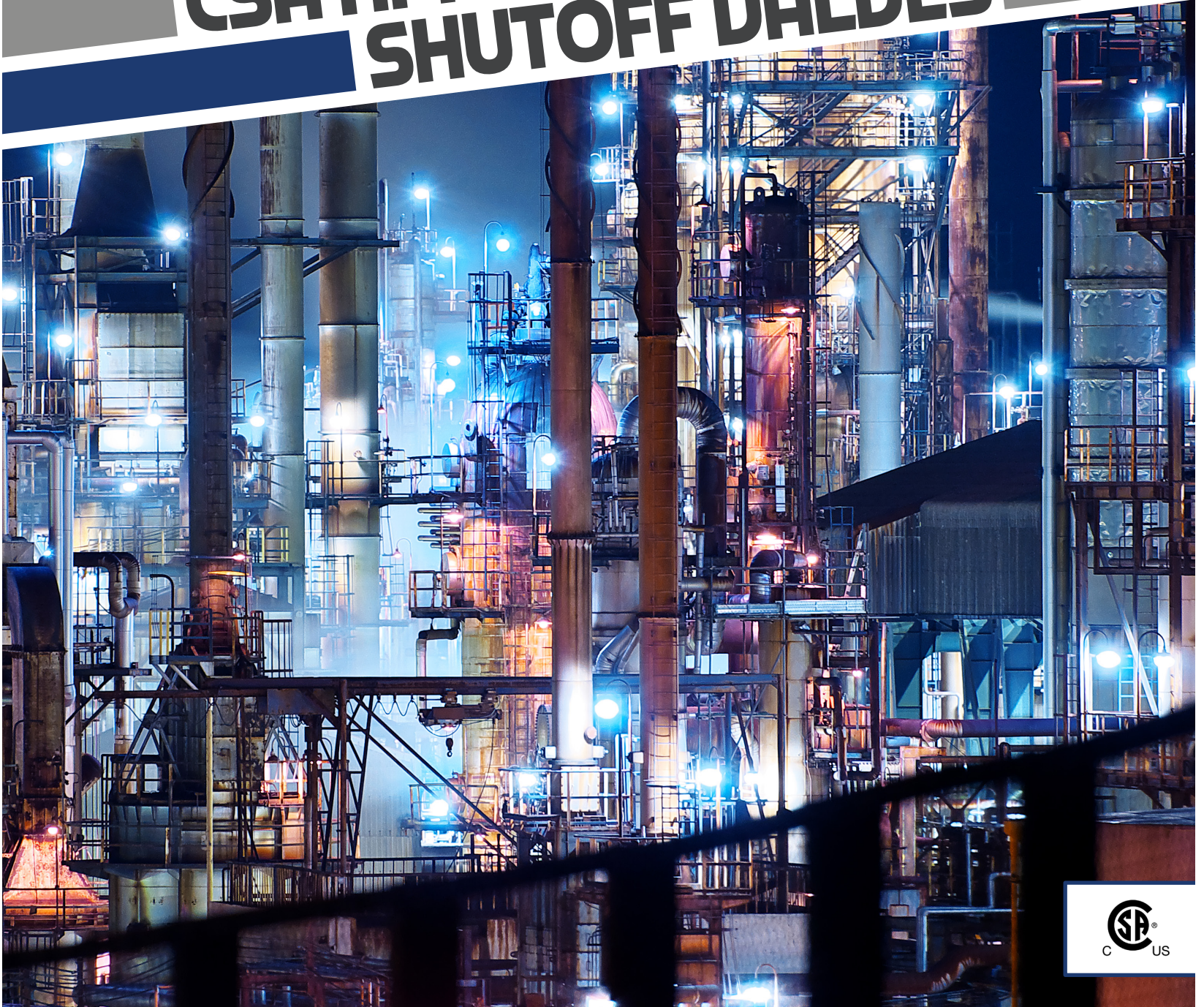




# CSA APPROVED SHUTOFF VALVES





**Partnered with Habonim and its superior Ball Valve design, Lakeside is proud to offer a complete line of solutions for CSA approved Natural Gas Shutoff applications.**

Lakeside has been providing automation solutions since 1988 and remains committed to continually enhancing its services and products with leading edge technology. Partnered with a select group of suppliers to provide best-in-class valves and automation products, Lakeside serves local industries with standardized and custom-made solutions, along with the capability to execute large scale projects.

As the industry becomes more complex with accessories and bus technologies, our team of highly trained and experienced Technical Sales specialists and technicians provide you with superior knowledge on products and applications. Lakeside's value-added services include design, assembly, staging, commissioning, bus configuration, and inventory management capabilities.

Habonim develops, designs, manufactures, tests, and supplies ball valves for the global market and is a leader in various segments of ball valve usage. With high-end products, uncompromised quality, serviceability, and innovation to create solutions for the most demanding applications, Habonim has gained a long track record of proven success. Habonim's ball valve product line supports extreme cold to extreme heat systems, industrial use up to very high pressures, and meets the specific needs and regulations of a wide range of industries.

Lakeside serves many different process industry segments in Ontario and Manitoba including chemical, oil and gas, pharmaceuticals, power, pulp and paper, gas distribution, food and beverage, and mining to name a few.



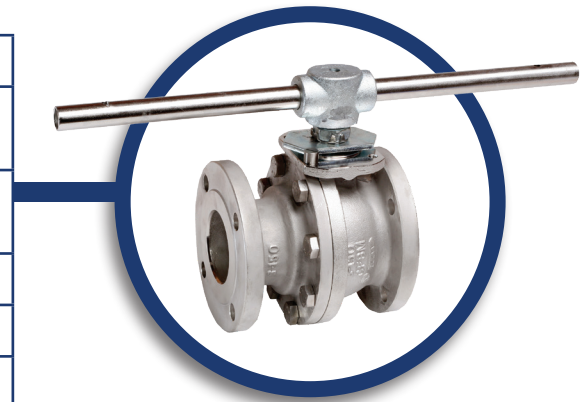
<b>ANSI Z21.21:19 • CSA 6.5:19</b>	Automatic Valves For Gas Appliances (Sixth Edition)
<b>CSA 3.16:21</b>	Lever Operated Non-Lubricated Gas Shut-Off Valves (Third Edition)
<b>ASME B16.33-2012 (R2017)</b>	Manually Operated Metallic gas Valves for Use in Gas Piping Systems Up to 175 psi (Sizes NPS ½ Through NPS 2)
<b>ASME B16.38-2012 (R2017)</b>	Large Metallic Valves for Gas Distribution, Manually Operated NPS 2 ½ to NPS 12, 125 psig Maximum

# ANSI CLASS 150 & 300 73/74 Series

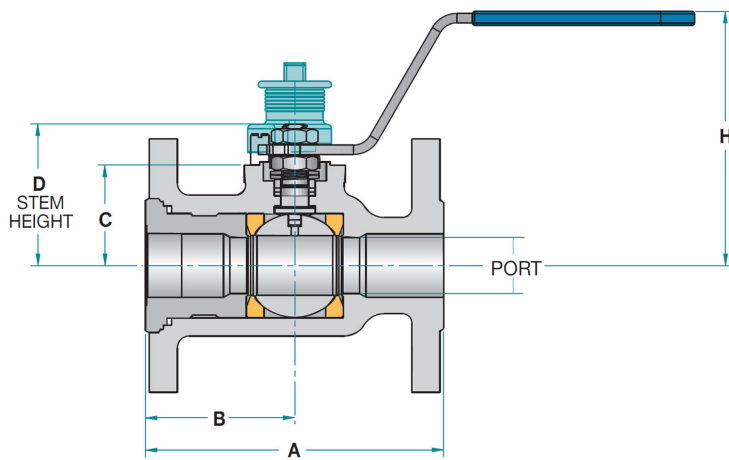
## ASME Full Port

The 73/74 Series are Habonim's line of Flanged Full Port Ball Valves in ANSI class 150 and ANSI class 300. Ideal for conditions which require minimal pressure drop, reducing risk of clogging with solids or slurries, Habonim's full bore valves offer tight shutoff, long service life and durability with exceptional performance in many service applications under the most severe working conditions.

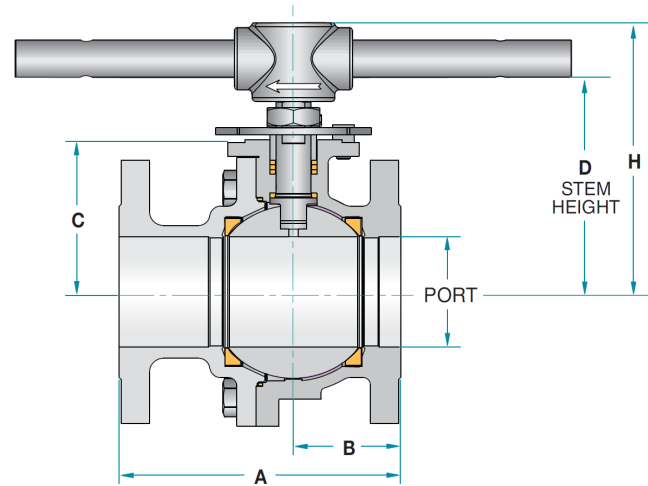
Size Range	1/2"-6" (DN15-DN150)
Flange connection	73 Series - ANSI class 150 74 Series - ANSI class 300
Industries	Chemical, Petrochemical, Oil and Gas production, Refining, Energy, Pulp & Paper and others
Service	Fuel Gases: Natural Gas, Propane etc.
Materials	Carbon Steel, Stainless Steel
Standards	ANSI/ASME B16.34, ASME 16.5 ASME B16.10 Short, API 607 Fire-Safe



Valve Dimensions 1/2"-1"



Valve Dimensions 1 1/2"-6"



Valve Size	Port Dia.	A		B	C	D	H	App Weight lb	
		150	300					150	300
1/2"	0.56	4.25	5.51	1.85	1.25	1.59	3.70	4.00	5.10
3/4"	0.81	4.61	5.98	2.24	1.50	2.19	4.08	4.80	7.30
1"	1.00	5.00	6.50	2.44	1.68	2.37	4.25	7.00	10.10

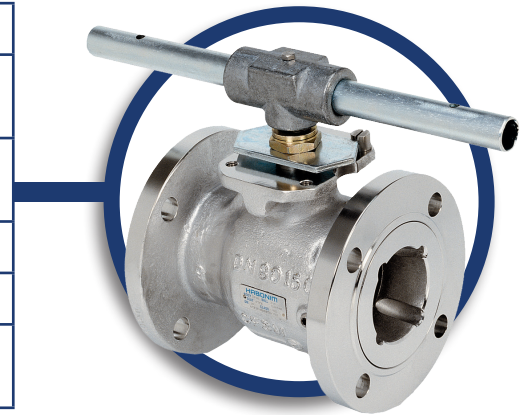
Valve Size	Port Dia.	A		B		C	D	H	App Weight lb	
		150	300	150	300				150	300
1 1/2"	1.50	6.50	7.50	3.82	4.33	1.90	30.60	4.88	14.50	21.50
2"	2.00	7.00	8.50	2.29	2.55	2.75	3.46	5.28	28.60	33.00
3"	3.20	7.99	11.12	3.05	3.80	4.25	6.09	7.67	48.50	62.20
4"	3.94	9.00	12.00	3.33	4.11	4.88	6.69	8.31	86.00	98.10
6"	5.91	15.51	15.89	6.44	6.87	7.05	9.78	12.13	180.80	220.50

# ANSI CLASS 150 & 300 31/32 Series

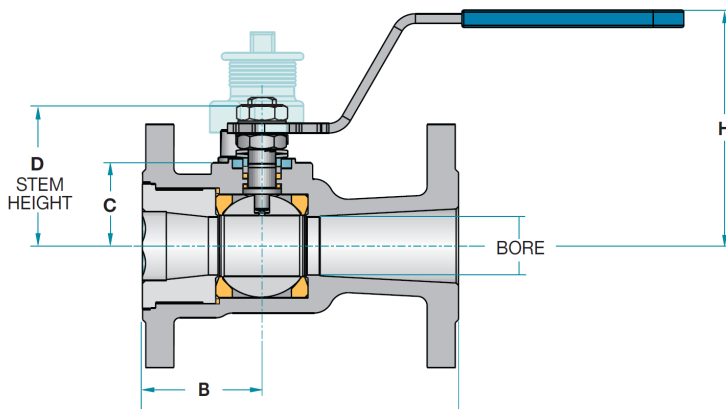
## ASME Reduced Port

The 31/32 Series are Habonim's line of one piece flanged reduced bore valves in ANSI class 150 and ANSI class 300. Habonim's flanged valves offer tight shutoff, long service life and high durability with exceptional performance in many service applications under the most sever working conditions.

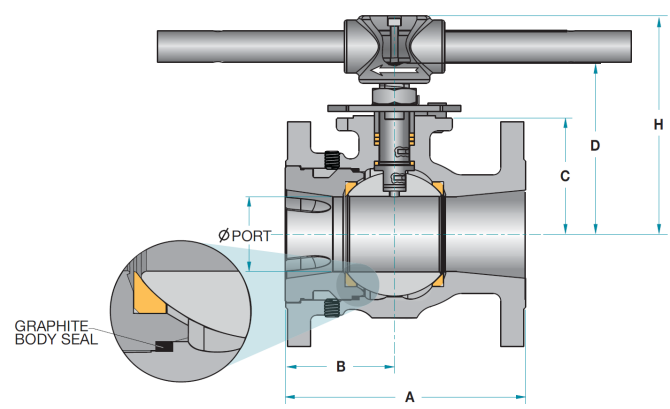
Size Range	1/2" - 8" (DN15 – DN200)
Flange connection	31 Series - ANSI class 150 32 Series - ANSI class 300
Industries	Chemical, Petrochemical, Oil and Gas production, Refining, Energy, Pulp & Paper and others
Service	Fuel Gases: Natural Gas, Propane etc.
Materials	Carbon Steel, Stainless Steel
Standards	ANSI/ASME B16.34, ASME B16.5 ASME B16.10 Short, API 607 Fire-Safe



### Valve Dimensions 1/2"-2"



### Valve Dimensions 3"-8"



Valve Size	Bore Dia.	A		B	C	D	H	App Weight lb	
		150	300					150	300
1/2"	0.44	4.25	11.10	1.81	1.14	1.50	3.62	3.80	5.30
3/4"	0.56	4.61	6.00	1.93	1.24	1.59	3.70	5.10	7.30
1"	0.81	5.00	6.50	2.25	1.50	2.19	4.07	7.30	10.20
1 1/2"	1.25	6.50	7.50	2.44	1.72	2.88	4.70	12.20	19.30
2"	1.50	7.00	8.5	2.67	1.90	3.06	4.88	18.00	24.00

Valve Size	Bore Dia.	A		B	C	D	H	App Weight lb	
		150	300					150	300
3"	2.50	8.00	11.18	3.62	3.88	5.72	7.28	40.00	50.40
4"	3.25	9.00	12.00	4.00	4.49	6.34	7.91	62.80	80.60
6"	4.38	10.50	15.88	4.25	6.20	8.91	11.25	91.00	153.00
8"	5.68	11.50	16.50	5.37	7.30	10.00	12.34	182.00	233.00

# 47 Series

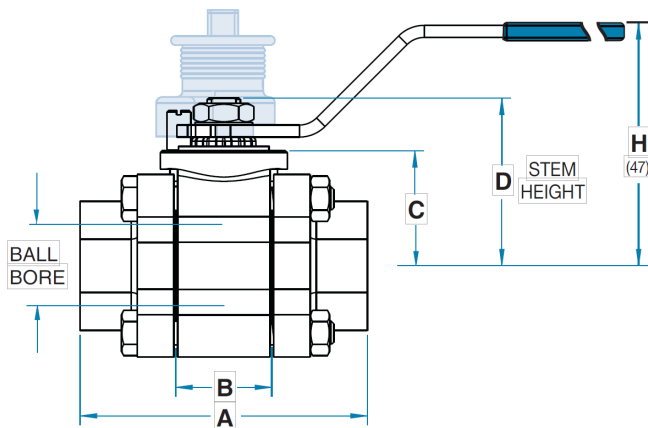
## ASME Reduced & Full Port

The 47 Series is the main line of HABONIM 3-piece ball valves for industrial applications. The valves are suitable for applications requiring high flow capacity and tight shutoff, where reliability, functionality and interchangeability are essential. HABONIM has various valve solutions and designs that give the end user the freedom of choice for the toughest requirements imposed by the industry and by international standards.

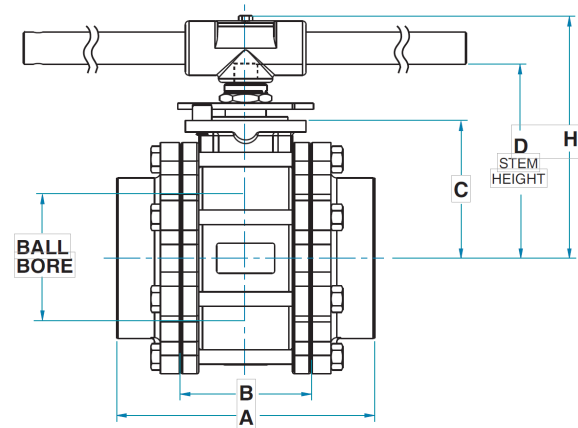
Size Range	1/4"-6" (DN6-DN150)
Industries	General Service, Chemical, Petrochemical, Oil and Gas, Refinery, Energy, Pharmaceutical, Food & Beverage, Cosmetics, Semiconductor
Service	Fuel Gases: Natural Gas, Propane etc.
Materials	Carbon Steel, Stainless Steel
Standards	ASME B1.20.1, API 607 Fire-Safe



Valve Dimensions 1/2"-2 1/2"



Valve Dimensions 3"-8"



RB	FB	Bore	A	B	C	D	H	Weight lb
1/2"	1/4", 3/8"	0.44	2.60	0.81	1.14	1.49	2.42	1.33 lb
3/4"	1/2"	0.56	2.78	0.97	1.24	1.59	2.52	1.77 lb
1"	3/4"	0.81	3.69	1.25	1.50	2.19	3.13	3.54 lb
1 1/4"	1"	1.00	4.25	1.62	1.68	2.37	3.31	5.53 lb
1 1/2"	1 1/4"	1.25	4.55	1.91	1.72	2.87	3.82	7.96 lb
2"	1 1/2"	1.50	5.04	2.22	1.90	3.06	4.01	9.95 lb
2 1/2"	2"	2	6.22	2.86	2.76	3.47	4.53	21.0 lb

RB	FB	Bore	A	B	C	D	H	Weight lb
3"	2 1/2"	2.50	6.65	3.28	3.87	5.71	7.29	30.30 lb
4"	3"	3.25	8.43	4.28	4.49	6.33	7.89	52.40 lb
-	4"	3.94	9.41	4.84	4.88	6.71	8.30	66.30 lb
6"	-	4.37	13.62	5.75	6.18	8.90	11.26	138.90 lb

# Compact 4-Piston Pneumatic Actuator

The Compact actuator is a quarter turn Rack & Pinion actuator. The superiority of the COMPACT II actuator over single and double rack & pinion actuator designs, results from the four pistons which generate torque around a centrally located pinion, thereby giving more than double the torque achieved by these designs. The increased number of pistons in the actuator allows their diameter to be reduced while maintaining its high torque. This also allows the overall size of the actuator to be reduced and become more compact.

Size Range	C15-C75	
Torque output	10 Nm - 2,600 Nm (81 in-lb - 23,800 in-lb)	
Air supply connection	Namura G1/4"	
Accessory top mount	Namura VDI/VDE 3845	
Valve bottom mount	ISO 5211, DIN 3337	
Health & Safety	Built-in safety features for maintenance and handling	
Nested spring sets	4-12 spring combinations for various operating pressures	
Other features	<ul style="list-style-type: none"> <li>- Space saving</li> <li>- Fast acting</li> <li>- Corrosion resistance</li> <li>- Balanced piston forces</li> <li>- Less air consumption</li> </ul>	<ul style="list-style-type: none"> <li>- Less wear</li> <li>- Limit stop for +/-5° and intermittent stop</li> <li>- Low temp (-63°C) <small>(optional)</small></li> </ul>



## Accessories

### ASCO™

#### ASCO Solenoid Valves

The solenoid is an electromagnetic part of a valve, comprised of a coil, core tube, core and enclosure. The ASCO brand offers the world's largest selection of 2-way, 3-way and 4-way solenoid valves, designed to handle the most demanding fluid control applications.

- 3-Way Solenoid Valves
- 4-Way Solenoid Valves
- Direct Mount ASCO Valves
- Manual Reset Valves



### TOPWORX™

#### TopWorx™ D-Series Discrete Valve Controllers

**Built for demanding applications**

TopWorx D-Series discrete valve controllers are certified for use in every world area. They carry IECEx, ATEX, and UL certifications in a single model, making it easier for global customers to standardize across plants in multiple world areas. Other certifications available include NEPSI, KOSHA, InMetro, and EAC.

D-Series discrete valve controllers can survive in virtually any plant condition. Their heavy-duty construction and corrosion resistance enable superior performance in the most demanding applications.

#### World Class Discrete Valve Controllers with Market Leading Technology

Designed to provide reliable service for a lifetime, TopWorx DX-Series discrete valve controllers can survive in virtually any plant condition. Their heavy-duty construction and corrosion resistance enable superior performance in the most demanding applications. They are certified for use in every world area. The DX-Series is a complete line of valve controllers and monitors for every protocol, application, environment, and hazardous area. Available with the TopWorxGO™ Switch and other position sensors, integral solenoid valves, and bus networks.



Tropicalized Aluminum  
 Flameproof/Explosion Proof/Intrinsically  
 Safe Class I, Div 1 & 2  
 Class II, Div 1 & 2  
 Ex ia IIC T6/T4

Ex d IIB+H2 or IIC T6/T5/T4/T3  
 Tamb -60°C up to +175°C  
 Ex tb IIIC  
 Tamb -50°C up to +92°C  
 II2GD, Type 4X, IP66/67

# Advanced Design and Flexibility

Research, development, and continuous technological advances ensure that Habonim stays at the forefront of the process industry. Habonim's expertise in valve design means that the company can supply not only standard valves & actuators, but also complex and custom-designed package solutions for industries such as: LNG, Petrochemical, Chemical and Pharmaceutical. With continuing enhancement of current valve designs, together with the development of new products, Habonim offers the highest degree of sophisticated products that meet customer requirements.

# Product Availability

With dedication to customer requirements, Habonim's flexible inventory management ensures worldwide supply of high quality products at short lead times. Our highly efficient and modern production facilities are ideally suited to manufacture products to fill customer needs, rather than to fill inventories.

# Zero Stem Leak HermetiX™ Valves Series

## Total Hermetix™

**Built for demanding applications**

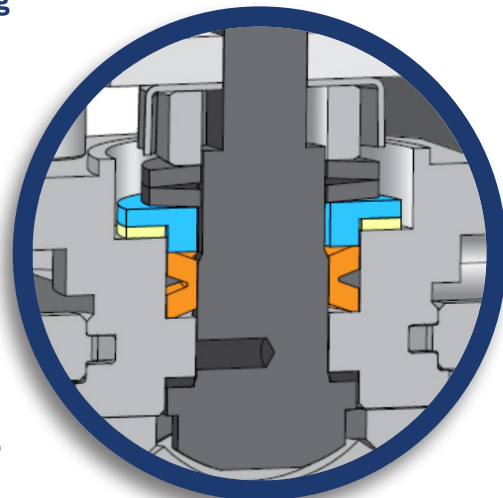
As a standard, most HABONIM valves are equipped with the Total HermetiX integrity package comprised of three main elements and a superior inline sealing mechanism in some of them:

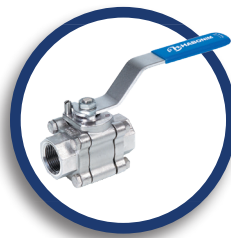
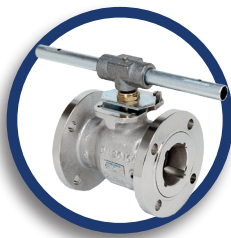
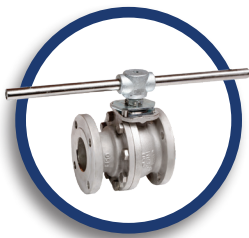
### Zero fugitive-emission no maintenance stem sealing

- Patented HermetiX™ stem sealing design with zero fugitive emission sealing capability.
- Tested or certified according to ISO 15848-1 and API641 standards.
- Up to 500,000 cycles of operation.
- Field proven for millions of cycles continuous operation.

### Fire safe

- According to API 607 & ISO 10497 - where applicable.
- Type-tested and certified by leading certification bodies for marine service – for some valve series.
- Clean fire-safe construction guarantees no graphite contamination of the media flow.





Mississauga • Hamilton • Sarnia • Sudbury • Thunder Bay • Winnipeg • Guelph • Port Elgin  
[www.lakesidecontrols.com](http://www.lakesidecontrols.com) | [info@lakesidecontrols.com](mailto:info@lakesidecontrols.com) | 1.800.265.1005

