

PFOW SERIES 21 Industries, Inc. HYDRAULIC VERTICAL LIFTS



SERIES 21 LIFT PROVIDES EFFICIENT, SAFE VERTICAL HANDLING FOR LOADS UP TO 8,000 LBS.

- Adaptable for mezzanines, throughfloor, inside or outside applications.
- Customized to meet your exact needs.
- Quality construction with 6" wide flange columns, oversized bearings and heavy roller chain ensures strength, durability and long-lasting performance.
- Carriage is lifted and lowered by two hydraulic cylinders mounted on the guide columns.
- Lifts loads up to 8,000 lbs. Carriage sizes to 10' \times 10'. Vertical rise heights to 22'. Available in straddle or cantilever styles.
- Torsion bar links the two hydraulic cylinders to equalize the load and ensure the carriage remains level at all times.
- Optional quick-connect cabling for push-button stations and gate interlocks is available to significantly reduce field-wiring costs. (Check local codes for conformity.)
- Patented DeckLock Safety System is an available option in order to provide additional security at the upper levels.
- Built-in, advanced safety features protect workers and materials. Access gates at each level are interlocked with lift operation.
- Velocity fuses prevent uncontrolled carriage descent in case of hydraulic hose rupture.
- Meets ANSI/ASME B20.1 code.

SERIES 21

DIMENSIONS & DATA

STRADDLE CARRIAGE CANTILEVER CARRIAGE PIT WIDTH S + 24* DEFECTIVE CARRIAGE WINDHUM FLOOR/SHAFT OPENING WIDTH S + 24* DEFECTIVE CARRIAGE LENGTH MINIMUM FLOOR/SHAFT OPENING LENGTH A + 25* PIT LENGTH PIT LENGTH A + 26* PIT LENGTH A + 26* PIT LENGTH PIT

- A. Effective Carriage Length
- B. Effective Carriage Width
- D. Carriage Thickness
- **E.** Effective Carriage Height
- F. Vertical Rise

PIT LENGTH

- A. Effective Carriage Length
- B. Effective Carriage Width
- D. Carriage Thickness
- E. Upright Height or Load Height
- F. Vertical Rise

■ EFFECTIVE CARRIAGE → LENGTH

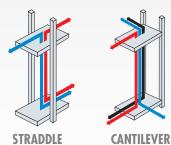
PIT LENGTH

Note: The dimensions shown are illustrative. Request a job-specific drawing before making any building modifications.

SERIES 21 HYDRAULIC LIFT LOADING/UNLOADING PATTERNS:



Note: All Patterns Are Reversible.



SPECIFICATIONS

GENERAL

Pflow Series 21 Vertical Lifts move materials between two levels. Principal components are guide columns, carriage and hydraulic actuating mechanism.

APPLICATION DATA

Pflow Series 21 Vertical Lifts are available with: Lifting capacities to 8,000 lbs.; carriage sizes to 10' x 10'; vertical rise to 22'. Standard travel speed is 24 fpm. Speeds to 35 fpm are available on special order.

STRUCTURE

Guide columns are 6" wide flange. Carriage is fabricated of 4" or 6" structural members with steel deck plate. Other deck surfaces can be supplied. Carriage is available in straddle or cantilever styles.

OPERATION

Carriage is lifted and lowered by two hydraulic cylinders mounted on guide columns. Cylinders are actuated by a remote mounted hydraulic pump. Transmission of the lifting force is through roller chain attached to the cylinders and carriage. A torsion bar links the two cylinders to equalize the load and ensure carriage remains level at all times.

ELECTRICAL

Standard power requirements are 208V/23OV/46OV, 3-phase. Single-phase is an available option. Control voltage is 24V. Control stations and remote mounted control panel are NEMA 12. Control stations, provided for each level, include self-maintaining push buttons with mushroom-head E-Stop button. Quick connect pre-wiring is available as an option.

SAFETY FEATURES

Overtravel is prevented by positive mechanical stops. Safety cams prevent uncontrolled descent in case both chains break. Velocity fuses prevent uncontrolled descent in case of hydraulic hose rupture. NO RIDER signs are posted at each point of operation. Optional DeckLocks automatically lock carriage at the upper level to eliminate drift or bounce. Carriage will not move if loaded to more than 120% of rated capacity.

CARRIAGE SIDE GUARDS

Carriage is equipped with safety rails on non-operating sides and safety chains or diagonal drop bars on operating ends. Optional expanded metal or sheet metal carriage side guards are available.

SAFETY ENCLOSURES

Safety codes (ANSI/ASME B2O.I) require gates and enclosures on all sides of the lift. Enclosures must be a minimum of 8' high and reject a ball 2" in diameter. Pflow manufactures gates and enclosures with I/2" expanded metal in a structural angle frame. Gates are accessible during loading/unloading and are electrically and mechanically interlocked with carriage movement. Interlocks prevent gates from being opened unless the carriage is at the designated level and also prevent carriage movement if any gates are not fully closed and locked.

