

POWTEK



Rotary Electric Vibrators

Rotary Electric Vibrators

The VE series vibrators were developed based on the most advanced concepts in vibration technology with special emphasis on design details that are critical to large, heavy duty vibrators.

Electric vibrators are best suited in applications where:

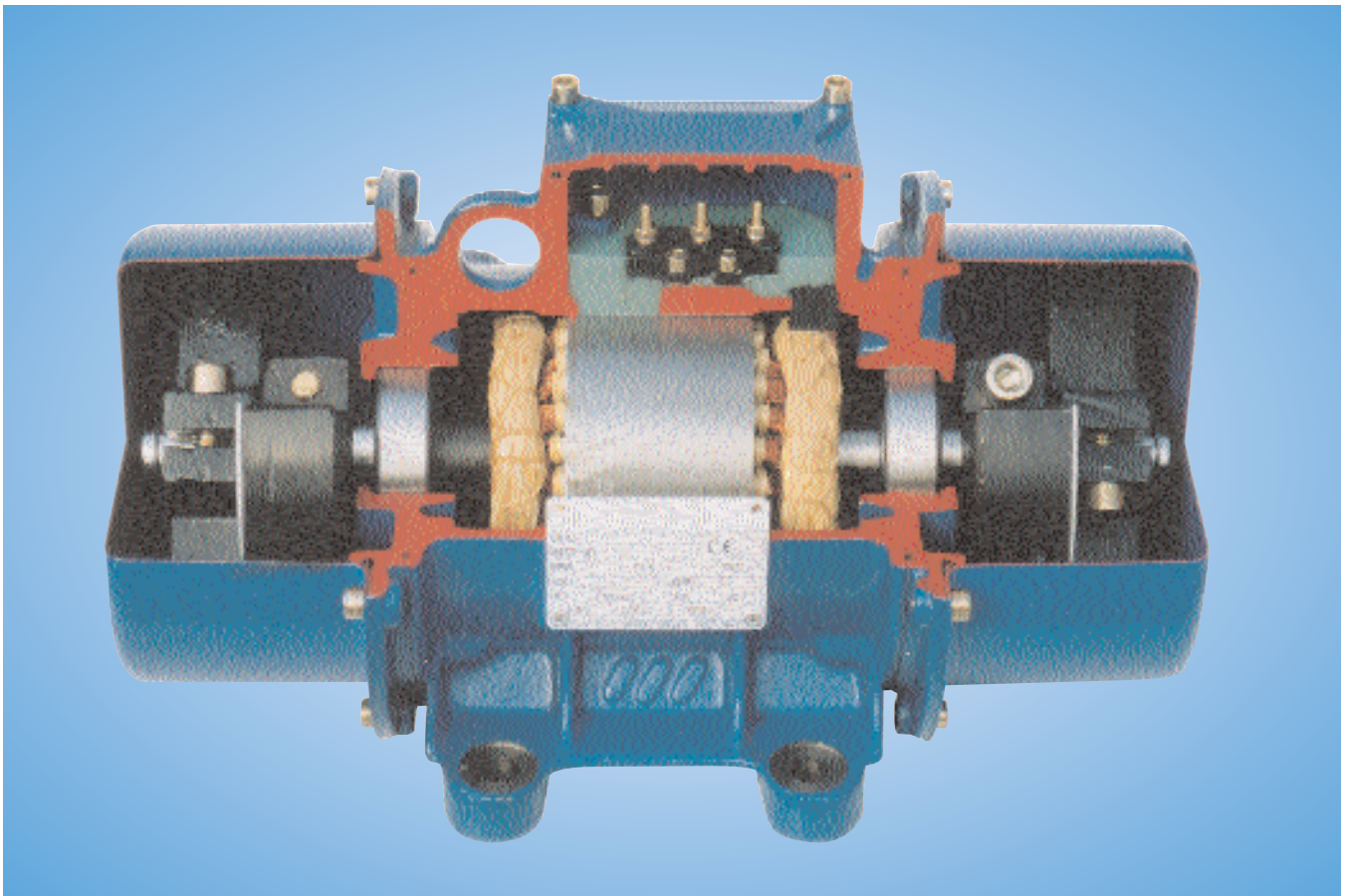
- Noise is a factor
- Compressed air is not readily or sufficiently available
- High energy efficiency is needed
- Precise adjustment of force output is necessary
- A very high force output is required

In addition to force output, success in certain applications is based on reaching and maintaining a required frequency.

How it Works

The external vibrator is an asynchronous motor which has adjustable eccentric weights mounted on each end of the rotor shaft.

Shaft rotation generates centrifugal force which can be adjusted by changing the weight settings.



Typical frequency based applications:

3600 rpm

- Silo flow aid
- Most small and midsize containers

1800 rpm

- Bin activators
- Screeners (for product sizes smaller than 3/4")
- Bulk Bag Unloaders

1200 rpm

- Vibratory tables
- Screeners (for product sizes ranging between 3/4" and 2").
- Sifters
- Vibratory feeders

900 rpm

- Screeners (for product sizes larger than 2")

General Features

The housing is made of ductile cast iron of high mechanical strength (starting from frame 3)

Lifting and safety eyebolts.

Double grease fittings each bearing for longer life in vertical applications.

Stator core laminations with low core energy loss reduce overheating of the motors.

Mechanical Protection IP65-7.

Insulation Class F.

CE Compliance.

ASTM winding impregnation with top of the line resin Dolph's CC 1105 LV.

Thermistor safety protection against overheating (for frame size 50 and higher).

30% to 100% force adjustment is available on all models.

Integrally cast terminal block housing.

End caps with 6 bolts to maintain a more perfect seal with the O-rings.

Steel endcaps. Unlike aluminum endcaps, job damaged steel will not easily crack, split or leak.

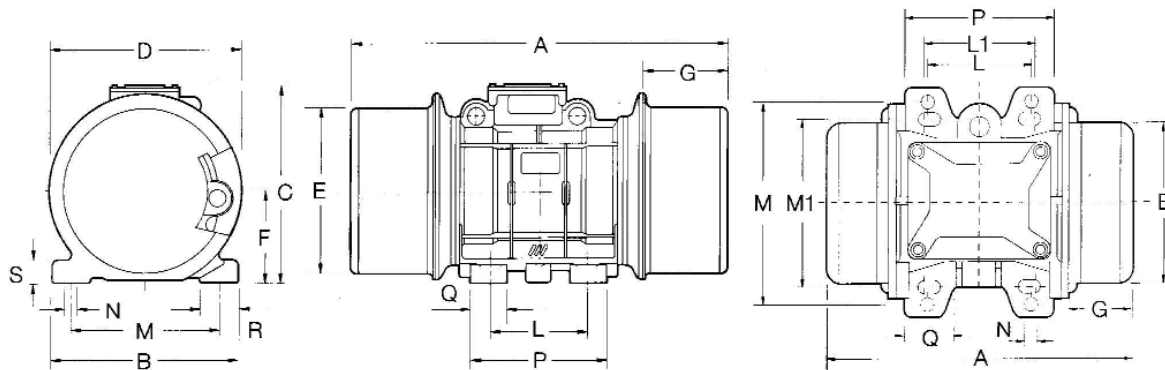
VE3

3600 RPM

Three-Phase

PERFORMANCE DATA

| MODEL | FORCE OUTPUT | UNBALANCE | HP | AMP DRAW 460 V | AMP DRAW 230 V | STARTUP CURRENT MULTIPLIER | FRAME | WEIGHT |
|---------------|--------------|-----------|------|----------------|----------------|----------------------------|-------|--------|
| | lbs | in -lbs | h.p. | Amps | Amps | | | lbs |
| VE3/36/95 | 114 | 0.34 | 0.15 | 0.20 | 0.40 | 3.0 | 0 | 9 |
| VE3/36/95 XL | 167 | 0.45 | 0.15 | 0.20 | 0.40 | 3.0 | 0 | 9 |
| VE3/36/120 | 167 | 0.45 | 0.22 | 0.28 | 0.56 | 3.2 | 1 | 10 |
| VE3/36/120 XL | 208 | 0.56 | 0.22 | 0.28 | 0.56 | 3.2 | 1 | 11 |
| VE3/36/250 | 297 | 0.81 | 0.25 | 0.32 | 0.64 | 3.0 | 1 | 11 |
| VE3/36/400 | 398 | 1.08 | 0.28 | 0.34 | 0.68 | 3.0 | 1 | 12 |
| VE3/36/660 | 653 | 1.94 | 0.34 | 0.60 | 1.2 | 3.7 | 2 | 18 |
| VE3/36/1050 | 1511 | 4.44 | 0.72 | 0.85 | 1.7 | 4.6 | 3 | 42 |
| VE3/36/1650 | 1815 | 5.30 | 0.85 | 1.0 | 2.0 | 4.0 | 4A | 61 |
| VE3/36/2200 | 2420 | 7.00 | 1.00 | 1.2 | 2.4 | 5.1 | 4B | 65 |
| VE3/36/2800 | 3100 | 8.8 | 1.75 | 1.8 | 3.6 | 4.8 | 6 | 76 |
| VE3/36/3000 | 3507 | 10 | 2.01 | 2.1 | 4.2 | 6.0 | 15A | 97 |
| VE3/36/4000 | 4400 | 12 | 2.7 | 2.9 | 5.8 | 5.5 | 15B | 101 |
| VE3/36/5000 | 5500 | 15 | 3.2 | 3.5 | 7.0 | 5.4 | 20 | 161 |
| VE3/36/7000 | 7040 | 19 | 5.4 | 5.6 | 11.2 | 5.2 | 30 | 218 |
| VE3/36/10000 | 10560 | 29 | 6.7 | 7.1 | 14.2 | 4.9 | 60 | 299 |
| VE3/36/12000 | 13200 | 36 | 11 | 12 | 24 | 5.4 | 70A | 425 |
| VE3/36/20000 | 19570 | 53 | 13 | 13.5 | 27 | 4.8 | 70B | 517 |



DIMENSIONS

| MODEL | A | B | C | D | E | F | G | L | L1 | M | M1 | N | P | Q | R | S | BOLT HOLE NBR |
|---------------|-------|-------|-------|-------|-------|------|------|------|-----------|-----------|------|------|-------|------|------|------|---------------|
| VE3/36/95 | 7.65 | 4.92 | 4.80 | 3.42 | 3.23 | 1.81 | 1.38 | 2.44 | - | 3.86-4.17 | - | 0.35 | 3.89 | 1.18 | 1.22 | 0.32 | 4 |
| VE3/36/95 XL | 7.65 | 4.92 | 4.80 | 3.42 | 3.23 | 1.81 | 1.38 | 2.44 | - | 3.86-4.17 | - | 0.35 | 3.89 | 1.18 | 1.22 | 0.32 | 4 |
| VE3/36/120 | 8.34 | 5.90 | 5.70 | 4.45 | 4.13 | 2.36 | 1.81 | 2.75 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.37 | 0.39 | 4 |
| VE3/36/120 XL | 8.34 | 5.90 | 5.70 | 4.45 | 4.13 | 2.36 | 1.81 | 2.75 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.37 | 0.39 | 4 |
| VE3/36/250 | 8.34 | 5.90 | 5.70 | 4.45 | 4.13 | 2.36 | 1.81 | 2.75 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.37 | 0.39 | 4 |
| VE3/36/400 | 8.34 | 5.90 | 5.70 | 4.45 | 4.13 | 2.36 | 1.81 | 2.75 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.37 | 0.39 | 4 |
| VE3/36/660 | 10.24 | 6.54 | 7.28 | 6.30 | 5.12 | 2.95 | 1.97 | 3.54 | 3.54 | 4.92 | 5.51 | 0.51 | 4.72 | 1.18 | 1.57 | 0.47 | 4 |
| VE3/36/1050 | 11.34 | 7.48 | 8.07 | 7.36 | 5.94 | 3.35 | 2.13 | 4.13 | | 5.51 | | 0.51 | 5.35 | 1.30 | 1.57 | 0.63 | 4 |
| VE3/36/1650 | 13.98 | 8.27 | 9.29 | 8.50 | 7.13 | 3.98 | 2.80 | 4.72 | | 6.70 | | 0.67 | 6.30 | 1.57 | 1.69 | 0.79 | 4 |
| VE3/36/2200 | 13.98 | 8.27 | 9.29 | 8.50 | 7.13 | 3.98 | 2.80 | 4.72 | | 6.70 | | 0.67 | 6.30 | 1.57 | 1.69 | 0.79 | 4 |
| VE3/36/2800 | 14.75 | 9.28 | 9.29 | 8.50 | 7.13 | 3.98 | 2.80 | 3.94 | | 7.87 | | 0.67 | 6.30 | 1.57 | 1.69 | 0.95 | 4 |
| VE3/36/3000 | 17.56 | 9.65 | 10.24 | 10.16 | 8.62 | 4.80 | 3.39 | 5.51 | | 7.48 | | 0.67 | 7.48 | 1.57 | 1.77 | 0.98 | 4 |
| VE3/36/4000 | 17.56 | 9.65 | 10.24 | 10.16 | 8.62 | 4.80 | 3.39 | 5.51 | | 7.48 | | 0.67 | 7.48 | 1.57 | 1.77 | 0.98 | 4 |
| VE3/36/5000 | 20.47 | 10.83 | 12.20 | 10.94 | 9.41 | 5.20 | 4.17 | 6.10 | | 8.86 | | 0.83 | 8.07 | 1.97 | 2.17 | 1.18 | 4 |
| VE3/36/7000 | 21.26 | 12.80 | 13.54 | 12.80 | 11.14 | 6.18 | 4.02 | 6.14 | | 10.08 | | 0.91 | 8.66 | 2.17 | 2.36 | 1.38 | 4 |
| VE3/36/10000 | 23.23 | 13.39 | 14.72 | 13.98 | 12.17 | 6.77 | 4.17 | 7.09 | | 11.02 | | 0.98 | 9.45 | 2.36 | 2.56 | 1.57 | 4 |
| VE3/36/12000 | 25.12 | 15.35 | 16.26 | 15.67 | 13.66 | 7.52 | 4.13 | 7.87 | | 12.6 | | 1.11 | 11.02 | 2.95 | 3.07 | 1.77 | 4 |
| VE3/36/20000 | 25.67 | 15.35 | 16.26 | 15.67 | 13.66 | 6.52 | 4.13 | 7.87 | | 12.6 | | 1.11 | 11.02 | 2.95 | 3.07 | 1.77 | 4 |

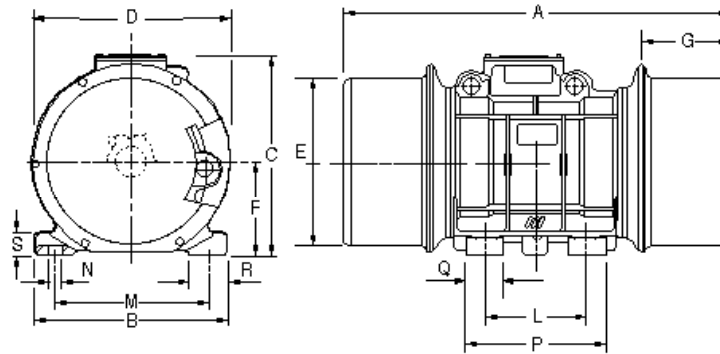
VE3

1800 RPM

Three-Phase

PERFORMANCE DATA

| MODEL | FORCE OUTPUT | UNBALANCE | HP | AMP DRAW 460 V | AMP DRAW 230 V | STARTUP CURRENT MULTIPLIER | FRAME | WEIGHT |
|--------------|--------------|-----------|------|----------------|----------------|----------------------------|-------|--------|
| | lbs | in -lbs | h.p. | Amps | Amps | | | lbs |
| VE3/18/150 | 174 | 1.54 | 0.14 | 0.21 | 0.42 | 1.9 | 1 | 12 |
| VE3/18/450 | 448 | 5.1 | 0.23 | 0.37 | 0.74 | 3.2 | 2 | 24 |
| VE3/18/900 | 908 | 10 | 0.44 | 0.66 | 1.32 | 3.5 | 3 | 46 |
| VE3/18/1200 | 1280 | 15 | 0.48 | 0.71 | 1.42 | 3.3 | 3 | 62 |
| VE3/18/1500 | 1522 | 17 | 0.70 | 0.90 | 1.8 | 4.3 | 4-A | 72 |
| VE3/18/2200 | 2246 | 25 | 0.91 | 1.15 | 2.3 | 4.7 | 4-B | 95 |
| VE3/18/3500 | 3522 | 38 | 1.47 | 1.5 | 3.0 | 4.4 | 15-A | 106 |
| VE3/18/4600 | 4598 | 50 | 1.68 | 2.0 | 4.0 | 4.7 | 15-B | 119 |
| VE3/18/6000 | 5984 | 65 | 2.41 | 3.1 | 6.2 | 6.1 | 20 | 172 |
| VE3/18/8000 | 8342 | 91 | 3.28 | 4.7 | 9.4 | 6.3 | 30 | 240 |
| VE3/18/10000 | 10932 | 119 | 4.42 | 4.9 | 9.8 | 4.6 | 50 | 304 |
| VE3/18/15000 | 14487 | 157 | 8.04 | 9.5 | 19 | 6.1 | 70 | 453 |
| VE3/18/17500 | 17681 | 192 | 10.7 | 11.5 | 23 | 5.6 | 70-B | 515 |
| VE3/18/18000 | 17681 | 192 | 10.7 | 11.5 | 23 | 5.6 | 120-A | 647 |
| VE3/18/20000 | 19769 | 215 | 11.4 | 12 | 24 | 5.3 | 120-B | 680 |
| VE3/18/25000 | 24160 | 263 | 14.7 | 16 | 32 | 6.7 | 120-C | 814 |



DIMENSIONS

| MODEL | A | B | C | D | E | F | G | L | L1 | M | M1 | N | P | Q | R | S | BOLT HOLE NBR |
|--------------|-------|-------|-------|-------|-------|------|------|-------|-----------|-------|------|------|-------|------|------|------|---------------|
| VE3/18/150 | 9.06 | 5.91 | 5.71 | 5.12 | 4.13 | 2.36 | 2.17 | 2.76 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.38 | 0.39 | 4 |
| VE3/18/450 | 11.73 | 6.54 | 7.28 | 6.30 | 5.12 | 2.95 | 2.72 | 3.54 | 3.54 | 4.92 | 5.51 | 0.51 | 4.72 | 1.18 | 1.57 | 0.47 | 4 |
| VE3/18/900 | 13.78 | 7.48 | 8.07 | 7.36 | 5.94 | 3.35 | 3.35 | 4.13 | | 5.51 | | 0.51 | 5.35 | 1.30 | 1.57 | 0.63 | 4 |
| VE3/18/1200 | 13.78 | 7.48 | 8.07 | 7.36 | 5.94 | 3.35 | 3.35 | 4.13 | | 5.51 | | 0.51 | 5.35 | 1.30 | 1.57 | 0.63 | 4 |
| VE3/18/1500 | 13.98 | 8.27 | 9.29 | 8.50 | 7.13 | 3.98 | 2.80 | 4.72 | | 6.70 | | 0.67 | 6.30 | 1.57 | 1.69 | 0.79 | 4 |
| VE3/18/2200 | 16.34 | 8.27 | 9.29 | 8.50 | 7.13 | 3.98 | 3.98 | 4.72 | | 6.70 | | 0.67 | 6.30 | 1.57 | 1.69 | 0.79 | 4 |
| VE3/18/3500 | 17.56 | 9.65 | 10.24 | 10.16 | 8.62 | 4.80 | 3.39 | 5.51 | | 7.48 | | 0.67 | 7.48 | 1.57 | 1.77 | 0.98 | 4 |
| VE3/18/4600 | 19.21 | 9.65 | 10.24 | 10.16 | 8.62 | 4.80 | 4.21 | 5.51 | | 7.48 | | 0.67 | 7.48 | 1.57 | 1.77 | 0.98 | 4 |
| VE3/18/6000 | 20.47 | 10.83 | 12.20 | 10.94 | 9.41 | 5.20 | 4.17 | 6.10 | | 8.86 | | 0.83 | 8.07 | 1.97 | 2.17 | 1.18 | 4 |
| VE3/18/8000 | 21.26 | 12.80 | 13.54 | 12.80 | 11.14 | 6.18 | 4.02 | 6.14 | | 10.08 | | 0.91 | 8.66 | 2.17 | 2.36 | 1.38 | 4 |
| VE3/18/10000 | 23.23 | 13.39 | 14.72 | 13.98 | 12.17 | 6.77 | 4.17 | 7.09 | | 11.02 | | 0.98 | 9.45 | 2.36 | 2.56 | 1.57 | 4 |
| VE3/18/15000 | 25.12 | 15.35 | 16.26 | 15.67 | 13.66 | 7.52 | 4.13 | 7.87 | | 12.6 | | 1.10 | 11.02 | 2.95 | 3.07 | 1.77 | 4 |
| VE3/18/17500 | 33.31 | 15.35 | 16.26 | 15.67 | 13.66 | 7.52 | 7.95 | 7.87 | | 12.6 | | 1.10 | 11.02 | 2.95 | 3.07 | 1.77 | 4 |
| VE3/18/18000 | 27.80 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 4.65 | 10.24 | | 14.76 | | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |
| VE3/18/20000 | 27.80 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 4.65 | 10.24 | | 14.76 | | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |
| VE3/18/25000 | 29.06 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 4.65 | 10.24 | | 14.76 | | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |

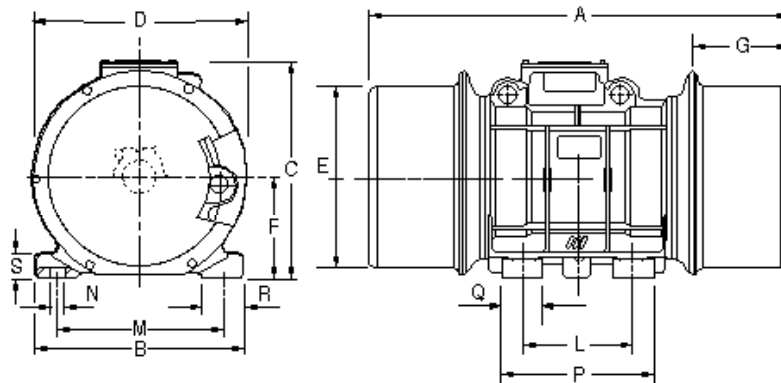
VE3

1200 RPM

Three-Phase

PERFORMANCE DATA

| MODEL | FORCE OUTPUT | UNBALANCE | HP | AMP DRAW 460 V | AMP DRAW 230 V | STARTUP CURRENT MULTIPLIER | FRAME | WEIGHT |
|--------------|--------------|-----------|------|----------------|----------------|----------------------------|-------|--------|
| | lbs | in -lbs | h.p. | Amps | Amps | | | lbs |
| VE3/12/110 | 110 | 2.7 | 0.12 | 0.35 | 0.7 | 1.6 | 1 | 12 |
| VE3/12/220 | 220 | 5.4 | 0.21 | 0.43 | 0.86 | 1.8 | 2 | 24 |
| VE3/12/550 | 560 | 14 | 0.38 | 0.54 | 1.08 | 2.6 | 3 | 54 |
| VE3/12/700 | 704 | 17 | 0.40 | 0.56 | 1.12 | 2.5 | 3 | 73 |
| VE3/12/980 | 999 | 24 | 0.47 | 0.68 | 1.36 | 3.0 | 4-A | 100 |
| VE3/12/1250 | 1248 | 31 | 0.62 | 0.95 | 1.9 | 3.3 | 4-B | 105 |
| VE3/12/2000 | 2044 | 50 | 1.07 | 1.3 | 2.6 | 4.4 | 15-A | 117 |
| VE3/12/2800 | 2926 | 71 | 1.21 | 1.6 | 3.2 | 4.7 | 15-B | 139 |
| VE3/12/4000 | 4382 | 107 | 1.88 | 2.3 | 4.6 | 4.8 | 20 | 189 |
| VE3/12/6000 | 7190 | 175 | 2.68 | 4.2 | 8.4 | 5.2 | 30 | 288 |
| VE3/12/10000 | 11033 | 269 | 3.75 | 5 | 10 | 6.0 | 50 | 398 |
| VE3/12/15000 | 14480 | 353 | 8.04 | 9.5 | 19 | 5.3 | 70 | 550 |
| VE3/12/18000 | 18700 | 456 | 11.4 | 13 | 26 | 4.8 | 70-B | 636 |
| VE3/12/18700 | 18700 | 456 | 11.4 | 13 | 26 | 4.8 | 120-A | 781 |
| VE3/12/20000 | 20926 | 510 | 12 | 14 | 28 | 4.7 | 120-B | 825 |
| VE3/12/25000 | 27093 | 661 | 14 | 16 | 33 | 5.5 | 120-C | 979 |
| VE3/12/44000 | 44222 | 1078 | 25 | 28 | 56 | 5.2 | 200 | 1958 |



DIMENSIONS

| MODEL | A | B | C | D | E | F | G | L | L1 | M | M1 | N | P | Q | R | S | BOLT HOLE NBR |
|--------------|-------|-------|-------|-------|-------|-------|------|-------|-----------|-------|------|------|-------|------|------|------|---------------|
| VE3/12/110 | 9.06 | 5.91 | 5.71 | 5.12 | 4.13 | 2.36 | 2.17 | 2.76 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.38 | 0.39 | 4 |
| VE3/12/220 | 11.73 | 6.54 | 7.28 | 6.30 | 5.12 | 2.95 | 2.72 | 3.54 | 3.54 | 4.92 | 5.51 | 0.51 | 4.72 | 1.18 | 1.57 | 0.47 | 4 |
| VE3/12/550 | 13.78 | 7.48 | 8.07 | 7.36 | 5.94 | 3.35 | 3.35 | 4.13 | | 5.51 | | 0.51 | 5.35 | 1.30 | 1.57 | 0.63 | 4 |
| VE3/12/700 | 13.78 | 7.48 | 8.07 | 7.36 | 5.94 | 3.35 | 3.35 | 4.13 | | 5.51 | | 0.51 | 5.35 | 1.30 | 1.57 | 0.63 | 4 |
| VE3/12/980 | 13.98 | 8.27 | 9.29 | 8.50 | 7.13 | 3.98 | 2.80 | 4.72 | | 6.70 | | 0.67 | 6.30 | 1.57 | 1.69 | 0.79 | 4 |
| VE3/12/1250 | 16.34 | 8.27 | 9.29 | 8.50 | 7.13 | 3.98 | 3.98 | 4.72 | | 6.70 | | 0.67 | 6.30 | 1.57 | 1.69 | 0.79 | 4 |
| VE3/12/2000 | 19.21 | 9.65 | 10.24 | 10.16 | 8.62 | 4.80 | 4.21 | 5.51 | | 7.48 | | 0.67 | 7.48 | 1.57 | 1.77 | 0.98 | 4 |
| VE3/12/2800 | 21.42 | 9.65 | 10.24 | 10.16 | 8.62 | 4.80 | 5.31 | 5.51 | | 7.48 | | 0.67 | 7.48 | 1.57 | 1.77 | 0.98 | 4 |
| VE3/12/4000 | 22.83 | 10.83 | 12.20 | 10.94 | 9.41 | 5.20 | 5.35 | 6.10 | | 8.86 | | 0.83 | 8.07 | 1.97 | 2.17 | 1.18 | 4 |
| VE3/12/6000 | 24.02 | 12.80 | 13.54 | 12.80 | 11.14 | 6.18 | 5.39 | 6.14 | | 10.08 | | 0.91 | 8.66 | 2.17 | 2.36 | 1.38 | 4 |
| VE3/12/10000 | 27.44 | 13.39 | 14.72 | 13.98 | 12.17 | 6.77 | 6.30 | 7.09 | | 11.02 | | 0.98 | 9.45 | 2.36 | 2.56 | 1.57 | 4 |
| VE3/12/15000 | 30.79 | 15.35 | 16.26 | 15.67 | 13.66 | 7.52 | 6.97 | 7.87 | | 12.6 | | 1.10 | 11.02 | 2.95 | 3.07 | 1.77 | 4 |
| VE3/12/18000 | 33.31 | 15.35 | 16.26 | 15.67 | 13.66 | 7.52 | 7.95 | 7.87 | | 12.6 | | 1.10 | 11.02 | 2.95 | 3.07 | 1.77 | 4 |
| VE3/12/18700 | 34.65 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 8.07 | 10.24 | | 14.76 | | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |
| VE3/12/20000 | 34.65 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 8.07 | 10.24 | | 14.76 | | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |
| VE3/12/25000 | 36.06 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 8.07 | 10.24 | | 14.76 | | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |
| VE3/12/44000 | 43.30 | 24.21 | 23.62 | 23.42 | 21.30 | 11.81 | 8.66 | 16.55 | | 20.47 | | 1.77 | 21.45 | 3.54 | 2.54 | 1.97 | 8 |

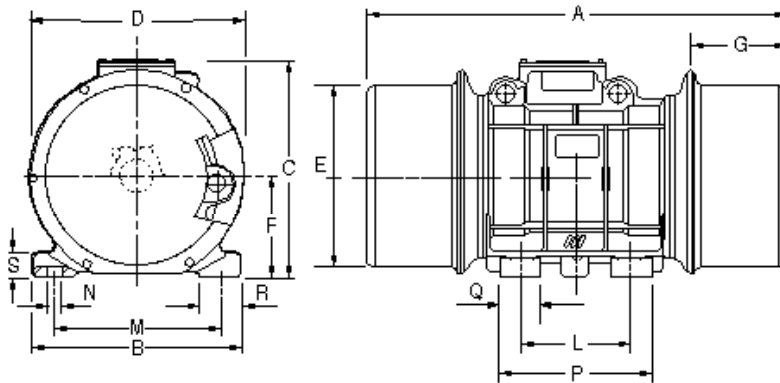
VE3

900 RPM

Three-Phase

PERFORMANCE DATA

| MODEL | FORCE OUTPUT | UNBALANCE | HP | AMP DRAW 460 V | AMP DRAW 230 V | STARTUP CURRENT MULTIPLIER | FRAME | WEIGHT |
|-------------|--------------|-----------|------|----------------|----------------|----------------------------|-------|--------|
| | lbs | in -lbs | h.p. | Amps | Amps | | | lbs |
| VE3/9/380 | 396 | 16 | 0.30 | 0.51 | 1.02 | 1.8 | 03 | 57 |
| VE4/9/550 | 561 | 24 | 0.40 | 0.65 | 1.3 | 2.25 | 04-A | 76 |
| VE3/9/850 | 871 | 38 | 0.48 | 0.75 | 1.5 | 2.5 | 04-B | 90 |
| VE3/9/1500 | 1646 | 72 | 0.67 | 1.2 | 2.4 | 2.6 | 15-A | 125 |
| VE3/9/2000 | 2405 | 105 | 0.80 | 1.4 | 2.8 | 2.7 | 15-B | 154 |
| VE3/9/3000 | 3245 | 141 | 1.61 | 2.3 | 4.6 | 3.5 | 20 | 209 |
| VE3/9/5000 | 5166 | 225 | 2.41 | 3.9 | 7.8 | 3.8 | 30 | 304 |
| VE3/9/8000 | 8140 | 354 | 3.22 | 5.3 | 10.6 | 4.6 | 50 | 422 |
| VE3/9/12000 | 12423 | 540 | 6.70 | 8.8 | 17.6 | 3.6 | 70 | 603 |
| VE3/9/14000 | 15239 | 667 | 8.72 | 10.5 | 21 | 3.3 | 70-B | 697 |
| VE3/9/15000 | 15470 | 673 | 9.1 | 11 | 22 | 3.6 | 120-A | 836 |
| VE3/9/18000 | 17224 | 749 | 9.4 | 11.2 | 22.4 | 3.5 | 120-A | 880 |
| VE3/9/21000 | 21399 | 930 | 10.7 | 13 | 26 | 3.2 | 120-B | 1034 |
| VE3/9/24000 | 23923 | 1040 | 11.4 | 13.4 | 27 | 3.4 | 120-C | 1067 |
| VE3/9/50000 | 54670 | 2377 | 18.5 | 24.4 | 49 | 5.6 | 200 | 2134 |



DIMENSIONS

| MODEL | A | B | C | D | E | F | G | L | M | N | P | Q | R | S | BOLT HOLE NBR |
|-------------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|-------|------|------|------|---------------|
| VE3/9/380 | 13.78 | 7.48 | 8.07 | 7.36 | 5.94 | 3.35 | 3.35 | 4.13 | 5.51 | 0.51 | 5.35 | 1.30 | 1.57 | 0.63 | 4 |
| VE4/9/550 | 13.98 | 8.27 | 9.29 | 8.50 | 7.13 | 3.98 | 2.80 | 4.72 | 6.70 | 0.67 | 6.30 | 1.57 | 1.69 | 0.79 | 4 |
| VE3/9/850 | 16.34 | 8.27 | 9.29 | 8.50 | 7.13 | 3.98 | 3.98 | 4.72 | 6.70 | 0.67 | 6.30 | 1.57 | 1.69 | 0.79 | 4 |
| VE3/9/1500 | 19.21 | 9.65 | 10.24 | 10.16 | 8.62 | 4.80 | 4.21 | 5.51 | 7.48 | 0.67 | 7.48 | 1.57 | 1.77 | 0.98 | 4 |
| VE3/9/2000 | 21.42 | 9.65 | 10.24 | 10.16 | 8.62 | 4.80 | 5.31 | 5.51 | 7.48 | 0.67 | 7.48 | 1.57 | 1.77 | 0.98 | 4 |
| VE3/9/3000 | 22.83 | 10.83 | 12.20 | 10.94 | 9.41 | 5.20 | 5.35 | 6.10 | 8.86 | 0.83 | 8.07 | 1.97 | 2.17 | 1.18 | 4 |
| VE3/9/5000 | 24.02 | 12.80 | 13.54 | 12.80 | 11.14 | 6.18 | 5.39 | 6.14 | 10.08 | 0.91 | 8.66 | 2.17 | 2.36 | 1.38 | 4 |
| VE3/9/8000 | 27.44 | 13.39 | 14.72 | 13.98 | 12.17 | 6.77 | 6.30 | 7.09 | 11.02 | 0.98 | 9.45 | 2.36 | 2.56 | 1.57 | 4 |
| VE3/9/12000 | 30.79 | 15.35 | 16.26 | 15.67 | 13.66 | 7.52 | 6.97 | 7.87 | 12.6 | 1.10 | 11.02 | 2.95 | 3.07 | 1.77 | 4 |
| VE3/9/14000 | 33.31 | 15.35 | 16.26 | 15.67 | 13.66 | 7.52 | 7.95 | 7.87 | 12.6 | 1.10 | 11.02 | 2.95 | 3.07 | 1.77 | 4 |
| VE3/9/15000 | 34.65 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 8.07 | 10.24 | 14.76 | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |
| VE3/9/18000 | 34.65 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 8.07 | 10.24 | 14.76 | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |
| VE3/9/21000 | 35.43 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 8.07 | 10.24 | 14.76 | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |
| VE3/9/24000 | 35.43 | 17.91 | 17.64 | 18.11 | 16.18 | 8.86 | 8.07 | 10.24 | 14.76 | 1.26 | 13.39 | 3.39 | 3.27 | 1.97 | 6 |
| VE3/9/50000 | 43.30 | 24.21 | 23.62 | 23.42 | 21.30 | 11.81 | 8.66 | 16.55 | 20.47 | 1.77 | 21.45 | 3.54 | 3.94 | 1.97 | 8 |

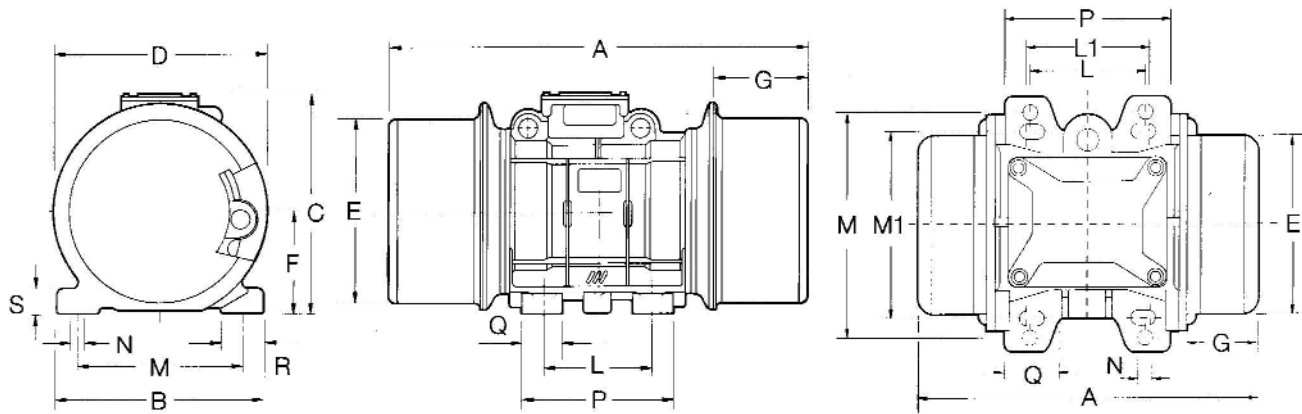
VE1

3600 RPM

Single-Phase

PERFORMANCE DATA

| MODEL | FORCE OUTPUT | UNBALANCE | HP | AMP DRAW 115 V | STARTUP CURRENT MULTIPLIER | CAPACITOR SIZE (115v) | FRAME | WEIGHT |
|---------------|--------------|-----------|------|----------------|----------------------------|-----------------------|-------|--------|
| | lbs | in -lbs | h.p. | Amps | | Micro farad | | lbs |
| VE1/36/ 95 | 114 | 0.34 | 0.14 | 0.92 | 3.0 | 8 | 0 | 9 |
| VE1/36/ 95 XL | 167 | 0.45 | 0.14 | 0.92 | 3.0 | 8 | 0 | 10 |
| VE1/36/120 | 167 | 0.45 | 0.20 | 1.35 | 3.2 | 25 | 1 | 11 |
| VE1/36/120 XL | 208 | 0.56 | 0.20 | 1.35 | 3.2 | 25 | 1 | 12 |
| VE1/36/250 | 297 | 0.81 | 0.22 | 1.45 | 3.0 | 25 | 1 | 12 |
| VE1/36/400 | 398 | 1.08 | 0.24 | 1.48 | 3.0 | 25 | 1 | 13 |
| VE1/36/660 | 653 | 1.94 | 0.36 | 2.8 | 3.7 | 50 | 2 | 18 |
| VE1/36/1050 | 1511 | 4.44 | 0.60 | 4.5 | 4.6 | 40 | 3 | 42 |
| VE1/36/1650 | 1815 | 5.30 | 0.87 | 6.3 | 4.0 | 50+40 | 4A | 61 |



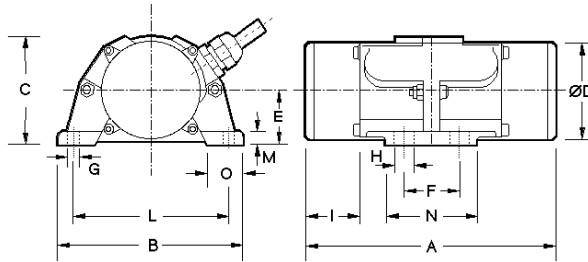
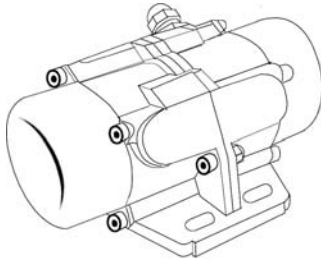
DIMENSIONS

| MODEL | A | B | C | D | E | F | G | L | L1 | M | M1 | N | P | Q | R | S | BOLT HOLE NBR |
|---------------|-------|------|------|------|------|------|------|------|-----------|-----------|------|------|------|------|------|------|---------------|
| VE1/36/95 | 7.65 | 4.92 | 4.80 | 3.42 | 3.23 | 1.81 | 1.38 | 2.44 | - | 3.86-4.17 | - | 0.35 | 3.89 | 1.18 | 1.22 | 0.32 | 4 |
| VE1/36/95 XL | 7.65 | 4.92 | 4.80 | 3.42 | 3.23 | 1.81 | 1.38 | 2.44 | - | 3.86-4.17 | - | 0.35 | 3.89 | 1.18 | 1.22 | 0.32 | 4 |
| VE1/36/120 | 8.34 | 5.90 | 5.70 | 4.45 | 4.13 | 2.36 | 1.81 | 2.75 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.37 | 0.39 | 4 |
| VE1/36/120 XL | 8.34 | 5.90 | 5.70 | 4.45 | 4.13 | 2.36 | 1.81 | 2.75 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.37 | 0.39 | 4 |
| VE1/36/250 | 8.34 | 5.90 | 5.70 | 4.45 | 4.13 | 2.36 | 1.81 | 2.75 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.37 | 0.39 | 4 |
| VE1/36/400 | 8.34 | 5.90 | 5.70 | 4.45 | 4.13 | 2.36 | 1.81 | 2.75 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.37 | 0.39 | 4 |
| VE1/36/660 | 10.24 | 6.54 | 7.28 | 6.30 | 5.12 | 2.95 | 1.97 | 3.54 | 3.54 | 4.92 | 5.51 | 0.51 | 4.72 | 1.18 | 1.57 | 0.47 | 4 |
| VE1/36/1050 | 11.34 | 7.48 | 8.07 | 7.36 | 5.94 | 3.35 | 2.13 | 4.13 | - | 5.51 | - | 0.51 | 5.35 | 1.30 | 1.57 | 0.63 | 4 |
| VE1/36/1650 | 13.98 | 8.27 | 9.29 | 8.50 | 7.13 | 3.98 | 2.80 | 4.72 | - | 6.70 | - | 0.67 | 6.30 | 1.57 | 1.69 | 0.79 | 4 |

VBM

Light Impact Vibrators

| PERFORMANCE DATA | | | | | | | | |
|------------------|--------------|-----------|--------------|------------|-------|----------|----------------------------|--------|
| MODEL | | FREQUENCY | FORCE OUTPUT | UN-BALANCE | H P | AMP DRAW | STARTUP CURRENT MULTIPLIER | WEIGHT |
| | | rpm | lbs | in-lbs | hp | Amp 115V | | lbs |
| VBM1/36/70 | Single-Phase | 3600 | 68 | 0.19 | 0.040 | 0.25 | 0.6 | 3.5 |
| VBM3/36/70 | Three-Phase | 3600 | 68 | 0.19 | 0.055 | 0.29 | 0.7 | 3.5 |



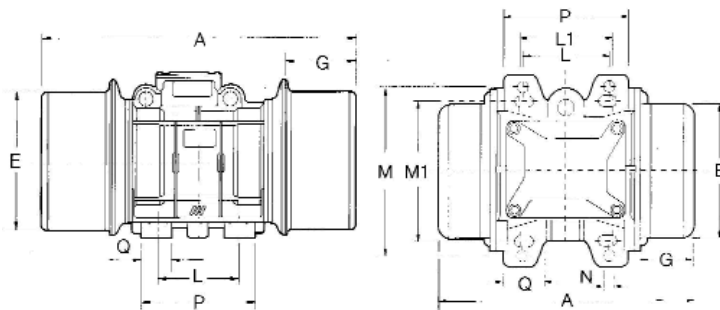
| DIMENSIONS | | | | | | | | | | | | | |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MODEL | A | B | C | D | E | F | G | H | I | L | M | N | O |
| VBM 1/36/70 | 5.75 | 4.37 | 2.64 | 2.40 | 1.30 | 1.26 | 0.28 | 0.51 | 1.26 | 3.62 | 0.35 | 2.13 | 0.83 |
| VBM 3/36/70 | 5.75 | 4.37 | 2.64 | 2.40 | 1.30 | 1.26 | 0.28 | 0.51 | 1.26 | 3.62 | 0.35 | 2.13 | 0.83 |

DCV

DC Vibrators



| PERFORMANCE DATA | | | | | | | |
|------------------|--------------|-----------|------|---------------|---------------|----------------------------|--------|
| MODEL | FORCE OUTPUT | FREQUENCY | HP | AMP DRAW 12 V | AMP DRAW 24 V | STARTUP CURRENT MULTIPLIER | WEIGHT |
| | lbs | vpm | h.p. | Amps | Amps | | lbs |
| DCV 440 | 440 | 3100 | 0.17 | 10.8 | 5.4 | 2.5 | 14 |

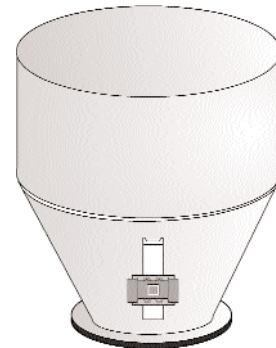


| DIMENSIONS | | | | | | | | | | | | | | | | | | |
|----------------|------|------|------|------|------|------|------|------|-----------|------|------|------|-----|------|------|------|---------------|--|
| MODEL | A | B | C | D | E | F | G | L | L1 | M | M1 | N | P | Q | R | S | BOLT HOLE NBR | |
| DCV 440 | 8.34 | 5.90 | 5.70 | 4.45 | 4.13 | 2.36 | 1.81 | 2.75 | 2.44-2.91 | 5.12 | 4.17 | 0.35 | 3.9 | 1.18 | 1.37 | 0.39 | 4 | |

Vibrators For Hoppers And Bins

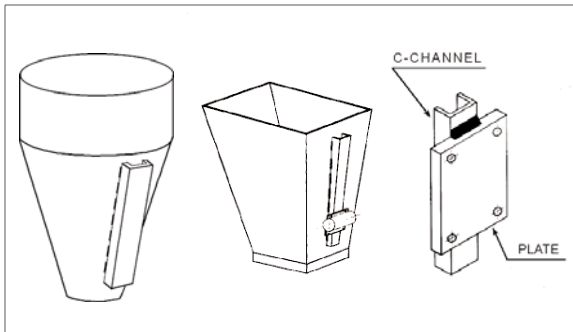
Vibrator Selection

| WEIGHT OF THE MATERIAL ON THE BIN'S CONE (lbs) | FORCE OUTPUT NEEDED (lbs) | MINIMUM WALL THICKNESS | MINIMUM C-CHANNEL SIZE | MINIMUM PLATE THICKNESS |
|--|---------------------------|------------------------|------------------------|-------------------------|
| 1000 | 100 | 12 gauge | 3" | 1/4" |
| 2000 | 200 | 12 gauge | 3" | 3/8" |
| 3000 | 300 | 11 gauge | 4" | 1/2" |
| 5000 | 500 | 10 gauge | 4" | 1/2" |
| 10000 | 1000 | 3/16" | 5" | 5/8" |
| 50000 | 5000 | 1/2" | 8" | 1" |



The force needed to move the product is usually 10% of the product weight in the bin's cone.

Vibrator Mounting to Hoppers and Bins

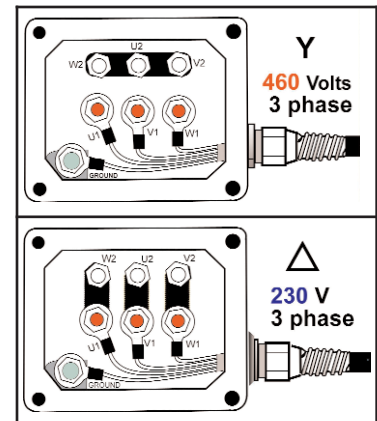
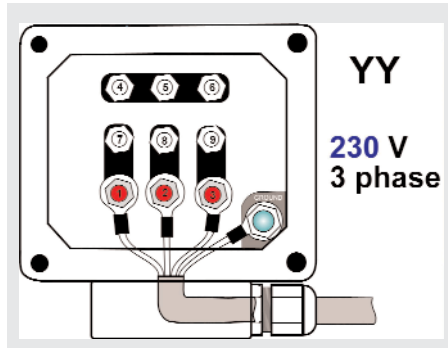
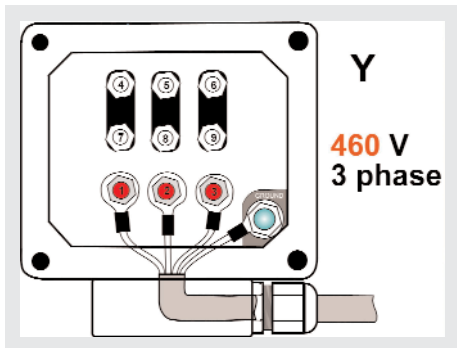


- The purpose of rotary vibration on bins, hoppers and chutes is to transmit vibration through the wall into the product contained inside.
- The vibrator should always be installed with a proper mounting made of channel iron stitch welded to the wall of the bin's cone with a steel plate welded on top!
- Maximum vibration transfer efficiency occurs when the vibrator is rigidly mounted, and the force and frequency are transmitted over a large reinforced surface area.

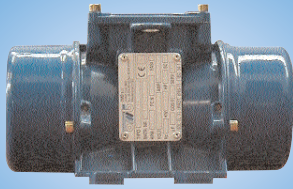
Wiring Diagram

9 Leads - Standard 230-460 Volts 60Hz

6 Leads: Small vibrators, 575 Volts & 380 Volts



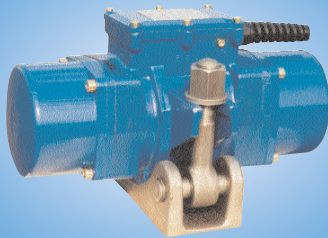
Electric Vibrators For Special Applications



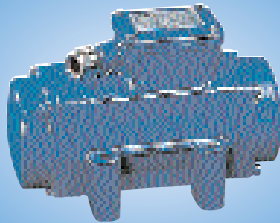
VE1 1800 RPM 115 VOLTS SINGLE PHASE
From 150 Lbs to 900 Lbs
3 Models



C-FLANGE
From 100 to 15000 Lbs Force Output
4 Series 40 Different Models



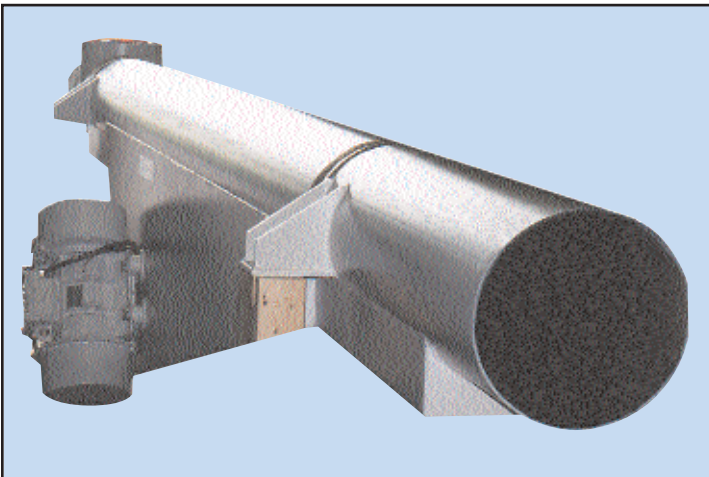
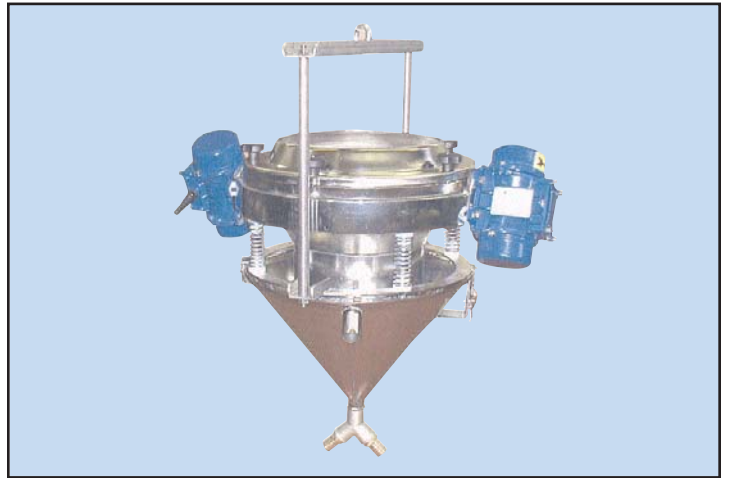
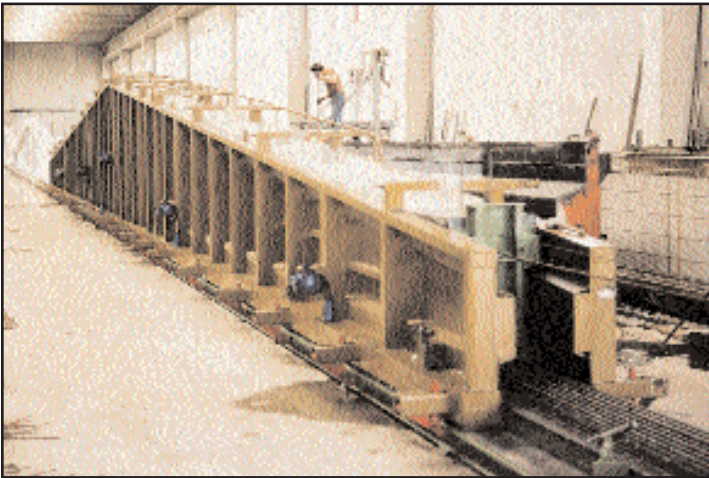
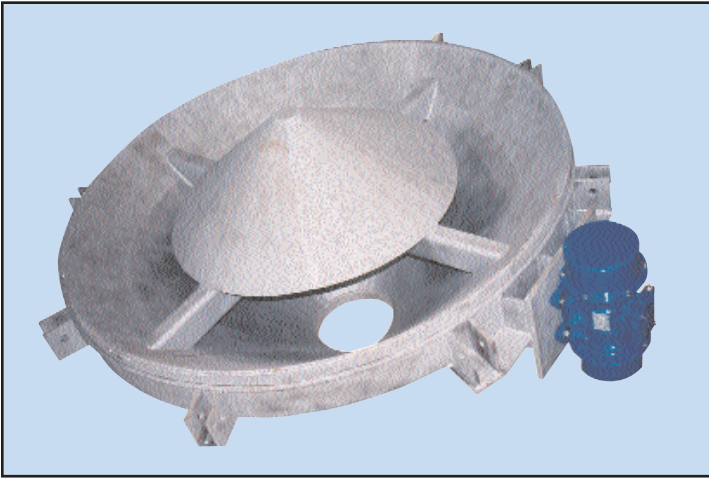
AFC QUICK DISCONNECT 3600 RPM
Two Models of 1600 and 3000 Lbs Force each



AFP 7200 RPM THREE PHASE BOLT MOUNT
1000 to 4000 Lbs Force Output – 4 Models
Inverter or Converter required



ATEX 22 - HAZARDOUS ENVIRONMENTS
INCREASED SAFETY
3600 rpm - 1800 rpm - 1200 rpm



POWTEK

INDUSTRIAL VIBRATORS

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