

Stainless Steel Pipe System

Vic-Press™ for Schedule 10S Type 304/304L Stainless Steel



18.12



The Victaulic® PFT510 tool is the only press tool approved for use on the Vic-Press™ for Schedule 10S System.

1.0 PRODUCT DESCRIPTION

Available Sizes:

- ½ – 2"/DN15 – DN50

Maximum Working Pressure:

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 500 psi/3447 kPa
- Rated up to 300 psi when used with Schedule 5S pipe
- FM Approved to 300 psi/2068 kPa

Application:

- Joins ASTM A312 Schedule 10S Types 304/304L stainless steel pipe
- Recommended on services conveying water, hydrocarbons, water/hydrocarbon mixtures, air (wet/dry/with oil vapors), other gases, vegetable and mineral oils, as well as automotive fluids such as engine oil and transmission fluid within the temperature range of -30°F to +300°F/-34°C to +149°C, depending on service and seal material selected.

Pipe Materials:

- Standard ASTM A312 Schedule 10S Types 304/304L stainless steel pipe

Codes and Requirements:

- Support hanger spacing corresponds to ASME B31.1 Power Piping Code, ASME B31.3 Process Piping, and ASME B31.9 Building Services Piping Code
- Meets ASME requirements for ANSI Class 150 systems for water, oil, gases and general chemical services
- Meets the requirements of ASME B31.1, B31.3 and B31.9 for Schedule 10S systems
- Request publications [18.16](#), [18.17](#) and [18.18](#) for details.

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

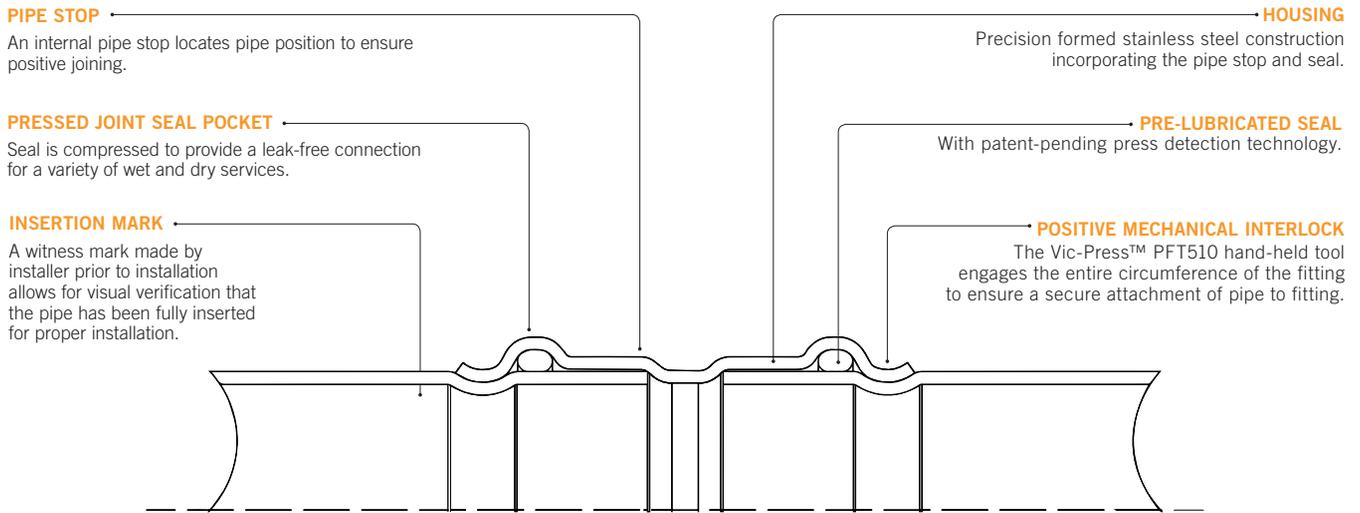
System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	



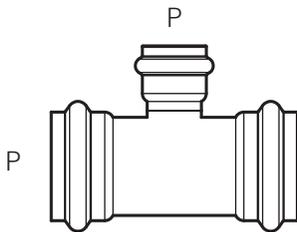
1.1 PRODUCT DESCRIPTION

Vic-Press™ Joining System for Schedule 10S Type 304/304L Stainless Steel Pipe



Dimensional Information

- Products in the Vic-Press™ for Schedule 10S system for Type 304/304L stainless steel have unique center-to-end or end-to-end dimensions which incorporate specific, “takeout” dimensions for easy fabrication calculations.
- Use of threaded products employing special features such as probes, escutcheon cups, etc., should be checked to be certain the thread standard and length of insertion are compatible with fitting dimensions.
- Failure to verify dimensional suitability in advance may result in difficulties in assembly.



End Type Code

- P = Press
- F = Female Thread
- M = Male Thread
- T = Plain End
- L = Flanged
- G = Grooved
- EOB = End of Branch
- W = Weld Ends

2.0 CERTIFICATION/LISTINGS



NOTE

- See publication [publication 02.06](#): Victaulic Potable Water Approvals ANSI/NSF for potable water approvals if applicable.
- For complete information on Maritime approvals, visit <https://www.victaulic.com/maritime-approvals/>

3.0 SPECIFICATIONS - MATERIAL

Housing: Made from Type 304L stainless steel.

Threaded Outlets: Made from stainless steel bar or stainless steel pipe conforming to ASTM A312, Type 304L.

Plain End or Grooved End Products: Stainless steel pipe conforming to ASTM A312, Type 304L.

Style P595 Flange Adapter: ANSI Class 150 or AS 2129 Table E, Type 316L raised face one-piece Type 304L stainless steel flange adapter.

Style P565 Van Stone Flange Adapter: ANSI Class 150 or AS 2129 Table E, carbon steel raised face slip on flange with Type 304 stainless steel stub end.

Style P594 Concentric Reducer: Reducer body made from Type 304 stainless steel, press ends made from Type 304L stainless steel.

Seal:

Victaulic Grade “H” HNBR

HNBR (Two orange stripes color code). Temperature range -20°F to +210°F/-29°C to +98°C. May be specified for hot petroleum/water mixtures, hydrocarbons, 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.

Optional Seal: (specify choice¹)

Victaulic Grade “E” EPDM

EPDM (Green stripe color code). Temperature range -30°F to +250°F/-34°C to +121°C. 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.**

Victaulic Grade “O” Fluoroelastomer

Fluoroelastomer (Blue stripe color code). Temperature range +20°F to +300°F/-7°C to +149°C. May be specified for many 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.**

Others

For alternate gasket selection, reference [publication 05.01](#): Victaulic Seal Selection Guide - Elastomeric Seal Construction.

¹ Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest [Victaulic Seal Selection Guide](#) for specific gasket service guidelines and for a listing of services which are not compatible.

NOTE

- Vic-Press™ for Schedule 10S seals are pre-lubricated to further simplify the installation process. To maintain the integrity of the lubrication, components are shipped in factory sealed bags and should remain bagged until ready for use. For more information regarding the lubricant used, please refer to [publication 05.07](#).

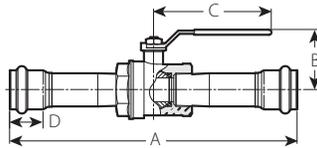
5.1 PERFORMANCE

Vic-Press™ Brass Body Ball Valve with Stainless Steel Vic-Press™ Schedule 10S Ends

Series P589³ (P x P)

Working Pressure: 300 psi/2068 kPa

- Series P589 Ball Valve is a full port valve with Vic-Press™ Schedule 10S ends for fast, easy installation. The valve, with Vic-Press™ Schedule 10S ends, is designed for service to 300 psi/ 2068 kPa.
- The valve body is constructed from forged brass. The ball is chrome plated brass and seals on PTFE seats. A hollow ball design eliminates unnecessary weight while maintaining flow and mechanical strength. PTFE seats and washers reduce the friction coefficient which eases valve operation.



Size		Dimensions				Weight	Flow Coefficient ⁴ (Fully Open)
Nominal	Actual Outside Diameter	A ± 0.125 3.18	B	C	D	Approximate (Each)	Cv Values Kv Values
inches DN	inches mm	inches mm	inches mm	inches mm	inches mm	lb kg	
1/2 DN15	0.840 21.3	9.030 229.3	1.42 36.1	3.03 77.0	1.06 26.9	1.0 0.5	11 9.4
3/4 DN20	1.050 26.7	9.120 231.7	1.90 48.3	3.74 95.0	1.06 26.9	1.6 0.7	25 21.3
1 DN25	1.315 33.4	10.11 256.7	2.05 52.1	3.74 95.0	1.19 30.2	2.8 1.3	36 30.7
1 1/2 DN40	1.900 48.3	11.18 283.9	2.76 70.1	5.40 137.2	1.38 35.1	4.7 2.1	112 95.5
2 DN50	2.375 60.3	12.69 322.3	3.15 80.0	5.40 137.2	1.63 41.4	6.9 3.1	195 166.3

³ Not approved for use in maritime services.

⁴ Cv/Kv values for flow of water at +60°F/+16°C with valve fully open.

NOTES

- The Vic-Press™ Schedule 10S ends are of ASTM A312 Type 304 stainless steel.
- The Series P589 Brass Body Ball Valve is NOT ANSI/NSF certified for potable water. For potable water applications use the Series P569 Stainless Steel Ball Valve.

Series P589

Valve Body: Forged Brass ASTM B30

Ball: Brass ASTM B30, chrome plated

Stem: Brass ASTM B16

Seats: (PTFE) Polytetrafluoroethylene

Handle: Carbon steel, zinc plated

Stem Nut: Carbon steel, zinc plated

Stem Washer: (PTFE) Polytetrafluoroethylene

Extended Ends: Schedule 10S stainless steel, Type 304