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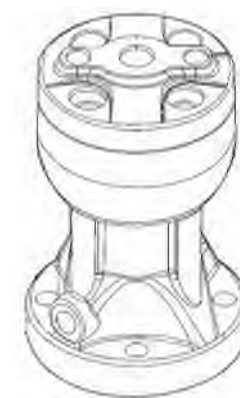
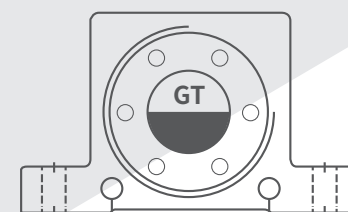
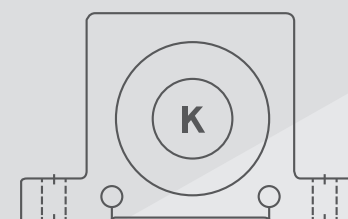
NTA® 太坦

Expert in Pneumatic Power Transmission

选型手册/Selection Guide

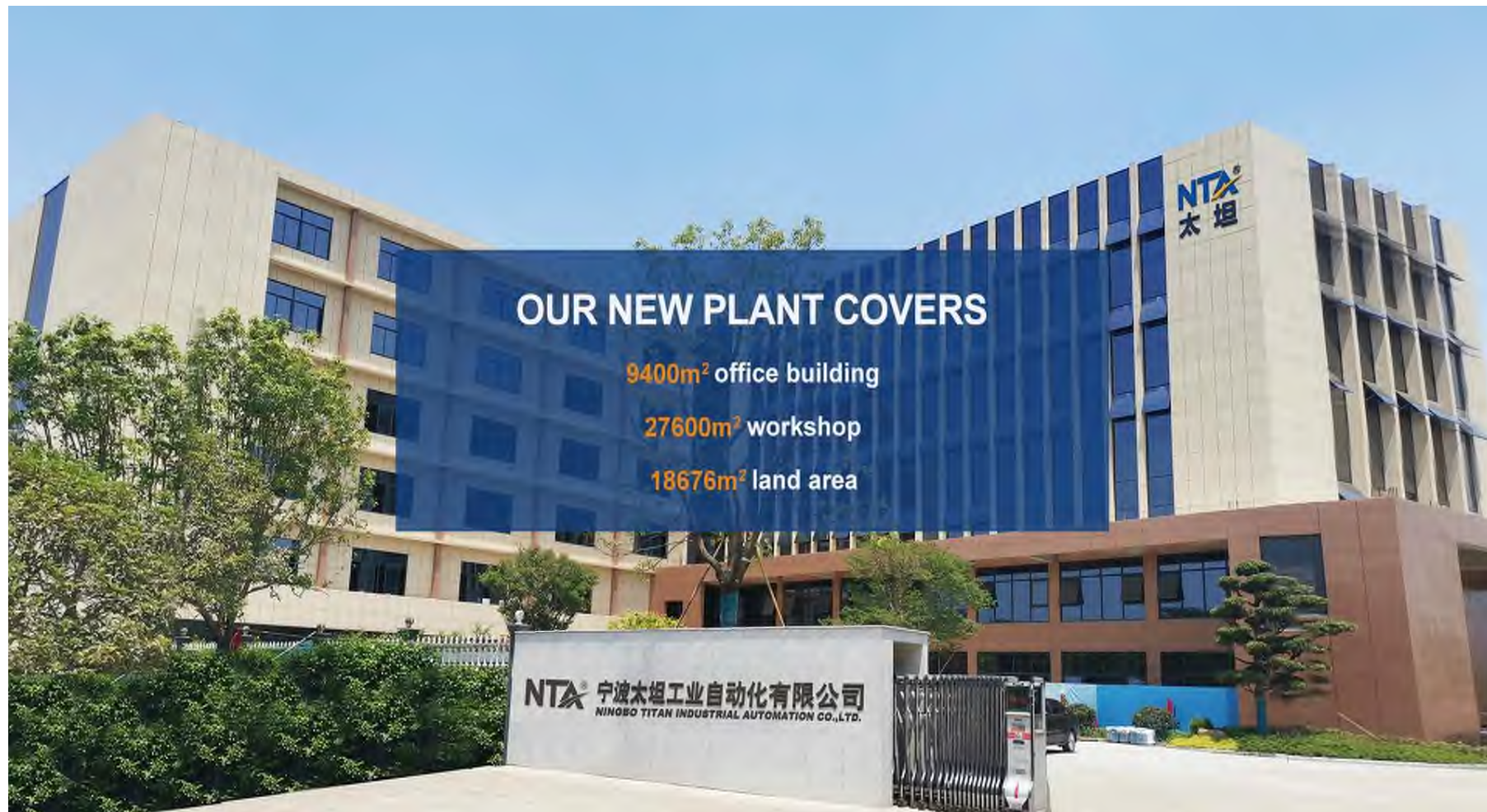
NTA® 太坦

PNEUMATIC
Expert in Pneumatic Power Transmission



INDUSTRIAL PNEUMATIC VIBRATOR

宁波太坦工业自动化有限公司
NINGBO TITAN INDUSTRIAL AUTOMATION CO.,LTD.



Company info——公司介绍

ABOUT NTA

Pneumatic Technology Made in China

Headquartered in Ningbo city China, N.T.A(TITAN) is one of a greatest pneumatic technology and engineering company providing innovative solutions for customers in industrial automation market, helping customers to realize maximize production, protect personnel and the environment while optimizing their energy and operating costs.

As a national leader in pneumatic technology, our 47 years of mechanical spare parts manufacturing and 26 years of pneumatic components manufacturing experience are an important basis for our flexibility, creativity and innovative skills to meet our customers' needs.

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◆ For more details of technical data ,please contact us.

TITAN confidently & successfully figures out the best solution for each case due to its high quality and accumulated rich experience in past 20 years, and its products have enjoyed a high reputation in more than 70 countries around the world.



Technical data:

All the experimental data taken from Kistler triaxial dynamometer.
When the installation rigidity decreases, then vibration frequency and force will become lower.
When the vibration frequency and force is too large, it will destroy the machine, please adjust the pressure to be at suitable level.
KLSX reserves the right to revise and rescind any parameters and relative products without any notice, and not therefore bear any responsibilities.

Keen on improving technology, saving cost, serving customers well

Due to well R & D, each year, dozens of new products launched into market, besides, constantly expand existing product range, TITAN is now trying to realize: delivery out within 24 hours, no any requests for Minimum Order Quantity, no any additional charges to clients, for more details, welcome to visit our web: www.titan-automation.com

How to choose the perfect vibrators

How to select vibrators? In fact, its not only by simple calculation and chart, because the application is completely different in each type, usually, the free vibration will be lowered by structural strengthening rib or other damping factors, followings chart would be one best option for you, but eventually the vibrator need to be adjusted a little, let the vibration frequency be close to the free and natural vibrating status of the object itself by changing air pressure, to ensure top working performance.
In many applications, three or more vibrators of different types are concerned, under these circumstances, you must consider more aspects in details such as noise, installation cost and others long-run cost involved in.

- Generally speaking, there are seven aspects needed to be considered:
- Air consumption (Liters/Min.)
 - Noise
 - Installation space
 - Frequency
 - Amplitude of vibration/vibration energy
 - Cost/maintenance costs
 - The condition of air supply/lubrication

Different kinds of vibrators, different vibration force and amplitude, other important factors: cost, noise and air consumption, e.g. sometimes, the turbine vibrator is essential in application because of low noise, under the same power, it is only half in air consumption compared to ball vibrator, however under others circumstances, if noise is not restricted, the ball vibrator can be much qualified and save cost.

1. Please choose the vibrator available from bottom chart as per force needed.
2. Cost comparison, attention: one vibrator of GT series can completely substitute for two ball vibrators, the GT series cost is more lower in the long run.
3. Normally, it's wiser to choose two smaller vibrators rather than the bigger one, because the two installed on hopper can avoid suffering the excess force at certain position where the force would be much concentrated from one vibrator.
4. When you use two vibrators, be sure that the two is installed on the same strengthening rib, so it will quickly vibrate in resonance then increase the force.

✕ The following data comes from many years' experience and practice, please choose the right vibrators as per the material weight vibrated and different intensity of strengthening rib.

Material weight vibrated Kgs	Ball vibrator K series	Roller vibrator R series	Turbine vibrator GT series	Piston vibrator FP series	Piston impact vibrator NTP series	Impact hammer SX series
	Small noise	Noisy	Very quiet	Very quiet	Quiet	Small noise
20	K-8		GT-6	FP-12		
50	K-10		GT-8	FP-18		
100	K-13		GT-10	FP-25	NTP25	
200	K-16		GT-10	FP-35	NTP25	
300	K-20		GT-13	FP-35	NTP25	
500	K-25	R-50	GT-16	FP-40	NTP32	SX30
800	K-30	R-50	GT-20	FP-50	NTP32	SX30
1000	K-36	R-50	GT-25	FP-60	NTP32	SX40
1500		R-65	GT-30	FP-60	NTP48	SX40
2000		R-65	GT-36	FP-80	NTP48	SX60
3000			GT-40	FP-80	NTP48	SX60
4000			GT-48	FP-100		SX80
5000			GT-48	FP-100		SX80
8000						SX80
10000						SX100
More than 10000						SX100

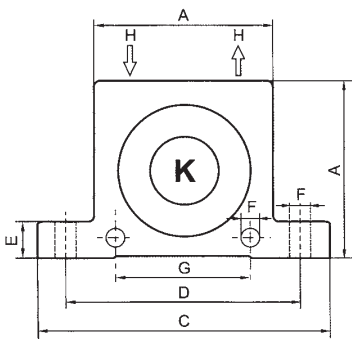


Characters

- Large power.
- Nominal frequency 7300~35000 rmps.
- Vibration force 132~4100N.
- Parameter adjustable(adjust the air pressure).
- Maximum working temperature:100℃.
- 150℃ is available upon requests.

Typical application

- Vibrating table.
- Filter sieve.
- Storage bin emptying.
- Material conveying.
- Prevent hanging on the wall in pipeline of storage bin.



Overall dimensions



【 Patent No: ZL2010 2 0172619.8 】
【 Patent No: ZL2010 3 0150718.1 】

Structure

Creating the vibration force by the alloy ball rolls on the alloy track, end nylon covers bolster the sphere and avoid dust and water, with horizontal mounting hole on the shell adapts to different installation situations.

Performance parameters

Mode	Vibration times/min.			Vibration force (N)			Air consumed L/ min.		
	0.2MPa	0.4MPa	0.6MPa	0.2MPa	0.4MPa	0.6MPa	0.2MPa	0.4MPa	0.6MPa
K-08	25510	31100	35100	132	249	355	85	150	190
K-10	22510	28100	34100	245	468	715	95	155	210
K-13	15100	18510	22510	320	560	875	95	160	230
K-16	13100	17100	19510	455	810	1110	125	210	285
K-20	10510	14510	16510	715	1200	1750	135	235	335
K-25	9210	12210	14100	925	1580	2100	165	295	420
K-30	7810	9710	12510	1520	2480	3250	220	380	575
K-36	7310	9100	10100	2050	3135	4100	265	480	678

Remark: The data in above form taken from Kistler triaxial dynamometer on heavy test platform, when the installation rigidity is poor, the frequency and force will become lower.

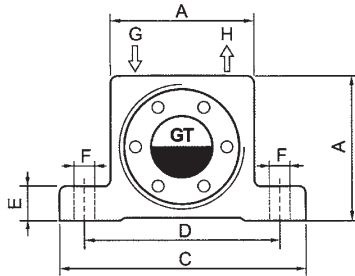
Dimension

Mode	A	Thickness	C	D	E	F	G	H	Weight
	mm	mm	mm	mm	mm	mm	mm	G thread	kg
K-08	50	20	86	68	12	7	40	G1/4	0.150
K-10	50	20	86	68	12	7	40	G1/4	0.150
K-13	65	24	113	90	16	9	50	G1/4	0.350
K-16	65	27	113	90	16	9	50	G1/4	0.380
K-20	80	33	128	104	16	9	60	G1/4	0.650
K-25	80	38	128	104	16	9	60	G1/4	0.680
K-30	100	44	160	130	20	11	80	G3/8	1.150
K-36	100	50	160	130	20	11	80	G3/8	1.350



Characters

- Large power, without lubrication,very quiet.
- Nominal frequency 5800~46000 rmps.
- Vibration force 135~10600N.
- Parameter adjustable(air pressure).
- Maximum working temperature: 150℃ .
- 200℃ is available upon requests.
- Suitable for extreme bad environment.



Overall dimensions



【 Patent No: ZL2010 2 0172618.3 】
【 Patent No: ZL2010 3 0150717.7 】

Typical application

- Vibrating table.
- Filter sieve.
- Storage bin emptying.
- Material conveying.
- Prevent hanging on the wall in pipeline of storage bin.

Structure

Creating the vibration force by the positive and negative unbalanced torque on the wheel, the wheel is supported by the fully enclosed ball shaft which is pre-lubricated, the bearing contains special lubrication grease which ensures long life and adapts to different situations.

Performance parameters

Mode	Vibration times/min.			Vibration force (N)			Air consumed L/ min.		
	0.2MPa	0.4MPa	0.6MPa	0.2MPa	0.4MPa	0.6MPa	0.2MPa	0.4MPa	0.6MPa
GT-04	14100	15100	16100	135	160	200	30	40	50
GT-06	11500	12500	13500	130	165	210	30	40	50
GT-08	35850	43000	45900	980	2100	2950	48	75	152
GT-10	26950	34800	37600	850	1400	2450	48	75	152
GT-13	25950	30050	39800	1450	2450	3700	125	210	280
GT-16	16950	21800	24100	1250	2100	3150	125	210	280
GT-20	16950	19800	23100	2180	4050	5500	188	315	465
GT-25	11980	15600	17100	2150	3550	5600	188	315	465
GT-30	12990	14010	16100	3400	5450	7550	335	520	755
GT-36	7990	10100	13000	3300	5380	7180	335	520	755
GT-40	7650	8850	9550	4350	7350	9850	428	680	960
GT-48	5800	7550	9750	4950	7750	10600	428	680	960

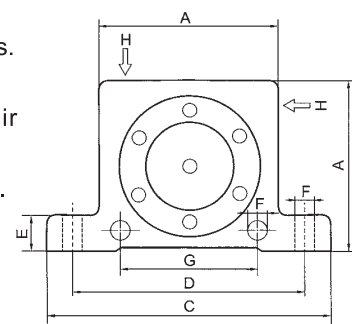
Remark: The data in above form taken from Kistler triaxial dynamometer on heavy test platform, when the installation rigidity is poor,the frequency and force will become lower.

Dimension

Mode	A	Thickness	C	D	E	F	G	H	Weight
	mm	mm	mm	mm	mm	mm	G thread	G thread	kg
GT-04	40	28	70	56	10	6	G1/8	G1/8	0.15
GT-06	40	28	70	56	10	6	G1/8	G1/8	0.15
GT-08	50	33	86	68	12	7	G1/8	G1/8	0.30
GT-10	50	33	86	68	12	7	G1/8	G1/8	0.32
GT-13	65	42	113	90	16	9	G1/4	G1/4	0.60
GT-16	65	42	113	90	16	9	G1/4	G1/4	0.63
GT-20	80	56	128	104	16	9	G1/4	G1/4	1.10
GT-25	80	56	128	104	16	9	G1/4	G1/4	1.13
GT-30	100	73	160	130	20	11	G3/8	G3/8	2.25
GT-36	100	73	160	130	20	11	G3/8	G3/8	2.28
GT-40	120	83	194	152	24	17	G3/8	G3/8	3.50
GT-48	120	83	194	152	24	17	G3/8	G3/8	3.60

Characters

- Large power.
- Nominal frequency 10100~36100 rmps.
- Vibration force 1170~6150N.
- Parameter adjustable(adjust the air pressure).
- Maximum working temperature:100℃ .
- 150℃ is available upon requests.



Overall dimensions



【 Patent No: ZL2010 3 0150718.1 】

【 Patent No: ZL2010 3 0150717.7 】

Typical application

- Vibrating table.
- Filter sieve.
- Storage bin emptying.
- Material conveying.
- Prevent hanging on the wall in pipeline of storage bin.

Structure

Creating the vibration force by the steel wheel rolls on the alloy track, end nylon covers bolster the sphere and avoid dust and water, with horizontal mounting hole on the shell adapts to different situations.

Performance parameters

Mode	Vibration times/min.			Vibration force (N)			Air consumed L/ min.		
	0.2MPa	0.4MPa	0.6MPa	0.2MPa	0.4MPa	0.6MPa	0.2MPa	0.4MPa	0.6MPa
R-50	25100	35100	36100	1170	2950	4250	150	148	198
R-65	19100	21100	26100	2750	4850	6150	210	305	410

Remark: The data in above form taken from Kistler triaxial dynamometer on heavy test platform, when the installation rigidity is poor, the frequency and force will become lower.

Dimension

Mode	A	Thickness	C	D	E	F	G	H	Weight
	mm	mm	mm	mm	mm	mm	mm	G thread	kg
R-50	50	29	86	68	12	7	40	G1/8	0.25
R-65	62	37	113	90	16	9	50	G1/4	0.65

Characters

- Large power, without lubrication,very quiet.
- Nominal frequency 5800~46000 rmps.
- Vibration force 135~10600N.
- Parameter adjustable(adjust the air pressure).
- Maximum working temperature:150℃ .
- 200℃ is available upon requests.
- Can be used in the extreme bad environment.

Typical application

- Vibrating table.
- Filter sieve.
- Storage bin emptying.
- Material conveying.
- Prevent hanging on the wall in pipeline of storage bin.

Performance parameters

Mode	Vibration times/min.			Vibration force (N)			Air consumed L/ min.		
	0.2MPa	0.4MPa	0.6MPa	0.2MPa	0.4MPa	0.6MPa	0.2MPa	0.4MPa	0.6MPa
GT-04	14100	15100	16100	135	160	200	30	40	50
GT-06	11500	12500	13500	130	165	210	30	40	50
GT-08	35850	43000	45900	980	2100	2950	48	75	152
GT-10	26950	34800	37600	850	1400	2450	48	75	152
GT-13	25950	30050	39800	1450	2450	3700	125	210	280
GT-16	16950	21800	24100	1250	2100	3150	125	210	280
GT-20	16950	19800	23100	2180	4050	5500	188	315	465
GT-25	11980	15600	17100	2150	3550	5600	188	315	465
GT-30	12990	14010	16100	3400	5450	7550	335	520	755
GT-36	7990	10100	13000	3300	5380	7180	335	520	755
GT-40	7650	8850	9550	4350	7350	9850	428	680	960
GT-48	5800	7550	9750	4950	7750	10600	428	680	960

Dimension

Mode	A	Thickness	C	D	E	F	G	H	Weight
	mm	mm	mm	mm	mm	mm	G thread	G thread	kg
GT-04	40	28	70	56	10	6	G1/8	G1/8	0.35
GT-06	40	28	70	56	10	6	G1/8	G1/8	0.38
GT-08	50	33	86	68	12	7	G1/8	G1/8	0.80
GT-10	50	33	86	68	12	7	G1/8	G1/8	0.85
GT-13	65	42	113	90	16	9	G1/4	G1/4	1.35
GT-16	65	42	113	90	16	9	G1/4	G1/4	1.38
GT-20	80	56	128	104	16	9	G1/4	G1/4	2.50
GT-25	80	56	128	104	16	9	G1/4	G1/4	2.53
GT-30	100	73	160	130	20	11	G3/8	G3/8	5.15
GT-36	100	73	160	130	20	11	G3/8	G3/8	5.18
GT-40	120	83	194	152	24	17	G3/8	G3/8	7.35
GT-48	120	83	194	152	24	17	G3/8	G3/8	7.38

Remark: The data in above form taken from Kistler triaxial dynamometer on heavy test platform, when the installation rigidity is poor, the frequency and force will become lower.

Structure

Creating the vibration force by the positive and negative unbalanced torque on the wheel ,the wheel is supported by the fully enclosed ball shaft which is pre-lubricated,the bearing contains special lubrication grease which ensures long life and adapts to different situations.

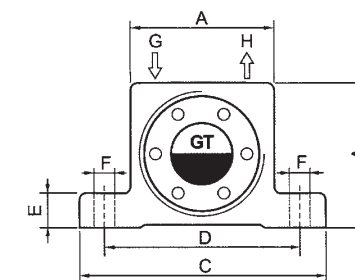
Reminder

At present, this type stainless steel pneumatic vibrator used in more complex environment such as electroplating, chemical, pharmaceutical,for its material is SS316,so it is believed safely and widely that this can be applied in food-processing.The most notable is that it's vibrating power is high and can destroy the manufacturing facilities,please pay much attentions to adjust inlet air pressure and let it to be in suitable working situation.



【 Patent No: ZL2010 3 0150718.1 】

【 Patent No: ZL2010 3 0150717.7 】



Overall dimensions



Characters

- Large power, little lubrication, very quiet.
- Nominal frequency 1560-9120 times/min.
- Exciting force 30-6500N.
- Parameter adjustable(adjust the air pressure).
- Maximum working temperature: 150°C .
- 200°C is available upon requests.
- Can be used in the extreme bad environment.

Typical application

- Vibrating table.
- Filter sieve.
- Storage bin emptying.
- Bulk material dispersing and tamping.
- Prevent hanging on the wall in pipeline of storage bin.
- Drive conveying device and discharge-chute.

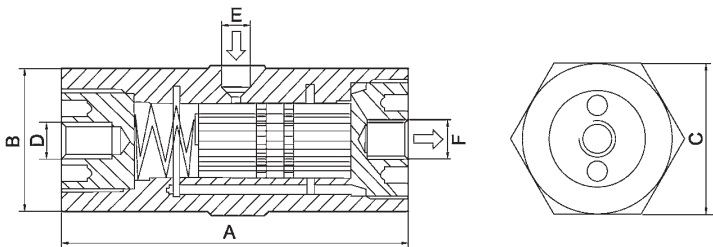


[Patent No: ZL2011 2 0016407.5]
[Patent No: ZL2011 3 0006140.7]
[Patent No: ZL2011 3 0047756.9]

Structure

- The surface treatment of aluminum alloy shell is processed by anodic oxidation, anti-corrosion, with special lubricating grease.
- The piston is made of lead bronze.
- With steel spring starting device.
- Sound-absorbing and exhaust system.
- With anodic aluminum oxide(AAO)base.
- Female thread mounting hole.

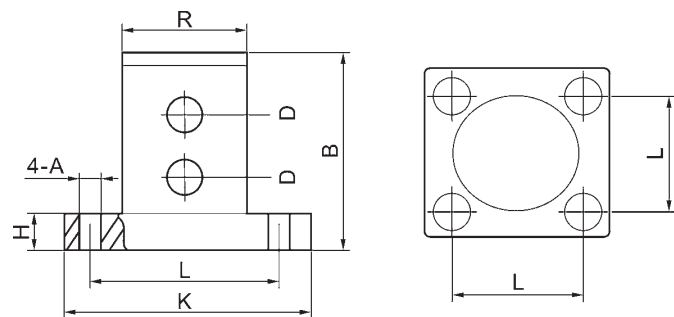
Overall dimensions



Performance parameters

Mode	Vibration times/min.		Vibration force (N)		Air consumed L/ min.		A	C	D	E	F
	0.2 MPa	0.6 MPa	0.2 MPa	0.6 MPa	0.2 MPa	0.6 MPa	Length	SW	Thread	G thread	G thread
							mm	mm			
FP-12-S	6120	9120	30	88	0.7	23	71	34	M8	G1/8	G1/8
FP-12-M	4980	6705	35	77	0.6	19	81	34	M8	G1/8	G1/8
FP-12-L	3950	5380	33	80	1	21	94	34	M8	G1/8	G1/8
FP-18-S	4950	7720	65	190	5	60	81	42	M10	G1/8	G1/8
FP-18-M	3980	5855	68	195	4	53	94	42	M10	G1/8	G1/8
FP-18-L	3200	4510	70	220	5	47	109	42	M10	G1/8	G1/8
FP-25-S	3500	5550	120	410	13	90	98	50	M12	G1/8	G1/4
FP-25-M	3050	4165	140	500	20	85	116	50	M12	G1/8	G1/4
FP-25-L	2350	3620	180	600	19	90	136	50	M12	G1/8	G1/4
FP-35-S	3760	5795	270	1050	25	160	98	65	M12	G1/4	G1/4
FP-35-M	2980	4580	260	1100	24	140	116	65	M12	G1/4	G1/4
FP-35-L	2450	2595	250	1200	33	132	136	65	M12	G1/4	G1/4

Overall dimensions



Performance parameters

Mode	Vibration times/min.		Vibration force (N)		Air consumed L/ min.		B	K	L	A	R	H	D	Mounting bolt
	0.2 MPa	0.6 MPa	0.2 MPa	0.6 MPa	0.2 MPa	0.6 MPa	mm	mm	mm	mm	mm	mm	mm	
FP-32	3250	4850	265	865	30	140	100	70	58	8	48	15	G1/8	M8
FP-40-M	2550	3560	350	1550	35	160	123	80	47	9	59	15	G1/8	M8
FP-50-M	1880	2850	450	1700	40	180	140	94	54	11	68	15	G1/4	M10
FP-60-M	1780	2750	550	2100	85	285	160	120	67	11	92	20	G3/8	M10
FP-80-M	1700	2680	600	5250	100	350	192	115	82	13	114	20	G3/8	M12
FP-100-M	1560	2650	850	6500	160	520	155	150	124	13	138	20	G3/8	M12

FP-U series pipeline pneumatic vibrator

With the function of amplitude and frequency adjustable

Characters

- Large power, little lubrication, very quiet.
- Nominal frequency 35-120 Hz.
- Exciting force 15-2200N.
- Parameter adjustable (adjust the air pressure).
- Maximum working temperature: 150°C .
- 200°C is available upon requests.
- Can be used in the extreme bad environment.

Typical application

- Pipeline vibration.
- Pipeline emptying.
- Drive conveying in pipe.
- Dregs cleaning of pipeline inside wall.
- Prevent hanging on the wall in pipeline of storage bin.
- Material dispersing and tamping in the pipe.
- Speeding the flow of materials in the pipeline.



[Patent No: 2012101T9202.8]
[Patent No: 20122025T353.6]

Structure

- The surface treatment of aluminum alloy shell is processed by anodic oxidation, anti-corrosion, with special lubricating grease.
- Long life warrant, and adapts to different application situations.

Performance parameters

Mode	Vibration force (N)	Impact times/s	Pipe dia. (mm)	Air consumed (L/min.)
FP-50-U	15-1000	45-120	60-120	50-110
FP-65-U	25-2200	35-88	120-220	120-170



Characters

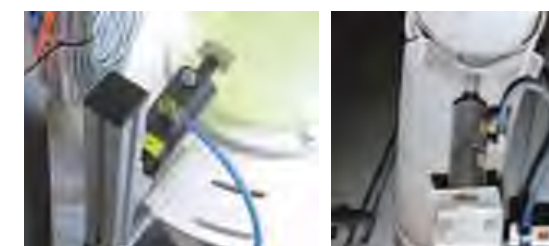
- Large power, little lubrication, very quiet.
- Nominal frequency 20~50 Hz.
- Exciting force 12~2740N.
- Parameter adjustable(adjust the air pressure).
- Maximum working temperature : 150°C .
- 200°C is available upon requests.
- Can be used in the extreme bad environment.

Typical application

- Vibrating table.
- Filter sieve.
- Storage bin emptying.
- Bulk material dispersing and tamping.
- Prevent hanging on the wall in pipeline of storage bin.
- Drive conveying device and discharge-chute.

Structure

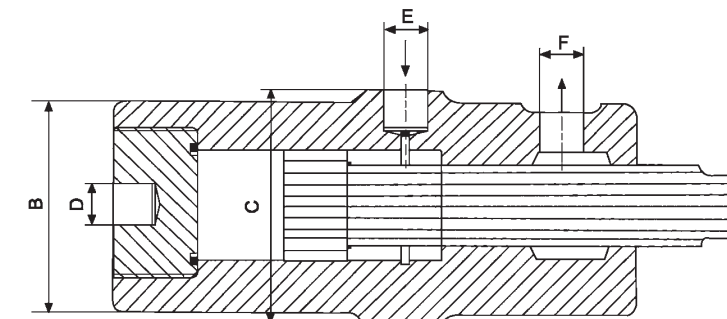
- The surface treatment of aluminum alloy shell is processed by anodic oxidation, anti-corrosion, with special lubricating grease.
- The piston is made of lead bronze.
- The piston rod outside is vibrating with piston.
- Long life warrant, and adapts to different application situations.
- Female thread mounting hole.



Performance parameters

Mode	Vibration times/min.		Vibration force (N)		Air consumed L/ min.		A	C	D	E	F
	0.2MPa	0.6MPa	0.2MPa	0.6MPa	0.2MPa	0.6MPa	Length mm	SW mm	Thread	G thread	G thread
FAL-8	2050	3400	12	42	8	30	91	23	M-6	M-5	M-5
FAL-18	1420	2250	60	205	20	60	117	50	M-10	G1/8	G1/8
FAL-25	1130	2020	120	530	40	155	139	65	M-16	G1/4	G1/4
FAL-35	1240	2010	205	655	75	350	140		M-16	G1/4	G1/4
VTL-155	1800	2700	40	96	18	85	114		M-10	G1/8	G1/8
VTL-165	1900	2600	43	96	17	70	111		M-10	G1/8	G1/8
VTL-255	1600	2200	80	400	56	180	140		M-16	G1/4	G1/4
VTL-405	1400	2000	200	650	80	390	140		M-16	G1/4	G1/4
VTL-555	1600	2500	450	1305	140	717	125		M-20	G3/8	G3/8
VTL-855	1800	2600	700	1530	301	900	122		M-20	G3/8	G3/8
VTL-1105	2100	3000	1550	2740	345	920	122		M-20	G1/2	G3/8

Overall dimensions



NTP series piston pneumatic vibrator

With the function of amplitude and frequency adjustable



Characters

- Large power, little lubrication,very quiet.
- Nominal frequency 43~146 Hz.
- Exciting force 150~2039N.
- Parameter adjustable(adjust the air pressure).
- Maximum working temperature: 150℃ .
- 200℃ is available upon requests.
- Can be used in the extreme bad environment.

Typical application

- Vibrating.
- Emptying.
- Conveying.
- Dispersing and tamping.

Structure

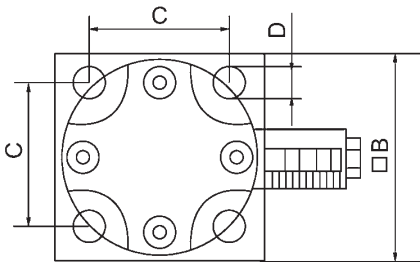
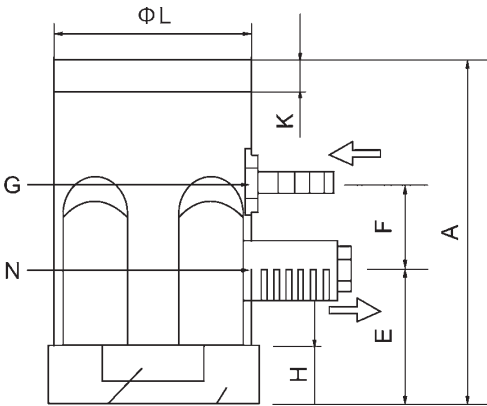
- The surface treatment of aluminum alloy shell is processed by anodic oxidation, anti-corrosion, with special lubricating grease.
- Long life warrant, and adapts to different application situations.

Performance parameters

Mode	Vibration times/min.			Vibratory force(N)			Air consumed L/ min.
	0.2MPa	0.4MPa	0.6MPa	0.2MPa	0.4MPa	0.6MPa	0.2MPa~0.4MPa
NTP-25	5848	7000	8784	269	438	830	68-82
NTP-32	2959	4080	5040	289	607	926	71-86
NTP-48	2618	3456	4320	782	1305	2039	78-90

Dimension

Mode	A	B	C	D	E	F	G	H	K	L	N	Weight
	mm	mm	mm	mm	mm	mm	G thread	mm	mm	mm	G thread	kg
NTP-25	90	60	46	6.5	36	14.5	G1/8	15	8	51	G1/8	0.85
NTP-32	140	75	51	11	48	32	G1/4	20	10	70	G1/4	1.65
NTP-48	194	100	78	13	60	51	G3/8	25	15	95	G3/8	4.30



Use Case

SX series impact air hammer

With the function of low air pressure, but strong impact force

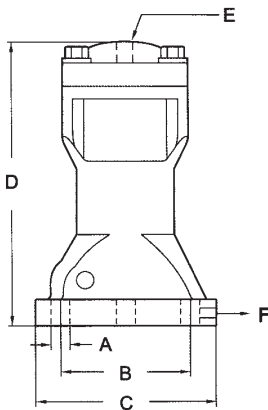


Characters

- Large power, little lubrication,very quiet.
- Frequency and impact interval is controlled by solenoid valve.
- Can be used in the extreme bad environment.

Typical application

- Outlet of hopper, pipe, sieve etc.
- Pipeline emptying,and clean up the material hanging on the wall of container.
- Outdoors,high humidity places.



Overall dimensions



Structure

- The surface treatment of aluminum alloy shell is processed by anodic oxidation,anti-corrosion,with special lubricating grease.
- Long life warrant, and adapts to different application situations.

[Patent No: ZL2011 2 0016408.X]

[Patent No: ZL2011 3 0006138.X]



Use Case

Performance parameters

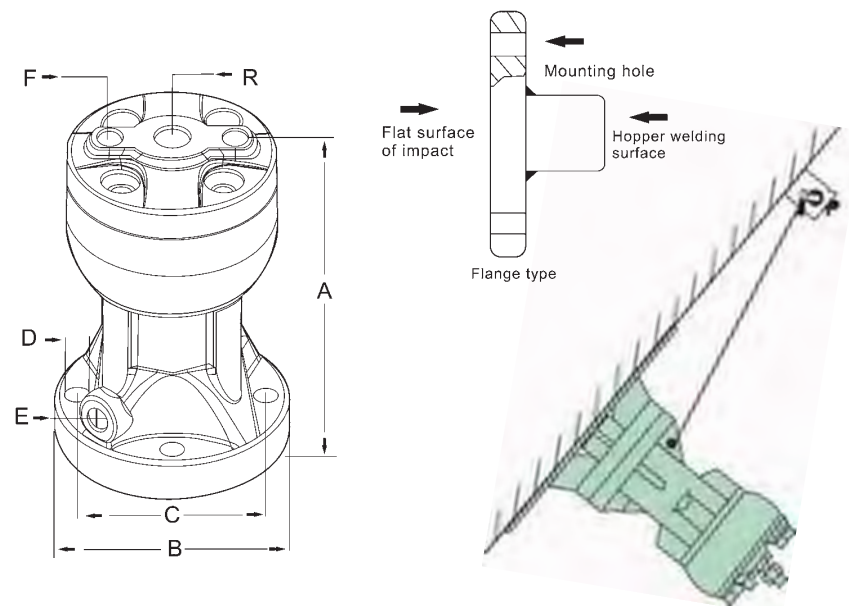
Mode	Working pressure	Air consumed	Impact force	Impact energy	Weight
	MPa	L/ time	Kg.M/s ²	N.M	kg
SX-30	0.3~0.7	0.05~0.13	1.9	13	1.25
SX-40	0.3~0.7	0.15~0.37	4.2	22	2.20
SX-60	0.3~0.7	0.33~0.77	11.2	49	5.35
SX-80	0.4~0.6	0.60~1.40	24.2	109	11.20
SX-100	0.5~0.7	0.86~1.55	48.5	220	12.05

Dimension

Mode	A	B	C	D	E	F
	mm	mm	mm	mm	G thread	G thread
SX-30	9	67	82	135	G1/4	G1/8
SX-40	11	77	98	175	G1/4	G1/4
SX-60	12.5	110	143	220	G1/4	G1/4
SX-80	17	140	170	275	G3/8	G3/8
SX-100	17	150	195	310	G3/8	G3/8

Remark:The data in above form taken from Kistler triaxial dynamometer on heavy test platform, when the installation rigidity is poor, the frequency and force will become lower.

Characters



- This explosion-proof air hammer (already get the patent) impact force is adjusted by air pressure. When the impact force is lower and can not get rid of the blockage, please increase the inlet air pressure, on the contrary, if the impact force is bigger, please reduce the pressure.
- If the user choose the mode not right and the impact force becomes bigger or smaller, please adjust the air pressure as per above way.
- The structure which can change the impact force ensure the convenience of mode choosing. Several hammers can work simultaneously if installed relay hose, which greatly reduce the costs.

Performance parameters

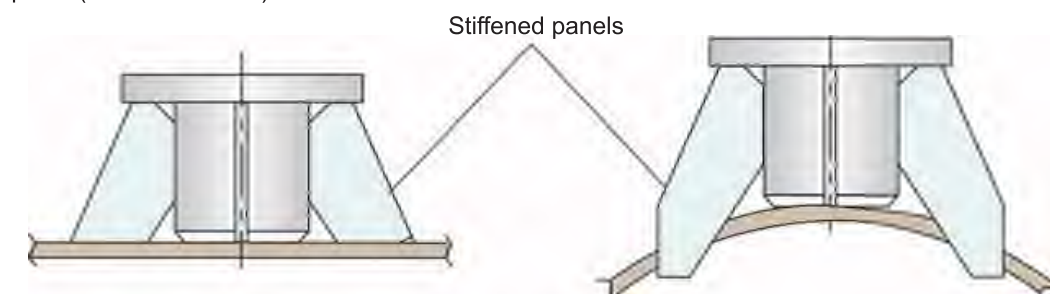
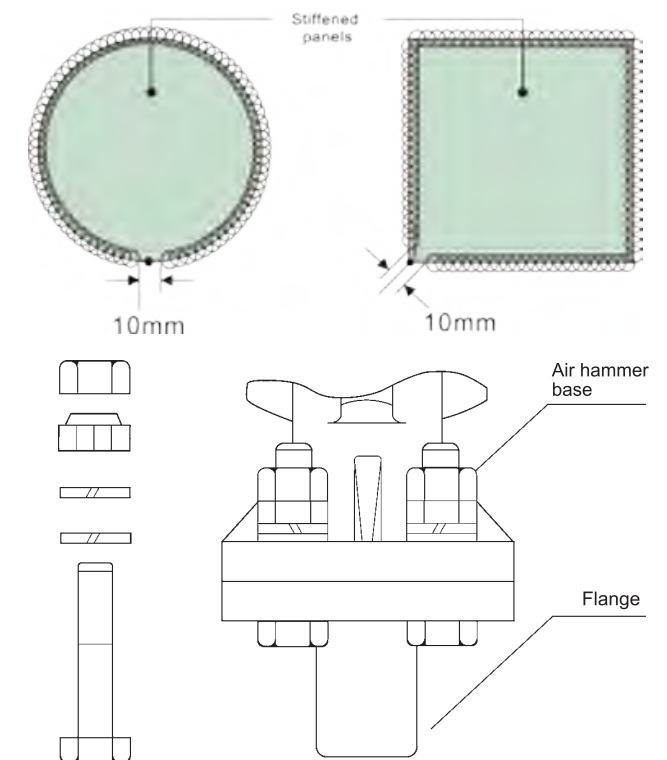
Air hammer of generation 2	Working pressure	Impact frequency	Air consumed	Impact energy	Impact force		Weight
Mode	MPa	Times/min.	L/ time	N.M	Kg.M/s ²	Impact(pound)	kg
SX30-2	0.3~0.7	1~60	0.06~0.14	5.6~13.2	1.2~1.9	Less than 1	1.30
SX40-2	0.3~0.7	1~60	0.16~0.36	9.3~22.5	2.7~4.2	1~1.5	2.20
SX60-2	0.3~0.7	1~60	0.32~0.78	20.8~49.8	7.0~11.2	1.5~3	5.60

Dimension

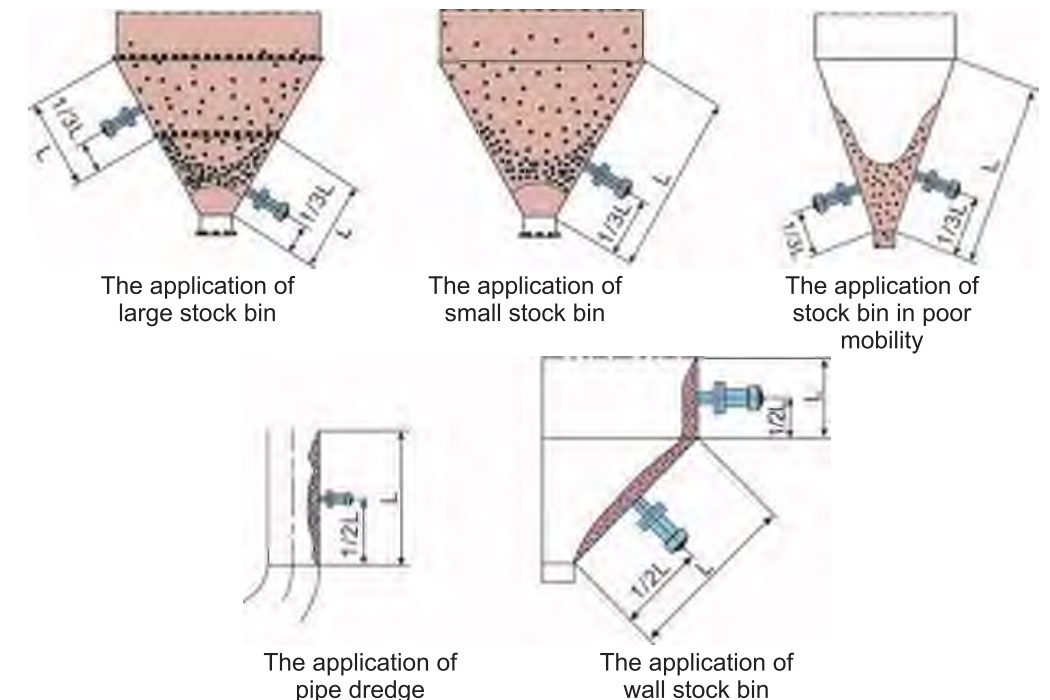
Mode	A	B	C	D	E	F	R
	mm	mm	mm	mm	Thread	Relay port thread	Air inlet port thread
SX30-2	115	82	67	9	G1/8	G1/8	G1/4
SX40-2	155	98	77	11	G1/4	G1/8	G1/4
SX60-2	200	145	110	13	G1/4	G1/8	G1/4

Installation

- Please wear a helmet, safety shoes, safety belt before installation.
- Please welding the stiffened panels(reinforcing plate) if the plate is thin, otherwise the impact maybe destroy the installation spot.
- If weld the panel, please ensure there will be no space between the plate and hopper, also please reserve about 10mm exhaust port so that the air can be discharged, and let the impact force be transmitted fully.
- Please use dragline and fix the container body in case of fall-off, otherwise may cause the screw bolt loose and fall off.
- Please install the spring washer when use the screw bolt fix the body with flange, tighten the screws and inspect regularly.
- Please equipped with air filter when installing the air hose, it will not work well if the trash and dust enter.
- Please don't surpass the required impact force, otherwise it would cause damage of the installation spot or hopper.
- When under circular and continuous impact, please setting a time more than 1 second, less than it, some error actions would happen.
- Please ensure that the impact surface of the installed flange must be solid, if needed, please weld the stiffened panel.(as shown below)



- Suitable location for installation, can exert its maximum performance.



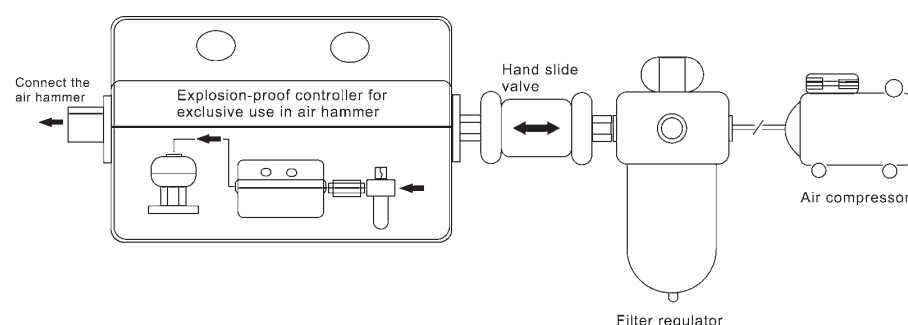
Relay piping

With relay piping, can realize centralized control by several hammers together.

- It is one piping way which connects several hammers together, from the relay port of one hammer connects the inlet port of another ,due to different working way, this type has the maximum joint number limit.
- When piping, the compressed air in relay hose also impact the hammer, so the air pressure and hose length should not exceed the set rating.
- When piping at long distance,for the difference of pressure, the impact force is also different, you can increase the pressure to make up, to keep the stability, can be equipped with quick exhaust valve which is near to hammer, with it can improve the impact performance.
- When piping, please set the impact time to be more than one second, if more hammers involved in, please prolong the setting time.



Explosion-proof controller for exclusive use in air hammer



Characters

This controller does not need power, timer, solenoid valve etc, not only control one pc hammer,but several hammers which equipped with relay piping, so in the overall equipment installation is very practical, safe and convenient.

Performance parameters

Mode	Working Environment	Working Pressure (MPa)	Fluid Temperature (°C)	Action Times (times/min.)
TITAN-8J	Indoor / Outdoor dual-purpose	0.3~0.7	5~55	1~60

Attentions

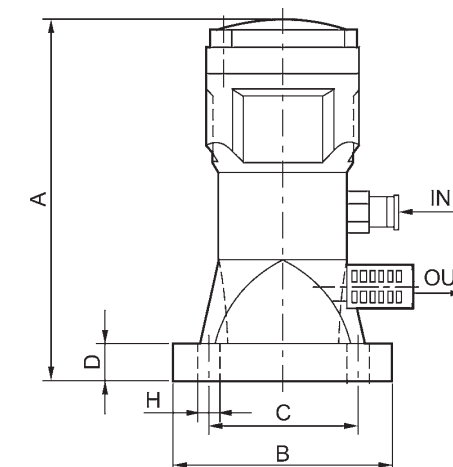
- Please use screw to fix before installation in case that accidents occur from dropping.
- Please shut off the hand slide valve which is near to controller when move the equipment, prevent accidents from suddenly starting of hammer.
- After the work, please shut off the hand slide valve, because during the period of air constant supplying,the hammer still be working.
- If the air pressure is not stable, it will lead to happen error actions, pressure rises, impact times become more and more, on the contrary, times less and less, for better performance of controller and air hammer, please install the filter regulator in front of controller.
- If use electric controller such as solenoid valve, please make sure to use 3 ports so that it would be helpful when discharge the leftover air.

Piping limit

Mode	SX30-2	SX40-2	SX60-2
Between the controller and air hammer	2M	3M	8M

Characters

BVP series hammer type vibrator is made of high strength aluminum alloy, the main structure is composed of the impact part and the air chamber. inside without easily damaged parts such as spring, and can be installed in any direction and position. A regular vibration is generated by using compressed air to drive the reciprocating motion of impact part in the air chamber, which has good performance in the bridge blocked damage. The magnitude and frequency of the vibration of the vibration can be controlled by adjusting the pressure of compressed air and the flow rate, and can start and stop the work in an instant.

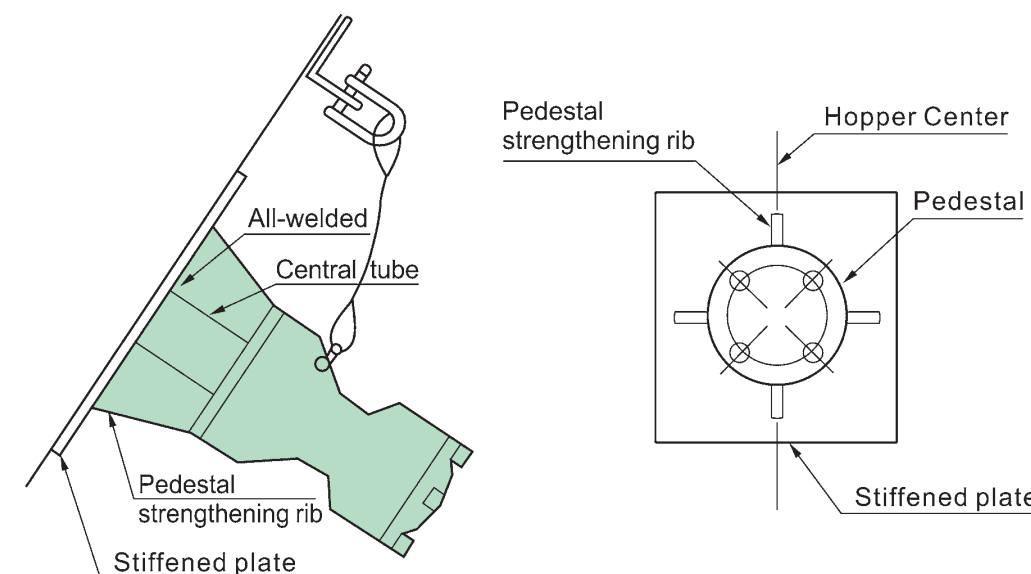


Performance parameters

Mode	Vibration times/min.		Vibration force (N)		Air consumed L/ min.		A	B	C	D	H	IN	OUT
	0.2 MPa	0.6 MPa	0.2 MPa	0.6 MPa	0.2 MPa	0.6 MPa	mm	mm	mm	mm	mm	Thread	Thread
BVP-40C	174	300	1444	2690	220	270	160	100*100	78*78	18	12	G1/4	G1/4
BVP-60C	128	197	1543	3681	260	300	208	140*140	105*105	20	16	G1/4	G1/4

Installation and maintenance

- User self weld the vibrator base in the right place,use 4 pcs M10×30 bolts to fix the vibrator with the base,connect right of the electromagnetic, filter, lubricator,air source.
- The vibrator need clean, dry compressed air, therefore, regularly check the filter, the timely replacement of damaged.
- Regularly check the base bolts, in case of the bolt loose from the long-term vibration .
- Please notify the manufacturer of professional maintenance if there is a failure, open cover is prohibited.



Must connect the safety chain hook before installation, to avoid screw loosening, falling and injury.

Characters

- Temporary vibration, quick, flexible solution.
- Easy link, share the same air source with vibrator.

Typical application

- Need for short time vibration.
- Smooth, small curvature of the surface can be sucked.

Structure

- Compressed air drives the suction-cup, the mounting plate with vibrator, switch and handle.
- Long life warrant, and adapts to different application situations.



【 Patent No: ZL2011 3021 9540.6 】



Base Mode	Base size (mm)	Installed vibrator of mode
B1	Manual dia.: 120*30	K-8, K-10, GT-8, GT-10
B2	Auto: (L*W*H): 200*100*30	GT-13, GT-16, FP-32, NTP25
B3	Auto: (L*W*H): 300*100*40	GT-20, GT-25, GT20S, GT25S
B4	Auto: (L*W*H): 300*100*40	FP-40-M, FP-50-M, NTP32
B5	Auto: (L*W*H): 400*200*60	GT-30, GT-36, FP-60-M, NTP48
B6	Auto: (L*W*H): 100*100*30	FP-25-S-M-L, FP-35-S-M-L



Characters

- Only connect the compressed air, put it into the container where has particulates.
- Do not need power,only compressed air.
- Safe and long life.
- Maintenance free, easy operation, feeding capacity can be controlled.
- Freely open and close, continuous operation and working.
- Small size, easy to move.
- Low cost and noise, easily clean and environment friendly.
- 500Kgs/h conveying capacity of sand and stone .

Performance parameters

Mode	Suction inlet diameter	Max. Head	Feeding capacity/min.	Air consumed/min.
KLS38	38mm	8-15m	8-10Kgs	6-10L

Characters

- Is made of anodic aluminum oxide,without moving parts.
- Can be made of stainless steel in high temperature or corrosive environment.
- The size matches standard hose, easy installation.
- With pressure regulator to control the material conveyance.
- Freely open and close,do not need power, no explosion danger.

Performance parameters

Mode	Suction inlet diameter	Max. Head	Feeding capacity/min.	Air consumed/min.
KLS38	38mm	8-15m	8-10Kgs	6-10L

Characters

- No coolant,zero chemical loss or residue.
- Cooling solder joint, hot melt metal, heat adhesive.
- Cooling the thermal probe element, circuit board and temperature adjusting device.
- Colling the thermal insert parts.
- Colling the hot mould, ultrasonic device.
- Cooling the sewing needle to prevent the thread from breaking and to avoid the fracture of synthetic filaments.
- Improve the service life of the tool, improve the finished product rate, improve the finish, reduce the tolerance.
- Enhance the feeding, moving speed and improve the quality of the workpiece.
- No consumption of coolant, to avoid the pollution caused by cooling liquid, stimulating the skin, dirty walls.
- Cold air drying, used for metal, composite material, plastic, rubber and wood processing industry.

Performance parameters

Mode	Product description	Material	Air pressure	Cooling air	Noise
KL60055	Bending tube and magnetic base	SS	0.8MPa	(-38℃)	60DBA

Characters

- The vortex tube is very reliable and easy to control.
- When the compressed air enters the cool air generator of the vortex tube, we can get the cool air from cooling end, and get the hot air from heat end.
- The hot air side end is equipped with a small adjustable valve, a manual adjustment knob, so that the temperature and capacity of cool air can be adjusted manually.

Performance parameters

Mode	Air pressure (MPa)	Air consumed (CFA)	Cooling capacity (BTU/H)
KL20015	0.8	14.8	1150



Air hopper



Air conveyor



Cold air gun



Vortex tube



Pipeline vibration



Base to vacuum chuck



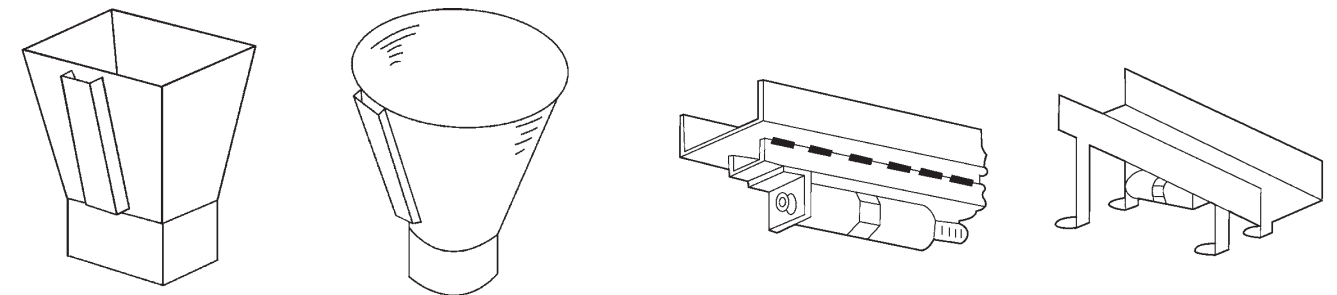
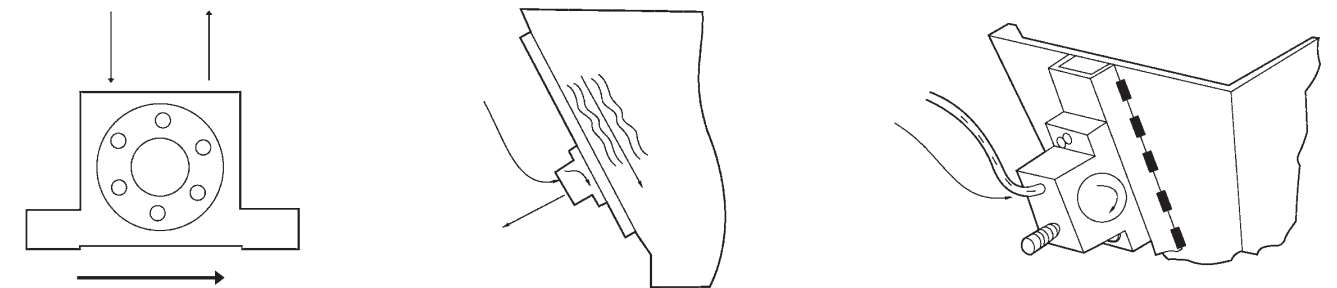
Vibration base



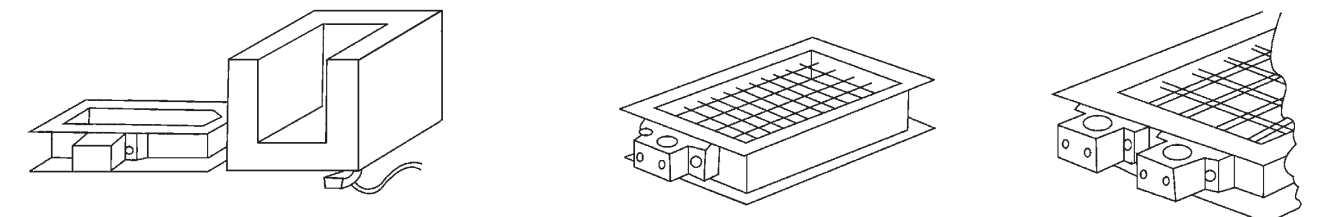
Pneumatic paving machine of floor tile

The installation position must be chosen carefully before installing the vibrator, so that it can ensure best working performance. The installation surface must be clean and flat. Please note that : if the surface is not flat and smooth, it will lead to the vibrator not work properly and well due to the torsional vibration of vibrator itself.

■ The following chart "back-up" moving and installing on the hopper in right way

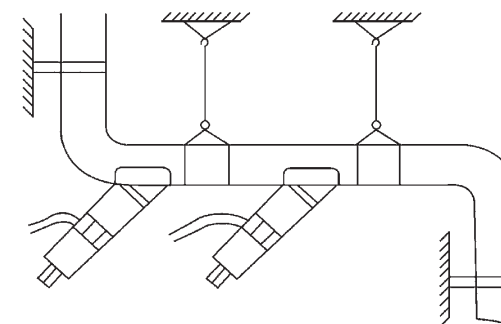


■ Application in channel-section steel

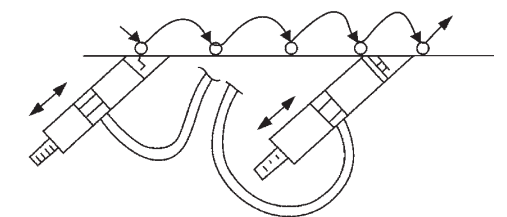


■ Choose the installation method as per mould

■ Installation on sieve

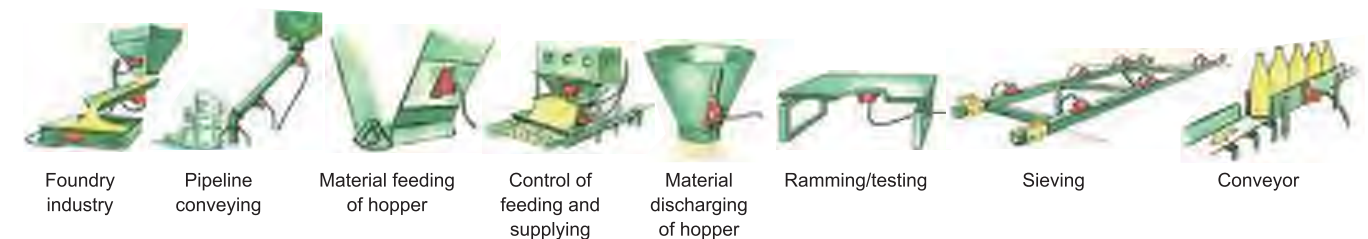


■ Material path



■ Material feeding and supplying

Application examples



Foundry industry

Pipeline conveying

Material feeding of hopper

Control of feeding and supplying

Material discharging of hopper

Ramming/testing

Sieving

Conveyor