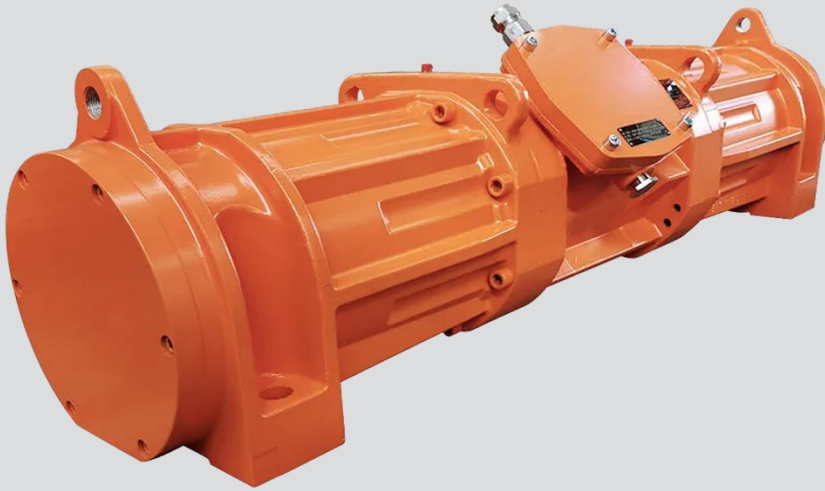


MVE-SV



The MVE-SV vibrator motor features a self-supporting design, eliminating the need for a crossbeam by directly applying centrifugal force on the screen walls, thereby minimizing energy loss and enhancing screening performance.

Suitable for use in zone 1 and 2 (gas) and zone 21 and 22 (dust), it retrofits vibrating machines using Derrick® Screen Vibrators and is ideal for quarrying, mining, and oil & gas applications, such as solids separation and drilling fluid recovery.

Technical features

Power supply

Three-phase voltage from 220V to 690V, 50Hz or 60Hz.

Polarity

4 poles.

Level of protection

Ex db IIC T4 Gb (Zone 1 & 2)
Ex tb IIIC T130°C Db (Zone 21 & 22)

Conformity with standards and regulations

GB/T 3836.1-2021;
GB/T 3836.2-2021;
GB/T 3836.31-2021.

Centrifugal force

Extended range up to 55 kN, with adjustable centrifugal force achieved by changing the position of the eccentric weights.

Functioning

Continuous operation (S1) is supported at maximum centrifugal force and electric power.

Mechanical protection

IP66.

Insulation class

Class F (155°C).

Ambient temperature

From -20°C to +40°C.

Vibrator thermal protection

Standard PTC thermistor heat detectors rated at 130°C.

Casing and bearing flange

Made in high-tensile aluminum alloy.

Terminal box

Large terminal box to facilitate electrical connection.

Bearings

Custom-designed single-row cylindrical roller bearings with large clearance effectively balance motor heat dissipation and vibration resistance. These bearings provide a theoretical lifespan of up to 20,000 hours. SKF and NSK bearings are also available upon request.

Lubrication

All vibrators are pre-lubricated at the factory and require no additional lubrication at start-up.

Windings

Special windings are designed for low energy consumption and exceptionally high tightening torque, enabling the motors to accelerate rapidly to nominal speed and achieve quick synchronization.

Eccentric weights

Allow adjustment of the centrifugal force from 0 to 100% according to the graduated scale on the eccentric weights. (Standard supply: setting at 80%)

Testing

Each unit undergoes a rigorous dynamic test with eccentric weights before leaving the factory.



Compliance with the applicable European Union directives.

MVE-SV

4 poles - 1,500rpm / 50Hz / 380V - 1,800rpm / 60Hz / 460V

DESCRIPTION			MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Type	Type	Size	Centrifugal Force				Static Moment		Weight		Input Power		Power Factor		Nominal Current	
			[kN]		[kg]		[kgmm]		[kg]		[kW]		[cos ø]		[A]	
50Hz	60Hz		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
MVE 3500/15-SVL1	MVE 3500/18-SVL1	75	35	35	3568	3568	1420	986	112	110	1.84	1.84	0.85	0.85	4.2	4.2
MVE 3500/15-SVL2	MVE 3500/18-SVL2	75	35	35	3568	3568	1420	986	112	110	1.84	1.84	0.85	0.85	4.2	4.2
MVE 3800/15-SVL1	MVE 3800/18-SVL1	75	38	38	3874	3874	1542	1071	126	124	1.84	1.84	0.85	0.85	4.2	4.2
MVE 4300/15-SVL1	MVE 4300/18-SVL1	75	43	43	4383	4383	1744	1211	128	158	1.84	1.84	0.85	0.85	4.2	4.2
MVE 5000/15-SVL1	MVE 5000/18-SVL1	75	50	50	5097	5097	2028	1409	155	170	1.84	1.84	0.85	0.85	5.5	5.5
MVE 5300/15-SVL1	MVE 5300/18-SVL1	75	53	53	5403	5403	2150	1493	188	175	2.60	2.60	0.85	0.85	5.5	5.5
MVE 5500/15-SVL1	MVE 5500/18-SVL1	75	55	55	5607	5607	2231	1550	190	182	2.60	2.60	0.85	0.85	5.5	5.5

To convert kg into Newton: $N = 9.81 \cdot kg$

Working moment = 2 x static moment

MVE-SV

4 poles - 1,500rpm / 50Hz / 380V - 1,800rpm / 60Hz / 460V

Type		DIMENSIONAL SPECIFICATIONS (mm)														
50Hz	60Hz	Size	A	B	H	A1	B1	AA	BB	HA	HD	L	ØD	ØK	Cable Gland	
MVE 3500/15-SVL1	MVE 3500/18-SVL1	75	229	959	135	160	870	285	1048	60	330	1130	265	29	NPT 3/4"	
MVE 3500/15-SVL2	MVE 3500/18-SVL2	75	241.3	959	135	160	870	285	1048	60	330	1130	265	20	NPT 3/4"	
MVE 3800/15-SVL1	MVE 3800/18-SVL1	75	229	959	135	160	870	285	1048	60	330	1130	265	29	NPT 3/4"	
MVE 4300/15-SVL1	MVE 4300/18-SVL1	75	229	959	135	160	870	285	1048	60	330	1130	265	29	NPT 3/4"	
MVE 5000/15-SVL1	MVE 5000/18-SVL1	75	229	959	135	160	870	285	1048	60	330	1130	265	29	NPT 3/4"	
MVE 5300/15-SVL1	MVE 5300/18-SVL1	75	229	959	135	160	870	285	1048	60	330	1130	265	29	NPT 3/4"	
MVE 5500/15-SVL1	MVE 5500/18-SVL1	75	229	959	135	160	870	285	1048	60	330	1130	265	29	NPT 3/4"	

