

Vibrolator® Ball Vibrator Series



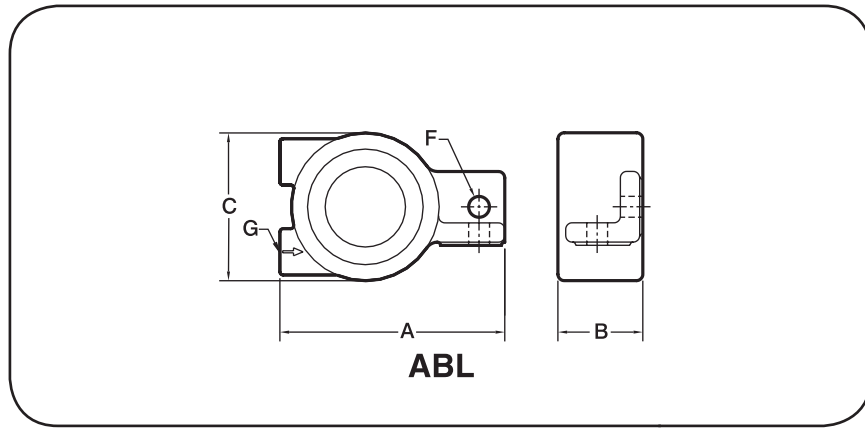
FEATURES

- One moving part – Chrome steel ball on hardened steel race
- Continuous Duty
- Highest ratio of force to physical weight in the industry
- Tapped exhaust
- Muffler is standard
- O-ring sealed
- Interchangeable with other manufacturers
- Three mounting and port configurations available
- 250°F temperature rating

Specify Martin Engineering for:

- Cost effective solutions
- Expert technical assistance
- Complete service and support

TECHNICAL DATA SHEET



DIMENSIONS—in. (mm)

Model/ Part Number	A	B	C	Bolt Size	Port NPT	Weight lbs (kg)
				F	G	
ABL-10A[†]	3.13 (79.5)	1.27 (32.3)	1.87 (47.5)	5/16	1/8	0.55 (0.2)
ABL-10M	3.14 (79.8)	1.14 (29.0)	1.97 (50.0)	5/16	1/8	0.75 (0.3)
ABL-13M	3.64 (92.5)	1.26 (32.0)	2.29 (58.2)	3/8	1/8	1.00 (0.5)
ABL-16M	4.38 (111.3)	1.65 (41.9)	2.92 (74.2)	3/8	1/4	1.75 (0.8)
ABL-19M	4.38 (111.3)	1.65 (41.9)	2.92 (74.2)	3/8	1/4	2.00 (0.9)
ABL-25M	5.66 (143.8)	2.26 (57.4)	3.76 (95.5)	1/2	1/4	4.75 (2.2)

[†]Aluminum housing and endcaps.

PERFORMANCE DATA

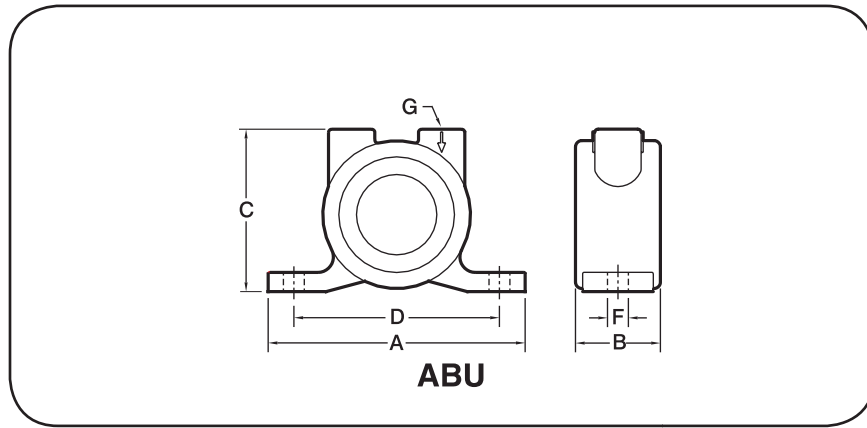
Model/ Part Number	In. Lbs.	Min. Starting Pressure PSI (bar)		40 PSI (2.76 bar)			60 PSI (4.14 bar)			80 PSI (5.51 bar)*		
		Horz.	Vert.	VPM	Force lbs (kg)	CFM (L/min)	VPM	Force lbs (kg)	CFM (L/min)	VPM	Force lbs (kg)	CFM (L/min)
ABL-10A[†] ABL-10M	0.003	4 (0.3)	5 (0.3)	21000	37 (16.8)	6.4 (181.2)	23000	45 (20.4)	6.4 (181.2)	24000	49 (22.2)	8.4 (237.9)
ABL-13M	0.008	5 (0.3)	10 (0.7)	17500	70 (31.8)	6.6 (186.9)	19500	86 (39.0)	8.8 (249.2)	20000	91 (41.3)	11.3 (320.0)
ABL-16M	0.020	5 (0.3)	12 (0.8)	12000	82 (37.2)	7.0 (198.2)	15500	137 (62.1)	9.2 (260.5)	17000	164 (74.4)	14.6 (413.4)
ABL-19M	0.037	5 (0.3)	19 (1.3)	13000	116 (52.6)	8.3 (235.0)	15000	236 (107.0)	11.2 (317.1)	16000	269 (122.0)	16.1 (455.9)
ABL-25M	0.116	5 (0.3)	19 (1.3)	10000	329 (149.2)	10.4 (294.5)	11000	399 (181.0)	14.1 (399.3)	12500	515 (233.6)	18.1 (512.5)

*Maximum recommended pressure.

ABL ACCESSORIES

Part Number	Description
39504	Control Line Kit
14824-PR	Ball Valve 1/2" NPT
14760-PR	Filter, Regulator, Lubricator Combination, 1/2" NPT
14766-PR	Air Motor Oil (qt)
38902-20	On/Off Cycle Timer 115/1/60
36343-NC-PR	Solenoid Valve 115/1/60 1/2" NPT

TECHNICAL DATA SHEET



DIMENSIONS—in. (mm)

Model/ Part Number	A	B	C	Bolt Pattern	Bolt Size	Port NPT	Weight lbs (kg)
				D	F	G	
ABU-06M	3.75 (95.3)	1.13 (28.6)	2.14 (54.4)	3 (76.2)	1/4	1/8	0.75 (0.3)
ABU-13M	5.00 (127.0)	1.25 (31.8)	2.52 (64.0)	4 (101.6)	3/8	1/8	1.50 (0.7)
ABU-19M	5.00 (127.0)	1.63 (41.3)	3.16 (80.3)	4 (101.6)	3/8	1/4	2.50 (1.1)
ABU-25M	6.00 (152.4)	2.25 (57.2)	4.11 (104.4)	5 (127.0)	1/2	1/4	5.00 (2.3)
ABU-32M	6.00 (152.4)	2.25 (57.2)	4.11 (104.4)	5 (127.0)	1/2	3/8	6.00 (2.7)
ABU-38M	7.75 (196.9)	2.75 (69.9)	4.92 (125.0)	6 (152.4)	5/8	3/8	9.00 (4.1)
ABU-44M	8.50 (215.9)	3.00 (76.2)	5.71 (145.0)	7 (177.8)	5/8	1/2	13.0 (5.9)

PERFORMANCE DATA

Model/ Part Number	In. Lbs.	Min. Starting Pressure PSI (bar)		40 PSI (2.76 bar)			60 PSI (4.14 bar)			80 PSI (5.51 bar)*		
		Horz.	Vert.	VPM	Force lbs (kg)	CFM (L/min)	VPM	Force lbs (kg)	CFM (L/min)	VPM	Force lbs (kg)	CFM (L/min)
ABU-06M	0.001	1 (0.1)	1 (0.1)	22000	14 (6.4)	3.5 (99.1)	25000	18 (8.2)	4.5 (127.4)	26000	19 (8.6)	6.0 (169.9)
ABU-13M	0.008	5 (0.3)	10 (0.7)	15000	51 (23.1)	5.0 (141.6)	20000	90 (40.8)	7.5 (212.4)	22000	100 (45.4)	10.5 (297.3)
ABU-19M	0.037	5 (0.3)	13 (0.9)	14000	205 (93.0)	7.0 (198.2)	16000	270 (122.5)	11.0 (311.5)	17000	303 (137.4)	14.0 (396.4)
ABU-25M	0.116	5 (0.3)	19 (1.3)	9700	309 (140.2)	10.0 (283.2)	11000	398 (180.5)	13.0 (368.1)	12000	474 (215.0)	16.0 (453.1)
ABU-32M	0.240	5 (0.3)	30 (2.1)	6500	288 (130.6)	11.0 (311.5)	7500	383 (173.7)	17.0 (481.4)	11500	901 (408.7)	19.2 (543.7)
ABU-38M	0.480	5 (0.3)	50 (3.4)	5500	412 (186.9)	14.0 (396.4)	6200	524 (237.7)	20.0 (566.3)	10000	1363 (618.2)	24.6 (696.6)
ABU-44M	0.915	5 (0.3)	60 (4.1)	5100	675 (306.2)	15.0 (424.8)	6000	935 (424.1)	21.0 (594.7)	6500	1097 (497.6)	26.0 (736.2)

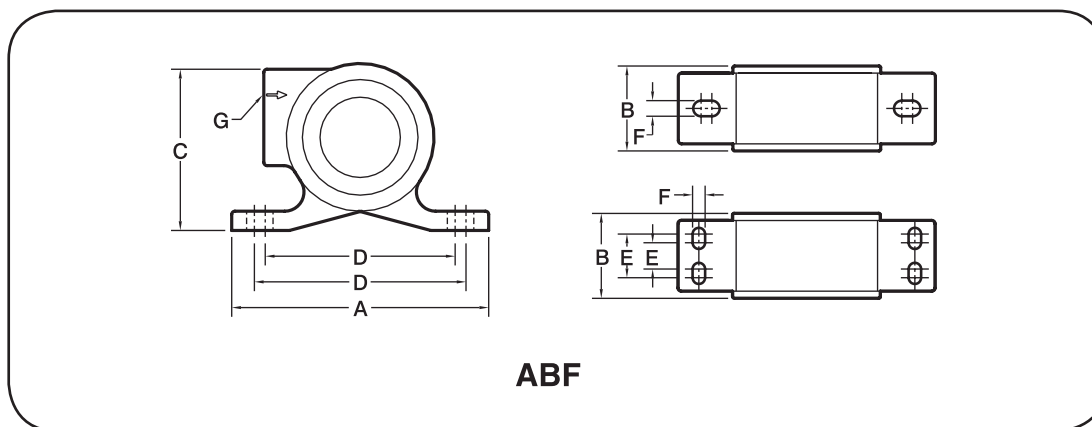
*Maximum recommended pressure.

ABU ACCESSORIES

Part Number	Description
See Chart	Channel Mount Kit
39504	Control Line Kit
14824-PR	Ball Valve 1/2" NPT
14760-PR	Filter, Regulator, Lubricator Combination, 1/2" NPT
14766-PR	Air Motor Oil (qt)
38902-20	On/Off Cycle Timer 115/1/60
36343-NC-PR	Solenoid Valve 115/1/60 1/2" NPT

Model	Channel Mount Kit Part Number
ABU-06	220691-3-313
ABU-13	220691-4-375
ABU-19	
ABU-25	220691-5-500
ABU-32	
ABU-38	220691-6-625
ABU-44	220691-7-625

TECHNICAL DATA SHEET



DIMENSIONS—in. (mm)

Model/ Part Number	A	B	C	Bolt Pattern		Bolt Size	Port NPT	Weight lbs (kg)
				D	E			
ABF-10M	3.88 (98.6)	1.00 (25.4)	2.11 (53.6)	3 (76.2)	—	5/16	1/8	0.75 (0.3)
ABF-13M	5.00 (127.0)	1.13 (28.7)	2.58 (65.5)	4 (101.6)	—	3/8	1/8	1.50 (0.7)
ABF-19M	5.00 (127.0)	1.38 (35.1)	3.26 (82.8)	4 (101.6)	—	3/8	1/4	2.50 (1.1)
ABF-25M	6.00 (152.4)	1.56 (39.6)	4.32 (109.7)	4-5 (101.6-127)	—	1/2	1/4	5.50 (2.5)
ABF-35M	6.00 (152.4)	1.56 (39.6)	4.32 (109.7)	4-5 (101.6-127)	—	1/2	1/4	5.88 (2.7)
ABF-41M	6.50 (165.1)	2.88 (73.2)	6.05 (153.7)	5 1/2 (139.7)	1 1/4 - 1 3/4 (31.8-44.5)	3/8	3/8	13.5 (6.1)
ABF-51M	6.50 (165.1)	2.88 (73.2)	6.05 (153.7)	5 1/2 (139.7)	1 1/4 - 1 3/4 (31.8-44.5)	3/8	3/8	14.5 (6.6)

PERFORMANCE DATA

Model/ Part Number	In. Lbs.	Min. Starting Pressure PSI (bar)		40 PSI (2.76 bar)			60 PSI (4.14 bar)			80 PSI (5.51 bar)*		
		Horz.	Vert.	VPM	Force lbs (kg)	CFM (L/min)	VPM	Force lbs (kg)	CFM (L/min)	VPM	Force lbs (kg)	CFM (L/min)
ABF-10M	0.003	12 (0.8)	20 (1.4)	15000	19 (8.6)	4.3 (121.8)	15500	20 (9.1)	6.0 (169.9)	19000	31 (14.1)	7.5 (212.4)
ABF-13M	0.008	3 (0.2)	18 (1.2)	13000	38 (17.2)	5.9 (167.1)	15100	52 (23.6)	8.1 (229.4)	17000	66 (29.9)	10.0 (283.2)
ABF-19M	0.037	5 (0.3)	20 (1.4)	11000	127 (57.6)	9.0 (254.9)	13250	184 (83.5)	11.1 (314.3)	15500	252 (114.3)	14.1 (399.3)
ABF-25M	0.116	5 (0.3)	41 (2.8)	8100	216 (98.0)	9.4 (266.2)	9700	313 (142.0)	12.8 (362.5)	11100	406 (184.2)	16.3 (461.6)
ABF-35M	0.210	5 (0.3)	41 (2.8)	8200	401 (181.9)	10.9 (308.7)	10750	689 (312.5)	14.7 (416.3)	11500	789 (357.9)	18.9 (535.2)
ABF-41M	0.750	5 (0.3)	65 (4.5)	4000	341 (154.7)	16.6 (470.1)	5000	533 (241.8)	20.8 (589.0)	5500	644 (292.1)	29.0 (821.2)
ABF-51M	1.130	5 (0.3)	84 (5.8)	3000	289 (131.1)	16.6 (470.1)	3600	416 (188.7)	22.5 (637.1)	5000	802 (363.8)	29.0 (821.2)

*Maximum recommended pressure.

ABF ACCESSORIES

Part Number	Description
See Chart	Channel Mount Kit
39504	Control Line Kit
14824-PR	Ball Valve 1/2" NPT
14760-PR	Filter, Regulator, Lubricator Combination, 1/2" NPT
14766-PR	Air Motor Oil (qt)
38902-20	On/Off Cycle Timer 115/1/60
36343-NC-PR	Solenoid Valve 115/1/60 1/2" NPT

Model	Channel Mount Kit Part Number
ABF-10	220691-3-313
ABF-13	220691-4-375
ABF-19	
ABF-25	220691-4-500
ABF-35	
ABF-41	220691-5.5-375
ABF-51	



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