1. Product Name
PFlow M Series Mechanical Vertical Lifts

2. Manufacturer
PFlow Industries, Inc.
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3. Product Description
PFlow Industries, Inc. has been an industry-leading provider of custom-engineered vertical reciprocating conveyors (VRCs) for nearly 40 years. Today, with more than 17,000 proven vertical lifts sold worldwide, PFlow Industries offers a full line of custom-engineered hydraulic, mechanical and fully automated VRC systems.

Basic Use
PFlow M Series Mechanical Vertical Lifts are 2-post mechanical VRCs designed for multi-level applications with large loads and frequent, continuous use. Manufactured to ANSI/ASME B20.1 safety standards, PFlow M Series supports load capacities as high as 10,000 lbs and custom carriages as large as 12' x 10'.

PFlow M Series is suited for interior or exterior conveyor systems, pallets, production lines and other industrial applications where products or materials must be moved from one level to another. It is available for new or existing buildings and can be installed in unused elevator shafts. Applications range from paper distribution facilities to vitamin manufacturers, distributors, storage facilities and motorcycle dealerships.

Materials, Composition
Each M Series Mechanical Vertical Lift has a frame and drive base, plus a moving carriage and built-in advanced safety features. One NEMA 12 code compliant control panel and pushbutton station is located at each level serviced.

The frame includes two vertical upright guide columns, bolted at the first level to the floor. At the second and additional levels, the frame is braced to the building structure.

Guide columns are 6" wide flange sections. The carriage is fabricated of 4" or 6" structural members with a steel deck plate. Additional deck surfaces are available.

An electric motor/reducer assembly, mounted to the guide columns, lifts and lowers the carriage.

Primary components are the guide columns and carriage.

Types
Two configurations are available:
- Straddle, where columns are on each side of the carriage
- Cantilever, where both columns are positioned at the back

Color, Sizes
PFlow M Series is custom designed to application and height requirements.

Benefits
- Versatile design can be customized for a wide variety of uses
- Patented DeckLock Safety System adds security at critical upper levels
- Interlocked access gates prevent gates from opening between levels to protect workers and materials
- Electrical components comply with all NEC requirements
- Conforms to ANSI/ASME B20.1
PFlow M Series, Cantilever

PFlow M Series, Straddle
Table 1 – Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum platform size</td>
<td>12' x 10'</td>
</tr>
<tr>
<td>Maximum capacity</td>
<td>10,000 lbs</td>
</tr>
<tr>
<td>Carriage sizes</td>
<td>100 ft²</td>
</tr>
<tr>
<td>Maximum vertical rise</td>
<td>200'</td>
</tr>
<tr>
<td>Levels</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Travel speed</td>
<td>25–30 fpm</td>
</tr>
<tr>
<td>(special order to 600 fpm)</td>
<td></td>
</tr>
<tr>
<td>Power requirement</td>
<td>230V/460V, 3-phase</td>
</tr>
<tr>
<td>Control voltage</td>
<td>110V</td>
</tr>
<tr>
<td>Brake motor</td>
<td>2 HP to 10 HP</td>
</tr>
</tbody>
</table>

Limitations
PFlow M Series is designed for movement of materials only and should not be used as an elevator. Do not exceed rated capacity.

Accessories, Options
- DeckLock Safety System
- Expanded and sheet metal side guards
- Enclosures
- Auto load/unload
- Explosion proof
- Speeds to 600 fpm
- Epoxy paint

4. Technical Data

Applicable Standards
- American National Standards Institute (ANSI)
  - ANSI B20.1 Safety Code for Conveyors, Cableways, and Related Equipment
- National Electrical Manufacturer's Association (NEMA)
  - NEMA 12 Enclosures
- National Electrical Code® (NEC)
  - NFPA 70 National Electrical Code

Physical Characteristics
See Table 1.

5. Installation

Preparatory work
Perform all necessary site work, such as pit, floor opening, adequate bracing locations and shaftway openings. Ensure the site or building area has sufficient clearance to move the equipment into the storage and installation areas.

6. Availability and Cost
PFlow Industries offers a full line of VRCs, including the M Series Mechanical Vertical Lift, throughout the U.S. and internationally. Contact PFlow Industries for pricing information and availability in specific areas.

7. Warranty
Used and installed as directed, PFlow Industries warrants the M Series Mechanical Vertical Lift, beginning 30 days after shipment. PFlow components have a one-year warranty on parts and labor. Purchased components have a one-year parts warranty and a 90-day labor warranty.

8. Maintenance
To ensure system safety, the PFlow M Series Mechanical Vertical Lift requires consistent minimal and basic periodic attention. Standard preventative maintenance is within the capabilities of a plant maintenance person. See the manufacturer's M Series manuals for a detailed schedule.

9. Technical Services
Technical assistance, including detailed information, product literature, test results, project lists, assistance in preparing project specifications, and installation supervision is offered by the manufacturer. For questions, contact PFlow Industries, Inc.

10. Filing Systems
- CMD
  - Additional product information is available from the manufacturer upon request

Transport products in manufacturer's original, unopened, undamaged containers with identification labels intact. A fork truck with a minimum 2000 lb capacity is required. Inspect upon delivery.

Weather/Ambient Conditions
The PFlow M Series accommodates most weather conditions. Materials can be customized for climate need, and epoxy coating and galvanizing is available.

Methods
Comply with the manufacturer's M Series Installation Manual.

Building Codes
Ensure installation complies with the requirements of all applicable local, state and federal code jurisdictions.