

BVK Series Air Vibrator Operation Manual

The BVK Series Ball Air Vibrator employs compressed air to rotate an internal ball to produce uniform oscillation. Oscillation intensity and frequency can be controlled by regulating air compression strength.

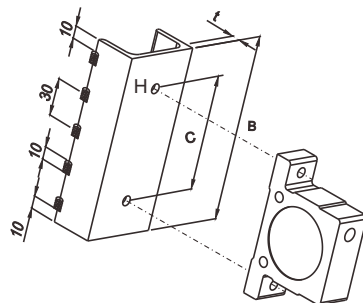


The vibrator can be used indoors and outdoors in conveying, feeding, filling and screen powder materials. Do not use in liquid.

- ★ Minimum air pressure---2 bar (29 psi). Maximum air pressure---6 bar (87 psi). Nitrogen can be used in compressor if needed.
- ★ Do not operate if temperature in surrounding area exceeds 100°C (220°F)
- ★ Keep surrounding area clean. For the best results, it is recommended that the vibrator be spot welded (plate welded) to a reinforcement bracket, such as a steel plate.
- ★ When used outdoors, the exhaust should be pointed downward to keep rain and other liquids out.

☞ Install using high-tension screws. Torque should not exceed the ranges shown below:

Model No.	Thread	Torque Range
BVK-10	M6	6~10Nm
BVK-13	M8	15~21Nm
BVK-16	M8	15~21Nm
BVK-20	M8	15~21Nm
BVK-25	M8	15~21Nm
BVK-32	M10	30~42Nm



- ★ To prevent nuts loose from vibrator during machine operation, please use notched washers, spring washers or self-locking nuts. Bonding agent is recommended.
- ★ Install a filter to compressed air source and a lubricator to increase life of vibrator.
- ★ When operating vibrator for first time, operate vibrator at full capacity to determine whether or not it is working at correct frequencies. Maximum vibrations per minute for different pressure setting are shown on Table 1:
- ♣ Excessively high vibration frequencies decrease power of vibration and produce excessive wear and tear on ball. If your machine runs too fast, select a larger vibrator.

Table 1.

Model No.	Frequency (V.P.M)			Vibration Power (N)		
	2Bar 29PSI	4Bar 58PSI	6Bar 87PSI	2Bar 29PSI	4Bar 58PSI	6Bar 87PSI
BVK-10	22,500	28,000	34,000	250	470	710
BVK-13	15,000	18,500	22,500	320	550	870
BVK-16	13,000	17,000	19,500	450	800	1,100
BVK-20	10,500	14,500	16,500	720	1,220	1,720
BVK-25	9,200	12,200	14,000	930	1,570	2,050
BVK-32	7,800	9,700	12,500	1,510	2,470	3,210

⚠ Caution

- ❖ Inspect regularly, beginning with first use and once each month thereafter. (Ensure that casing is firmly in place and that the muffler, filter and air compressor are working normally.)
- ❖ Pressure should not exceed 6 bars (87 psi). Temperatures should not exceed 100°C (220°F)
- ❖ Ensure that power to air compressor is off when installing or doing maintenance in vicinity of vibrator.
- ❖ Loosened screws could cause machine to fall and injure personnel.
- ❖ Blocked exhaust (e.g. muffler clogs) and high temperature may cause one of side plate to be pressed out.
- ❖ Please use a muffler at exhaust port to reduce the noise of vibration and to protect person's ear.
- ❖ The exhaust is under pressure, please keep away from exhaust port with care.

🔧 Trouble shooting

Problem	Fault Possibility	Trouble Shooting
Vibrator can not run when switch on	No air supply	Make sure turn on the air supply valve and compressor.
	Air supply pressure too low	To check pressure gauge in F.R.L combination and air compressor should be adjusted.
	Solenoid valve no activate	Solenoid valve is breakdown needs to change, make sure whether solenoid valve has driver
	Install mistaken air inlet hole	To make sure air in/outlet installation position right.
Too weak vibration force	Too many branches on main tube	To enlarge cross section of main tube equal or bigger to sum of manifold or branches tubes or to install tubings individually.
	Insufficient air supply	To make sure applied accessories match to required ones.
	To make mistake in AH of inlet installation.	To check pressure of F.R.L. combination and air supply its value higher
	In appropriate chosen tube, solenoid valve, F.R.L. combination to required ones	To make sure applied accessories match to required ones.
	Tubing too long	The length of tubing should not beyond 5M.
	Something jam in muffler	To check pressure of air supply and adjusting it stronger.
Vibration Noise	Screw loosen	To tight screw
	U shape steel doesn't being weld well	To weld again
	There is no foreign matter in the air hammer	Cleaning or maintenance.
Solenoid valve noise	Articles are in solenoid valve	To replace solenoid valve.
	Solenoid circle loosen	To firm solenoid circle again.

☞ Please contact us for any unmoral happened soon.



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