

NIAGARA BELCO

North America's Lift & Door Solution

Product Specifications

General

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| Capacity: | 1000 lb standard (1400 lb available) |
| Speed: | 30 fpm (50fpm maximum) |
| Pump: | Vane type hydraulic pump design |
| Control: | Non-proprietary control system |
| Stops: | 2-5 levels served |
| Power: | 115 -220V/1ph or 208 -600V/3ph pump unit power supply 115V/1ph car lighting power supply |
| Operation: | Constant pressure floor selective operation |
| Travel: | 7m maximum (longer travel available subject to local code requirements) |
| Platform: | 38" x 60" nominal based on standard designs 1-4 (custom platform configurations and sizes available) |
| Entrances: | 36" x 80" nominal entrance dimensions (custom designs and sizes readily available) |
| Cab: | Full platform enclosure with removable ceiling |
| Pit Depth: | 12" (305mm) standard; 10" (254mm) min. |
| Overhead: | 100" (2540mm) standard; 96" (2440mm) min. |

System Control

*The Hamilton Vertical 'C' type lift comes supplied with a CSA certified, fully code compliant **non-proprietary** control system featuring:*

- Relay logic fully field serviceable design
- Switch and cam hoistway signaling devices
- Fully code compliant for all jurisdictions in North America
- Automatic two way leveling
- Integral self monitoring emergency power device
- Enclosure is supplied as an independent fixture for remote installation as specified by building design requirements.
- Complete with all wiring design documents including component list for service reference
- Custom designed for each new or retrofit application including all options required as per building design specifications

Options

- 2-5 landings served
- Auto door operation
- Automatic car light
- Controller enclosure lock (for machine room-less applications)

Landing Entrances - Doors

Each door/frame entrance unit is supplied fully assembled, pre-adjusted and installation ready. All assemblies are 1 1/2 hr fire rated and fully certified as code compliant for all applications in all jurisdictions throughout North America. Standard features and hardware included in the door/frame assembly as follows:

- 2 speed adjustable hydraulic door closer
- (3) 4 1/2" x 4" heavy duty ball bearing hinges and plates
- Minimum 16 gauge zinc wipe (galvaneal) frame construction; paint ready
- Minimum 18 gauge zinc wipe (galvaneal) door construction; paint ready
- Georgian wired glass vision panel 3" x 23" (76mm x 584mm) flush mounted on the lift side and located no more than 35" (890mm) from the bottom of the door
- CSA/UL listed GAL certified interlock; concealed installation in frame assembly
- Standard 36" x 80" (914mm x 2032mm) entrance certified to **1-1/2 hour fire rating**
- 8", 20 gauge aluminum **rivet mounted** kick plate at base of door
- 4", 20 gauge aluminum **rivet mounted** finger guard at top of door
- 2" x 6", 10 gauge (1/8th") checker plate steel welded landing sill
Predrilled for fasteners (supplied)
- Latch-set (**required by code for fire rating**) c/w with NBL Flushcup lever handle
- Mortar guards included at various locations around frame to protect components from damage during hoistway construction
- Welded steel frame reinforcements in frame perimeter
- Key operated hall operating assembly complete with mushroom type pushbutton and 'in use' indicator

Options

- Concealed door closer
- Power door operator
- Oversize door assembly up to 48" x 96" (fire rated)
- Custom assembly finishes featuring
 - Stainless steel – satin or polished
- Custom vision panel designs (subject to local code requirements)
- Weather seal kit for exterior doors including styrene insulated doors

Hydraulic Drive Unit

High efficiency, continuous duty rated hydraulic drive unit is supplied fully assembled and pre-wired for ease of installation.

Features

- Hydraulic pump unit featuring an industrial rated 2HP motor (208/460/575VAC-3 Phase or 110/220VAC-1 Phase)
- Blain KV-1 valve featuring
 - Bypass control for smooth start up
 - Down speed control
 - Manual lowering valve for emergency lowering
 - Pressure relief valve to prevent overloading complete with means for affixing seal by inspection authority as required by code
 - Integral check valve capable of supporting the car with 125% of rated load
- Vane type pump for ultra quiet operation
- Ball type gate valve
- High capacity tank for extended fluid life featuring
 - Fluid level sight gauge
 - Low oil level switch to prevent operation when there is insufficient fluid in the reservoir
 - Fluid filter

Options

- Pump unit steel enclosure cabinet
- 3 -5 HP motor
- Two speed EV-100 valve

Jack Assembly

A high pressure steel pipe cylinder, true machined packing head and a polished micro finish steel piston fitted with a welded steel stop ring designed to positively prevent the piston from leaving the cylinder.

Features

- 2 3/4" Cylinder complete with 'v' packing and oil recovery system
- High pressure flexible hydraulic supply line rated and tagged as per code requirements
- An adjustable flow control valve is supplied complete with means for affixing a seal to prevent unauthorized adjustment

The 1:2 roped type design incorporates a rail guided sheave assembly affixed to the top of the piston featuring;

- 3/8" plate steel construction
- Polished 'U' groove sheave complete with sealed precision bearings
- Two 3/8" aircraft grade suspension cables utilizing wedge type shackles

Hoistway Equipment

- 8lb guide rails
- Welded steel guide rail brackets c/w mounting hardware
- Mechanical rail mounted stops < 2" above uppermost landing
- Maintenance block capable of sustaining the car with 125% of rated load
- Pit stop switch

Car sling and platform construction

- Sling provided as welded modular design featuring:
 - formed 1/4" steel channel construction
 - Type 'A' instantaneous safety device
 - Upper and lower metal guide shoes w/nylon inserts (dual upper guide shoes provided on 1400lb capacity models)
- Platform provided as welded assembly featuring:
 - 1.50" X 1.50" steel tube and angle iron sub-frame construction
 - .125" plate steel sub-floor
 - 6" steel platform apron (toe guard)

Car Enclosure

The platform is supplied with a full enclosure on all non-entrance sides to a minimum height 80" (2032mm) and comes standard with 'egg crate' type removable ceiling panels. All cabs all fully assembled during production.

Features

- Welded tube steel sub-frame utilizing an all bolted cab assembly system
- 1/2" (13mm) melamine panels
- Stainless steel trim throughout enclosure
- Stainless steel kick-plates at base of all wall panels
- Formed stainless steel entrance trim
- Stainless steel handrail
- Heavy duty non-skid rubber flooring
- Overhead lighting including automatically activated emergency lighting

In-car Operating Devices

The in-car operating control panel is designed and conveniently located for ease of operation whether standing or sitting. The factory pre-wired panel consists of floor designated pushbuttons, key switch, light switch and an emergency stop/alarm button as specified by code requirements. The buttons are 'mushroom head' type and suitably marked as to their function. The key switch is an on-off type and the key is removable only in the OFF position. The buttons are mounted on a 1/8", 10 gauge (3mm) stainless steel plate. The in-car operation is designed to give preference to the passenger in the lift; however, the control is designed so as to enable the lift to continue to operate should the in-car key be inadvertently left in the switch in the 'on' position.

Options

- Key pad operation
- Low profile pushbuttons
- Flush-mount pushbuttons
- Brass car station

Landing Operating Devices

The hall or landing operating control devices are pre-assembled and designed to mount directly into the door frame as supplied or mounted remotely. Each control device is mounted on a stainless steel plate and includes a 'mushroom head' push button, key switch (key removable only in the 'off' position) and an in use indicator light.

Options

- Key pad operation
- Low profile pushbuttons
- Flush-mount pushbuttons
- Brass hall station

Signage

All code related signage is provided including operating instructions, emergency operating instructions, caution signs and equipment specification information.