Ball Valves



Ball valves are used in a wide variety of air conditioning and refrigeration applications. They can be used for both liquid and gas applications. Ball valves are commonly used for isolating purposes. All ball valves are suitable for HCFC and HFC refrigerants, along with their associated oils. The SWP of these valves allows them to be used for R410A and sub-critical CO₂ applications.

Materials of Construction

The valve body, valve body adaptor, and seal cap are made from brass. The stem is made from stainless steel. The pipe extensions are made from copper. The ball seals are made from virgin PTFE, stem O-rings and cap seal from neoprene. The ball is made from electro-plated brass.

Installation – Main Issues

The valve body must be protected against excessive heat during installation, to prevent damage to the seals. Full instructions are given in the Product Instruction Sheet included with each valve.

Technical Specification

Allowable Operating Temperature = -40°C to +150°C Allowable Operating Pressure = 0 to 4,800 kPag (0 to 700 psig)

Sealing Integrity Features

- Premium quality PTFE ball seals.
- Double O-ring stem seal design.
- Premium quality neoprene stem O-ring seals
- Neoprene cap seal (on new line)

Features

- Bi-directional flow.
- Mounting pad for easy installation.
- Extended copper tails.
- Indicator on stem shows valve position open or closed.
- Fully opened or closed with a quarter turn of the valve stem.
- Positive stem stop ensures precise positioning in the open or closed position.
- Blow-out proof stem design.
- Double stem seal.
- Ball cavity vented to prevent over-pressure.
- Schrader Access options: 1/4" or 5/16"
- Integral Schrader access fitting on brass body.
- Full flow port design on Valves 3/8" to 3-1/8".
 - Body is hermetically sealed.
 - Hexagonal seal cap with plastic tether included.
 - Helium tested to a maximum of 4.69 E⁻⁷ cm³/sec.

Benefits

- · May be installed in any position.
- Can be mounted securely preventing undue stress on the connecting pipe work.
- · Allows for quick and easy installation.
- · At a glance the valves position can be determined when cap is removed.
- Quick & simple operation gives the operator full control.
- Flow indicator arrow ensures the valve is in the position it is meant to be in – open or closed.
- · Cannot blow out under pressure due to its design.
- Double O-Ring stem seal provides a greater sealing surface.
- Provides equalisation of pressure surrounding ball to ensure smooth easy action. Allows for liquid expansion.
- · Allow access to system pressure measurement.
- Schrader Access is positioned on the main body there is less chance of damage to the valve during installation.
- Full Flow means minimal pressure drop across the range of valves on offer.
- A streamlined design that is fully rated to 48 bar.
- Seal cap can be safely secured to valve body. The Neoprene seal in the cap is the final defence in the Henry Triple Stem Seal design.
- Helium leak tested: The smaller Helium molecule enables detection of minute leaks that may not be detected by other leak testing methods.





1/4" Schrader Access Port Fitted

Part No. Co	onn. Size ID			·)	Mounting Hole Size	Ball Port Diameter (Inch)	Kv (m3/hr)**	Weight (kg)
	Conn. Size ID (Inch)	A	В	С				
937203	3/8	165	54	8	#8 -36 UNF	1/2	3.7	0.33
937204	1/2	165	54	10	#8 -36 UNF	1/2	6.0	0.33
937205	5/8	165	54	13	#8 -36 UNF	1/2	12.0	0.33
937306	3/4	184	67	16	#8 -36 UNF	3/4	18.1	0.62
937307	7/8	184	67	19	#8 -36 UNF	3/4	26.1	0.64
937409	1-1/8	216	76	23	#10 - 32 UNF	1	52.9	0.95
937511	1-3/8	235	94	25	#10 - 32 UNF	1-1/4	73.5	1.52
937613	1-5/8	254	109	28	1/4 - 28 UNF	1-1/2	182.8	2.44
937617	2-1/8	289	132	34	1/4 - 28 UNF	2	245.7	4.58
937721*	2-5/8	327	132	37	1/4 - 28 UNF	2	205.2	5.04
937721FP	2-5/8	365	154	37	1/4 - 28 UNF	2-1/2	259.5	8.73
937825FP	3-1/8	420	178	43	5/16-24 UNF	3-1/8	362.1	18.20

* Reduced Port

** Kv rating @ 1 bar pressure drop across valve



No Access Port Fitted

		Dimensions (mm)				Ball Port		
Part No.	Conn. Size ID (Inch)	A	В	c	Mounting Hole Size	Diameter (Inch)	Kv (m3/hr)**	Weight (kg)
907203	3/8	165	54	8	#8 -36 UNF	1/2	3.7	0.33
907204	1/2	165	54	10	#8 -36 UNF	1/2	6.0	0.33
907205	5/8	165	54	13	#8 -36 UNF	1/2	12.0	0.33
907306	3/4	184	67	16	#8 -36 UNF	3/4	18.1	0.62
907307	7/8	184	67	19	#8 -36 UNF	3/4	26.1	0.64
907409	1-1/8	216	76	23	#10 - 32 UNF	1	52.9	0.95
907511	1-3/8	235	94	25	#10 - 32 UNF	1-1/4	73.5	1.52
907613	1-5/8	254	109	28	1/4 - 28 UNF	1-1/2	182.8	2.44
907617	2-1/8	289	132	34	1/4 - 28 UNF	2	245.7	4.58
907825FP	3-1/8	420	178	43	5/16-24UNF	3-1/8	362.1	18.20

** Kv rating @ 1 bar pressure drop across valve



5/16" Schrader Access Port Fitted

Part No.	Conn. Size ID (Inch)	A	Dimensions (mm) B	C	Hole Size	Ball Port Diameter (Inch)	Kv (m3/hr)**	Weight (kg)
947203	3/8	165	54	8	#8 -36 UNF	1/2	3.7	0.33
947204	1/2	165	54	10	#8 -36 UNF	1/2	6.0	0.33
947205	5/8	165	54	13	#8 -36 UNF	1/2	12.0	0.33
947206	3/4	184	67	16	#8 -36 UNF	3/4	18.1	0.62
947307	7/8	184	67	19	#8 -36 UNF	3/4	26.1	0.64
947409	1-1/8	216	76	23	#10 - 32 UNF	1	52.9	0.95
947511	1-3/8	235	94	25	#10 - 32 UNF	1-1/4	73.5	1.52

** Kv rating @ 1 bar pressure drop across valve

