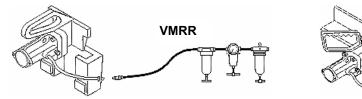
VMRR & VMBB

METALLIC-IMPACT OR AIR-CUSHIONED



INSTALLATION AND OPERATING KITS

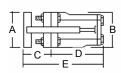
VMRR and VMBB air-powered vibrators eliminate the hazards connected with climbing around railroad cars and poking their contents to keep the materials flowing freely. In addition, their use can reduce unloading time by as much as 30%. (These vibrators can be handled by one man.)

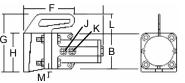
The VMRR for railroad cars is designed for use with covered hopper cars that are equipped with female brackets (available for sale see below). The VMBB for railroad cars is used on all other types of covered hopper railroad cars, as well as portable installations on large bins. These units

utilize either the VMS (impact) or VMSAC (air-cushion) vibrator with either the male wedge (VMRR) or boltbite (VMBB) mounting head.

VMBB

Specify VMRR-AC or VMBB-AC when quiet operating, air-cushioned vibrators are required.

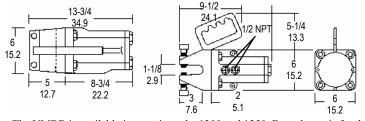




VMRR			Coated vibrators for non-lubricated applications are available.													
MODEL	PISTON DIA. in/cm	A in/cm	B in/cm	C in/cm	D in/cm	E in/cm	F in/cm	G in/cm	H in/cm	J in/cm	K in/cm	L in/cm	M in/cm	WT. lbs/kg	AIR CNSMP scfm/Imp (Imp=liter per min) @ 60 psig 4.1 bar	FREQUENCY* (vibrations per min.) @ 60 psig 4.1 bar
1200	2 5.1	5-1/2 14.0	4-1/2 11.4	3-3/4 9.5	6-1/2 16.5	10-1/4 25.9	7 17.8	7-1/2 19.1	5 12.7	3/8 1.0	1/4 0.6	2-1/2 6.4	-	33 14.9	7.2 204	4500
1300	3 7.6	6 15.2	5-3/4 14.6	5-1/4 13.3	8-5/16 21.1	13-9/16 34.4	7 17.8	11-1/2 29.2	7 17.8	1/2 1.3	3/8 1.0	4-3/4 12.1	1 2.5	83 38	18.5 524	3350
1350	3-1/2 8.9	6 15.2	6 15.2	5-1/4 13.3	10 25.4	15-1/4 38.7	7 17.8	11-1/2 29.2	7 17.8	1/2 1.3	1/2 1.3	4-1/2 11.4	1 2.5	93 42	21 595	2400
1400	4 10.2	6 15.2	8-5/8 21.9	6 15.2	11-7/8 30.2	17-7/8 45.4	**	**	7 17.8	3/4 1.9	1/2 1.3	**	-	165 75	25.0 708	2100

Frequency data obtained through testing under a no-load condition. Frequency will decline as load is increased.

VMBB TECHNICAL DATA

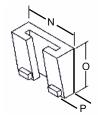


WT. Ibs/kg	AIR CONSMP. scfm/lpm (lpm=liters per min.) @60 psig 4.1 bar	Frequency (vibrations per minute) @60 psig 4.1 bar			
90 41	17.5 496	2400			

The VMBB is available in two sizes, the 1300 and 1350. Data shown is for the more popular 1350 size (dimensions are in in/cm).

LSRR BRACKET

LSRR-FL are cast steel female brackets that are standard equipment on covered hopper railroad cars. They can be welded or bolted to a structure. LSRR-FS was designed for use with the 2" (1200) vibrator only. It is ideal for portable bins and hoppers.



	LSRR-FL in/cm	LSRR-FS in/cm
N	7-3/4 19.7	7 17.8
0	7 17.8	4-3/4 12.1
Р	3-3/8 8.6	2-1/2 6.4
WT. lb/kg	25/11	12/5



[&]quot;Handles are extension of top two bolts. Dimension confined by BxBxE.