



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).

The MVSI series has been conceived to guarantee higher performance in all conditions and environments and complies with the most recent IEC and EN international standards for use in atmospheres with potentially explosive powders. In particular, the MVSI series can be used in areas 21 and 22

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); sui-table 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 European Directives

Low voltage 2006/95/EC; ATEX 94/9/EC.

Reference Regulations

EN 60034-1, IEC/EN 61241-0, IEC/EN 61241-1.

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 from 0 to 100%.

Mechanical protection

IP 66 according to IEC 529, EN 60529

Protection against mechanical impacts

IK 08 according to IEC 68, EN 50102.

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 (DIN 44081-44082) 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 if used in normal operating condition ("FOR LIFE" lubrication). In heavy duty operating conditions periodical re-lubrication may be applied to size 35 and larger.

Terminal box

Large fixed electrical connections. 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 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 high-tensile aluminium alloy up to size 60, in spheroidal cast iron for larger sizes. Patented shape that improves heat dispersion and lowers normal working temperature at full load.

Bearing flange

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

Bearings

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

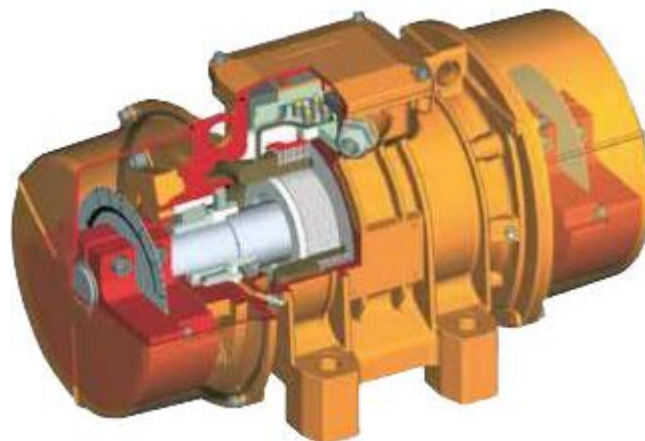
Category: II 2 D

Level of protection: tD A21 IP66

Temperature class: see tab. page 8-15

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 (patent N° MO98A000194), called ARS, prevents adjustment errors.

Weight covers

In aluminium alloy. On several sizes split covers are available, please refer to section MVSI-TS on page 16. On request stainless steel AISI 304 weight covers can be supplied.

Painting

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

Stainless steel protection

On request, corrosion high grade protection (stainless steel AISI 316L micro suspensions in a polyurethanic paint) is available.

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

Certifications



Regulation CAN/CSA - C22.2 N. 100-95, file n° LR100948 Class 4211 01 – Motors and generators.



Mechanical protection IP66 (EN 60529), protection against impacts IK 08 (EN 50102)



II 2 D, tD A21 IP66 IEC/EN 61241-0, IEC/EN 61241-1 Certificate n. LCIE 05 ATEX 6163X



Certificate GOST-R n° POCC IT.AB.72.B03026, standards GOST R 51330.0-99, GOST R 51330.8-99, GOST R IEC 61241-1-1-99



Certificate of Conformity n° IECEx CES 09.0001X standards IEC 61241-0, IEC 61241-1



Comply with the applicable European Union directives



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



Upon request available version MVSI-C Class I, Div. 2, Groups ABCD standards CAN/CSA-C22.2



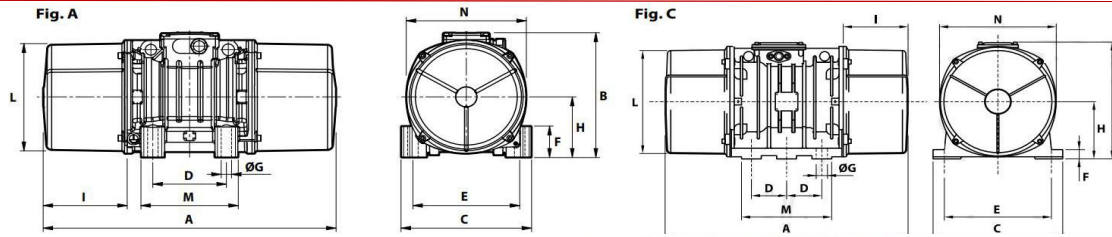
Upon request available version MVSI-F Class II, Div. 1, Groups EFG standards CAN C22.2, UL 1004-01



6 poles – 1000/1200 rpm

	Description					Mechanical specifications								Electrical specifications			
	Code	Type	SIZE	Ex	II2D Temp. class	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A	
						50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	400 V 50 Hz	460 V 60 Hz
three-phase	602296	MVSI 10/40-S02	10	•	120°C	30.1	30.1	35.0	49.0	0.331	0.476	9.70	9.70	120	135	0.30	0.30
	602297	MVSI 10/100-S02	10	•	120°C	84.2	84.2	94.3	136	0.925	1.33	12.5	12.5	120	135	0.30	0.30
	602298	MVSI 10/200-S02	20	•	120°C	163	163	183	264	1.80	2.59	19.0	19.0	185	205	0.50	0.50
	602314	MVSI 10/310-S02	30	•	120°C	286	209	321	338	3.15	3.32	27.5	26.2	350	380	0.72	0.68
	602402	MVSI 10/550-S02	35	•	120°C	457	457	512	737	5.02	7.23	36.5	36.5	350	380	0.75	0.68
	602403	MVSI 10/650-S02	35	•	120°C	580	457	650	737	6.37	7.23	41.0	36.5	350	380	0.75	0.68
	602380	MVSI 10/810-S08	40	•	135°C	723	561	809	905	7.94	8.88	48.0	44.0	680	760	1.40	1.35
	602381	MVSI 10/1110-S08	50	•	135°C	1012	715	1132	1151	11.1	11.3	58.0	51.0	750	750	1.65	1.50
	602382	MVSI 10/1400-S08	50	•	170°C	1274	921	1424	1483	14.0	14.5	66.0	59.5	950	1000	1.80	1.70
	602406	MVSI 10/1610-S08	60	•	135°C	1464	962	1638	1549	16.1	15.2	83.0	71.0	1100	1300	2.20	2.20
	602407	MVSI 10/2100-S08	60	•	200°C	1927	1318	2154	2102	21.1	20.6	93.0	82.0	1500	1770	3.00	2.75
	602167	MVSI 10/2610-S02	70	•	135°C	2326	1720	2601	2747	25.5	26.9	130	116	1960	2100	4.10	3.75
	602230	MVSI 10/3000-S02	70	•	135°C	2690	1940	3007	3124	29.5	30.6	145	130	2200	2400	4.50	4.30
	602154	MVSI 10/3810-S02	80	•	135°C	3422	2380	3826	3831	37.5	37.6	188	170	2500	3000	5.10	5.00
	602204	MVSI 10/4700-S02	80	•	135°C	4206	2887	4701	4648	46.1	46.0	204	183	3200	3600	6.50	6.00
	602350	MVSI 10/5150-S02	80	•	135°C	4678	3230	5230	5200	51.3	51.0	225	200	3200	3600	6.50	6.00
	602138	MVSI 10/5200-S02	90	•	135°C	4658	3288	5208	5293	51.1	51.9	228	205	3800	4000	7.00	6.50
	602351	MVSI 10/5700-S02	90	•	135°C	5044	3490	5650	5620	55.4	55.1	230	210	3800	4000	7.00	6.50
	602091	MVSI 10/6500-S02	90	•	135°C	5838	4055	6527	6529	64.0	64.0	258	248	4300	5000	8.20	8.10
	602136	MVSI 10/6600-S02	97	•	135°C	6083	3979	6799	6405	66.7	62.8	285	257	5000	5900	10.0	9.80
	602352	MVSI 10/7000-S02	90	•	135°C	6272	4348	7013	7000	68.8	68.7	265	253	4300	5000	8.20	8.10
	602092	MVSI 10/8000-S90	95	□	135°C	7197	4967	8046	7996	78.9	78.4	315	277	7000	7500	12.6	11.3
	602093	MVSI 10/9000-S90	95	□	135°C	7752	5385	8666	8669	85.0	85.0	326	289	7500	8200	14.0	12.9
	602137	MVSI 10/10000-S02	97	□	135°C	8673	5664	9695	9117	95.1	89.4	381	340	7600	8000	13.5	12.4
	602349	MVSI 10/11200-S02	97	□	135°C	9983	6896	11160	11100	109	109	405	370	7600	8000	13.5	12.4
	602134	MVSI 10/12000-S90	100	□	135°C	10996	7543	12294	12141	119	119	500	445	9000	9500	16.3	15.0
	602227	MVSI 10/13000-S02	97	□	135°C	11510	8158	12867	13130	126	129	457	382	9600	10000	17.0	16.0
	602142	MVSI 10/15000-S02	105	□	135°C	12662	8700	14155	14004	139	137	643	605	10600	11270	19.0	18.0
	602143	MVSI 10/17500-S02	105	□	135°C	15500	10439	17327	16804	170	165	705	656	13000	13700	24.5	23.0
	602244	MVSI 10/19500-S02	105	□	135°C	17947	11430	20062	18400	197	181	711	661	14000	14800	25.5	24.0
	602144	MVSI 10/22000-S90	110	□	135°C	20025	12533	22386	20208	220	198	926	896	19000	19000	33.0	25.5
	602273	MVSI 10/25000-S90	110	□	135°C	22364	14785	25000	23800	245	233	955	928	19000	19000	33.0	25.5
	602336	MVSI 10/30000-S02	120	-	-	27285	18760	30560	30200	300	296	1200	1050	24000	25800	40.0	38.0

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



Dimensional specifications (mm)

I _A /I _N		Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Cable entry thread
50 Hz	60 Hz								ØG	N°							
1.90	2.07	MVSI 10/40-S02	A	255	179	152	90	125	13	4	28	73	54	127	128	141	M20x1,5
1.90	2.07	MVSI 10/100-S02	A	301	179	152	90	125	13	4	28	73	77	127	128	141	M20x1,5
2.72	3.10	MVSI 10/200-S02	A	344	203	167	105	140	13	4	30	82.5	93	145	140	160	M25x1,5
2.63	2.79	MVSI 10/310-S02	A	394	216	205	120	170	17	4	45	93.5	106	170	160	182	M25x1,5
2.53	3.68	MVSI 10/550-S02	A	435	225	205	120	170	17	4	54	104.5	117.5	187	162	203	M25x1,5
2.53	3.68	MVSI 10/650-S02	A	480 (50Hz) 435 (60Hz)	225	205	120	170	17	4	54	104.5	140 (50Hz) 117.5 (60Hz)	187	162	203	M25x1,5
2.79	3.33	MVSI 10/810-S08	A	500 (50Hz) 448 (60Hz)	246	230	140	190	17	4	54	116	134 (50Hz) 108 (60Hz)	207	190	225	M25x1,5
3.33	4.13	MVSI 10/1110-S08	A	574	246	230	140	190	17	4	54	116	171	207	190	225	M25x1,5
3.05	3.65	MVSI 10/1400-S08	A	574	246	230	140	190	17	4	54	116	171	207	190	225	M25x1,5
4.21	4.05	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
3.42	4.00	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
5.35	5.60	MVSI 10/2610-S02	A	666	321	310	155	255	23.5	4	77	157	178	277	215	295	M25x1,5
4.35	4.81	MVSI 10/3000-S02	A	712	321	310	155	255	23.5	4	77	157	201	277	215	295	M25x1,5
5.91	6.00	MVSI 10/3810-S02	A	734	347	340	180	280	26	4	80	165	202	303	240	320	M32x1,5
5.24	5.50	MVSI 10/4700-S02	A	796	347	340	180	280	26	4	80	165	233	303	240	320	M32x1,5
5.24	5.50	MVSI 10/5150-S02	A	826	347	340	180	280	26	4	80	165	248	303	240	320	M32x1,5
4.71	5.08	MVSI 10/5200-S02	A	744	370	390	200	320	28	4	90	180	192	330	270	350	M32x1,5
4.71	5.08	MVSI 10/5700-S02	A	840	370	390	200	320	28	4	90	180	240	330	270	350	M32x1,5
4.51	5.83	MVSI 10/6500-S02	A	840	370	390	200	320	28	4	90	180	240	330	270	350	M32x1,5
5.61	5.82	MVSI 10/6600-S02 ^A	C	750	437	460	125	380	39	6	35	215	174	387	320	414	M32x1,5
4.51	5.83	MVSI 10/7000-S02	A	840	370	390	200	320	28	4	90	180	240	330	270	350	M32x1,5
4.59	5.58	MVSI 10/8000-S90	A	870	395	392	200	320	28	4	100	192	255	355	270	375	M32x1,5
4.13	4.88	MVSI 10/9000-S90	A	870	395	392	200	320	28	4	100	192	255	355	270	375	M32x1,5
4.72	4.92	MVSI 10/10000-S02	C	862	437	460	125	380	39	6	35	215	230	387	320	414	M32x1,5
4.72	4.92	MVSI 10/11200-S02	C	912	437	460	125	380	39	6	35	215	255	387	320	414	M32x1,5
5.21	5.73	MVSI 10/12000-S90 ^A	C	990	454	530	140	440	45	6	38	230	240	423	370	448	M32x1,5
4.98	5.00	MVSI 10/13000-S02	C	1002	437	460	125	380	39	6	35	215	300	387	320	414	M32x1,5
5.88	5.78	MVSI 10/15000-S02	F	960	526	570	140	480	45	8	41	268	200	486	510	516	M32x1,5
5.71	5.96	MVSI 10/17500-S02	F	1040	526	570	140	480	45	8	41	268	240	486	510	516	M32x1,5
5.49	-	MVSI 10/19500-S02	F	1120	526	570	140	480	45	8	41	268	280	486	510	516	M32x1,5
4.67	5.88	MVSI 10/22000-S90	F	1150	607	610	140	520	45	8	38	297	297.5	542	510	582	M32x1,5
4.67	-	MVSI 10/25000-S90	F	1150	607	610	140	520	45	8	38	297	297.5	542	510	582	M32x1,5
4.89	5.39	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. ** Slot ^A Start-up capacitor / Running capacitor.
Several sizes are available with different mounting bolt patterns. Please contact sales office at Electrotech Drives.

