

MVL



The MVL series, derived from the MV series, is a vertical vibrator motor equipped with a lateral flange. This series is specifically designed for circular vibrating screens with diameters ranging from 500mm to 2000mm.

It is available in two configurations: top flange and top-central flange, to meet diverse user requirements for vibrator motors for circular vibrating screens.

Technical features

Power supply

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

Polarity

2, 4 and 6 standard poles.

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

IP65.

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.

Available on request

Customizable fixing holes is available.

Testing

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



Compliance with the applicable European Union directives.

MVL

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

Top-central Flange

Type		MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS	
		Centrifugal Force		Weight	Input Power	Nominal Current
		[kN]	[kg]	[kg]	[kW]	[A]
MVL	300/3-SC	3	306	20	0.25	0.59
MVL	500/3-SC	5	510	33	0.40	1.10
MVL	800/3B-SC	8	815	46	0.75	1.75
MVL	800/3C-SC	8	815	46	0.75	1.75
MVL	1000/3B-SC	10	1019	51	0.90	2.10
MVL	1000/3C-SC	10	1019	51	0.90	2.10
MVL	1500/3B-SC	15	1529	65	1.30	3.10
MVL	1500/3C-SC	15	1529	65	1.30	3.10
MVL	2000/3B-SC	20	2039	78	1.70	4.12
MVL	2000/3C-SC	20	2039	78	1.70	4.12

To convert kg into Newton: N =9.81•kg

Top Flange

Type		MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS	
		Centrifugal Force		Weight	Input Power	Nominal Current
		[kN]	[kg]	[kg]	[kW]	[A]
MVL	300/3-SL	3	306	20	0.25	0.59
MVL	800/3-SL	8	815	46	0.75	1.75
MVL	1000/3B-SL	10	1019	51	0.90	2.10
MVL	1600/3-SL	16	1631	72	1.30	3.36
MVL	2000/3-SL	20	2039	78	1.70	4.12
MVL	2000/3B-SL	20	2039	78	1.70	4.12
MVL	2000/3C-SL	20	2039	78	1.70	4.12

To convert kg into Newton: N =9.81•kg

MVL

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

Top-central Flange

Type	DIMENSIONAL SPECIFICATIONS (mm)														
	Fig.	L	ΦA	ΦB	ΦC	ΦD	E	F	ØG	N° Holes	H	K	M	N	Hexagon Screws
MVL 300/3-SC	A	240	200	225	170	140	16	180	12	4	60	26	60	60	M10
MVL 500/3-SC	A	300	220	245	190	165	16	205	12	6	95	60	90	90	M10
MVL 800/3B-SC	A	310	205	245	190	165	16	205	15	6	95	60	90	90	M14
MVL 800/3C-SC	A	310	220	245	190	165	16	205	12	6	95	60	90	90	M10
MVL 1000/3B-SC	A	375	230	270	200	180	16	220	14	6	155	93	110	110	M12
MVL 1000/3C-SC	A	375	240	270	200	180	16	220	14	6	155	93	110	110	M12
MVL 1500/3B-SC	A	390	270	315	235	200	18	230	18	6	160	99	115	115	M16
MVL 1500/3C-SC	A	390	270	315	235	200	18	230	18	8	160	99	115	115	M16
MVL 2000/3B-SC	A	420	270	315	235	200	18	230	18	6	178	112	120	120	M16
MVL 2000/3C-SC	A	420	270	315	235	200	18	230	18	8	178	112	120	120	M16

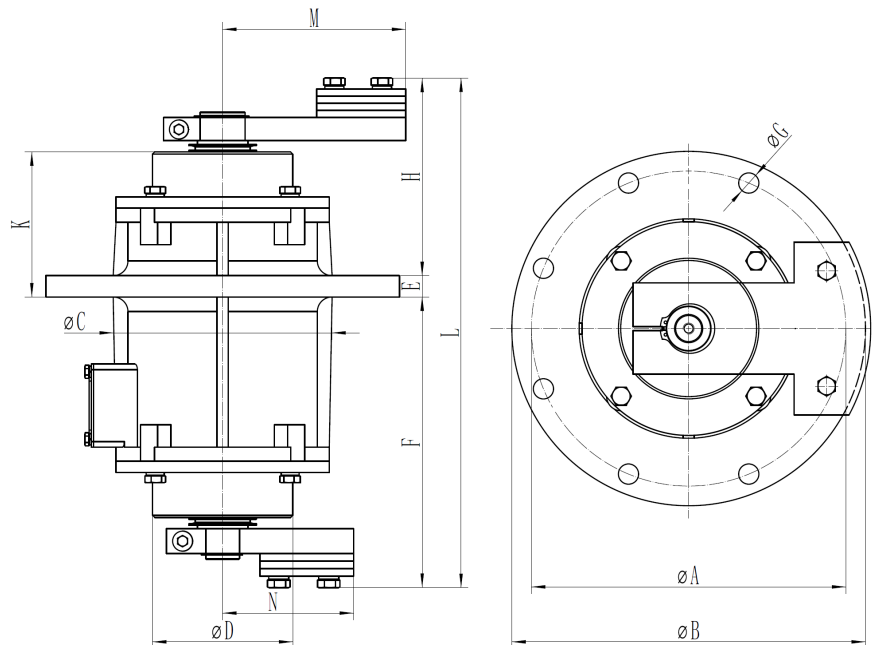


Fig. A

MVL

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

Top Flange

Type	DIMENSIONAL SPECIFICATIONS (mm)														
Fig.	L	ΦA	ΦB	ΦC	ΦD	E	F	ØG	N° Holes	H	K	M	N	Hexagon Screws	
MVL 300/3-SL	D	240	200	225	170	140	16	180	12	4	60	26	60	60	M10
MVL 800/3-SL	D	310	205	245	190	165	16	205	15	6	90	60	90	90	M14
MVL 1000/3B-SL	D	370	230	270	200	180	16	230	14	6	100	60	125	125	M12
MVL 1600/3-SL	D	380	230	270	200	180	16	230	14	6	100	60	125	125	M12
MVL 2000/3-SL	D	460	240	270	180	180	16	310	18	6	100	60	120	120	M16
MVL 2000/3B-SL	D	420	270	315	235	200	18	242	18	6	178	122	155	150	M16
MVL 2000/3C-SL	D	420	270	315	235	200	18	242	18	8	178	122	155	150	M16

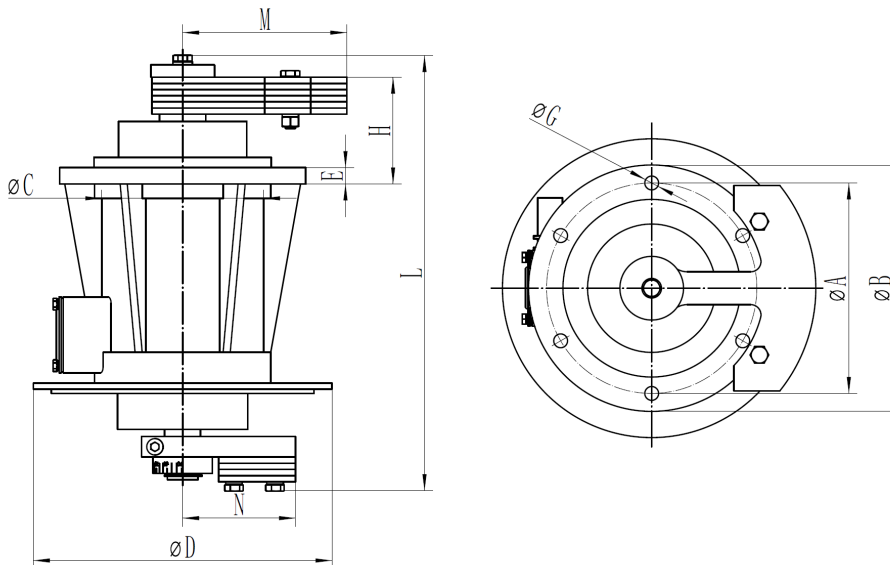


Fig. D

MVL

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

Top-central Flange

Type		MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS	
		Centrifugal Force		Weight	Input Power	Nominal Current
		[kN]	[kg]	[kg]	[kW]	[A]
MVL	300/15-SC	3	306	23	0.25	0.59
MVL	500/15A-SC	5	510	41	0.37	1.05
MVL	500/15H-SC	5	510	41	0.37	1.05
MVL	800/15-SC	8	815	55	0.55	1.56
MVL	1000/15B-SC	10	1019	61	0.70	1.85
MVL	1000/15C-SC	10	1019	61	0.70	1.85
MVL	1100/15B-SC	11	1121	72	0.75	2.15
MVL	1100/15C-SC	11	1121	72	0.75	2.15
MVL	1100/15D-SC	11	1121	72	0.75	2.15
MVL	2000/15B-SC	20	2039	78	1.30	3.36
MVL	2000/15C-SC	20	2039	78	1.30	3.36
MVL	2000/15D-SC	20	2039	78	1.30	3.36
MVL	3000/15B-SC	30	3058	110	1.50	3.81
MVL	3000/15C-SC	30	3058	110	1.50	3.81
MVL	4000/15-SC	40	4077	172	2.20	5.10
MVL	5000/15-SC	50	5097	236	2.90	6.95
MVL	7500/15-SC	75	7645	336	4.20	10.59

Top Flange

Type		MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS	
		Centrifugal Force		Weight	Input Power	Nominal Current
		[kN]	[kg]	[kg]	[kW]	[A]
MVL	300/15-SL	3	306	23	0.25	0.59
MVL	800/15-SL	8	815	55	0.55	1.56
MVL	1000/15C-SL	10	1019	61	0.70	1.85
MVL	2000/15-SL	20	2039	78	1.30	3.36
MVL	2000/15A-SL	20	2039	78	1.30	3.36
MVL	2000/15B-SL	20	2039	78	1.30	3.36
MVL	2000/15C-SL	20	2039	78	1.30	3.36

To convert kg into Newton: N =9.81*kg

MVL

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

Top-central Flange

Type	DIMENSIONAL SPECIFICATIONS (mm)														
	Fig.	L	ΦA	ΦB	ΦC	ΦD	E	F	ØG	N° Holes	H	K	M	N	Hexagon Screws
MVL 300/15-SC	A	240	200	225	170	140	16	180	12	4	60	26	90	90	M10
MVL 500/15A-SC	A	300	210	245	190	165	16	205	12	6	95	60	130	130	M10
MVL 500/15H-SC	A	300	220	245	190	165	16	205	12	6	95	60	130	130	M10
MVL 800/15-SC	A	320	220	245	190	165	16	205	12	6	95	60	150	150	M10
MVL 1000/15B-SC	A	375	230	270	200	180	16	220	14	6	155	93	150	140	M12
MVL 1000/15C-SC	A	375	240	270	200	180	16	220	14	6	155	93	150	140	M12
MVL 1100/15B-SC	A	390	270	315	235	200	18	230	18	6	160	110	155	150	M16
MVL 1100/15C-SC	A	390	270	315	235	200	18	230	18	8	160	110	155	150	M16
MVL 1100/15D-SC	A	390	280	315	235	200	18	230	18	4	160	110	155	150	M16
MVL 2000/15B-SC	A	420	270	315	235	200	18	242	18	6	178	122	155	150	M16
MVL 2000/15C-SC	A	420	270	315	235	200	18	242	18	8	178	122	155	150	M16
MVL 2000/15D-SC	A	420	280	315	235	200	18	242	18	6	178	122	155	150	M16
MVL 3000/15B-SC	A	470	320	370	280	230	20	275	22	6	195	126	175	155	M20
MVL 3000/15C-SC	A	470	320	370	280	230	20	275	22	8	195	126	175	155	M20

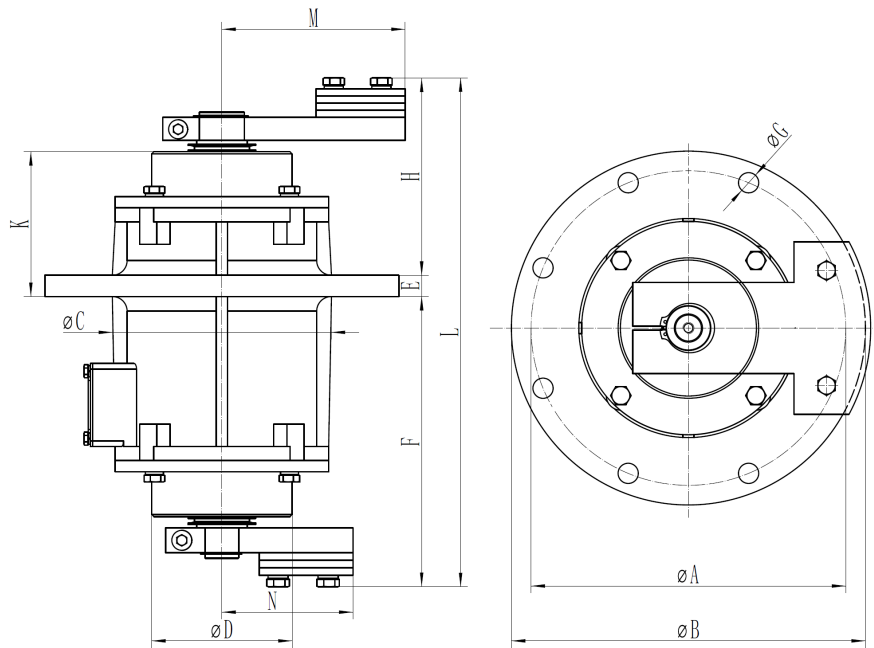


Fig. A

MVL

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

Top-central Flange

Type	DIMENSIONAL SPECIFICATIONS (mm)														
Fig.	L	ΦA	ΦB	ΦC	ΦD	E	F	ØG	N° Holes	H	K	M	N	Hexagon Screws	
MVL 4000/15-SC	B	510	415	460	370	280	26	260	26	6	250	185	190	190	M24
MVL 5000/15-SC	C	590	450	500	400	370	26	310	26	8	280	190	210	210	M24
MVL 7500/15-SC	C	620	480	530	430	410	26	325	26	8	295	210	220	220	M24

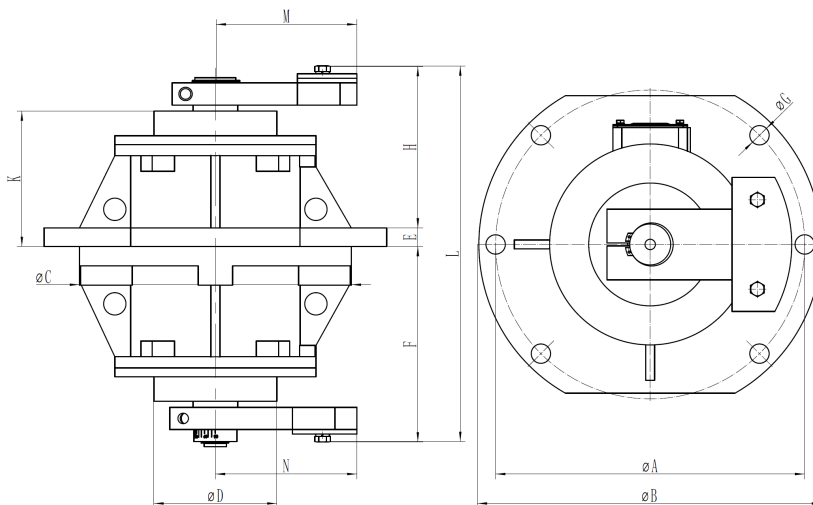


Fig. B

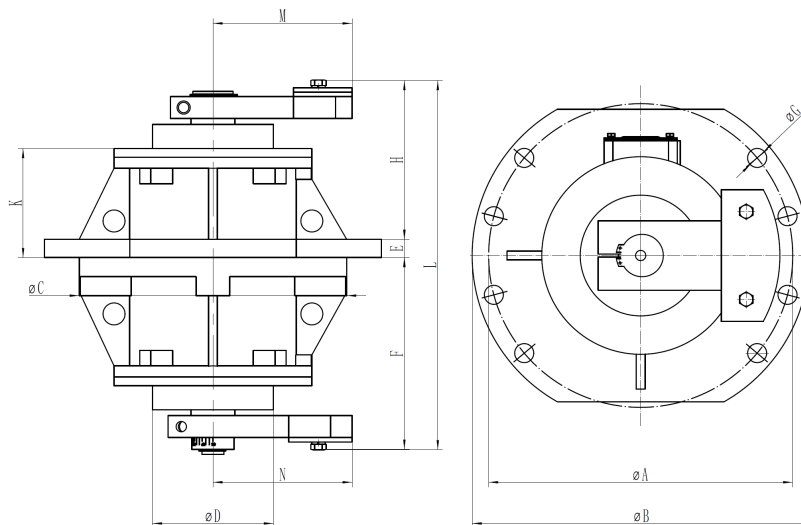


Fig. C

MVL

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

Top-central Flange

Type	DIMENSIONAL SPECIFICATIONS (mm)														
Fig.	L	ΦA	ΦB	ΦC	ΦD	E	F	ØG	N° Holes	H	K	M	N	Hexagon Screws	
MVL 3000/1-SC	B	510	415	460	370	280	26	260	26	6	250	185	190	190	M24
MVL 5000/1-SC	C	590	450	500	400	370	26	310	26	8	280	190	210	210	M24

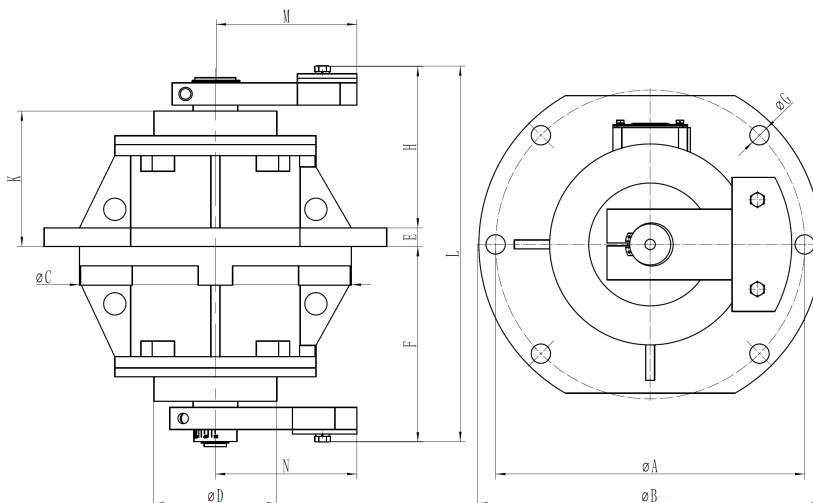


Fig. B

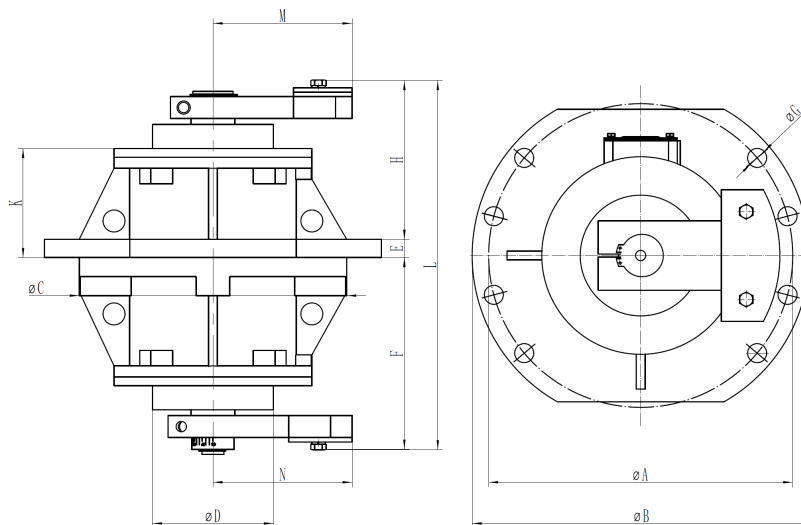


Fig. C

MVL

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

Top Flange

Type	Fig.	DIMENSIONAL SPECIFICATIONS (mm)													Hexagon Screws
		L	ΦA	ΦB	ΦC	ΦD	E	F	ØG	N° Holes	H	K	M	N	
MVL 300/15-SL	D	240	200	225	170	140	18	180	12	4	60	26	90	90	M10
MVL 800/15-SL	D	320	230	260	200	170	16	230	14	6	90	50	150	150	M12
MVL 1000/15C-SL	D	375	230	270	200	180	16	220	14	6	90	93	150	140	M12
MVL 2000/15-SL	D	410	205	240	180	180	16	310	14	6	100	60	150	150	M12
MVL 2000/15A-SL	D	410	240	270	180	180	16	310	18	6	100	60	105	105	M16
MVL 2000/15B-SL	D	410	230	270	180	180	16	310	14	6	100	60	105	105	M12
MVL 2000/15C-SL	D	420	270	315	235	200	18	242	18	6	100	122	155	150	M16

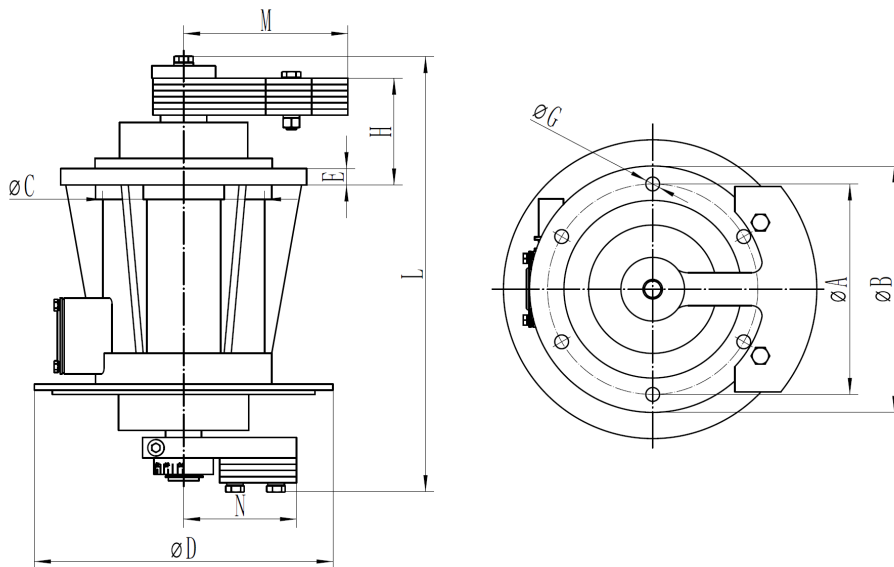


Fig. D

MVL

6 poles - 1,000rpm / 50Hz / 380V

Top-central Flange

Type		MECHANICAL SPECIFICATIONS			ELECTRICAL SPECIFICATIONS	
		Centrifugal Force		Weight	Input Power	Nominal Current
		[kN]	[kg]	[kg]	[kW]	[A]
MVL	1000/1-SC	10	1019	75	0.75	2.21
MVL	2000/1-SC	20	2039	122	1.50	3.81
MVL	3000/1-SC	30	3058	175	2.20	5.51
MVL	5000/1-SC	50	5097	265	3.70	9.35

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

Type	DIMENSIONAL SPECIFICATIONS (mm)														
	Fig.	L	ΦA	ΦB	ΦC	ΦD	E	F	ØG	N° Holes	H	K	M	N	Hexagon Screws
MVL 1000/1-SC	A	400	270	315	235	200	18	242	18	8	158	112	155	150	M16
MVL 2000/1-SC	A	450	320	370	280	230	20	275	22	8	175	126	175	155	M20

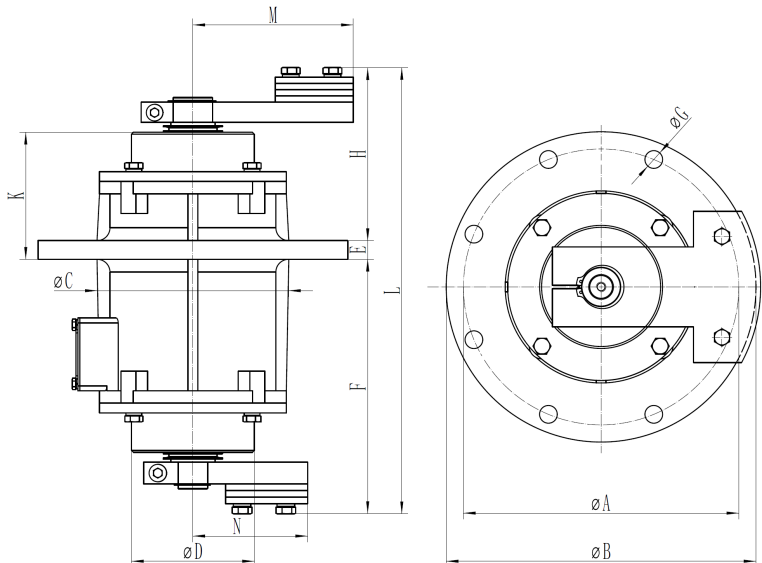


Fig. A