

# BVR PNEUMATIC ROLLER VIBRATOR

## Operation Manual

### Working Principle :

- Special aluminum body equips with roller and ring with multi nozzles. It is tightly closed by plastic side covers. Vibration is caused when roller pushed by compressed air runs in rotary motion to produce centrifugal force, and the compressed air controls the vibration's force & frequency.
- This Vibrator can be installed in outdoor & indoor's conveyor for feeding, filling, and screen powder materials. Do not use in liquid detecting.

**Minimum air pressure : 2 bar (29psi)**

**Maximum air pressure : 6 bar (87psi)**

\*\*\* Nitrogen air can be used in compressor, if need it. \*\*\*

### Surrounding area do not exceed 100°C (220°F):

Keep surrounding area clean. To recommended that the vibrator be spot welded to a reinforcement bracket, such as a steel plate.

### Installation :

- Using in the outdoor, the exhaust should be downward to keep rain and liquid out.
- To use high-tension screws for installation, the torque should not exceed the standard :

MODEL NO.	SCREW TYPE	TORQUE RANGE
BVR-50	M6	6~10Nm
BVR-65	M8	15~21Nm
BVR-80	M8	15~21Nm
BVR-100	M10	30~42Nm

- To recommend that using "Notched Washer" , "Spring Washer" & "Self-Locking Nuts" prevent any fixing loose during vibrating operation.
- Installation a filter with compressed air source and a lubricator can increase vibrator using life.
- To operate vibrator in first time, please operate vibrator at full material capacity in hopper to test whether vibrator is working at correct frequency & force. The Maximum Vibration Force & Pressure setting are listed in **Table 1:**
- Excessively high vibration frequency decrease power of vibration and produce excessive wear and tear on ball. If vibration frequency is too high, please replace with larger force vibrator.

**Table 1:**

MODEL NO.	FREQUENCY (V.P.M.)			VIBRATION FORCE		
	2Bar 29PSI	4Bar 58PSI	6Bar 87PSI	2Bar 29PSI	4Bar 58PSI	6Bar 87PSI
BVR-50	25,000	35,000	36,000	1,070	2,920	4,220
BVR-65	19,000	21,000	26,000	2,730	4,830	6,120
BVR-80	15,500	18,500	19,000	3,000	6,090	7,450
BVR-100	11,000	14,000	16,000	3,750	6,750	8,900

- To inspect the "Casing is firmly in place", "Muffler, filter" and "Air compressor" are working normally regularly in each month

### ⚠ Caution

- Pressure should not exceed 6 bars (87psi). Temperatures should not exceed 140°C (284°F).
- Ensure that power to air compressor is off when installing or doing maintenance in vicinity of vibrator.
- Loosened screws could cause vibrator to fall and injure personnel.

### 🔧 Troubleshooting Causes

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 VT of exhaust and 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.
Vibration Noise	Something jam in muffler	To check pressure of air supply and adjusting it stronger.
	Screw loosen	To tight screw
	U shape steel doesn't being weld well	To weld again
	Vibrator itself problem	To remove vibrator, and then activate it individually. It has to be repair, if unmoral condition happened while running.
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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