601446	MTF 15/80-S02	01	-	120°C	40/40	37/37	0,39/0,39	0,36/0,36	6,8	6,5	85	95	0,21	0,20	1,78	1,95
601403	MTF 15/200-S02	10	•	120°C	106/74	107/107	1,04/0,72	1,05/1,05	14,0	13,2	170	170	0,41	0,40	2,34	2,75
601405	MTF 15/400-S02	20	•	120°C	205/142	205/205	2,01/1,39	2,01/2,01	20,6	19,8	300	350	0,60	0,60	3,33	3,50
601406	MTF 15/550-S02	20	•	120°C	276/205	295/295	2,70/2,01	2,70/2,70	22,0	20,6	300	350	0,60	0,60	3,33	3,50
601407	MTF 15/700-S02	30	•	120°C	360/263	380/380	3,53/2,58	3,73/3,73	26,0	24,5	525	665	0,92	0,98	3,48	3,43
601280	MTF 15/1100-S90	40	•	120°C	504/504	491/491	4,94/4,94	4,82/4,82	36,0	31,4	900	1050	1,45	1,50	4,10	4,20
601379	MTF 15/1710-S02-VRS	50	•	150°C	894/322	878/355	8,77/3,16	8,61/3,48	44,0	41,5	1100	1200	2,00	1,90	4,29	4,89
601380	MTF 15/2000-S02-VRS	50	•	170°C	1021/357	1017/390	10,0/3,50	9,98/3,83	48,0	45,5	1350	1450	2,50	2,30	4,30	4,90
601381	MTF 15/3810-S02-VRS	70	•	135°C	1908/707	1872/718	18,7/6,94	18,4/7,04	100,0	93,0	2200	2500	3,90	3,90	7,11	6,92

### Single-phase

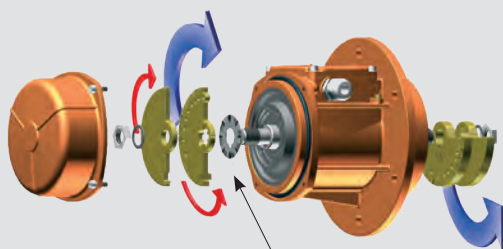
Code	Type	SIZE	Ex II2D Temp. class	Temp. class	Centrifugal force (A/B)*				Weight		Max input power		Max. current		Ia/In	
					kg	kN	kg	kN	50Hz	60Hz	50Hz	60Hz	W	W	A	A
601446	MTF 15/80-S02	01	-	120°C	40/40	37/37	0,39/0,39	0,36/0,36	6,8	6,5	90	100	0,43	1,00	1,20	1,3
601403	MTF 15/200-S02	10	-	120°C	106/74	107/107	1,04/0,72	1,05/1,05	14,0	13,2	210	230	1,00	2,00	1,50	1,85
601405	MTF 15/400-S02	20	-	120°C	205/142	205/205	2,01/1,39	2,01/2,01	20,6	19,8	240	320	1,20	2,80	2,50	2,5
601406	MTF 15/550-S02	20	-	120°C	276/205	295/295	2,70/2,01	2,70/2,70	22,0	20,6	240	320	1,20	2,80	2,50	2,5
601407	MTF 15/700-S02	30	-	120°C	360/263	380/380	3,53/2,58	3,73/3,73	26,0	24,5	450	550	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).

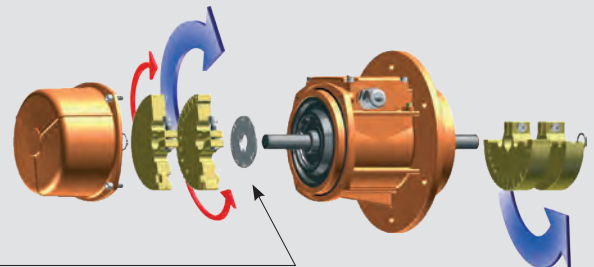
Ia/In = ratio between start-up current and maximum current.

## 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



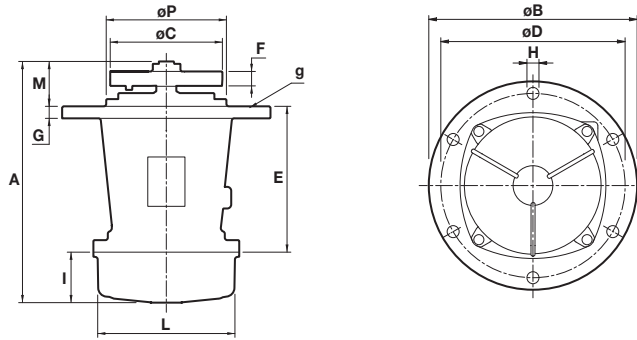


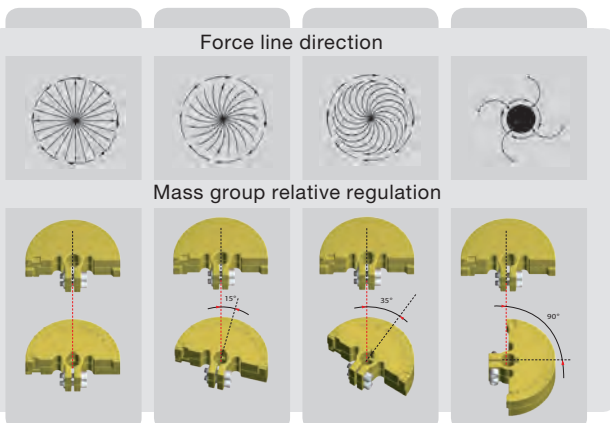
Fig. G

DIMENSIONAL SPECIFICATIONS (mm)

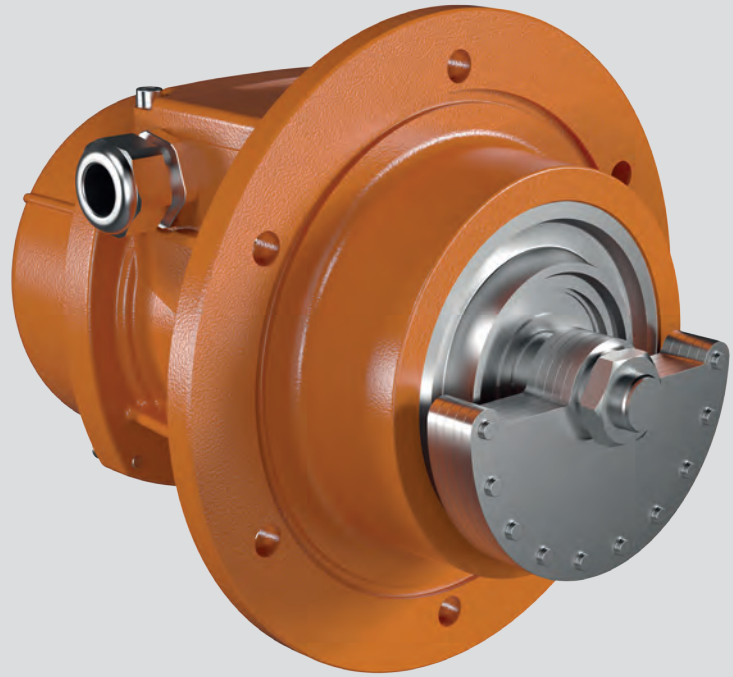
Type	Fig.	A	ØB	ØC	Holes			E	F	G	I	L	M	ØP	Capacitor (µF)		Cable entry thread	Seal g
					ØD	ØH	N°								220V 50Hz	115V 60Hz		
MTF 15/80-S02	G	241	211,5	93	188	12	4	144	32(50Hz) 20(60Hz)	10	65	103	32	-	-	-	M20x1,5	OR 4650
MTF 15/200-S02	G	292,5	215	114(50Hz) 108(60Hz)	187	12	4	179,5	48(50Hz) 40(60Hz)	13	77	127	36	-	-	-	M20x1,5	OR 4625
MTF 15/400-S02	G	335,5	245	130	205	12	6	124	59(50Hz) 42(60Hz)	12	93	145	118,5	162	-	-	M25x1,5	OR 4700
MTF 15/550-S02	G	376,5	245	130	205	12	6	124	79(50Hz) 59(60Hz)	12	114	145	138,5	162	-	-	M25x1,5	OR 4700
MTF 15/700-S02	G	380,5	260	154	230	15	6	182	59(50Hz) 46(60Hz)	15	106	170	92,5	150	-	-	M25x1,5	OR 4800
MTF 15/1100-S90	G	429	279	190	254	14	4	-	49	17,5	57,5	-	-	229	-	-	M25x1,5	-
MTF 15/1710-S02-VRS	G	488	350	190	290	17	6	232	84(50Hz) 57(60Hz)	25	134	209	122	172	-	-	M25x1,5	-
MTF 15/2000-S02-VRS	G	500(50Hz) 488(60Hz)	350	193	290	17	6	232	100(50Hz) 68(60Hz)	25	134	209	133(50Hz) 122(60Hz)	172	-	-	M25x1,5	-
MTF 15/3810-S02-VRS	G	614	410	250(50Hz) 244(60Hz)	350	22	6	310	78(50Hz) 57(60Hz)	27	178	280	126	234	-	-	M25x1,5	-

Type	Fig.	A	ØB	ØC	Holes			E	F	G	I	L	M	ØP	Capacitor (µF)		Cable entry thread	Seal g
					ØD	ØH	N°								220V 50Hz	115V 60Hz		
MTF 15/80-S02	G	241	211,5	93	188	12	4	144	32(50Hz) 20(60Hz)	10	65	103	32	-	3,15	25	M20x1,5	OR 4650
MTF 15/200-S02	G	292,5	215	114(50Hz) 108(60Hz)	187	12	4	179,5	48(50Hz) 40(60Hz)	13	77	127	36	-	5	25	M20x1,5	OR 4625
MTF 15/400-S02	G	335,5	245	130	205	12	6	124	59(50Hz) 42(60Hz)	12	93	145	118,5	162	12 <sup>o</sup> +20 <sup>●</sup>	35	M20x1,5	OR 4700
MTF 15/550-S02	G	376,5	245	130	205	12	6	124	79(50Hz) 59(60Hz)	12	114	145	138,5	162	12 <sup>o</sup> +20 <sup>●</sup>	35 <sup>o</sup> +10 <sup>●</sup>	M20x1,5	OR 4700
MTF 15/700-S02	G	380,5	260	154	230	15	6	182	59(50Hz) 46(60Hz)	15	106	170	92,5	150	16 <sup>o</sup> +80 <sup>●</sup>	40 <sup>o</sup> +120 <sup>●</sup>	M25x1,5	OR 4800

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



# ■ MTF-E



## Technical features

### Power supply

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

### Polarity

2 and 4 poles.

### Conformity with Standards and Regulations

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

### Controls

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

### Functioning

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

### Centrifugal force

Range extended up to 2615 kgf. (25.7 kN), with centrifugal force adjustable fby varying weights position.

### Mechanical protection

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

### Protection against mechanical impacts

IK 08 according to IEC/EN 62262.

### Insulation class

Class F (155°C).

### Tropicalization

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

### Ambient temperature

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

### Vibrator thermal protection

On demand with PTC rated thermistor heat detectors 130°C. Also on request thermistors with different temperatures and anti-condensation heaters.

### Fixing of the vibrator

In all positions and therefore without restriction.

### Lubrication

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

### Electrical connection box

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

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

### Electric motor

Three-phase asynchronous type. Designed for maximum starting torques and torque curves adapt for the specific requirements of vibrating machines. Insulated windings using vacuum encapsulating up to size 30; using the "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminium.

### Casing

In high-tensile aluminium alloy up to size 50, in spheroidal cast iron for size 70.

### Bearing flange

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

### Bearings

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

### Motor shaft

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

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

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

**Category:** II2D & II2G

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

**Temperature class:**  
see tables

**EC certificate:**  
LCIE 05 ATEX 6163 X

**Zones of use:**  
21, 22

#### Eccentric weights

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

#### Weight covers

In aluminium alloy.

#### Painting

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

**For further details please contact sales offices at 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 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

# MTF-E



## 2 poles - 3.000/3.600 rpm

### Three-phase

DESCRIPTION			MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS									
Code	Type	SIZE	Centrifugal force (A/B)*				Weight		Temp. class (G)	Temp. class (D)	Max input power		Power rating		Max. current		tE (s)	Ia/In
			kg	kN	50Hz	60Hz	50Hz	60Hz			kg	kg	W	W	W	W		
6E0369	MTF 3/200E-S02 ○	01	102/102	117/117	1,00/1,00	1,15/1,15	7,50	7,30	T3	120°C	180	180	120	120	-	-	30	2,68
6E0370	MTF 3/300E-S02	10	151/151	163/163	1,48/1,48	1,60/1,60	11,2	10,9	T3	120°C	260	270	210	210	0,57	0,50	18	3,50
6E0378	MTF 3/500E-S02	20	292/292	252/252	2,86/2,86	2,47/2,47	15,0	14,1	T3	120°C	500	500	300	300	0,76	0,67	12	4,20
6E0456	MTF 3/700E-S02	20	350/350	336/336	3,43/3,43	3,30/3,30	15,2	14,3	T3	120°C	500	500	300	300	0,76	0,67	12	4,20
6E0380	MTF 3/800E-S02	30	375/375	405/405	3,67/3,67	3,97/3,97	17,0	16,5	T3	120°C	550	570	405	405	0,95	0,83	12	4,20
6E0285	MTF 3/1100E-S90	40	553/553	530/530	5,42/5,42	5,20/5,20	26,0	25,0	T4	120°C	830	910	660	660	1,43	1,25	6	7,30

## 4 poles - 1.500/1.800 rpm

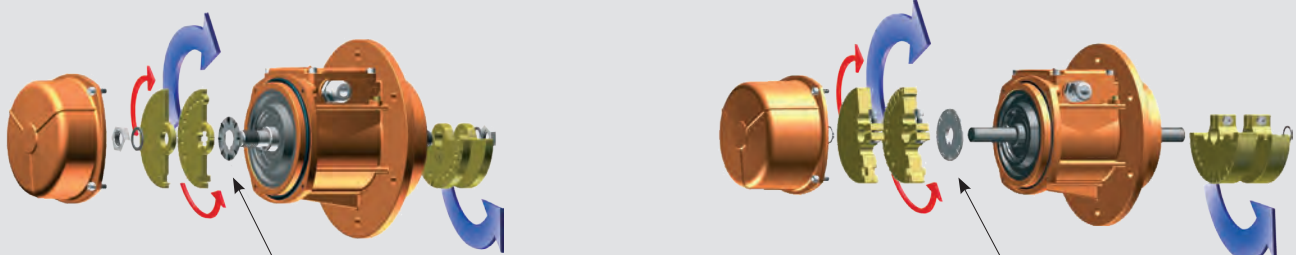
DESCRIPTION			MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS									
Code	Type	SIZE	Centrifugal force (A/B)*				Weight		Temp. class (G)	Temp. class (D)	Max input power		Power rating		Max. current		tE (s)	Ia/In
			kg	kN	50Hz	60Hz	50Hz	60Hz			kg	kg	W	W	W	W		
6E1403	MTF 15/200E-S02	10	106/74	107/107	1,04/0,72	1,05/1,05	14,0	13,2	T3	120°C	203	-	90	-	0,45	-	35	2,04
6E1405	MTF 15/400E-S02	20	205/142	205/205	2,01/1,39	2,01/2,01	20,6	19,8	T3	120°C	300	320	200	230	0,57	0,52	18	3,33
6E1406	MTF 15/550E-S02	20	276/205	295/295	2,70/2,01	2,70/2,70	22,0	20,6	T3	120°C	300	320	200	230	0,57	0,52	18	3,33
6E1407	MTF 15/700E-S02	30	360/263	380/380	3,53/2,58	3,73/3,73	26,0	24,5	T3	120°C	460	500	310	380	0,86	0,85	17	3,50
6E1280	MTF 15/1100E-S90	40	504/504	491/491	4,94/4,94	4,82/4,82	36,0	31,4	T3	120°C	900	950	660	730	1,38	1,32	13	4,00
6E1379	MTF 15/1710E-S02-VRS	50	894/322	878/355	8,77/3,16	8,61/3,48	44,0	41,5	T3	150°C	1100	1150	730	800	1,90	1,82	9	4,95
6E1380	MTF 15/2000E-S02-VRS	50	1021/357	1017/390	10,0/3,50	9,98/3,83	48,0	45,5	T3	150°C	1100	1150	730	800	1,90	1,82	9	4,95
6E1381	MTF 15/3810E-S02-VRS	70	1908/707	1872/718	18,7/6,94	18,4/7,04	100	93,0	T3	135°C	2200	2400	1780	1960	3,71	3,50	6	7,17

\* 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

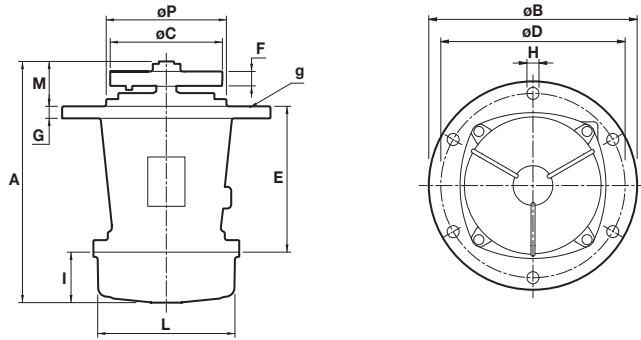


Fig. G

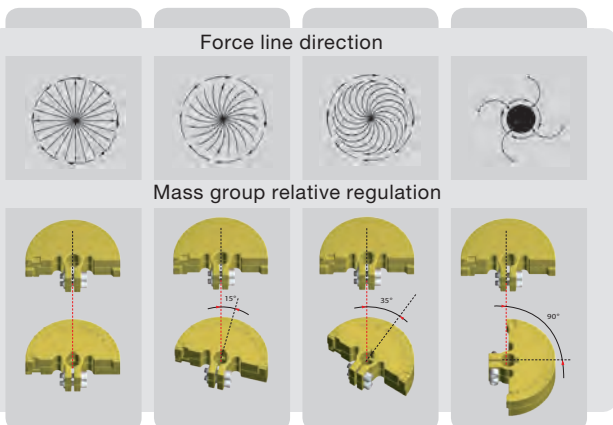
DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	ØB	ØC	Holes			E	F	G	I	L	M	ØP	Cable entry thread	Seal g
					ØD	ØH	N°									
MTF 3/200E-S02 ○	G	226	211,5	93	188	12	4	144	20(50Hz) 16(60Hz)	10	58	103	23,5	-	M20x1,5	OR 4650
MTF 3/300E-S02	G	247	215	114	187	12	4	179,5	16(50Hz) 12(60Hz)	13	54	127	13,5	-	M20x1,5	OR 4625
MTF 3/500E-S02	G	279,5	245	132	205	12	6	124	20(50Hz) 16(60Hz)	12	65	145	90,5	162	M25x1,5	OR 4700
MTF 3/700E-S02	G	279,5	245	132	205	12	6	124	24(50Hz) 16(60Hz)	12	65	145	90,5	162	M25x1,5	OR 4700
MTF 3/800E-S02	G	301	260	154	230	15	6	182	16(50Hz) 12(60Hz)	15	63	170	56	150	M25x1,5	OR 4800
MTF 3/1100E-S90	G	383	279	145	254	14	4	-	31(50Hz) 21(60Hz)	17,5	57,5	-	63	229	M25x1,5	-

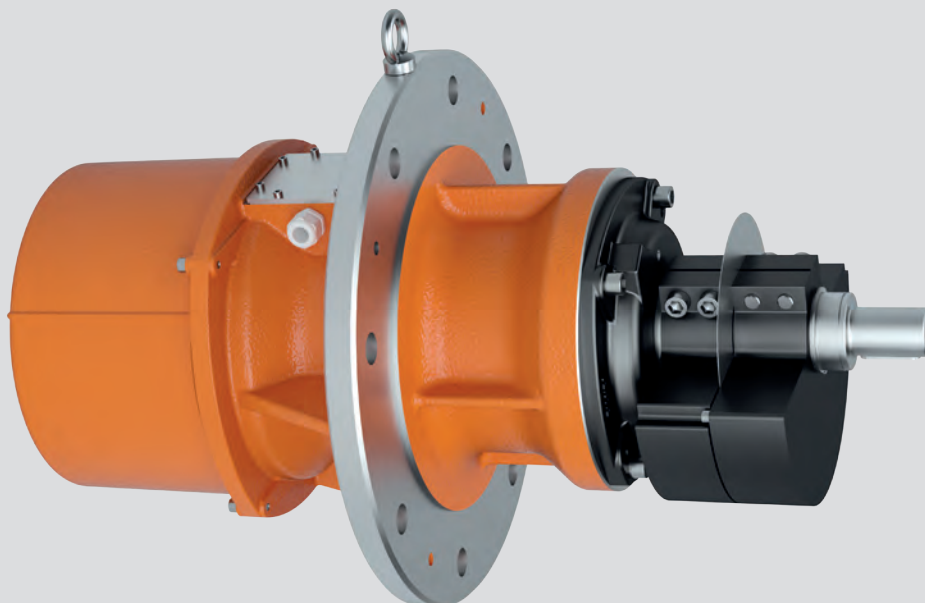
DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	ØB	ØC	Holes			E	F	G	I	L	M	ØP	Cable entry thread	Seal g
					ØD	ØH	N°									
MTF 15/200E-S02	G	292,5	215	114(50Hz) 108(60Hz)	187	12	4	179,5	48(50Hz) 40(60Hz)	13	77	127	36	-	M20x1,5	OR 4625
MTF 15/400E-S02	G	335,5	245	130	205	12	6	124	59(50Hz) 42(60Hz)	12	93	145	118,5	162	M25x1,5	OR 4700
MTF 15/550E-S02	G	376,5	245	130	205	12	6	124	79(50Hz) 59(60Hz)	12	114	145	138,5	162	M25x1,5	OR 4700
MTF 15/700E-S02	G	380,5	260	154	230	15	6	182	59(50Hz) 46(60Hz)	15	106	170	92,5	150	M25x1,5	OR 4800
MTF 15/1100E-S90	G	429	279	190	254	14	4	-	49	17,5	57,5	-	-	229	M25x1,5	-
MTF 15/1710E-S02-VRS	G	488	350	190	290	17	6	232	84(50Hz) 57(60Hz)	25	134	209	122	172	M25x1,5	-
MTF 15/2000E-S02-VRS	G	500(50Hz) 488(60Hz)	350	193	290	17	6	232	100(50Hz) 68(60Hz)	25	134	209	133(50Hz) 122(60Hz)	172	M25x1,5	-
MTF 15/3810E-S02-VRS	G	614	410	250(50Hz) 244(60Hz)	350	22	6	310	78(50Hz) 57(60Hz)	27	178	280	126	234	M25x1,5	-

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



# ■ 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

Continual 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 20000 kgf. (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 -20°C to +40°C; higher or lower temperatures are possible on request.

### Vibrator thermal protection

With thermal detectors with thermistors PTC 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 Italvibras, 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 40000 Kgf (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 polymerised epoxy polyester powder in oven at 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.



# ■ MTF-ACC



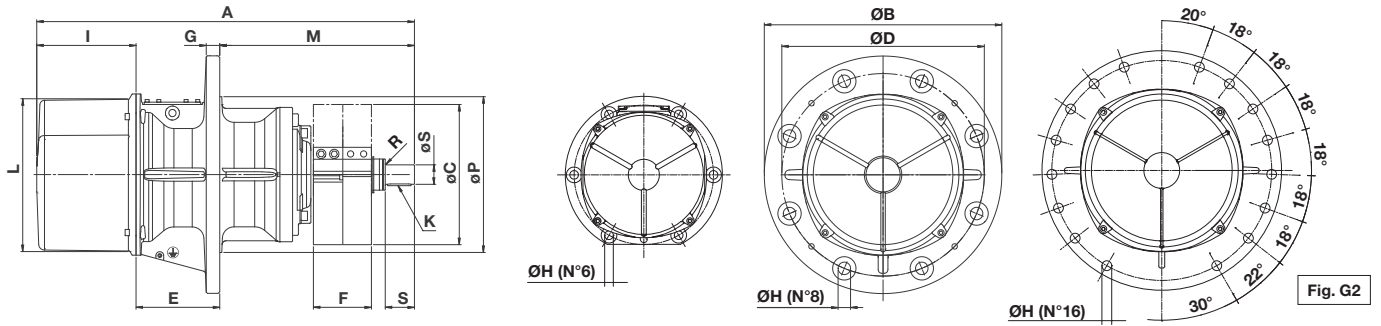
6 poles - 1.000/1.200 rpm

## Three-phase

DESCRIPTION			MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	Static moment*		Centrifugal force				Weight		Max input power		Max current		Ia/In	
			kgmm	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz
602013	<b>MTF 10/5150-S02-ACC</b>	80	4678	3230	<b>5230</b>	<b>5200</b>	<b>51,3</b>	<b>51,0</b>	230	205	3200	3600	6,50	6,00	5,24	5,50
602001	<b>MTF 10/6600-S02-ACC</b>	97	6083	3979	<b>6800</b>	<b>6405</b>	<b>66,7</b>	<b>62,8</b>	316	288	5000	5900	10,0	9,80	5,61	5,82
602498	<b>MTF 10/10000-S02-ACC</b>	97	8673	5664	<b>9696</b>	<b>9117</b>	<b>95,1</b>	<b>89,4</b>	420	381	7600	8000	13,5	12,4	4,72	4,92
602305	<b>MTF 10/11200-S02-ACC</b>	97	9983	6896	<b>11160</b>	<b>11100</b>	<b>109</b>	<b>109</b>	437	402	7600	8000	13,5	12,4	4,72	4,92
602217	<b>MTF 10/12000-S09-RF-ACC</b>	105	10700	7500	<b>11963</b>	<b>12072</b>	<b>117</b>	<b>118</b>	665	610	9000	9500	16,3	15,0	5,21	5,73
602101	<b>MTF 10/13000-S02-ACC</b>	97	11510	8158	<b>12867</b>	<b>13130</b>	<b>126</b>	<b>129</b>	485	410	9600	10000	17,0	16,0	4,98	5,00
602002	<b>MTF 10/15000-S09-RF-ACC</b>	105	12662	8700	<b>14155</b>	<b>14004</b>	<b>139</b>	<b>137</b>	690	650	10600	11270	19,0	18,0	5,88	5,78
602218	<b>MTF 10/17500-S09-RF-ACC</b>	105	15500	10439	<b>17327</b>	<b>16804</b>	<b>170</b>	<b>165</b>	750	700	13000	13700	24,5	23,0	5,71	5,96
602009	<b>MTF 10/19500-S09-RF-ACC</b>	105	17947	11430	<b>20062</b>	<b>18400</b>	<b>197</b>	<b>181</b>	760	710	13000	13700	24,5	23,0	5,71	5,96

\* Working moment = 2 x static moment

RF = Possibilità di raffreddamento a circolazione d'acqua in ambienti ad alta temperatura.

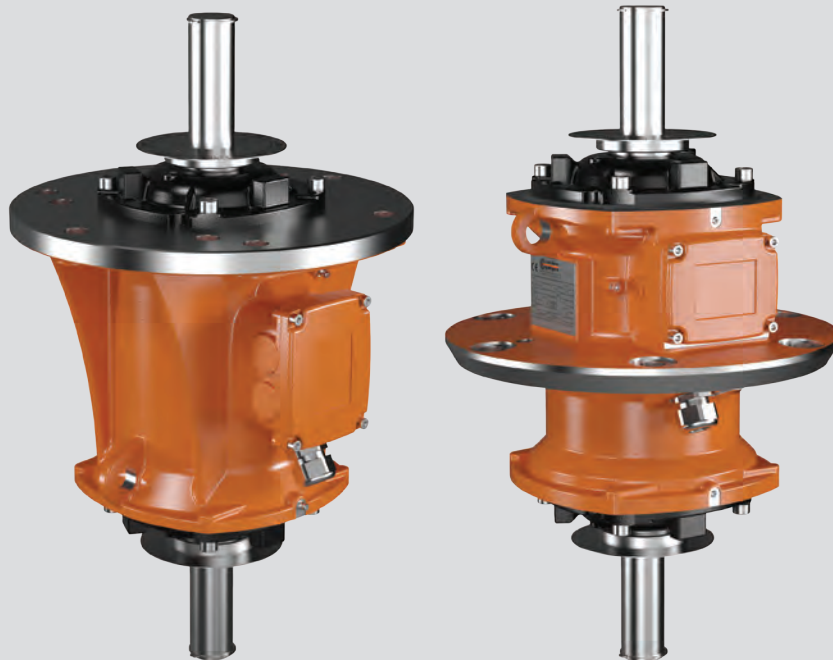


DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	Holes											Filettatura Pressacavo (non fornito)
								E	F	G	I	L	M	ØP	ØS	S	R	K	
<b>MTF 10/5150-S02-ACC</b>	<b>G2</b>	865	400	280	<b>355</b>	<b>22</b>	<b>6</b>	215	172 (50Hz) 120 (60Hz)	23	248	304	402	302	40	54	-	12x8x20	M32x1,5
<b>MTF 10/6600-S02-ACC</b>	<b>G2</b>	815	610	360	<b>520</b>	<b>32</b>	<b>8</b>	215	104 (50Hz) 73 (60Hz)	34	174	387	426	400	50	80	-	14x9x60	M32x1,5
<b>MTF 10/10000-S02-ACC</b>	<b>G2</b>	970	610	360	<b>520</b>	<b>32</b>	<b>8</b>	215	147 (50Hz) 96 (60Hz)	34	255	387	500	400	50	75	-	14x9x60	M32x1,5
<b>MTF 10/11200-S02-ACC</b>	<b>G2</b>	970	610	360	<b>520</b>	<b>32</b>	<b>8</b>	215	172 (50Hz) 122 (60Hz)	34	255	387	500	400	50	75	-	14x9x60	M32x1,5
<b>MTF 10/12000-S09-RF-ACC</b>	<b>G2</b>	1095	610	444	<b>560</b>	<b>25</b>	<b>16</b>	280	107 (50Hz) 95 (60Hz)	40	200	486	615	445	65	140	-	20x12x90	M32x1,5
<b>MTF 10/13000-S02-ACC</b>	<b>G2</b>	1060	610	355	<b>520</b>	<b>32</b>	<b>8</b>	215	210 (50Hz) 162 (60Hz)	34	300	387	545	400	50	75	-	14x9x60	M32x1,5
<b>MTF 10/15000-S09-RF-ACC</b>	<b>G2</b>	1133	610	444 (50Hz) 420 (60Hz)	<b>560</b>	<b>25</b>	<b>16</b>	280	116 (50Hz) 95 (60Hz)	40	200	486	653	445	80	193	11	22x14x50	M32x1,5
<b>MTF 10/17500-S09-RF-ACC</b>	<b>G2</b>	1179	610	444 (50Hz) 420 (60Hz)	<b>560</b>	<b>25</b>	<b>16</b>	280	142 (50Hz) 114 (60Hz)	40	240	486	659	445	80	169	11	22x14x70	M32x1,5
<b>MTF 10/19500-S09-RF-ACC</b>	<b>G2</b>	1219	610	444	<b>560</b>	<b>25</b>	<b>16</b>	280	168 (50Hz) 106 (60Hz)	40	280	486	659	445	80	169	11	22x14x70	M32x1,5

Ia/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

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

### Centrifugal force

Range extended up to 7000 kgf. (68.7 kN), with centrifugal force adjustable from 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 -20°C a +40°C. Versions for higher or lower temperatures are available on request.

### Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C 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 centric 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 envisioned in the MVB and MVB-FLC series.

#### Painting

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

**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.AJ133.B.02527  
N° TC RU C-IT.ГБ08.B.02190



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

# MVB / MVB-FLC



## MVB 4 poles - 1.500/1.800 rpm

### Three-phase

DESCRIPTION							MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	Ex	II2D Temp. class	Available versions	Centrifugal force				Weight kg	Max input power		Max current		Ia/In	
						kg	60Hz	50Hz	60Hz		W	W	A	A	50Hz	60Hz
601226	MVB 1510/15*	50	•	150°C	B, C, D	1500	1500	14,7	14,7	41,5	1100	1200	2,10	2,00	3,76	4,50
601628	MVB 2510/15*	60	•	/	B, C, D	2700	2700	26,4	26,4	63,0	2150	2700	3,90	4,10	5,60	5,81
601130	MVB 4500/15	80	•	/	A, B, C, D	4500	4500	44,1	44,1	106	4000	4200	6,70	5,80	4,48	4,18
601131	MVB 7000/15	90	•	/	A, B, C, D	7000	7000	68,7	68,7	160	7000	7000	11,8	10,2	6,19	6,73

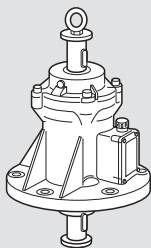
## MVB-FLC 4 poles - 1.500/1.800 rpm

DESCRIPTION							MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	Ex	II2D Temp. class	Available versions	Centrifugal force				Weight kg	Max input power		Max current		Ia/In	
						kg	60Hz	50Hz	60Hz		W	W	A	A	50Hz	60Hz
601225	MVB 1510/15-FLC*	50	•	150°C	B, C, D	1500	1500	14,7	14,7	54,5	1100	1200	2,10	2,00	3,76	4,50
601629	MVB 2510/15-FLC*	60	•	/	B, C, D	2700	2700	26,4	26,4	63,0	2150	2700	3,90	4,10	5,60	5,81
601135	MVB 4500/15-FLC	80	•	/	A, B, C, D	4500	4500	44,1	44,1	106	4000	4200	6,70	5,80	4,48	4,18
601136	MVB 7000/15-FLC	90	•	/	A, B, C, D	7000	7000	68,7	68,7	160	7000	7000	11,8	10,2	6,19	6,73

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

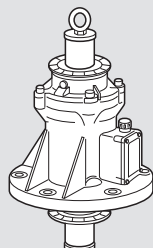
### Versions

Version A



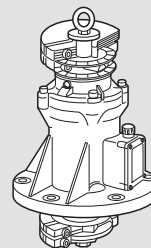
Basic model.

Version B



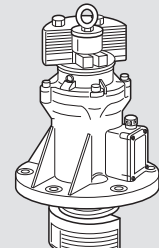
Basic model with angle disc.

Version C



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

Version D



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

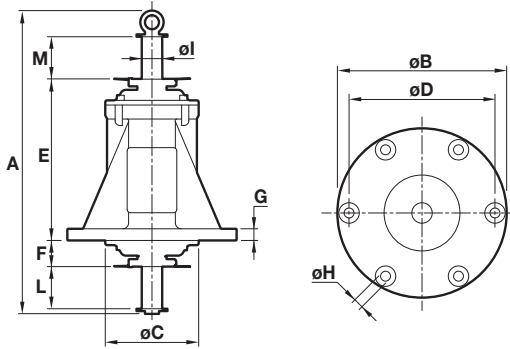


Fig. I

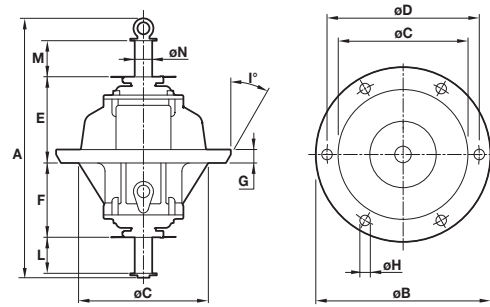


Fig. L

DIMENSIONAL SPECIFICATIONS (mm)

Holes

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	ØI	L	M	Cable entry thread
MVB 1510/15	I	476	290	171	250	17	6	278	46	20	35	71	71	M25x1,5
MVB 2510/15	I	587	350	198	305	21	6	314	51	25	40	106	106	M25x1,5
MVB 4500/15	I	664	400	240	355	23,5	6	340	70	30	52	75	75	M25x1,5
MVB 7000/15	I	737	508	314	438	25	8	387	87	34	52	79	79	M25x1,5

DIMENSIONAL SPECIFICATIONS (mm)

Holes

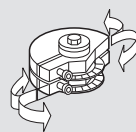
Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I°	L	M	ØN	Cable entry thread
MVB 1510/15-FLC	L	476	350	260	305	21	6	174	150	27	30	71	71	35	M25x1,5
MVB 2510/15-FLC	L	587	350	260	305	21	6	198	168	22	30	106	106	40	M25x1,5
MVB 4500/15-FLC	L	664	400	310	355	23,5	6	220	190	30	15	75	75	52	M25x1,5
MVB 7000/15-FLC	L	737	508	348	438	25	8	253	222	32,5	30	79	79	52	M25x1,5

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

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

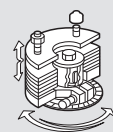
**Weight adjustment:** the weights at the two ends of the shaft can be staggered as required, with reference to the graduated discs on the shaft itself.

Type "C"



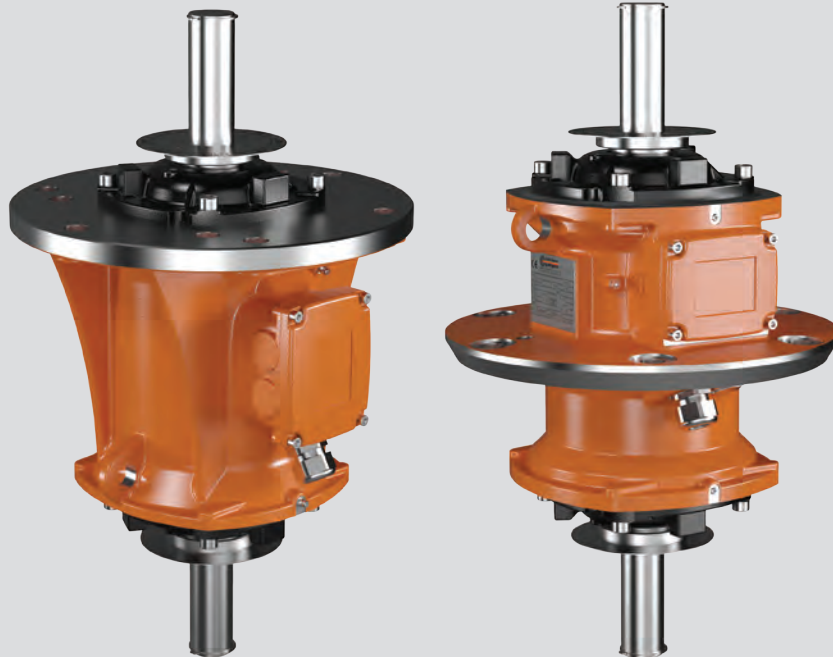
Infinitely adjustable centrifugal force

Type "D"



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

# ■ MVB-E / MVB-E-FLC



## 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.

### Controls

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

### Functioning

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

### Centrifugal force

1500 Kgf. (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 -20°C to +40°C, on request it is possible to have vibrators for max. ambient temperature +55°C.

### Vibrator thermal protection

On demand with PTC rated thermistor heat detectors 130°C. Also on request thermistors with different temperatures and anti-condensation heaters.

### Fixing of the vibrator

In all positions and therefore without restriction.

### Lubrication

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

### 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 Italvibras, suitable to support both high radial and axial loads.

### Motor shaft

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

### Eccentric weights

The weights are not provided in the delivery and must be ordered separately (ask Italvibras sales office). Lamellar for clamped centric weigh 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 o T4 (135°C)

Polveri: 150°C

**Zones of use:**

1, 2, 21, 22

#### Weight covers

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

#### Painting

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

**For further details please contact sales offices at 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 / MVB-E-FLC



## MVB-E 4 poles - 1.500/1.800 rpm

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS										
Code	Type	SIZE	Available versions	Centrifugal force				Weight kg	Temp. class (G)	Temp. class (D)	Max input power W		Power rating W		Max. current A		tE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz				50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz		
6E1226	MVB 1510/15-E*	50	B, C, D	1500	1500	14,7	14,7	41,5	T3	150°C	1100	1150	730	800	1,90	1,82	9	4,95
									T4		630	700	480	530	1,33	1,27	5,5	7,00

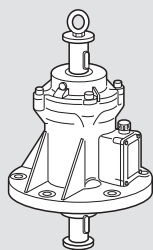
## MVB-E-FLC 4 poles - 1.500/1.800 rpm

DESCRIPTION				MECHANICAL SPECIFICATIONS				ELECTRICAL SPECIFICATIONS										
Code	Type	SIZE	Available versions	Centrifugal force				Weight kg	Temp. class (G)	Temp. class (D)	Max input power W		Power rating W		Max. current A		tE (s)	Ia/In
				50Hz	60Hz	50Hz	60Hz				50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz		
6E1225	MVB 1510/15-E-FLC*	50	B, C, D	1500	1500	14,7	14,7	41,5	T3	150°C	1100	1150	730	800	1,90	1,82	9	4,95
									T4		630	700	480	530	1,33	1,27	5,5	7,00

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

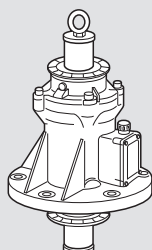
### Versions

Version A



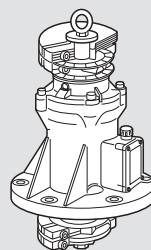
Basic model.

Version B



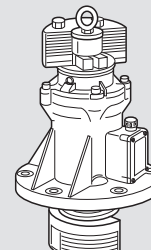
Basic model with angle disc.

Version C



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

Version D



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

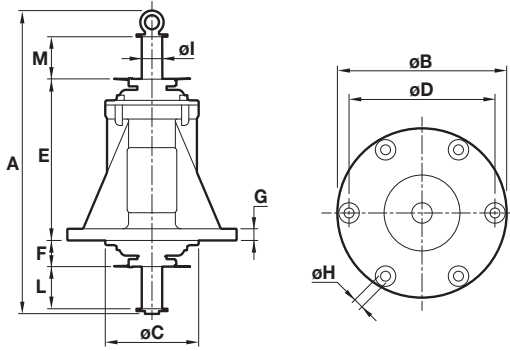


Fig. I

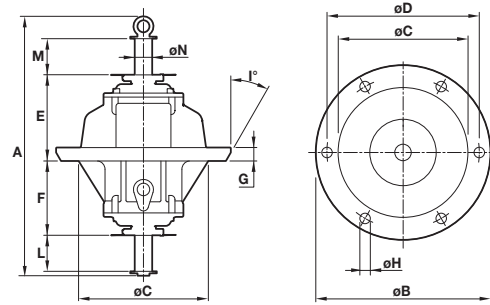


Fig. L

DIMENSIONAL SPECIFICATIONS (mm)

Holes

Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I°	L	M	ØN	Pressacavo
MVB 1510/15-E*	I	476	290	171	250	17	6	278	46	20	35	71	71		M25x1,5

DIMENSIONAL SPECIFICATIONS (mm)

Holes

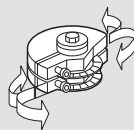
Type	Fig.	A	ØB	ØC	ØD	ØH	N°	E	F	G	I°	L	M	ØN	Pressacavo
MVB 1510/15-E-FLC*	L	476	350	260	305	21	6	174	150	27	30	71	71	35	M25x1,5

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

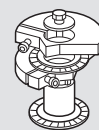
Each C type weight group (in twos) is adjustable by phase shifting one in respect to the other. Each D type weight group (lamellars) is adjustable by removing one or more lamellar elements.

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

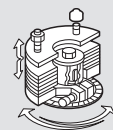
Type "C"



Infinitely adjustable centrifugal force



Type "D"



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



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**

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**

Proportioned for a centrifugal force equal to 5000 kgf. (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 -20°C to +40°C. Versions for higher or lower temperatures are available on request.

**Vibrator thermal protection**

Standard PTC rated thermistor heat detectors 130°C for VB 15/5000-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	CE	II2D Temp. class	rpm				Centrifugal force				Weight kg	Max input power		Max current		Ia/In	
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	kg	W		W	A	A	50Hz	60Hz	
601650	VB 15/2200-D	-	-	1500	1800	2200	2200	21,6	21,6	66,0	1540	1900	2,60	3,00	3,84	4,00		
601223	VB 15/2510-D	•	150°C	1500	1800	2500	2500	24,5	24,5	68,0	2016	2600	3,60	4,10	3,50	3,58		
601651	VB 15/3000-D	-	-	1500	1800	3000	3000	29,5	29,5	78,0	2800	3000	5,90	6,00	6,78	7,00		
601378	VB 15/5000-LM	-	135°C	1500	1800	5000	5000	49,0	49,0	101	3600	3400	6,00	5,00	7,02	8,00		

## 6 poles - 1.000/1.200 rpm Three-phase

602171	VB 10/2510-D	•	150°C	-	1200	-	2500	-	24,5	68,0	-	2100	-	3,22	-	3,27
602056	VB 10/5500-D	-	-	-	1200	-	5500	-	54,0	110	-	4600	-	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



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

### Motor shaft

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

### Eccentric weights

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

### Weight covers

Not envisioned.

### Painting

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

### For further details please contact sales

offices at Italtvibras.

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

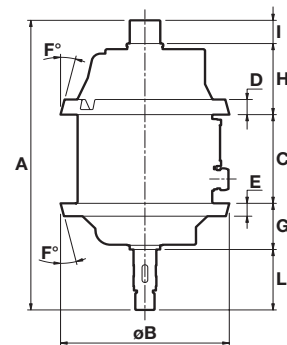


Fig. H

### DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	ØB	C	D	E	F°	G	H	I	L	Cable entry thread
VB 15/2200-D	H	517,5	281	158,5	27	23	14	82,5	127	41,5	108	M32x1,5
VB 15/2510-D	H	517,5	281	158,5	27	23	14	82,5	127	41,5	108	M32x1,5
VB 15/3000-D	H	523	282,5	152	25	25	14	113	129,5	38,0	90,5	M25x1,5
VB 15/5000-LM	H	555	342	208	48	48	25	110	119	48,0	70	M25x1,5

VB 10/2510-D	H	517,5	281	158,5	27	23	14	82,5	127	41,5	108	M32x1,5
VB 10/5500-D	H	607	282,5	216	25	25	14	119	143,5	38,0	90,5	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.

### Controls

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

### Functioning

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

### Centrifugal force

Range extended up to 5000 kgf (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 -20°C to +40°C, on request it is possible to have vibrators for maximum ambient temperatures of +55°C.

### Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C for VB 15/5000E-LM, on request for smaller sizes.

Also 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	Poles	rpm		Centrifugal force				Weight kg	Temp. class (G)	Temp. class (D)	Max input power W		Power rating W		Max. current A		tE (s)	Ia/In
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz				50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz		
6E1223	VB 15/2510-D-E	4	1500	1800	2500	2500	24,5	24,5	68,0	T3	150°C	1700	1800	1390	1480	2,85	2,80	7	6,70
																1220	1350	1030	1100
6E1378	VB 15/5000E-LM	4	1500	1800	5000	5000	49,0	49,0	101	T3	135°C	3200	3500	2560	2800	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:

si veda tabella

### 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.B.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 envisioned, to be made and mounted by the user.

### Weight covers

Not envisioned.

### Painting

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

**For further details please contact sales offices at Italvibras.**

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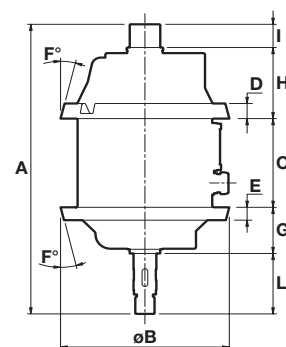


Fig. H

## DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	ØB	C	D	E	F°	G	H	I	L	Cable entry thread
VB 15/2510-D-E	H	517,5	281	158,5	27	23	14	82,5	127	41,5	108	M32x1,5
VB 15/5000E-LM	H	555	342	208	48	48	25	110	119	48	70	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 4294 to 73440 kgmm 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 580 kN by pair of VR exciters.

### Ambient temperature

From -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 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.

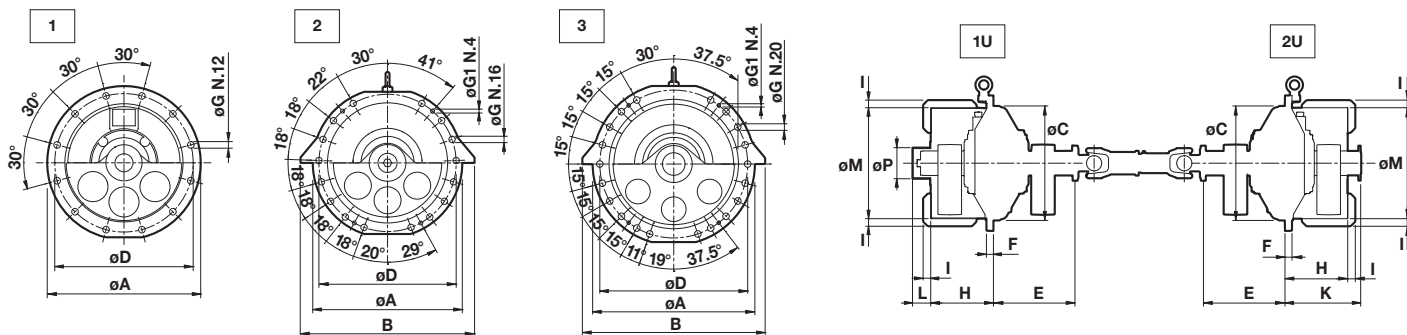
**Different fixing distances can be available.**

**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.**

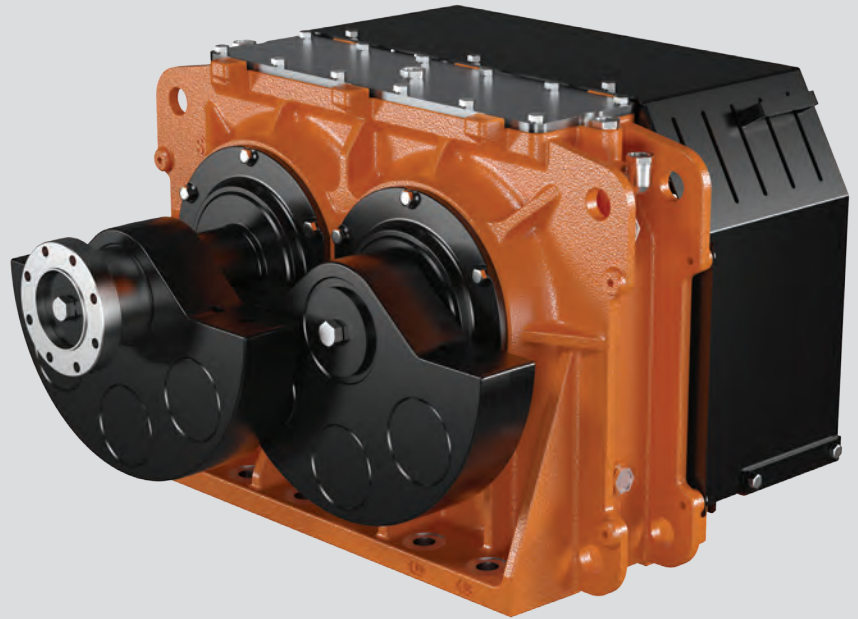
DESCRIPTION				SPECIFICATIONS						
Code	Execution	Type	SIZE	Weights Setting	Static moment kgmm	Max RPM	Centrifugal force		Weight kg	Drive Motor Rating kW
							kg	kN		
0605043	1U	<b>VR 5000/6-S08</b>	280	Min	4294	1500	<b>10800</b>	<b>106</b>	143+143	5,5
0605044	2U			Max	9693	1000	<b>10837</b>	<b>106</b>	171+171	
0605048	1U	<b>VR 8000/6-S08</b>	297	Min	8225	1600	<b>23525</b>	<b>231</b>	238+238	11
0605049	2U			Max	15545	1213	<b>25560</b>	<b>251</b>	271+271	
0605046	1U	<b>VR 10000/6-S08</b>	297	Min	10410	1444	<b>24260</b>	<b>238</b>	255+255	11
0605047	2U			Max	19700	1094	<b>26360</b>	<b>259</b>	296+296	
0605050	1U	<b>VR 11500/6-S08</b>	297	Min	12065	1354	<b>24730</b>	<b>243</b>	270+270	15
0605051	2U			Max	22875	1000	<b>25580</b>	<b>251</b>	318+318	
0605052	1U	<b>VR 14000/6-S08</b>	310	Min	17715	1334	<b>35220</b>	<b>346</b>	374+374	15
0605053	2U			Max	28045	1092	<b>37400</b>	<b>367</b>	415+415	
0605054	1U	<b>VR 17500/6-S08</b>	310	Min	18685	1303	<b>35470</b>	<b>348</b>	382+382	18,5
0605055	2U			Max	35175	1000	<b>39300</b>	<b>386</b>	450+450	
0605056	1U	<b>VR 19000/8-S08</b>	310	Min	20375	1255	<b>35870</b>	<b>352</b>	393+393	15 (8 poli)
0605057	2U			Max	38040	957	<b>38940</b>	<b>382</b>	465+465	
0605058	1U	<b>VR 27500/6-S08</b>	320	Min	39570	1074	<b>51030</b>	<b>501</b>	632+632	30
0605059	2U			Max	55155	980	<b>59200</b>	<b>581</b>	680+680	
0605060	1U	<b>VR 37000/8-S08</b>	320	Min	43580	1030	<b>51680</b>	<b>507</b>	659+659	30 (8 poli)
0605061	2U			Max	73440	820	<b>55200</b>	<b>542</b>	750+750	

\* Working moment = 2 x static moment.



DIMENSIONAL SPECIFICATIONS (mm)

Type	Ref.	Fixing						E	F	H	I	K	L	$\phi M$	$\phi P$
		$\phi A$	B	$\phi C$	$\phi D$	$\phi G$	$\phi G1$								
VR 5000/6-S08	1	510	-	400	460	22	-	273	25	202	33	252	67	415	97
VR 8000/6-S08	2	610	710	490	560	26	16	329	30	248	33	305	78	473	133
VR 10000/6-S08	2	610	710	490	560	26	16	349	30	268	33	324	78	473	133
VR 11500/6-S08	2	610	710	490	560	26	16	364	30	286	33	339	78	473	133
VR 14000/6-S08	2	610	710	490	560	26	16	415	30	330	33	390	81	508	140
VR 17500/6-S08	2	610	710	490	560	26	16	415	30	330	33	390	81	508	140
VR 19000/8-S08	2	610	710	490	560	26	16	415	30	330	33	390	81	508	140
VR 27500/6-S08	3	790	890	630	720	32	16	464	35	366	33	432	83	620	163
VR 37000/8-S08	3	790	890	630	720	32	16	464	35	366	33	432	83	620	163



## 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 3140 to 119525 kgmm. The static moment of eccentric weights can be adjusted by means of the additional weights.

### Centrifugal Force

Up to 453 kN.

### Ambient temperature

From -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 Italtibras 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.

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

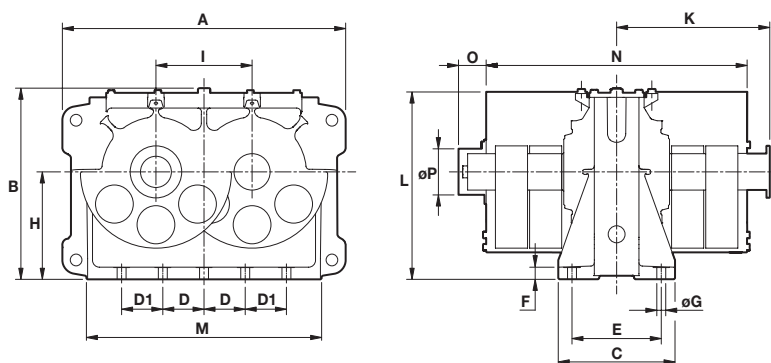
**Other mounting bolt patterns are available. For further details please contact sales offices at Italtibras.**

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DESCRIPTION			SPECIFICATIONS						
Code	Type	SIZE	Weights Setting	Static moment kgmm	Max RPM	Centrifugal force kN	Weight kg	Drive Motor Rating	
								1 VU	2 VU
0605033	VU 5000/6-S08	270	Min	3140	1475	<b>74,9</b>	240	3	7,5
			Max	5435	1163	<b>80,5</b>	265		
0605021	VU 8000/6-S08	280	Min	4130	1534	<b>107</b>	298	5,5	11
			Max	8065	1098	<b>107</b>	340		
0605020	VU 10000/6-S08	280	Min	4294	1500	<b>106</b>	301	5,5	11
			Max	9693	1000	<b>106</b>	357		
0605022	VU 14000/6-S08	295	Min	7642	1460	<b>179</b>	430	7,5	15
			Max	13955	1080	<b>179</b>	490		
0605032	VU 16000/6-S08	295	Min	7963	1430	<b>179</b>	433	11	18,5
			Max	15950	1000	<b>175</b>	509		
0605023	VU 18000/6-S08	297	Min	8225	1600	<b>231</b>	563	11	18,5
			Max	17980	1138	<b>256</b>	649		
0605025	VU 23000/6-S08	297	Min	10410	1500	<b>257</b>	631	15	30
			Max	22885	1000	<b>252</b>	741		
0605024	VU 27000/8-S08	297	Min	12065	1323	<b>231</b>	629	11	22
			Max	26635	890	<b>231</b>	758		
0605026	VU 33000/6-S08	310	Min	17650	1335	<b>345</b>	895	18,5	37
			Max	32583	1000	<b>357</b>	1005		
0605028	VU 38000/6-S08	310	Min	20448	1262	<b>357</b>	949	18,5	37
			Max	37881	927	<b>357</b>	1078		
0605027	VU 42000/8-S08	310	Min	20060	1200	<b>317</b>	949	18,5	37
			Max	42060	828	<b>317</b>	1116		
0605034	VU 60000/8-S08	320	Min	39570	1000	<b>434</b>	1451	30	55
			Max	60560	815	<b>442</b>	1580		
0605029	VU 74000/8-S08	320	Min	43580	1000	<b>478</b>	1520	30	75
			Max	73440	770	<b>478</b>	1703		
0605041	VU 103000/8-S08	360	Min	58862	1000	<b>646</b>	2268	45	90
			Max	102955	750	<b>635</b>	2486		
0605042	VU 120000/8-S08	360	Min	65940	980	<b>695</b>	2365	55	110
			Max	119525	740	<b>718</b>	2630		

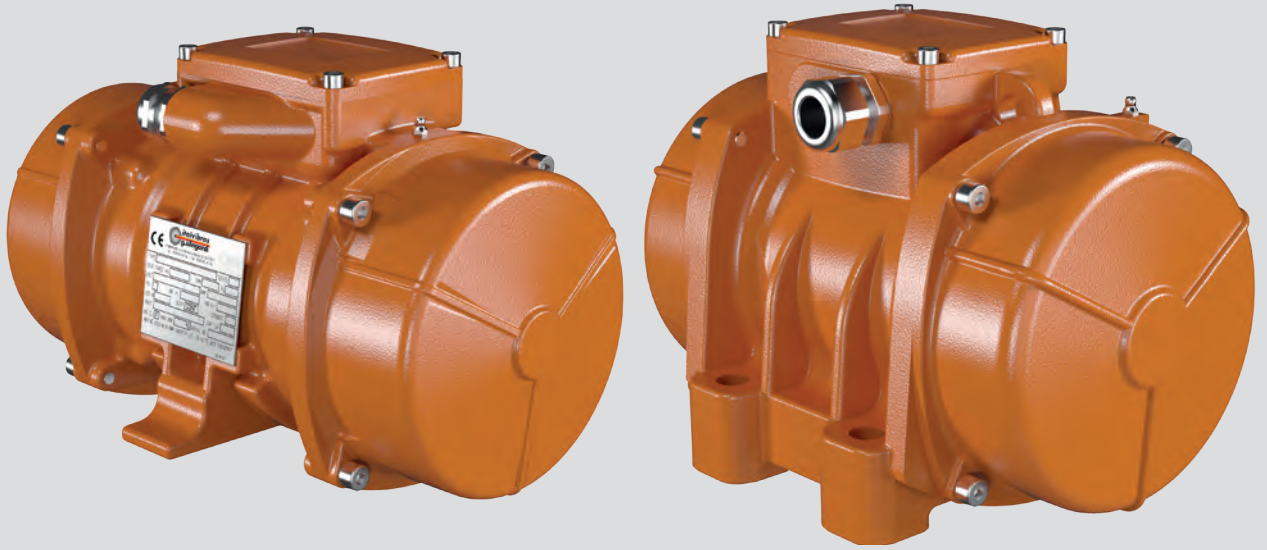




DIMENSIONAL SPECIFICATIONS (mm)

Type	A	B	C	D	D1	E	ØG	N°	F	H	I	K	L	M	N	O	ØP
VU 5000/6-S08	655	410	250	1x190	2x110	165	22	8xM20	25	225	210	320,5	407,5	545	530	69,5	97
VU 8000/6-S08	700	453,5	260	1x190	2x110	165	22	8xM20	30	240	232	330,5	442,5	575	555	69,5	97
VU 10000/6-S08	700	453,5	260	1x190	2x110	165	22	8xM20	30	240	232	331,5	442,5	575	555	69,5	97
VU 14000/6-S08	760	508,5	270	1x220	2x110	190	26	8xM24	30	280	256	389	497,5	640	670	69,5	107
VU 16000/6-S08	760	508,5	270	1x220	2x110	190	26	8xM24	30	280	256	389	497,5	640	670	69,5	107
VU 18000/6-S08	825	551,5	340	4x120	-	260	26	10xM24	35	310	280	407	540,5	685	685	80,5	133
VU 23000/6-S08	825	551,5	340	4x120	-	260	26	10xM24	35	310	280	446	540,5	685	760	80,5	133
VU 27000/8-S08	825	551,5	340	4x120	-	260	26	10xM24	35	310	280	476	540,5	685	820	80,5	133
VU 33000/6-S08	925	629	380	5x120	-	300	32	12xM30	35	350	320	476,5	618	770	815	83	143
VU 38000/6-S08	925	629	380	5x120	-	300	32	12xM30	35	350	320	510,5	618	770	885	83	143
VU 42000/8-S08	925	629	380	5x120	-	300	32	12xM30	35	350	320	524,5	618	770	915	83	143
VU 60000/8-S08	1070	708	470	4x120	2x150	390	32	14xM30	35	390	370	499	698,5	920	970	30	208
VU 74000/8-S08	1070	708	470	4x120	2x150	390	32	14xM30	35	390	370	592	698,5	920	1045	85	161
VU 103000/8-S08	1280	830	500	1x280	4x160	410	39	12xM36	45	460	440	629,5	821	1135	1075	115,5	200
VU 120000/8-S08	1280	830	500	1x280	4x160	410	39	12xM36	45	460	440	661,5	821	1135	1140	115,5	200

# ■ 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 5300 kgf (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 -20°C to +40°C.

### Vibrator thermal protection

With PTC rated thermistor heat detectors 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 spherical 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 Italvibras 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 2800 Kgf (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 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.**

**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



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

# ITV-VR / ITVAF



## ITV-VR fixed connection

### Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE		Plage vibrat. (vibr./min)	Centrifugal force		Weight	Max input power		Max. current (A) 100Hz		la/In
					kg	kN	kg	W	42V	400V		
600500	ITV-VR/1210-S08	AF33	•	0-6000	1569	15,4	23	1200	21,0	2,30	4,48	
600247	ITV-VR/2010	AF33	•	0-6000	2000	19,6	27	1700	27,0	2,90	5,00	
600248	ITV-VR/2510	AF50	-	0-6000	2500	24,5	42	2200	35,0	3,90	6,15	
600249	ITV-VR/2510-V*	AF50	-	4500-6000	2500	24,5	42	2200	35,0	3,90	6,15	
600208	ITV-VR/3300*	AF68	-	4500-6000	3300	32,3	74	4000	-	7,20	5,10	
600514	ITV-VR/5000-S02	AF70	-	0-4500	5300	52,0	105	5000	-	8,00	5,30	

## ITV-VR RS cradle connection

Code	Type	SIZE		Plage vibrat. (vibr./min)	Centrifugal force		Weight	Max input power		Max. current (A) 100Hz		la/In
					kg	kN	kg	W	42V	400V		
600508	ITV-VR/1210-RS-S08	AF33	•	0-6000	1569	15,4	21	1200	21	2,3	4,48	
600245	ITV-VR/2010-RS	AF33	•	0-6000	2000	19,6	28	1700	27	2,9	5,00	

\* Special ventilated type for heavy service.

## ITVAF fixed connection

### Three-phase

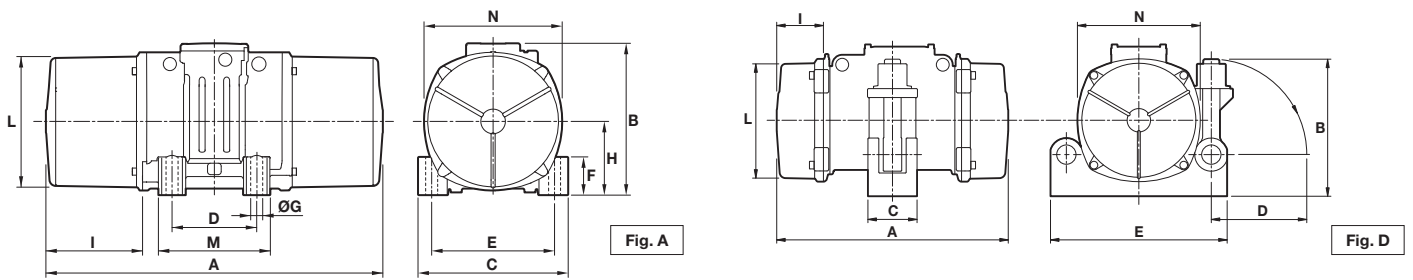
DESCRIPTION				MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS							
Code	Type	SIZE		Plage vibrat. (vibr./min)	Centrifugal force		Weight	Max input power		Max. current (A)			la/In	
					kg	kN	kg	W	200Hz	150Hz	100Hz			
									42V	250V	42V	250V	400V	
603050	ITVAF 6/600-S02	AF10	-	6000	610	5,98	8	500	9,50	1,60	-	-	1,60	4,50
603053	ITVAF 6/1220-S08	AF33	-	6000	1095	10,7	23	1200	23,0	3,85	-	-	3,90	6,04
603054	ITVAF 6/1510-S08	AF33	-	6000	1484	14,6	25	1700	29,0	4,90	-	-	4,80	7,10
603037	ITVAF 6/2010-S90	AF50	-	6000	1978	19,4	41	2000	35,0	5,90	-	-	5,90	8,00
603010	ITVAF 6/3300 o	AF68	-	6000	2800	27,5	74	4000	-	-	-	-	11,0	5,10
604041	ITVAF 9/1110-S08	AF33	-	9000	1230	12,0	22	1150	-	-	18	-	1,85	8,52
604042	ITVAF 9/1510-S08	AF33	-	9000	1484	14,6	24	1600	-	-	24	4,0	2,50	10,40

## ITVAF RS cradle connection

Code	Type	SIZE		Plage vibrat. (vibr./min)	Centrifugal force		Weight	Max input power		Max. current (A)			la/In	
					kg	kN	kg	W	200Hz	150Hz	100Hz			
									42V	250V	42V	250V	400V	
603055	ITVAF 6/1220-RS-S08	AF33	-	6000	1095	10,7	21	1200	23	3,85	-	-	3,9	6,04
603056	ITVAF 6/1510-RS-S08	AF33	-	6000	1484	14,6	23	1700	29	4,90	-	-	4,8	7,10
604043	ITVAF 9/1110-RS-S08	AF33	-	9000	1230	12,0	20	1150	-	-	18	-	1,85	8,52
604044	ITVAF 9/1510-RS-S08	AF33	-	9000	1484	14,6	22	1600	-	-	24	4,0	2,50	10,40

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

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



DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N
							ØG	N°						
ITV-VR/1210-S08	A	289	217	215	100	180	17	4	47	93,5	63	170	145	182
ITV-VR/2010	A	375	217	215	100	180	17	4	47	93,5	106	170	145	182
ITV-VR/2510	A	458	232	230	140	190	17	4	49	104	101,5	183	180	200
ITV-VR/2510-V*	A	467	232	230	140	190	17	4	49	104	106	240	180	248
ITV-VR/3300*	A	528	267	310	155	255	23,5	4	122	115	140	265	215	275
ITV-VR/5000-S02	A	560	290	310	155	255	25	4	90	130	137	238	210	253

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N
							ØG	N°						
ITV-VR/1210-RS-S08	D	289	189	83	140	240	-	-	-	-	63	170	-	182
ITV-VR/2010-RS	D	355	189	83	140	240	-	-	-	-	81,5	164	-	-

CARATTERISTICHE DIMENSIONALI (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N
							ØG	N°						
ITVAF 6/600-S02	A	255	179	152	90	125	13	4	28	73	54	124	128	141
ITVAF 6/1220-S08	A	289	216,5	215	100	180	17	4	47	93,5	63	170	145	182
ITVAF 6/1510-S08	A	375	216,5	215	100	180	17	4	47	93,5	106	170	145	182
ITVAF 6/2010-S90 ◦	A	458	232	230	140	190	17	4	49	104	101,5	183	180	200
ITVAF 6/3300 ◦	A	528	267	310	155	255	23,5	4	122	115	140	265	215	275
ITVAF 9/1110-S08	A	289	216,5	215	100	180	17	4	47	93,5	63	170	145	182
ITVAF 9/1510-S08	A	375	216,5	215	100	180	17	4	47	93,5	106	170	145	182

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N
							ØG	N°						
ITVAF 6/1220-RS-S08	D	289	189	83	140	240	-	-	-	-	63	170	-	182
ITVAF 6/1510-RS-S08	D	375	189	83	140	240	-	-	-	-	106	170	-	182
ITVAF 9/1110-RS-S08	D	289	189	83	140	240	-	-	-	-	63	170	-	182
ITVAF 9/1510-RS-S08	D	375	189	83	140	240	-	-	-	-	106	170	-	182

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