

Full Flow Ball Valves

Technical Information

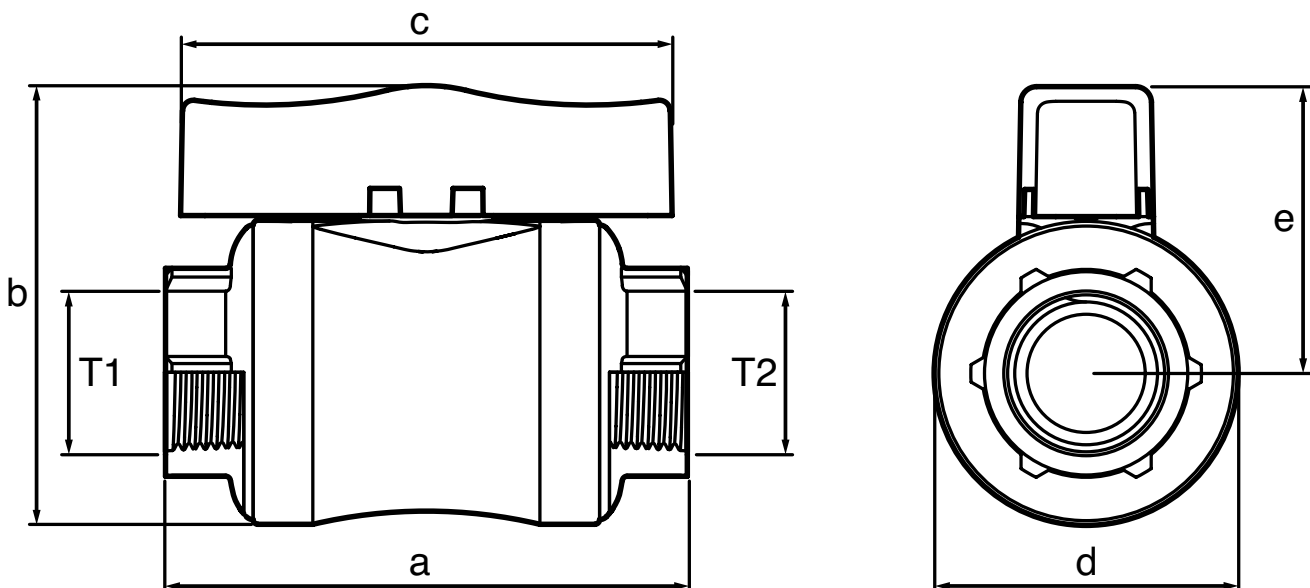
Ball Valve Features and Benefits

- Versatile Full Flow Ball Valve
- Lightweight and Strong
- Manufactured from Non Corrosive, UV Stabilised Materials
- Potable Water Approved
- Available in BSPT, NPT, Acme Thread Configurations
- Removable Handles for Security and Varying Applications
- Positive “Click” Smooth Open/Close Action
- High Pressure 16 Bar Rated

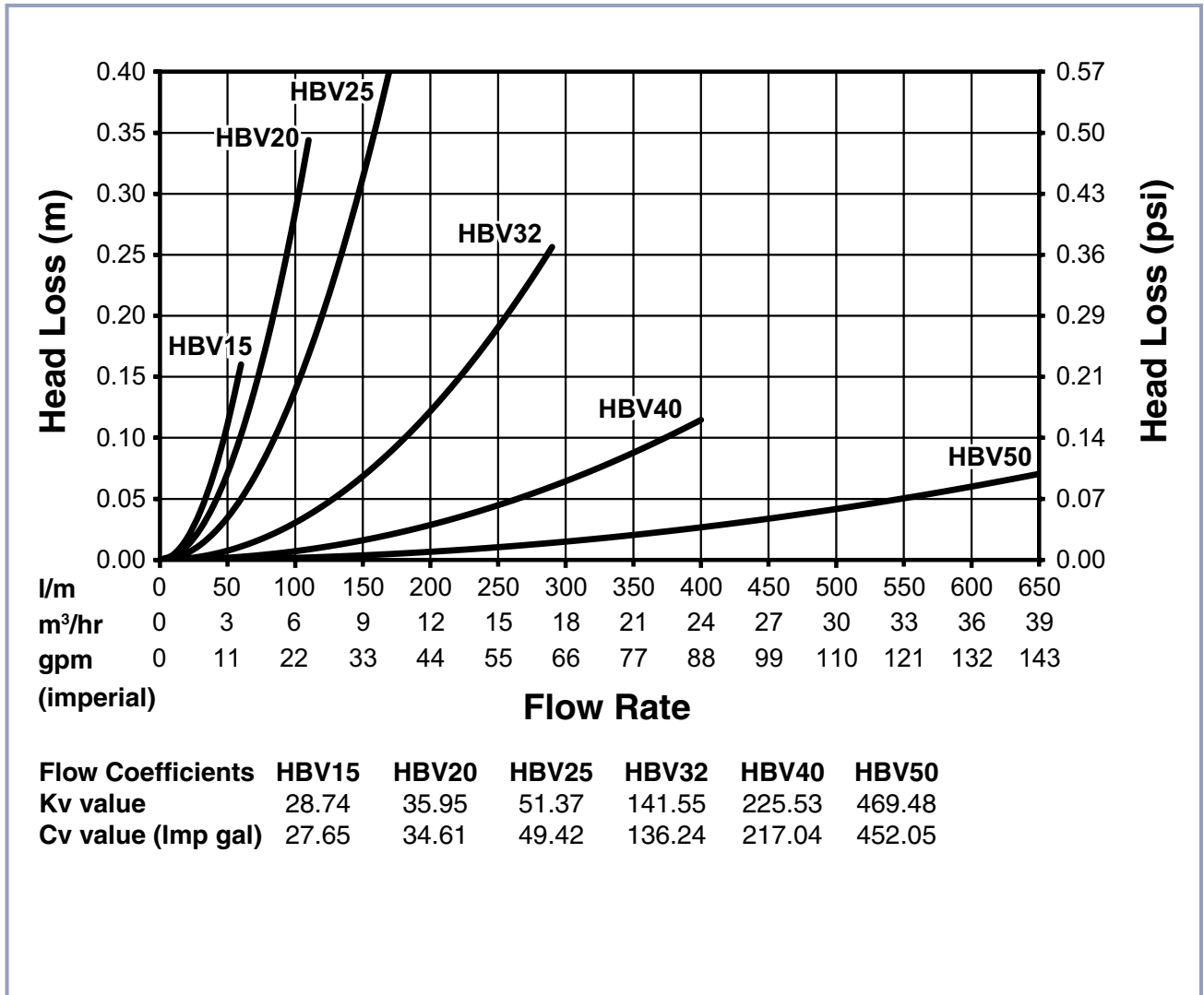
Ball Valve Dimensions

Product Code	T1 BSPT/ NPT (DN*)	T2 BSPT/ NPT (DN*)	a mm	b mm	c mm	d mm	e mm
HBV15	15mm (1/2")	15mm (1/2")	98	82	93	56	54
HBV20	20mm (3/4")	20mm (3/4")	98	82	93	56	54
HBV25	25mm (1")	25mm (1")	111	93	104	65	61
HBV32	32mm (1 1/4")	32mm (1 1/4")	122	107	112	76	69
HBV40	40mm (1 1/2")	40mm (1 1/2")	135	124	123	90	79
HBV50	50mm (2")	50mm (2")	146	140	131	106	89

*DN = Normal Bore Size



Ball Valve Flow Chart



This chart has been prepared using the results from independent tests carried out by The University of Auckland, New Zealand.

Ball Valve Parts and Materials

- Body & End Caps - Glass Fibre Reinforced Nylon
- Handle - Glass Fibre Reinforced Nylon
- Ball - Polypropylene
- Ball Seats & Stem - Acetal (POM)
- O-Rings - Nitrile Rubber

Full Flow Ball Valve Chemical Resistance Chart

CHEMICAL TYPE	RESISTANCE LEVEL		
	Good	OK But Check Further	BAD Try to Avoid
Drinking Water	X		
Sea Water	X		
Bloat Remedies Diluted		X	
CHEMICAL TYPE	RESISTANCE LEVEL		
Acids Weak			X
Acids Strong			X
Organic Acids Weak		X	
Organic Acids Strong			X
Bases Weak	X		
Bases Strong			X
Bleach			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Automotive Fuel			X
Automotive Lubricants			X
Hydraulic Fluids			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Solvents			X
Hydrocarbons			X
Halogens			X
Alcohols			X
Aldehydes			X
Amines			X
Esters			X
Ethers			X
Ketones			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Detergents	X		
Oxidising Agents			X
Weak Hydrogen Peroxide			X
Ozone			X
Phenols			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Calcium Chloride			X

PLEASE NOTE: This chart is intended as a basic guide only. The resistance to a given chemical will vary with temperature & concentrations. Some chemicals within the group mentioned may result in different rating. For further information, please email us with your specific question.

Full Flow Ball Valves Installation Steps

- All pipe work must be adequately supported.
- Use a thread sealant on all threaded connections. We recommend Loctite 5331.
- If you are using chemicals or have any special requirements that you wish to use your Ball Valves for, please don't hesitate to contact us or refer to Chemical Resistance chart on previous page



1 (a) Use a teflon tape sealant or



1 (b) thread paste sealant. The right sealant for threaded joints is non-hardening, compatible with plastic and doesn't add slipperiness to encourage over-torquing.



2. Screw pipe or fitting into Ball Valve.



3. Do not over tighten. The recommended way to assemble a Ball Valve is finger tight. Tighten until firm with spanner or pipe grip. One to two turns should be all that is required.

Full Flow Ball Valve Handle Removal Steps

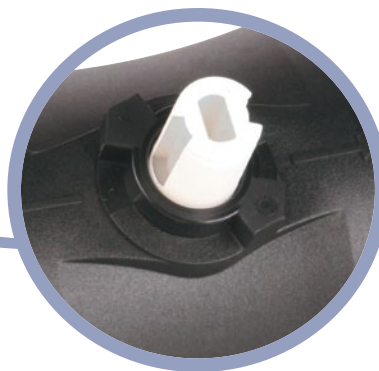


1 Turn handle clockwise slightly.

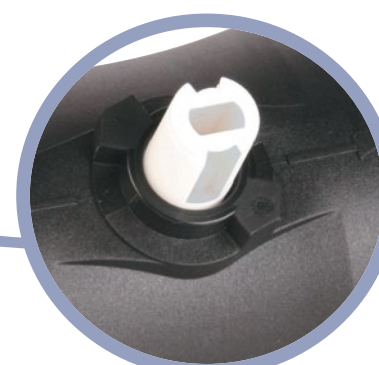


2 Put fingers under handle and pull whilst pushing with thumbs on body of valve.

Full Flow Ball - Determining if your Valve Open or Closed



Valve is identified as OPEN when centre notch is not parallel with the valve body.



Valve is identified as CLOSED when centre notch is parallel with the valve body.

Full Flow Ball Valve Maximum Working Pressures

Fitting Size	MAX PRESSURE @ 20 Degrees Celsius
15mm - 50mm	16 Bar (1600 kPa. 235 PSI)

Hansen have tested all its products for use with cold water up to a maximum temperature of 60°C (140°F). We do not recommend the use of these products with temperatures higher than 60°C (140°F) as plastic expands due to temperature increases. Hansen cannot guarantee the products will perform when used with temperatures over 60°C (140°F). Hansen products that have failed in temperatures higher than 60°C (140°F) will not be covered by warranty.

Ball Valve Approvals

SGS M&I – HANSEN™ Ball Valves have been approved in SGS Marine Certificate. The M&I division of SGS New Zealand Limited is the country's largest marine and industrial inspection, testing and Safe Ship Management service provider.

AS/NZS 4020 – HANSEN™ Ball Valves have met the requirements of AS/NZS 4020 Australia & New Zealand drinking water test standard.

See our website for further details.

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Ball Valve Frequently Asked Questions

Q How tight should I tighten my valves?

A Do not over tighten. The right way to tighten a Ball Valve is hand tight plus one to two turns - no more!

Q Do I need to support my Ball Valve?

A Yes. All pipe work must be adequately supported.

Q What type of sealant should I use?

A Use a thread sealant on all threaded connections. We recommend Loctite 5331.

Q Can I use my Hansen Ball Valve with my swimming pool/spa pool set up?

A No, as the high concentration of chlorine used in the water for pools, will attack the material. The fitting material is only suitable for use with domestic water. Hansen products that are used in this application will not be covered by warranty.

Q Can I use these Ball Valves with metal fittings?

A Yes.

Q Are Hansen Ball Valves Frost Friendly?

A Hansen Ball Valves are Frost Friendly and have been tested in frost conditions. Results may vary in freezing conditions.

Q What temperature can I use Hansen fittings at?

A Hansen have tested all its products for use with cold water up to a maximum temperature of 60°C (140°F). We do not recommend the use of these products with temperatures higher than 60°C (140°F) as plastic expands due to temperature increases. Hansen cannot guarantee the products will perform when used with temperatures over 60°C (140°F). Hansen products that have failed in temperatures higher than 60°C (140°F) will not be covered by warranty.