

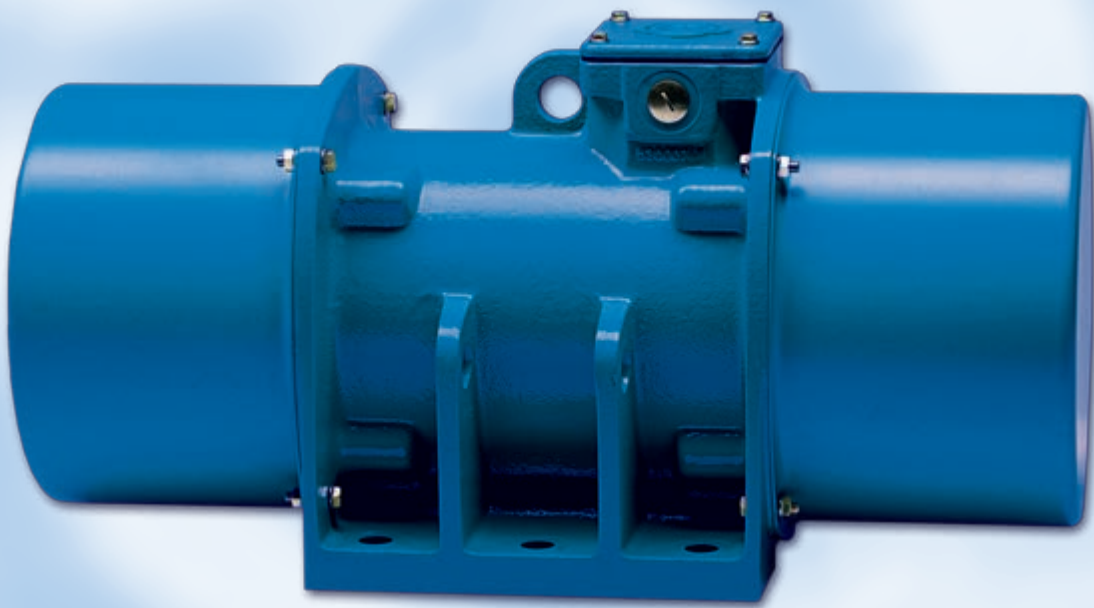
USA

# Vibrator Motors

>> Specifications and Dimensions

60 Hz

## FP/N-Type



Vimarc®



FRIEDRICH



Vimarc®

## » Technical features



**Power Supply:** Voltages from 115 to 690V in 50/60 hertz. Acceptable for use with Variable Frequency Drives.

**Number of Poles:** Standard: 4, 6, and 8 pole

**Enclosure Protection:**

IP66,  
IP69K for motor frame sizes AFP to DFP with molded cable

**Thermal class:** F (155°C) according to DIN EN 60034-1

**Tropical insulation:** Standard

**Bearings:** FRIEDRICH/Vimarc® vibrator motors have been produced maintenance-free for over 50 years with great success. The mounted cylindrical roller bearings with high carrying load and increased bearing play are factory-lubricated for life with a special grease. Regreasing can cause errors such as soiled lubricating nipples, too much, too little or the wrong grease. Use of FRIEDRICH/Vimarc® vibrator motors with lifetime lubrication will eliminate such errors, reduce your maintenance costs, and provide longer life.

**Operation:** Continuous duty at 100% centrifugal force setting.

**Ambient Temperature:** -20 to +40°C (-4 to 104°F). Special executions with special steel to -65°C (-85°F). Please contact us for use in higher ambient temperatures.

**Mounting:** Mounting allowed in any position. Mounting surface must be level (Rz 63) and clean with no paint. Use 8.8 (grade 5) strength bolts and (DIN EN ISO 7040) self-locking nuts. Do not use washers, spring washers, or other means to secure the motor. Tighten only with a torque wrench:

M 16 = 210 Nm (5/8" = 150 ft-lbs.)

M 20 = 410 Nm (3/4" = 260 ft-lbs.)

M 24 = 710 Nm (7/8" = 400 ft-lbs.)

Retighten bolts after 10 minutes of operation time. Check bolts and nuts frequently until retightening is no longer possible.

**Electrical connection:** Use highly flexible cable for heavy mechanical demands. Use for instance H07RN-F or A07RN-F according to DIN VDE 0282. Allow some slack and a loop in the cable and pay special attention to anything the cable might vibrate against and either secure it or clear it to prevent chafing under vibration. Properly tighten the terminal box cover to prevent dust and moisture from entering.

**Cable Pre-assembly:** We have a wide range of different power supply cables in standard lengths available that can be factory installed. In addition the terminal box wire connections are completely secured from vibration and contamination.

**Frequency Inverter Operation:** The FP Series motors are suitable for use with Frequency inverter drive of the PWM type. Note that the frequency converter must not only be sized for the electrical power consumption, but also to the starting current load. Please contact us prior to using at above the name-plated frequency of the motor. Note that too low an operating frequency can create resonance issues with the spring isolation system.

**Thermal Overload Protection:** PTC thermistors rated at 120°C are available for all vibrator motors on request.

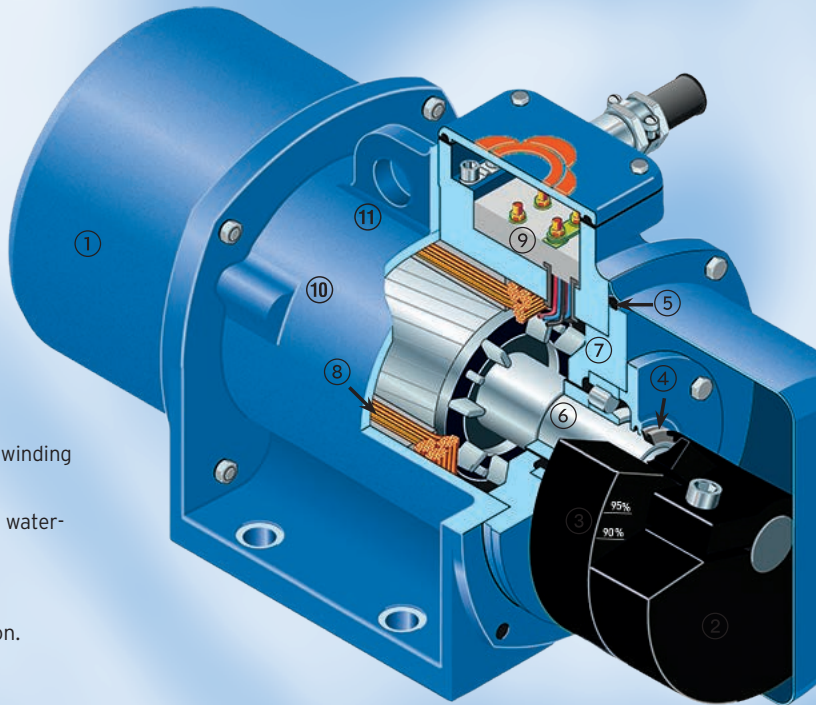
**Certifications:** The following Certifications are available on request:

 II 3 G/D, T 120°C.

Vibrator motors for potentially explosive atmospheres of Zone 22 (dust) according to RL 2014/34 EU with an EU Declaration of Conformity for the whole range.

 approval, project number 70186023 for all standard motors 60 Hz

- ① Closed drawn stainless steel end cover
- ② Keyed outer flyweight for safety. Adjustable inner flyweight.
- ③ For stepless adjustment of the centrifugal force (each graduation line = 5%) a well readable scale is lasered onto the inner centrifugal disc.
- ④ Labyrinth shaft seal
- ⑤ End covers sealed with thick round white silicon O-rings - 100% sealed against dust and moisture.
- ⑥ Heavy special purpose cylindrical roller bearings with increased internal clearance and crowned inner rings. Lubricated for life - maintenance free design.
- ⑦ Heavy bearing housing, supports the transmission of centrifugal force through to the frame.
- ⑧ Electrical components suitable for use under heavy vibration with special winding epoxy impregnation.
- ⑨ Firmly integrated cast-in terminal box to withstand heavy stress. Dust and water-spray proof.
- ⑩ Robust casing totally enclosed
- ⑪ Casing with cast-in lifting lugs for safe and easy mounting in any position.



- >> Bearings lubricated for life – no re-greasing required
- >> 100% maintenance free
- >> Energy efficient



#### CSA Certification

Vimarc has a long history of providing hazardous location "Explosionproof" motors to the North American marketplace bearing the CSA (Canadian Standards Association) and FM (Factory Mutual) approvals. To compliment these certifications, we also provide the CSA marking (master contract #173554) on all 60 hertz products found in this brochure. The CSA Appliance Norms 22.2 100-14 Motors and Generators (Master Contract #173554) cover the required safety standards for our products use both in the USA and Canada.

# >> Dimensions

## 4 pole vibrator motors (1800 min<sup>-1</sup>), nominal current at 460 V

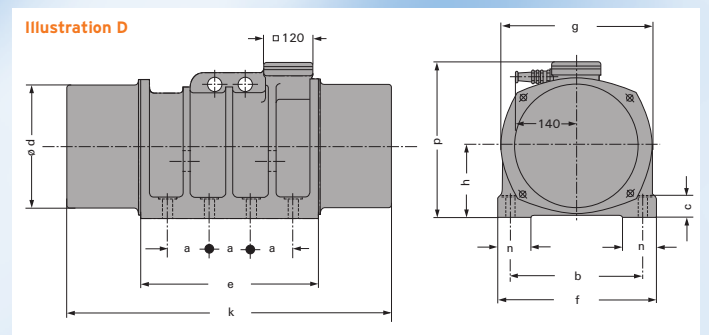
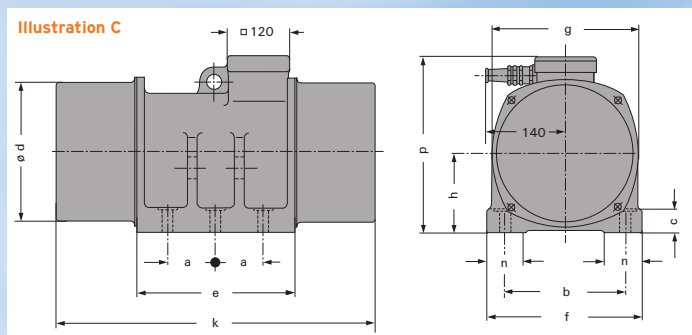
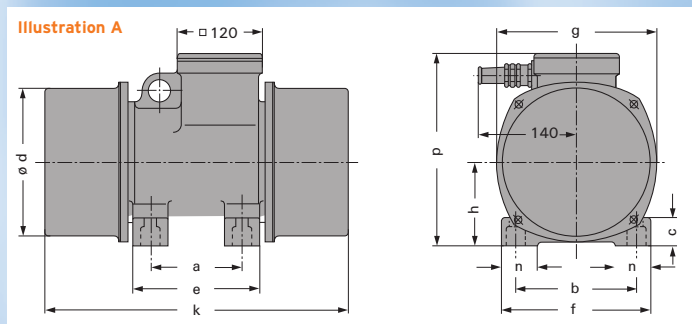
Working moment in-lb	Centrifugal force Pounds	Power consumption HP	Nominal current A	Power factor cos φ	Starting current ratio IA/IN	Type	Dimension Sketch #	Motor base No.	Dimensions inches										Weight lbs.	Cable Size AWG	Mounting Bolt Grade 5	
									a	b	c	d	e	f	g	h	k	n				p
26	1200	0.40	0.89	0.75	4.4	AFPZ 30-4	A	2	5.51	6.69	0.87	6.34	7.28	8.27	7.17	3.78	16.77	1.77	9.25	66	16-4	4x5/8"
35	1600	0.40	0.89	0.75	4.4	AFPZ 40-4	A	2	5.51	6.69	0.87	6.34	7.28	8.27	7.17	3.78	16.77	1.77	9.25	71	16-4	4x5/8"
52	2400	1.05	1.81	0.76	5.3	BFPZ 60-4	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	16.38	1.97	10.39	101	16-4	4x5/8"
65	3000	1.05	1.81	0.76	5.3	BFPZ 75-4	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	16.38	1.97	10.39	104	16-4	4x5/8"
78	3600	1.05	1.81	0.76	5.3	BFPZ 90-4	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	16.38	1.97	10.39	110	16-4	4x5/8"
109	5000	1.05	1.81	0.76	5.3	BFPZ 126-4	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	19.53	1.97	10.39	132	16-4	4x5/8"
130	6000	1.05	1.81	0.76	5.3	BFPZ 151-4	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	19.53	1.97	10.39	141	16-4	4x5/8"
130	6000	1.88	2.80	0.77	7.4	CFPZ 150-4	A	3-4B	6.54	9.06	1.14	9.84	9.92	11.02	11.10	5.51	18.23	2.87	12.01	201	16-4	4x3/4"
174	8000	1.88	2.80	0.77	7.4	CFPZ 200-4	A	3-4B	6.54	9.06	1.14	9.84	9.92	11.02	11.10	5.51	18.23	2.87	12.01	212	16-4	4x3/4"
174	8000	2.95	4.45	0.77	7.5	DFPZ 201-4	A	4-4B	8.27	9.76	1.30	11.22	11.69	11.97	12.60	6.22	23.15	2.83	13.31	256	16-4	4x1"
260	12000	2.95	4.45	0.77	7.5	DFPZ 301-4	A	4-4B	8.27	9.76	1.30	11.22	11.69	11.97	12.60	6.22	23.15	2.83	13.31	271	16-4	4x1"
373	17200	9.38	15.86	0.86	7.6	FNZ 430-4	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	26.77	3.54	15.35	434	14-4	6x1"
477	22000	9.38	15.86	0.86	7.6	GNZ 550-4	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	26.77	3.54	15.35	551	14-4	6x1"
521	24000	10.72	17.84	0.87	7.6	KNZ 600-4	C	8V	5.91	12.60	1.18	14.17	18.11	16.54	15.75	8.27	38.19	3.54	16.42	770	14-4	6x1-1/4"
608	28000	10.72	16.70	0.82	8.7	HNZ 700-4	D	9V	4.84	14.17	1.57	16.54	18.46	18.50	17.72	9.25	36.22	4.13	18.31	944	14-4	8x1"

## 6 pole vibrator motors (1200 min<sup>-1</sup>), nominal current at 460 V

in-lb	Pounds	HP	A	cos φ	IA/IN	Type	#		a	b	c	d	e	f	g	h	k	n	p	lb	AWG	Grade 5
48	980	0.20	0.89	0.62	3.6	AFPZ 55-6	A	2	5.51	6.69	0.87	6.34	7.28	8.27	7.17	3.78	16.77	1.77	9.25	77	16-4	4x5/8"
65	1330	0.20	0.89	0.62	3.6	AFPZ 75-6	A	2	5.51	6.69	0.87	6.34	7.28	8.27	7.17	3.78	20.31	1.77	9.25	82	16-4	4x5/8"
78	1600	0.50	1.52	0.74	2.9	BFPZ 90-6	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	16.38	1.97	10.39	110	16-4	4x5/8"
109	2220	0.50	1.52	0.74	2.9	BFPZ 125-6	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	19.53	1.97	10.39	128	16-4	4x5/8"
130	2660	0.50	1.52	0.74	2.9	BFPZ 150-6	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	19.53	1.97	10.39	132	16-4	4x5/8"
174	3550	0.50	1.52	0.74	2.9	BFPZ 201-6	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	22.44	1.97	10.39	152	16-4	4x5/8"
174	3550	1.30	3.30	0.74	4.5	CFPZ 200-6	A	3-4B	6.54	9.06	1.14	9.84	9.92	11.02	11.10	5.51	18.23	2.87	12.01	203	16-4	4x3/4"
217	4440	1.30	3.30	0.74	4.5	CFPZ 250-6	A	3-4B	6.54	9.06	1.14	9.84	9.92	11.02	11.10	5.51	20.20	2.87	12.01	216	16-4	4x3/4"
260	5330	1.30	3.30	0.74	4.5	CFPZ 300-6	A	3-4B	6.54	9.06	1.14	9.84	9.92	11.02	11.10	5.51	20.20	2.87	12.01	234	16-4	4x3/4"
304	6210	1.30	3.30	0.74	4.5	CFPZ 350-6	A	3-4B	6.54	9.06	1.14	9.84	9.92	11.02	11.10	5.51	20.20	2.87	12.01	238	16-4	4x3/4"
360	7370	2.10	4.65	0.74	4.9	DFPZ 415-6	A	4-4B	8.27	9.76	1.30	11.22	11.69	11.97	12.60	6.22	23.15	2.83	13.31	311	16-4	4x1"
434	8880	2.10	4.65	0.74	4.9	DFPZ 501-6	A	4-4B	8.27	9.76	1.30	11.22	11.69	11.97	12.60	6.22	24.88	2.83	13.31	335	16-4	4x1"
521	10650	2.10	4.65	0.74	4.9	DFPZ 600-6	A	4-4B	8.27	9.76	1.30	11.22	11.69	11.97	12.60	6.22	24.88	2.83	13.31	362	16-4	4x1"
608	12400	2.70	7.00	0.60	6.6	ENZ 700-6	C	4	4.13	9.76	1.10	12.60	11.81	12.20	13.46	7.09	27.56	3.15	14.37	412	16-4	6x3/4"
738	15100	2.70	7.00	0.60	6.6	ENZ 850-6	C	4	4.13	9.76	1.10	12.60	11.81	12.20	13.46	7.09	27.56	3.15	14.37	432	16-4	6x3/4"
738	15100	4.00	8.62	0.84	7.5	FNZ 850-6	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	30.31	3.54	15.35	551	14-4	6x1"
868	17800	4.00	8.62	0.84	7.5	FNZ 1000-6	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	30.31	3.54	15.35	598	14-4	6x1"
998	20400	4.00	8.62	0.84	7.5	GNZ 1150-6	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	35.83	3.54	15.35	620	14-4	6x1"
1215	24900	5.60	12.83	0.66	7.3	GLNZ 1400-6	C	6	4.65	11.02	1.38	14.17	14.57	13.39	15.75	8.27	34.25	3.35	16.73	827	14-4	6x1"
1519	31000	5.60	12.83	0.66	7.3	GLNZ 1750-6	C	6	4.65	11.02	1.38	14.17	14.57	13.39	15.75	8.27	34.25	3.35	16.73	856	14-4	6x1"
1736	35500	8.00	19.13	0.70	9.5	HNZ 2000-6	D	9V	4.84	14.17	1.57	16.54	18.46	18.50	17.72	9.25	36.22	4.13	18.31	1133	14-4	8x1"
2170	44400	8.00	19.13	0.70	9.5	HNZ 2500-6	D	9V	4.84	14.17	1.57	16.54	18.46	18.50	17.72	9.25	36.22	4.13	18.31	1191	14-4	8x1"

### 8 pole vibrator motors (900 min<sup>-1</sup>), nominal current at 460 V

in-lb	Pounds	HP	A	cos φ	IA/IN		#		a	b	c	d	e	f	g	h	k	n	p	lb	AWG	Grade 5
35	400	0.15	0.53	0.60	5.6	AFPZ 40-8	A	2	5.51	6.69	0.87	6.34	7.28	8.27	7.17	3.78	16.77	1.77	9.25	71	16-4	4x5/8"
48	550	0.15	0.53	0.60	5.6	AFPZ 55-8	A	2	5.51	6.69	0.87	6.34	7.28	8.27	7.17	3.78	16.77	1.77	9.25	77	16-4	4x5/8"
65	750	0.15	0.53	0.60	5.6	AFPZ 75-8	A	2	5.51	6.69	0.87	6.34	7.28	8.27	7.17	3.78	20.31	1.77	9.25	82	16-4	4x5/8"
82	950	0.15	0.53	0.60	5.6	AFPZ 95-8	A	2	5.51	6.69	0.87	6.34	7.28	8.27	7.17	3.78	20.31	1.77	9.25	90	16-4	4x5/8"
109	1250	0.45	1.65	0.59	3.0	BFPZ 125-8	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	19.53	1.97	10.39	123	16-4	4x5/8"
130	1500	0.45	1.65	0.59	3.0	BFPZ 150-8	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	19.53	1.97	10.39	135	16-4	4x5/8"
174	2000	0.45	1.65	0.59	3.0	BFPZ 200-8	A	2	5.51	6.69	0.91	7.56	8.39	8.66	8.90	4.33	22.44	1.97	10.39	141	16-4	4x5/8"
217	2500	1.10	3.20	0.64	3.8	CFPZ 250-8	A	3-4B	6.54	9.06	1.14	9.84	9.92	11.02	11.10	5.51	20.20	2.87	12.01	223	16-4	4x3/4"
260	3000	1.10	3.20	0.64	3.8	CFPZ 300-8	A	3-4B	6.54	9.06	1.14	9.84	9.92	11.02	11.10	5.51	20.20	2.87	12.01	234	16-4	4x3/4"
304	3500	1.10	3.20	0.64	3.8	CFPZ 350-8	A	3-4B	6.54	9.06	1.14	9.84	9.92	11.02	11.10	5.51	21.81	2.87	12.01	238	16-4	4x3/4"
360	4140	1.80	4.45	0.72	4.2	DFPZ 415-8	A	4-4B	8.27	9.76	1.30	11.22	11.69	11.97	12.60	6.22	23.15	2.83	13.31	311	16-4	4x1"
434	5000	1.80	4.45	0.72	4.2	DFPZ 500-8	A	4-4B	8.27	9.76	1.30	11.22	11.69	11.97	12.60	6.22	23.15	2.83	13.31	331	16-4	4x1"
521	6000	1.80	4.45	0.72	4.2	DFPZ 600-8	A	4-4B	8.27	9.76	1.30	11.22	11.69	11.97	12.60	6.22	24.88	2.83	13.31	362	16-4	4x1"
608	7000	2.00	5.25	0.65	4.8	ENZ 700-8	C	4	4.13	9.76	1.10	12.60	11.81	12.20	13.46	7.09	27.56	3.15	14.37	412	16-4	6x3/4"
738	8500	2.00	5.25	0.65	4.8	ENZ 850-8	C	4	4.13	9.76	1.10	12.60	11.81	12.20	13.46	7.09	27.56	3.15	14.37	432	16-4	6x3/4"
868	10000	3.00	7.73	0.66	6.0	FNZ 1000-8	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	30.31	3.54	15.35	598	14-4	6x1"
998	11500	3.00	7.73	0.66	6.0	FNZ 1150-8	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	35.83	3.54	15.35	620	14-4	6x1"
1128	13000	3.00	7.73	0.66	6.0	FNZ 1300-8	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	35.83	3.54	15.35	628	14-4	6x1"
1215	14000	3.00	7.73	0.66	6.0	FNZ 1400-8	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	35.83	3.54	15.35	653	14-4	6x1"
1389	16000	3.00	7.73	0.66	6.0	FNZ 1600-8	C	6	4.65	11.02	1.38	12.60	14.57	13.39	13.39	7.28	37.40	3.54	15.35	684	14-4	6x1"
1519	17500	4.00	10.23	0.68	6.1	GLNZ1750-8	C	6	4.65	11.02	1.38	14.17	14.57	13.39	15.75	8.27	34.25	3.35	16.73	856	14-4	6x1"
1736	20000	4.00	10.23	0.68	6.1	GLNZ2000-8	C	6	4.65	11.02	1.38	14.17	14.57	13.39	15.75	8.27	36.61	3.35	16.73	875	14-4	6x1"
1736	20000	4.50	11.30	0.70	6.1	KNZ 2000-8	C	8V	5.91	12.60	1.18	14.17	18.11	16.54	15.75	8.27	40.55	3.54	16.42	1036	14-4	6x1-1/4"
2170	25000	7.00	18.93	0.56	7.3	HNZ 2500-8	D	9V	4.84	14.17	1.57	16.54	18.46	18.50	17.72	9.25	36.22	4.13	18.31	1191	14-4	8x1"
2778	31900	7.00	18.93	0.56	7.3	HNZ 3200-8	D	9V	4.84	14.17	1.57	16.54	18.46	18.50	17.72	9.25	40.55	4.13	18.31	1279	14-4	8x1"



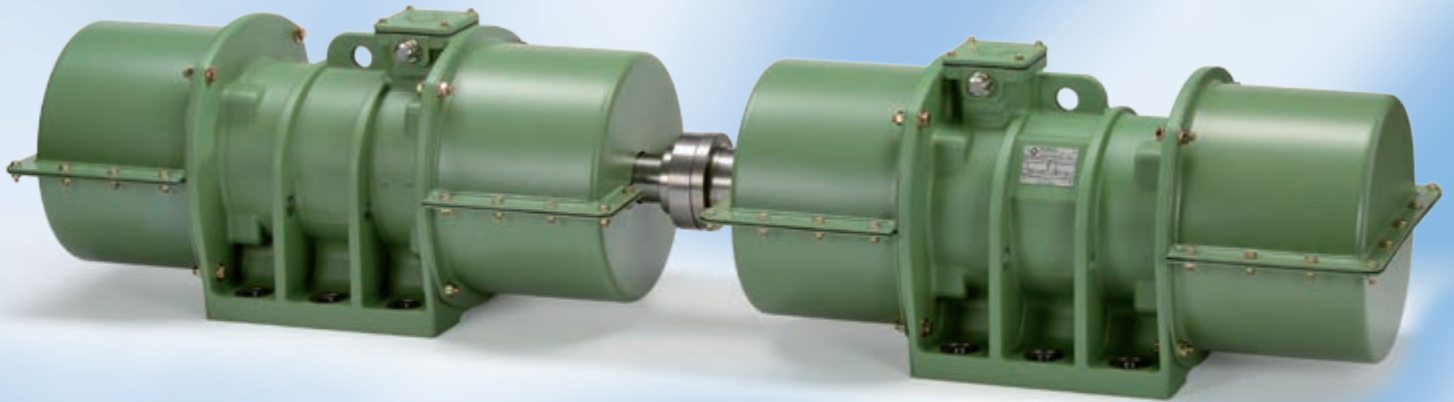
schematic diagram

## >> Product range

### FK types

FK Type motors are coupled shaft design. The coupled shaft design provides a doubling of working moment capability and is often used for wide vibrating machines. When assembled, the two motor bases are also located closer to the machine frame sidewalls reducing the stress created by a single motor mounted in the middle of the motor support structure or bridge. FK Type vibrators are designed to transmit the vibrating forces more uniformly throughout the machine.

The connecting shaft assures perfect synchronization by means of an extended shaft protruding through a split weight cover. The split weight cover provides access to adjustability of the eccentric weights. A flexible maintenance free coupling design connects the two shafts. Available for frame sizes FN, GN, GLN, HN, KN in 6 and 8 poles.



### FHG types

FHG-Motors are equipped with flange-divided end covers made of deep drawn steel and welded-on flange. This special form is equipped with round silicon seal on the motor side and special rubber seal between the end cover flanges to ensure a perfect protection against intrusion of dust and water.

Flange-divided end covers are available either in powder coated deep drawn steel or stainless steel quality. RAL 6011 is the standard color powder coating.

Flange-divided end covers are recommendable in constricted installation situations. The divided end cover allows for unproblematic opening and dismantling, in order to adjust the flyweights of the motor.

It is also possible to use a closed end cover on one motor side and a flange-divided end cover on the other motor side. Flange-divided end covers are also usable on both motor sides. More flexibility during construction of machinery is a major advantage.



### FP types

FRIEDRICH/VIMARC® is the world's first vibrator motor manufacturer that developed motors especially for applications in the food processing plants and also in the field of pharmaceuticals and chemicals. Our FP model motor series is now developed for the purpose of meeting a growing demand in the industry for improved hygiene and cleanability, and this product line provides a perfect solution.

The new FP series is characterized by the fact that all ribs and blind spots are constructively eliminated and mounting surfaces are minimized on the machine.

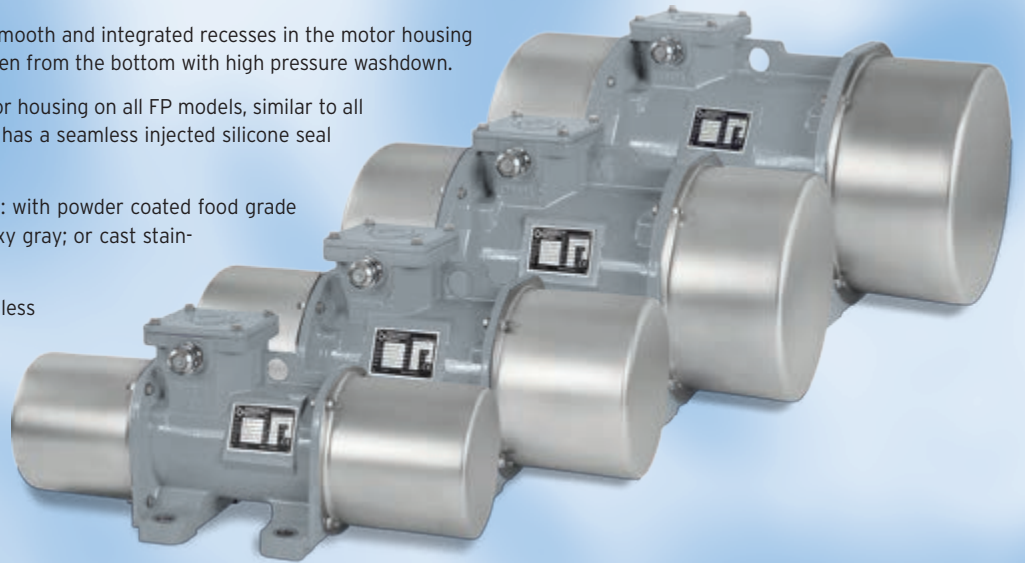
Furthermore, the casting surface is extremely smooth and integrated recesses in the motor housing allows a light and safe cleaning of the motor, even from the bottom with high pressure washdown.

The terminal box is integrally cast with the stator housing on all FP models, similar to all the FRIEDRICH models. The terminal box cover has a seamless injected silicone seal which cannot be lost.

The FP series can be supplied in three versions: with powder coated food grade epoxy (RAL 5015) blue; Steel-It food grade epoxy gray; or cast stainless steel.

The end covers are standard deep drawn stainless steel sheet, but can also be provided with stainless steel split cover option for easy access and adjustment of the flyweights in tight locations.

The FP series motors otherwise meets all the requirements and specifications of the FRIEDRICH/Vimarc® brands.



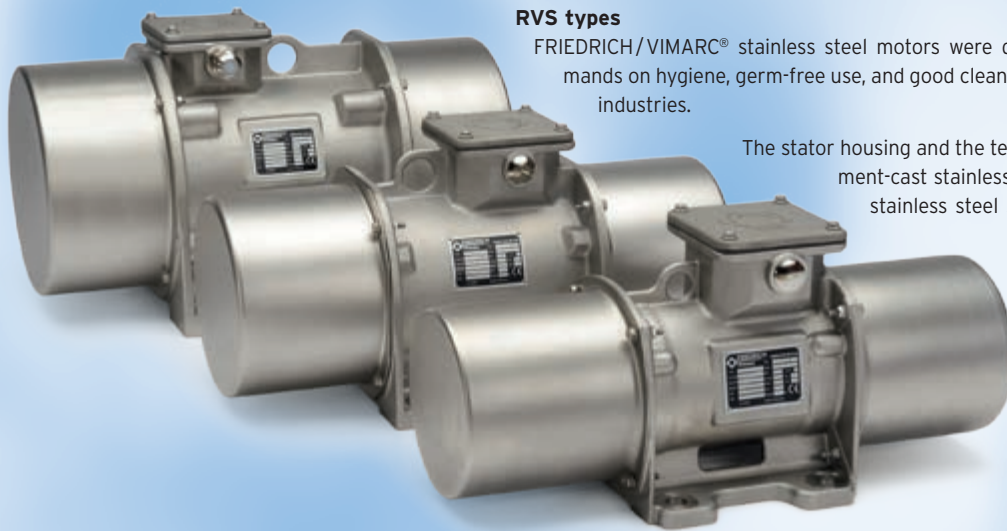
### RVS types

FRIEDRICH/VIMARC® stainless steel motors were developed to meet the constantly increasing demands on hygiene, germ-free use, and good cleaning characteristics in the food and pharmaceutical industries.

The stator housing and the terminal box cover of this series are made of investment-cast stainless steel and are hermetically sealed by deep-drawn stainless steel sheet metal covers. Special cleaning openings in the stainless steel housing provide excellent cleaning possibilities on the underside of the housing.

The smooth motor surface - without any ribbing - allows absolutely no formation of germs.

The RVS series motors otherwise meets all the requirements and specifications of the FRIEDRICH/Vimarc® brands.



## Unbalance exciters



- » Centrifugal force: 21000 - 482000 N
- » Working moment: 390 - 12300 kgcm
- » Speed 50Hz: 750, 1000, 1500 min<sup>-1</sup>
- » Speed 60Hz: 900, 1200 min<sup>-1</sup>

### Our further range of products:

- » Repair service
- » Spare parts service
- » Springs

## Vibrator motors



- » Centrifugal force: 500 - 216600 N
- » Working moment: 1.2 - 6500 kgcm
- » Speed 50Hz: 500, 600, 750, 1000, 1500, 3000 min<sup>-1</sup>
- » Speed 60Hz: 600, 900, 1200, 1800, 3600 min<sup>-1</sup>

### Ask for our other catalogs or download from our website!

- » VIMARC® vibrator motor 50 and 60 Hz
- » VIMARC® explosion-proof-vibrator motor
- » Spare parts
- » FRIEDRICH Vibrator motor 50 and 60 Hz
- » FRIEDRICH ATEX-vibrator motor
- » FRIEDRICH Coupled motor
- » FRIEDRICH Vibrator motor with stainless steel end cover
- » FRIEDRICH Motor with split end covers

## Hazardous location vibrator motors



- » II 2 G/D Ex e, T4/T3, T 120 °C
- » II 3 G/D, T 120 °C
- » II 2 G/D Ex d IIB T4
- » Class I, Groups C and D. Class II, Groups E, F and G - File N° 2R55503
- » Class I, Division 1, Groups C and D, Class II, Division 1, Groups E, F and G - N° OM5A8.AE

## History

- 1951** Vimarc manufacturing begins including explosion proof vibrating motors, as a Division of United Technologies in Breda, The Netherlands.
- 1965** FRIEDRICH Schwingtechnik GmbH is founded.
- 1972** Vimarc establishes permanent presence in the US marketplace with an exclusive distribution agreement.
- 1973** FRIEDRICH develops first maintenance-free vibrating motor, based upon many years of experience in the field of vibration technology.
- 1974** FRIEDRICH introduces a line of linear unbalance exciters.
- 1982** Vimarc vibrating motor approved for hazardous locations by Factory Mutual, for the US market, complementing existing ATEX and IECEx certifications.
- 1987** Vimarc explosion proof vibrating motor for hazardous locations is certified by Canadian Standards Association for the Canadian market.
- 1996** FRIEDRICH Schwingtechnik GmbH is acquired with new management focus on international markets
- 1998** Vimarc is acquired as a sister company to FRIEDRICH Schwingtechnik GmbH and expands its market presence in the food processing industry, and global petroleum markets.
- 2001** FRIEDRICH completes extensive expansion of its facilities in Haan, Germany.
- 2007** Vimarc Inc. opens its doors in Houston, TX for inventory, assembly, and aftermarket support of our products for the North America Market
- 2016** Vimarc Inc. begins direct sales and marketing of our products in North America along with product support for our sister company FRIEDRICH Schwingtechnik GmbH

Copyright © Vimarc "®" is a registered trademark of Vimarc Inc.

This catalog is protected by Copyright. Reproduction and public communication, also excerpts thereof, require our explicit written approval.

We are constantly updating our range of products. Latest product information is available on our internet page: [www.vimarcusa.com](http://www.vimarcusa.com)



**Vimarc Inc.**  
10757 Cutten Road #5 · Houston, TX 77066 · USA  
Phone: +1 (281) 440-0028  
[www.vimarcusa.com](http://www.vimarcusa.com) · [info@vimarcusa.com](mailto:info@vimarcusa.com)