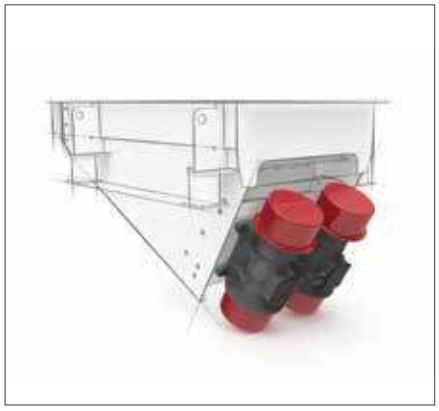
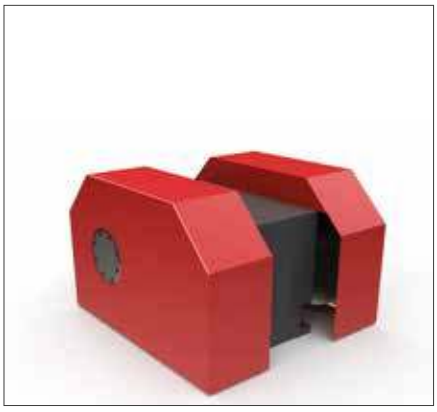
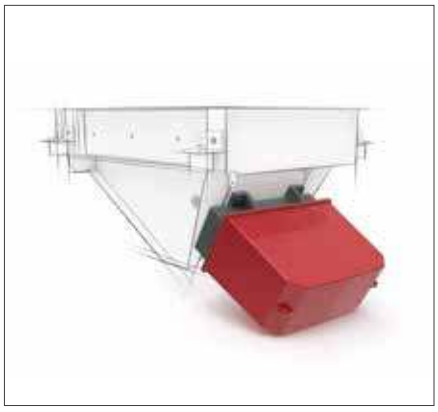
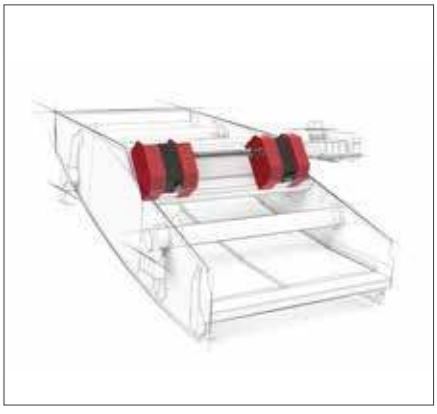
JVM®
DRIVES IN MOTION

Your Partner
for Vibration Technology.

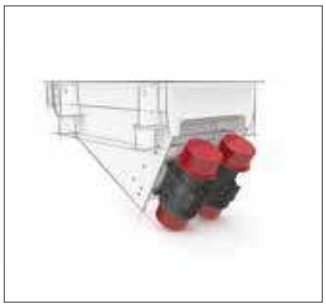
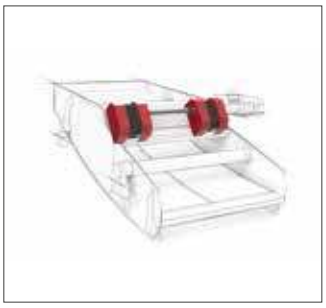
JVM®
DRIVES IN MOTION

Welcome to JVM®

“The past 100 years we have gained the reputation of being an expert partner in vibration technology that is always reliable. Knowing the value and responsibilitly of this position, we will do everything in our power to define the standards.”

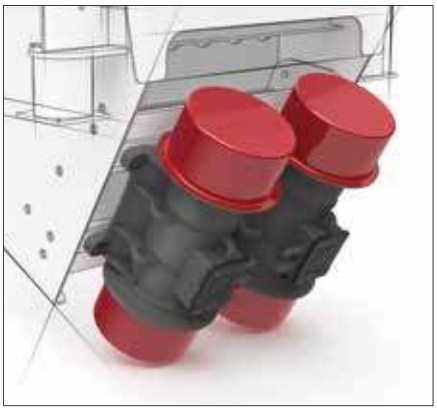
From expert technical advice during drive selection, to ensuring on-time delivery, through after sales support - our professional team will always be glad to be at your service. Deployment throughout the world and direct exports to over 80 countries speaks for itself.

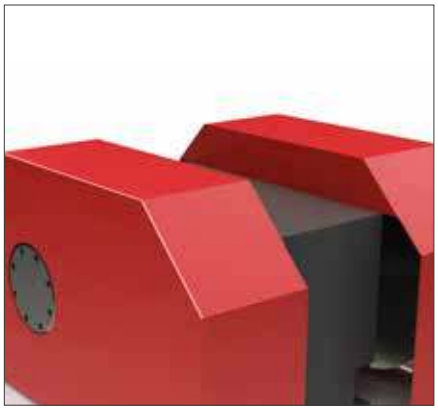
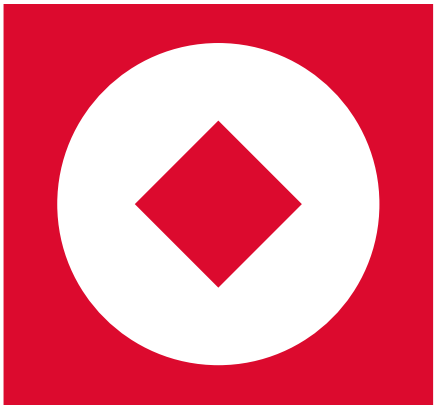
Our clear corporate strategy and global operations provide you with the certainty that you will find a reliable partner both now and in the future.

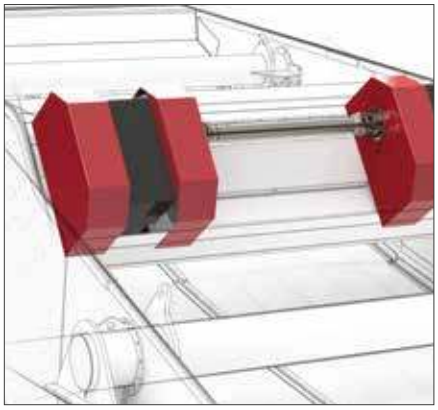



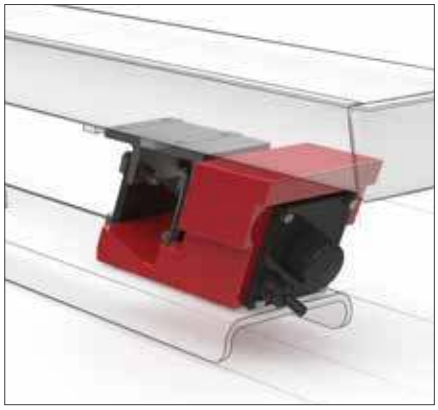
Your Requirements Are Our Milestones – Our Knowledge At Your Service.

We offer more than just a product. From expert technical advice during drive selection, to ensuring on-time delivery and through after sales support, JVM® offers reliability, trust and expertise.





JVM®
DRIVES IN MOTION

All drives are manufactured on the basis of our competence in development and engineering within the JOEST group. This underlines our worldwide approach to guarantee the high level of our full line of products and services.

Experience
When it comes to vibration drives, our extensive knowledge and experience is at your service.

Quality
By maintaining a high level of quality in our products, services and schedules we garantee that projects are delivered on time. Deployment throughout the world and direct exports to over 80 countries speaks for itself.

Flexibility
Quick customer response, direct customer service and our variable manufacturing process help you concentrate on your core business. Our adjoining production facilities also enable us to produce special models at short notice.

Operational reliability
Proven engineering and experience, from 100 years of manufacturing vibratory motors, and innovative developments guarantee the operational reliabilty you can trust.

Durability
The efficiency, easy maintenance and reliability of our drive units make them the economical choice. Use in the most extreme variety and conditions testifies to our demanding standards.

After-sales service
You can expect comprehensive support from us especially after the purchase. In addition to our service teams, our own workshop is at your disposal for maintenance and repair work.

Oriented to the future
Our clear corporate strategy and global operations provide you with the certainty that you will find a reliable partner both now and in the future.

Your expert partner in vibration technology.

Every product leaving our premises is made to meet or exceed the individual customers´ expectations. Our design and process engineering staff strive to find solutions for every individual application and the varying on-site conditions.

Vibratory Drive Units by JVM®

Knowing the value and responsibility of this position we will do everything in our power to define the standards.

UNBALANCE MOTORS - JX

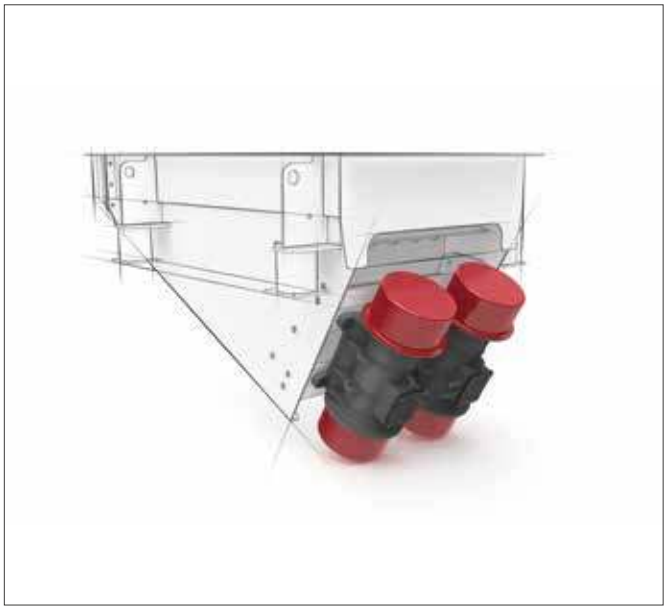
Screening, Conveying, Activating

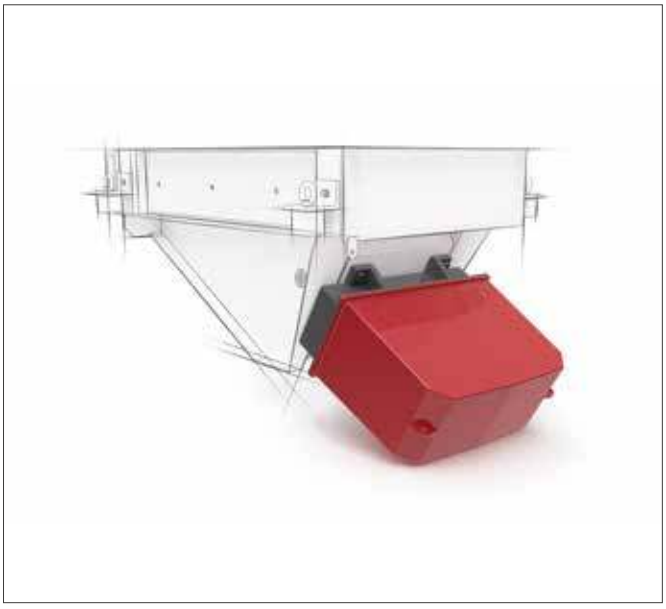
Unbalance motors are electro-mechanical drive units which generate circular motions. In contrast, linear motions are produced by operating two motors working in opposite directions.

ELECTROMAGNETIC VIBRATORS - MS

Conveying, Dosing, Drawing off

The electromagnetic vibrators generate linear motions and are operated at motion frequencies of 50 and 25 Hz or at 60 and 30 Hz. MS drive units are used in a variety of industries for medium duty dosing, draw-off and conveying applications. The drive units are also suitable for clock cycle operation because the maximum motionamplitude is reached as soon as it is started and it comes to a stop immediately after being switched off.



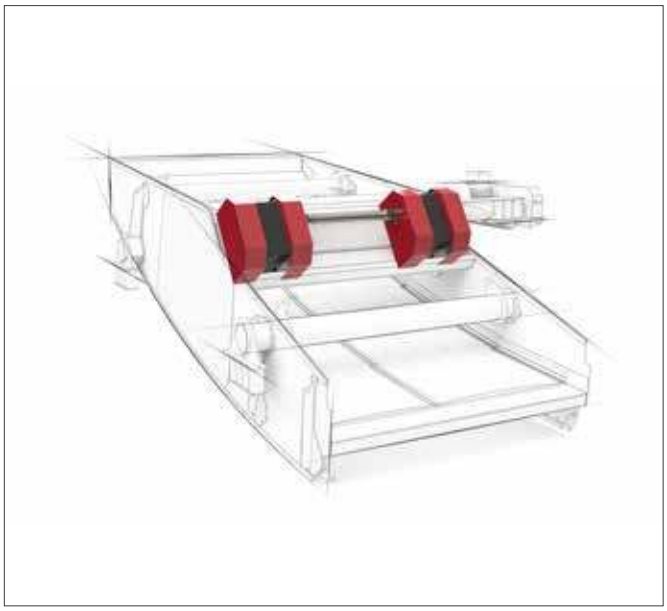


JVM®
DRIVES IN MOTION

EXCITERS - JR

Screening, Conveying

Two shafts with centrifugal weights are operated in opposite directions via a toothed gear, this action creates linear vibrations. The drive power is generally transmitted via a cardan shaft with a standard, stationary motor. JVM® exciters are primarily used for large and heavy vibration machines. Their long service lives and problem-free operation – even under the most difficult industrial conditions - testifies to the JVM® technical design throughout the world.



DOSING DRIVES - JD

Dosing, Packaging, Feeding

The electromagnetic drives generate linear motion and are operated via Thyristor controllers. JD dosing drives are ideal for dosing, mixing and feeding applications in the packaging, weighing and automation industries, at low to medium throughput rates.

Unbalance Drive Series JX

Unbalance motors are electro-mechanical drive units which generate circular motions. In contrast, linear motions are produced by operating two motors working in opposite directions.

Infinite oscillation amplitudes
With the motors off, the motion amplitude can be set for all JVM unbalance motors by adjusting the centrifugal weights. The motion frequency can also be adjusted during operation via the optional frequency converter.

Operational reliability
Proven engineering from 100 years of experience and purposeful development of our technology guarantee the operational reliability that you expect. Further attention to practical design details such as non-twisting centrifugal weights and large, legible scales make the JVM® drives the market preference.

Consistency
Every JVM® unbalance motor undergoes stringent mechanical and electrical quality controls, during all windings are tested. All motors are rated for S1 continuous operation – even when the feed rate is set to 100%.

Dimensioning
Conservatively sized, quality components and optimised electrical performance guarantee long service lives and fast motor run-up times – this way you conserve your vibration equipment.

JVM®
DRIVES IN MOTION

Ready for connection and easy to install

JVM® unbalance motors are supplied ready for connection and operation. Their space-saving geometry, easily accessible foot fastenings and transport eyes make them easy to install. JVM unbalance motors can be operated in every position and size 10 and up are equipped with a re-lubrication feature in the standard version.

Efficiency

The modern and state-of-the-art-design ensures great efficiency and clearly defined, direct power transmission. Field-proven success has testified to our technical concept – across the globe, even under the most difficult operating conditions.

Special executions

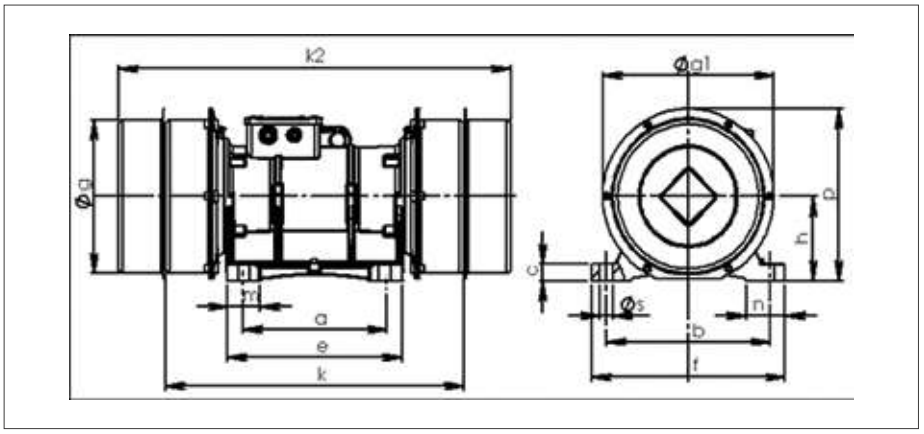
Whether you need split covers in protection class IP65, high/low temperature models, standstill heating or other special fittings – we offer many options and can offer more information upon request.

Accessories

Details on frequency converters, D.C. injection braking devices and monitoring systems can be found in our separate information notices.

Unbalance Drives Series JX

400 V 50 Hz											460 V 60 Hz						
Speed	Type	Size	Pole		Torque	Cetrifugal Force	Weight	Power Input	Rated Current	Ratio Staring / Rated Current	Speed	Torque	Cetrifugal Force	Weight	Power Input	Rated Current	Ratio Staring / Rated Current
					kgcm	kN	kg	kW	A	IA/IN		kgcm	kN	kg	kW	A	IA/IN
3.000	JX	07	2	-	1	0,5	6,5	0,15	0,25	3,6	3.600	1	0,5	6,5	0,15	0,23	4,5
	JX	08	2	-	4	2,0	9	0,15	0,25	3,6		2,8	2,0	9	0,15	0,23	4,5
	JX	10	2	-	14	6,9	23	0,45	0,79	6		10	6,9	23	0,45	0,7	6,5
	JX	13	2	-	40	19,7	45	0,85	1,4	6,45		28	19,7	45	0,85	1,2	7,27
1.500	JX	08	4	-	12	1,5	12	0,15	0,4	3,5	1.800	8,5	1,5	12	0,15	0,35	4,1
	JX	08	4	-	20	2,5	15,6	0,15	0,4	3,5		14	2,5	15,6	0,15	0,35	4,1
	JX	10	4	-	50	6,2	27	0,40	0,78	4,8		35	6,2	27	0,40	0,71	5,6
	JX	13	4	-	66	8,0	41,5	0,8	1,5	5,5		46	8,0	41,5	0,8	1,5	6,4
	JX	13	4	-	90	11,2	45,5	0,8	1,5	5,5		63	11,2	45,5	0,8	1,5	6,4
	JX	15	4	-	130	16,0	74	1,2	2,1	5,9		90	16,0	74	1,2	1,8	6,8
	JX	15	4	-	190	23,4	78	1,2	2,1	5,9		130	23,4	78	1,2	1,8	6,8
	JX	17	4	-	200	24,9	91	1,6	2,8	7		140	24,9	91	1,6	2,5	7,5
	JX	18	4	-	300	37,5	116	2,2	4,6	6,3		200	37,2	110	2,5	4,65	6,2
	JX	24	4	-	390	49,0	181	3,0	5,1	3,8		270	48,7	174	3,1	4,8	4
	JX	24	4	-	490	60,8	207	3,5	6,07	4,6		330	59,7	198,5	3,8	5,8	4,7
	JX	28	4	-	630	78,6	293	5,4	9,25	6,8		440	78,2	282	6,0	9	6,9
	JX	28	4	-	710	88,6	297	5,4	9,25	6,8		490	88,1	286	6,0	9	6,9
	JX	28	4	-	900	112,0	333	5,5	9,25	7,2		600	107,1	319	5,8	8,65	7
1.000	JX	10	6	-	100	5,5	32,5	0,38	0,78	2,9	1.200	70	5,5	32,5	0,38	0,68	3,4
	JX	13	6	-	180	9,9	56	0,65	1,4	3,8		125	9,9	56	0,65	1,2	4,4
	JX	15	6	-	250	13,8	76	0,95	2	4,8		175	13,8	76	0,95	1,79	5,6
	JX	15	6	-	330	18,1	85	0,95	2	4,8		230	18,1	85	0,95	1,79	5,6
	JX	17	6	-	450	24,7	122	1,6	3,35	5,6		310	24,7	122	1,6	3	5,2
	JX	17	6	-	550	30,1	132	1,6	3,35	5,6		380	30,1	132	1,6	3	6,2
	JX	18	6	-	710	39,04	163	2,3	5	4,95		500	39,86	151,5	2,4	4,8	4,6
	JX	20	6	-	820	45,13	196	2,2	5	5,95		620	49,17	185	2,6	5	5,9
	JX	24	6	-	940	51,82	230	3,1	6,35	5,2		660	52,12	203	3,4	6,05	5,1
	JX	24	6	-	1250	68,76	258	3,9	7,8	4,8		820	65	234,5	4	7,2	5,2
	JX	28	6	-	1250	68,8	317	4,2	8,4	5,8		900	71,7	299	4,4	7,7	5,7
	JX	28	6	-	1460	80,06	338	4,8	9,7	5,9		980	77,4	309	5,1	9,1	5,8
	JX	28	6	-	1730	94,8	370	4,8	9,7	5,9		1180	93,2	344	5,1	9,1	5,8
	JX	28	6	-	2150	117,9	420	6,0	12,45	7,6		1530	120,8	395	6,7	12	8
	JX	30	6	-	2680	147,2	552	7,65	15,7	8		1800	142,2	520	8,3	14,7	8,2
	JX	30	6	-	3220	176,6	602	7,65	15,7	8		2100	166,7	560	8,3	14,7	8,2
750	JX	15	8	-	410	12,7	95	0,95	2,4	3,5	900	285	12,7	95	0,95	2,2	4
	JX	17	8	-	675	20,8	138	1,6	4,5	4,29		450	20,8	138	0,6	4,1	4,78
	JX	20	8	-	820	25,2	200	2,3	6,15	4		820	36,53	200	2,5	5,9	3,9
	JX	20	8	-	1060	32,65	234	2,3	6,15	4		1060	47,05	234	2,5	5,9	3,9
	JX	20	8	-	1250	38,81	250	3,0	8,1	4,1		1250	55,84	250	3,3	7,9	3,7
	JX	24	8	-	1520	46,9	301	3,1	7,2	4,9		1260	55,9	281	3,7	7,2	4,9
	JX	24	8	-	1780	55	309	3,1	7,2	4,9		1520	67,5	295	3,7	7,2	4,9
	JX	28	8	-	2150	66,2	385	4,2	9,4	4,5		1780	79,2	367	4,7	9,1	4,6
	JX	28	8	-	2610	80,4	433	5,3	11	3,9		2150	95,4	404,5	5,5	11	3,9
	JX	30	8	-	3600	110,9	722	10,5	21,7	5,5		3100	139,5	703	11,5	21	5,9
	JX	30	8	-	4300	132,5	785	10,5	21,7	5,5		3850	175,3	766	11,5	21	5,9

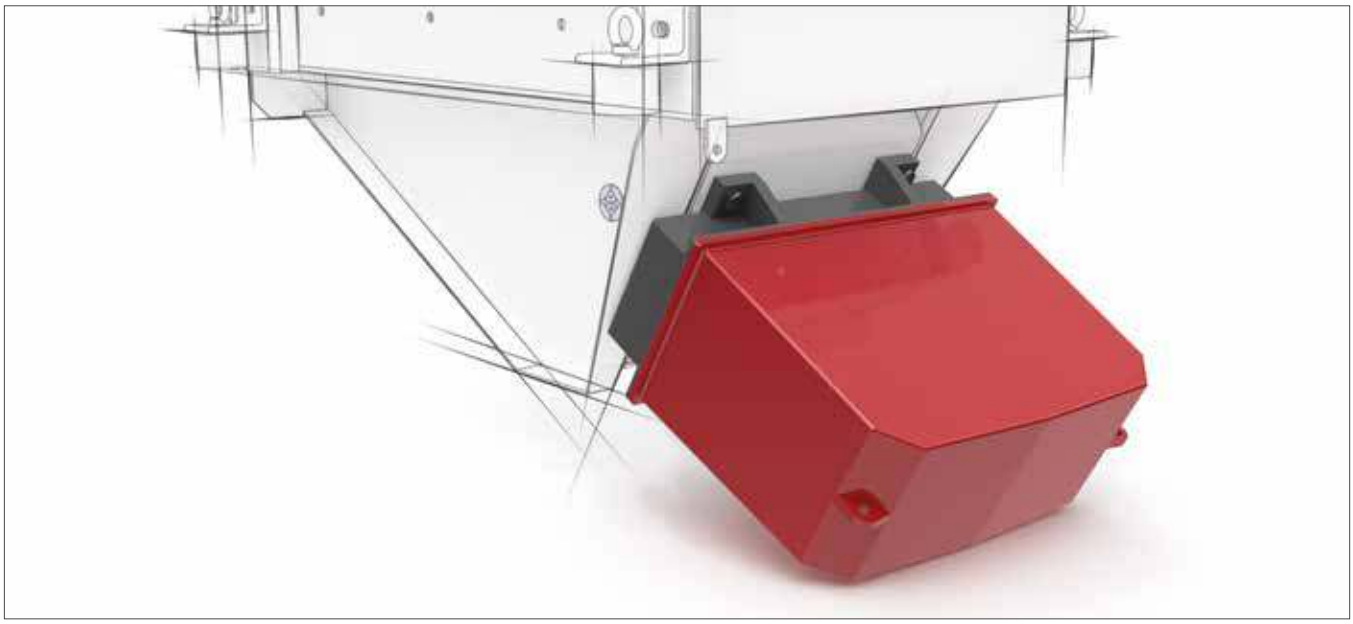


JVM®
DRIVES IN MOTION

Type	Size	Pole		Description		Dimensions													
				50 Hz	60 Hz	a	b	c	e	f	øg	g1	h	k	k2	m	n	p	4 x øs
JX	07	2	-	1	1	71	90	8,5	90	112	103	167	56	193	280	25	25	137	6,4
JX	08	2	-	4	2,8	131	120	25	156	145	110	124	65	225	325	25	25	178	9,5
JX	10	2	-	14	10	146	180	38	178	210	185	202	105	326	430	32	35	231	11,5
JX	13	2	-	40	28	125	210	20	178	248	211	256	118	386	535	49	55	257	17,5
JX	08	4	-	12	8,5	131	120	25	156	145	110	124	65	335	480	25	25	179	9,5
JX	08	4	-	20	14	131	120	40	156	145	185	202	105	290	372	25	25	222	9,5
JX	10	4	-	50	35	146	180	38	178	210	185	202	105	326	430	32	35	231	11,5
JX	13	4	-	66	46	125	210	20	178	248	211	256	118	374	523	49	55	257	17,5
JX	13	4	-	90	63	125	210	20	178	248	211	256	118	374	523	49	55	257	17,5
JX	15	4	-	130	90	250	270	25	298	320	265	310	146	498	676	55	65	308	22
JX	15	4	-	190	130	250	270	25	298	320	265	310	146	498	676	55	65	308	22
JX	17	4	-	200	140	280	290	30	333	345	265	310	146	533	711	53	70	318	26
JX	18	4	-	300	200	250	270	35	312	322	284	326	172	581	759	60	65	338	26
JX	24	4	-	390	270	335	380	38	405	450	309	355	191	689	875	72	90	372	32
JX	24	4	-	490	330	335	380	38	405	450	347	398	191	693	879	72	90	390	32
JX	28	4	-	630	440	385	400	80	455	480	411	460	225	761	975	70	80	455	32
JX	28	4	-	710	490	385	400	80	455	480	411	460	225	761	975	70	80	455	32
JX	28	4	-	900	600	385	400	80	455	480	411	460	225	797	1.013	70	80	455	32
JX	10	6	-	100	70	146	180	38	178	210	185	202	105	400	591	32	35	231	11,5
JX	13	6	-	180	125	125	210	20	178	248	211	256	118	452	679	49	55	257	17,5
JX	15	6	-	250	175	250	270	25	298	320	265	310	146	498	676	55	65	308	22
JX	15	6	-	330	230	250	270	25	298	320	265	310	146	538	756	55	65	308	22
JX	17	6	-	450	310	280	290	30	333	345	265	310	146	653	951	53	70	318	26
JX	17	6	-	550	380	280	290	30	333	345	265	310	146	719	1.083	53	70	318	26
JX	18	6	-	710	500	250	270	35	312	322	284	326	172	723	1.055	60	65	338	26
JX	20	6	-	820	620	315	320	35	372	380	309	355	172	762	1.066	60	75	352	26
JX	24	6	-	940	660	335	380	38	405	450	309	355	191	931	1.269	72	90	372	32
JX	24	6	-	1250	820	335	380	38	405	450	347	398	191	837	1.163	72	90	390	32
JX	28	6	-	1250	900	385	400	80	455	480	411	460	225	919	1.155	70	80	455	32
JX	28	6	-	1460	980	385	400	80	455	480	411	460	225	919	1.224	70	80	455	32
JX	28	6	-	1730	1180	385	400	80	455	480	411	460	225	919	1.271	70	80	455	32
JX	28	6	-	2160	1530	385	400	80	455	480	498	460	225	955	1.309	70	80	455	32
JX	30	6	-	2680	1800	135	400	45	398	475	498	545	270	951	1.290	110	85	547	6 x 32
JX	30	6	-	3220	2100	135	400	45	398	475	265	545	270	951	1.290	110	85	547	6 x 32
JX	15	8	-	410	285	250	270	25	298	320	265	310	146	578	836	55	65	308	22
JX	17	8	-	675	450	280	290	30	333	345	265	310	146	753	1.151	53	70	318	26
JX	20	8	-	820	820	315	320	35	372	380	309	355	172	762	1.066	60	75	352	26
JX	20	8	-	1060	1060	315	320	35	372	380	309	355	172	896	1.274	60	75	352	26
JX	20	8	-	1250	1250	315	320	35	372	380	309	355	172	896	1.336	60	75	352	26
JX	24	8	-	1520	1260	335	380	38	405	450	347	398	191	887	1.272	72	90	390	32
JX	24	8	-	1780	1520	335	380	38	405	450	347	398	191	950	1.390	72	90	390	32
JX	28	8	-	2150	1780	385	400	80	455	480	411	460	225	919	1.271	70	80	455	32
JX	28	8	-	2610	2150	385	400	80	455	480	411	460	225	963	1.379	70	80	455	32
JX	30	8	-	3600	3100	135	400	45	398	475	498	545	270	951	1.290	110	85	547	6 x 32
JX	30	8	-	4300	3850	135	400	45	398	475	497	545	270	1.015	1.415	110	85	547	6 x 32

Electromagnetic Vibrators Series MS

The electromagnetic vibrators generate linear motions and are operated at motions frequencies of 50 and 25 Hz or at 60 and 30 Hz.



Conveying, dosing, drawing off
MS drive units are used in various industries for medium duty dosing, draw-off and conveying applications. The drive units are also suitable for clock cycle operation because the maximum motion amplitude is reached as soon as it is started and it comes to a stop immediately after being switched off.

Operational reliability
Tried-and-tested, reliable engineering together with robust, practical field-tested designs provide high operational reliability, even under the most difficult conditions in central lines. All MS electromagnetic vibrators are EMC-compatible.

Continuous control
The motion amplitude can be continuously controlled during the operation of all JVM® electromagnetic vibrators. Therefore the feed rate can be easily adjusted to the current requirements. We have summarised information on the required thyristor controller on page 25.

Flexibility
In order to allow the motion frequency to be changed after installation, the drives have been designed in such a way that they are interchangeable within a construction size in the motion frequencies.

JVM®
DRIVES IN MOTION

Maintenance-free

The use of high quality components means that JVM® electromagnetic vibrators are maintenance-free and easy to install. Special lifting eyes make transport easy, eliminating the need to remove the hoods.

Adapted model series

MS drive units are available in seven sizes, and also in models for higher effective weights at lower motion amplitudes (MS 30...80). This broad range enables the optimum drive to be selected for the particular application requirements.

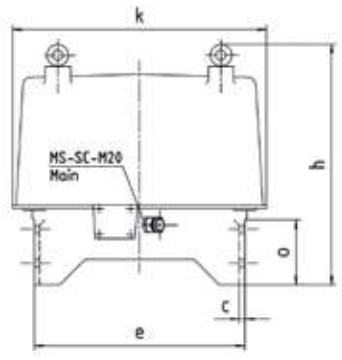
The data

We would also be happy to provide you with further details or inform you about special models built to your specifications.

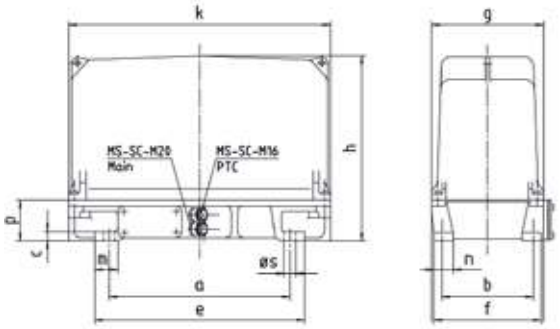
Connection	Via thyristor controller JT 230/400V 50Hz, 460V 60Hz
Switch-on time	100% (operating mode S1)
Protection System	IP 65 as per EN 60 529
Explosion proof models	ATEX II 3 DG cCSAus, UL Cl. I Div. 2 Gr. B, C, D cCSAus, UL Cl. II Div. 1 Gr. E, F, G
Options	Special voltages and executions

Electromagnetic Vibrators
Series MS

MS 10



MS 3-8



Type		a	b	c	e	f	g	h	k	m	n	o	p	øs
MS	**3...**	230	160	18	262	192	215	390	450	45	45	-	83	4 x 11
MS	**4...**	230	160	18	262	192	215	390	450	45	45	-	83	4 x 11
MS	**5...**	230	200	18	264	234	245	407	507	47	42	-	83	4 x 13
MS	**6...**	330	250	25	374	294	262	480	572	70	70	-	97	4 x 18
MS	**7...**	450	200	28	494	244	330	420	640	70	70	-	105	4 x 18
MS	**8...**	500	290	27	580	346	395	560	775	89	73	-	137	4 x 22
MS	**10...**	100	200	21	800	290	490	870	960	-	50	210	300	12 x 22

Dimensions in mm

TYPE CODE

MS 5 _ 50 400V 50Hz

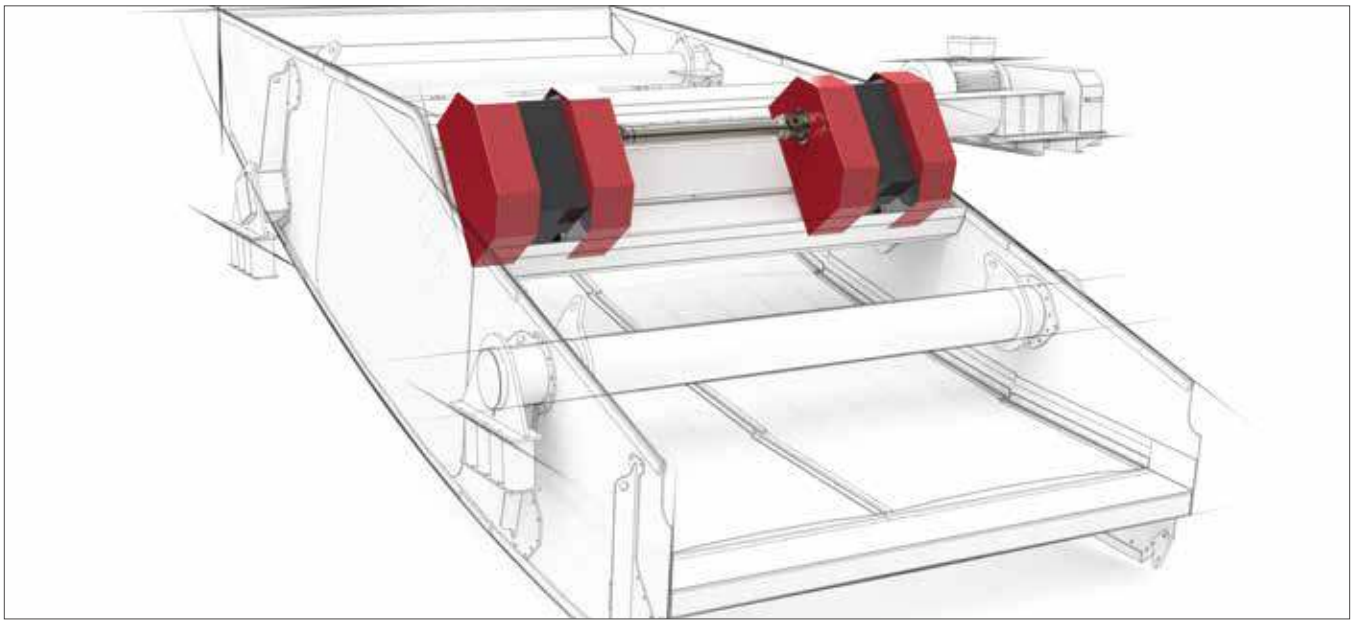
Type — Size — Vibrating Frequency

JVM®
DRIVES IN MOTION

Main Frequency	Type	Size	Vibrating Frequency	Effective Weight			Stroke			Weight	Rated Current			Rated Current		Control Unit
			Hz	min. kg		max. kg	max. mm		min. mm	kg	230 V A	400 V A	500 V A	400 V A	460 V A	Type
50 Hz	MS	3	- 50	16	-	48	2,0	-	1,0	42	5,7	3,0	2,5			JT 14
	MS	4	- 50	30	-	89	2,0	-	0,9	53	7,0	3,7	3,2			JT 14
	MS	5	- 50	53	-	155	2,1	-	1,0	88	9,8	5,2	4,4			JT 14
	MS	6	- 50	102	-	255	1,9	-	1,0	130	18,0	9,5	8,0			JT 26/14
	MS	7	- 50	130	-	305	2,2	-	1,1	134	-	12,7	10,8			JT 14
	MS	8	- 50	210	-	520	2,2	-	1,1	296	-	23,0	19,4			JT 26
	MS	10	- 50	570	-	1.300	1,7	-	0,9	695	-	42,0	35,5			JT 45
	MS	30	- 50	44	-	153	1,1	-	0,4	44	5,7	3,0	2,5			JT 14
	MS	40	- 50	85	-	189	1,0	-	0,5	57	7,0	3,7	3,2			JT 14
	MS	50	- 50	158	-	380	1,1	-	0,5	92	9,8	5,2	4,4			JT 14
	MS	60	- 50	230	-	570	1,1	-	0,5	142	18,0	9,5	8,0			JT 26/14
	MS	70	- 50	280	-	760	1,2	-	0,5	134	-	12,7	10,8			JT 14
	MS	80	- 50	580	-	1.300	1,0	-	0,5	310	-	23,0	19,4			JT 26
	MS	3	- 25	13	-	48	4,0	-	1,9	37	6,2	3,3	2,8			JT 14
	MS	4	- 25	33	-	93	4,0	-	1,8	50	6,6	3,5	3,0			JT 14
	MS	5	- 25	47	-	135	5,1	-	2,3	75	12,6	6,7	5,7			JT 14
	MS	6	- 25	82	-	230	4,4	-	2,0	110	19,2	10,2	8,6			JT 26/14
	MS	8	- 25	190	-	450	4,2	-	2,4	285	-	30,0	25,5			JT 45/26
	MS	10	- 25	600	-	1.300	3,8	-	2,1	680	-	60,0	51,0			JT 70
60 Hz	MS	3	- 60	17	-	45	1,6	-	0,9	45				2,5	2,1	JT 14
	MS	4	- 60	37	-	82	1,5	-	0,8	58				2,9	2,5	JT 14
	MS	5	- 60	63	-	153	1,7	-	0,9	95				5,6	4,7	JT 14
	MS	6	- 60	115	-	251	1,5	-	0,8	140				9,5	8,0	JT 14
	MS	7	- 60	180	-	345	1,5	-	0,9	135				13,0	11,0	JT 14
	MS	8	- 60	215	-	570	1,7	-	0,8	224				19,0	16,0	JT 26
	MS	30	- 60	43	-	153	1,0	-	0,4	50				2,5	2,1	JT 14
	MS	40	- 60	82	-	190	0,9	-	0,5	62				2,9	2,5	JT 14
	MS	50	- 60	153	-	380	1,1	-	0,5	102				5,6	4,7	JT 14
	MS	60	- 60	225	-	570	0,9	-	0,4	105				9,5	8,0	JT 14
	MS	3	- 30	15	-	52	3,2	-	1,5	39				4,50	3,8	JT 14
	MS	4	- 30	33	-	93	3,2	-	1,5	51				4,80	4,0	JT 14
	MS	5	- 30	55	-	135	3,4	-	1,7	78				5,50	4,6	JT 14
	MS	6	- 30	93	-	230	3,3	-	1,6	120				13,0	11,0	JT 14
	MS	8	- 30	204	-	517	3,2	-	1,6	290				32,0	27,0	JT 45

Exciters
Series JR

Two shafts with centrifugal weights are operated in opposite directions via a toothed gear, this action creates linear vibrations. The drive power is generally transmitted via a cardan shaft with a standard, stationary motor.



Heavy duty
JVM® exciters are primarily used for large and heavy vibration machines. Their long service lives and problem-free operation even under the most difficult industrial conditions - testifies to the JVM® technical design all over the world.

Long services lives
Instead of high-tension, welded designs, JR gearbox housings are manufactured exclusively from high quality modular cast iron. The bearing arrangements consist of heavy duty, high quality bearings. The centrifugal weights are also protected by particularly sturdy hoods.

Machine conservation
Forced mechanical synchronisation dispenses with the critical synchronisation phases and the associated high loadings during starting and stopping. The base machine construction is conservatively designed.

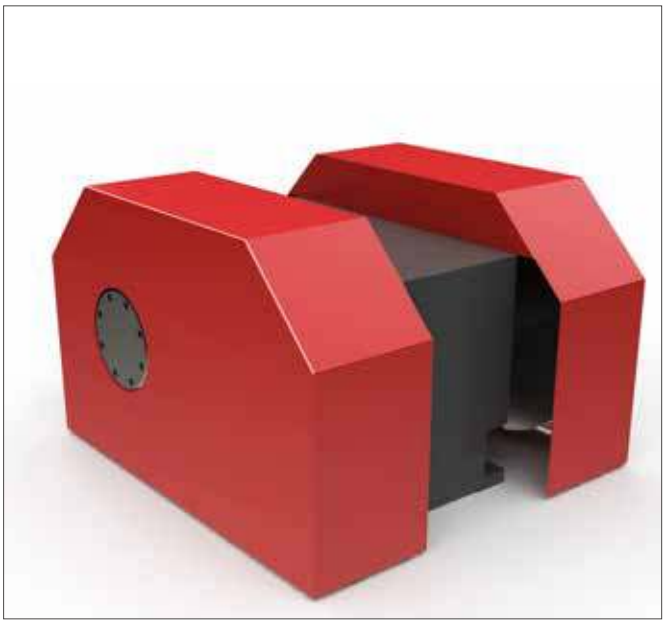
Easy maintenance
An oil splash system supplies the gears and bearings with a constant supply of lubrication. JVM® exciters can be operated in any position and are reliable in ambient temperatures of -40 ... +80°C (-40 … +176°F) when the appropriate oil is used.

JVM®
DRIVES IN MOTION

Variable parameters
With the machine off, the motion amplitude can be reliably set to the particular requirements by simply ad-justing the centrifugal weights. The motion frequency can also be adjusted via an optional frequency converter.

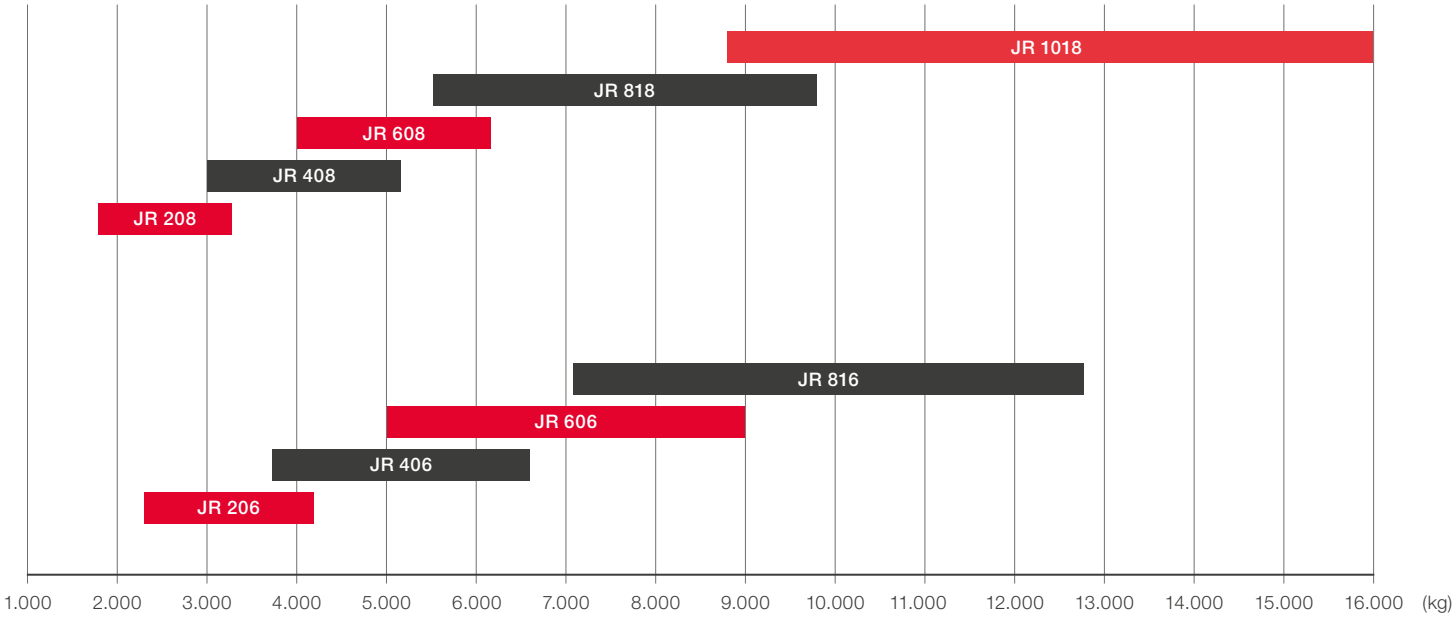
Drive
A standard hydraulic is used as the drive motor. Please note that the highest admissible speed of the exciter may not be exceeded and that the motor‘s starting torque must be 2.5-times that of the nominal torque.

Tip
Where extremely wide or heavy machines are necessary, several exciters can be operated in parallel side-by-side with one drive motor. The starting torque is thereby transmitted form one exciter to the next by coupling shafts.



Exciters
Series JR

Selection of Drive

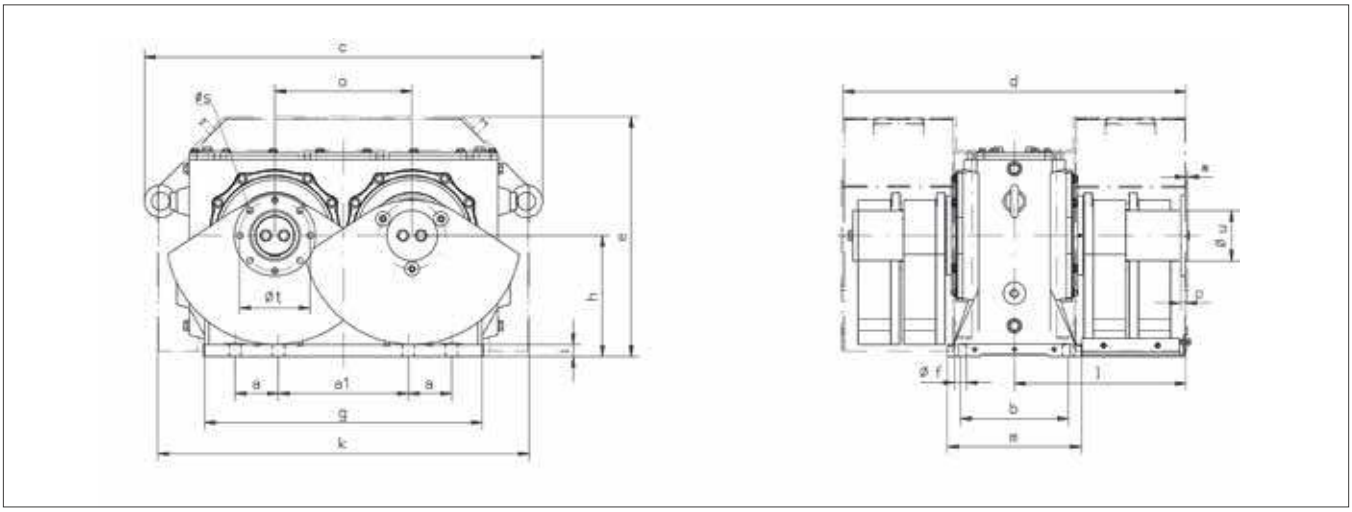


Construction weight when using one exciter.

TECHNICAL DATA										
	Size	Speed max. min $^{-1}$	Torque kgcm		kgcm	Centrifugal force kN		kN	Weight kg	Power Input kW *
JR	206	1.000	1.100	-	2.800	60	-	155	470	11
JR	208	830	2.600	-	4.300	100	-	155	550	11
JR	406	1.000	1.600	-	4.400	90	-	240	730	15
JR	408	830	3.900	-	6.700	145	-	240	800	15
JR	606	1.000	2.700	-	6.000	150	-	330	970	18,5
JR	608	830	5.700	-	9.100	215	-	330	1.110	18,5
JR	816	1.000	3.000	-	8.400	165	-	460	1.270	30
JR	818	830	7.000	-	12.400	265	-	460	1.440	30
JR	1018	750	10.400	-	20.400	320	-	630	2.500	45

* Approximate specification at medium deployment.

JVM®
DRIVES IN MOTION



TYPE CODE

JR _ 20 6

Type	Size	No. of Poles

Type	a	a_1	b	c	d	e	øf	g	h	i	k	l	m	o	p	øs	t
206 208	110	220	190	860	660	525	26	590	260	27	830	325	250	290	15	8x 8,5	101,5
406 408	110	330	220	940	700	610	26	685	295	27	940	340	280	330	15	8x 10,5	130,0
606 608	120	360	300	1.060	830	650	33	740	320	32	1.000	410	370	360	15	8x 12,5	155,5
816 818	120	360	300	1.105	950	665	33	770	335	32	1.030	475	370	380	15	8x 16,5	196,0
1018	160	280	410	1.300	1.080	850	39	910	475	45	1.195	540	500	440	20	12x 16,5	196,0

Dimensions in mm

Dosing Drives Series JD

The electromagnetic drives generate linear motions and are operated via thyristor controllers.

Dosing, packaging, feeding
JD dosing drives are ideal for dosing, mixing and feeding applications in the packaging, weighing and automation industries, at low to medium throughput rates.

Continuously adjustable speed
The motion amplitude can be continuously adjusted during operation via the controller. The conveying speed can thus be adjusted from standstill up to the maximum performance via potentiometer or target value.

Stable operation
In order to obtain the optimum vibration parameters, even under varying influences of the conveyed material, every drive unit is tuned in our workshop to the effective weight required by your application.

Ready for immediate operation
The drives are also ideal for clock cycle operation because the drive reaches maximum motion amplitude as soon as it is started and it comes to a stop immedi-ately after being switched off.

JVM®
DRIVES IN MOTION

Maintenance-free

JVM® dosing drives generate only little noise, are maintenance-free and are designed for continuous operation. The tried-and-tested engineering and the compact, minimised dead point construction in protection system IP65 ensures operational reliability and easy cleaning.

Adapted model series

JD drive units are available in four sizes, and also in „G“ executions for higher effective weights.

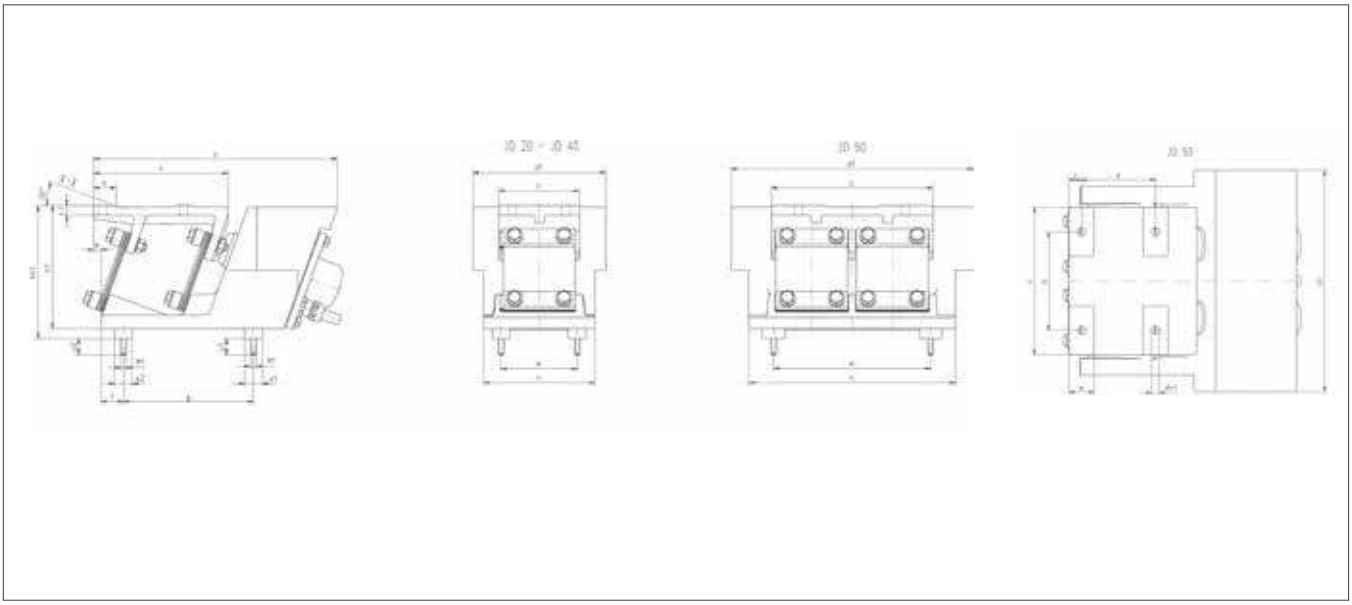
Mounting

Standard drive mounts are rubber buffers with threaded connection bolts as standard. Other options are available upon request.

Tip

Using several drive units on one machine allows for longer conveying routes, and /or higher design weights.

Dosing Drives Series JD



Connection

Please note that dosing drives are operated via a Thyristor controller. Details on our controllers in the TK series are given on page 24. Please use only the specified moving-iron instruments for measuring the current.

Centre of gravity

The centre of gravity of the trough top fixture must be situated on the X-X line for all types. The dimension „K“ states the intersection with the bearing surface.

Mains voltages	115/230 V, 50/60 Hz
optional	42 - 230 V, 50/60 Hz
Switch-on time	Operating mode S1, 100%
Protection system	IP 65 as per EN 60 529
Paintwork	Hammer tone finish pure silver 91
optional	SSC 1000, USDA approved
Thyristor controller	TK 5

TYPE CODE

JD	20	-	50
↓	↓		↓
Type	Size		Vibrating Frequency

JVM®
DRIVES IN MOTION

	Size	Vibrating Frequency	Usable Weight			Stroke			Ratet Current 230V	Output	Weight	Vibrating Frequency	Usable Weight			Stroke			Rated Current 230V
		Hz	kg			mm			A	W	kg	Hz	kg			mm			A
JD	20	- 50	0,3	-	2,0	2,15	-	1,50	0,20	10	3,9	- 60	0,3	-	1,9	1,75	-	1,25	0,20
JD	30		1,5	-	4,5	2,00	-	1,45	0,35	18	7,3		1,5	-	4,2	1,55	-	1,15	0,35
JD	40		2,5	-	8,3	2,00	-	1,45	0,70	35	13,4		2,5	-	8,5	1,60	-	1,15	0,70
JD	50		6,0	-	15,4	1,90	-	1,45	1,50	70	25,5		6,0	-	16,3	1,50	-	1,10	1,50
JD	20G	- 50	2,1	-	2,8	1,50	-	1,20	0,20	10	6,8	- 60	2,0	-	2,8	1,20	-	1,0	0,20
JD	30G		4,6	-	6,0	1,45	-	1,20	0,35	18	12,0		4,3	-	6,0	1,15	-	0,9	0,35
JD	40G		8,4	-	10,5	1,45	-	1,20	0,70	35	20,1		8,6	-	10,5	1,15	-	1,0	0,70
JD	50G		15,5	-	22,0	1,45	-	1,15	1,50	70	37,7		16,4	-	22,0	1,10	-	0,95	1,50

Type	a	b	c	d1	d2	e	f	g	g^1	h1	h	h^1	k	l	m
JD 2...	55	35	50	90	70	9	15	100	220	97	104	129	0	250	50
JD 3...	80	50	70	120	80	8,5	20	120	240	115	126	150	35	300	65
JD 4...	90	60	90	148	100	9	25	145	285	137	147	172	105	350	85
JD 5...	90	120	180	270	270	14	25	145	300	137	147	172	105	350	175

Type	m1	m2	n	n^1	o	p	r1	s1	s^2	t1	u1	u^2	v	w	z
JD 2...	M4	M4	75	75	188	63	7	15	10	7,5	10	10	100	20	10
JD 3...	M6	M4	100	100	222	78	7	20	15	8,5	18	10	125	20	10
JD 4...	M6	M6	124	120	272	78	9,6	20	20	10,5	18	18	150	20	10
JD 5...	M6	M6	230	220	277	73	9,6	25	25	10,5	18	18	155	30	15

Thyristor Control Units Series TK

A thyristor control unit must be used to operate electromagnetic drives.

The EMV-compatible control units from JVM® allow electro-magnetic drives to be regulated continuously and without maintenance during operation

Flexible regulation
Output value can be set for all JVM® controllers either via potentiometers or via analog signals 0-10V, 0-20 mA or 4-20 mA.

Constant conveying
Accurate feed rates are maintained because the controller constantly monitors and automatically compensates for voltage fluctuations of ±10%.

Useful extensions
The wide choice of additional components, such as coarse/fine controllers, display devices or manual/automatic switching, enables the right solution to be found for every application.

Internal or external fitting
Our thyristor control units are available both as build-in kits in protection system IP21 or in housing versions in IP54 completely wired with switches, monitor lamps and potentiometers.

Mains voltage	115/230 V, 50/60 Hz
Mains frequency	50/60 Hz
Output frequency	50/60 Hz
Output amperage max	5,0 A

JVM®
DRIVES IN MOTION

Thyristor Control Units Series JT

For operating magnetic motions MS.

Perfect monitoring

As an alternative to set-point-signal control, the optional JSEN motion sensor allows the machine's actual motion amplitude to be constantly determined and adapted to the target value. Changes in loadings are thus recorded and automatically compensated.

Safe operation

The drive unit is also protected against hazardous knocking operation in case of actual value failure. An analogue output for process displays and a relay contact for operating messages for external process control are integrated here in the same way as a diagnostics plug and illuminated display for voltage and controller release.

Mains voltage	200...500 V
Mains frequency	50/60 Hz
Output frequency	25/30/50/60 Hz
Output amperage max	14/26/45/70 A

At a Glance - General Informations

The main factor in the optimum functionning of vibration machines over the long term is that the construction is adequately rigid.

Vibration rigidity
The dynamic loads and forces which occur require careful calculation and sufficient design.

Centre of gravity
In order to obtain an even distribution of vibration force and power, the effective line of the drives should run through the machine‘s centre of gravity.

Non-tension installation
Due to the high mechanical loadings, installation and welding should be as free of tension as possible.

Secure connections
It is essential that vibration drives are fastened to the stated tightening torque with bolts of quality 8.8 and that the cables used are sufficiently flexible.

Vibrating weight
As the motion amplitude, and thus the capacity of the machines, depends on the construction weight, this should be considered as precisely as possible during the selection of drives.

Motion amplitude
The motion amplitude is understood to be the doubled amplitude, thus the movement from peak to peak in the direction of motion.

Recommend Torques for Mounting

Type	ø mm	Nm	DIN 931
M 6	6,4	10	10
M 8	9,5	25	13
M 10	11,5	49	17
M 12	13,5	85	19
M 16	17,5	210	24
M 20	22,0	410	30
M 24	26,0	710	36
M 30	33,0	1.450	46

Recommend Strokes

	Pol	min-1	mm
50 Hz	2	3.000	0,5 - 2,0
	4	1.500	3,0 - 5,0
	6	1.000	6,0 - 10,0
	8	750	11,0 - 18,0
60 Hz	2	3.600	0,3 - 1,4
	4	1.800	2,1 - 3,5
	6	1.200	4,2 - 7,0
	8	900	7,7 - 12,6

JVM®
DRIVES IN MOTION

ATEX Equipment Group II		Other areas endangered by explosive gas or dust			
Category		2		3	
Probability of explosive gas atmospheres		Sometimes		usually not, Short-term	
Required safety		High		Normal	
Ex-Atmosphere (G-Gas / D-Dust)		G	D	G	D
Zone		1	21	2	22
Required Certification		EG Examination Certificate		Declaration of Conformity	
Available JVM® drives	JX 08 ... JX 28	-	-	•	•
	JX 07, JX 30	-	-	•	•
	JD	•	•	•	•
	MS 3 ... 10	-	-	•	•

Use of Drive		Type of Motion		Drive Frequency at 50 Hz mains				Adjustable Stroke		Major Use			
		Linear	Circle	8-pol 750-1 12,5 Hz	6-pol 1.000-1 16,6 Hz	4-pol 1.500-1 25,0 Hz	2-pol 3.000-1 50,0 Hz	During operating	During Stop of Device	Screening	Conveying	Dosing	Activating
JD	Dosing Drive	•					•	• TK		◦	◦	•	
MS	Electromagnetic Drive	•				•	•	• JT		◦	◦	•	◦
JX	Unbalance Motor	• •	•	•	•	•	•		•	•	•	◦	•
JR	Exciter	•		•	•				•	•	•		

JVM®
DRIVES IN MOTION

„Your Requirements Are Our Milestones – Our Knowledge At Your Service.“

A brand of the
JOST® group

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BLUeCOMPETENCE Alliance Member
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2018/05