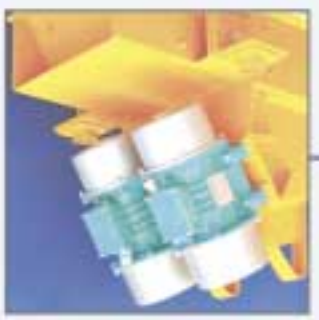
AViTEQ
Vibrationstechnik GmbH

formerly AEG Vibrationstechnik



# Unbalance Motors – Drives to Keep Your Bulk Material on the Move

We move you forward.

# Unbalance Motors in Process

Trough conveyor to charge an elevator with up to 12 m³/h glass batch

Trough and tubular conveyors and screens which are specially designed for the stringent hygiene standards of the foodstuffs industry are used for vegetable processing

Extreme environmental conditions in paper recycling place high demands on the sealing of housings

## Fields of application

High transporting power for small equipment sizes, a long service life, rugged design, efficiency and the latest in terms of manufacturing technology– these are just some of the features of AViTEQ unbalance motors.

You can count on AViTEQ unbalance motors for reliable operation whether the work involves gravel de-watering, classifying, dust removal or screening, transporting large quantities or special tasks in chemical engineering, such as concrete compacting, dosing or loosening material.

Our unbalance motors are the answer for a perfect and economical drive whether extracting or processing raw materials in the chemical or pharmaceutical industries, in the production of foodstuffs or in machine and plant constructions. Take advantage of our 50 years of experience from former AEG Vibrationstechnik in vibration-based materials handling technology covering almost all conceivable fields.

Unbalance motors are suitable as drives for trough and tubular vibrating conveyors, vibrating and bar screens, vibrating hoppers and tables, helical conveyors and de-watering devices. They ensure a trouble-free flow of material in operation as activators for silos, bunkers, shake-out grids, fall pipes, slides, filters and filling machines.

The motors can move equipment of over 11,000 kgs off dead weight with their working moments from 0.1 kgcm to 2,763 kgcm and centrifugal forces up to 119 kN. High transport performance can be achieved and long delivery distances can be overcome through the combination of a number of materials handling devices, using parallel drives and individual design of vibration equipment. The rugged design enables trouble-free use in continuous operation round the clock. The comprehensive range of motor types offers you the best drive materials handling requirements from a few kg/h through to more than 5,000 m³/h.



PVC granules must overcome large differences in height in a confined space of ground. Spiral conveyors offer the possibility of processing the conveyed material in addition to the transport function

Enclosed conveying protects from unwanted contamination of the transported material and of the environment

## Quality

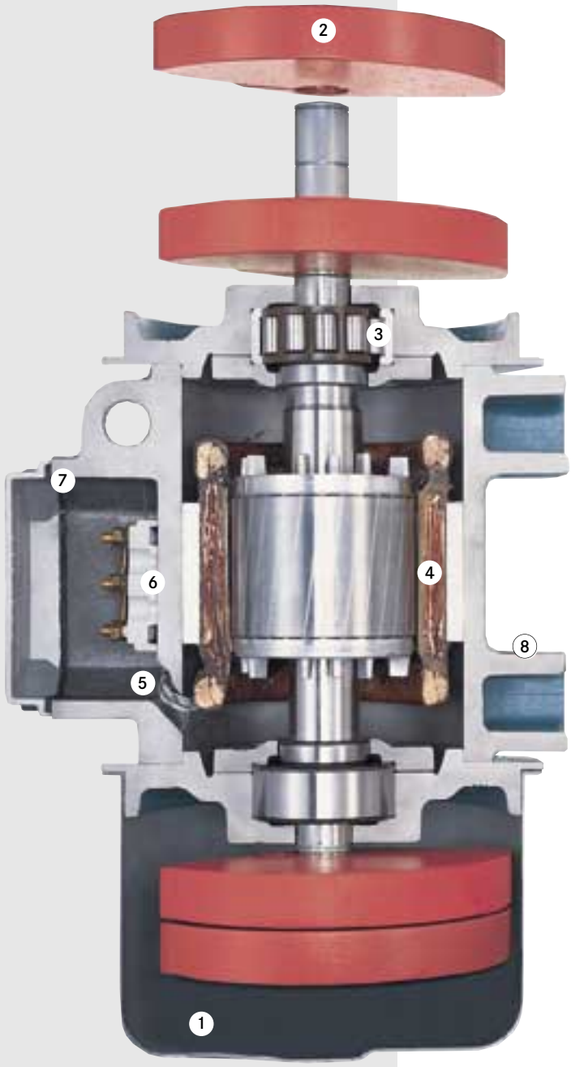
All components and assemblies are inspected during manufacture after each stage, using the latest measurement equipment. The certified quality checks from goods reception through final inspection guarantee you reliable products and ensure fault-free operation. Each drive unit is subjected to a routine check test under load before shipping to ensure proper functioning and operational reliability in your plant. Generously dimensioned tapered and cylindrical roller bearings, a precision ground armature shaft in tempering steel and the strong cast housing guarantee a long service life and maintenance-free operation.

## Service

Our customers have come to take for granted the excellent, fast service provided by our team of technicians. This means we reduce downtimes and help you to save costs.

Of course, we will advise and assist you during the design and project planning of your application. Our engineers would be pleased to help you with their in-depth expertise in processes and plant engineering.

# The Technology




High performance and reliability with economical procurement and operating costs – these are good reasons for specifying AViTEQ unbalance motors. Our unbalance motors are well known for their long life, rugged construction and highest standards of manufactured quality. We are offering a particularly favourable price/performance ratio with our latest range of unbalance motors. Permanent tests in our own test laboratory support the on-going development and optimisation of our products.

**1 Cover**

Easy to fit; sealed against dust and water (IP 66 protection) by O-ring flange seal, from Model Size F to L in stainless steel.
*Advantage: Shorter downtimes for maintenance*

**2 Unbalance weights**

Adjustable, permanently legible setting scale.
*Advantages: Quick and precise setting*

**3 Rotor bearings**

Oversized tapered/cylindrical roller bearings; pre-packed lubrication; maintenance-free.
*Advantages: Long service life; low maintenance costs; continuous operation at 100% centrifugal force setting*

**4 Winding**

High quality winding, impregnated in resin and vibration-resistant; impervious to moisture and dust; armature shaft in alloyed tempering steel.
*Advantage: Operational reliability in harsh environments*

**5 Thermistor**

Thermistor protection from Model Size E as standard; trouble-free operation using speed control units.
*Advantages: Motor protection for unpredictable operating states; universal application; low failure costs*

**6 Terminal board**

6-pole version (voltages up to 660 V without additional insulation); encapsulated.
*Advantages: Solidly mounted; no risk of vibration fatigue failure*

**7 Cable gland**

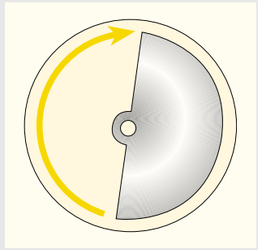
Simple electrical connection; IP 66; second separate cable gland for thermistor connection.
*Advantages: Easy to fit; high operational reliability*

**8 Housing**

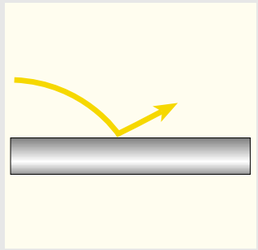
Tall feet enable the use of long expansion lengths of the mounting screws; mounting in any position possible;housing for high stresses; large thermal reserve.
*Advantages: Operational reliability for high stresses; long service life*



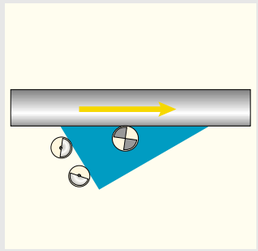
# The Operating Principle of the Vibration Technique



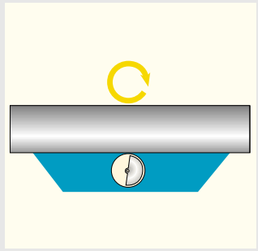
**The unbalance weights on the drive shaft produce an oscillating force which sets the spring-mounted working device (e.g. a screen) to vibrating in a defined direction**



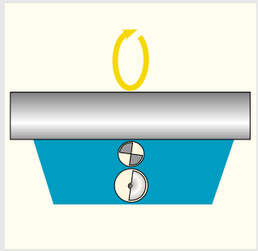
**The bulk material is transported by a micro-projection motion due to the vibration of the equipment**



**Two counter-rotating unbalance motors are required for linear vibratory movement**



**A single drive mounted at the centre of gravity produces circular vibrations**



**A single drive produces elliptical vibrations when mounted away from the centre of gravity**

The unbalance motor, a special form of the electrical motor (a three-phase asynchronous motor), is mounted directly onto a working device (e.g. screen, trough, tube) and connected electrically. There is no need for any belts, shafts, frames, fans, gear or cams. Incorrect operation is eliminated and additional protection is unnecessary.

Elliptical, circular or linear vibratory movements of the working device can be produced using unbalance motors, depending on the arrangement.

A straight, linear vibratory movement is produced, enabling linear transport of material, when using double drive units, e.g. with vibrating trough or tubular conveyors with two unbalance motors running synchronously in opposite directions.

Single drives which are arranged at the centre of gravity produce a circular vibratory movement, e.g. for screening. An elliptical movement is produced, e.g. for compacting or agitating hoppers, when single drives are mounted away from the centre of gravity.

The type of vibratory movement therefore depends on the arrangement of the drive relative to the centre of gravity of the working device. It is best to mount the motors in the vertical orientation.

## Direction of rotation

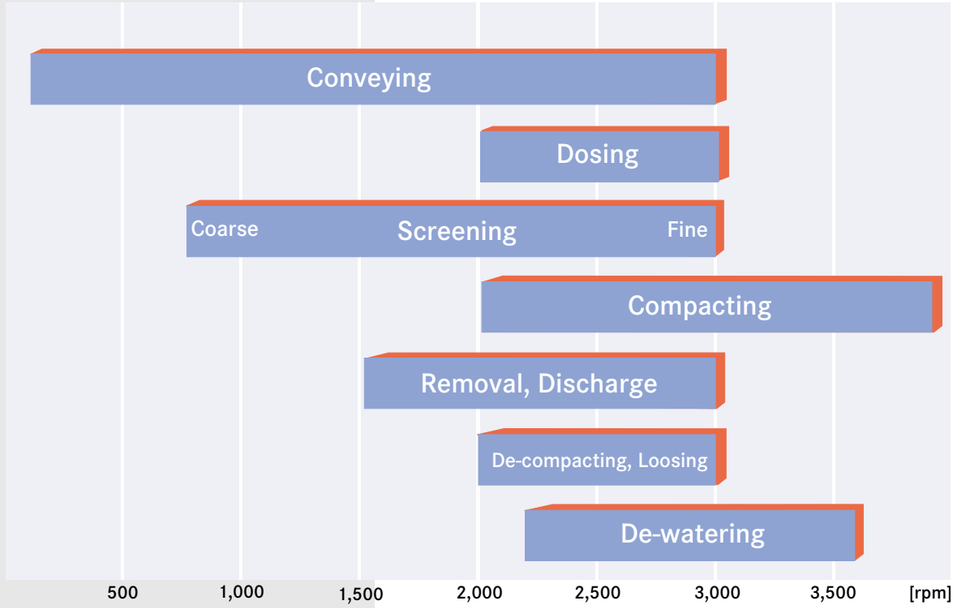
The motors must rotate in opposite directions in order to produce a linear vibration as required for longitudinal conveyors such as trough conveyors or vibrating screens. In contrast, equipment which produces torsion vibrations needs drives rotating in the same direction. Motor operation in the wrong direction, even though brief can cause serious damage to the working devices.

The motors must be mounted on a part of the device which is rigid to bending, otherwise there is a risk of fracture and the motors cannot automatically synchronise. Furthermore energy consumption of the motors would rise to unacceptable levels. Transverse vibration monitoring is employed with large, long conveying equipment to indicate when incorrect rotation occurs.

# Design and Motor Selection

## Design

The vibration amplitude is the sole decisive factor in calculating the operation of unbalance motors. The forces, transferred from the motor to the working device, can be calculated most simply from the acceleration figures at the relevant drive frequencies and the vibration amplitude. You can just take the effective vibration amplitude for all types of motors in relation to the working weights from the motor characteristics on the following pages. It is easy to find the best drive for your application.




The vibration amplitudes and acceleration values suitable for various applications depend on the nominal speed in the relevant mains supply.

## Summary of Performance Data

| | |
|---|---|
| Range of centrifugal force: | From 40 to 119,000 N |
| Working moment: | From 0.08 to 2,763 kgcm |
| Synchronous speed: | |
| in 50 Hz network | 750, 1,000, 1,500, 3,000 rpm |
| in 60 Hz network | 900, 1,200, 1,800, 3,600 rpm |
| Working weight: | From 1 to 11,250 kgs |
| Mains connection: | Three-phase 50 or 60 Hz for all common voltages up to 660 V |
| Rated power consumption: | From 0.03 to 10 kW |
| Ambient temperature: | From −25 to +40° C |
| Protection: | IP 66 to EN 60529, tropic-proof insulation |
| Insulation class: | F to VDE 0530, Part 1 and 0535b |



# Electrical Connection

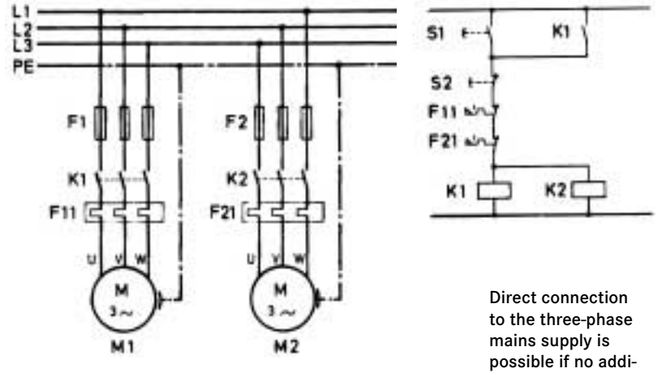
AViTEQ unbalance motors can be supplied for mains supply voltages of 230/400 V in standard versions for 50 Hz or with 265/460 V for 60 Hz mains. We would be pleased to quote for special models and other windings for other voltages or mains frequencies if required.

## Connection Methods

Our unbalance motors can be directly connected to the three-phase mains or via our various Vibtronic® connection units depending on the required operation.

You can use the Vibtronic® Brake Unit if the shortest possible run-down time after switch-off is recommended or specified. This is required particularly for large equipment and with speeds less than 1,500 rpm.

You should use the Vibtronic® Frequency Converter for drives which are to be controlled or monitored over a larger range of their revolutions (only for drives with thermistor protection).




Direct connection to the three-phase mains supply is possible if no additional functions are required

All drives according to the relevant EU-regulations.

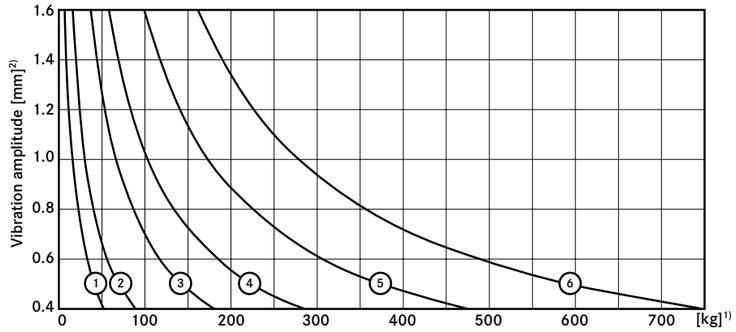
Drives comply to the CSA rules.

Protected series: EEx e II T3 and/or T4 to EN 50014/50019, LCiE 00 ATEX 6005X

# The Quick Way to the Right Drive

**Performance graphs for 2-pole motors, synchronous speed 3,000 rpm (50 Hz)**

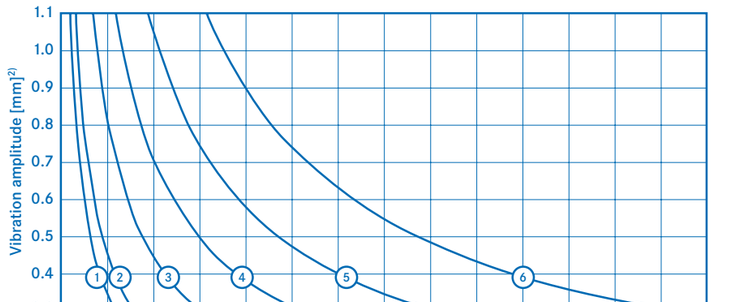
| | | | | | |
|---|---|---|---|---|---|
| 1 = UVA | 0,6 | Y | 4 = UVC | 3 | Y |
| 2 = UVB | 1 | Y | 5 = UVD | 5 | Y |
| 3 = UVB | 1,9 | Y | 6 = UVE | 7,7 | Y |




**Performance graphs for 2-pole motors, synchronous speed 3,600 rpm (60 Hz)**

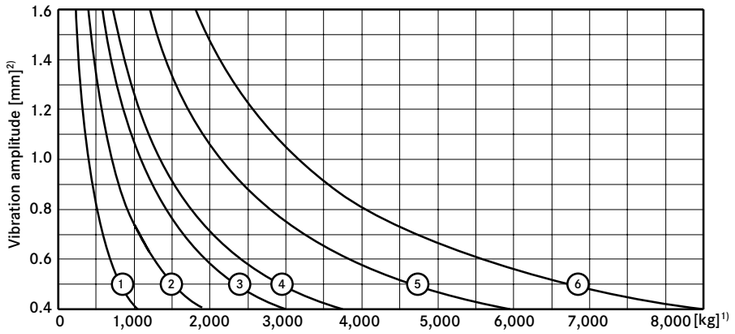
| | | | | | |
|---|---|---|---|---|---|
| 1 = UVA | 0,6 | Y | 4 = UVC | 3 | Y |
| 2 = UVB | 1 | Y | 5 = UVD | 5 | Y |
| 3 = UVB | 1,9 | Y | 6 = UVE | 7,7 | Y |





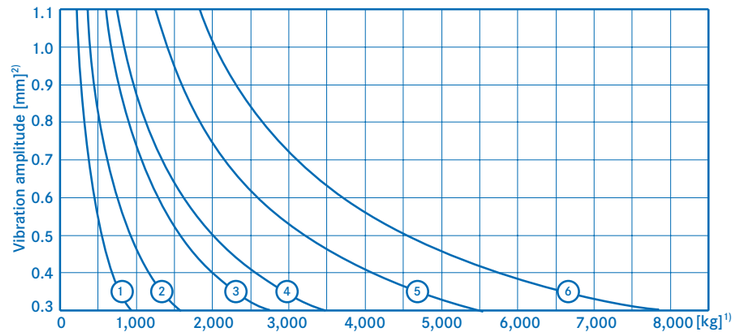

**Performance graphs for 2-pole motors, synchronous speed 3,000 rpm (50 Hz)**

| | | | | | |
|---|---|---|---|---|---|
| 1 = UVE | 11 | Y | 4 = UVH | 40 | Y |
| 2 = UVF | 20 | Y | 5 = UVL | 62 | Y |
| 3 = UVG | 32 | Y | 6 = UVL | 88 | Y |




**Performance graphs for 2-pole motors, synchronous speed 3,600 rpm (60 Hz)**

| | | | | | |
|---|---|---|---|---|---|
| 1 = UVE | 11 | Y | 4 = UVH | 40 | Y |
| 2 = UVF | 20 | Y | 5 = UVL | 62 | Y |
| 3 = UVG | 32 | Y | 6 = UVL | 88 | Y |

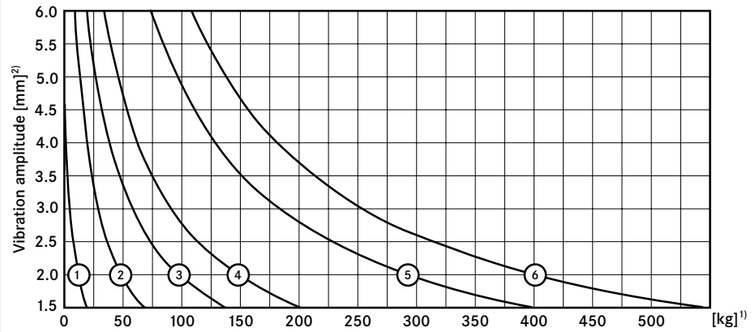



1) **Working weight [kg]** for devices driven by two motors
2) Vibration amplitude from peak to peak



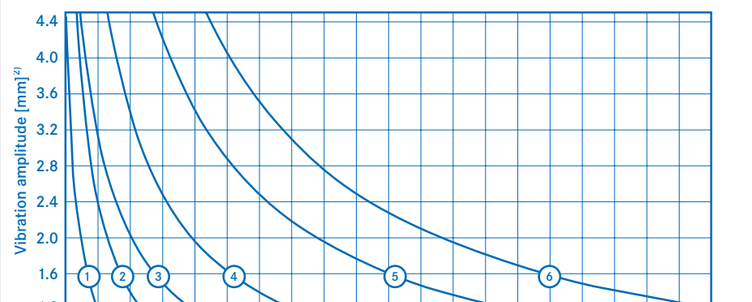
**Performance graphs for 4-pole motors, synchronous speed 1,500 rpm (50 Hz)**

| | | | | | |
|---|---|---|---|---|---|
| 1 = UVB | 0,3 | X | 4 = UVC | 2,1 | X |
| 2 = UVB | 0,7 | X | 5 = UVD | 4 | X |
| 3 = UVC | 1,5 | X | 6 = UVD | 5,4 | X |



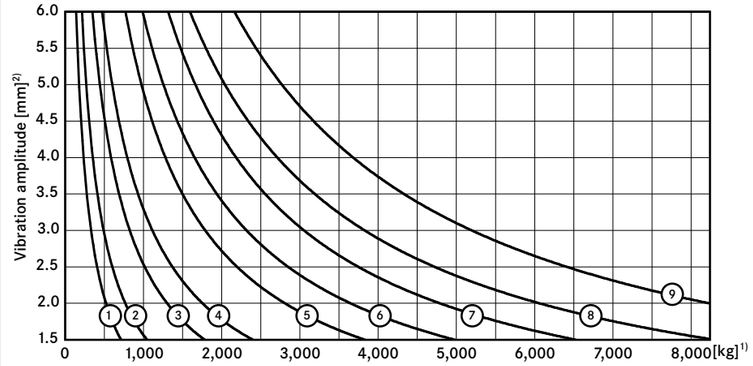

**Performance graphs for 4-pole motors, synchronous speed 1,800 rpm (60 Hz)**

| | | | | | |
|---|---|---|---|---|---|
| 1 = UVB | 0,3 | X | 4 = UVC | 2,1 | X |
| 2 = UVB | 0,7 | X | 5 = UVD | 4 | X |
| 3 = UVC | 1,5 | X | 6 = UVD | 5,4 | X |



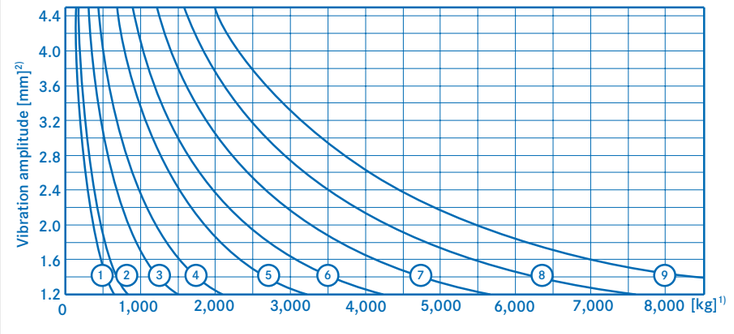

**Performance graphs for 4-pole motors, synchronous speed 1,500 rpm (50 Hz)**

| | | | | | |
|---|---|---|---|---|---|
| 1 = UVE | 7 | X | 6 = UVH | 49 | X |
| 2 = UVE | 10 | X | 7 = UVL | 64 | X |
| 3 = UVF | 18 | X | 8 = UVN | 83 | X |
| 4 = UVF | 24 | X | 9 = UVP | 112 | X |
| 5 = UVG | 38 | X | | | |




**Performance graphs for 4-pole motors, synchronous speed 1,800 rpm (60 Hz)**

| | | | | | |
|---|---|---|---|---|---|
| 1 = UVE | 7 | X | 6 = UVH | 49 | X |
| 2 = UVE | 10 | X | 7 = UVL | 64 | X |
| 3 = UVF | 18 | X | 8 = UVN | 83 | X |
| 4 = UVF | 24 | X | 9 = UVP | 112 | X |
| 5 = UVG | 38 | X | | | |




1) **Working weight [kg]** for devices driven by two motors
2) Vibration amplitude from peak to peak

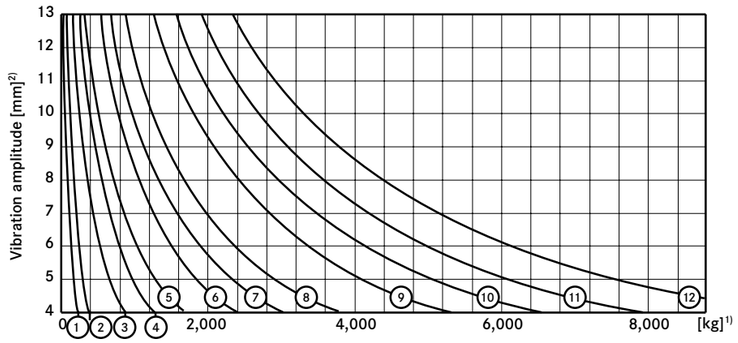
**Performance graphs for 6-pole motors, synchronous speed 1,000 rpm (50 Hz)**

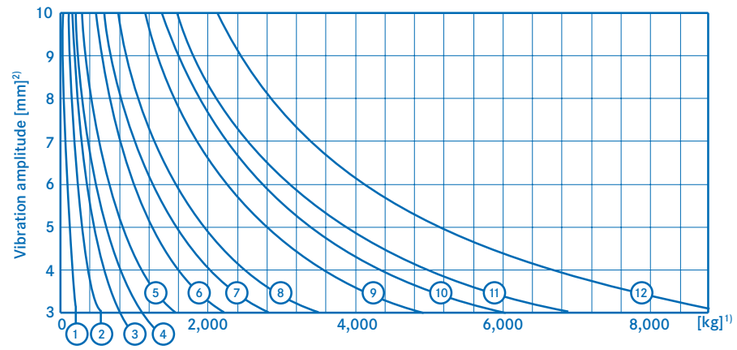
| | | | |
|---|---|---|---|
| 1 = UVE | 3 W | 7 = UVH | 38 W |
| 2 = UVE | 5 W | 8 = UVH | 46 W |
| 3 = UVF | 11 W | 9 = UVL | 64 W |
| 4 = UVF | 16 W | 10 = UVK | 79 W |
| 5 = UVG | 21 W | 11 = UVN | 95 W |
| 6 = UVG | 30 W | 12 = UVP | 119 W |

**Performance graphs for 6-pole motors, synchronous speed 1,200 rpm (60 Hz)**

Bildunterzeilen

| | | | |
|---|---|---|---|
| 1 = UVE | 3 W | 7 = UVH | 38 W |
| 2 = UVE | 5 W | 8 = UVH | 46 W |
| 3 = UVF | 11 W | 9 = UVL | 64 W |
| 4 = UVF | 16 W | 10 = UVK | 79 W |
| 5 = UVG | 21 W | 11 = UVN | 95 W |
| 6 = UVG | 30 W | 12 = UVP | 119 W |



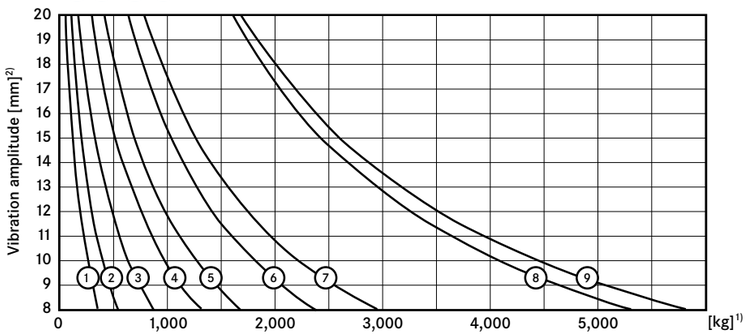



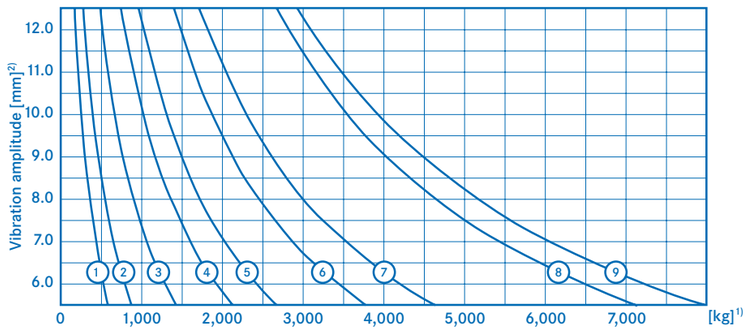

**Performance graphs for 8-pole motors, synchronous speed 750 rpm (50 Hz)**

| | | | |
|---|---|---|---|
| 1 = UVF | 6 V | 6 = UVL | 36 V |
| 2 = UVF | 9 V | 7 = UVK | 44 V |
| 3 = UVG | 14 V | 8 = UVN | 76 V |
| 4 = UVH | 21 V | 9 = UVP | 85 V |
| 5 = UVH | 26 V | | |

**Performance graphs for 8-pole motors, synchronous speed 900 rpm (60 Hz)**

| | | | |
|---|---|---|---|
| 1 = UVF | 6 V | 6 = UVL | 36 V |
| 2 = UVF | 9 V | 7 = UVK | 44 V |
| 3 = UVG | 14 V | 8 = UVN | 76 V |
| 4 = UVH | 21 V | 9 = UVP | 85 V |
| 5 = UVH | 26 V | | |




1) **Working weight [kg]** for devices driven by two motors
2) Vibration amplitude from peak to peak



The Figures in te Type designation have the following meaning:

**eUVE 5 W**

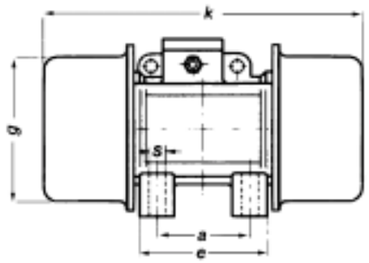
Number of poles (Y = 2-pole, X = 4-pole, W = 6-pole, V = 8-pole)
Centrifugal force in kN
Base dimensions, see table

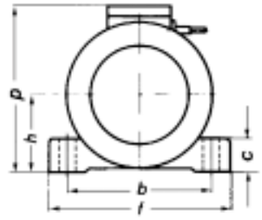
| Code | a | b | s | Mounting |
|---|---|---|---|---|
| 1A | 25–40 | 75 | 5,5 | 4 x M5 |
| A | 65 | 95 | 12 | 4 x M10 |
| B | 64–72 | 106 | 9 | 4 x M8 |
| C | 90 | 125 | 13 | 4 x M12 |
| D | 105 | 140 | 13 | 4 x M12 |
| E | 120 | 170 | 13 | 4 x M12 |
| F | 125 | 210 | 17 | 4 x M16 |
| G | 165 | 260 | 26 | 4 x M24 |
| H | 280 | 290 | 26 | 4 x M24 |
| K | 280 | 400 | 33 | 4 x M30 |
| L | 200 | 320 | 28 | 4 x M27 |
| N | 125/250 | 380 | 38 | 6 x M36 |
| P | 140/280 | 440 | 44 | 6 x M42 |

UV- Series

-protected series

# 2-Pole Motors with Synchronous Speeds 3,000/3,600 rpm

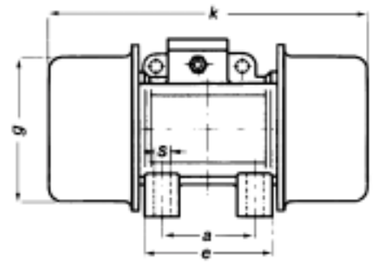


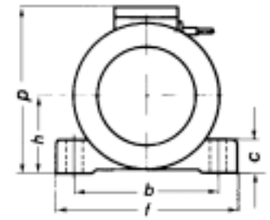




| Type | Part No. | Thermistor | Ex-proof[3] | CSA | Centrifugal force [N] | Working moment [kgcm] | Motor weight [kg] | Working weight range[1] [kg] | | Rated Current max. [A] | | Rated Power max. [kW] | Dimensions [mm] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 Hz (3,000 rpm) | | | | | | | | from | to | Δ 230 V | Y 400 V | | a | b | c | e | f | g | h | k | p | s | Screws |
| UV1 A 0,04 Y[2] | 43125 | | | | 39 | 0.08 | 0.9 | Rüttler | Rüttler | 0.13 | - | 0.02 | 25–40 | 75 | 9 | 59 | 90 | 56 | 31 | 113 | 62 | 5,5 | M5 |
| UV A 0,6 Y | 19453 | ❍ | | ● | 608 | 1.22 | 4.1 | 13 | 52 | 0.47 | 0.27 | 0.12 | 65 | 95 | 20 | 86 | 127 | 96 | 70 | 193 | 120 | 12,0 | M8 (M10) |
| UV B 1 Y | 44172 | ❍ | | ● | 981 | 1.96 | 4.3 | 16 | 89 | 0.61 | 0.35 | 0.18 | 64–72 | 106 | 24 | 100 | 125 | 100 | 61 | 210 | 153 | 9,0 | M8 |
| UV B 1,9 Y | 44174 | ❍ | | ● | 1,890 | 3.82 | 5.0 | 38 | 183 | 0.61 | 0.35 | 0.18 | 64–72 | 106 | 24 | 100 | 125 | 100 | 61 | 225 | 153 | 9,0 | M8 |
| UV C 3 Y | 44177 | ❍ | ❍ | ● | 2,980 | 6.02 | 8.3 | 59 | 284 | 1.04 | 0.60 | 0.26 | 90 | 125 | 28 | 128 | 152 | 124 | 73 | 255 | 179 | 13,0 | M12 |
| UV D 5 Y | 44182 | ❍ | ❍ | ● | 4,930 | 9.98 | 13 | 99 | 473 | 1.39 | 0.80 | 0.45 | 105 | 140 | 30 | 140 | 167 | 143 | 83 | 284 | 203 | 13,0 | M12 |
| UV E 7,7 Y | 20812 | ● | ❍ | ● | 7,700 | 15.60 | 17 | 161 | 746 | 1.91 | 1.10 | 0.65 | 120 | 170 | 45 | 160 | 205 | 168 | 92 | 383 | 210 | 13,0 | M12 |
| UV E 11 Y | 19943 | ● | | ● | 10,800 | 22 | 23 | 230 | 1,055 | 3.00 | 1.75 | 1.00 | 120 | 170 | 54 | 162 | 205 | 187 | 104 | 372 | 233 | 13,0 | M12 |
| UV F 20 Y | 16417 | ● | ❍ | ● | 20,200 | 41 | 56 | 400 | 1,940 | 5.70 | 3.30 | 2.00 | 125 | 210 | 65 | 175 | 260 | 201 | 124 | 490 | 246 | 17,0 | M16 |
| UV G 32 Y | 16421 | ● | ❍ | ● | 31,600 | 64 | 103 | 595 | 2,995 | 11.30 | 6.50 | 4.00 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 594 | 334 | 26,0 | M24 |
| UV H 40 Y | 16425 | ● | | ● | 40,000 | 81 | 145 | 725 | 3,760 | 11.30 | 6.50 | 4.00 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 682 | 363 | 26,0 | M24 |
| UV L 62 Y | 17127 | ● | | ● | 62,400 | 126 | 184 | 1,210 | 5,930 | 15.90 | 9.20 | 5.50 | 200 | 320 | 90 | 270 | 390 | 334 | 189 | 666 | 381 | 28,0 | M27 |
| UV L 88 Y | 16429 | ● | | | 88,400 | 179 | 215 | 1,810 | 8,520 | 31.20 | 18.00 | 10.00 | 200 | 320 | 100 | 270 | 392 | 355 | 192 | 633 | 395 | 28,0 | M27 |
| 60 Hz (3,600 rpm) | | | | | | | | | | 265 V | 460 V | | | | | | | | | | | | |
| UV1 A 0,04 Y[2] | 43125 | | | | 59 | 0.08 | 0.85 | Rüttler | Rüttler | 0.30 (115V) | - | 0.02 | 25–40 | 75 | 9 | 59 | 90 | 56 | 31 | 113 | 62 | 5,5 | M5 |
| UV A 0,6 Y | 19454 | ❍ | | ● | 690 | 0.98 | 3.80 | 10 | 57 | 0.40 | 0.23 | 0.12 | 65 | 95 | 20 | 86 | 127 | 96 | 70 | 193 | 120 | 12,0 | M8 (M10) |
| UV B 1 Y | 44187 | ❍ | | ● | 942 | 1.31 | 4.10 | 16 | 79 | 0.52 | 0.30 | 0.18 | 64–72 | 106 | 24 | 100 | 125 | 100 | 61 | 210 | 153 | 9,0 | M8 |
| UV B 1,9 Y | 44190 | ❍ | | ● | 1,740 | 2.42 | 4.60 | 35 | 152 | 0.52 | 0.30 | 0.18 | 64–72 | 106 | 24 | 100 | 125 | 100 | 61 | 225 | 153 | 9,0 | M8 |
| UV C 3 Y | 44200 | ❍ | ❍ | ● | 2,910 | 4.08 | 7.80 | 58 | 256 | 0.78 | 0.50 | 0.27 | 90 | 125 | 28 | 128 | 152 | 124 | 73 | 255 | 179 | 13,0 | M12 |
| UV D 5 Y | 44209 | ❍ | ❍ | ● | 4,620 | 6.48 | 12 | 93 | 407 | 1.30 | 0.75 | 0.50 | 105 | 140 | 30 | 140 | 167 | 143 | 83 | 284 | 203 | 13,0 | M12 |
| UV E 7,7 Y | 20814 | ● | ❍ | ● | 7,400 | 10.40 | 16 | 157 | 661 | 1.73 | 1.00 | 0.69 | 120 | 170 | 45 | 160 | 205 | 168 | 92 | 383 | 210 | 13,0 | M12 |
| UV E 11 Y | 20825 | ● | | ● | 10,400 | 14.60 | 22 | 220 | 930 | 3.00 | 1.75 | 0.68 | 120 | 170 | 54 | 162 | 205 | 187 | 104 | 372 | 233 | 13,0 | M12 |
| UV F 20 Y | 16419 | ● | ❍ | ● | 18,200 | 25.60 | 54 | 360 | 1,600 | 5.00 | 2.90 | 2.00 | 125 | 210 | 65 | 175 | 260 | 201 | 124 | 490 | 246 | 17,0 | M16 |
| UV G 32 Y | 16423 | ● | ❍ | ● | 31,300 | 44.10 | 99 | 605 | 2,745 | 9.70 | 5.60 | 4.00 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 594 | 334 | 26,0 | M24 |
| UV H 40 Y | 16427 | ● | | ● | 40,200 | 56.60 | 141 | 750 | 3,490 | 9.70 | 5.60 | 4.00 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 682 | 363 | 26,0 | M24 |
| UV L 62 Y | 17133 | ● | | ● | 63,000 | 88.60 | 178 | 1,255 | 5,550 | 13.90 | 8.00 | 5.50 | 200 | 320 | 90 | 270 | 390 | 334 | 189 | 666 | 381 | 28,0 | M27 |
| UV L 88 Y | 16431 | ● | | | 88,000 | 124.00 | 210 | 1,835 | 7,850 | 22.50 | 13.00 | 9.30 | 200 | 320 | 100 | 270 | 392 | 355 | 192 | 633 | 395 | 28,0 | M27 |

❍ = Possible as option
● = Fitted as standard
[1] For devices driven by two unbalance motors
[2] Single-phase AC unbalance motor with unchangeable fitted 3-core cable
[3] Explosionproof motors have different tecnical data
Motor housings in Series UV in standard colour RAL 5018, powder coated

# 4-Pole Motors with Synchronous Speeds 1,500/1,800 rpm

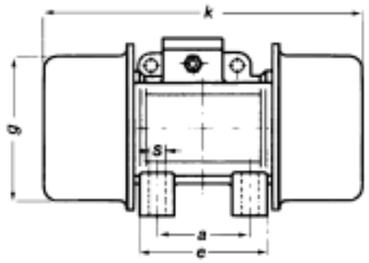


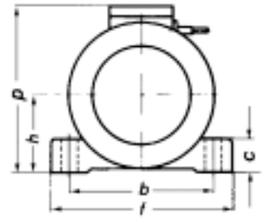




| Type | Part No. | Thermistor | Ex-proof[3] | CSA | Centrifugal force [N] | Working moment [kgcm] | Motor weight [kg] | Working weight range[1] [kg] | | Rated Current max. [A] | | Rated Power max. [kW] | Dimensions [mm] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 Hz (3,000 rpm) | | | | | | | | from | to | Δ 230 V | Y 400 V | | a | b | c | e | f | g | h | k | p | s | Screws |
| UV B 0,3 X | 44169 | ❍ | | ● | 265 | 2.0 | 4.4 | 1 | 19 | 0.36 | 0.21 | 0.09 | 64–72 | 106 | 24 | 100 | 125 | 100 | 61 | 210 | 153 | 9 | M8 |
| UV B 0,7 X | 44170 | ❍ | | ● | 746 | 5.9 | 5.3 | 9 | 68 | 0.36 | 0.21 | 0.09 | 64–72 | 106 | 24 | 100 | 125 | 100 | 61 | 225 | 153 | 9 | M8 |
| UV C 1,5 X | 44175 | ❍ | ❍ | ● | 1,460 | 11.8 | 9.9 | 19 | 137 | 0.71 | 0.41 | 0.17 | 90 | 125 | 28 | 128 | 152 | 124 | 73 | 295 | 179 | 13 | M12 |
| UV C 2,1 X | 44176 | ❍ | ❍ | ● | 2,090 | 16.8 | 10.7 | 34 | 203 | 0.71 | 0.41 | 0.17 | 90 | 125 | 28 | 128 | 152 | 124 | 73 | 295 | 179 | 13 | M12 |
| UV D 4 X | 44180 | ❍ | ❍ | ● | 4,040 | 32.6 | 17 | 75 | 400 | 1.04 | 0.60 | 0.30 | 105 | 140 | 30 | 140 | 167 | 143 | 83 | 340 | 203 | 13 | M12 |
| UV D 5,4 X | 44181 | ❍ | ❍ | ● | 5,420 | 43.8 | 19 | 108 | 546 | 1.04 | 0.60 | 0.30 | 105 | 140 | 30 | 140 | 167 | 143 | 83 | 380 | 203 | 13 | M12 |
| UV E 7X | 19941 | ● | ❍ | ● | 7,060 | 57.2 | 25 | 140 | 715 | 1.59 | 0.92 | 0.52 | 120 | 170 | 45 | 160 | 205 | 168 | 91 | 383 | 210 | 13 | M12 |
| UV E 10 X | 19942 | ● | ❍ | ● | 10,300 | 83 | 31 | 215 | 1,045 | 1.65 | 0.95 | 0.55 | 120 | 170 | 54 | 162 | 205 | 187 | 104 | 438 | 233 | 13 | M12 |
| UV F 18 X | 16345 | ● | ❍ | ● | 17,600 | 143 | 64 | 250 | 1,780 | 3.50 | 2.00 | 1.10 | 125 | 210 | 65 | 175 | 260 | 201 | 124 | 490 | 254 | 17 | M16 |
| UV F 24 X | 16349 | ● | ❍ | ● | 23,700 | 192 | 83 | 475 | 2,395 | 5.50 | 3.20 | 1.60 | 125 | 210 | 65 | 175 | 260 | 231 | 140 | 525 | 278 | 17 | M16 |
| UV G 38 X | 16353 | ● | ❍ | ● | 37,700 | 305 | 122 | 775 | 3,825 | 6.75 | 3.90 | 2.20 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 594 | 334 | 26 | M24 |
| UV H 49 X | 16357 | ● | ❍ | ● | 49,100 | 398 | 168 | 990 | 4,970 | 10.39 | 6.00 | 3.60 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 682 | 363 | 26 | M24 |
| UV L 64 X | 17128 | ● | | ● | 64,100 | 520 | 208 | 1,320 | 6,520 | 18.20 | 10.50 | 6.00 | 200 | 320 | 90 | 270 | 390 | 334 | 189 | 666 | 381 | 28 | M27 |
| UV N 83 X | 16361 | ● | ❍ | | 82,600 | 669 | 317 | 1,600 | 8,290 | 21.10 | 12.20 | 7.50 | 2 x 125 | 380 | 35 | 320 | 460 | 387 | 215 | 866 | 436 | 38 | 6 x M36 |
| UV P 112 X | 16365 | ● | | | 112,000 | 909 | 433 | 2,165 | 11,255 | 30.30 | 17.50 | 10.00 | 2 x 140 | 440 | 38 | 370 | 530 | 420 | 230 | 994 | 454 | 44 | 6 x M42 |
| 60 Hz (1,800 rpm) | | | | | | | | | | 265 V | 460 V | | | | | | | | | | | | |
| UV B 0,3 X | 44193 | ❍ | | ● | 373 | 2.1 | 4.4 | 1 | 25 | 0.35 | 0.20 | 0.10 | 64–72 | 106 | 24 | 100 | 125 | 100 | 61 | 210 | 153 | 9 | M8 |
| UV B 0,7 X | 44219 | ❍ | | ● | 765 | 4.2 | 5.1 | 9 | 60 | 0.35 | 0.20 | 0.10 | 64–72 | 106 | 24 | 100 | 125 | 100 | 61 | 225 | 153 | 9 | M8 |
| UV C 1,5 X | 44203 | ❍ | ❍ | ● | 1,260 | 7.1 | 9.9 | 12 | 98 | 0.69 | 0.40 | 0.17 | 90 | 125 | 28 | 128 | 152 | 124 | 73 | 295 | 179 | 13 | M12 |
| UV C 2,1 X | 44206 | ❍ | ❍ | ● | 2,100 | 11.8 | 9.9 | 34 | 176 | 0.69 | 0.40 | 0.17 | 90 | 125 | 28 | 128 | 152 | 124 | 73 | 295 | 179 | 13 | M12 |
| UV D 4 X | 44211 | ❍ | ❍ | ● | 4,030 | 22.6 | 16.0 | 71 | 345 | 1.04 | 0.60 | 0.35 | 105 | 140 | 30 | 140 | 167 | 143 | 83 | 340 | 203 | 13 | M12 |
| UV D 5,4 X | 19488 | ❍ | ❍ | ● | 5,810 | 32.6 | 18.0 | 113 | 508 | 1.04 | 0.60 | 0.35 | 105 | 140 | 30 | 140 | 167 | 143 | 83 | 380 | 203 | 13 | M12 |
| UV E 7 X | 20816 | ● | ❍ | ● | 7,460 | 41.8 | 22.0 | 145 | 655 | 1.70 | 0.98 | 0.66 | 120 | 170 | 45 | 160 | 205 | 168 | 91 | 383 | 210 | 13 | M12 |
| UV E 10 X | 20817 | ● | ❍ | ● | 9,630 | 54.2 | 31.0 | 180 | 845 | 1.65 | 0.95 | 0.68 | 120 | 170 | 54 | 162 | 205 | 187 | 104 | 438 | 233 | 13 | M12 |
| UV F 18 X | 16347 | ● | ❍ | ● | 17,200 | 97.0 | 60.0 | 310 | 1,495 | 3.30 | 1.90 | 1.20 | 125 | 210 | 65 | 175 | 260 | 201 | 124 | 490 | 254 | 17 | M16 |
| UV F 24 X | 16351 | ● | ❍ | ● | 24,000 | 135.0 | 77.0 | 445 | 2,095 | 5.20 | 3.00 | 1.70 | 125 | 210 | 65 | 175 | 260 | 231 | 140 | 525 | 278 | 17 | M16 |
| UV G 38 X | 16355 | ● | ❍ | ● | 36,700 | 207.0 | 117.0 | 685 | 3,215 | 6.75 | 3.90 | 2.50 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 594 | 334 | 26 | M24 |
| UV H 49 X | 16359 | ● | ❍ | ● | 48,500 | 273.0 | 160.0 | 895 | 4,230 | 8.66 | 5.00 | 3.40 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 682 | 363 | 26 | M24 |
| UV L 64 X | 17134 | ● | | ● | 64,700 | 364.0 | 195.0 | 1,230 | 5,675 | 15.60 | 9.00 | 6.00 | 200 | 320 | 90 | 270 | 390 | 334 | 189 | 666 | 381 | 28 | M27 |
| UV N 83 X | 16363 | ● | ❍ | | 87,500 | 492.4 | 303.0 | 1,580 | 7,595 | 20.80 | 12.00 | 8.50 | 2 x 125 | 380 | 35 | 320 | 460 | 387 | 215 | 866 | 436 | 38 | 6 x M36 |
| UV P 112 X | 16367 | ● | | | 112,000 | 633.2 | 411.0 | 1,990 | 9,730 | 26.80 | 15.50 | 10.50 | 2 x 140 | 440 | 38 | 370 | 530 | 420 | 230 | 994 | 454 | 44 | 6 x M42 |

❍ = Possible as option
● = Fitted as standard
[1] For devices driven by two unbalance motors
[2] Explosionproof motors have different tecnical data
Motor housings in Series UV in standard colour RAL 5018, powder coated

# 6-Pole Motors with Synchronous Speeds 1,000/1,200 rpm

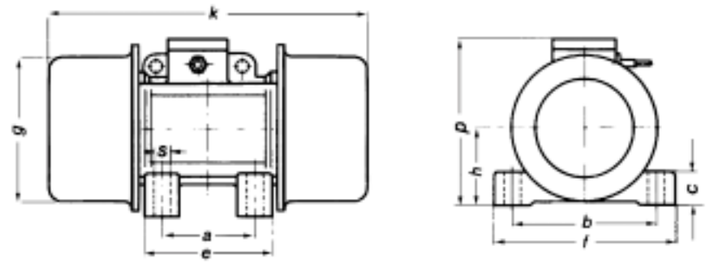



| Type | Part No. | Thermistor | Ex-proof[3] | CSA | Centrifugal force [N] | Working moment [kgcm] | Motor weight [kg] | Working weight range[1] [kg] | | Rated Current max. [A] | | Rated Power max. [kW] | Dimensions [mm] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Δ | Y | | | | | | | | | | | |
| 50 Hz (3,000 rpm) | | | | | | | | from | to | 230 V | 400 V | | a | b | c | e | f | g | h | k | p | s | Screws |
| UV E 3 W | 19939 | ● | ❍ | ● | 3,150 | 57 | 25 | 40 | 235 | 1.25 | 0.72 | 0.35 | 120 | 170 | 45 | 160 | 205 | 168 | 92 | 383 | 210 | 13 | M12 |
| UV E 5 W | 19940 | ● | ❍ | ● | 5,020 | 91 | 33 | 75 | 390 | 1.30 | 0.75 | 0.35 | 120 | 170 | 54 | 162 | 205 | 187 | 105 | 438 | 233 | 13 | M12 |
| UV F 11 W | 16377 | ● | ❍ | ● | 11,100 | 202 | 73 | 165 | 865 | 2.85 | 1.65 | 0.75 | 125 | 210 | 65 | 175 | 260 | 201 | 125 | 560 | 254 | 17 | M16 |
| UV F 16 W | 16381 | ● | ❍ | ● | 16,100 | 293 | 93 | 265 | 1,280 | 3.80 | 2.20 | 1.10 | 125 | 210 | 65 | 175 | 260 | 231 | 140 | 603 | 278 | 17 | M16 |
| UV G 21 W | 16385 | ● | ❍ | ● | 21,100 | 385 | 130 | 335 | 1,665 | 7.10 | 4.10 | 1.96 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 662 | 334 | 26 | M24 |
| UV G 30 W | 16389 | ● | | ● | 29,500 | 538 | 145 | 540 | 2,400 | 7.80 | 4.50 | 2.20 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 710 | 334 | 26 | M24 |
| UV H 38 W | 16393 | ● | ❍ | ● | 37,500 | 684 | 195 | 665 | 3,030 | 8.80 | 5.10 | 2.50 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 774 | 363 | 26 | M24 |
| UV H 46 W | 16397 | ● | | ● | 46,100 | 841 | 211 | 870 | 3,785 | 11.30 | 6.50 | 3.20 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 834 | 363 | 26 | M24 |
| UV L 64 W | 17129 | ● | | ● | 64,000 | 1,168 | 263 | 1,270 | 5,315 | 14.20 | 8.20 | 4.30 | 200 | 320 | 90 | 270 | 390 | 334 | 189 | 840 | 381 | 28 | M27 |
| UV K 79 W | 16401 | ● | | | 78,900 | 1,439 | 327 | 1,560 | 6,540 | 21.80 | 12.60 | 7.00 | 280 | 400 | 65 | 350 | 470 | 359 | 199 | 878 | 403 | 33 | M30 |
| UV N 95 W | 16405 | ● | ❍ | | 95,100 | 1,735 | 384 | 1,900 | 7,910 | 23.30 | 13.50 | 7.60 | 2 x 125 | 380 | 35 | 320 | 460 | 387 | 215 | 866 | 436 | 38 | 6 x M36 |
| UV P 119 W | 16409 | ● | | | 119,000 | 2,163 | 500 | 2,330 | 9,815 | 28.20 | 16.30 | 9.00 | 2 x 140 | 440 | 38 | 370 | 530 | 420 | 230 | 994 | 454 | 44 | 6 x M42 |
| 60 Hz (1,200 rpm) | | | | | | | | | | 265 V | 460 V | | | | | | | | | | | |
| UV E 3 W | 20810 | ● | ❍ | ● | 3,320 | 42 | 23 | 40 | 235 | 1.18 | 0.68 | 0.38 | 120 | 170 | 45 | 160 | 205 | 168 | 92 | 383 | 210 | 13 | M12 |
| UV E 5 W | 20811 | ● | ❍ | ● | 7,230 | 91 | 33 | 115 | 545 | 1.18 | 0.68 | 0.38 | 120 | 170 | 54 | 162 | 205 | 187 | 105 | 438 | 233 | 13 | M12 |
| UV F 11 W | 16379 | ● | ❍ | ● | 11,300 | 143 | 65 | 155 | 825 | 2.60 | 1.50 | 0.75 | 125 | 210 | 65 | 175 | 260 | 201 | 125 | 490 | 254 | 17 | M16 |
| UV F 16 W | 16383 | ● | ❍ | ● | 15,200 | 192 | 84 | 215 | 1,115 | 3.80 | 2.20 | 1.30 | 125 | 210 | 65 | 175 | 260 | 231 | 140 | 525 | 278 | 17 | M16 |
| UV G 21 W | 16387 | ● | ❍ | ● | 21,100 | 268 | 120 | 295 | 1,550 | 6.50 | 3.75 | 2.10 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 594 | 334 | 26 | M24 |
| UV G 30 W | 16391 | ● | | ● | 30,400 | 375 | 130 | 490 | 2,240 | 7.40 | 4.30 | 2.40 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 710 | 334 | 26 | M24 |
| UV H 38 W | 16395 | ● | ❍ | ● | 37,600 | 476 | 177 | 600 | 2,820 | 8.70 | 5.00 | 3.00 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 774 | 363 | 26 | M24 |
| UV H 46 W | 16399 | ● | | ● | 46,000 | 583 | 190 | 785 | 3,505 | 10.40 | 6.00 | 3.60 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 774 | 363 | 26 | M24 |
| UV L 64 W | 17132 | ● | | ● | 64,000 | 811 | 234 | 1,155 | 4,940 | 14.00 | 8.10 | 5.00 | 200 | 320 | 90 | 270 | 390 | 334 | 189 | 840 | 381 | 28 | M27 |
| UV K 79 W | 16403 | ● | | | 78,400 | 993 | 293 | 1,400 | 6,040 | 19.60 | 11.30 | 7.50 | 280 | 400 | 65 | 350 | 470 | 359 | 199 | 878 | 403 | 33 | M30 |
| UV N 95 W | 16407 | ● | ❍ | | 89,400 | 1,133 | 343 | 1,580 | 6,870 | 21.50 | 12.40 | 8.00 | 2 x 125 | 380 | 35 | 320 | 460 | 387 | 215 | 866 | 436 | 38 | 6 x M36 |
| UV P 119 W | 16411 | ● | | | 119,000 | 1,509 | 445 | 2,130 | 9,170 | 26.00 | 15.00 | 9.50 | 2 x 140 | 440 | 38 | 370 | 530 | 420 | 230 | 994 | 454 | 44 | 6 x M42 |

❍ = Possible as option
● = Fitted as standard
[1] For devices driven by two unbalance motors
[2] Explosionproof motors have different tecnical data
Motor housings in Series UV in standard colour RAL 5018, powder coated

# 8-Pole Motors with Synchronous Speeds 750/900 rpm




| Type | Part No. | Thermistor | Ex-proof[3] | CSA | Centrifugal force [N] | Working moment [kgcm] | Motor weight [kg] | Working weight range[1] [kg] | | Rated Current max. [A] | | Rated Power max. [kW] | Dimensions [mm] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Δ | Y | | | | | | | | | | | |
| 50 Hz (3,000 rpm) | | | | | | | | from | to | 230 V | 400 V | | a | b | c | e | f | g | h | k | p | s | Screws |
| UV F 6 V | 19865 | ● | | ● | 6,250 | 202 | 73 | 55 | 360 | 2.40 | 1.40 | 0.40 | 125 | 210 | 65 | 175 | 260 | 201 | 124 | 560 | 246 | 17 | M16 |
| UV F 9 V | 19866 | ● | | ● | 9,045 | 293 | 93 | 110 | 545 | 3.80 | 2.20 | 0.95 | 125 | 210 | 65 | 175 | 260 | 231 | 140 | 603 | 278 | 17 | M16 |
| UV G 14 V | 19867 | ● | | ● | 14,350 | 465 | 145 | 175 | 810 | 7.10 | 4.10 | 1.50 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 710 | 334 | 26 | M24 |
| UV H 21 V | 19868 | ● | | ● | 21,110 | 684 | 195 | 295 | 1,320 | 9.30 | 5.40 | 2.00 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 774 | 363 | 26 | M24 |
| UV H 26 V | 19869 | ● | | ● | 25,950 | 841 | 211 | 420 | 1,680 | 10.40 | 6.00 | 2.50 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 834 | 363 | 26 | M24 |
| UV L 36 V | 19870 | ● | | ● | 36,020 | 1168 | 263 | 640 | 2,395 | 14.20 | 8.20 | 4.00 | 200 | 320 | 90 | 270 | 390 | 334 | 189 | 840 | 381 | 28 | M27 |
| UV K 44 V | 19871 | ● | | | 44,400 | 1439 | 327 | 785 | 2,945 | 17.10 | 9.90 | 4.90 | 280 | 400 | 65 | 355 | 470 | 359 | 200 | 878 | 403 | 33 | M30 |
| UV N 76 V | 19872 | ● | | | 76,440 | 2478 | 438 | 1,600 | 5,320 | 22.80 | 13.20 | 6.80 | 2 x 125 | 380 | 35 | 320 | 460 | 387 | 215 | 1,002 | 436 | 38 | 6 x M36 |
| UV P 85 V | 19873 | ● | | | 85,240 | 2763 | 540 | 1,685 | 5,830 | 24.20 | 14.00 | 7.60 | x 140 | 440 | 38 | 370 | 530 | 423 | 230 | 1,070 | 454 | 44 | 6 x M42 |
| 60 Hz (900 rpm) | | | | | | | | | | 265 V | 460 V | | | | | | | | | | | |
| UV F 6 V | 19891 | ● | | ● | 8,995 | 202 | 73 | 175 | 590 | 2.60 | 1.30 | 0.50 | 125 | 210 | 65 | 175 | 260 | 201 | 124 | 560 | 246 | 17 | M16 |
| UV F 9 V | 19892 | ● | | ● | 13,020 | 293 | 93 | 280 | 880 | 4.40 | 2.20 | 1.10 | 125 | 210 | 65 | 175 | 260 | 231 | 140 | 603 | 278 | 17 | M16 |
| UV G 14 V | 19893 | ● | | ● | 20,670 | 465 | 130 | 485 | 1,430 | 7.30 | 4.20 | 1.79 | 165 | 260 | 65 | 230 | 330 | 270 | 160 | 710 | 334 | 26 | M24 |
| UV H 21 V | 19894 | ● | | ● | 30,400 | 684 | 177 | 740 | 2,135 | 9.00 | 5.20 | 2.30 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 774 | 363 | 26 | M24 |
| UV H 26 V | 19895 | ● | | ● | 37,350 | 841 | 190 | 965 | 2,680 | 10.40 | 6.00 | 3.00 | 280 | 290 | 70 | 345 | 355 | 296 | 173 | 834 | 363 | 26 | M24 |
| UV L 36 V | 19896 | ● | | ● | 51,865 | 1,168 | 234 | 1,400 | 3,780 | 13.60 | 7.85 | 4.30 | 200 | 320 | 90 | 270 | 390 | 334 | 189 | 840 | 381 | 28 | M27 |
| UV K 44 V | 19897 | ● | | | 63,930 | 1,439 | 293 | 1,715 | 4,645 | 16.50 | 9.50 | 5.80 | 280 | 400 | 65 | 355 | 470 | 359 | 200 | 878 | 403 | 33 | M30 |
| UV N 76 V | 19898 | ● | | | 97,480 | 2,195 | 419 | 2,675 | 7,145 | 20.80 | 12.00 | 7.45 | 2 x 125 | 380 | 35 | 320 | 460 | 387 | 215 | 1,002 | 436 | 38 | 6 x M36 |
| UV P 85 V | 19899 | ● | | | 110,215 | 2,481 | 520 | 2,930 | 7,980 | 23.40 | 13.50 | 8.30 | x 140 | 440 | 38 | 370 | 530 | 423 | 230 | 1,070 | 454 | 44 | 6 x M42 |

❍ = Possible as option
● = Fitted as standard
[1] For devices driven by two unbalance motors
Motor housings in Series UV in standard colour RAL 5018, powder coated

# Vibration technology in application

## Drives and dosing technology

AViTEQ Vibrationstechnik GmbH (formerly AEG Vibrationstechnik) manufactures and distributes a full range of vibrating systems and drives including magnetic vibrators and unbalanced motors.

AViTEQ Vibrationstechnik GmbH offers every possible solution, whether your products have to be unloaded or loaded, conveyed horizontally or vertically, screened or graded, separated, drained, arranged, cooled down, warmed up or dried, condensed or vibrated and loosened.

Vibrating systems from AViTEQ Vibrationstechnik GmbH are used worldwide in practically every industry.

WE ARE CERTIFIED
Certificate Registration No.
QC-QM-Z-02/044-01


**AVITEQ Vibrationstechnik GmbH**
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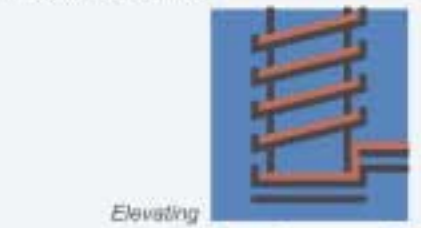
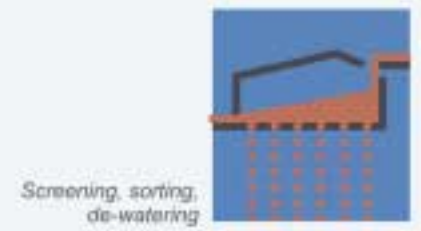
E-Mail: komponenten@aviteq.de
Internet: www.aviteq.de

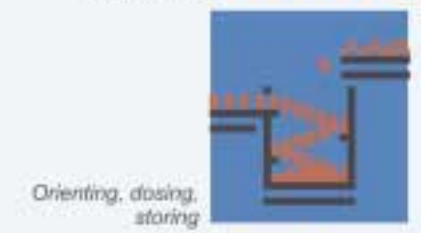



*Horizontal conveying*

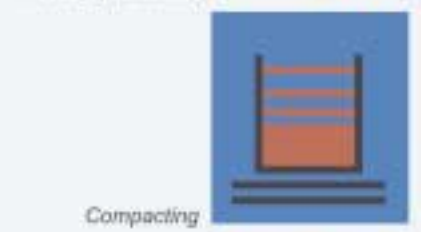

*Elevating*


*Discharging and charging*


*Screening, sorting, de-watering*


*Orienting, dosing, storing*


*Feeding, handling*


*Compacting*


*Cooling, heating, drying, chemical reactions*

VIB.2.56/02/2006 GB