

AllianceMotori

Electric Vibrator Motor



AVI-F SERIES



- | | | | | |
|----------------------|------------------|---------------------|-----------------------|------------------|
| A. EndShield Cover | D. Fixed Weight | G. Stator | J. Terminal Box Cover | L. Rotor |
| B. Adjustable Weight | E. O Shaped Ring | H. Frame | K. Bearing | N. Bearing Cover |
| C. Scale Disc | F. EndShield | I. Connection Board | | |

AF-T	Concrete Vibrator Series - General Application in Batching Plants and Other Concrete Plants.	Aluminium Frame 00AL - 03AL	Cast Iron Frame 30 -120
		Mounting Dimension : Alliance Standard; May Not interchangeable with Other Major Brand	
AVI	Heavy Duty Industrial Vibrator Series - Heavy Duty Application in Mines, Power Plants.	Cast Iron Frame 70-110	
		Mounting Dimension : International Standard; Interchangeable with Major Brand	
AVM	Premium Industrial Vibrator Series - General Industry Vibrator Such as Conveyor, SILO, Feeder Polishing Machine.	Aluminium Frame 30 -75	Cast Iron Frame 10-20
		Mounting Dimension : International Standard; Interchangeable with Other Major Brand	

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); suitable 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.

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 IP55 / IP65

Protection against mechanical impacts

IK 08 according to IEC 68, EN 50102.

Insulation class

Class F (155°C), class H (180°C) on request.

Ambient Temperature

From -20°C to +40°C. Versions for higher or lower temperatures are available on request.

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

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.

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.

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.

Weight Covers

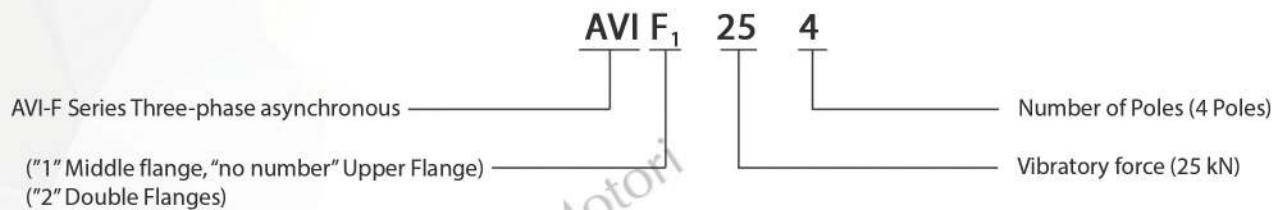
In aluminium alloy. On several sizes split covers are available, please refer to section MVSI-TS on page 16. On request stainless steel AISI 304 weight covers can be supplied.

AVI/F SERIES

Vibratory Motor



Type Identifiers



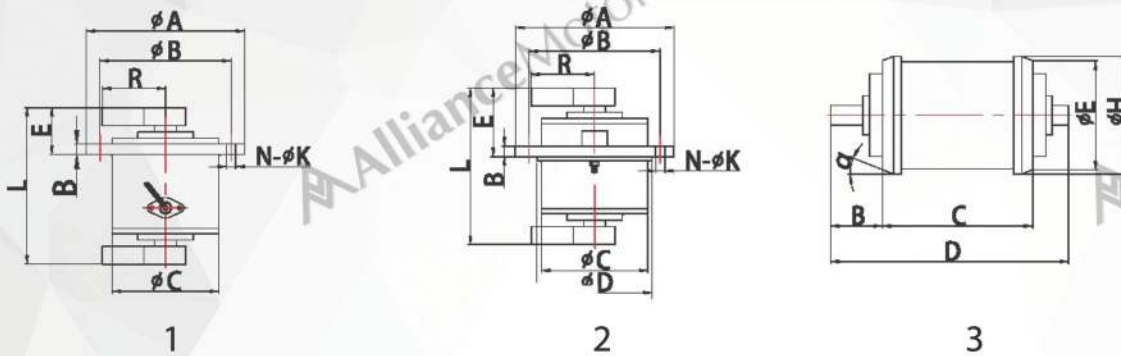
Specification

1. This motor is of a reasonable design using superior process materials in order to product a highly efficient motor with a low operating temperature with a long service operating life.
2. The weight density and design this vibratory motor has a good vibratory output force (kN) with a high starting torque and low electrical power consumption.
3. Low operating noise levels (dB) during running and fluctuating loads.
4. By adjusting piece of the counterweights (flyweight) or the angle of the counterweights (flyweight) various levels of vibratory force percentage can be achieved.
5. By adjusting the angle of degrees of the upper and lower counterweights (flyweight), circular or elliptic vibration will be produced to meet many kinds of working requirements such as vibration screen, vibration cleaning machine, vibration polisher, vibration Crusher, Vibration mixer.

Workable Condition

Ambient Temperature	Altitude (m)	Voltage (V)	Frequency (Hz)	Insulation Class
-20°C ~ 40°C	≤ 1000	380	50	F
Degrees of Protection Provided	Duty Type	Cooling	Mounting Arrangement	
IP54	S1	C410	Vertical Installation	

Dimension of AVI/F Series Vibration Motor



No	Model	Vibrating Force (kN)	Speed (r/min)	Input Power (kW)	Max. Current (A)	Dimension (mm)							Kg	Figure	ΦD	
						ΦA	ΦB	ΦC	L	E	B	R				N-ΦK
2 Poles																
1	AVI/F-5-2	5	2800	0.40	0.90	245	210	150	278	67	18	72	6-12	24	1	
2	AVI/F-8-2	8		0.55	1.20	270	240	164	273	67	20	82	6-14	32	1	
3	AVI/F1-20-2	20		1.50	3.00	370	320	210	425	203	25	94	6-22	80	2	
4 Poles																
1	AVI/F-1-4	1	1440	0.12	0.40	190	165	126	220	54	16	68	4-12	15	1	
2	AVI/F-3-4	3		0.12	0.40	230	200	126	268	78	16	78	4-12	15	1	
3	AVI/F-5-4	5		0.25	0.70	245	210	150	270	76	18	90	6-12	25	1	
4	AVI/F-8-4	8		0.37	0.86	270	240	164	302	81	20	103	6-14	36	1	
5	AVI/F1-8-4	8		0.37	0.86	268	230	160	326	145	24	105	4-18	35	2	160
6	AVI/F-10-4	10		0.55	1.25	310	265	190	343	104	22	130	8-18	44	1	
7	AVI/F-16-4	16		0.75	1.68	310	265	190	365	112	24	135	8-18	51	1	
8	AVI/F1-16-4	16		0.75	1.68	268	230	180	350	134	24	115	4-18	40	2	180
9	AVI/F1-20-4	20		1.10	2.38	370	320	210	456	218	25	141	6-22	80	2	285.5
10	AVI/F1-25-4	25		1.50	3.20	370	320	210	470	225	25	141	6-22	88	2	285.5
11	AVI/F1-32-4	32		1.50	3.20	370	320	210	495	238	25	151	6-22	87	2	285.5
12	AVI/F1-35-4	35		1.80	3.78	370	320	210	556	258	25	141	6-22	96	2	285.5
13	AVI/F1-50-4	50		2.20	4.70	500	440	330	533	262	30	175	8-26	170	2	368
14	AVI/F1-50-4A	50		2.50	5.40	500	440	330	504	233	30	200	8-26	158	2	368
15	AVI/F1-65-4	65		5.00	10.40	500	440	330	659	356	32	175	8-26	225	2	368
16	AVI/F1-75-4	75		3.70	7.64	610	525	380	663	320	40	170	6-38	278	2	420
17	AVI/F1-75-4A	75		5.50	11.00	610	525	380	631	322	40	215	6-38	362	2	420
18	AVI/F1-100-4	100		7.50	16.30	610	525	380	711	347	40	180	6-38	366	2	420
19	AVI/F1-125-4	125		10.00	19.60	610	495	420	737	390	50	245	8-38	420	2	420

No	Model	Vibrating Force (kN)	Speed (r/min)	Input Power (kW)	Max. Current (A)	Dimension (mm)						Kg	Figure
						ΦE	ΦH	B	C	D	α		
4 Poles													
1	AVI/F2-50-4	50	1440	2.20	3.20	215	230	80	330	490	20°	73	3
2	AVI/F2-65-4	65		4.00	8.40	298	318	115	345	547	25°	131	3
3	AVI/F2-75-4	75		5.50	11.20	298	318	119.5	420	631	25°	160	3
4	AVI/F2-100-4	100		7.50	16.30	351	372	144	442	710	25°	222	3
5	AVI/F2-125-4	125		11.00	21.30	351	372	138	525	801	25°	263	3

Other Products

DC Vibrator Motor



ZF-TDC90



ZF-TDC200



ZF-TDC1500



ZN Series Handhold
Vibrator Motor



ZDN Straight High Frequency
Vibrator Shaft



Pneumatic Turbine Vibrator



Concrete Vibrator Shaft



Attached Flat Vibrator Motor



ZDN Electronic Inverter Low Noise
Concrete Vibrator Shaft

ZN Series - Insertion Vibrator Motor



ZN50F/70F



ZN50E/70E



ZN50A/70A



ZN50F/70F



ZN5G/70G



ZN50D/70D



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