## Thermolyne Shakers



## Big Bill Orbital Shakers



## Product Description/Operations:

All units Feature:

- Precise, variable speed control from $25-450 \mathrm{rpm}$ for gentle to vigorous shaking.
- Two large platform sizes: $16.7^{\prime \prime} \times 16.7^{\prime \prime}$ (Big Bill) or 21" x 21" (Bigger Bill) to accommodate flasks, test tube racks and utility trays.
- Maximum load capacity $=55 \mathrm{Lbs}(25 \mathrm{~kg})$ holds up to five 6L flasks.
- Increase vessel capacity with double tier platform (see Accessories). Use at speeds of 100 rpm or slower.
- Units operate in temperature ranges of 4 to $45^{\circ} \mathrm{C}$ and humidity conditions from $20 \%$ to $80 \%$ non-condensing enabling them to be used in incubators, warm rooms, environmental chambers and refrigerators.


## Analog Units Feature:

- On/Off rocker switch.
- Economical, dial speed control when digital readout is not necessary.


## Durable Shakers for Large - Capacity Applications!

- Heavy-duty cast metal body for durability
- Three mixing modes (digital models only)
- Timer option available on the digital models
- Choose from two large platform sizes
- Precise variable speed control from 25 to 450 rpm
is 24 Month Warranty


## Digital Units Feature:

- Easy-to-use push button for time and speed.
- Three mixing models (clockwise, counterclockwise, oscillation) offers versatility depending upon your application.
- Oscillating circular movement guarantees low shear force while maintaining optimum mixing.
- Shaker also performs continuous circular clockwise or counterclockwise stirring.
- Two timed options are offered for timed studies.
- General mixing $=$ up to 99 hours and 59 min .
- Oscillating mixing $=5$ sec to 2.8 hours


## Applications

- Molecular Biology
- Fermentation
- Mixing Viscous Solutions
- Bacterial Suspensions
- Cell Cultures

| Product Specifications |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Description | Speed Control | Platform Dimensions Inches (cm) |  | Overall Dimensions Inches (cm) |  |  | Power | Shipping Weight Lbs (kg) | List Price |
|  |  |  | W | D | W |  | D |  |  |  |
| M49125 | Big Bill | Analog | 16.7 (42.4) | 16.7 (42.4) | 16.7 (42.4) | 9 (22.9) | 16.7 (42.4) | 120V, 0.4A | 38 (17.2) | \$1,538.00 |
| M49120-26 | Big Bill | Analog | 16.7 (42.4) | 16.7 (42.4) | 16.7 (42.4) | 9 (22.9) | 16.7 (42.4) | 220/240V, 0.2A | 38 (17.2) | \$1538.00 |
| M49235 | Bigger Bill | Analog | 21 (53.3) | 21 (53.3) | 21(53.3) | 9 (22.9) | 21 (53.3) | 120V, 0.4A | 50 (22.7) | \$1,788.00 |
| M59230-26 | Bigger Bill | Analog | 21 (53.3) | 21 (53.3) | 21 (53.3) | 9 (22.9) | 21 (53.3) | 220/240V, 0.2A | 50 (22.7) | \$1,788.00 |
| M73625 | Big Bill | Digital | 16.7 (42.4) | 16.7 (42.4) | 16.7 (42.4) | 9 (22.9) | 16.7 (42.4) | 120V, 1.4A | 38 (17.2) | \$2,057.00 |
| M73620-26 | Big Bill | Digital | 16.7 (42.4) | 16.7 (42.4) | 16.7 (42.4) | 9 (22.9) | 16.7 (42.4) | 220/240V, 0.2A | 38 (17.2) | \$2,057.00 |
| M73735 | Bigger Bill | Digital | 21 (53.3) | 21 (53.3) | 21 (53.3) | 9 (22.9) | 21 (53.3) | $120 \mathrm{~V}, 0.4 \mathrm{~A}$ | 50 (22.7) | \$2,322.00 |
| M73730-26 | Bigger Bill | Digital | 21 (53.3) | 21 (53.3) | 21 (53.3) | 9 (22.9) | 21 (53.3) | 220/240V, 0.2A | 20 (22.7) | \$2,322.00 |
| -26 Models Supplied with European Cord Set Load Capacity 55 Lbs. ( 25 kg ) <br> Speed Range rpm 25-450 <br> Orbit Diameter inches (cm) . 75 (1.9) |  |  |  |  |  |  |  |  |  |  |


| ORDERING INFORMATION |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Electrical ( $50 / 60 \mathrm{~Hz}$ ) |  | US List Price | Model \# | Description | Electrical ( $50 / 60 \mathrm{~Hz}$ ) |  | US List Price |
| Model \# | Description Volts | Amps |  |  |  | Volts | Amps |  |
| M49120-26 | Analog Big Bill 220 | 0.2 | \$1,698.00 | M49235 ${ }^{1}$ | Analog Bigger Bill | 120 | 0.4 | \$1,974.00 |
| M49125 ${ }^{\text {² }}$ | Analog Big Bill 120 | 0.4 | \$1,698.00 | M73730-26 | Digital Oscillating Bigger Bill | 220 | 0.2 | \$2,563.00 |
| M73620-26 | Digital Oscillating Big Bill 220 | 0.2 | \$2,272.00 | M73735 ${ }^{1}$ | Digital Oscillating Bigger Bill | 120 | 0.4 | \$2,563.00 |
| M73625 ${ }^{1}$ | Digital Oscillating Big Bill 120 | 0.4 | \$2,272.00 | -26 Models Supplied with European Cord Set. ${ }^{\text {' CSA }}$ |  |  |  |  |
| M49230-26 | Analog Bigger Bill 220 | 0.2 | \$1,974.00 |  |  |  |  |  |  |  |
| ACCESSORIES |  |  |  |  |  |  |  |  |
| Model \# | Description |  | US List Price | Model \# | Description | Big Bill <br> Capacity* | Bigger Bill Capacity* | US List Price |
| AY720X1 | Stability clamps for Big Bill: Provides additional stability at higher speeds |  | \$36.00 | FCX63 | 10 ml flask clamp | 111 | 177 | \$19.00 $\$ 21.00$ |
| AY491X1A |  |  |  | FCX65 | 25 ml flask clamp | 64 | 100 | \$21.00 |
|  | Accommodates flasks, test tube racks, bottles and unusually shaped objects: 11 " $\times 13$ " |  |  | FCX66 | 50 ml flask clamp | 64 | 100 | \$22.00 |
|  | $(27.9 \times 33.0 \mathrm{~cm})$ |  | \$247.00 | FCX67 | 125 ml flask clamp | 29 | 50 | \$27.00 |
| AY492X1A |  |  |  | FCX68 | 250 ml flask clamp | 25 | 36 | \$33.00 |
|  | Accommodates flasks, test tube racks, |  |  | FCX69 | 500 ml flask clamp | 16 | 25 | \$41.00 |
|  | bottles and unusually shaped objects: 16 "x16" |  | \$264.00 | FCX70 | 1000 ml flask clamp | 9 | 16 | \$43.00 |
|  | Tube platform: Accommodates 42 |  |  | FCX74 | 2000 ml flask clamp | 9 | 9 | \$53.00 |
| AY734X1 |  |  |  | FCX84 | 4000 ml flask clamp | 5 | 5 | \$74.00 |
| AY491X3A | Double tiered platform - Big Bill |  |  | \$197.00 | FCX85 | 6000 ml flask clamp | 5 | 5 | \$92.00 |
| AY492X3A | Double tiered platform - Bigger Bill |  | \$277.00 | * Depends on flask mix and configuration. <br> For a complete system, order... <br> Big Bill shaker with flask platform \& flask clamps |  |  |  |  |

