

High Pressure (HP) Airlock

Ideal for applications requiring a valve suited for operating in the range of 30-50 psi

- HP08 and HP16 models are designed with a 316 stainless steel cast housing and the HP650 and HP850 models in aluminum or stainless steel
- The HP features continuous product contact area welds that are free of cracks and crevices

Application

The HP Airlock is ideal for applications requiring a valve suited for operating in the range of 30-50 psi. HP Airlocks include a range of model types that are suited for hygienic applications in food processing to the ruggedness of conveying materials in the petrochemical industry.

Standard HP Airlock Specifications

- Cast 316SS (CF8M) housing and endplates (solution annealed per ASTM A743)
- Tapered 316 stainless steel cast housing with ceramic bore (HP08 and HP16 only)
- Rotor clearance is adjustable by sliding tapered rotor into the tapered housing (HP08 and HP16 only)
- Fabricated 17-4 PH SS (H1150) rotor:
 - 10 vane (HP08, 10 and 12);
 12 vane (HP14, 16, 650 and 850)
 - Closed end only
 - Plain blade and shroud tips
 - Tungsten carbide coating on shroud seal areas and shaft seal areas
 - 2° taper with threaded shaft ends for adjustable clearance
 - Clearance factory set @ .0035"-.005" (.09 .13 mm)



- Filled PTFE shroud slide ring (food grade, 340°F, [171°C])
- High strength silicone inflatable shroud seal (food grade, 350°F [177°C])
- Filled PTFE shaft seal (food grade, 400°F [204°C])
- Inboard, zero-clearance, tapered roller bearing (200°F [93°C])
- Inflatable shroud seal connection assembly with pressure regulator
- Pressure transducer assembly with pressure gauge
- Gasket assembly (food grade, 400°F [204°C])
- Fabricated carbon steel tail shaft guard
- 230/460/3PH/60Hz SEW Eurodrive parallel shaft integral gear motor (TEFC)
- Mechanical drive clutch
- Carbon steel hinged drive mount assembly
- Carbon steel drive guard
- Cast 356-T6 aluminum housing vent with flanged stub adaptor
- Fabricated 304SS flanged inlet hopper
- Fabricated 304SS mounting skid
- Fabricated 304SS line injector designed for 90 psi
- SS ID tag and logo assembly
- Standard airlock designed for convey pressures up to 50 psi



Specifically designed for the petrochemical industry, HP650 and HP850 valves can handle high rate, high pressure conveying applications such as pellet take-away systems at the discharge of extruders. Handles up to 220,000 lbs. per hour of product. System components are rated at 250°F (121°C) or higher.

HP650/850 Specifications

- Designed for extreme high rate and pressure.
- HP650 offers 6.5 CFR 150,000 lbs.
 (68,039 kg) per hour of product.
- HP850 offers 8.5 CFR 220,000 lbs. (99,790 kg) per hour of product.
- Large capacity cast valve with flanged round inlet and outlet ports.
- Rotors are 12-vane closed end design manufactured from stainless steel.
- Closed end rotors only.
- Units have inboard bearings with spherical roller bearings, and food grade shroud and shaft seals.
- The standard drive package is a chain drive with parallel shaft reducer and c-face motor. Inlet is designed with a v-plow to help reduce product shearing.
- Components (bearings, seals, etc.) are all rated at 250°F (121°C) or higher. The valves are also available in an optional high temperature version.
- Designed for 3.5 bar (52 PSIG) design pressures.
- Available in either aluminum or stainless steel construction.

Schenck Process

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Airlock Rebuild Program

When your airlock has been subject to heavy service use and is not running up to peak performance, Schenck Process technicians can evaluate the equipment and determine the cost to repair it. Many times the cost of repair is up to 50% less than purchasing a new airlock. All Schenck Process airlock rebuilds are to original factory specification and come with a one year warranty.