



UNIDIRECTIONAL EXCITERS

VU



# VU



The VU series linear motion exciters manufactured by Italtvibras have been designed for medium and large size vibrating machines operating in many industrial processes.

The state of the art design and components selected, offer best performance, low operating noise, resulting in a longer lifetime for bearings and gears.

Model VU exciters can be mounted in line (connected through cardan shafts), in order to achieve higher centrifugal forces.

## Technical features

### Functioning

Vu linear motion exciters are composed by a casing (central body) that, by means of 4 bearings supports two shafts, synchronized by two helicoidal ground gears. The eccentric weights are mounted at the end of both shafts, rotating synchronized in opposite sense, determining a resulting unidirectional centrifugal force perpendicular to the mounting surface of the exciter.

### Conformity to European Directives

In the application field of the Machinery Directive 2006/42/EC, the VU linear motion exciters can be considered as "partly completed machinery".

### Static moment

From 4130 to 73440 kgmm. The static moment of eccentric weights can be adjusted by means of the additional weights.

### Centrifugal Force

Up to 453kN.

### Ambient temperature

From -40°C to +70°C.

### Exciter mounting position

VU exciters can be mounted in all positions, always with the shafts in horizontal position.

### Lubrication

Gears and bearings are oil splash / spray lubricated.

### Driving system

The movement is transmitted by an external driving system coupled with the driving shaft by means of a joint, generally a Cardan joint (recommended). The external driving system can be an electric motor, a hydraulic motor or other motor type, directly coupled or by belts and pulleys.

### Casing

In spheroidal cast iron.

### Bearings

Spherical roller bearings, highest quality, rated lifetime in excess of 40000 hours in conditions of maximum load.

### Shafts

In treated steel alloy (Isothermic hardening) resistant to stress.

### Eccentric weights / additional weights

Eccentric weights in steel, additional weights in steel and/or lead.

### Weight covers

All exciters are equipped with two weight covers for protection from rotating parts.

### Painting

Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at +200°C. Tested in salt spray for 500 hours.

Description			Specifications					
Code	Type	Frame	Weights setting	Static moment kgmm	Max RPM	Centrifugal force kN	Weight kg	Motor rating kW
0605021	<b>VU 8000/6-S08</b>	280	Min Max	4130 8065	1470 1100	98 107	298 340	5,5
0605022	<b>VU 14000/6-S08</b>	295	Min Max	7660 13975	1385 1000	145 153	410 470	7,5
0605023	<b>VU 18000/6-S08</b>	297	Min Max	8225 17980	1435 1000	186 197	563 649	11
0605025	<b>VU 23000/6-S08</b>	297	Min Max	10410 22885	1410 1000	227 252	631 741	15
0605024	<b>VU 27000/8-S08</b>	297	Min Max	12065 26635	1115 750	164 164	629 758	11
0605026	<b>VU 33000/6-S08</b>	310	Min Max	17650 32583	1220 935	288 312	895 1005	18,5
0605028	<b>VU 38000/6-S08</b>	310	Min Max	20448 37881	1153 882	298 323	949 1078	18,5
0605027	<b>VU 42000/8-S08</b>	310	Min Max	20060 42060	1087 750	260 260	949 1116	18,5
0605029	<b>VU 74000/8-S08</b>	320	Min Max	43580 73440	940 750	423 453	1520 1703	30

Italvibras competence and experience, in the vibration field by over 50 years, are the best guarantee for reliability and safety of the VU series exciters.

The VU linear motion exciters are completely designed, manufactured and tested in Italy.

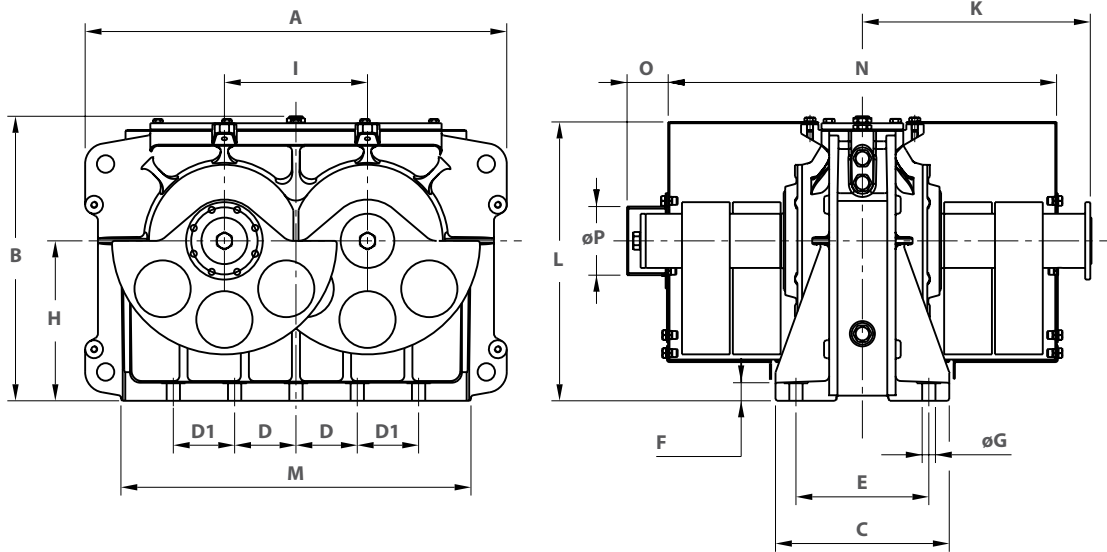


**Other features**

- The VU Italvibras exciters are supplied with:
- coupling flange according to DIN standard on the driving shaft (on request a second flange on the opposite side);
  - additional weights, based on the requested weights setting;
  - oil level dipstick, magnetic plugs and breather plug with valve;
  - technical handbook for use and maintenance;
  - ATEX certification in progress.

On request Italvibras can supply the complete driving system including joints, shaft extension and electric motor.

**Different mounting bolt patterns are available. Please contact sales office at Italvibras.**



Type	Dimensional features (mm)																
	A	B	C	D	D1	E	ØG	N°	F	H	I	K	L	M	N	O	ØP
VU 8000/6-S08	700	453,5	260	1x455	-	156	32	4xM30	30	240	232	330	442,5	575	550	69	98
VU 14000/6-S08	760	508,5	270	1x280	2x120	200	28	8xM27	30	280	256	388	497,5	640	665	69,5	118
VU 18000/6-S08	825	551,5	340	4x120	-	260	26	10xM24	35	310	280	407	540,5	685	685	80,5	133
VU 23000/6-S08	825	551,5	340	4x120	-	260	26	10xM24	35	310	280	446	540,5	685	760	80,5	133
VU 27000/8-S08	825	551,5	340	4x120	-	260	26	10xM24	35	310	280	476	540,5	685	820	80,5	133
VU 33000/6-S08	925	629	380	5x120	-	300	32	12xM30	35	350	320	476,5	618	770	815	83	143
VU 38000/6-S08	925	629	380	5x120	-	300	32	12xM30	35	350	320	510,5	618	770	885	83	143
VU 42000/8-S08	925	629	380	5x120	-	300	32	12xM30	35	350	320	524,5	618	770	915	83	143
VU 74000/8-S08	1070	708	470	4x120	2x150	390	32	14xM30	35	390	370	592	698,5	920	1045	85	161

# The Italtvibras production range



**MVSI**  
The most extensive range of industrial electric vibrators on the market. Approved for potentially explosive dust atmospheres (ATEX, IECEx, GOST). Range from 0 to 300 kN.



**MVSI-TS**  
MVSI industrial electric vibrators with split covers.



**MVSI-ACC**  
MVSI industrial electric vibrators for axial coupling.



**MVSI-E**  
"Ex e" increased safety electric vibrators for potentially explosive atmosphere (ATEX, IECEx, GOST). Range up to 109 kN.



**CDX**  
"Ex d" explosion-proof industrial electric vibrators for operation in potentially explosive atmospheres (UL, CSA, ATEX, IECEx, GOST). Range up to 220 kN.



**MVCC**  
Direct current vibrators (12 or 24 V.) designed for continuous duty on mobile machines. Range from 0 to 15 kN.



**MVSS**  
Electric industrial vibrators in stainless steel AISI 316L for the chemical, petroleum chemistry, food, pharmaceutical processing sectors. Range from 0 to 42 kN.



**MICRO**  
Electric vibrators designed for continuous service in processes where a lower centrifugal force is required. Range from 0 to 640 N.



**M3**  
Electric industrial vibrators with multi-holes mounting feet and minimum dimensions. Range up to 3kN.



**ITV-VR**  
Variable high frequency electric vibrators with fixed or cradle connection for industrial building sector. Range from 0 to 90 kN.



**ITVAF**  
High frequency electric vibrators with fixed or cradle connection for industrial building sector. Range from 0 to 90 kN.



**VU**  
Unidirectional linear motion exciters designed for medium and large size vibrating machines. Range up to 73500 kgmm (453kN).



**MTF**  
Vertical electric vibrators with side flange. Range from 0 to 26 kN.



**MTF-E**  
"Ex e" increased safety vertical electric vibrators with side flange for potentially explosive atmosphere (ATEX, IECEx, GOST).



**VB**  
Vertical electric vibrators with double tapered flange. Range from 0 to 49 kN.



**VB-E**  
"Ex e" increased safety vertical electric vibrators with double tapered flange for potentially explosive atmosphere (ATEX, IECEx, GOST).



**MVB**  
Vertical electric vibrators with side flange and shaft projecting on both sides. Range from 0 to 68 kN.



**MVB-FLC**  
Vertical electric vibrators with central flange and shaft projecting on both sides. Range from 0 to 68 kN.



**MVB-E**  
"Ex e" increased safety vertical electric vibrators with side flange and shaft projecting on both sides, for potentially explosive atmosphere (ATEX, IECEx, GOST).



**MVB-E-FLC**  
"Ex e" increased safety vertical electric vibrators with central flange and shaft projecting on both sides, for potentially explosive atmosphere (ATEX, IECEx, GOST).

