# **DataSheet**

# **ProSpare**

## **Pneumatic Piston Linear Vibrator**

The FP model pneumatic piston vibrator produces a linear vibration with an infinitely variable amplitude and frequency. The frequency is controlled by the air pressure.



A spring is incorporated in the body to ensure self starting when used in conjunction with a self exhausting valve. The vibrator requires a minimum of 30 PSI to operate.

The aluminium body is hard coated and is corrosion resistant. The power-to-weight ratio of the unit makes it particularly efficient for feeder applications. Explosion proof, light weight, compact quiet and efficient, these units are ideal for most applications. Easy to install and designed to work continuously under the most arduous conditions. Servicing requirements are minimal.

#### Installation Instructions

An air line filter and lubricator must be used to guarantee a long working-life. Hydraulic oil ISO VG5 = 5cSt/40°C, for example SHELL Tellus Oil C5 must be used.

These vibrators are suitable for use in ambient temperatures up to  $60^{\circ}C = 120^{\circ}F$ . Maximum air pressure 6 Bar = 87 PSI.

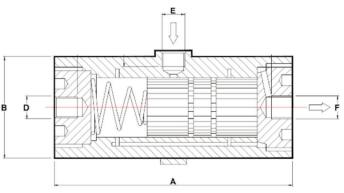
#### General Maintenance

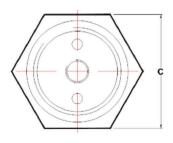
FP model vibrators have a long life with no undue piston or cylinder wear. The air line filter and lubricator must be inspected and cleaned at regular intervals. Dirt or contaminated oil will slow down or stop the vibrator.

#### **Performance Data**

TYPE	Frequency V.P.M.			Linear Force Measured						Air Consumption / Minute						Noise Level	
	2 Bar 29 PSI	4 Bar 58 PSI	6 Bar 87 PSI	2 Bar N	29 PSI lbs	4 Bar N	58 PSI lbs	6 Bar N	87 PSI lbs	2 Bar litr	29 PSI CFM	4 Bar litr	58 PSI CFM	6 Bar litr	87 PSI CFM	A** dB	A*** dB
FP-12-S	6200	7800	9300	34	7.7	70	16	92	21	0.8	0.03	7.5	0.26	25	0.88	57-61	N/A
FP-12-M	5000	6000	6700	37	7.7	58	13	74	17	0.5	0.02	4	0.14	19	0.67	57-61	N/A
FP-12-L	4000	4800	5400	32	7.2	58	13	81	18	1	0.04	3	0.11	20	0.71	58-60	N/A
FP-18-S	5000	6400	7700	66	15.0	134	30	187	42	5	0.18	33	1.16	57	2.00	62-71	N/A
FP-18-M	4000	5000	5900	68	15.0	134	30	188	42	4	0.14	28	1.00	52	1.84	61-67	N/A
FP-18-L	3100	4000	4600	64	14.0	150	34	206	46	5	0.18	23	0.81	46	1.62	61-68	N/A
FP-25-S	3600	4300	5500	126	28	270	61	416	94	13	0.46	54	1.91	93	3.28	70-75	61-67
FP-25-M	3000	3800	4200	142	32	364	82	504	113	23	0.81	50	1.76	87	3.07	73-75	62-66
FP-25-L	2400	3100	3700	186	42	392	88	594	134	18	0.64	62	2.19	93	3.28	72-75	60-65
FP-35-S	2800	4700	5800	294	66	668	150	1038	234	23	0.81	101	3.56	162	5.72	72-77	71-73
FP-35-M	3000	4000	4600	248	56	778	175	1080	243	24	0.84	83	2.93	141	4.98	74-78	70-73
FP-35-L	2400	3100	3600	282	63	680	153	1066	240	38	1.34	89	3.14	135	4.77	74-78	68-74
FP-50-M*	1850	2300	2800	490	110	970	218	1600	360	48	1.67	100	3.48	190	6.61	70-77	-
FP-60-M*	1950	2400	2700	610	137	1400	315	2170	489	90	3.13	160	5.57	270	9.39	73-79	-
FP-95-M*	1800	2400	2800	1500	338	2620	590	4270	962	170	5.91	320	11.13	450	15.65	85-92	-

Note \*\* with customary silencer \*\*\* with 1/4" free flow silencer





#### **Dimensions**

TYPE	А		В		С		D	E	F	Weight of Body		Weight of Piston		Total Weight	
	mm	inch	mm	inch	mm	inch	Metric Thread	BSP Thread	BSP Thread	kg	lbs	kg	lbs	kg	lbs
FP-12-S	71	2.80	31	1.22	34	1.34	M8	1/8"	1/8"	0.125	0.275	0.020	0.045	0.145	0.320
FP-12-M	81	3.19	31	1.22	34	1.34	M8	1/8"	1/8"	0.140	0.309	0.030	0.066	0.170	0.375
FP-12-L	94	3.70	31	1.22	34	1.34	M8	1/8"	1/8"	0.165	0.360	0.040	0.090	0.205	0.450
FP-18-S	81	3.19	40	1.57	42	1.65	M10	1/8"	1/8"	0.220	0.485	0.060	0.135	0.280	0.620
FP-18-M	94	3.70	40	1.57	42	1.65	M10	1/8"	1/8"	0.260	0.575	0.080	0.175	0.340	0.750
FP-18-L	109	4.29	40	1.57	42	1.65	M10	1/8"	1/8"	0.300	0.660	0.110	0.240	0.410	0.900
FP-25-S	98	3.86	48	1.89	50	1.97	M12	1/4"	1/4"	0.375	0.825	0.155	0.345	0.530	1.170
FP-25-M	116	4.57	48	1.89	50	1.97	M12	1/4"	1/4"	0.435	0.955	0.215	0.475	0.650	1.430
FP-25-L	136	5.35	48	1.89	50	1.97	M12	1/4"	1/4"	0.500	1.100	0.290	0.640	0.790	1.740
FP-35-S	98	3.86	58	2.28	65	2.55	M12	1/4"	1/4"	0.530	1.168	0.315	0.694	0.845	1.862
FP-35-M	116	4.57	58	2.28	65	2.55	M12	1/4"	1/4"	0.610	1.344	0.430	0.947	1.040	2.292
FP-35-L	136	5.35	58	2.28	65	2.55	M12	1/4"	1/4"	0.700	1.543	0.530	1.278	1.280	2.281
FP-50-M*	157	6.18	84.5	3.33	N/A	N/A	M16	1/4"	1/4"	1.737	3.821	1.483	3.263	3.220	7.08
FP-60-M*	157	6.18	95	3.74	N/A	N/A	M16	1/4"	1/4"	2.110	4.642	2.130	4.686	4.240	9.34
FP-95-M*	157	6.18	140	5.51	N/A	N/A	N/A	3/8"	3/8"	4.000	8.800	4.00	9.460	8.300	18.26

#### \* Note

The FP-50-M, FP-60-M and FP-95-M are supplied with square base plates attached for alternative fixing using 4 off bolts instead the M16 single stud. This increases the overall length by 20mm.

Plate dimensions are:

FP-50-M 90mm x 90mm x 20mm thick 4 holes 9mm dia 72mm x 72mm pitch FP-60-M 110mm x 110mm x 20mm thick 4 holes 9mm dia 90mm x 90mm pitch FP-95-M 150mm x 150mm x 20mm thick 4 holes 13mm dia 124mm x 124mm pitch

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