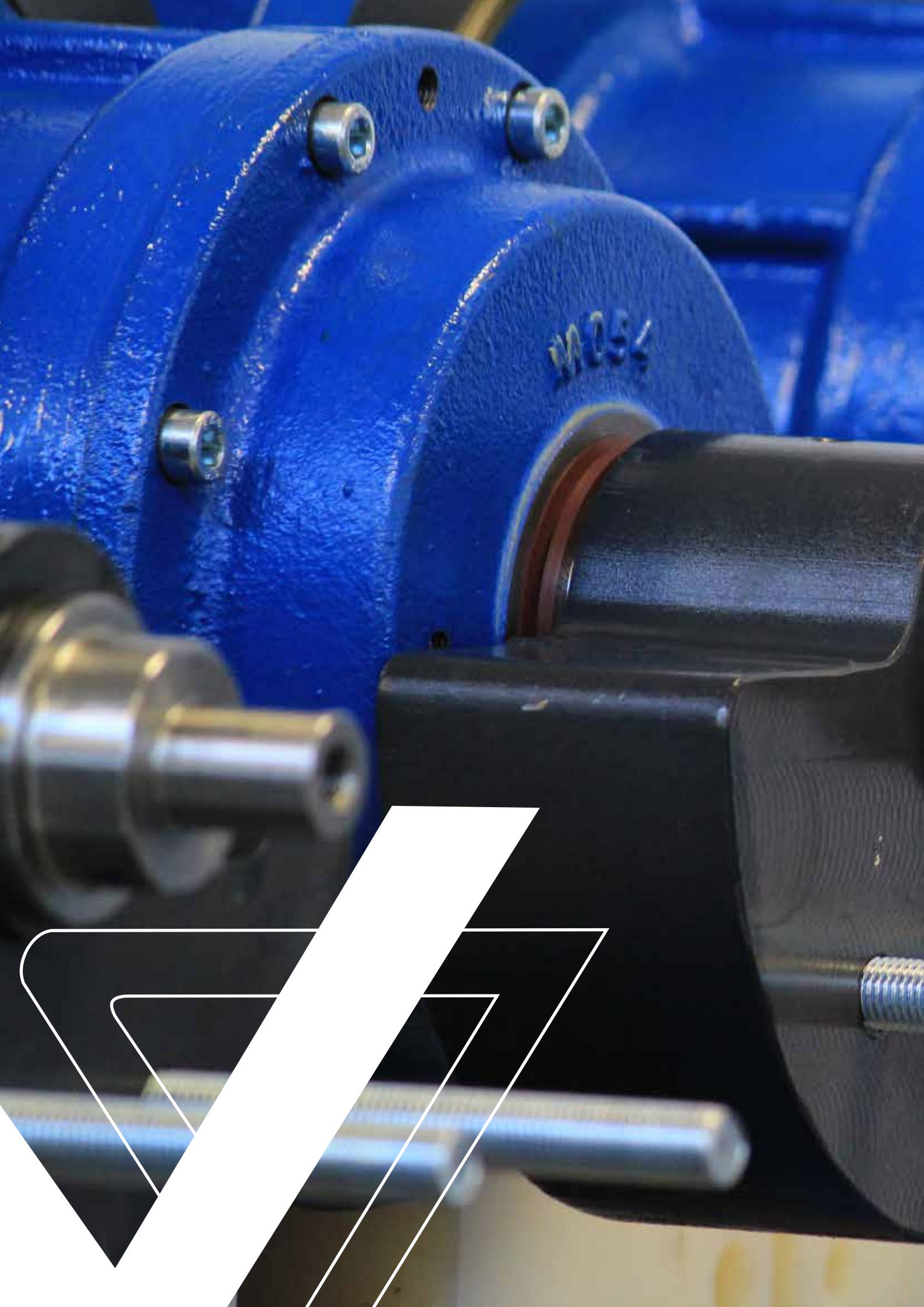


VISAM MOTOVIBRATORS



DESIGNED TO MEET YOUR NEEDS







Intro

Company profile	4
Technical features	6
Standard specifications	7
The VISAM vibrator range	8
Certifications	9
How to choose a motovibrator	10

SP range

Micro	12
2 poles single phase	13
2 poles three phase	14
4 poles	16
6 poles	18
8 poles	20

Customization

Customizations	22
----------------	----

DESIGNED TO MEET YOUR NEEDS

Since 1994 we have been striving to improve our products, service and technical support in order to meet our customers' demand and achieve their satisfaction and fidelity. Since 2013 Visam is part of OLI Group, the worldwide leader in vibration technology.



VISAM is dedicated to the design, manufacturing and marketing of electric vibrators for industrial applications. Since the beginning, our goal is to offer the market **a product suitable for the most demanding applications**, requiring **high performance and reliability**.

Our attention is focused on the quality of materials and components, the accuracy and precision of processing and finishing, and multiple controls from raw materials to final testing of the product.

Thanks to this, VISAM has today a broad presence on all major world markets and exports exceed 80% of its production.





✓ OUR FOCUS

TECHNICAL APPROACH



Visam identifies the most effective solution starting from the technical and applicational needs of the customer.

PRE-SALES CONSULTANCY



Experience, vast knowledge of applications for each industry sector, technical expertise: this allows Visam to have a technical approach to the customer, that is listened to and supported from the first contact.

CO-ENGINEERING



Customized projects and shared stages of development; Visam drives the customer to highly effective custom solutions.



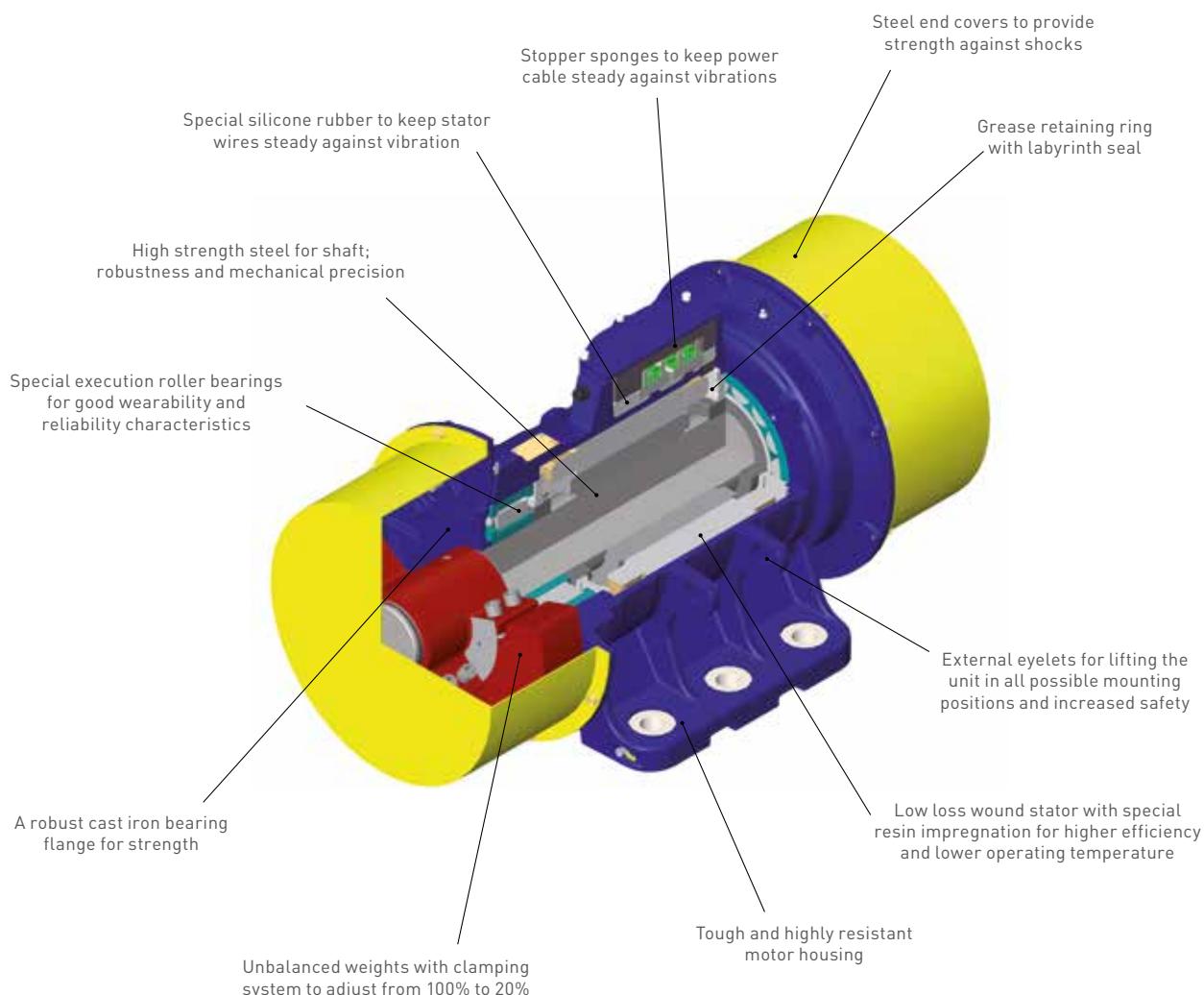
Standard specifications

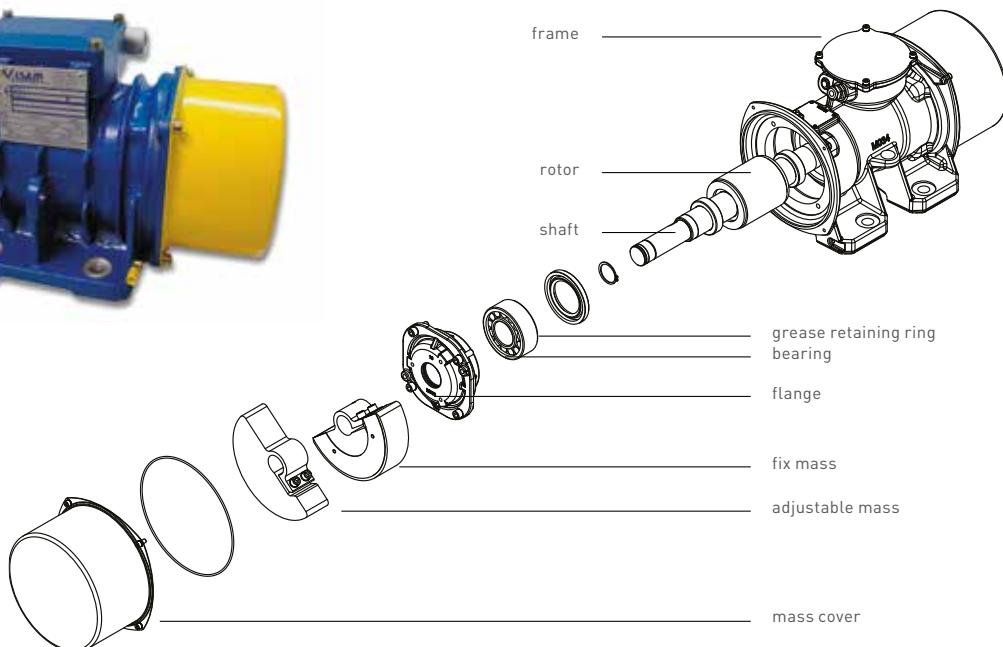
Specification	SPX / SPV
Power supply	Three-phase from 42 up to 700 V at 50 and 60 Hz; Single-phase from 110 up to 240 V at 50 and 60 Hz. Perfect performance under inverter control (VFD)
Time rating	Continuous at maximum Centrifugal Force (S1)
Range	2, 4, 6, 8, 10, 12 poles & specials
Mechanical protection	IP 66
Impact protection	IK 10
Insulation class	F standard • H on request
Coating colour	Powder coated blue RAL 5010 (body) / yellow RAL 1003 (mass covers)
Installation and operating environment	From -20° up to +40° C
Thermal protection	Standard (thermistor 130° C) from size 10. Up to size 9 on request
Centrifugal force	From 30 kg up to 22.800 Kg. Continuous adjusting from 100% to 20% (standard supply: setting at 80%)
Tropicalization	Standard
Lubrication	Greased for life up to size 4. Long life span greasing from size 4.1 upwards.
Mounting position	Any position
Testing	All units undergo a dynamic test-run (with unbalanced weights) before leaving the factory

THE VISAM VIBRATORS RANGE

Model	Poles	Centrifugal Force (kg)	Voltage Class (V)	Speed at 50Hz/ 60Hz (rpm)	Input Power (kW)
SPV SPX SPEx*	2	65 - 9,550	Three-phase from 42 up to 700 V at 50 and 60 Hz.	3,000 - 3,600	0.11 - 9.5
	4	30 - 13,000		1,500 - 1,800	0.08 - 11
	6	120 - 22,800	Single-phase from 110 up to 240 V at 50 and 60 Hz. Perfect performance under inverter control (VFD)	1,000 - 1,200	0.24 - 20.5
	8	150 - 22,200		750 - 900	0.28 - 14.5

* available on request



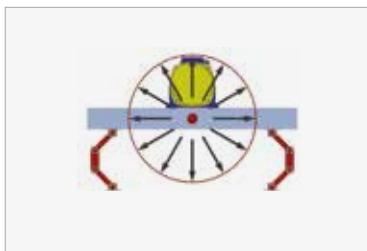


Certifications

Range	Certifications	Category	Type of protection	Temperature rating	Directive
SPX SPV	 	-	-	-	European Directives: <ul style="list-style-type: none"> • 2006/42/CE (Machine) • 2014/35/UE (Low Voltage) • 2002/95/CE (RoHS)
SPEx	 zone 21	Ex II 2D	Ex tb IIIC T140 °C Db	140 °C	European Directives: <ul style="list-style-type: none"> • 2006/42/CE (Machine) • 2014/35/UE (Low Voltage) • 2014/34/UE (Atex) • 2002/95/CE (RoHS)
	 zone 22 and 2	Ex II 3 GD	Ex nAc II T3 Ex tc IIIC T140 °C	T3 140 °C	

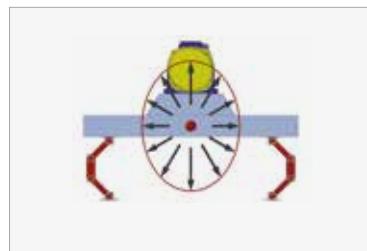
➤ Recommendations for the selection of the vibrator

TYPES OF VIBRATION



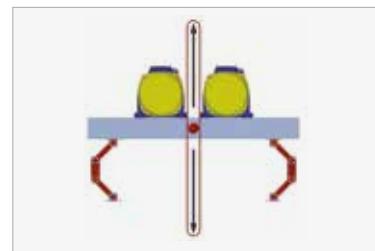
CIRCULAR

1 electric vibrator positioned near the mass center of the equipment



ELLIPTICAL

1 electric vibrator positioned distant from the mass center of the equipment

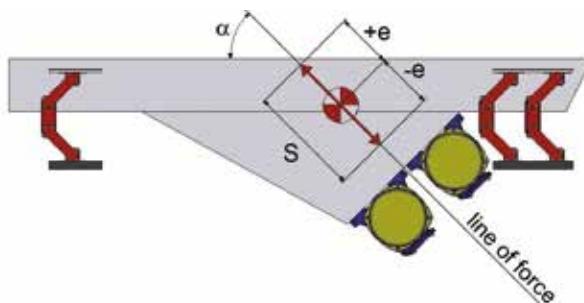


LINEAR

2 electric vibrators (counter-rotating) positioned so that the line of force goes through the mass center of the equipment

GENERAL FORMULA AND LEGENDA

The functioning of vibratory equipment is the result of a specific know-how and experience. It is recommended that only specialized manufacturers make all necessary evaluations and relevant calculations. For a preliminary evaluation of the vibrator model suitable for an application, we report here some formulas to be considered only as not-binding indications.



S = stroke (mm) = $e \times 2$

α = line of force angle from horizontal ($^{\circ}$)

n = number of vibrating motors

e = amplitude of vibration 0-peak (mm)

$$e = 5 \times \frac{n \times W_m}{n \times M_{MOT} + M_{VM}}$$

W_m = working moment (kgcm)

Wm_{TOT} = total working moment (kgcm)

$$Wm_{TOT} = \frac{M_{TOT} \times e}{5}$$

M_{MOT} = motor weight (kg)

M_{VM} = vibrating machine weight (kg)
without material and motors

M_{TOT} = total vibrating machine weight (kg)
without material

$$M_{TOT} = M_{VM} + M_{MOT} \times n$$

a = acceleration (G)

$$e \times \frac{rpm^2}{900,000}$$

EXAMPLE OF SIZING

1.

Given data on equipment and process

Type of process / vibration: primary feeder / linear vibration
Weight of equipment (We): 1,500 kg
Feeding Frequency: 50 Hz
Speed / Poles: 1,000 rpm / 6 Poles
Requested stroke of vibration (S): 8.0 mm

2.

Calculations

Eccentricity (e): $S / 2 \rightarrow 8,0 / 2 = 4,0 \text{ mm}$
Weight of vibrators estimated (Wvt): 20-25% of equipment weight $\rightarrow 25\% \text{ of } 1,500 \text{ kg} = 375 \text{ kg}$
Total equipment weight (Wt): $We + Wvt \text{ (estimated)} \rightarrow 1,500 + 375 = 1,875 \text{ kg}$
Total Working moment (Wm): $(M_{TOT} \times e \times 2) / 10 = \text{kgcm} \rightarrow (1,875 \times 4.0 \times 2) / 10 = 1,500 \text{ kgcm}$
Working Moment of vibrator (SMv): $Wm_{TOT} / 2 \rightarrow 1,500 / 2 = 750 \text{ kgcm}$

3.

Selection and checking

When selecting the vibrator model, it is advisable to use, for all further calculations, the 80% of the value of Static Moment (SMv). Therefore, 80% of the relevant Centrifugal Force (CFv), in order to have an operative safety margin of 20%.

In the Catalogue section "6 poles - 50 Hz - 1,000 rpm", we must identify a model that is 80% of the setting that will grant a value of Static Moment (SMv) the closest possible to the value required:

SPX 41.5 C

M_{VM} = 1,500 kg
n = 2 (linear motion)
Wm = 860 kgcm @ 100%
688 kgcm @ 80%
M_{MOT} = 200 kg

$$e = 5 \times \frac{2 \times 688}{2 \times 200 + 1,500} = 3.6 \text{ mm}$$

$$a = 3.6 \times \frac{1,000^2}{900,000} = 4 \text{ G}$$

SPV 50.0 C

M_{VM} = 1,500 kg
n = 2 (linear motion)
Wm = 1,020 kgcm @ 100%
816 kgcm @ 80%
M_{MOT} = 242 kg

$$e = 5 \times \frac{2 \times 816}{2 \times 242 + 1,500} = 4.1 \text{ mm}$$

$$a = 4.1 \times \frac{1,000^2}{900,000} = 4.6 \text{ G}$$

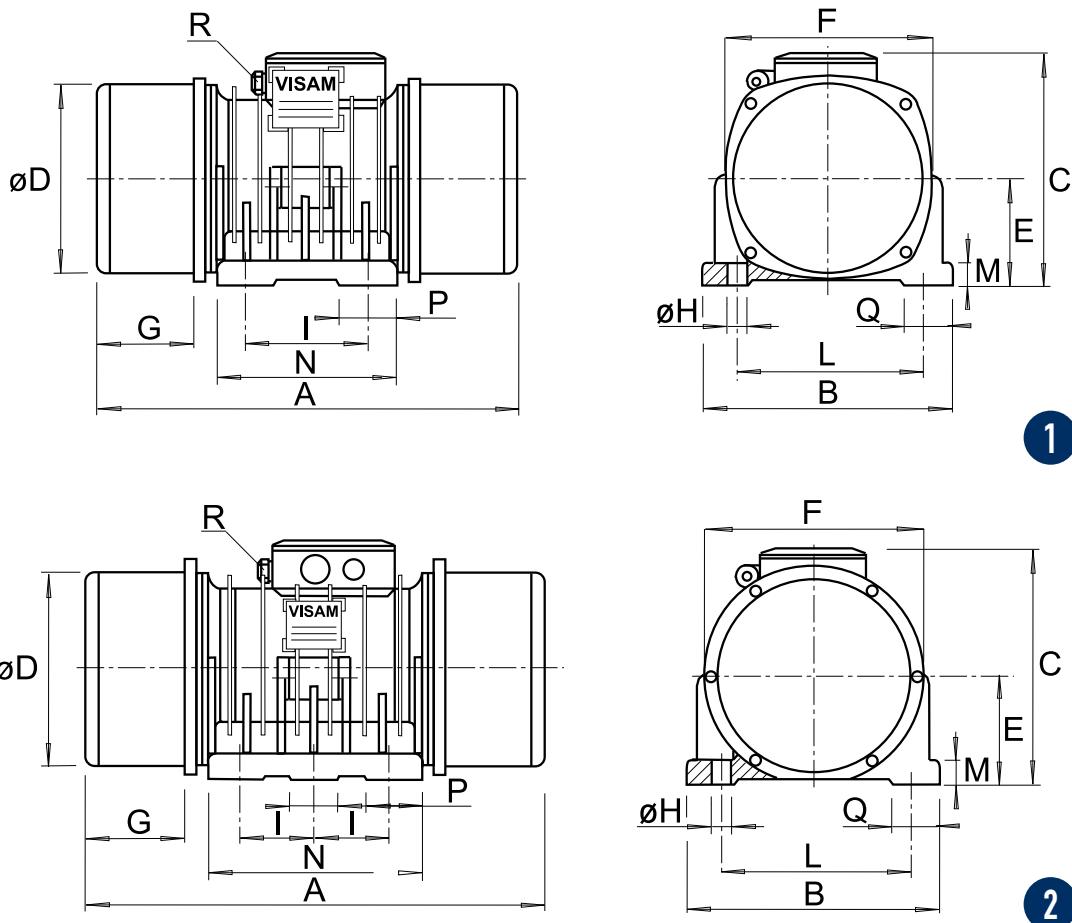
SPV / SPX 2 POLES THREE-PHASE

3,000/3,600 rpm



Wm (kgcm)		Model		Centrifugal Force (kg)		Weight (kg)		ELECTRICAL SPECIFICATIONS								
50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	Input Power (kW)		Nominal Current A max.				Ia / In		Cable Gland
								50Hz	60Hz	Δ 50Hz	Y 50Hz	Δ 60Hz	Y 60Hz	50Hz	60Hz	Metric
1.3	0.9	SPX-50 0.7 A	SPX-60 0.7 A	65	65	5	4.9	0.11	0.13	0.4	0.2	0.4	0.25	3	3.5	M16X1.5
2	1.3	SPX-50 1.2 A	SPX-60 1.2 A	100	94	5.2	5	0.18	0.2	0.6	0.4	0.6	0.3	4.5	4.5	M16X1.5
4.4	3.4	SPX-50 1.8 A	SPX-60 1.8 A	220	240	6	6.3	0.19	0.22	0.7	0.4	0.7	0.4	4.5	4.5	M16X1.5
6.6	4.4	SPV 2.7 A	SPV 2.7 A	330	320	9	8.5	0.28	0.3	1	0.6	1	0.6	3.5	3.5	M16X1.5
10	8	SPV 4.5 A	SPV 4.5 A	500	580	15.5	15	0.51	0.6	1.7	1	1.7	1	4	4	M20X1.5
16	12	SPV 7.0 A	SPV 7.0 A	800	870	20.5	20	0.75	0.8	2.3	1.3	2.1	1.2	5	5	M20X1.5
20	13	SPV 9.0 A	SPV 9.0 A	1,000	965	27	25	1.1	1.2	3.2	1.8	3.2	1.8	5	5	M20X1.5
26	16	SPV 12.0 A	SPV 12.0 A	1,350	1,200	28	27.5	1.3	1.4	3.7	2.1	3.5	2	5	5	M20X1.5
33	24	SPV 15.0 A	SPV 15.0 A	1,660	1,750	33.5	32	1.5	1.6	4.5	2.6	4.5	2.6	6	6	M20X1.5
40	30	SPX-50 19.0 A	SPX-60 19.0 A	2,000	2,200	46	44	1.9	2	5	2.8	5	3	6	6	M20X1.5
54	40	SPX-50 25.0 A	SPX-60 25.0 A	2,700	2,900	61	57.5	2.2	2.4	6.2	3.6	6	3.4	6	6	M20X1.5
83	69	SPX-50 32.0 A	SPX-60 32.0 A	4,200	5,000	100.5	98.5	3.5	4	10	5.8	10	5.8	5.5	5.5	M25X1.5 + M16X1.5
112	79	SPX-50 50.0 A	SPX-60 50.0 A	5,630	5,700	130	126.5	5	5.5	14	8	14	8	6	6	M25X1.5 + M16X1.5
132	87	SPV 60.0 A	SPV 60.0 A	6,640	6,300	182.5	178	7	7.3	20	11.5	19	11	6	6	M25X1.5 + M16X1.5
150	110	SPV 70.0 A	SPV 70.0 A	7,600	7,960	210	206	8	8.5	22.5	13	21.5	12.5	6	6	M25X1.5 + M16X1.5
190	130	SPV 85.0 A	SPV 85.0 A	9,550	9,400	216	210	9	9.5	25	14.5	24	14	6	6	M25X1.5 + M16X1.5

To convert kg into Newton: $N = 9.81 \cdot \text{kg}$



Model		Drawing	DIMENSIONAL SPECIFICATIONS (mm)														
50Hz	60Hz		A 50Hz	B 50Hz	C 50Hz	D 50Hz	E 50Hz	F 50Hz	G 50Hz	Holes Nr.	H 60Hz	I 60Hz	L 60Hz	M 60Hz	N 60Hz	P 60Hz	Q 60Hz
SPX-50 0.7 A	SPX-60 0.7 A	1	214	130	154	92	59	108	47	4	9	62-74	106	15	117	52	35
SPX-50 1.2 A	SPX-60 1.2 A	1	214	130	154	92	59	108	47	4	9	62-74	106	15	117	52	35
SPX-50 1.8 A	SPX-60 1.8 A	1	252	130	154	92	59	108	66	4	9	62-74	106	15	117	52	35
SPV 2.7 A	SPV 2.7 A	1	262	160	175	126	72	140	56	4	13	90	125	15	145	55	50
SPV 4.5 A	SPV 4.5 A	1	292	194	204	148	86	164	44	4	13	100	155	18	180	50	45
SPV 7.0 A	SPV 7.0 A	1	336	220	213	168	96	184	54	4	17	115	170	20	200	65	50
SPV 9.0 A	SPV 9.0 A	1	366	225	233	187	105	200	62	4	17	120	180	20	210	70	50
SPV 12.0 A	SPV 12.0 A	1	366	225	233	187	105	200	62	4	17	120	180	20	210	70	50
SPV 15.0 A	SPV 15.0 A	1	403	250	246	200	112	216	75	4	17	150	190	22	220	60	60
SPX-50 19.0 A	SPX-60 19.0 A	1	410	280	258	212	117	227	74	4	17	160	200	30	260	95	80
SPX-50 25.0 A	SPX-60 25.0 A	1	512	300	280	237	131	255	105	4	22	165	230	35	300	115	80
SPX-50 32.0 A	SPX-60 32.0 A	1	568	330	331	270	150	285	104	4	25	165	270	35	360	150	90
SPX-50 50.0 A	SPX-60 50.0 A	1	609	355	360	308	166	322	110	4	29	210	295	35	390	165	100
SPV 60.0 A	SPV 60.0 A	2	656	390	392	345	193	396	121	6	29	110	310	41	350	110	90
SPV 70.0 A	SPV 70.0 A	2	686	390	414	345	192	396	121	6	29	115	320	45	370	115	75
SPV 85.0 A	SPV 85.0 A	2	672	390	414	345	192	396	121	6	29	115	320	45	370	115	75

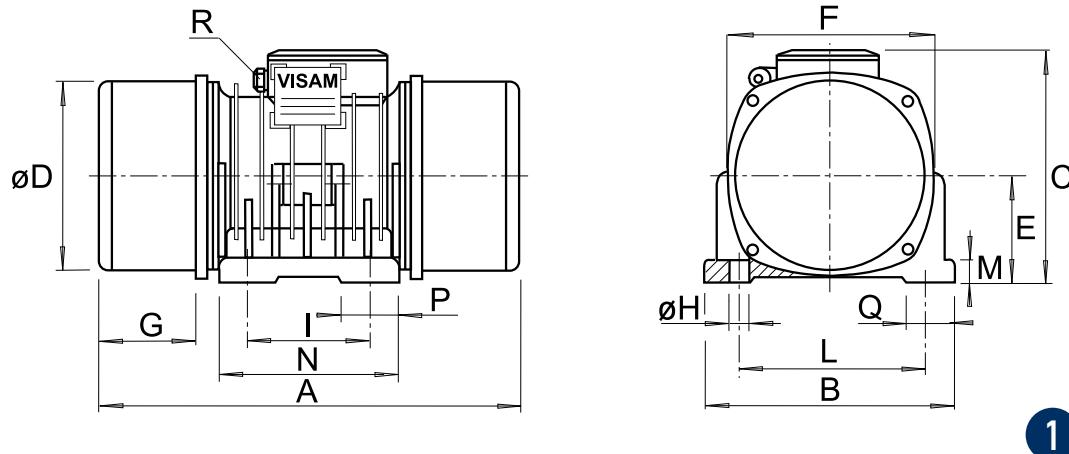
NOTE: Dimensions with coarse degree of accuracy related to UNI 22768/1

This information is provided without warranty, representation, inducement or licence of any kind. It is accurate to the best OLI knowledge or is obtained from sources believed to be accurate. OLI therefore assumes no legal responsibility.



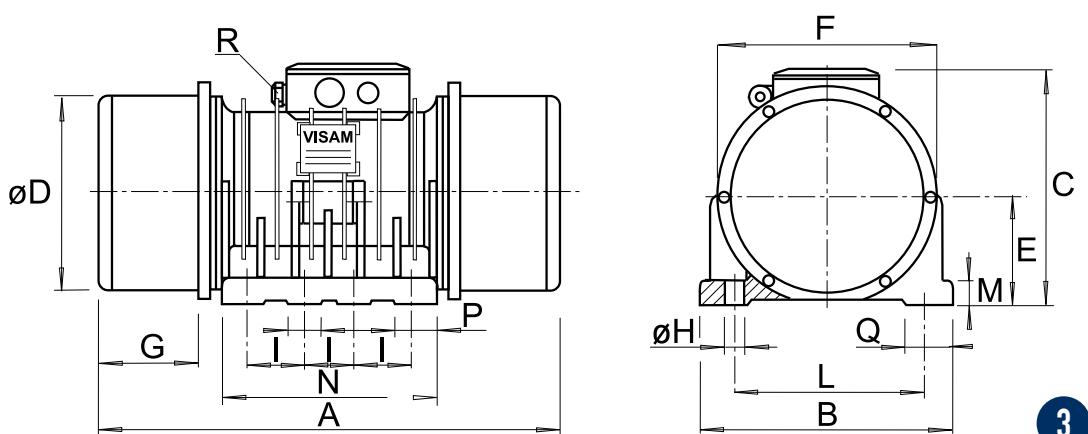
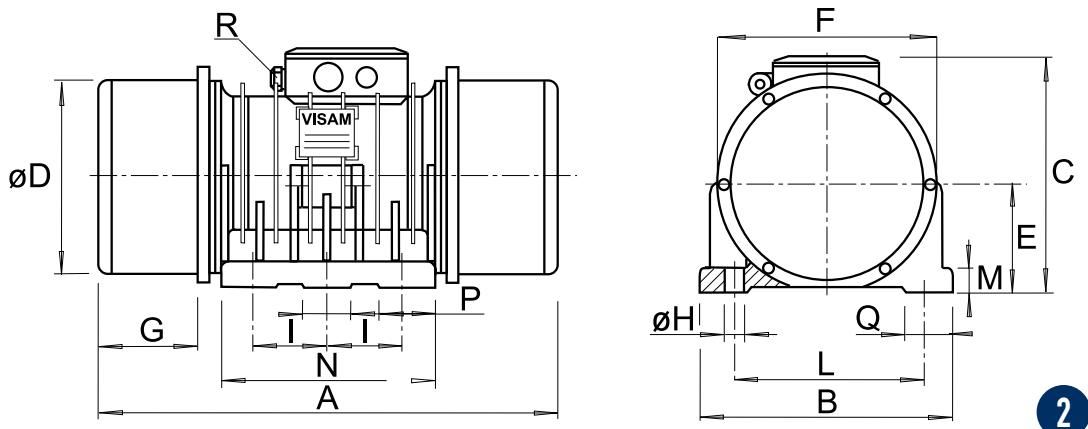
SPV / SPX 8 POLES THREE-PHASE

750/900 rpm



Wm (kgcm)		Model		Centrifugal Force (kg)		Weight (kg)		ELECTRICAL SPECIFICATIONS								
50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	Input Power (kW)		Nominal Current A max.				Ia / In		Cable Gland
50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	Δ 50Hz	Y 50Hz	YY/ Δ 60Hz	Y 60Hz	50Hz	60Hz	Metric
48	48	SPV 1.3 D	SPV 1.3 D	150	220	23	23	0.28	0.32	1.2	0.7	1.5	0.7	3	3	M20X1.5
80	80	SPV 2.1 D	SPV 2.1 D	250	360	30	30	0.45	0.5	2.1	1.2	2.2	1.1	3.5	3.5	M20X1.5
104	104	SPV 2.8 D	SPV 2.8 D	330	470	37	37	0.55	0.7	2.5	1.5	3.5	1.7	3.5	3.5	M20X1.5
172	172	SPV 4.5 D	SPV 4.5 D	540	780	50	50	0.7	0.8	2.9	1.7	3.4	1.7	3.5	3.5	M20X1.5
222	222	SPX-50 7.0 D	SPX-60 7.0 D	700	1,000	62.5	62.5	0.9	0.95	3.5	2	4	2	3	3	M20X1.5
330	330	SPX-50 10.0 D	SPX-60 10.0 D	1,050	1,500	82	82	1.1	1.2	4.3	2.5	5.2	2.6	4	4	M20X1.5
420	420	SPX-50 13.0 D	SPX-60 13.0 D	1,320	1,900	100	100	1.3	1.5	4.8	2.8	5.4	2.7	4	4	M20X1.5
512	512	SPX-50 15.5 D	SPX-60 15.5 D	1,610	2,320	140	140	2	2.3	8.6	5	10	5	4.5	4.5	M25X1.5 + M16X1.5
712	712	SPX-50 20.0 D	SPX-60 20.0 D	2,250	3,220	173.5	173.5	2.5	2.8	10	6	12	6	4.5	4.5	M25X1.5 + M16X1.5
860	860	SPX-50 23.5 D	SPX-60 23.5 D	2,700	3,900	187	187	3	3.3	11.7	6.8	14	7	4.5	4.5	M25X1.5 + M16X1.5
1,210	1,020	SPV 28.0 D	SPV 28.0 D	3,800	4,620	254	241.5	3.7	4.1	14.7	8.5	17	8.5	4.5	4.5	M25X1.5 + M16X1.5
1,510	1,210	SPV 42.5 D	SPV 42.5 D	4,750	5,500	300	280	5.2	5.8	17.5	10	20	10	5.5	5.5	M25X1.5 + M16X1.5
1,960	1,580	SPV 56.0 D	SPV 60.0 D	6,160	7,150	331	308	6.5	7.2	21	12	24	12	5	5	M25X1.5 + M16X1.5
2,394	1,820	SPV-50 66.5 D	SPV-60 66.5 D	7,550	8,250	407	372	7	8	22.5	13	26	13	4	4	M32X1.5 + M16X1.5
2,734	2,430	SPV-50 78.5 D	SPV-60 78.5 D	8,600	11,000	438	428	8	8.5	24.5	14	28	14	5	5	M32X1.5 + M16X1.5
3,600	2,800	SPV-50 100.0 D	SPV-60 100.0 D	11,300	12,640	584	543	10	10.8	18	10.5	36	18	5	5	M32X1.5 + M16X1.5
4,340	3,540	SPV-50 124.0 D	SPV-60 124.0 D	13,650	16,000	672	630	11	12	20	11.5	40	20	5	5	M32X1.5 + M16X1.5

To convert kg into Newton: $N = 9.81 \cdot \text{kg}$



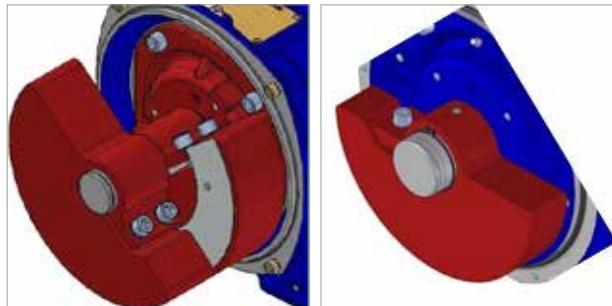
Model		Drawing	Size	DIMENSIONAL SPECIFICATIONS (mm)																
50Hz	60Hz			A	B	C	D	E	F	G	Holes Nr.	H	I	L	M	N	P	Q		
				50Hz	60Hz					50Hz	60Hz									
SPV 1.3 D	SPV 1.3 D	1	04.1	406	194	204	148	86	164	101	4	13	100	155	18	180	50	45		
SPV 2.1 D	SPV 2.1 D	1	05.0	428	220	213	168	96	184	100	4	17	115	170	20	200	65	50		
SPV 2.8 D	SPV 2.8 D	1	06.0	452	225	233	187	105	200	105	4	17	120	180	20	210	70	50		
SPV 4.5 D	SPV 4.5 D	1	07.0	495	250	246	200	112	216	121	4	17	150	190	22	220	60	60		
SPX-50 7.0 D	SPX-60 7.0 D	1	08.0	548	280	258	212	117	227	143	4	17	160	200	30	260	95	80		
SPX-50 10.0 D	SPX-60 10.0 D	1	09.0	584	300	280	237	131	255	141	4	22	165	230	35	300	115	80		
SPX-50 13.0 D	SPX-60 13.0 D	1	09.1	624	300	280	237	131	255	161	4	22	165	230	35	300	115	80		
SPX-50 15.5 D	SPX-60 15.5 D	1	10.0	662	330	331	270	150	285	151	4	25	165	270	35	360	150	90		
SPX-50 20.0 D	SPX-60 20.0 D	1	11.0	693	355	360	308	166	322	152	4	29	210	295	35	390	165	100		
SPX-50 23.5 D	SPX-60 23.5 D	2	11.1	693	355	360	308	166	322	152	4	29	210	295	35	390	165	100		
SPV 28.0 D	SPV 28.0 D	2	12.0	740	390	392	345	193	396	163	6	29	110	310	41	350	110	90		
SPV 42.5 D	SPV 42.5 D	2	13.0	851	770	390	414	345	192	396	203	163	6	29	115	320	45	370	115	75
SPV 56.0 D	SPV 56.0 D	2	13.2	917	838	390	414	345	192	396	243	203	6	29	115	320	45	370	115	75
SPV-50 66.5 D	SPV-60 66.5 D	2	14.0	1.001	901	456	468	410	235	460	253	203	6	32	130	380	40	400	390	120
SPV-50 78.5 D	SPV-60 78.5 D	2	14.1	1.007	907	456	468	410	235	460	253	203	6	32	130	380	40	400	390	120
SPV-50 100.0 D	SPV-60 100.0 D	2	15.0	1.084	964	520	504	451	255	500	278	218	6	38	155	400	40	470	150	145
SPV-50 124.0 D	SPV-60 124.0 D	2	15.1	1.138	520	504	451	255	500	278	6	38	155	400	40	470	150	145		

NOTE: Dimensions with coarse degree of accuracy related to UNI 22768/1

This information is provided without warranty, representation, inducement or licence of any kind. It is accurate to the best OLI knowledge or is obtained from sources believed to be accurate. OLI therefore assumes no legal responsibility.

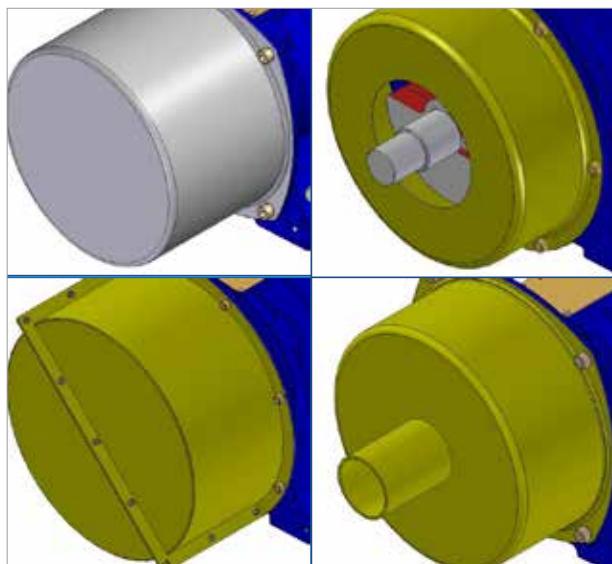
✓ CUSTOMIZATIONS

WEIGHTS SETTINGS



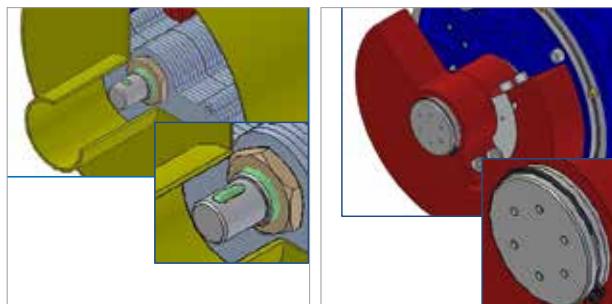
Customizable at any %.
Fix (single/side).

WEIGHTS COVERS



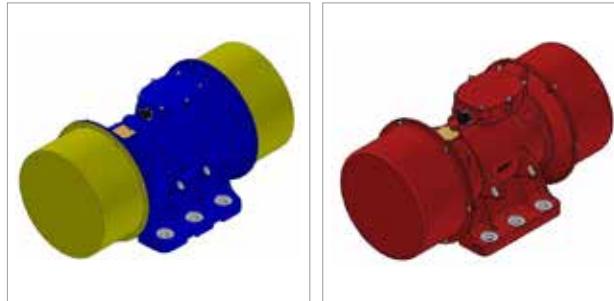
Stainless Steel.
Split System.
Axial hole for extended shaft.
Axial guard for extended shaft.

COUPLING



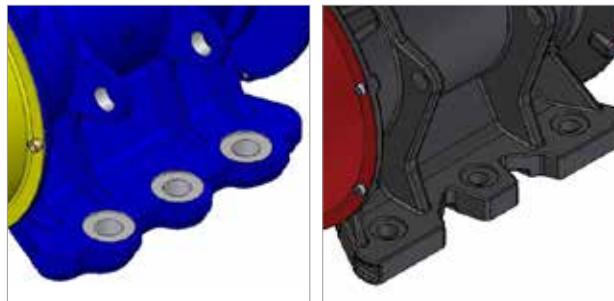
Extended shaft.
Side drilled shaft.

EXTERNAL COLOUR



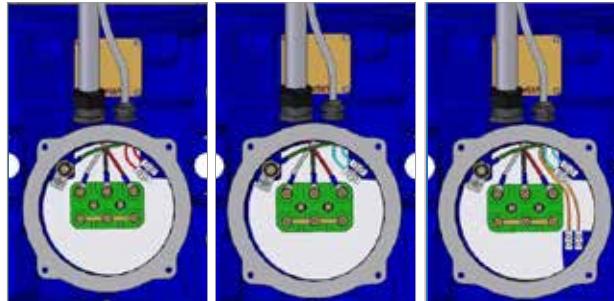
Blue/yellow standard.
Customizable with other colours.

FOOT PRINT



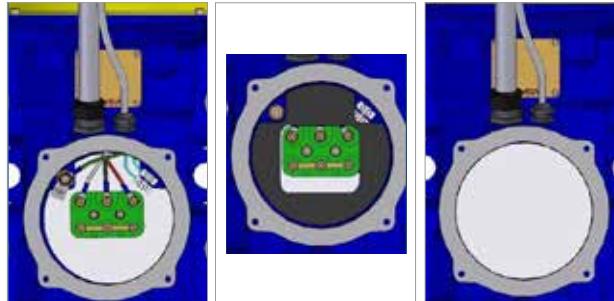
Various foot print available
matching different fixing patterns.
Customizable.

READING PROBES



PTC (standard on some models as default, others on request).
PT100.
Heaters.

FEEDING CABLE



Feeding cable.
Feeding cable + terminal box
fully filled with silicon rubber

VISAM MOTOVIBRATORS

DESIGNED TO MEET YOUR NEEDS

WWW.VISAM.IT



VISAM Headquarters

VIA NUOVA PONENTE 27/G
41012 CARPI (MO) - ITALY

+39 059 625 8411
 info@visam.it

VISAM worldwide direct presence

OLI Australia	OLI Germany	OLI Nordic	OLI Turkey
OLI Benelux	OLI India	OLI Russia	OLI UK
OLI Brazil	OLI Italy	OLI South Africa	OLI USA
OLI China	OLI Malta	OLI Spain	
OLI France	OLI Middle East	OLI Thailand	