

Jamesbury™ 4" (DN 100) 6RIB3 internal bottom-unloading full port valves for tank car applications (AAR no. E172130)

Description

The Jamesbury 6RIB3 internal bottom-unloading valve is used where a low external profile is required. The valve has been used for handling a wide range of hazardous materials in tank care applications.

Noted in the industry for its dependable performance, the 6RIB3 valve has proved it can withstand rugged road and service conditions.

This ball valve offers the advantages of quick quarter-turn operation, long service life, and easy cycling. It is much faster to operate than multi-turn types of valves. In addition, it is easy to cycle even after being set in one position for an extended period.

Unique sealing

The superior performance of Jamesbury tank car ball valves is achieved by the unique design of the seat. The flexible-lip PTFE seats exert continuous sealing pressure on the ball. The seat automatically compensates for wear and for changes in temperature and pressure.

In addition, these valves are designed to withstand the demanding service requirements of the railroad industry. In the Jamesbury "corner sealing" of the stem, the compression of low-friction box rings stops stem leakage by avoiding straight-line leakage paths. Stem seal adjustment, if required, is done simply by tightening the packing nut.

Materials

6RIB3 valves are available in carbon steel with 316 stainless steel trim and all 316 stainless steel. Other materials are available for special applications.



Fire-Tite™ design

All Jamesbury tank care ball valves have the Jamesbury Fire-Tite design. In the event of a fire resulting in partial or complete destruction of the PTFE seats, a secondary metal sealing surface provides continuous effective shut-off.

Flow data

The 4" (DN 100) 6RIB3 has an installed C value of 650. C is defined as the flow of water through the valve in U.S. gallons per minute at a pressure drop of 1 psi. The metric equivalent, Kv, is the flow of water at 16 °C through the valve in m³/hr at a pressure drop of 1kg/cm². To convert Cv to Kv, multiply by 0.8569. This Cv value is an estimate of the installed flow capacity and considers typical inlet losses.

Ratings

6RIB3 valves are rated for pressures and temperatures well in excess of those that are normally encountered in tank car service. Carbon steel valves are rated from -20°F to +500°F (-29°C to +260°C). 316 stainless-steel valves are rated from -60°F to +500°F (-51°C to +260°C). The pressure rating is shown in the table below.

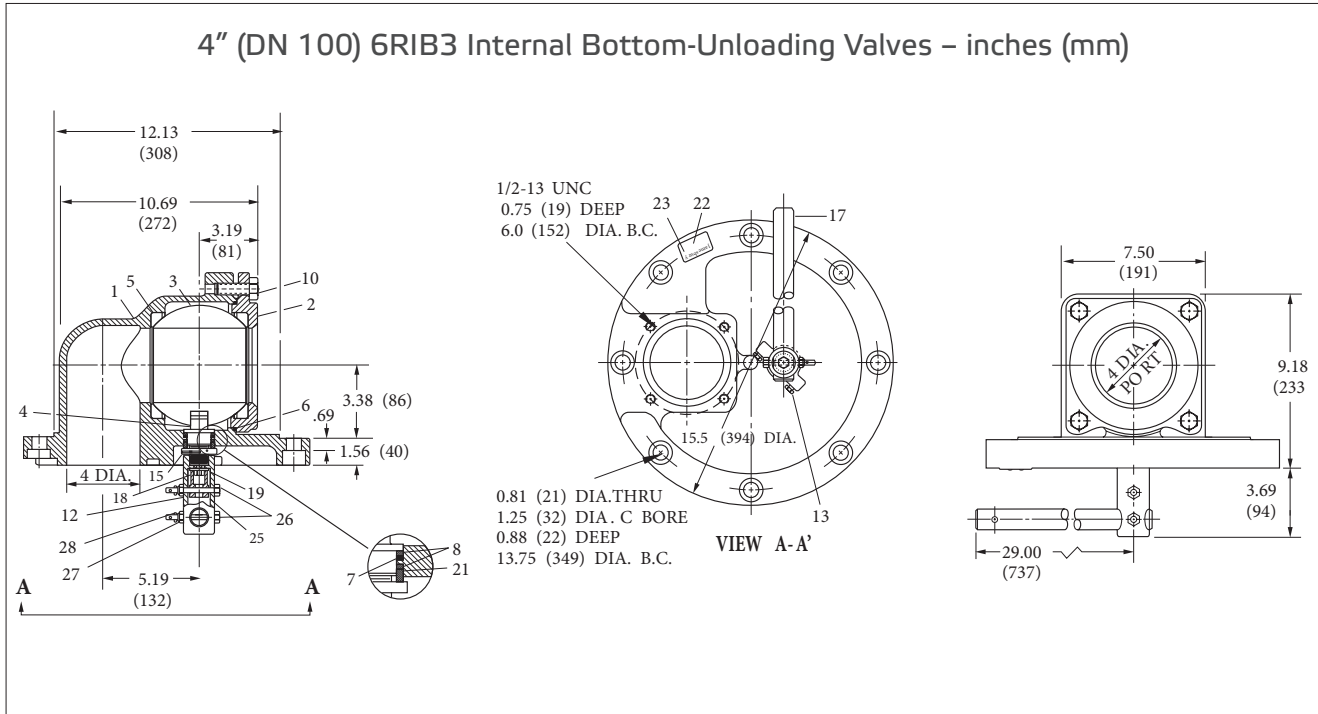
Maximum pressure rating (psi)

Carbon steel body w/ASTM A193 Gr B7 bolting	285
Stainless steel body w/ASTM A193 Gr B7 bolting	275
Stainless steel body w/ASTM A193 Gr B8 bolting	100

Service

Representative stocks of 6RIB3 valves are maintained by Valmet network of authorized stocking distributors located in key industrial areas of the United States and Canada. They will be happy to assist in the selection of the most cost-effective valve for your application. For more information visit our website at www.valmet.com/flowcontrol.

Dimensions



Bill of materials and parts list			
Part no.	Part name	Body material	
		Carbon Steel with 316 Stainless Steel Trim (2236)	316 Stainless Steel (3600)
1	Body	Carbon steel ASTM A216 Type WCB	316 Stainless steel ASTM A351 Type CF8M
2	Body Cap	Carbon steel ASTM A216 Type WCB	316 Stainless steel ASTM A351 Type CF8M
3	Ball	316 Stainless steel	
4	Stem	17-4 PH Stainless steel	
5	Seat	PTFE or Filled PTFE	
6	Body Seal	PTFE	
7	Secondary Stem Seal	Graphite	
8	Stem Seal	PTFE	
10	Hex Head Cap Screw	ASTM A193 Gr. B8, B8C, or B8T, Class 1	
12	Handle Indicator Stop	Carbon steel	
13	Hex Head Cap Screw	Stainless steel	
15	Stem Nut	Carbon steel	
17	Pipe Handle	Carbon steel	
18	Hex Head Cap Screw	Carbon steel	
19	Washer	Carbon steel	
21	Compression Ring	Stainless steel	
22	Identification Tag	Stainless steel	
23	Drive Screw	Stainless steel	
25	Screw Retainer	Carbon steel	
26	Hex Head Screw Cap	Stainless steel	
27	Lock Nut	Stainless steel	
28	Spiral Ring	Stainless steel	

Optional trim material offered upon request.

How to order 6RIB3 ball valves

To specify one of these valves, it is necessary only to select the proper body and seat materials to meet a particular service requirement. All other components are of materials appropriate for the most severe conditions.

The catalog designations below fully describe a valve identifying body, trim, seat, and seal materials. The codes are:

Carbon steel body with 316 stainless steel trim:

4" 6RIB3-22HBTT

316 Stainless steel body and trim:

4" 6RIB3-36HBTT

For filled PTFE seats, simply substitute MT for TT.

To order a Service Kit for these valves, specify RKR33 TT or MT.

Subject to change without prior notice.

Neles, Neles Easyflow, Jamesbury, Stonel, Valvcon and Flowrox, and certain other trademarks, are either registered trademarks or trademarks of Valmet Oyj or its subsidiaries in the United States and/or in other countries.

For more information www.neles.com/trademarks

Valmet Flow Control Oy

Vanha Porvoontie 229, 01380 Vantaa, Finland.

Tel. +358 10 417 5000.

www.valmet.com/flowcontrol

