

400HP Series - Standard Rolling Steel Door

Part 1 - GENERAL

1.01 DESCRIPTION

- A. **Type:** High Performance Rolling Steel Doors to be manufactured by Janus.
- B. **Operation:** High Performance Direct (SecureDrive™) Electric motor operation-chain hoist manual override.
- C. **Mounting:** To be face mounted on a prepared opening.

1.02 RELATED WORK

1.03 WARRANTY

A. Standard Warranty:

1. Janus warrants the 400HP Series High Performance Rolling Steel Door System for two years or 400,000 cycles, whichever comes first, from the purchase date (the Warranty Period), to be free of defects in materials and workmanship. Should any product be defective due to defect in material or workmanship within the Warranty Period, Janus, upon notification, shall correct this problem by option of repairing or replacing such defective products. For complete details of our warranty visit our website at <https://www.janusintl.com/>.
 - a. Standard Cycle rating: 400,000 cycles or two years
 - b. Upgrade Cycle rating: 600,000 cycles or three years.
2. This Limited Warranty gives you specific legal rights and you may also have other rights, which vary from state to state.
3. To obtain Warranty service, you must provide written notice of any alleged defect in material or faulty workmanship within the Warranty Period. Such notices shall be delivered via certified or registered mail, return receipt requested, and addressed to Janus at the following address:
 - a. Company: Janus International
 - b. Attention: Customer Service.
 - c. Address: 135 Janus International Blvd. Temple, GA 30179

- B. Opening preparation, access panels, finish or field painting are in the scope of the work of other sections or trades.

Part 2 - PRODUCT

2.01 CURTAIN

- A. **Slats:** Galvanized steel cold roll formed in continuous lengths. Galvanized according to A.S.T.M. A653-G90 and finished with baked epoxy primer and/or baked polyester topcoat (finish colors listed below). Flat slat 2-5/8" x 5/8".
 1. Model 422HP-22 gauge in flat slat up to 14'-0" wide x 20'-0" high
- B. **Endlocks:** Each end of alternate slats to be fitted with nylon endlocks to maintain slat alignment.
- C. **Bottom Bar:** Curtain to be reinforced with a bottom bar consisting of two steel angles bolted back-to-back with bottom astragal, powder coated black.

2.02 BARREL ASSEMBLY

- A. **Barrel:** To be a steel pipe of diameter and wall thickness to restrict maximum deflection to .03" per foot (2.5 mm/m) of door width.
- B. **Springless Barrel:** System designed to safely operate without the use of a spring counterbalance assembly. High Performance door systems with the use of spring counterbalance assemblies not available.

2.03 BRACKET PLATES

A. Bracket Plates:

1. To be ¼" minimum thickness steel plate
2. To include self-aligning sealed ball bearings
3. To include welded steel provisions for hood mount

2.04 OPERATION

A. High Performance Direct (SecureDrive™) Motor - manual chain hoist override

1. SecureDrive™ motor operator and controls designed for continuous duty cycle. Voltage and phase: 115/230v 1ph, 208/230v 1ph, 230/460v 3ph, 50/60 Hz standard. Other voltages available upon request. Sprocket and roller chain not applicable.
2. SecureDrive™ motor operator to include:
 - a. Motor brake standard. Dynamic braking optional thru timed energized solenoid actuation
 - b. Emergency chain hoist operation with integrated electronic interlock
 - c. Inherent overload protection
3. Performance level recommended by manufacturer.
 - a. High Performance application door travel speed not to exceed 24"/sec in the open direction and 12"/second in the closing direction.
 - b. SecureDrive™ motor operator designed to exceed 400,000+ cycles of operation standard. 600,000+ cycles of operation upgrade available.
4. Controller standard with Variable Frequency Drive (VFD) for soft-start/soft-stop with optimal inverter. Controller without VFD not accepted.
5. NEMA 4X Wall mounted interface control panel. Plug in play programmable logic board connections for:
 - a. Operator Assembly
 - b. Encoder and brake assembly
 - c. Entrapment Protection
 - d. All Ancillary connections
6. LED display standard readout:
 - a. Start Up Menu
 - b. Electronic limit quick set up (Non-Mechanical)
 - c. Diagnostics (communication)
 - d. Door Positioning
 - e. Error Codes
 - f. Non-Resettable Cycle Counter-continuous display
7. Normally Closed (NC)/Normally Open (NO) dry contact inputs and outputs (programmable)
8. Overload and current protection protected by Class II Control Circuits

B. Entrapment Protection:

1. Janus to provide the following devices for entrapment protection.
2. UL325 R5 compliant, NEMA rated photo eye sensors consisting of a transmitter and receiver that are to be mounted within 6" (152.4 mm) from the floor, projecting an IR beam across the entire width of the opening. Disruption of IR beam while door is in closing operation will stop downward travel and reverse in the opening direction until it reaches the pre-set open position.
3. UL325 R5 compliant, 3ft. or 6ft. NEMA rated light curtain consisting of transmission and receiving units that are to be mounted within 6" (152.4 mm) from the floor, projecting multiple IR beams across the entire width of the opening. Disruption of beams while door is in closing operation will stop downward travel and reverse in the opening direction until it reaches the pre-set open position.

C. Control and Drive Systems Options

1. High Performance SecureDrive™ is compatible with NC and NO dry contacts from the devices listed but not limited to:
 - a. Loop Detectors
 - b. RFID Readers
 - c. Motion sensors
 - d. Sensing devices
 - e. Annunciators
 - f. Interlocking systems

D. LED R/G Traffic Light Kit

1. Janus to provide a 3ft. IP68 LED Traffic Light Kit for mounting per application requirements.
 - a. LED Traffic Light Kit to wire directly into SecureDrive™ inputs or optional external power supply
 - b. Standard functionality: Solid red when door is in the closed position and during door operation (Optional Red flashing functionality available when door is in motion). Solid Green when door is in pre-set fully open position.

2.05 GUIDE ASSEMBLY

- A. Wall Angles:** to be 3/16" (4.76mm) minimum thickness structural steel angles.
- B. Guides:** to be structural steel angles 3/16" (4.76mm) minimum thickness with removable headstops.
- C. Guide Depth:** to provide slat penetration adequate to maximize performance.
- D. Weather Seal:** optional non-coil side to be vinyl weather seal.

2.06 HOODS

- A. Hoods:** to be 24-gauge steel
 1. Galvanized steel with baked on epoxy primer and polyester finish coat
- B. Reinforcing:** to be 1/4" (6.35mm) thick steel brackets for doors over 13'4" (4877mm) wide.

2.07 LOCKING

- A. Hand Chain Lock:** lockable bracket, mounted on guide angle or wall, suitable for padlocking (padlock by others). **2.08 FINISH**
- B. Ungalvanized Surfaces:** to be powder coated black prime paint.
- C. Curtain:**
 - 1. Satin White Topcoat
 - 2. Gray Topcoat
 - 3. Tan Topcoat
 - 4. Galvanized in 22 gauge only
 - 5. Stainless Steel #4 Finish
 - 6. Powder Coat Optional Ral. # _____

Part 3 - EXECUTION

3.01 INSTALLATION

- A. Installation:** to be by an authorized representative according to Janus standards and instructions.