

Global Hygienic Blow-Through Airlock (GHB)

- 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 Global Hygienic Blow-Through Airlock (GHB) 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 GHB is designed for high process rates it possesses a number of features suited for processes that have a higher sanitary requirement.

Equipment

The GHB is a dismountable round inlet, blow through, convey line 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 GHB 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 linear bearings contained within 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 GHB 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

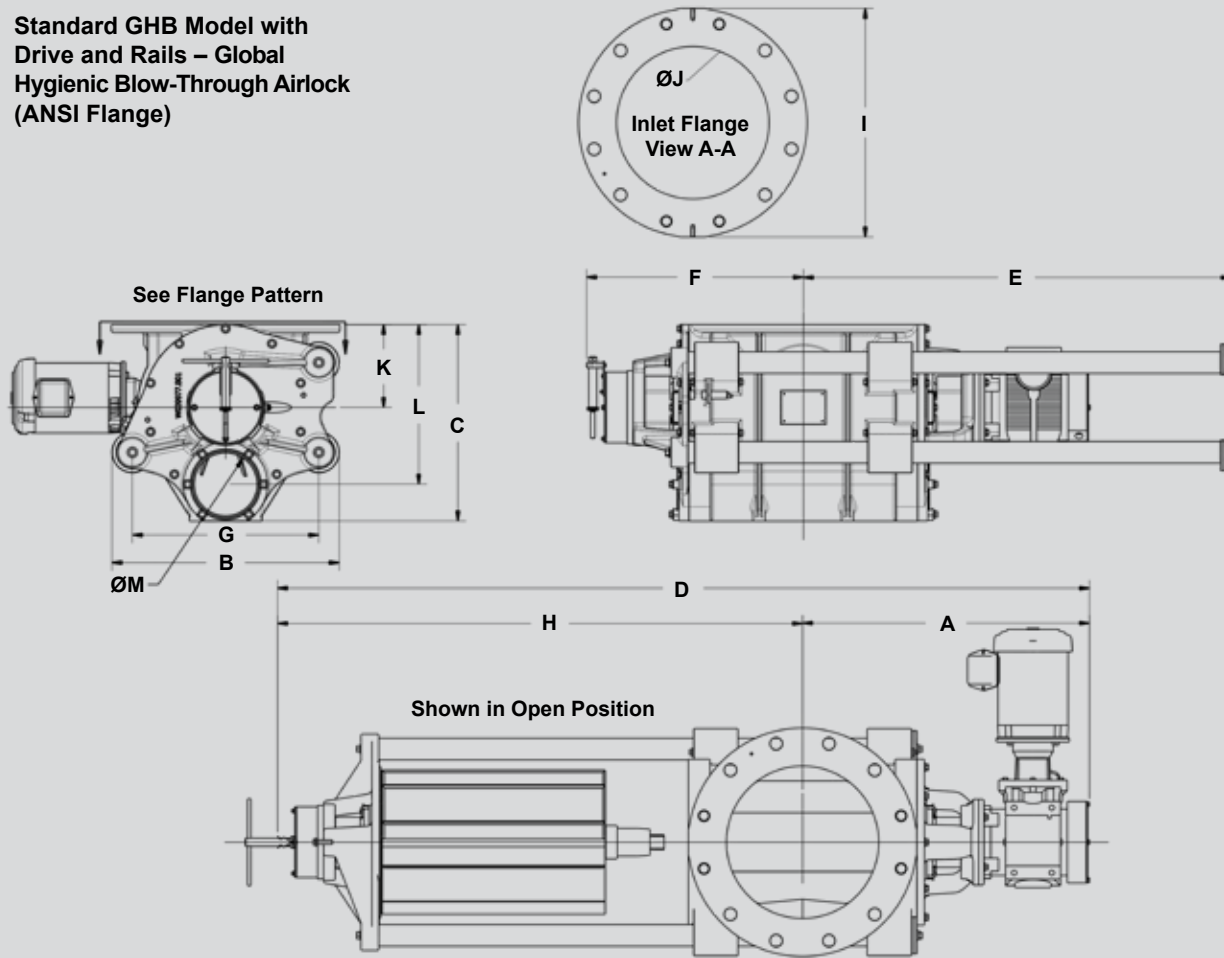
- Rugged construction with rotor design providing adequate resistance to deformation at any pressure within the intended use
- Easy access to seals with rotor removed from the endplate
- All stainless steel construction (outer endplate bearings are an exception)
- Housing and endplates designed for 10 Bar explosion shock resistance (requires additional testing prior to shipment)
- 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
- Safety switch for use on GHB configurations to indicate when tail endplate has been disengaged

Options

- 1/16" fixed relieved tip rotor blades
- 3-stage compressed air filtration for all purge kits
 - Air filtration of 99.9999% efficiency
 - Flow metering
 - Final filter contains color indicator of element saturation
- Sanitary ferrule fittings for housing venting
- NEMA and IEC motors
- 32 Ra minimum finish on all product contact and sealing surfaces
- Speed sensor in tail end cover
- Seal air purge kit for each endplate

Dimensions (inches)

Standard GHB Model with Drive and Rails – Global Hygienic Blow-Through Airlock (ANSI Flange)



Model	Dimensions (inches)													Weight (lbs.)	Motor (HP)
	A	B	C	D	E	F	G	H	I	J	K	L	M		
GHB10	22.36	17.13	14.48	63.86	32.24	16.80	14.00	40.50	16.00	10.00	6.00	12.06	3.83	608	0.75
GHB12	25.36	19.13	16.45	70.99	36.68	18.92	16.00	45.63	19.00	12.00	7.00	13.56	4.79	782	0.75
GHB14	26.35	20.88	18.05	74.59	39.30	19.92	17.13	48.24	21.00	14.00	7.63	14.69	5.78	935	1.00

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

- Special shaft alloy surface for increased longevity on seal and bushing
- Fixed relieved

- 1/8" or 1/16" land

- Counter clockwise rotation (drive end)

3. Rail specifications:

- Plain linear bearings
- Marvalloy coated rails

4. Reducer Specifications:

- Manufacturer: Eurodrive

- 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 Blow-Through Airlock (GHB)



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. Endplate and rotor in fully open position.



5. Loosen the bolts around the bushing and seal assembly, then remove the bushing and seal assembly.



6. When bushing is removed unit is disassembled.