

BVP Series Products Operation Manual

Working Principle :

BVP Piston Vibrator Series Products are using compressed air to push piston from one side to the other side and create frequency vibration. Also the Frequency and amplitude of vibration can be adjusted by Compressed Air. The BVP Piston Vibrator Series Products can use on several applications for Conveyor, Feed-in, Infill, Solid & Sifter in out-door or in-door location, but it couldn't use in liquid.

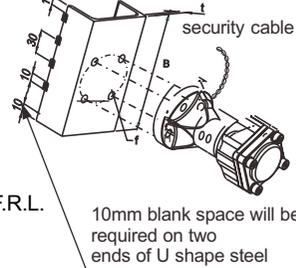
- ☞ BVP series: Air cushioned type, low noise character. It is suitable for quiet area application; a good solution to clog stick onto tank wall and material delivery problem. Also, it can be designed to apply on vibrating separator, conveyor.
- ☞ BVP series: Piston impact types can get rid of rust, material accumulated inside pipe. And the direct impact on tank with low S.G. with high moisture material inside, material build-up, pipe clog or rust.
- ☞ The Min. Air of pressure: 2 bar (29 PSI) / Max. Air of pressure: 6 bar (87 PSI)
- ☞ The Working Temperature isn't over 100°C (220°F).

- ☞ Installation :
To avoid tank wall amplitude caused by vibrator moves in left and right direction, U shape steel of fixer is a good choice. To avoid tank wall broken by vibrator force, stitch weld method is suggested. (10mm blank space will be required on two ends of U shape steel). The side of air exhaust should be down. The vibrator should be fixed by High Tension Screw. As the screw's specification & torque are showing as below :

Model No.	Screw	Torque (kgm)
BVP-30	M8	150~210
BVP-40	M10	300~420
BVP-60	M14	600~800

- ☞ To fix the vibrator with Spring Washer or Locked Screw, which could avoid any screw loose during Vibrating. Also suggest using the glue to fix it. As the full utilize vibrator performance, appropriate chose for F.R.L. (Filter/Regulator/Lubricator) combination unit, Solenoid Valve, PU Tubing will be necessary.

- ☞ All vibrator require lubricating oil with low viscosity for "SAE 20" under operating. The lubrication oil need a drop in every 3 minutes (Which lubrication oil could be adjustable by different operation condition).



Model No.	Frequency (AC1M)			Force (N)			Consumption (l / min)	Weight
	2kg/cm ²	4kg/cm ²	6kg/cm ²	2kg/cm ²	4kg/cm ²	6kg/cm ²		
BVP-30C	1765	2308	2857	195	380	560	230	0.9 kg
BVP-40C	1333	1677	1875	275	531	715	249	1.9 kg
BVP-60C	1000	1200	1340	404	780	1030	269	4.5 kg
BVP-30S	1900	2885	3500	3600	5400	6200	250	1.0 kg
BVP-40S	1700	2459	3000	6450	8750	9400	270	2.1 kg
BVP-60S	1200	1800	1900	6900	12850	13850	300	4.8 kg

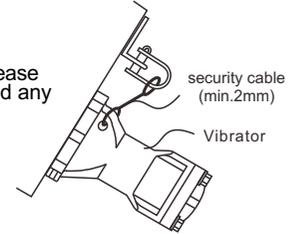
Fig.1

- ☞ It is necessary to check the Vibrator Working Frequency under starting in first time, also the hopper should be full.
- ☞ The Vibrator's bottom Seal Cover is changeable, please check it while installation.
- ☞ Please check Vibrator Installation for 100% fixing and all Accessories for "Muffler", "F.R.L." (Filter Regular Lubrication) Combination and Source of Air Pressure while first time starting & Regular Maintain.



Caution :

- ❖ Please check the Vibrator's Bottom Seal Cover and fixing situation before Starting, which avoid any danger while start Vibrator.
- ❖ Maximum Air Pressure: 6 Bar (87PSI) / Maximum Temperature: 100°C (220°F).
- ❖ If other instruments are closing the Vibrator, please shut down the Air Pressure Source before installation or maintain the instruments.
- ❖ Cause of the fix screw losing on Vibrator, the Vibrator would be making danger to worker.
- ❖ Please check the lubrication very often. (If lubrication capacity is less than 35%, Please refill it.)
- ❖ Please use the Type Sealer onto Quick Joint for 2~3 turns, but please leave 2mm in front of screw without the Type Sealer which is avoid any piece of Type Sealer into Vibrator.
- ❖ To connect with Security Cable if vibrator is installed onto hopper.



Problem Solution :

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.
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
	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.

- * AC1-C series products should install the Bottom Seal Cover to avoid piston strikethe body directly. Otherwise it could be make damage soon after starting.
- ❖ Please contact us for any unmoral happened soon.



FineTek Co., Ltd.

No.16, Tzuchiang St., Tucheng Industrial Park, New Taipei City 23678, Taiwan.
Tel: 886-2-22696789 Fax: 886-2-22686682
Email: info@fine-tek.com http://www.fine-tek.com



08-BVP-B0-EM,06/13/2012

