

MVE-L



The MVE-L series, an explosion-proof variant of the MVE-L series, is a vertical vibrator motor equipped with a lateral flange. It is available in two configurations: top flange and top-central flange, to meet diverse user requirements for vibrator motors for circular vibrating screens.

It is suitable for use in zone 1 and zone 2 (gas) as well as zone 21 and zone 22 (dust).

Technical features

Power supply

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

Polarity

2 and 4 standard 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 75 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), class H (180°C) on request.

Ambient temperature

From -20°C to +40°C.

Casing and bearing flange

In spheroidal cast iron for all sizes.

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. Small models are maintenance-free and do not require regreasing throughout their lifetime.

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

Equipped with clamped semi-circular or rectangular eccentric weights, allowing adjustment of the amplitude and screening pattern for circular vibrating screens. Additionally, we can customize the dual-shaft head design of this series to accommodate your specific eccentric weight requirements upon request.

Testing

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



Compliance with the applicable European Union directives.

MVE-L

2 poles - 3,000rpm / 50Hz / 380V - 3,600rpm / 60Hz / 460V

DESCRIPTION			MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Type	Type	Size	Centrifugal Force				Weight		Input Power		Power Factor		Nominal Current	
			[kN]		[kg]		[kg]		[kW]		[cos ø]		[A]	
50Hz	60Hz		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
MVE-L 300/3-SC/SL	MVE-L 300/36-SC/SL	50	3	3	306	306	19	19	0.18	0.18	0.74	0.74	0.5	0.5
MVE-L 500/3-SC/SL	MVE-L 500/36-SC/SL	50	5	5	510	510	20	20	0.37	0.37	0.78	0.78	1.0	1.0
MVE-L 800/3-SC/SL	MVE-L 800/36-SC/SL	50	8	8	815	815	30	29	0.55	0.55	0.80	0.80	1.5	1.5
MVE-L 1100/3-SC/SL	MVE-L 1100/36-SC/SL	50	10	10	1019	1019	32	31	0.75	0.75	0.81	0.81	2.1	2.1
MVE-L 1100/3-SC/SL	MVE-L 1100/36-SC/SL	60	10	10	1019	1019	37	35	0.75	0.75	0.81	0.81	2.1	2.1
MVE-L 1300/3-SC/SL	MVE-L 1300/36-SC/SL	60	13	13	1325	1325	38	37	1.10	1.10	0.82	0.82	2.4	2.4
MVE-L 1600/3-SC/SL	MVE-L 1600/36-SC/SL	70	15	15	1529	1529	43	42	1.25	1.25	0.83	0.83	2.9	2.9
MVE-L 2000/3-SC/SL	MVE-L 2000/36-SC/SL	70	20	20	2039	2039	47	46	2.00	2.00	0.85	0.85	4.1	4.1

To convert kg into Newton: N =9.81*kg

MVE-L

2 poles - 3,000rpm / 50Hz / 380V - 3,600rpm / 60Hz / 460V

Type				DIMENSIONAL SPECIFICATIONS (mm)									
50Hz	60Hz	Size	Fig.	Ø1	Ø2	Ø3	Ø4	B	E	F	L	N° Holes	ØN
MVE-L 300/3-SL	MVE-L 300/36-SL	50	AC	245	220	175	159	13	65	127	307	6	12
MVE-L 500/3-SL	MVE-L 500/36-SL	50	AC	245	220	175	159	13	65	127	307	6	12
MVE-L 800/3-SL	MVE-L 800/36-SL	50	AC	270	240	190	159	13	65	120	329	6	14
MVE-L 1100/3-SL	MVE-L 1100/36-SL	50	AC	270	240	190	159	13	71	120	329	6	14
MVE-L 1100/3-SL	MVE-L 1100/36-SL	60	AD	309	270	190	159	20	94	145	390	8	18
MVE-L 1300/3-SL	MVE-L 1300/36-SL	60	AD	309	270	190	159	20	94	145	390	8	18
MVE-L 1600/3-SL	MVE-L 1600/36-SL	70	AD	370	320	210	265	24	106	105	430	8	22
MVE-L 2000/3-SL	MVE-L 2000/36-SL	70	AD	370	320	210	265	24	106	105	430	8	22

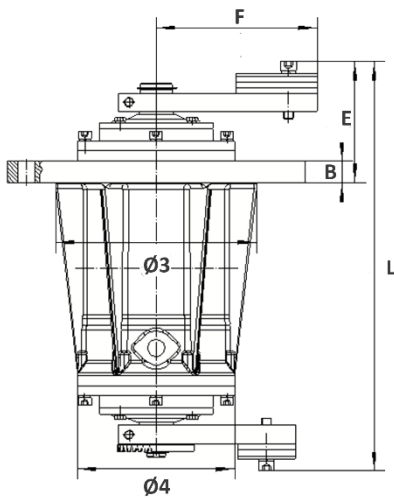


Fig. A

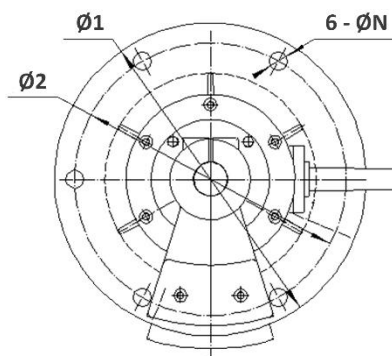


Fig. C

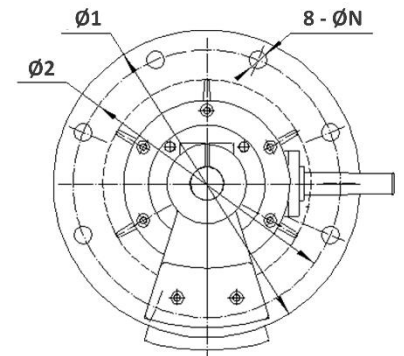


Fig. D

MVE-L

2 poles - 3,000rpm / 50Hz / 380V - 3,600rpm / 60Hz / 460V

Type		DIMENSIONAL SPECIFICATIONS (mm)											
50Hz	60Hz	Size	Fig.	Ø1	Ø2	Ø3	Ø4	B	E	F	L	N° Holes	ØN
MVE-L 300/3-SC	MVE-L 300/36-SC	50	BC	245	220	175	159	13	107	127	307	6	12
MVE-L 500/3-SC	MVE-L 500/36-SC	50	BC	245	220	175	159	13	107	127	307	6	12
MVE-L 800/3-SC	MVE-L 800/36-SC	50	BC	270	240	190	159	13	107	120	329	6	14
MVE-L 1100/3-SC	MVE-L 1100/36-SC	50	BC	270	240	190	159	13	113	120	329	6	14
MVE-L 1100/3-SC	MVE-L 1100/36-SC	60	BD	309	270	190	159	20	146	145	390	8	18
MVE-L 1300/3-SC	MVE-L 1300/36-SC	60	BD	309	270	190	159	20	146	145	390	8	18
MVE-L 1600/3-SC	MVE-L 1600/36-SC	70	BD	370	320	210	265	24	167	105	430	8	22
MVE-L 2000/3-SC	MVE-L 2000/36-SC	70	BD	370	320	210	265	24	167	105	430	8	22

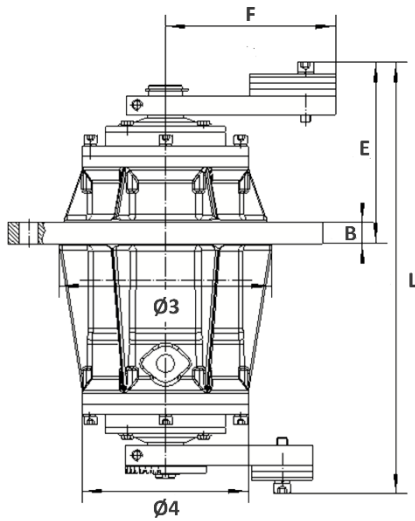


Fig. B

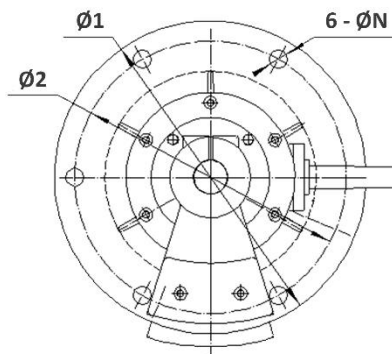


Fig. C

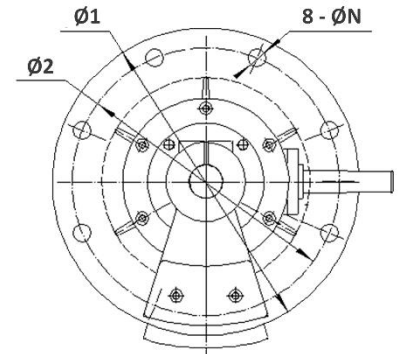


Fig. D

MVE-L

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

DESCRIPTION			MECHANICAL SPECIFICATIONS						ELECTRICAL SPECIFICATIONS					
Type	Type	Size	Centrifugal Force				Weight		Input Power		Power Factor		Nominal Current	
			[kN]		[kg]		[kg]		[kW]		[cos ø]		[A]	
50Hz	60Hz		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
MVE-L 300/15-SC/SL	MVE-L 300/18-SC/SL	50	3	3	306	306	20	20	0.12	0.12	0.66	0.66	0.8	0.8
MVE-L 500/15-SC/SL	MVE-L 500/18-SC/SL	50	5	5	510	510	21	21	0.25	0.25	0.68	0.68	1.1	1.1
MVE-L 800/15-SC/SL	MVE-L 800/18-SC/SL	50	8	8	815	815	34	33	0.40	0.40	0.75	0.72	1.4	1.4
MVE-L 1100/15-SC/SL	MVE-L 1100/18-SC/SL	60	10	10	1019	1019	40	38	0.40	0.40	0.75	0.75	1.4	1.4
MVE-L 1500/15-SC/SL	MVE-L 1500/18-SC/SL	60	15	15	1529	1529	42	40	0.45	0.45	0.78	0.75	1.8	1.8
MVE-L 2000/15-SC/SL	MVE-L 2000/18-SC/SL	60	20	20	2039	2039	47	45	0.75	0.75	0.82	0.78	2.2	2.2
MVE-L 2000/15-SC/SL	MVE-L 2000/18-SC/SL	70	20	20	2039	2039	50	48	0.75	0.75	0.82	0.78	2.2	2.2
MVE-L 2400/15-SC/SL	MVE-L 2400/18-SC/SL	70	24	24	2446	2446	52	50	1.00	1.00	0.82	0.82	3.2	3.2
MVE-L 2500/15-SC/SL	MVE-L 2500/18-SC/SL	70	25	25	2548	2548	58	56	1.20	1.20	0.82	0.82	3.4	3.4
MVE-L 3000/15-SC/SL	MVE-L 3000/18-SC/SL	70	30	30	3058	3058	60	58	1.50	1.50	0.85	0.82	3.7	3.7
MVE-L 3800/15-SC/SL	MVE-L 3800/18-SC/SL	85	38	38	3874	3874	136	133	1.72	1.72	0.85	0.82	4.2	4.2
MVE-L 4300/15-SC/SL	MVE-L 4300/18-SC/SL	85	43	43	4383	4383	138	135	1.94	1.94	0.85	0.82	4.5	4.5
MVE-L 5000/15-SC/SL	MVE-L 5000/18-SC/SL	85	50	50	5097	5097	148	143	2.20	2.20	0.85	0.85	6.5	6.5
MVE-L 5500/15-SC/SL	MVE-L 5500/18-SC/SL	85	55	55	5607	5607	155	150	2.20	2.20	0.85	0.85	6.5	6.5
MVE-L 7200/15-SC/SL	MVE-L 7200/18-SC/SL	85	72	72	7339	7339	190	185	3.00	3.00	0.85	0.85	8.5	8.5
MVE-L 7500/15-SC/SL	MVE-L 7500/18-SC/SL	85	75	75	7645	7645	195	187	3.00	3.00	0.85	0.85	8.5	8.5

To convert kg into Newton: N =9.81*kg

MVE-L

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

Type				DIMENSIONAL SPECIFICATIONS (mm)									
50Hz	60Hz	Size	Fig.	Ø1	Ø2	Ø3	Ø4	B	E	F	L	N° Holes	ØN
MVE-L 300/15-SL	MVE-L 300/18-SL	50	AC	245	220	175	159	13	65	127	311	6	12
MVE-L 500/15-SL	MVE-L 500/18-SL	50	AC	245	220	175	159	13	83	127	323	6	12
MVE-L 800/15-SL	MVE-L 800/18-SL	50	AC	270	240	190	159	13	81	138	367	6	14
MVE-L 1100/15-SL	MVE-L 1100/18-SL	60	AD	309	270	210	168	20	84	168	400	8	18
MVE-L 1500/15-SL	MVE-L 1500/18-SL	60	AD	309	270	210	168	20	105	168	426	8	18
MVE-L 2000/15-SL	MVE-L 2000/18-SL	60	AD	309	270	210	168	20	123	180	450	8	18
MVE-L 2000/15-SL	MVE-L 2000/18-SL	70	AD	370	320	210	265	24	106	194	430	8	22
MVE-L 2400/15-SL	MVE-L 2400/18-SL	70	AD	370	320	210	265	24	127	194	445	8	22
MVE-L 2500/15-SL	MVE-L 2500/18-SL	70	AD	370	320	210	265	24	127	194	445	8	22
MVE-L 3000/15-SL	MVE-L 3000/18-SL	70	AD	370	320	210	265	24	133	194	457	8	22
MVE-L 3800/15-SL	MVE-L 3800/18-SL	85	AD	440	390	330	300	26	129	187	471	8	26
MVE-L 4300/15-SL	MVE-L 4300/18-SL	85	AD	440	390	330	300	26	139	187	481	8	26
MVE-L 5000/15-SL	MVE-L 5000/18-SL	85	AD	440	390	330	300	26	139	187	481	8	26
MVE-L 5500/15-SL	MVE-L 5500/18-SL	85	AD	440	390	330	300	26	139	187	481	8	26
MVE-L 7200/15-SL	MVE-L 7200/18-SL	85	AD	530	480	370	300	26	153	220	548	8	26
MVE-L 7500/15-SL	MVE-L 7500/18-SL	85	AD	530	480	370	300	26	153	220	548	8	26

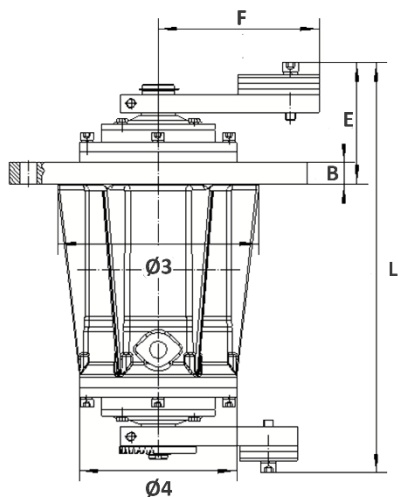


Fig. A

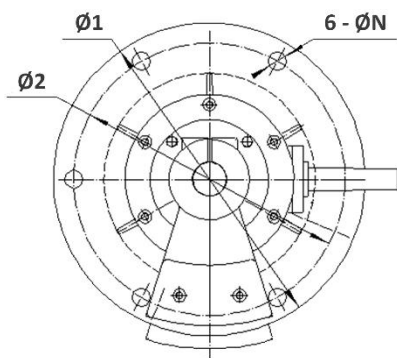


Fig. C

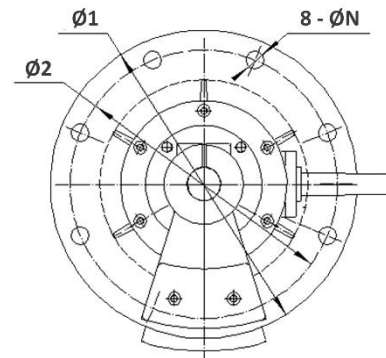


Fig. D

MVE-L

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

Type				DIMENSIONAL SPECIFICATIONS (mm)									
50Hz	60Hz	Size	Fig.	Ø1	Ø2	Ø3	Ø4	B	E	F	L	N° Holes	ØN
MVE-L 300/15-SC	MVE-L 300/18-SC	50	BC	245	220	175	159	13	107	127	311	6	12
MVE-L 500/15-SC	MVE-L 500/18-SC	50	BC	245	220	175	159	13	125	127	323	6	12
MVE-L 800/15-SC	MVE-L 800/18-SC	50	BC	270	240	190	159	13	136	138	367	6	14
MVE-L 1100/15-SC	MVE-L 1100/18-SC	60	BD	309	270	210	168	20	157	168	400	8	18
MVE-L 1500/15-SC	MVE-L 1500/18-SC	60	BD	309	270	210	168	20	172	168	426	8	18
MVE-L 2000/15-SC	MVE-L 2000/18-SC	60	BD	309	270	210	168	20	190	180	450	8	18
MVE-L 2000/15-SC	MVE-L 2000/18-SC	70	BD	370	320	210	265	24	167	194	430	8	22
MVE-L 2400/15-SC	MVE-L 2400/18-SC	70	BD	370	320	210	265	24	188	194	445	8	22
MVE-L 2500/15-SC	MVE-L 2500/18-SC	70	BD	370	320	210	265	24	188	194	445	8	22
MVE-L 3000/15-SC	MVE-L 3000/18-SC	70	BD	370	320	210	265	24	194	194	457	8	22
MVE-L 3800/15-SC	MVE-L 3800/18-SC	85	BD	440	390	330	300	26	203	187	471	8	26
MVE-L 4300/15-SC	MVE-L 4300/18-SC	85	BD	440	390	330	300	26	213	187	481	8	26
MVE-L 5000/15-SC	MVE-L 5000/18-SC	85	BD	440	390	330	300	26	213	187	481	8	26
MVE-L 5500/15-SC	MVE-L 5500/18-SC	85	BD	440	390	330	300	26	213	187	481	8	26
MVE-L 7200/15-SC	MVE-L 7200/18-SC	85	BD	530	480	370	300	26	261	220	548	8	26
MVE-L 7500/15-SC	MVE-L 7500/18-SC	85	BD	530	480	370	300	26	261	220	548	8	26

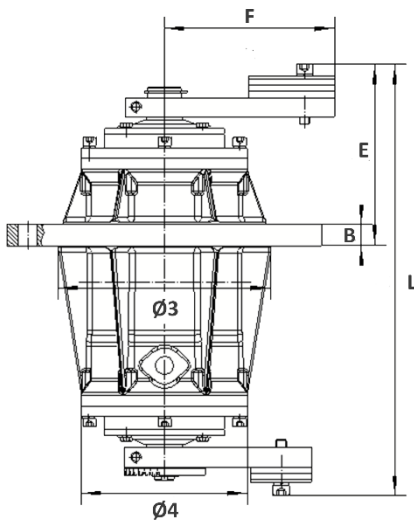


Fig. B

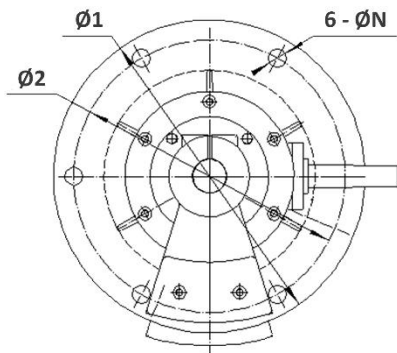


Fig. C

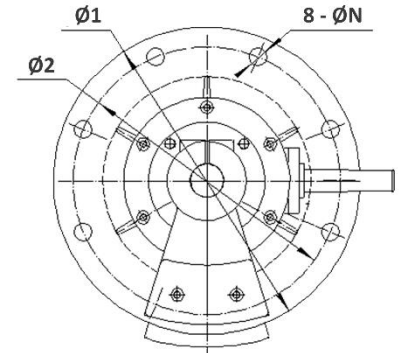


Fig. D