### PRESSFIT 304™

The Victaulic® Pressfit 304™ System for joining approved Type 304/304L stainless steel pipe provides a fast, easy, clean, reliable means for joining ½"/15 mm, ¾"/20 mm, 1"/25 mm,

pipe provides a fast, easy, clean, reliable means for joining ½"/15mm, ¾"/20mm, 1"/25mm, 1½"/40mm, and 2"/50mm stainless steel pipe. Pressfit 304 products and Type 304/304L stainless steel pipe are designed for pressure service to 300 psi/2065kPa or ANSI Class 150 (except steam, according to standard temperature/pressure charts, below) for water, oil, non-combustible gaseous and general chemical services. Refer to o-ring selection data for the intended service. The system requires no flame as with welding; no cutting oil, chips or preparation time as with threading or flanging. Stainless steel pipe is cut to size, inserted into the coupling and the coupling pressed onto the pipe and fitting in seconds.

Victaulic Type 304 stainless steel pipe meets the requirements of ASTM A-312, Grade 304/304L (TP304, UNS designation S30400). **Only approved Pressfit 304 pipe must be used with Pressfit 304 stainless steel products.** 

The system meets the hanging requirements of ASME B31.1, B31.3 and B31.9.

Pressfit 304 couplings, fittings and approved pipe are UL classified in accordance with ANSI/ NSF 61 for cold +86°F/+30°C and hot +180°F/+82°C potable water service.

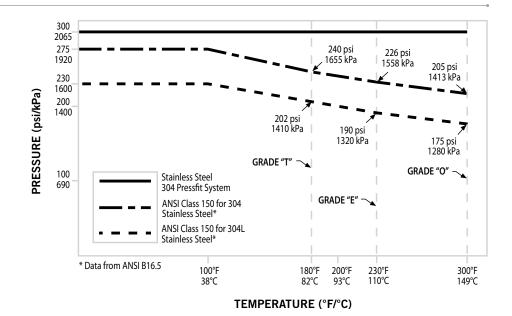
For product installation instructions, refer to Pressfit Product Assembly Instructions (I-500) and the appropriate Tool Operating and Maintenance Instructions Manual.

\*Style 500 Series Pressfit products are FM Approved as noted below when installed on Victaulic Pressfit 304 Schedule 5 stainless steel pipe only for services up to 175 psi/1205 kPa. See Submittal Publication 18.01 for products Approved for use with Pressfit 316 Schedule 5 stainless steel pipe.



SEE VICTAULIC PUBLICATION 10.01 FOR DETAILS

### **PERFORMANCE**



JOB/OWNER	CONTRACTOR	ENGINEER	
System No.	Submitted By	Spec Sect Pa	ara
Location	Date	Approved	
		Date	





PRESSFIT 304™

### **MATERIAL SPECIFICATIONS**

Housing Body: Precision cold drawn austenitic stainless steel.

**Threaded Outlets:** Austenitic stainless steel bar conforming to ASTM A-276 or pipe conforming to ASTM A-312.

Plain End or Grooved End Products: Austenitic stainless steel pipe conforming to ASTM A-312.

Flanges for Style 595: Austenitic stainless steel conforming to ANSI Class 150.

O-Ring Seals: (Specify choice on order) O-ring seals shall be molded of synthetic rubber.

### • Grade "E" EPDM

EPDM (Green color code). Temperature range -30°F to +230°F/-34°C to +110°C. Recommended for hot water service within the specified temperature range plus a variety of dilute acids, compressed air and many chemical services. UL classified in accordance with ANSI/NSF 61 for cold +86°F/+30°C and hot +180°F/+82°C potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES. NOT RECOMMENDED FOR STEAM SERVICES.

### • Grade "T" nitrile

Nitrile (Orange color code). Temperature range  $-20^{\circ}$ F to  $+180^{\circ}$ F/ $-29^{\circ}$ C to  $+82^{\circ}$ C. Recommended for petroleum products, vegetable and mineral oils within the specified temperature range; except hot, dry air over  $+140^{\circ}$ F/ $+60^{\circ}$ C and water over  $+150^{\circ}$ F/ $+66^{\circ}$ C. NOT RECOMMENDED FOR HOT WATER SERVICES.

### · Grade "O" fluoroelastomer

Fluoroelastomer (Blue color code). Temperature range  $\pm 20^{\circ}$ F to  $\pm 300^{\circ}$ F/ $\pm 7^{\circ}$ C to  $\pm 149^{\circ}$ C. Recommended for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons.

\* Services listed are General Service Recommendations only. It should be noted that there are services for which these o-rings are not recommended. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific o-ring service recommendations and for a listing of services which are not recommended.



### **WARNING**

- Pressfit 304 products must only be used on services compatible with o-ring and fitting materials.
- Incompatible services may result in leakage.

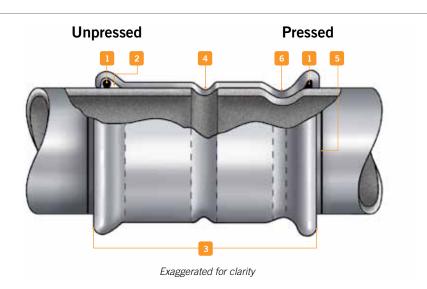
For services not listed or special services, contact Victaulic for recommendations.

18.02\_2

### PRESSFIT 304™

### PRESSFIT COMPONENTS

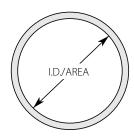
- 1 O-RING
- O-RING POCKET
- 3 HOUSING
- 4 PIPE STOP
- 5 INSERTION MARK
- 6 TOOL INDENT



# FRICTION LOSS

5	Size	Flow Rate	Friction Loss – (psi Per Ft./ kPa/m) C = 120				
Nom. Size Inches mm	Actual Out. Dia. Inches mm	GPM LPM	Sch. 5	Sched psi/Ft. kPa/m	lule 10 Higher	Sched psi/Ft. kPa/m	ule 40 Higher
½ 15	0.840 21.3	15 56.8	0.5000 11.3	0.6430 14.6	22%	0.9510 21.5	90%
<sup>3</sup> ⁄ <sub>4</sub> 20	1.050 26.7	25 94.6	0.3713 8.4	0.4510 10.2	21%	0.6351 14.4	71%
1 25	1.315 33.7	40 151.4	0.2584 5.9	0.3773 8.5	46%	0.4691 10.6	82%
1 ½ 40	1.900 48.3	120 454.2	0.2800 6.3	0.3592 8.1	28%	0.4445 10.1	59%
2 50	2.375 60.3	150 567.8	0.1330 3.0	0.1616 3.7	22%	0.1989 4.5	50%

### FLOW AREA



Pressfit 304 stainless steel pipe provides larger flow area and greater capacity frequently permitting pipe downsizing.

Si	ze		Available	Flow Area (Sq. Inc	ches/mm2)	
Nom. Size Inches	Actual Out. Dia. Inches	C.L. F		ule 10	Schedu	
mm	mm	Sch. 5	Flow Area	Less	Flow Area	Less
½ 15	0.840 21.3	0.396 255.4	0.357 230.3	10%	0.304 196.1	23%
<sup>3</sup> / <sub>4</sub> 20	1.050 26.7	0.655 422.5	0.614 396.0	8%	0.533 343.8	20%
1 25	1.315 33.7	1.103 711.4	0.945 609.5	14%	0.864 557.3	22%
1 ½ 40	1.900 48.3	2.461 1587.3	2.222 1433.2	10%	2.036 1313.2	17%
2 50	2.375 60.3	3.960 2554.2	3.650 2354.3	8%	3.360 2167.2	15%

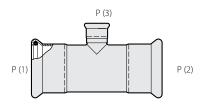


### PRESSFIT 304™

### **Dimensional Information**

Products in the Pressfit 304/316 Systems have unique centerto-end or end-to-end dimensions which incorporate specific, uniform "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 = Pressfit

F = Female Pipe Thread

M = Male Pipe Thread

T = Plain End

L = Flanged

G = Grooved

# Standard Coupling

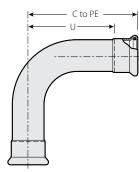
**STYLE 597** (P × P)



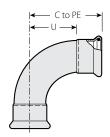
Approx. Weight Each Size Dimensions - Inches/mm 0.35 0.840 2.00 0.1 ½ 15 21.3 0.1 3/4\* 1.050 2.17 0.2 0.28 20 0.1 26.7 1\* 25 1.315 2.44 0.39 0.2 33.7 62 10 0.1 1 1/2\* 1.900 3.15 0.32 0.5 2\* 50 2.375 60.3 3.94 100 0.33 0.7 0.3

### **Elbows**

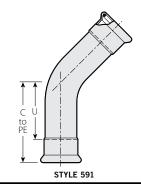
STYLE 590 90° Elbow (P  $\times$  P) STYLE 586 Short Tangent 90° Elbow (P  $\times$  P) STYLE 591 45° Elbow (P  $\times$  P)



STYLE 590



STYLE 586



Size		Style 590			Style 586			Style 591		
		90° Elbow			Short Tangent 90° Elbow			45° Elbow		
Nominal Size Inches mm	Actual Outside Diameter Inches mm	C to PE Inches mm	U Takeout Inches mm	Approx. Weight Each Lbs. kg	C to PE Inches mm	U Takeout Inches mm	Approx. Weight Each Lbs. kg	C to PE Inches mm	U Takeout Inches mm	Approx. Weight Each Lbs. kg
½ 15	0.840 21.3	2.67 68	1.84 47	0.3 0.1	_	_	_	1.65 42	0.82 21	0.2 0.1
<sup>3</sup> / <sub>4</sub> *	1.050	3.43	2.48	0.4	2.83	1.88	0.3	2.44	1.50	0.3
20	26.7	87	63	0.2	72	48	0.2	62	38	0.1
1*	1.315	4.33	3.31	0.6	3.36	2.34	0.5	3.11	2.09	0.5
25	33.7	110	84	0.3	85	59	0.2	79	53	0.2
1 ½*	1.900	6.73	5.32	1.4	4.60	3.19	1.0	5.00	3.59	1.3
40	48.3	171	135	0.6	117	81	0.5	127	91	0.6
2*	2.375	8.19	6.38	2.3	5.71	3.90	1.5	6.02	4.22	2.0
50	60.3	208	162	1.0	145	99	0.7	153	107	0.9

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

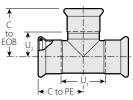


<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

### PRESSFIT 304™

Tee

**STYLE 592** ( $P \times P \times P$ )



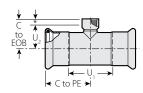
STYLE 592

Si	ze		Dimensions	- Inches/mm		Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm	C to PE	U <sub>1</sub>	C to EOB	U <sub>2</sub>	Lbs. kg
½	0.840	1.40	1.04	1.60	0.72	0.2
15	21.3	36	26	41	18	0.1
<sup>3</sup> / <sub>4</sub> *	1.050	1.89	1.89	1.89	0.95	0.3
20	26.7	48	48	48	24	0.1
1*	1.315	2.11	2.17	2.15	1.13	0.4
25	33.7	54	55	55	29	0.2
1 ½*	1.900	2.76	2.69	2.80	1.39	0.9
40	48.3	70	68	71	35	0.4
2*	2.375	3.39	3.17	3.62	1.81	1.4
50	60.3	86	81	92	46	0.6

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

### Tee with Threaded Branch

**STYLE 588** ( $P \times P \times F$ )



STYLE 588

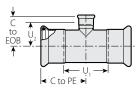
		Size				Dimensions	- Inches/mm	1	Approx. Wgt. Each
		Nomina Size Inches mm			C to PE	U <sub>1</sub>	C to EOB	U <sub>2</sub>	Lbs. kg
½ 15	×	½ 15	×	½ 15	1.50 38	1.35 34	1.50 38	0.97 25	0.2 0.1
<sup>3</sup> / <sub>4</sub> 20	×	<sup>3</sup> / <sub>4</sub> 20	×	½ 15	1.89 48	1.89 48	1.64 42	1.11 28	0.3 0.2
				<sup>3</sup> / <sub>4</sub> * 20	1.89 48	1.89 48	1.71 43	1.16 29	0.4 0.2
1 25	×	1 25	×	½ 15	2.11 54	2.17 55	1.78 45	1.25 32	0.4 0.2
				<sup>3</sup> / <sub>4</sub> * 20	2.11 54	2.17 55	1.85 47	1.30 33	0.5 0.2
				1* 25	2.11 54	2.17 55	2.02 51	1.34 34	0.6 0.3
1 ½ 40	×	1 ½ 40	×	½ 15	2.76 70	2.69 68	2.07 53	1.54 39	0.8 0.4
			-	<sup>3</sup> / <sub>4</sub> * 20	2.76 70	2.69 68	2.14 54	1.59 40	0.9 0.4
				1* 25	2.76 70	2.69 68	2.31 59	1.63 40	0.9 0.4
2 50	×	2 50	×	½ 15	3.39 86	3.16 80	2.31 59	1.78 45	1.2 0.5
				<sup>3</sup> / <sub>4</sub> * 20	3.39 86	3.16 80	2.38 60	1.83 46	1.3 0.6
				1* 25	3.39 86	3.16 80	2.55 65	1.87 48	1.3 0.6

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

PRESSFIT 304™

# Tee with Reducing Branch

**STYLE 593** ( $P \times P \times P$ )



STYLE	593

		Size				oimensions -	– Inches/mr	n	Approx. Weight Each
		Nomina Size Inches mm			C to PE		C to EOB	U <sub>2</sub>	Lbs. kg
<sup>3</sup> / <sub>4</sub> 20	×	<sup>3</sup> ⁄ <sub>4</sub> 20	×	½ 15	1.90 48	1.91 48	2.10 53	1.27 32	0.3 0.1
1 25	×	1 25	×	½ 15	2.10 53	2.15 55	2.30 58	1.47 37	0.3 0.1
			-	<sup>3</sup> / <sub>4</sub> * 20	2.11 54	2.17 55	2.03 52	1.09 28	0.4 0.2
1 ½ 40	×	1 ½ 40	×	½ 15	2.76 70	2.69 68	2.60 66	1.77 45	0.6 0.3
			-	<sup>3</sup> / <sub>4</sub> * 20	2.76 70	2.69 68	2.32 59	1.68 43	0.7 0.3
				1* 25	2.76 70	2.69 68	2.44 62	1.42 36	0.8 0.4
2 50	×	2 50	×	½ 15	3.39 86	3.17 81	2.80 71	1.97 50	1.2 0.5
				<sup>3</sup> / <sub>4</sub> * 20	3.39 86	3.17 81	2.56 65	1.62 41	1.3 0.6
				1* 25	3.39 86	3.17 81	2.68 68	1.66 42	1.1 0.5
				1 ½* 40	3.39 86	3.17 81	3.03 77	1.62 41	1.3 0.6

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

# Male Threaded Adapter

STYLE 596 ( $P \times M$ )



STYLE 596

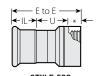
	Size		Dim	nensions – Inches/	mm	Approx. Weight Each
	Nominal Size Inches mm		E to E	U Takeout	IL Insert. Length	Lbs. kg
½ 15	×	½ 15	3.68 93	2.32 59	0.83 21	0.2 0.1
<sup>3</sup> / <sub>4</sub> 20	×	½ 15	3.22 82	1.75 44	0.95 24	0.3 0.1
		<sup>3</sup> / <sub>4</sub> * 20	3.72 94	2.22 56	0.95 24	0.3 0.1
		1* 25	3.22 82	1.60 41	0.95 24	0.4 0.2
1 25	×	<sup>3</sup> / <sub>4</sub> * 20	3.34 85	1.77 45	1.02 26	0.4 0.1
		1* 25	4.02 102	2.32 59	1.02 26	0.4 0.2
1 ½ 40	×	<sup>3</sup> / <sub>4</sub> * 20	3.69 94	1.73 44	1.42 36	0.6 0.3
		1 ½* 40	4.40 112	2.27 58	1.42 36	0.7 0.3
2 50	×	2* 50	5.03 128	2.46 62	1.81 46	1.0 0.5

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

PRESSFIT 304™

## Female Threaded Adapter

STYLE 599  $(P \times F)$ 



			STYLE 599					
	Size		Din	nensions – Inches/	mm	Approx. Weight Each		
	lomir Size Inche mm		E to E	U Takeout	IL Insert. Length	Lbs. kg		
½ 15	×	½ 15	2.15 55	0.79 20	0.83 21	0.2 0.1		
<sup>3</sup> / <sub>4</sub> 20	×	½ 15	2.20 56	0.71 18	0.95 24	0.2 0.1		
		<sup>3</sup> / <sub>4</sub> * 20	2.20 56	0.79 20	0.95 24	0.2 0.1		
1 25	×	½ 15	2.30 58	0.75 19	1.02 26	0.4 0.2		
		<sup>3</sup> / <sub>4</sub> * 20	2.30 58	0.73 19	1.02 26	0.3 0.1		
		1* 25	2.40 61	0.75 19	1.02 26	0.4 0.2		
1 ½ 40	×	1* 25	2.96 75	0.92 23	1.42 36	0.8 0.4		
		1 ¼* 32	2.96 75	0.87 22	1.42 36	0.6 0.3		
		1 ½* 40	2.96 75	0.87 22	1.42 36	0.8 0.4		
2 50	×	1 ¼* 32	3.75 95	1.27 32	1.81 46	0.9 0.4		
		1 ½* 40	3.75 95	1.27 32	1.81 46	1.1 0.5		
		2* 50	3.75 95	1.27 32	1.81 46	1.0 0.5		

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

## Weld Adapter

STYLE 561 ( $P \times T$ )



STYLE 561

Size	Din	Dimensions – Inches/mm				
Nominal Size Inches mm	E to E	U Takeout	IL Insert. Length	Lbs. kg		
1/2 × 1/2	3.68	2.85	0.83	0.2		
15 × 15	93	72	21	0.1		
<sup>3</sup> / <sub>4</sub> × <sup>3</sup> / <sub>4</sub> 20	3.72	2.77	0.95	0.3		
	94	70	24	0.1		
1 × 1	4.02	3.00	1.02	0.4		
25 × 25	102	76	26	0.2		
1½ × 1½	4.40	2.98	1.42	0.7		
40 × 40	112	76	36	0.3		
$\frac{2}{50} \times \frac{2}{50}$	5.03	3.22	1.81	1.0		
	128	82	46	0.5		

### Threaded Union

STYLE 584 ( $P \times P$ )



STYLE 584

Si	ze	Dimensions -	- Inches/mm	Approx. Weight Each
Nominal Size Inches mm	Actual Outside Diameter Inches mm	E to E	U Takeout	Lbs. kg
½	0.840	7.02	5.27	2.80
15	21.3	178	134	1.3
<sup>3</sup> / <sub>4</sub> *	1.050	7.14	5.14	3.50
20	26.7	181	131	1.6
1*	1.315	7.26	5.26	3.80
25	33.7	184	134	1.7
1 ½*	1.900	8.44	5.44	5.40
40	48.3	214	138	2.4
2*	2.375	8.38	4.67	6.10
50	60.3	213	119	2.8

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

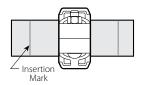
PRESSFIT 304™

### Grooved End Union

### STYLE 547

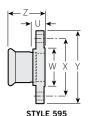
Request Publication 06.02 for Style 77 Flexible Joint Request Publication 06.04 for Style 07 Rigid Joint Request Publication 17.03/17.14 for Style 77S/475 Flexible Joints

Request Publication 17.25 for Style 489 Rigid Joints



- Style 547 grooved end union can be formed with two Style 587 transition nipples and a variety of grooved end couplings with varied gaskets to meet service requirements
- Standard ductile iron couplings request Style 77 for flexible joints or Style 07 for rigid joints
- Where external corrosion is a concern request Style 77S/475 for flexible joints or Style 489 for rigid joints

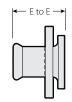
# Flange Adapter **STYLE 595** (P × L)



Si	ze		Dimensions – Inches/mm			Approx. Weight Each	
Nominal Size Inches mm	Actual Out. Dia. Inches mm	U Takeout	w	X	Y	z	Lbs. kg
½	0.840	2.39	1.38	2.38	3.50	3.22	2.3
15	21.3	61	35	60	89	82	1.1
<sup>3</sup> / <sub>4</sub> * 20	1.050	2.27	1.69	2.75	3.88	3.22	1.7
	26.7	58	43	70	99	82	0.8
1*	1.315	2.27	2.00	3.12	4.25	3.29	2.2
25	33.7	58	51	79	108	84	1.0
1 ½*	1.900	2.07	2.88	3.88	5.00	3.48	3.6
40	48.3	53	73	99	127	88	1.6
2*	2.375	1.80	3.62	4.75	6.00	3.60	5.4
50	60.3	46	92	121	152	92	2.4

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

# Van Stone Flange Adapter STYLE 565 (P x L)



STYLE 565

Si	ze	Dimensions	Approx. Weight Each
Nominal Size Inches mm	Actual Outside Diameter Inches mm	E to E Inches mm	Lbs. kg
½	0.840	3.12	3.00
15	21.3	79	1.4
<sup>3</sup> / <sub>4</sub> * 20	1.050	3.17	3.30
	26.7	81	1.5
1*	1.315	3.28	3.60
25	33.7	83	1.6
1 ½*	1.900	3.64	5.00
40	48.3	93	2.3
2*	2.375	4.73	5.90
50	60.3	120	2.7

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

PRESSFIT 304™

## Transition Nipple

STYLE 587  $(G \times T)$ 



STYLE 587

### Concentric Reducer STYLE 594 $(T \times T)$



STYLE 594

Si	ze	Dimensions -	- Inches/mm	Approx. Weight Each
Nominal Size Inches mm	Actual Outside Diameter Inches mm	E to E	L <sub>1</sub> Minimum	Lbs. kg
<sup>3</sup> / <sub>4</sub> *	1.050	4.00	1.00	0.2
20	26.7	102	25	0.1
1*	1.315	4.00	1.00	0.3
25	33.7	102	25	0.1
1 ½*	1.900	4.00	1.50	0.4
40	48.3	102	38	0.2
2*	2.375	4.00	1.88	0.5
50	60.3	102	48	0.2

# \*FM Approved for services up to 175 psi/1205 kPa.

Reducer Insert

STYLE 582  $(T \times P)$ 



STYLE 582

Size	Dimensions – Inches/mm			Approx. Weight Each
Nominal Size Inches mm	E to E	U Takeout	IL Insertion Length	Lbs. kg
1 × <sup>3</sup> / <sub>4</sub> * 20	2.95	0.98	0.95	0.2
	75	25	24	0.1
2 × 1½*	4.33	1.11	1.42	0.6
50 × 40	110	28	36	0.3

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

Size			Dim	mm	Approx. Weight Each	
	Nominal Size Inches mm		E to E	L <sub>1</sub> Minimum	L <sub>2</sub> Minimum	Lbs. kg
<sup>3</sup> / <sub>4</sub> 20	×	½ 15	3.50 89	1.00 25	0.88 22	0.2 0.1
1 25	×	½ 15	3.56 90	1.03 26	0.88 22	0.2 0.1
		<sup>3</sup> / <sub>4</sub> * 20	3.56 90	1.03 26	1.00 25	0.2 0.1
1 ½ 40	×	½ 15	4.25 108	1.44 37	0.88 22	0.3 0.1
		<sup>3</sup> / <sub>4</sub> * 20	4.25 108	1.44 37	1.00 25	0.4 0.2
		1* 25	4.25 108	1.44 37	1.03 26	0.4 0.2
		1 ¼* 32	4.25 108	1.44 37	1.25 32	0.4 0.2
2 50	×	½ 15	5.00 127	1.81 46	0.88 22	0.6 0.3
		<sup>3</sup> / <sub>4</sub> * 20	5.00 127	1.81 46	1.00 25	0.6 0.3
		1* 25	5.00 127	1.81 46	1.03 26	0.6 0.3
		1 ½* 40	5.00 127	1.81 46	1.44 37	0.7 0.3

<sup>\*</sup>FM Approved for services up to 175 psi/1205 kPa.

PRESSFIT 304™

Pressfit 304<sup>™</sup> Brass Body Ball Valve with Stainless Steel Pressfit Ends

**SERIES 589** (P × P)



Series 589 Ball Valve is a standard port valve with Pressfit ends for fast, easy installation. The valve, with Pressfit ends is designed for service to  $300\,\mathrm{psi}/2065\,\mathrm{kPa}$ .

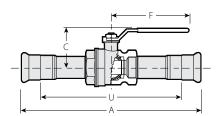
The valve body is constructed from forged brass. The ball is chrome plated brass and seals on TFE seats. A hollow ball design eliminates unnecessary weight while maintaining flow and mechanical strength. TFE seats and washers reduce the friction coefficient which eases valve operation.

The valve with Pressfit ends is designed for service to 300 psi/2065 kPa.

The Pressfit ends are of austenitic stainless steel.

Si	ze	Dimensions			Approx. Weight Each		
Nominal Size Inches mm	Actual Outside Diameter Inches/mm	A End to End Inches mm	C Inches mm	F Inches mm	U Takeout Inches mm	Lbs. kg	Flow Coefficient@ (Fully Open) C <sub>V</sub> Values K <sub>V</sub> Values
½	0.840	8.49	1.33	3.07	6.84	0.9	10
15	21.3	216	34	78	174	0.4	8.7
<sup>3</sup> / <sub>4</sub>	1.050	8.88	1.79	3.78	6.99	1.3	25
20	26.7	226	46	96	178	0.6	21.6
1	1.315	9.74	1.95	3.78	7.69	1.8	37
25	33.7	247	50	96	195	0.8	32.0
1 ½	1.900	11.09	2.68	5.43	8.26	3.4	87
40	48.3	282	68	138	210	1.5	75.3
2	2.375	12.90	2.89	5.43	9.29	4.4	110
50	60.3	328	73	138	236	2.0	95.2

@  $C_V/K_V$  values for flow of water at +60°F/+16°C with valve fully open.



### PRESSFIT 304™

### **SERIES 589 MATERIAL SPECIFICATIONS**

Valve Body: Forged Brass ASTM B-16

Ball: Brass ASTM B-16, chrome plated

Stem: Brass ASTM B-16, chrome plated

Seats: (TFE) Tetrafluoroethylene, rated to +450°F/+232°C.

Handle: Carbon steel, zinc plated

Stem Nut: Carbon steel, zinc plated

Stem Washer: (TFE) Tetrafluoroethylene

O-ring: Fluoroelastomer

Pressfit Ends: Precision cold drawn austenitic stainless steel.

**O-ring Seals:** (specify choice\*) O-ring seals shall be molded of synthetic rubber.

### • Grade "E" EPDM

EPDM (Green color code). Temperature range –30°F to +230°F/–34°C to +110°C. Recommended for cold and hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. NOT RECOMMENDED FOR PETROLEUM SERVICES.

### • Grade "T" nitrile

Nitrile (Orange color code). Temperature range –20°F to +180°F/–29°C to +82°C. Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water services over +150°F/+66°C or for hot dry air over +140°F/+60°C.

### • Optional: Grade "O" fluoroelastomer

Fluoroelastomer (Blue color code). Temperature range  $\pm 20^{\circ}$ F to  $\pm 300^{\circ}$ F/ $-7^{\circ}$ C to  $\pm 149^{\circ}$ C. Recommended for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons within the specified temperature range.

\* Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets are not recommended. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific gasket service recommendations and for a listing of services which are not recommended.



### **WARNING**

- Pressfit 304 products must only be used on services compatible with o-ring and fitting materials.
- · Incompatible services may result in leakage.

For services not listed or special services, contact Victaulic for recommendations.

PRESSFIT 304™

Pressfit 316<sup>™</sup> Type 316 Stainless Steel Ball Valve

SERIES 569



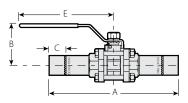
Series 569 Pressfit System Ball Valves feature full stainless steel body and trim, rated for service up to  $300\,\mathrm{psi/2065\,kPa}$  with Pressfit ends and up to  $400\,\mathrm{psi/2750\,kPa}$  with grooved ends, depending upon the joining coupling.

The valves are constructed of rugged Type 316 (CF8M) stainless steel with PTFE seats. The valves feature a blow-out proof stem and self-adjusting floating ball which provides uniform sealing. The full port design minimizes pressure drop for maximum flow efficiency. The three-piece swing-out design permits easy in-line maintenance.

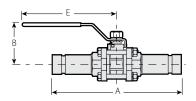
Size			Approx. Weight Each			
Nominal Size Inches mm	Actual Outside Diameter Inches mm	A End to End	В	С	E	Lbs. kg
½*	0.840	7.98	2.36	0.88	5.12	1.5
15	21.3	200.0	59.9	22.4	130.0	0.7
<sup>3</sup> / <sub>4</sub>	1.050	8.57	2.52	1.00	5.12	2.4
20	26.7	217.2	64.0	25.4	130.0	1.1
1	1.315	8.89	2.80	1.00	6.50	3.6
25	33.7	225.8	71.1	25.4	165.1	1.6
1 ½	1.900	11.20	3.39	1.50	7.48	6.9
40	48.3	284.5	86.1	38.1	190.0	3.1
2	2.375	12.52	3.74	1.88	7.48	9.5
50	60.3	318.0	95.0	47.8	190.0	4.3

For dimensions and weights with gear operator contact Victaulic.

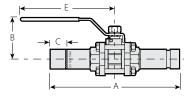
<sup>\*1/2&</sup>quot;/15 mm only available in plain end x plain end (T x T).



PLAIN END X PLAIN END



GROOVED X GROOVED



PLAIN END X GROOVED

### PRESSFIT 304™

### SERIES 569 MATERIAL SPECIFICATIONS Body: Stainless steel, CF8M

Ball: Stainless steel, CF8M

Stem: Stainless steel, Type 316

Seats: (PTFE) Polytetrafluoroethylene

Handle: Stainless steel, Type 304

Stem Nut: Stainless steel, Type 304

Stem Washer: Stainless steel, Type 304

Stem Packing and Thrust Washer: Tetrafluoroethylene

Bolt/Nut/Washer: Stainless steel, Type 304

Cap: Stainless steel, CF8M

Extended Ends: Schedule 5S Stainless steel, Type 316

### Specify end style:

Plain End for Pressfit (T x T)

• Grooved End (G x G)

• Plain End x Grooved End (T x G)



### **WARNING**

- Pressfit 304 products must only be used on services compatible with o-ring and fitting materials.
- Incompatible services may result in leakage.

For services not listed or special services, contact Victaulic for recommendations.

PRESSFIT 304™

### APPROVED PIPE

For Type 304/304L stainless steel Schedule 5S pipe approved for use with the Victaulic Pressfit 304 System, contact Victaulic or your nearest Pressfit 304 Stainless Steel distributor.

Approved pipe meets the requirements of ASTM A-312, Grade 304/304L and carries the label, "Pressfit 304™ Pipe Certified for use with Pressfit 304 Products".

The Pressfit 304 System requires no special preparation of the pipe ends before assembly. Pipe should be square cut (±0.030") and deburred, if required, to prevent damage to the o-ring during assembly.

Pressfit 304 System products are designed only for use on approved Pressfit 304 stainless steel pipe.

For product installation instructions, refer to Pressfit Product Assembly Instructions (I-500) and the appropriate Tool Operating and Maintenance Instructions Manual.

	*Pipe – Inches/mm		Aprx. Pipe* Weight Per Ft.
Nominal	Actual	Wall	Lbs
Size	Outside Dia.	Thickness	kg
½	0.840	0.065	0.6
15	21.3	1.7	0.3
<sup>3</sup> / <sub>4</sub>	1.050	0.065	0.7
20	26.7	1.7	0.3
1	1.315	0.065	0.9
25	33.7	1.7	0.4
1 ½	1.900	0.065	1.3
40	48.3	1.7	0.6
2	2.375	0.065	1.6
50	60.3	1.7	0.7

\*Pipe is supplied in random mill lengths (RML) (17 – 24 ft.) which nominally measure 21 ft. Order quantities will be accepted only in 21 ft. random length increments, subject to industry standard  $\pm 10\%$  tolerance. Minimum footage requirements must be specified on the order when required.



### **WARNING**

It is the responsibility of designers of piping systems to verify the suitability of Schedule 5S,
 Type 304 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 AISI Type 304 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.

### PRESSFIT 304™

### PIPE SUPPORT

Piping joined with Pressfit 304 System products, like all other piping systems, requires support to carry the weight of pipes and equipment. As for other methods of joining pipes, the support or hanging method must be such as to eliminate undue stresses on joints, piping and other components. Additionally, the method of support must be such as to allow movement of the pipes where required and to provide drainage, etc., as may be specified by the designer.

The maximum hanger spacing corresponds to ASME B31.1, B31.3 or B31.9 as noted, and should be used in conjunction with Victaulic Pressfit 304 System products on approved Type 304/304L stainless steel pipe.

Pipe	Size			Suggested Between Suppor	Max. Span rts - Feet/meters	i	
Nominal Size Inches	Actual Out. Dia. Inches	Water Service			Gas/Air Service		
mm	mm	B31.1	B31.3	B31.9	B31.1	B31.3	B31.9
½	0.840	6	6	7	8	8	7
15	21.3	1.8	1.8	2.1	2.4	2.4	2.1
<sup>3</sup> / <sub>4</sub>	1.050	7	7	8	9	9	8
20	26.7	2.1	2.1	2.4	2.7	2.7	2.4
1	1.315	7	7	9	9	9	9
25	33.7	2.1	2.1	2.7	2.7	2.7	2.7
1 ½	1.900	7	7	12	9	9	13
40	48.3	2.1	2.1	3.7	2.7	2.7	4.0
2	2.375	10	10	13	13	13	15
50	60.3	3.1	3.1	4.0	4.0	4.0	4.6

### **Pressfit Tools**



#### **PFT505**

- The Pressfit System requires a Pressfit tool designed for securing Pressfit products onto pipe
- Jaws are available separately for rental (with rental tool) or purchase
- Pressfit tool is designed for industrial and trade use only

Capacity: ½ – 2"/15 – 50 mm IPS Schedule 5 steel and stainless steel pipe

Power Requirements: 110 volt, 60 cycle, 6.5 amp

Accessories: Pressing jaws in ½"/15mm, ¾"/20mm, 1"/25mm, 1½"/40mm and

2"/50 mm sizes

Note: PFT505 and PFT509 components are not interchangeable



### PFT509

- The Pressfit System requires a Pressfit tool designed for securing Pressfit products onto pipe
- Tool packages include the actual pressing tool, two (2) batteries and a charger, carrying case, and  $\frac{1}{2}$ /15mm,  $\frac{3}{4}$ /20mm,  $\frac{1}{2}$ mm, and  $\frac{1}{2}$ /40mm press jaws
- Jaws are available separately for purchase (as needed for replacements)
- Pressfit tool is designed for industrial and trade use only
- Pressfit tool is battery powered and requires a 12V battery charger

**Capacity:**  $\frac{1}{2} - 1$ " and  $\frac{1}{2}$ "/15 – 25 mm and 40 mm IPS Schedule 5 steel and stainless steel pipe

Power Requirements: 110 volt/60 cycle/6.5 amp

Note: PFT505 and PFT509 components are not interchangeable

PRESSFIT 304™

WARRANTY	Refer to the Warranty section of the current Price List or contact Victaulic for details.
NOTE	This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

