

Global Hygienic Airlock (GHA)

- Oversized rotor shaft creates a naturally radiused rotor pocket for more complete product release
- Differential pressure up to 1.5 barg is possible without manipulating standard design or clearances
- Available design for NFPA 69 blocking valve requirements
- FDA and EC 1935/2004 approved materials of construction in product contact areas
- Integral rail system for endplate and rotor



Application

The GHA is a dismountable airlock that is ideal for applications where dry raw or finished products are being handled in the process and where inspection or system clean-out are required. Because the GHA is designed for high process rates it possesses a number of features suited for processes that have a higher sanitary requirement.

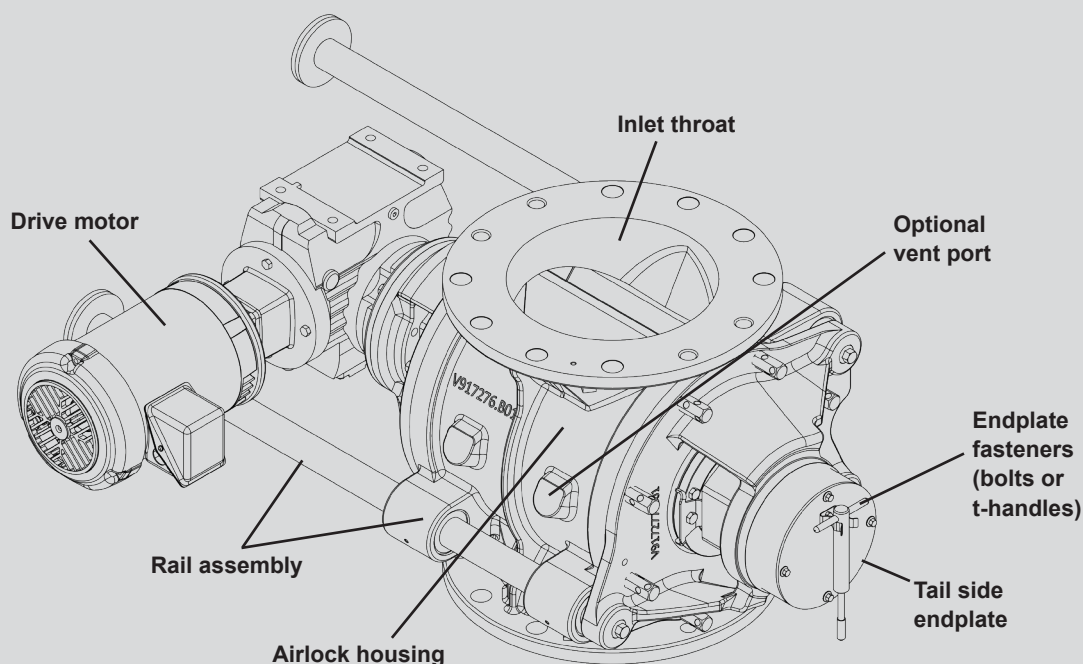
Equipment

The GHA is a dismountable round inlet, round outlet rotary valve, which incorporates seals and product contact surfaces that meet food safety requirements. Endplates and rotor can be disassembled and removed from the valve housing for cleaning. The endplates have specifically been designed for access to the seal area for cleaning or seal replacement. Rotor removal and reassembly is completed with a few simple steps in minutes.

The GHA is designed with a rail system consisting of externally mounted precision shafts, which are fixed to the tail side endplate on one end and are supported by special composite linear bearings pressed into the valve housing on the other. The endplate/rotor assembly can be unbolted from the housing and the assembly can be pulled from the housing and drive coupling while still remaining rigid to the housing via the rail system. These features simplify removal and provide access to the internal valve cavity, rotor pockets and all other product contact areas for quick and easy cleaning. Once the cleaning process is complete, the endplate/rotor assembly simply slides back into place through use of the rail system and is secured with the supplied fasteners.

USDA Acceptance

The GHA has been reviewed and accepted by the Dairy Grading Branch, USDA for use in dairy plants surveyed and approved for USDA grading services.



Features and benefits

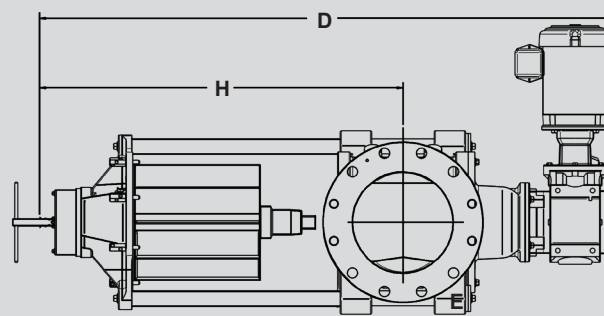
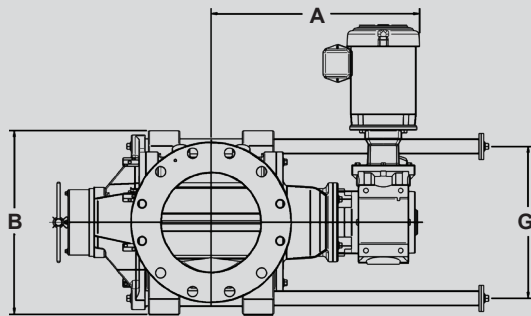
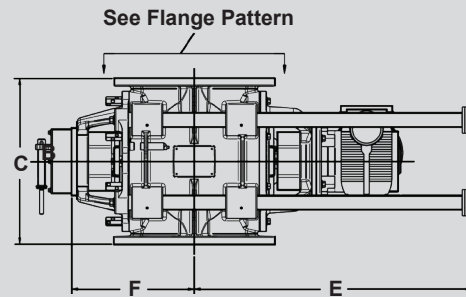
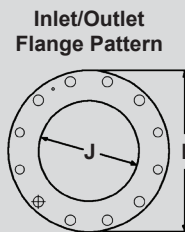
- Easy access to seals with rotor removed from the endplate
- All stainless steel construction (outer endplate bearings are an exception)
- Housing and endplates designed for 10 Bar explosion shock resistance (requires additional testing prior to shipment)
- Inner endplate bearings can be replaced without full disassembly of the endplate from the valve
- The valve's ability to resist deflection in the rotor during operation makes it suited for applications where convey pressure or vacuum could vary
- Close clearance design reduces overall leakage through the valve and minimizes pneumatic system losses

Options

- 1/16" fixed relieved tip rotor blades
- Closed end rotor
- Air filtration system that meets the requirements of 3-A standard 604 accepted practices for supplying air
 - Air filtration to 99.9999%
 - Flow metering for proper rate
 - Filters to aid in visual indication of a containment
- Sanitary ferrule fittings for housing venting
- NEMA and IEC motors provided by US or ABB respectively
- 32 Ra minimum finish on all product contact and sealing surfaces
- Round ANSI flange style blow through adapter
- Rotor Assist Device (RAD), two-hand controlled pneumatic system including filter/regulator
 - Available for GHA16-D, GHA14-D, and GHA12-D demountable models
 - Fabricated from 304 SS
 - Square ACME threads
- Table style airlock support skid with integrated blow through adapter with ANSI flange (welded to table)
- Safety switch for use on GHA configurations to indicate when tail endplate has been disengaged
- Speed sensor in tail end cover

Dimensions (inches)

Standard GHA Model with Drive and Rails – Global Hygienic Airlock (ANSI Flange)



Model	Dimensions (inches)										Weight (lbs.)	Motor (HP)
	A	B	C	D	E	F	G	H	I	J		
GHA06	17.31	12.69	12	51.25	25.94	9.75	6.25	33.94	11.13	6	478	0.75
GHA08	18.75	15.06	13.88	52.06	25.38	10.19	7.88	33.31	13.5	8	608	0.75
GHA10	20.75	18.25	16.5	57.13	27.69	12.19	15.13	36.31	16	10	825	1
GHA12	23	24	21.5	63	31.38	13.31	19.94	40	19	12	1,141	2
GHA14	27.56	25.5	26.75	73.81	36.88	15.69	14.75	46.13	21	14	1,988	3
GHA16	28.19	29.75	29.13	77.13	39.75	16.31	17.5	48.81	23.5	16	2,549	5

Standard specifications

1. Airlock Specifications:

- Cast 316 SS housing and endplates
- Seal purge shaft and FDA compliant O-ring and bushing

2. Rotor Specifications:

- Fabricated from 304 SS
- Straight blade
- Open end construction

3. Rail specifications:

- Plain linear bearings
- Marvalloy coated rails

4. Reducer Specifications:

- Manufacturer: Eurodrive

- Special shaft alloy surface for increased longevity on seal and bushing
- Fixed relieved 1/8" or 1/16" land
- Counter clockwise rotation (drive end)

- Style: Helical worm gear, with right angle c-face adapter

5. Motor Specifications:

- NEMA or IEC motor design

6. Accessories:

- Zero speed sensor
- Air purge kit
- Blow through (outlet)
- Valve interference detection (VID)

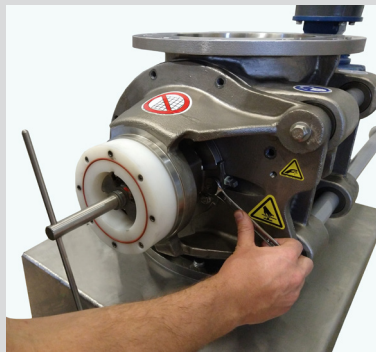
7. Weights in table:

- Calculated with open end rotor

Easy disassembly of the Global Hygienic Airlock (GHA)



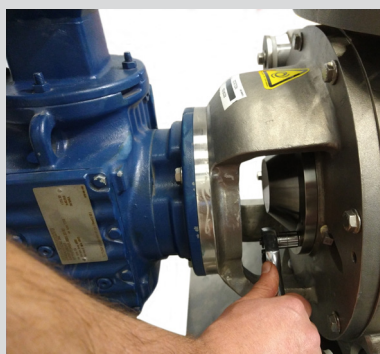
1. Remove endplate fasteners.



2. Remove shaft guards, outer cover and pull rotor to endplate with rotor removal tool.



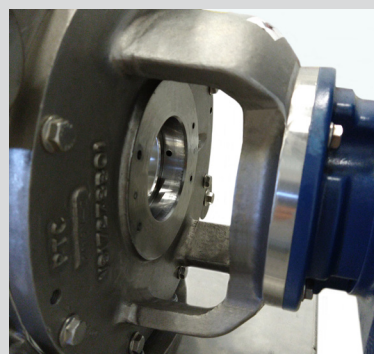
3. Slide out endplate and rotor.



4. Loosen the bolts around the bushing and seal assembly.



5. After bolts are loosened remove bushing.



6. When bushing is removed unit is disassembled.