3-Piece Ball Valve for Type 316 Stainless Steel
Vic-Press™ Series P569

18.14

1.0 PRODUCT DESCRIPTION

Available Sizes:

- ½ – 2"/ DN15 – DN50

Pressure Class:

- Up to 400 psi/2758 kPa

Application:

- Joins ASTM A312 Schedule 10S stainless steel pipe

Pipe Materials:

- Stainless steel Type 316

Codes and Requirements:

- Support hanger spacing correspond to ASME B31.1 Power Piping Code and ASME B31.9 Building Services Piping Code
- Meets ASME requirements for ANSI Class 150 systems for water, oil, gases and general chemical services

NOTE

- To maintain integrity of lubrication, components should remain in factory sealed bag until ready for use.

2.0 CERTIFICATION/LISTINGS

NOTES

- Download publication 10.01 for Fire Protection Certifications/Listings Reference Guide.
- Product designed and manufactured under the Victaulic Quality Management System as certified by LPCB in accordance with ISO-9001:2008.

3.0 SPECIFICATIONS – MATERIAL

Body: Stainless steel, CF8M, ASTM A351

Ball: Stainless steel, CF8M, ASTM A351

Stem: Stainless steel, Type 316

Seats: (PTFE) Polytetrafluoroethylene

Locking Handle: Stainless steel, Type 304

Stem Nut: Stainless steel, Type 304

Stem Washer: Stainless steel, Type 304

Stem Packing and Thrust Washer: (PTFE) Polytetrafluoroethylene

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

3.0 SPECIFICATIONS – MATERIAL (Continued)

Bolt/Nut/Washer: Stainless steel, Type 316

Cap: Stainless steel, CF8M, ASTM A351

Extended Ends: Schedule 10S stainless steel, Type 316

Specify End Style:

- Vic-Press™ Schedule 10S x Vic-Press™ Schedule 10S (P x P)
- Grooved End (G x G)
- Vic-Press™ Schedule 10S x Grooved End (P x G)

Press Seals:

Grade	Temp. Range[1]	Compound	Color Code	General Service Recommendations
H	–20°F to +210°F –29°C to +98°C	Hydrogenated Nitrile Butadiene Rubber (HNBR)	Two Orange Stripes	May be specified for hot petroleum/water mixtures, hyrdocarbons, air with oil vapors, vegetable and mineral oils, engine oil, transmission oil. UL Classified in accordance with ANSI/NSF 61 for cold +73°F/+23°C and hot +180°F/+82°C potable water service and ANSI/NSF 372.
	Standard Seal - Vic-Press™ products will ship with Grade "H" seal unless otherwise specified on your order			
E	–30°F to +250°F –34°C to +121°C	EPDM Ethylene Propylene Diene Monomer	Green Stripe	May be specified for hot water service, dilute acids, oil-free air, chemical services. UL Classified in accordance with ANSI/NSF 61 for cold +73°F/+23°C and hot +180°F/+82°C potable water service and ANSI/NSF 372. **NOT COMPATIBLE FOR USE WITH PETROLEUM OR STEAM SERVICES.**
O	+20°F to +300°F –7°C to +149°C	Fluoroelastomer	Blue Stripe	May be specified for oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids, and air with hydrocarbons. **NOT COMPATIBLE FOR USE WITH HOT WATER OR STEAM SERVICES.**

[1] For specific chemical and temperature compatibilty, refer to the Gasket Chemical Services Guide Long Report (GSG-100) located on victaulic.com. The information shown defines general ranges for all compatible fluids.

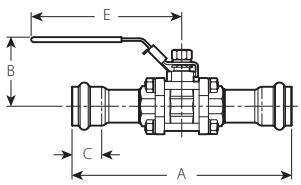
NOTE

- Vic-Press™ seals are pre-lubricated. No additional lubrication is required for installation.

4.0 DIMENSIONS

Series P569
Working Pressure: 400 psi/2758 kPa

Vic-Press™ for Schedule 10S x Vic-Press™ Schedule 10S (P x P)

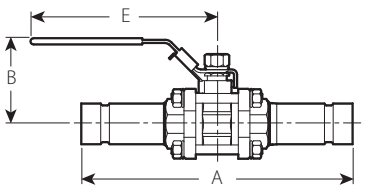


Size		Dimensions				Weight
Nominal inches DN	Actual Outside Diameter inches mm	A End to End inches mm	B inches mm	C inches mm	E inches mm	Approximate (Each) lb kg
½ DN15	0.840 21.3	8.44 214.3	2.24 56.9	1.06 26.9	4.02 102.1	1.5 0.7
¾ DN20	1.050 26.7	8.63 219.2	2.64 67.0	1.06 26.9	4.96 126.0	2.4 1.1
1 DN25	1.315 33.4	9.23 234.4	2.76 70.1	1.19 30.2	5.00 127.0	3.6 1.6
1 ½ DN40	1.900 48.3	10.11 256.8	3.74 95.0	1.38 35.1	6.14 156.0	6.9 3.1
2 DN50	2.375 60.3	10.46 265.7	4.02 102.1	1.63 41.4	7.52 191.0	9.5 4.3

4.0 DIMENSIONS (Continued)

Series P569
Working Pressure: 400 psi/2758 kPa

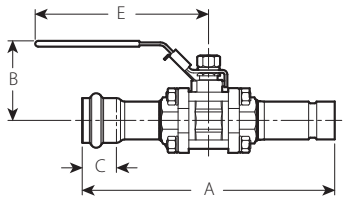
Groove x Groove (G x G)



Size		Dimensions			Weight
Nominal inches DN	Actual Outside Diameter inches mm	A End to End inches mm	B inches mm	E inches mm	Approximate (Each) lb kg
¾ DN20	1.050 26.7	8.81 223.8	2.64 67.0	4.96 126.0	2.4 1.1
1 DN25	1.315 33.4	9.21 234.0	2.76 70.1	5.00 127.0	3.6 1.6
1 ½ DN40	1.900 48.3	11.25 285.8	3.74 95.0	6.14 156.0	6.9 3.1
2 DN50	2.375 60.3	12.74 323.6	4.02 102.1	7.52 191.0	9.5 4.3

NOTE
- For dimensions and weights with gear operator contact Victaulic.

Vic-Press™ Schedule 10S x Groove (P x G)



Size		Dimensions				Weight
Nominal inches DN	Actual Outside Diameter inches mm	A End to End inches mm	B inches mm	C Lbs. kg	E inches mm	Approximate (Each) lb kg
¾ DN20	1.050 26.7	8.72 221.5	2.64 67.0	1.06 26.9	4.96 126.0	2.4 1.1
1 DN25	1.315 33.4	9.21 234.0	2.76 70.1	1.19 30.2	5.00 127.0	3.6 1.6
1 ½ DN40	1.900 48.3	10.68 271.3	3.74 95.0	1.38 35.1	6.14 156.0	6.9 3.1
2 DN50	2.375 60.3	11.60 294.6	4.02 102.1	1.63 41.4	7.52 191.0	9.5 4.3

NOTE
- For dimensions and weights with gear operator contact Victaulic.

5.0 PERFORMANCE

Flow Characteristics

Flow testing for the Vic-Press™ Series P569 three-piece Ball Valve demonstrated superior flow characteristics.

Testing was performed in our own engineering laboratory facilities with systems and equipment calibrated to National Bureau of Standards.

C_v/K_v values for flow of water at +60°F/+16°C with a fully open valve are shown in tables below.

Formulas for Cv values

$\Delta P = Q^2 / C_v^2$ $\quad$ $\Delta P = Q^2 / K_v^2$

$Q = C_v \times \sqrt{\Delta P}$ $\quad$ $Q = K_v \times \sqrt{\Delta P}$

Flow Coefficient	C_v	K_v
Q (Flow)	GPM	m^3/hr
ΔP (Pressure Drop)	psi	bar

Valve Size		Full Open
Nominal inches DN	**Actual Outside Diameter** inches mm	**Flow Coefficient** C_v K_v
½ DN15	0.840 21.3	10 9
¾ DN20	1.050 26.7	17 14
1 DN25	1.315 33.4	45 39
1 ½ DN40	1.900 48.3	125 107
2 DN50	2.375 60.3	365 314

Series P569 Repair Kits

Kits and replacement parts are available for the Series P569 valve.

The Repair Kit consists of one CF8M stainless steel ball, two seats, two gaskets, one stem seal and one thrust washer, all made of PTFE.

For replacement stem information, contact Victaulic.

Size		Repair Kit
Nominal inches DN	**Actual Outside Diameter** inches mm	Part No.
½ DN15	0.840 21.3	K-004-569-0P2
¾ DN20	1.050 26.7	K-006-569-0P2
1 DN25	1.315 33.4	K-010-569-0P2
1 ½ DN40	1.900 48.3	K-014-569-0P2
2 DN50	2.375 60.3	K-020-569-0P2

6.0 NOTIFICATIONS

⚠ WARNING

- **Vic-Press™ for Schedule 10S products for Type 316 stainless steel must only be used on services compatible with seal and fitting materials.**

Incompatible services may result in leakage. Always reference the latest Victaulic Gasket Selection Guide (05.01) for specific seal service recommendations and for a listing of services which are not recommended.

⚠ WARNING

- **It is the responsibility of designers of piping systems to verify the suitability of ASTM A312 Schedule 10S Type 316 stainless steel pipe for use with the intended fluid media. The fluid's chemical composition, pH level, operating temperature, chloride level, oxygen level and flow rate and their effect on ASTM A312 Type 316 stainless steel must be evaluated by the material specifier to confirm system life will be adequate for the intended service.**

Failure to do so may cause serious personal injury or property damage.

7.0 REFERENCE MATERIALS

02.06: Approvals for Potable Water Products
05.01: Victaulic Seal Selection Guide
10.01: Victaulic Fire Protections Certifications/Listings Guide
18.11: Vic-Press™ for Schedule 10S Type 316 Stainless Steel
18.12: Vic-Press™ for Schedule 10S Type 304 Stainless Steel
18.13: Vic-Press™ for Schedule 10S Qualification Test Data
18.16: Vic-Press™ for Schedule 10S ASME B31.1 Compliance
18.17: Vic-Press™ for Schedule 10S ASME B31.3 Compliance
18.18: Vic-Press™ for Schedule 10S ASME B31.9 Compliance
I-P500: Victaulic Field Installation Handbook Vic-Press™ Schedule 10S System Products
I-ENDCAP: Victaulic End Cap Installation Instructions

