

MVSS-P



The MVSS-P series has been designed for use in industrial processes which require stainless steel AISI 316L enclosures and take place in environments with a potentially explosive atmosphere, owing to dusts, in compliance with ATEX Directive (94/9/CE).

In particular, the MVSS-P series can be used in areas 21 and 22 (dusts) according to the layout and following features.

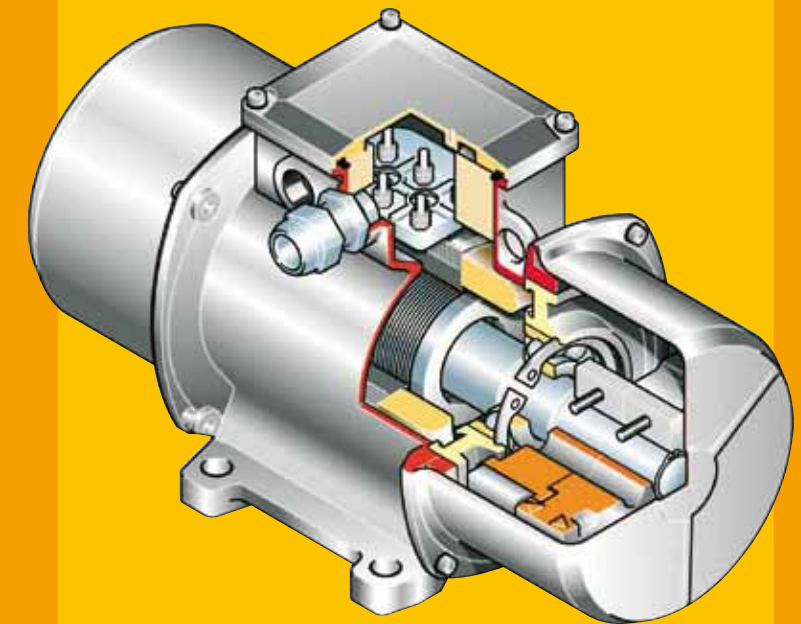
Category: II 2 D

Level of protection: IP66

Temperature class: 120°C

EC certificate: LCIE 03 ATEX 6005 X

Areas of use: 21, 22



Technical features

Power supply

Three-phase voltage from 220V to 690V, 50Hz or 60Hz or single-phase 115V 60Hz and 220V 50Hz; 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 European Directives

ATEX 94/9/CE; Electromagnetic Compatibility 89/336/CE

Reference Regulations

EN 60034-1, EN 50014, EN 50281-1-1, EN 50081-1, EN 50081-2, EN 50082-1, EN 50082-2.

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 4300 Kgf. (42.4 KN), with centrifugal force adjustable from 0 to 100%.

Mechanical protection

IP 66 according to IEC 529, EN 60529.

Insulation class

Class F (155°C).

Tropicalization

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

Environmental temperature

From -10°C to +40°C, on request it is possible to have vibrators for max. environmental temperatures of 55°C. On request special greases for temperatures less than -10°C.

Vibrator heat protection

Standard PTC rated thermistor heat detectors 130°C (DIN 44081-44082) from some models as shown in the following technical tables, where connection of the thermistor is obligatory. On request 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 conditions. In heavy duty operating conditions periodical re-lubrication may be applied to size 35 and larger.

Terminal box

Large fixed electrical connections, with terminal board cover in stainless steel AISI 316L. 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 30; 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 316L, with especially studied design to reduce deposits of dusts and liquids.

An external earthing screw is located on the casing as prescribed by Regulation EN 50014.

Bearing flange

Constructed in cast iron (ductile 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.

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 stainless steel AISI 316L with thickness measuring 1.2 to 1.5 mm, to unite mechanical resistance to the guaranteed protection of stainless steel.

Surface treatment

Electro polishing of the surface to obtain a smooth, bright, uniform surface.

External screws

In stainless steel AISI 304.

Other features

The MVSS-P series is characterized by two stainless steel plates AISI 316L.

Certifications



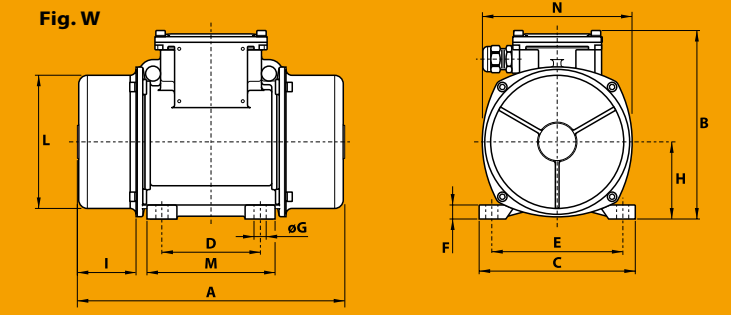
II 2 D, tD A21 IP66 IEC/EN 61241-0, IEC/EN 61241-1
Certificate n. LCIE 05 ATEX 6163X



Comply with the applicable European Union directives

6 poles - 1000/1200 rpm

	Description			Mechanical specifications								Electrical specifications						Type	Dimensional specifications (mm)																		
	Code	Type	SIZE	Static moment* kgmm		Centrifugal force				Weight kg		Temp. class	Max input power W		Power rating W		Max. current A		Thermi- store	t _{max} (s)	Ia/In	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Cable entry thread	
				50 Hz	60 Hz	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	øG								N°
three-phase	6P2283	MVSS 10/40P-S02	10	30.1	30.1	35.0	49.0	0.331	0.476	12.5	12.5	120°C	116	120	40	44	0.29	0.27	-	30	1.86	MVSS 10/40P-S02	W	255	176	152	90	125	13	4	12	73	54	124	122	141	M20x1.5
	6P2284	MVSS 10/100P-S02	10	84.2	84.2	94.3	136	0.925	1.33	15.8	15.8	120°C	116	120	40	44	0.29	0.27	-	30	1.86	MVSS 10/100P-S02	W	295	176	152	90	125	13	4	12	73	74	124	122	141	M20x1.5
	6P2285	MVSS 10/200P-S02	20	163	163	183	264	1.80	2.59	22.5	22.5	120°C	185	200	100	110	0.48	0.45	-	25	2.72	MVSS 10/200P-S02	W	340	200	167	105	140	13	4	15	82.5	91	143	137	160	M25x1.5
	6P2286	MVSS 10/310P-S02	30	286	209	321	338	3.15	3.32	32.0	30.7	120°C	320	350	201	221	0.67	0.65	-	25	2.81	MVSS 10/310P-S02	W	378	211	205	120	170	17	4	17	93.5	98	168	160	182	M25x1.5
	6P2287	MVSS 10/550P-S02	35	457	457	512	737	5.02	7.23	43.5	43.5	120°C	350	380	240	264	0.71	0.68	-	26	2.40	MVSS 10/550P-S02	W	434	232	205	120	170	17	4	20	104.5	117	181	162	203	M25x1.5
	6P2288	MVSS 10/810P-S02	40	723	561	809	905	7.94	8.88	54.0	52.6	120°C	500	540	290	320	1.05	1.00	-	17	3.54	MVSS 10/810P-S02	W	490 (50Hz) 442 (60Hz)	245	230	140	190	17	4	25	116	129 (50Hz) 105 (60Hz)	201	180	225	M25x1.5
	6P2289	MVSS 10/1110P-S02	50	1012	715	1132	1151	11.1	11.3	67.0	59.5	120°C	750	690	550	550	1.57	1.36	•	19	3.33	MVSS 10/1110P-S02	W	560 (50Hz) 490 (60Hz)	245	230	140	190	17	4	25	116	164 (50Hz) 129 (60Hz)	201	180	225	M25x1.5
	6P2290	MVSS 10/1400P-S02	50	1274	904	1424	1483	14.0	14.5	78.0	71.0	120°C	750	690	550	550	1.57	1.36	•	19	3.33	MVSS 10/1400P-S02	W	560	245	230	140	190	17	4	25	116	164	201	180	225	M25x1.5
	6P2291	MVSS 10/1610P-S02	60	1464	962	1638	1549	16.1	15.2	94.0	83.0	120°C	1100	1200	825	900	2.09	2.00	•	15	3.63	MVSS 10/1610P-S02	W	601 (50Hz) 525 (60Hz)	285	275	155	225	22	4	30	135	169 (50Hz) 131 (60Hz)	231	205	253	M25x1.5
	6P2293	MVSS 10/2610P-S02	70	2326	1706	2601	2747	25.5	26.9	130	116	120°C	1960	2100	1580	1700	3.90	3.70	•	8	5.31	MVSS 10/2610P-S02	W	657 (50Hz) 589 (60Hz)	323	310	155	255	23.5	4	35	155	173.5 (50Hz) 139.5 (60Hz)	269	215	295	M25x1.5



8 poles - 750/900 rpm

	Description			Mechanical specifications								Electrical specifications						Type	Dimensional specifications (mm)																		
	Code	Type	SIZE	Static moment* kgmm		Centrifugal force				Weight kg		Temp. class	Max input power W		Power rating W		Max. current A		Thermi- store	t _{max} (s)	Ia/In	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Cable entry thread	
				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	øG											N°									
three-phase	6P2561	MVSS 075/150P-S02	20	163	163	104	149	1.02	1.46	22.5	22.5	120°C	250	250	100	110	0.67	0.64	•	25	2.00	MVSS 075/150P-S02	W	340	200	167	105	140	13	4	15	82.5	91	143	137	160	M25x1.5
	6P2562	MVSS 075/250P-S02	30	286	286	181	260	1.76	2.55	32.0	32.0	120°C	350	350	190	205	0.86	0.80	•	25	2.47	MVSS 075/250P-S02	W	378	211	205	120	170	17	4	17	93.5	98	168	160	182	M25x1.5
	6P2563	MVSS 075/400P-S02	35	457	457	288	415	2.83	4.07	43.5	43.5	120°C	280	300	135	150	0.57	0.56	•	30	1.66	MVSS 075/400P-S02	W	434	232	205	120	170	17	4	20	104.5	117	181	162	203	M25x1.5
	6P2564	MVSS 075/660P-S02	40	723	723	456	656	4.47	6.44	54.0	54.0	120°C	500	525	275	302	1.14	1.10	•	30	2.15	MVSS 075/660P-S02	W	490	245	230	140	190	17	4	25	116	129	201	180	225	M25x1.5
	6P2565	MVSS 075/910P-S02	50	1012	1012	637	917	6.25	9.00	67.0	67.0	120°C	600	670	336	380	1.33	1.30	•	30	2.14	MVSS 075/910P-S02	W	560	245	230	140	190	17	4	25	116	164	201	180	225	M25x1.5
	6P2566	MVSS 075/1310P-S02	60	1464	1464	922	1327	9.04	13.0	94.0	94.0	120°C	950	1100	646	740	2.09	2.10	•	30	2.63	MVSS 075/1310P-S02	W	601	285	275	155	225	22	4	30	135	169	231	205	253	M25x1.5
	6P2567	MVSS 075/2110P-S02	70	2326	2326	1463	2107	14.4	20.7	130	130	120°C	1500	1650	1065	1225	3.61	3.60	•	15	4.18	MVSS 075/2110P-S02	W	657	323	310	155	255	23.5	4	35	155	173.5	269	215	295	M25x1.5

* Working moment = 2 x static moment.

t_{max} (s) = Time limit for overloading protection intervention. Ia/In = ratio between start-up current and maximum current. ** Slot.