

Vibrolator[®] Ball Vibrator Series

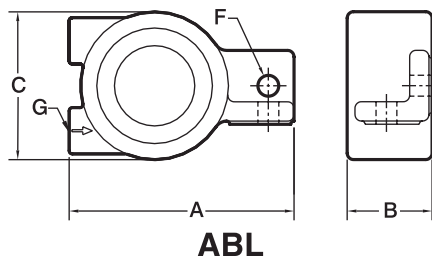


FEATURES

- 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



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) | 7/16 | 1/8 | 0.55 (0.2) |
| ABL-10M | 3.14 (79.8) | 1.14 (29.0) | 1.97 (50.0) | 7/16 | 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 11.3 | 1.65 (4) | 2.92 (74.2) | 3/8 | 1/4 | 1.75 (0.8) |
| ABL-19M | 4.38 11.3 | 1.65 (4) | 2.92 (74.2) | 3/8 | 1/4 | 2.00 (0.9) |
| ABL-25M | 5.66 (14) | 2.26 (5) | 3.76 (95.5) | 1/2 | 1/4 | 4.75 (2.2) |

†Aluminum housing and endcaps.

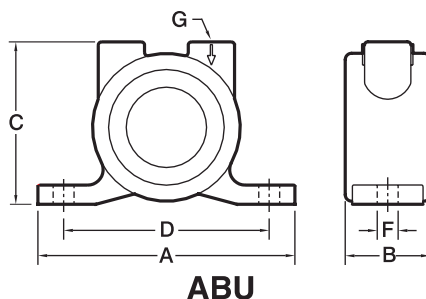
PERFORMANCE DATA

| 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.) | 6.4 (181) | 23000 | 45 (20.4) | 6.4 (181) | 24000 | 49 (22.) | 8.4 (237) |
| ABL-13M | 0.008 | 5 (0.3) | 10 (0.7) | 17500 | 70 (31.) | 6.6 (186) | 19500 | 86 (39.0) | 8.8 (249) | 20000 | 91 (41.) | 11.3 (320) |
| ABL-16M | 0.020 | 5 (0.3) | 12 (0.8) | 12000 | 82 (37.) | 7.0 (198) | 15500 | 137 (62.1) | 9.2 (260) | 17000 | 164 (74) | 14.6 (41) |
| ABL-19M | 0.037 | 5 (0.3) | 19 (1.3) | 13000 | 116 (52.) | 8.3 (235) | 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 | Ball Valve 1/2" NPT |
| 14760 | Filter, Regulator, Lubricator Combination, 1/2" NPT |
| 14766 | Air Motor Oil (qt) |
| 38902-20 | On/Off Cycle Timer 115/1/60 |
| 36343-NC | Solenoid Valve 115/1/60 1/2" NPT |
| 36528-NC | Solenoid Valve NC 24V DC Pilot Operate |



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

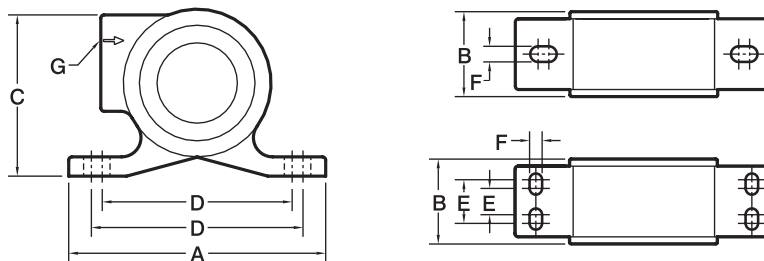
| Model/ Part Number | In. Lbs. | Min. Starting Pressure PSI (bar) | | 40 PSI (2.76 bar) | | | 60 PSI (4.14 bar) | | | 80 PSI (5.51 bar)* | | |
|-----------------------|-------------|--|----------|-------------------|-------------------|----------------|-------------------|-------------------|----------------|--------------------|-------------------|----------------|
| | | 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.) | 15000 | 51 (23.) | 5.0 (141) | 20000 | 90 (40.8) | 7.5 (212.4) | 22000 | 100 (45) | 10.5 (297.3) |
| ABU-19M | 0.037 | 5 (0.3) | 13 (0.) | 14000 | 205 (93) | 7.0 (198) | 16000 | 270 (122.5) | 11.0 (311.5) | 17000 | 303 (137) | 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) | 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) | 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 | Ball Valve 1/2" NPT |
| 14760 | Filter, Regulator, Lubricator Combination, 1/2" NPT |
| 14766 | Air Motor Oil (qt) |
| 38902-20 | On/Off Cycle Timer 115/1/60 |
| 36343-NC | Solenoid Valve 115/1/60 1/2" NPT |
| 36528-NC | Solenoid Valve NC 24V DC Pilot Operate |

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



ABF

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) | — | 1/8 | 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 | Ball Valve 1/2" NPT |
| 14760 | Filter, Regulator, Lubricator Combination, 1/2" NPT |
| 14766 | Air Motor Oil (qt) |
| 38902-20 | On/Off Cycle Timer 115/1/60 |
| 36343-NC | Solenoid Valve 115/1/60 1/2" NPT |
| 36528-NC | Solenoid Valve NC 24V DC Pilot Operate |

| 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 | |