

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 with Standards and Regulations

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 3140 to 119525 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, long rated lifetime 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.

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.

The VU series linear motion exciters manufactured by Italtibras 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.

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

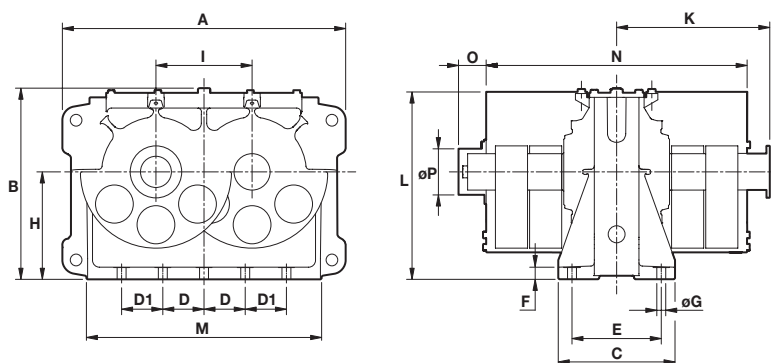
The VU linear motion exciters are completely designed, manufactured and tested in Italy.

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

Other mounting bolt patterns are available. For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

DESCRIPTION			SPECIFICATIONS						
Code	Type	SIZE	Weights Setting	Static moment kgmm	Max RPM	Centrifugal force kN	Weight kg	Drive Motor Rating	
								1 VU	2 VU
0605033	VU 5000/6-S08	270	Min	3140	1475	74,9	240	3	7,5
			Max	5435	1163	80,5	265		
0605021	VU 8000/6-S08	280	Min	4130	1534	107	298	5,5	11
			Max	8065	1098	107	340		
0605020	VU 10000/6-S08	280	Min	4294	1500	106	301	5,5	11
			Max	9693	1000	106	357		
0605022	VU 14000/6-S08	295	Min	7642	1460	179	430	7,5	15
			Max	13955	1080	179	490		
0605032	VU 16000/6-S08	295	Min	7963	1430	179	433	11	18,5
			Max	15950	1000	175	509		
0605023	VU 18000/6-S08	297	Min	8225	1600	231	563	11	18,5
			Max	17980	1138	256	649		
0605025	VU 23000/6-S08	297	Min	10410	1500	257	631	15	30
			Max	22885	1000	252	741		
0605024	VU 27000/8-S08	297	Min	12065	1323	231	629	11	22
			Max	26635	890	231	758		
0605026	VU 33000/6-S08	310	Min	17650	1335	345	895	18,5	37
			Max	32583	1000	357	1005		
0605028	VU 38000/6-S08	310	Min	20448	1262	357	949	18,5	37
			Max	37881	927	357	1078		
0605027	VU 42000/8-S08	310	Min	20060	1200	317	949	18,5	37
			Max	42060	828	317	1116		
0605034	VU 60000/8-S08	320	Min	39570	1000	434	1451	30	55
			Max	60560	815	442	1580		
0605029	VU 74000/8-S08	320	Min	43580	1000	478	1520	30	75
			Max	73440	770	478	1703		
0605041	VU 103000/8-S08	360	Min	58862	1000	646	2268	45	90
			Max	102955	750	635	2486		
0605042	VU 120000/8-S08	360	Min	65940	980	695	2365	55	110
			Max	119525	740	718	2630		



DIMENSIONAL SPECIFICATIONS (mm)

Type	A	B	C	D	D1	E	ØG	N°	F	H	I	K	L	M	N	O	ØP
VU 5000/6-S08	655	410	250	1x190	2x110	165	22	8xM20	25	225	210	320,5	407,5	545	530	69,5	97
VU 8000/6-S08	700	453,5	260	1x190	2x110	165	22	8xM20	30	240	232	330,5	442,5	575	555	69,5	97
VU 10000/6-S08	700	453,5	260	1x190	2x110	165	22	8xM20	30	240	232	331,5	442,5	575	555	69,5	97
VU 14000/6-S08	760	508,5	270	1x220	2x110	190	26	8xM24	30	280	256	389	497,5	640	670	69,5	107
VU 16000/6-S08	760	508,5	270	1x220	2x110	190	26	8xM24	30	280	256	389	497,5	640	670	69,5	107
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 60000/8-S08	1070	708	470	4x120	2x150	390	32	14xM30	35	390	370	499	698,5	920	970	30	208
VU 74000/8-S08	1070	708	470	4x120	2x150	390	32	14xM30	35	390	370	592	698,5	920	1045	85	161
VU 103000/8-S08	1280	830	500	1x280	4x160	410	39	12xM36	45	460	440	629,5	821	1135	1075	115,5	200
VU 120000/8-S08	1280	830	500	1x280	4x160	410	39	12xM36	45	460	440	661,5	821	1135	1140	115,5	200