

Submittal Package

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Viega ProPress® for Stainless System

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Viega® ProPress 304 and ProPress XL 304 for Stainless Steel

Viega ProPress 304 and ProPress XL 304 are stainless steel fittings designed to be used with Viega stainless steel pipe to form a complete press system that is ideal for industrial applications. ProPress 304 fittings utilize a versatile FKM sealing element to provide a permanent, leak-free connection in dimensions from ½" to 4". A Viega ProPress 304 system can stand up to harsh environments while transporting process water, diesel fuel, lube oil, ammonia, low pressure steam or any number of other essential fluids.

Listings and Certificates

- CRN# OA13492.5
- American Bureau of shipping (ABS)
- IAPMO PS117
- Lloyd's Register (LR)
- ICC LC1002
- Det Norske Veritas (DNV)
- UL 213
- Germanischer Lloyd (GL)

Compliant with:

- NFPA 13, 13D and 13R, 31, 54 and 58
- U.S. Coast Guard
- Uniform Plumbing Code
- Uniform Mechanical Code
- International Plumbing Code
- International Mechanical Code
- ASME B31

Viega ProPress 304 fittings are offered in configurations including: elbows, couplings, reducers, tees, reducing tees, threaded adapters, unions, caps and flanges. ProPress XL 304 fittings in 2½" to 4" have a 420 stainless steel grip ring and a PBT separator ring in addition to the FKM sealing element.

Operating Parameters

Operating Pressure: 200 PSI maximum
Test Pressure: 600 PSI maximum
Operating Temperature: 14°F to 284°F
(with temperature spikes up to 356°)

Approved Applications:

- Hydronic heating (w/ Glycol)
- Chilled water
- Compressed air
- Fire sprinkler (175 psi maximum)
- Low pressure steam (15 psi maximum)
- Vacuum (29.2 in. Hg maximum @ 68°F)
- Acetylene
- Fuel oil
- Diesel Fuel (125 psi)
- Lube oil
- Anhydrous ammonia



For more specific information on applications for ProPress 304, contact Viega Technical Services at 1-800-976-9819.

In ProPress 304 fittings, Smart Connect technology assures leakage of liquids and/or gases from inside the system past the sealing element of an unpressed connection. The function of this feature is to provide the installer quick and easy identification of connections which have not been pressed prior to putting the system into operation.

Viega ProPress 304 systems are approved for underground use. When installed underground, Viega ProPress 304 should have proper corrosion protection in accordance with local and national codes.

Recommended Tools:

- RIDGID RP 200-B (½" to 1¼")
- RIDGID RP 210-B (½" to 1¼")
- RIDGID RP 320-E
- RIDGID RP 330-B or 330-C
- RIDGID RP 340
- RIDGID CT 400

Contact your local Viega representative for details on local approvals.

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Viega® ProPress 316 and ProPress XL 316 for Stainless Steel

Viega ProPress 316 and ProPress XL 316 are stainless fittings that are designed to be used with Viega 316 stainless steel pipe to form a complete press system that is ideal for potable water and durable enough to handle industrial applications or environments. ProPress 316 fittings feature the same EPDM sealing element found in ProPress copper fittings and provide the same permanent leak-free connections in dimensions from ½" to 4". Viega ProPress 316 fittings can stand up to severe environments and harsh disinfectants while transporting potable water, deionized water, isopropyl alcohol, ethanol, low pressure steam or any number of other essential fluids.

Listings and Certificates

- NSF 61G
- IAPMO PS117
- UL 213
- ICC LC 1002
- ABS
- CRN OB13492.5

International Listings and Certificates

- Verein des Gas- und Wasserfaches e.V. (DVGW)
- Lloyd's Register (LR)
- Det Norske Veritas (DNV)
- Registro Italiano Navale (RINA)
- Bureau Veritas (BV)
- KIWA

Compliant with:

- ICC International Plumbing Code
- IAPMO Uniform Plumbing Code
- PHCC National Standard Plumbing Code
- Florida Building Code, Volume II Plumbing Code
- NFPA 13, 13D and 13R
- ASME B31
- U.S. Coast Guard

Viega ProPress 316 fittings are offered in configurations including: elbows, couplings, reducers, tees, reducing tees, threaded adapters, unions, caps and flanges.

Approved Applications:

- Potable Water
- Hydronic Heating (w/ Glycol)
- Chilled Water
- Compressed Air
- Isopropyl Alcohol
- Latex Paint
- Fire Sprinkler (175 PSI maximum)
- Low Pressure Steam (15 PSI maximum)
- Vacuum (29.2 in. Hg maximum @ 68°F)

For more specific information on applications for ProPress 316, contact Viega Technical Services at 1-800-976-9819.



Operating Parameters

Operating Pressure: 200 PSI maximum
Test Pressure: 600 PSI maximum
Operating Temperature: 0°F to 250°F

In ProPress 316 fittings, Smart Connect technology assures leakage of liquids and/or gases from inside the system past the sealing element of an unpressed connection. The function of this feature is to provide the installer quick and easy identification of connections which have not been pressed prior to putting the system into operation.

Viega ProPress 316 systems are approved for underground use. When installed underground, Viega ProPress 316 should have proper corrosion protection in accordance with local and national codes.

Recommended Tools:

- RIDGID RP 200-B (½" to 1¼")
- RIDGID RP 210-B (½" to 1¼")
- RIDGID RP 320-E
- RIDGID RP 330-B or 330-C
- RIDGID RP 340
- RIDGID CT 400

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ProPress® Stainless Flow Data

Dimensional Data

Nominal Pipe Size	Weight		
	Pipe (lb./ft.)	Water (lb./ft.)	Total (lb./ft.)
1/2"	0.41	0.06	0.47
3/4"	0.59	0.12	0.71
1"	0.77	0.20	0.97
1 1/4"	0.95	0.31	1.26
1 1/2"	1.13	0.43	1.56
2"	1.50	0.76	2.26
2 1/2"	2.18	1.61	3.79
3"	2.60	2.29	4.89
4"	3.46	4.06	7.52

1/2" Stainless Steel, ASTM A312

Flow Rate (gpm)	Schedule 5	
	Wall Thickness = 0.065 ID = 0.50	
	Velocity (ft/sec)	Press Loss (psi/100')
1.00	1.63	0.95
2.00	3.27	3.79
3.00	4.90	8.54
4.00	6.54	15.18
5.00	8.17	23.71
6.00	9.80	34.15
7.00	11.44	46.48
8.00	13.07	60.71
9.00	14.71	76.83
10.00	16.34	94.86
11.00	17.97	114.77
12.00	19.61	136.59
13.00	21.24	160.31
14.00	22.88	185.92
15.00	24.51	213.42
16.00	26.14	242.83
17.00	27.78	274.13
18.00	29.41	307.33

Flow Rate, Velocity and Friction Loss (Water)

Friction loss state within the following tables is based on pipe dimensional data using the Darcy-Weisbach equation:

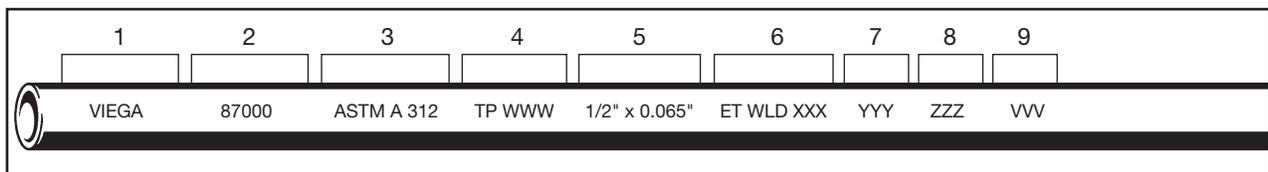
$$h_f = f \cdot \frac{L}{D} \cdot \frac{V^2}{2g}$$

h = friction loss
 L = pipe length
 D = pipe ID
 V = velocity (ft./sec.)
 g = gravity constant (32.174ft./sec.²)
 f = pipe friction factor

Identification

Viega ProPress for Stainless pipe is marked and labeled with the following information along its entire length:

1. Manufacturer
2. Stock code
 - a. NSF 61 (316 only)
3. Specification standard
4. Material type
5. Nominal diameter x wall thickness
6. Manufacturing information
7. Date of manufacture
8. Batch code
9. Country of origin



Identification of ProPress for Stainless

Viega LLC, 12303 Airport Way, Ste. 395 • Broomfield, CO 80021 • Ph: 800-976-9819 • Fax: 800-976-9817

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3/4" Stainless Steel, ASTM A312

Flow Rate (gpm)	Schedule 5	
	Wall Thickness = 0.065 ID = 0.75	
	Velocity (ft./sec.)	Press Loss (psi/100')
1.00	0.73	0.12
2.00	1.45	0.48
3.00	2.18	1.07
4.00	2.90	1.91
5.00	3.63	2.98
6.00	4.36	4.29
7.00	5.08	5.84
8.00	5.81	7.63
9.00	6.54	9.65
10.00	7.26	11.92
11.00	7.99	14.42
12.00	8.71	17.16
13.00	9.44	20.14
14.00	10.17	23.36
15.00	10.89	26.81
16.00	11.62	30.51
17.00	12.35	34.44
18.00	13.07	38.61
19.00	13.80	43.02
20.00	14.52	47.67
21.00	15.25	52.55
22.00	15.98	57.68
23.00	16.70	63.04
24.00	17.43	68.64
25.00	18.16	74.48
26.00	18.88	80.56
27.00	19.61	86.88
28.00	20.33	93.43
29.00	21.06	100.22
30.00	21.79	107.25

1" Stainless Steel, ASTM A312

Flow Rate (gpm)	Schedule 5	
	Wall Thickness = 0.065 ID = 1.00	
	Velocity (ft./sec.)	Press Loss (psi/100')
2.00	0.82	0.11
4.00	1.63	0.43
6.00	2.45	0.97
8.00	3.27	1.72
10.00	4.08	2.69
12.00	4.90	3.88
14.00	5.72	5.28
16.00	6.54	6.89
18.00	7.35	8.73
20.00	8.17	10.77
22.00	8.99	13.04
24.00	9.80	15.51
26.00	10.62	18.21
28.00	11.44	21.12
30.00	12.25	24.24
32.00	13.07	27.58
34.00	13.89	31.13
36.00	14.71	34.91
38.00	15.52	38.89
40.00	16.34	43.09
42.00	17.16	47.51
44.00	17.97	52.14
46.00	18.79	56.99

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1 1/4" Stainless Steel, ASTM A312

Flow Rate (gpm)	Schedule 5	
	Wall Thickness = 0.06 ID = 1.26	
	Velocity (ft./sec.)	Press Loss (psi/100')
5.00	1.29	0.21
8.00	2.06	0.54
11.00	2.83	1.03
14.00	3.60	1.66
17.00	4.37	2.45
20.00	5.15	3.39
23.00	5.92	4.49
26.00	6.69	5.73
29.00	7.46	7.13
32.00	8.23	8.68
35.00	9.01	10.39
38.00	9.78	12.25
41.00	10.55	14.26
44.00	11.32	16.42
47.00	12.09	18.73
50.00	12.87	21.20
53.00	13.64	23.82
56.00	14.41	26.60
59.00	15.18	29.52
62.00	15.95	32.60
65.00	16.72	35.83
68.00	17.50	39.21
71.00	18.27	42.75
74.00	19.04	46.44
77.00	19.81	50.28

1 1/2" Stainless Steel, ASTM A312

Flow Rate (gpm)	Schedule 5	
	Wall Thickness = 0.06 ID = 1.50	
	Velocity (ft./sec.)	Press Loss (psi/100')
10.00	1.82	0.34
13.00	2.36	0.57
16.00	2.90	0.86
19.00	3.45	1.22
22.00	3.99	1.63
25.00	4.54	2.11
28.00	5.08	2.64
31.00	5.63	3.24
34.00	6.17	3.90
37.00	6.72	4.61
40.00	7.26	5.39
43.00	7.81	6.23
46.00	8.35	7.13
49.00	8.90	8.09
52.00	9.44	9.11
55.00	9.99	10.19
58.00	10.53	11.33
61.00	11.07	12.54
64.00	11.62	13.80
67.00	12.16	15.13
70.00	12.71	16.51
73.00	13.25	17.96
76.00	13.80	19.46
79.00	14.34	21.03
82.00	14.89	22.66
85.00	15.43	24.34
88.00	15.98	26.09
91.00	16.52	27.90

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2" Stainless Steel, ASTM A312

Flow Rate (gpm)	Schedule 5	
	Wall Thickness = 0.06 ID = 2.00	
	Velocity (ft./sec.)	Press Loss (psi/100')
20.00	2.04	0.30
25.00	2.55	0.47
30.00	3.06	0.68
35.00	3.57	0.93
40.00	4.08	1.21
45.00	4.60	1.53
50.00	5.11	1.89
55.00	5.62	2.29
60.00	6.13	2.73
65.00	6.64	3.20
70.00	7.15	3.71
75.00	7.66	4.26
80.00	8.17	4.85
85.00	8.68	5.47
90.00	9.19	6.14
95.00	9.70	6.84
100.00	10.21	7.57
105.00	10.72	8.35
110.00	11.23	9.17
115.00	11.74	10.02
120.00	12.25	10.91
125.00	12.77	11.84
130.00	13.28	12.80
135.00	13.79	13.81
140.00	14.30	14.85
145.00	14.81	15.93
150.00	15.32	17.04
155.00	15.83	18.20
160.00	16.34	19.39
165.00	16.85	20.62

2½" Stainless Steel, ASTM A554

Flow Rate (gpm)	Schedule 5	
	Wall Thickness = 0.08 ID = 2.470	
	Velocity (ft./sec.)	Press Loss (psi/100')
50.00	3.35	0.62
55.00	3.68	0.75
60.00	4.02	0.90
65.00	4.35	1.05
70.00	4.69	1.22
75.00	5.02	1.40
80.00	5.36	1.59
85.00	5.69	1.80
90.00	6.03	2.02
95.00	6.36	2.25
100.00	6.70	2.49
105.00	7.03	2.75
110.00	7.37	3.01
115.00	7.70	3.30
120.00	8.03	3.59
125.00	8.37	3.89
130.00	8.70	4.21
135.00	9.04	4.54
140.00	9.37	4.88
145.00	9.71	5.24
150.00	10.04	5.61
155.00	10.38	5.99
160.00	10.71	6.38
165.00	11.05	6.78
170.00	11.38	7.20
175.00	11.72	7.63
180.00	12.05	8.07
185.00	12.39	8.53
190.00	12.72	8.99
195.00	13.06	9.47
200.00	13.39	9.97

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3" Stainless Steel, ASTM A554

Flow Rate (gpm)	Schedule 5	
	Wall Thickness = 0.08	
	ID = 2.970	
	Velocity (ft./sec.)	Press Loss (psi/100')
50.00	2.32	0.25
60.00	2.78	0.36
70.00	3.24	0.49
80.00	3.70	0.63
90.00	4.17	0.80
100.00	4.63	0.99
110.00	5.09	1.20
120.00	5.56	1.43
130.00	6.02	1.68
140.00	6.48	1.94
150.00	6.95	2.23
160.00	7.41	2.54
170.00	7.87	2.86
180.00	8.34	3.21
190.00	8.80	3.58
200.00	9.26	3.96
210.00	9.73	4.37
220.00	10.19	4.80
230.00	10.65	5.24
240.00	11.11	5.71
250.00	11.58	6.20
260.00	12.04	6.70
270.00	12.50	7.23
280.00	12.97	7.77
290.00	13.43	8.34
300.00	13.89	8.92
310.00	14.36	9.53
320.00	14.82	10.15
330.00	15.28	10.79
340.00	15.75	11.46
350.00	16.21	12.14
360.00	16.67	12.85
370.00	17.13	13.57
380.00	17.60	14.31
390.00	18.06	15.08

4" Stainless Steel, ASTM A554

Flow Rate (gpm)	Schedule 5	
	Wall Thickness = 0.08	
	ID = 3.970	
	Velocity (ft./sec.)	Press Loss (psi/100')
200.00	5.18	0.93
220.00	5.70	1.12
240.00	6.22	1.34
260.00	6.74	1.57
280.00	7.26	1.82
300.00	7.78	2.09
320.00	8.29	2.38
340.00	8.81	2.69
360.00	9.33	3.01
380.00	9.85	3.35
400.00	10.37	3.72
420.00	10.89	4.10
440.00	11.40	4.50
460.00	11.92	4.91
480.00	12.44	5.35
500.00	12.96	5.81
520.00	13.48	6.28
540.00	14.00	6.77
560.00	14.51	7.28
580.00	15.03	7.81
600.00	15.55	8.36
620.00	16.07	8.93
640.00	16.59	9.51
660.00	17.11	10.12
680.00	17.62	10.74
700.00	18.14	11.38
720.00	18.66	12.04
740.00	19.18	12.72
760.00	19.70	13.42
780.00	20.22	14.13
800.00	20.73	14.87
820.00	21.25	15.62
840.00	21.77	16.39
860.00	22.29	17.18
880.00	22.81	17.99

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Fitting Friction Loss Equivalent Length of Pipe (ft)

Fitting Type	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
90° elbow (long radius)	0.66	0.99	1.33	1.65	1.98	2.66	3.30	3.97	5.30
45° elbow	0.66	0.99	1.33	1.65	1.98	2.66	3.30	3.97	5.30
tee (straight flow)	0.82	1.24	1.66	2.06	2.48	3.32	4.12	4.96	6.62
tee (branch outlet)	2.46	3.72	4.98	6.18	7.44	9.96	12.36	14.88	19.86
ball valve (full port)	6.15	9.30	12.45	15.45	18.60	24.90	n/a	n/a	n/a

MSS SP-58 or the following maximum spacing and minimum rod sizes

Nominal Pipe Size (in.)	Stainless Steel Pipe Max. Span (ft.)	Min. Rod Diameter (in.)
Up to 3/4	10	3/8
1	10	3/8
1 1/4	10	3/8
1 1/2	10	3/8
2	10	3/8
2 1/2	11	1/2
3	12	1/2
4	14	5/8

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Engineering Specifications

ART 1 – GENERAL

1.1 SUMMARY

- 1.1.1 Stainless Steel Pipe and Fitting System using cold press connection technology. The system is assembled when the pipe is fully inserted into the fitting, then pressed on both sides of the fitting seal, creating a mechanical joint.

1.2 REFERENCES

- 1.2.1 ASME A13.1 Scheme for the Identification of Piping Systems
- 1.2.2 ASME B1.20 Pipe Threads, General Purpose (Inch)
- 1.2.3 ASME B31.1 Power Piping
- 1.2.4 ASME B31.3 Process Piping
- 1.2.5 ASME B31.9 Building Services Piping
- 1.2.6 ASTM A312 Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes
- 1.2.7 ASTM A554 Standard Specification For Welded Stainless Steel Mechanical Tubing
- 1.2.8 AWWA C651 Standard for Disinfecting Water Mains
- 1.2.9 IAPMO Uniform Mechanical Code
- 1.2.10 IAPMO Uniform Plumbing Code
- 1.2.11 ICC International Plumbing Code
- 1.2.12 ICC International Mechanical Code
- 1.2.13 MSS-SP-58 Pipe Hangers and Supports - Materials, Design and Manufacture
- 1.2.14 NFPA 13 Standard for the Installation of Sprinkler Systems (Approval Pending)
- 1.2.15 NFPA 13D Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes (Approval Pending)
- 1.2.16 NFPA 13R Standard for the Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height (Approval Pending)
- 1.2.17 NSF 61 Drinking Water System Components – Health Effects

1.3 QUALITY ASSURANCE

- 1.3.1 The installer shall be a qualified installer, licensed within the jurisdiction, and familiar with the installation of stainless steel pipe.
- 1.3.2 The installation of stainless steel pipe for hot and cold water distribution systems shall conform to the requirements of the ICC International Plumbing Code or IAPMO Uniform Plumbing Code. The installation of stainless steel pipe in hydronic systems shall conform to the requirements of the ICC International Mechanical Code or the IAPMO Uniform Mechanical Code.

1.4 DELIVERY, STORAGE, AND HANDLING

- 1.4.1 Stainless steel pipe shall be shipped to the job site by truck or in such a manner to protect the pipe. The pipe and fittings shall not be handled roughly during shipment. The pipe and fittings shall be unloaded with reasonable care.
- 1.4.2 Protect the stored pipe from moisture and dirt. Elevate above grade. When stored inside, do not exceed the structural capacity of the floor.
- 1.4.3 Protect fittings and piping specialties from moisture and dirt.

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1.5 PROJECT CONDITIONS

1.5.1 Verify length of pipe required by field measurements.

1.6 WARRANTY

- 1.6.1 The pipe and fittings manufacturer shall warrant that the pipe and fittings are free from defects and conform to the designated standard. The warranty shall only be applicable to pipe and fittings installed in accordance with the manufacturer's installation instructions.
- 1.6.2 The manufacturer of the pipe and fittings shall not be responsible for the improper use, handling, or installation of the product.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

2.1.1 Stainless Steel Press Fittings: Viega North America, Viega, LLC, 12303 Airport Way, Ste. 395, Broomfield, CO 80021, 800-976-9819

2.2 MATERIAL

- 2.2.1 Pipe Standard: Stainless Steel Pipe shall conform to ASTM A312 or ASTM A554.
- 2.2.2 Fitting Standard: Stainless steel fittings shall conform to the material requirements of ASTM A312 or ASTM A554.
- 2.2.3 Press Fitting: Stainless steel press fittings shall conform to the material and sizing requirements of ASME A312 or ASTM A554. O-rings for stainless steel press fittings shall be EPDM, or FKM, depending on the application.
- 2.2.4 Threaded Fittings: Pipe Threads shall conform to ASME B1.20.1.
- 2.2.5 Hanger Standard: Hangers and supports shall conform to MSS-SP-58.

2.3 SOURCE QUALITY CONTROL

2.3.1 All pipe, fittings, and joining materials in contact with drinking water shall be listed by a third party agency to NSF 61.

PART 3 – EXECUTION

3.1 EXAMINATION

3.1.1 The installing contractor shall examine the stainless steel pipe and fittings for defects or cracks. There shall be no defects of the pipe or fittings. Any damaged pipe or fittings shall be rejected.

3.2 PREPARATION

- 3.2.1 Stainless steel pipe shall be cut with a wheeled pipe cutter or approved stainless steel pipe cutting tool. The pipe shall be cut square to permit proper joining with the fittings.
- 3.2.2 Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly. The pipe end shall be wiped clean and dry. The burrs on the pipe shall be reamed with a deburring or reaming tool.

3.3 INSTALLATION GENERAL LOCATIONS

3.3.1 Plans indicate general location and arrangement of piping systems. Identified locations and arrangements are used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated, except where deviations to layout are approved on coordination drawings.

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3.4 INSTALLATION, STAINLESS STEEL PIPE

- 3.4.1 Pressure Rating: Install components having a pressure rating equal to or greater than the system operating pressure.
- 3.4.2 Install piping free of sags, bends, and kinks.
- 3.4.3 Change in Direction: Install fittings for changes in direction and branch connections.
- 3.4.4 Press Connections: Stainless steel press fittings shall be made in accordance with the manufacturer's installation instructions. The pipe shall be fully inserted into the fitting and the pipe marked at the shoulder of the fitting. The fitting alignment shall be checked against the mark on the pipe to assure the pipe is fully engaged (inserted) in the fitting. The joints shall be pressed using the tool approved by the manufacturer.
- 3.4.5 Threaded Joints: Threaded joints shall have pipe joint compound or teflon tape applied to the male threads only. Tighten joint with a wrench and backup wrench as required.
- 3.4.6 Pipe Protection: Provide protection against abrasion where stainless steel pipe is in contact with other building members by wrapping with an approved tape, pipe insulation or otherwise suitable method of isolation.
- 3.4.7 Penetration Protection: Provide allowance for thermal expansion and contraction of stainless steel pipe passing through a wall, floor, ceiling or partition by wrapping with an approved tape or pipe insulation, or by installing through an appropriately sized sleeve. Penetrations of fire resistance rated assemblies shall maintain the rating of the assembly
- 3.4.8 Backfill Material: Backfill material shall not include any ashes, cinders, refuse, stones, boulders or other materials which can damage or break the pipe or promote corrosive action in any trench or excavation in which pipe is installed.
- 3.4.9 Horizontal Support: Install hangers for horizontal piping in accordance with local code or the following maximum spacing and minimum rod sizes:

All systems must be installed per local codes and /or standards and requirements. Consult the Viega technical support department before installing the system in other applications or applications with temperatures and/or pressures outside the stated ratings. Refer to Viega's Application Guide for more information

Nominal Pipe Size (in)	Stainless Steel Pipe Max. Span (ft)	Min. Rod Diameter (in)
Up to ¾	10	¾
1	10	¾
1¼	10	¾
1½	10	¾
2	10	¾
2½	11	½
3	12	½
4	14	⅝

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- 3.4.10 Vertical Support: Vertical stainless steel pipe shall be supported at each floor or at 10 foot intervals.
- 3.4.11 Galvanic Corrosion: Hangers and supports shall be either stainless steel or vinyl coated to prevent galvanic corrosion between the pipe and the supporting member.
- 3.4.12 Restraint: In seismic areas, stainless steel pipe shall be installed to withstand all seismic forces.
- 3.4.13 Identification: Stainless steel pipe systems shall be identified in accordance with the requirements of ASME A13.1.

3.5 FIELD QUALITY CONTROL

- 3.5.1 Viega ProPress for stainless includes Smart Connect (SC) technology, a quick and easy way of identifying unpressed connections during the pressure testing process. This indentation is removed during the pressing process, creating a leak-free permanent connection. The function of the feature is to provide identification of connections which have not been pressed prior to putting the system in to operation. The function of Smart Connect technology is carried out by pressurizing the piping system. Smart Connect technology may be pressure tested with air or water
 - 3.5.1.1 When testing with air, the pressure range is ½ psi to 45 psi maximum.
 - 3.5.1.2 When testing with water, the pressure range is 15 psi to 85 psi maximum.
- 3.5.2 The Smart Connect technology test is not a substitute for local code required pressure testing of the piping system. Carry out the final piping system pressure test in accordance with local codes.

3.6 CLEANING (For potable water systems.)

- 3.6.1 Disinfection: The stainless steel hot and cold water distribution system shall be disinfected prior to being placed in service. The system shall be disinfected in accordance with AWWA C651 or the following requirements:
 - 3.6.1.1 The piping system shall be flushed with potable water until discolored water does not appear at any of the outlets.
 - 3.6.1.2 The system shall be filled with a water chlorine solution containing between 50 and 200 parts per million of chlorine. The system shall be valved in the closed position and allowed to stand for 24 hours.
 - 3.6.1.3 Following the standing time, the system shall be flushed with water until the chlorine is purged from the system.

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Seals And Gasket Materials Information

FKM Sealing Element

Operating temperature:

14°F to 284°F (-18°C to 140°)

Resistant to thermal spikes to 356°F (thermal spikes are temperature increases above maximum defined operating temperature for a duration of 24 hours or less).

FKM, is a fluoroelastomer or synthetic fluorinated rubber, specialty purpose elastomer.

FKM sealing elements are white in color, and possess excellent resistance to chemicals, higher temperatures, aging, ozone, sunlight, weathering, environmental influences, oils, and petroleum-based additives.

FKM's resistance to aggressive chemicals and higher operating temperatures makes it ideal for seals and gaskets in industrial process applications.

All sealing elements are installed using an H-1 food grade silicone oil lubricant registered with NSF, USDA and approved for use under FDA 21 CFR.

Refer to product line application guides or chemical compatibility matrix for general information, or call Viega® Tech Services at 1-800-976-9819.

HNBR Sealing Element

Operating temperature:

-40°F to 180°F (-40°C to 66°C)

[sliding scale range]

HNBR, or Hydrinatet butadiene-acrylic rubber, is a speciality purpose compound used where resistance to petroleum-based additives are required.

HNBR sealing elements are yellow in color, and possess excellent physical strength and retention properties after long-term exposure to heat, oil, and chemicals.

HNBR sealing elements are used for applications of natural, propane, mixed, and manufactured gases.

HNBR's unique properties have resulted in wide adoption in automotive, industrial, and assorted high performance applications.

Product line application guides and chemical compatibility matrix are not all inclusive.

EPDM Sealing Element

Operating temperature:

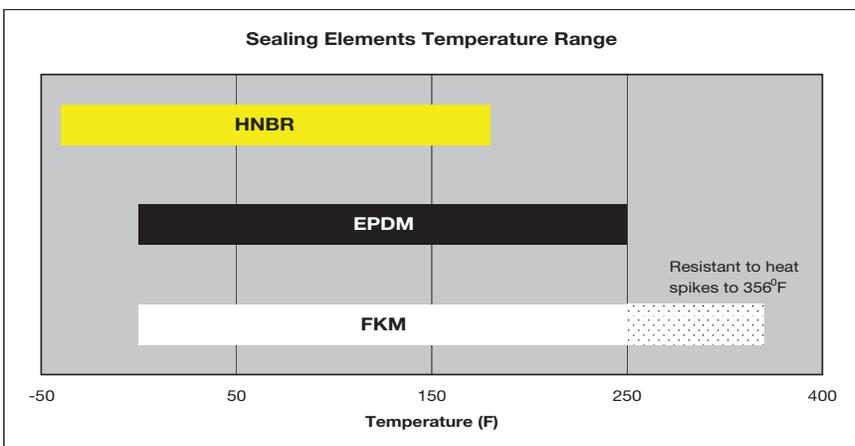
0°F to 250°F (-18°C to 120°C)

EPDM, or ethylene-propylene-diene rubber, is a synthetically manufactured and peroxidically cured all-purpose elastomer.

EPDM sealing elements are black in color and possess excellent resistance to aging, ozone, sunlight, weathering, environmental influences, alkalis and most alkaline solutions along with chemicals used in a broad range of applications, including ketones.

Viega Press Systems are manufactured with a high quality EPDM sealing elements standard, installed at the factory.

EPDM has particularly good resistance to hot water, making it ideal for seals and gaskets.

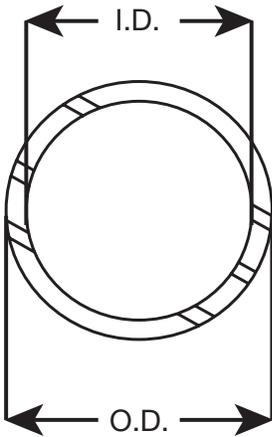


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Viega ProPress® for Stainless 1/2" - 2"

Viega ProPress Pipe Stainless Steel ASTM A312 - Models 0103 / 4003

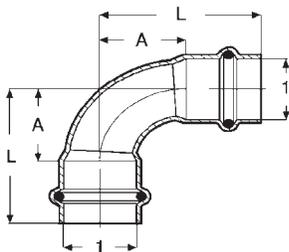


Part Number		Size	O.D.	I.D.	Wall Thickness	Length
S/S 304	S/S 316		(in)	(in)	(in)	(ft)
87000	82000	1/2"	0.63	0.50	0.06	20
87005	82005	3/4"	0.88	0.75	0.06	20
87010	82010	1"	1.13	1.00	0.06	20
87015	82015	1 1/4"	1.38	1.26	0.06	20
87020	82020	1 1/2"	1.63	1.50	0.06	20
87025	82025	2"	2.13	2.00	0.06	20

Viega ProPress ECO-Pipe Stainless Steel ASTM A554 - Model 0108

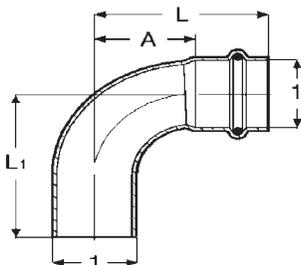
Part Number	Size	O.D.	I.D.	Wall Thickness	Length
S/S 304		(in)	(in)	(in)	(ft)
87050	1/2"	0.63	0.55	0.04	20
87055	3/4"	0.88	0.78	0.05	20
87060	1"	1.13	1.03	0.05	20
87065	1 1/4"	1.38	1.26	0.06	20
87070	1 1/2"	1.63	1.51	0.06	20
87075	2"	2.13	2.01	0.06	20

Viega ProPress 90° Elbow Stainless Steel P x P - Models 6016 / 4016



Part Number		Size	A	L
S/S 304	S/S 316	1	(in)	(in)
85402	80400	1/2"	1.12	1.87
85407	80405	3/4"	1.73	2.64
85412	80410	1"	1.87	2.78
85417	80415	1 1/4"	1.65	2.69
85422	80420	1 1/2"	1.98	3.41
85427	80425	2"	2.55	4.14

Viega ProPress 90° Elbow Stainless Steel FTG x P - Models 6016.1 / 4016.1

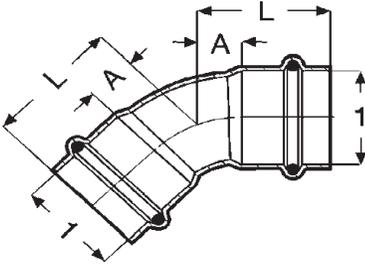


Part Number		Size	A	L	L1
S/S 304	S/S 316	1	(in)	(in)	(in)
85492	80490	1/2"	1.12	1.87	1.99
85497	80495	3/4"	1.45	2.35	3.03
85502	80500	1"	1.87	2.78	3.27
NA	80505	1 1/4"	1.65	2.69	2.76
85512	80510	1 1/2"	1.98	3.41	3.48
85517	80515	2"	2.55	4.14	4.20

Submittal Package

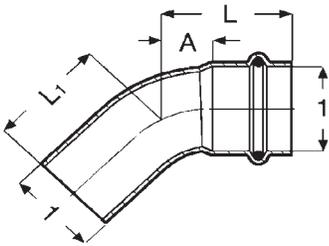


Viega ProPress 45° Elbow Stainless Steel P x P - Models 6026 / 4026



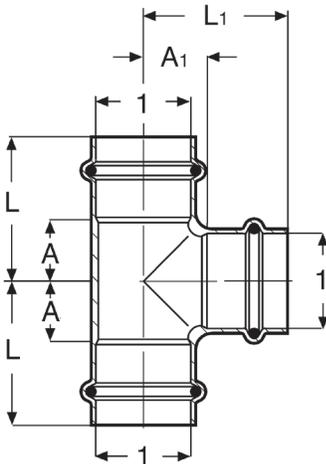
Part Number		Size	A	L
S/S 304	S/S 316	1	(in)	(in)
85447	80445	½"	0.57	1.32
85452	80450	¾"	0.87	1.77
85457	80455	1"	0.89	1.79
85462	80460	1¼"	0.69	1.72
85467	80465	1½"	0.82	2.25
85472	80470	2"	1.06	2.64

Viega ProPress 45° Elbow Stainless Steel FTG x P - Models 6026.1 / 4026.1



Part Number		Size	A	L	L1
S/S 304	S/S 316	1	(in)	(in)	(in)
85537	80535	½"	0.57	1.32	1.46
85542	80540	¾"	0.69	1.59	2.27
85547	80545	1"	0.89	1.79	2.28
NA	80550	1¼"	0.69	1.72	1.79
85557	80555	1½"	0.82	2.25	2.32
85562	80560	2"	1.06	2.64	2.71

Viega ProPress Tee Stainless Steel P x P x P - Models 6018 / 4018



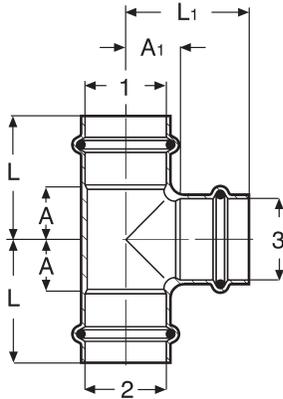
Part Number		Size	A	A1	L	L1
S/S 304	S/S 316	1	(in)	(in)	(in)	(in)
85582	80580	½"	0.75	0.87	1.50	1.61
85587	80585	¾"	0.96	0.96	1.86	1.86
85592	80590	1"	1.13	1.18	2.04	2.09
85597	80595	1¼"	1.04	1.05	2.08	2.07
85598	80600	1½"	1.26	1.22	2.69	2.65
85607	80605	2"	1.54	1.53	3.12	3.11

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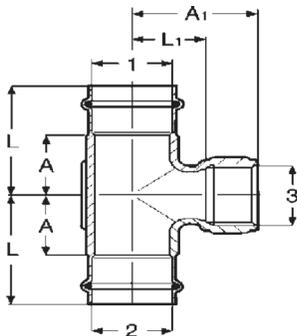


Viega ProPress Reducing Tee Stainless Steel P x P x P - Models 6018 / 4018



Part Number		Size			A	A1	L	L1
S/S 304	S/S 316	1	2	3	(in)	(in)	(in)	(in)
85632	80630	¾" x ¾" x ½"			0.96	0.98	1.86	1.73
85642	80640	1" x 1" x ½"			1.13	1.13	2.04	1.88
85652	80650	1" x 1" x ¾"			1.13	1.10	2.04	2.01
85662	80660	1¼" x 1¼" x ½"			0.75	1.28	1.78	2.03
85672	80670	1¼" x 1¼" x ¾"			0.83	1.25	1.86	2.16
85682	80680	1¼" x 1¼" x 1"			1.04	1.33	2.08	2.24
85692	80690	1½" x 1½" x ½"			1.26	1.39	2.69	2.14
85702	80700	1½" x 1½" x ¾"			1.26	1.37	2.69	2.27
85712	80710	1½" x 1½" x 1"			1.26	1.44	2.69	2.35
85722	80720	2" x 2" x ½"			0.71	1.65	2.30	2.40
85732	80730	2" x 2" x ¾"			0.71	1.63	2.30	2.53
85742	80740	2" x 2" x 1"			0.83	1.70	2.41	2.61
85752	80750	2" x 2" x 1½"			1.15	1.49	2.73	2.91

Viega ProPress Reducing Tee Stainless Steel P x P x FPT - Models 6017.2 / 4017.2



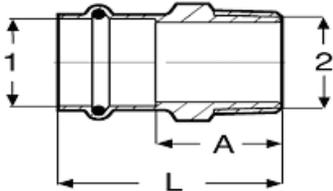
Part Number		Size			A	A1	L	L1
S/S 304	S/S 316	1	2	3	(in)	(in)	(in)	(in)
85822	80820	¾" x ¾" x ½" FPT			0.96	0.76	1.86	1.26
85832	80830	¾" x ¾" x ¾" FPT			0.96	0.78	1.86	1.34
85842	80840	1" x 1" x ½" FPT			1.13	0.87	2.04	1.41
85852	80850	1" x 1" x ¾" FPT			1.13	0.93	2.04	1.48
85862	80860	1¼" x 1¼" x ½" FPT			0.75	1.02	1.78	1.56
85872	80870	1¼" x 1¼" x ¾" FPT			0.83	1.08	1.86	1.63
85882	80880	1¼" x 1¼" x 1" FPT			1.04	1.09	2.08	1.75
85892	80890	1½" x 1½" x ½" FPT			1.26	1.13	2.69	1.67
85902	80900	1½" x 1½" x ¾" FPT			1.26	1.19	2.69	1.75
85912	80910	1½" x 1½" x 1" FPT			1.26	1.20	2.69	1.87
85922	80920	2" x 2" x ½" FPT			0.71	1.39	2.30	1.93
85932	80930	2" x 2" x ¾" FPT			0.71	1.45	2.30	2.01
85942	80940	2" x 2" x 1" FPT			0.83	1.50	2.41	2.13

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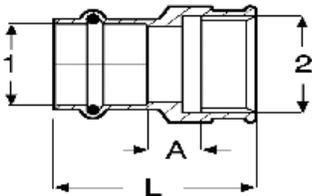


Viega ProPress Adapter Stainless Steel P x MPT - Models 6011 / 4011



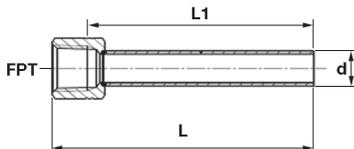
Part Number		Size		A	L
S/S 304	S/S 316	1	2	(in)	(in)
85012	80010	1/2" x 1/2" MPT		1.37	2.11
85017	80015	1/2" x 3/4" MPT		1.44	2.19
85022	80020	3/4" x 1/2" MPT		1.42	2.32
85027	80025	3/4" x 3/4" MPT		1.46	2.36
85032	80030	3/4" x 1" MPT		1.71	2.62
85037	80035	1" x 3/4" MPT		1.47	2.37
85042	80040	1" x 1" MPT		1.74	2.65
85047	80045	1 1/4" x 1 1/4" MPT		1.89	2.92
85052	80050	1 1/2" x 1 1/2" MPT		1.94	3.37
85054	80055	2" x 2" MPT		2.10	3.68

Viega ProPress Adapter Stainless Steel P x FPT - Models 6012 / 4012



Part Number		Size		A	L
S/S 304	S/S 316	1	2	(in)	(in)
85082	80080	1/2" x 1/2" FPT		0.54	1.82
85087	80085	3/4" x 1/2" FPT		0.51	1.95
85096	80090	3/4" x 3/4" FPT		0.57	2.03
85094	80092	1" x 1/2" FPT		0.62	2.06
85097	80095	1" x 3/4" FPT		0.62	2.08
85128	80100	1" x 1" FPT		0.61	2.18
85107	80105	1 1/4" x 1 1/4" FPT		0.62	2.33
	80110	1 1/2" x 1 1/4" FPT		0.69	2.80
85117	80115	1 1/2" x 1 1/2" FPT		0.69	2.80
85077	80075	2" x 1" FPT		0.75	2.99
85122	80120	2" x 1 1/2" FPT		0.73	2.99
85127	80125	2" x 2" FPT		0.71	2.99

Viega ProPress Instrument Adapter Stainless Steel - Model 4012.5



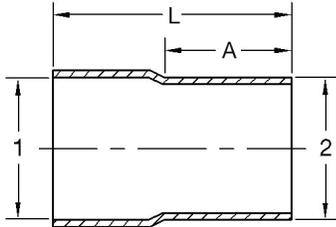
Part Number	Size	L	L1
S/S 316	FPT x FTG (d)	(in)	(in)
80126	1/2" x 1/2"	4.06	3.52
80127	3/4" x 3/4"	3.94	3.38

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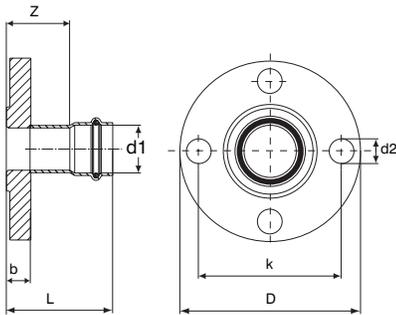
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Viega ProPress Adapter Stainless Steel FTG x Weld - Model 0113.3

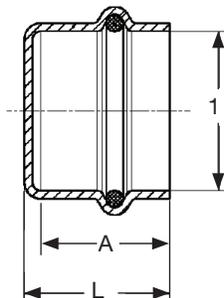


Part Number	Size		A (in)	L (in)
	S/S 304	1 2		
86003	1/2" ID	1/2" OD	0.87	2.40
86008	3/4" ID	3/4" OD	1.02	2.74
86013	1" ID	1" OD	1.06	2.78
86023	1 1/2" ID	1 1/2" OD	1.57	4.12
86028	2" ID	2" OD	1.73	4.27



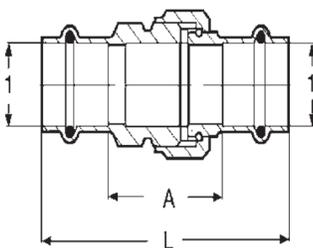
Viega ProPress Adapter Flange Stainless Steel P x Flange - Models 6059 / 4059

Part Number	S/S 304	S/S 316	Size	L (in)	A (in)	b (in)	d2 (in)	D (in)	k (in)
86082	81035	1/2"	2.46	1.72	0.46	0.63	3.54	2.36	
86087	81040	3/4"	2.57	1.66	0.52	0.63	3.94	2.76	
86092	81045	1"	2.51	1.60	0.58	0.63	4.33	3.11	
86097	81050	1 1/4"	2.69	1.66	0.64	0.63	4.53	3.50	
86102	81055	1 1/2"	2.83	1.41	0.70	0.63	4.92	3.86	
86107	81060	2"	3.86	2.30	0.77	0.75	5.91	4.76	



Viega ProPress Cap Stainless Steel P - Models 6056 / 4056

Part Number	S/S 304	S/S 316	Size	A (in)	L (in)
85357	80355	1/2"	0.70	0.82	
85362	80360	3/4"	0.93	1.04	
86367	80365	1"	0.94	1.06	
86372	80370	1 1/4"	1.04	1.20	
86377	80375	1 1/2"	1.44	1.59	
86382	80380	2"	1.59	1.74	



Viega ProPress Union Stainless Steel P x P - Models 6060 / 4060

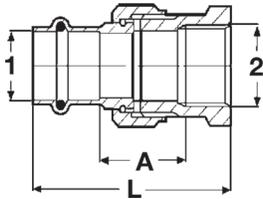
Part Number	S/S 304	S/S 316	Size	A (in)	L (in)
86007	81005	1/2"	1.87	3.37	
86012	81010	3/4"	1.89	3.70	
86017	81015	1"	2.25	4.06	
86022	81020	1 1/4"	2.25	4.31	
86027	81025	1 1/2"	2.68	5.53	
86032	81030	2"	2.95	6.12	

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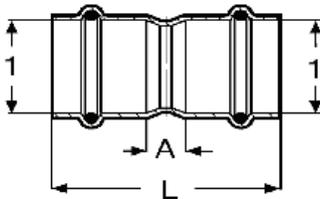


Viega ProPress Di-electric Union Stainless Steel P x FPT - Model 4067



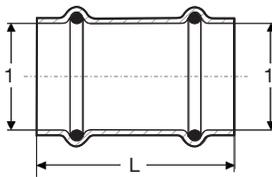
Part Number	Size	A	L
S/S 316	1 2	(in)	(in)
80071	1/2" x 1/2" FPT	1.28	2.57
80078	3/4" x 3/4" FPT	1.39	2.85
80073	1" x 1" FPT	1.25	2.81
80074	1 1/4" x 1 1/4" FPT	1.33	3.04
80076	1 1/2" x 1 1/2" FPT	1.54	3.64
80077	2" x 2" FPT	1.72	4.00

Viega ProPress Coupling with Stop Stainless Steel P x P - Models 6015 / 4015



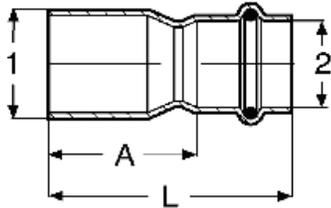
Part Number	Size	A	L
S/S 304	S/S 316	(in)	(in)
85267	80265	1/2"	1.85
85272	80270	3/4"	2.24
85277	80275	1"	2.20
85282	80280	1 1/4"	2.54
85287	80285	1 1/2"	3.21
85292	80290	2"	3.64

Viega ProPress Coupling No Stop Stainless Steel P x P - Models 6015.5 / 4015.5



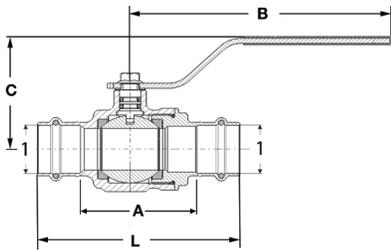
Part Number	Size	L
S/S 304	S/S 316	(in)
85312	80310	1/2"
85317	80315	3/4"
85322	80320	1"
85327	80325	1 1/4"
85332	80330	1 1/2"
85337	80335	2"

Submittal Package



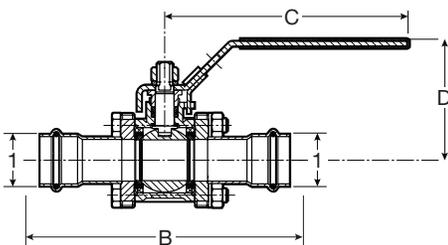
Viega ProPress Reducer Stainless Steel FTG x P - Models 6015.1 / 4015.1

Part Number		Size	A	L
S/S 304	S/S 316	1 2	(in)	(in)
85162	80160	¾" x ½"	1.54	2.28
85167	80165	1" x ½"	1.84	2.59
85172	80170	1" x ¾"	1.56	2.46
85173	80175	1¼" x ½"	2.25	3.00
85182	80180	1¼" x ¾"	1.93	2.83
85187	80185	1¼" x 1"	1.81	2.72
85192	80190	1½" x ½"	3.03	3.78
85197	80195	1½" x ¾"	2.64	3.54
85202	80200	1½" x 1"	2.50	3.41
NA	80205	1½" x 1¼"	2.26	3.29
85212	80210	2" x ½"	3.75	4.50
85217	80215	2" x ¾"	3.48	4.39
85222	80220	2" x 1"	3.08	3.99
NA	80225	2" x 1¼"	2.94	3.97
85232	80230	2" x 1½"	2.59	4.02



Viega ProPress Ball Valve Stainless Steel P x P - Model 4070

Part Number	Size	A	L	B	C
S/S 316	1	(in)	(in)	(in)	(in)
81080	½"	2.06	3.56	5.55	2.44
81085	¾"	2.42	4.23	5.55	2.52
81090	1"	2.76	4.59	5.55	2.68
81095	1¼"	3.17	5.23	6.10	3.09
81100	1½"	3.65	6.50	6.10	3.34
81105	2"	4.15	7.32	6.10	3.66



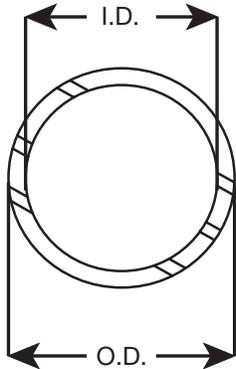
Viega ProPress 3-Piece Ball Valve Stainless Steel P x P - Model 4370.8

Part Number	Size	B	C	D
S/S 316	1	(in)	(in)	(in)
85132	½"	5.41	3.99	2.28
85133	¾"	5.79	5.88	2.85
85134	1"	6.00	5.88	2.93
85136	1¼"	6.61	7.54	3.27
85137	1½"	7.26	7.54	3.57
85138	2"	9.67	7.54	3.89

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ProPress[®] for Stainless XL

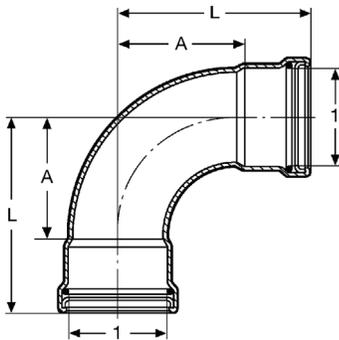


ProPress XL ECO Pipe 304 Stainless Steel ASTM A554- Model 0108XL

Part Number	Size	O.D.	I.D.	Wall Thickness	Length
S/S 304		(in)	(in)	(in)	(ft)
87080	2½"	2.63	2.47	0.08	20
87085	3"	3.13	2.97	0.08	20
87090	4"	4.13	3.97	0.08	20

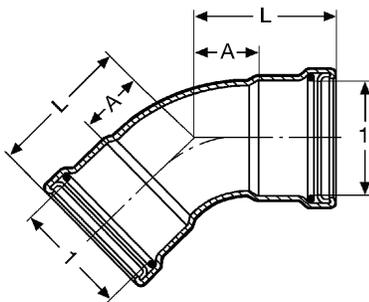
ProPress XL Pipe Stainless Steel ASTM A312 - Models 0107XL / 4007XL

Part Number		Size	O.D.	I.D.	Wall Thickness	Length
S/S 304	S/S 316		(in)	(in)	(in)	(ft)
87095	82042	2½"	2.63	2.47	0.08	20
87100	82050	3"	3.13	2.97	0.08	20
87105	82055	4"	4.13	3.97	0.08	20



ProPress XL 90° Elbow Stainless Steel P x P - Models 6016XL / 4016XL

Part Number		Size	A	L
S/S 304	S/S 316	1 1	(in)	(in)
85432	80430	2½" x 2½"	3.19	4.88
85437	80435	3" x 3"	3.76	5.73
85442	80440	4" x 4"	4.86	7.22

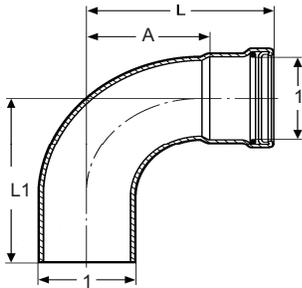


ProPress XL 45° Elbow Stainless Steel P x P - Models 6026XL / 4026XL

Part Number		Size	A	L
S/S 304	S/S 316	1 1	(in)	(in)
85477	80475	2½" x 2½"	1.48	3.18
85482	80480	3" x 3"	1.73	3.70
85487	80485	4" x 4"	2.19	4.55

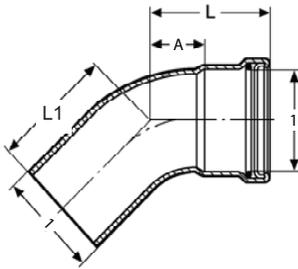
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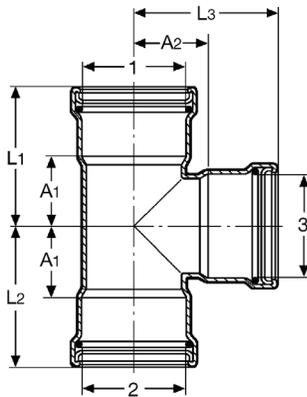
ProPress XL 90° Street Elbow Stainless Steel P x FTG - Models 6016.1XL / 4016.1XL

Part Number		Size	A	L	L1
S/S 304	S/S 316	1 1	(in)	(in)	(in)
85522	80520	2½" x 2½"	3.19	4.88	4.80
85527	80525	3" x 3"	3.76	5.73	5.63
85532	80530	4" x 4"	4.86	7.22	7.13



ProPress XL 45° Street Elbow Stainless Steel P x FTG - Models 6026.1XL / 4026.1XL

Part Number		Size	A	L	L1
S/S 304	S/S 316	1 1	(in)	(in)	(in)
85567	80565	2½" x 2½"	1.48	3.18	3.10
85572	80570	3" x 3"	1.73	3.70	3.60
85577	80575	4" x 4"	2.19	4.55	4.45

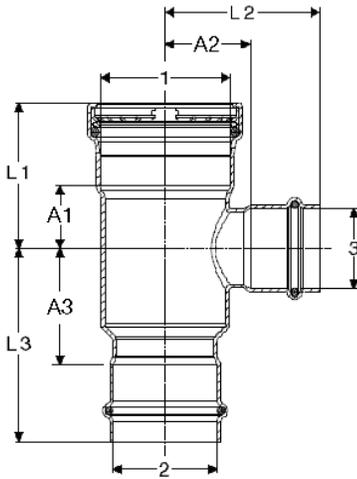


ProPress XL Tee Stainless Steel P x P x P - Models 6018XL / 4018XL

Part Number		Size	A1	A2	L1	L2
S/S 304	S/S 316	1 2 3	(in)	(in)	(in)	(in)
85934	80751	2½" x 2½" x 1½"	1.30	1.74	2.99	3.17
85904	80760	2½" x 2½" x 2"	1.54	1.78	3.23	3.37
85612	80610	2½" x 2½" x 2½"	1.83	1.87	3.52	3.56
85944	80782	3" x 3" x 1¼"	1.24	1.96	3.21	2.99
85935	80781	3" x 3" x 1½"	1.32	2.00	3.29	3.43
85905	80770	3" x 3" x 2"	1.56	2.04	3.52	3.62
85914	80780	3" x 3" x 2½"	1.85	2.13	3.82	3.82
85617	80615	3" x 3" x 3"	2.07	2.15	4.04	4.11
85945	80791	4" x 4" x 1½"	1.36	2.51	3.72	3.94
85915	80790	4" x 4" x 2"	1.59	2.55	3.96	4.13
85924	80800	4" x 4" x 2½"	1.89	2.64	4.25	4.33
85925	80810	4" x 4" x 3"	2.11	2.66	4.47	4.63
85622	80620	4" x 4" x 4"	2.60	2.66	4.96	5.02

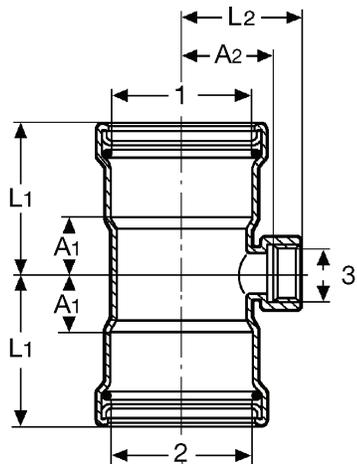
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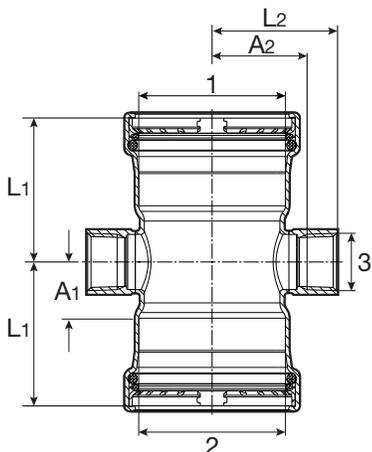
ProPress XL Tee Stainless Steel P x P x P - Models 6018XL / 4018XL

Part Number		Size			A1	A2	A3	L1	L2	L3
S/S 304	S/S 316	1	2	3	(in)	(in)	(in)	(in)	(in)	(in)
85955	80753	2½" x 2" x 1½"			1.30	1.74	2.37	2.99	3.17	3.96
85954	80752	2½" x 2" x 2"			1.54	1.78	2.70	3.23	3.37	4.27



ProPress XL Reducing Tee Stainless Steel P x P x FPT - Models 6017.2XL / 4017.2XL

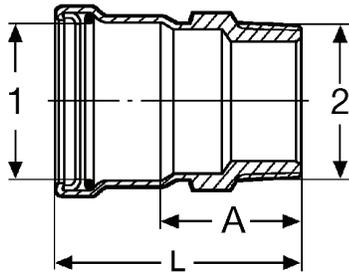
Part Number		Size			A1	A2	L1	L2
S/S 304	S/S 316	1	2	3	(in)	(in)	(in)	(in)
85952	80950	2½" x 2½" x ¾"			1.02	1.73	2.72	2.28
85962	80960	2½" x 2½" x 1"			1.02	1.74	2.72	2.38
85972	80970	3" x 3" x ¾"			1.04	1.98	3.01	2.54
85982	80980	3" x 3" x 1"			1.04	1.98	3.01	2.64
85992	80990	4" x 4" x ¾"			1.08	2.50	3.44	3.05
86002	81000	4" x 4" x 1"			1.08	2.49	3.44	3.15



ProPress XL Cross Stainless Steel P x P x FPT x FPT - Model 4044.2XL

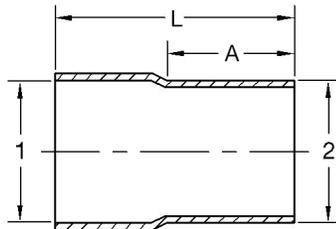
Part Number	Size			A1	A2	L1	L2
S/S 316	1	2	3	(in)	(in)	(in)	(in)
80067	2½" x 2½" x ¾"			1.02	1.73	2.62	2.28
80069	3" x 3" x ¾"			1.04	1.98	3.01	2.54
80068	4" x 4" x ¾"			1.08	2.50	3.44	3.05

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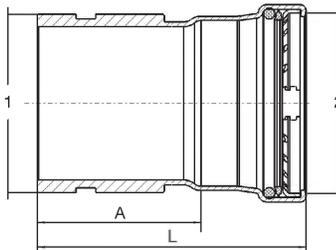
ProPress XL Adapter P x MPT - Models 6011XL / 4011XL

Part Number		Size		A	L
S/S 304	S/S 316	1	2	(in)	(in)
85062	80060	2½" x 2½" MPT		2.99	4.69
85067	80065	3" x 3" MPT		3.09	5.06
85072	80070	4" x 4" MPT		3.13	5.49



ProPress XL Adapter Stainless Steel BW (IPS) x FTG - Models 0113.1XL / 4013.1XL

Part Number		Size		A	L
S/S 304	S/S 316	1 (IPS)	2 (CTS)	(in)	(in)
85135	80081	2½" ID	2½" OD	2.32	4.37
85145	80082	3" ID	3" OD	2.60	4.57
85155	80083	4" ID	4" OD	2.99	5.16

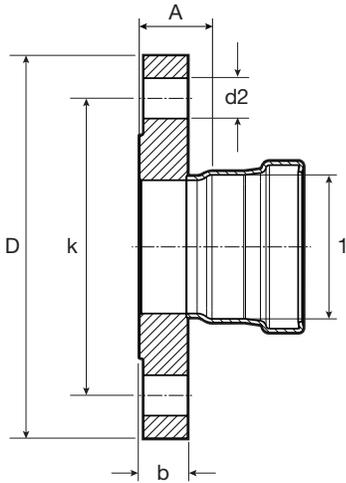


ProPress XL Adapter Stainless Steel Groove x P - Model 4013.2XL

Part Number	Size		A	L
S/S 316	1 (IPS)	2 (CTS)	(in)	(in)
80064	2½"	2½"	2.64	4.33
80061	3"	3"	2.66	4.63
80063	4"	4"	2.66	5.02

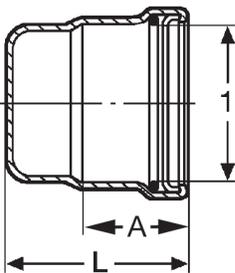
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ProPress XL Adapter Flange Stainless Steel P x Flange - Models 6059XL / 4059XL

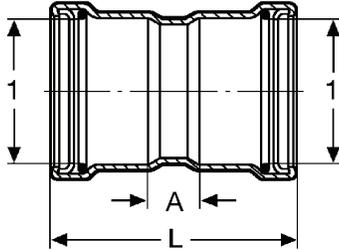
Part Number		Size	A	L	b	D	k	d2
S/S 304	S/S 316	1	(in)	(in)	(in)	(in)	(in)	(in)
86067	81065	2½"	1.35	3.04	0.89	7.09	5.51	0.75
86072	81070	3"	1.39	3.40	0.96	7.48	5.98	0.75
86077	81075	4"	1.40	3.77	0.96	9.06	7.52	0.75



ProPress XL Cap Stainless Steel P x Cap - Models 6056.1XL / 4056.1XL

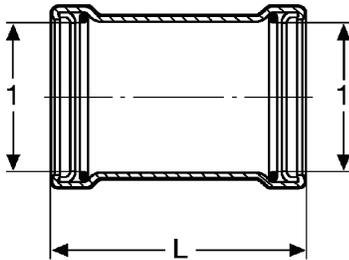
Part Number		Size	A	L
S/S 304	S/S 316	1	(in)	(in)
85387	80385	2½"	1.69	3.01
85392	80390	3"	1.97	3.33
85397	80395	4"	2.36	3.72

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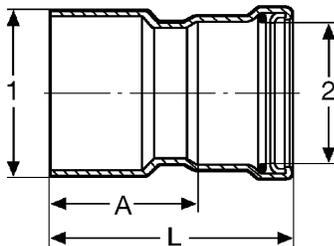
ProPress XL Coupling with Stop Stainless Steel P x P - Models 6015XL / 4015XL

Part Number		Size	A	L
S/S 304	S/S 316	1 1	(in)	(in)
85297	80295	2½" x 2½"	0.95	4.33
85302	80300	3" x 3"	0.98	4.92
85307	80305	4" x 4"	1.06	5.79



ProPress XL Coupling No Stop Stainless Steel P x P - Models 6015.5XL / 4015.5XL

Part Number		Size	L
S/S 304	S/S 316	1 1	(in)
85342	80340	2½" x 2½"	4.33
85347	80345	3" x 3"	4.92
85352	80350	4" x 4"	5.79



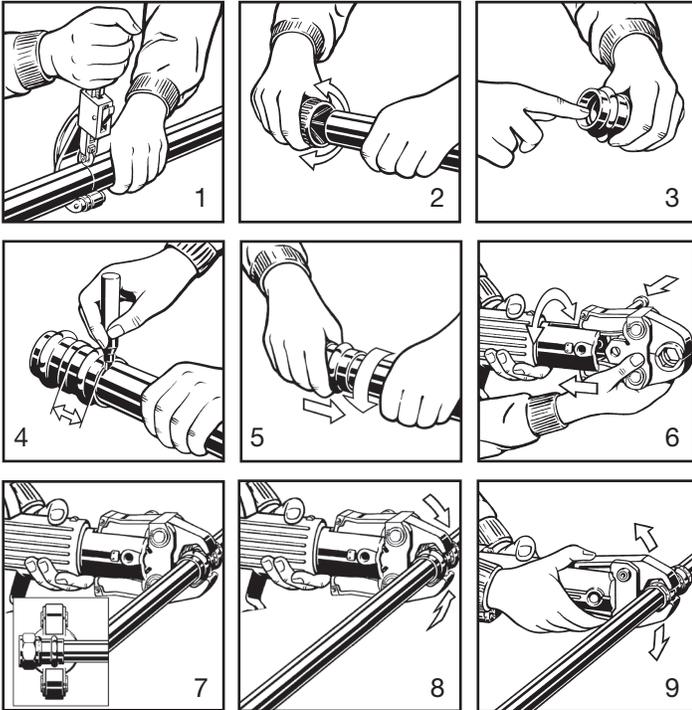
ProPress XL Reducer Stainless Steel FTG x P - Models 6015.1XL / 4015.1XL

Part Number		Size	A	L
S/S 304	S/S 316	1 2	(in)	(in)
85237	80235	2½" x 2"	2.85	4.43
85242	80240	3" x 2"	3.38	4.96
85247	80245	3" x 2½"	3.21	4.90
85252	80250	4" x 2"	4.26	5.85
85257	80255	4" x 2½"	4.09	5.79
85262	80260	4" x 3"	3.88	5.85

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Viega ProPress® for Stainless 1/2" to 2" For use only with Viega stainless steel tubing



⚠ WARNING Read, understand and follow all instructions for installing Viega ProPress for Stainless fittings. Failure to follow all instructions may result in extensive property damage, serious injury or death.

1. Cut stainless steel tubing only with an approved stainless steel pipe cutting tool. Cut tubing at right angle to permit proper joining with the fitting.
2. Remove burr from inside and outside of tubing to prevent damage to the sealing element.
3. Check seal for correct fit. Do not use oils or lubricants. Use only Viega ProPress Shiny Black EPDM or Dull Black FKM sealing elements.
4. Mark proper insertion depth as indicated by the Viega ProPress Insertion Depth Chart. Improper insertion depth may result in improper seal.
5. While turning slightly, slide press fitting onto tubing to the marked depth.
Note: End of tubing must contact stop.
6. Insert appropriate Viega jaw into the pressing tool and push in, holding pin until it locks in place.
7. Open the jaw and place at right angles on the fitting. Visually check insertion depth using mark on tubing.
8. Start pressing process and hold the trigger until the jaw has engaged the fitting.
9. After pressing, the jaw can be opened again.

Pipe Size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Insertion Depth	3/4"	7/8"	7/8"	1"	1 7/16"	1 9/16"

⚠ CAUTION It is the responsibility of designers of piping systems to verify the suitability of type 304 and 316 stainless steel pipe for use with the intended fluid media. The fluid's chemical composition, pH level, operation temperature, chloride level, oxygen level, and flow rate and their effect on AISI 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. Contact Viega Technical Services for questions and approvals.



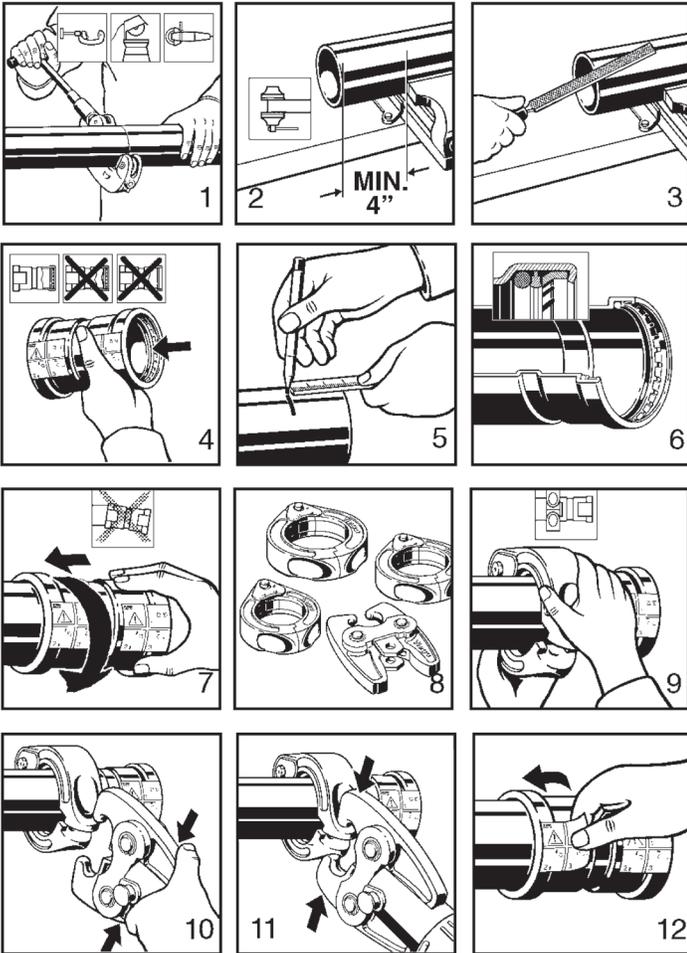
Leak Testing with Smart Connect®:

Unpressed connections are located by pressurizing the system with air or water. When testing with water the proper pressure range is 15 psi to 85 psi maximum. Leak testing with air can be dangerous at high pressures. When testing with compressed air the proper pressure range is 1/2 psi to 45 psi maximum. Following a successful leak test, the system may be pressure tested up to 200 psi with air, or up to 600 psi with water, if required by local code requirements or project specifications.

Submittal Package



Viega ProPress® XL (Stainless) 2½" to 4" For use only with Viega stainless steel tubing



Pipe Size	2½"	3"	4"
Insertion Depth	1 ¹¹ / ₁₆ "	1 ¹⁵ / ₁₆ "	2 ³ / ₈ "

CAUTION It is the responsibility of designers of piping systems to verify the suitability of type 304 and 316 stainless steel pipe for use with the intended fluid media. The fluid's chemical composition, pH level, operation temperature, chloride level, oxygen level, and flow rate and their effect on AISI 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.

WARNING Read, understand and follow all instructions for installing Viega ProPress for Stainless fittings. Failure to follow all instructions may result in extensive property damage, serious injury or death.

- Cut stainless steel tubing only with an approved stainless steel pipe cutting tool. Cut tubing at right angle to permit proper joining with the fitting.
- Keep end of tube a minimum of 4" away from the contact area of the vise to prevent possible damage to the tube in the press area.
- Remove burrs from inside and outside of tubing to prevent damage of the sealing element.
- Check seal and grip ring for correct fit. Do not use oils or lubricants. Use only Viega ProPress XL (Stainless) sealing elements.
- Mark proper insertion depth as indicated by Viega ProPress XL (Stainless) insertion depth chart. Improper insertion depth may result in an improper seal.
- Illustration demonstrates proper fit of grip ring, separation ring and sealing element.
- While turning slightly, slide press fitting onto pipe to the marked depth.
Note: End of tube must contact stop.
- Press Viega ProPress XL (Stainless) fitting connections with Viega ProPress XL-C rings and V2 ACTUATOR.
Note: Use of Viega ProPress XL rings and/or Actuator (for Bronze Fittings) will result in an improper connection. See Ridge Tool operator's manual for proper tool instructions.
- Open XL-C Ring and place at right angles on the fitting. XL-C Ring must be engaged on the fitting bead. Check insertion depth.
- With V2 ACTUATOR inserted in the tool, open the V2 ACTUATOR as shown and connect the V2 ACTUATOR to the XL-C Ring.
- Place the V2 ACTUATOR onto the XL-C Ring. Hold the trigger until the Actuator has engaged the XL-C Ring. Keep extremities and foreign objects away from the XL-C Ring and V2 ACTUATOR during pressing operation to prevent injury or incomplete press.
- Release V2 ACTUATOR from XL-C Ring and then remove the XL-C Ring from the fitting on completion of press. Remove tag from fitting, indicating press has been completed.

Leak Testing with Smart Connect®: Unpressed connections are located by pressurizing the system with air or water. When testing with water the proper pressure range is 15 psi to 85 psi maximum. Leak testing with air can be dangerous at high pressures. When testing with compressed air the proper pressure range is ½ psi to 45 psi maximum. Following a successful leak test, the system may be pressure tested up to 200 psi with air, or up to 600 psi with water, if required by local code requirements or project specifications.

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Viega® ProPress® for Stainless Steel Pipe Marking Guide

Guide to the ANSI A13.1 Standard for the Identification of Pipes

Usage	Material Properties	Type of Application (typical)	Color Scheme
Hazardous Materials	<ul style="list-style-type: none"> Flammable or Explosive Chemically Active or Toxic Radioactive Extreme Temperature/ Pressure 	<ul style="list-style-type: none"> Process Piping High Pressure Steam Acids/Corrosives 	YELLOW ON BLACK
Low Hazard Materials (Liquid)	<ul style="list-style-type: none"> Liquid Liquid Admixture 	<ul style="list-style-type: none"> Cooling Water Grey Water Chilled Water 	WHITE ON GREEN
Low Hazard Materials (Gas)	<ul style="list-style-type: none"> Gas Gas Admixture 	<ul style="list-style-type: none"> Compression Air Nitrogen (N₂) Argon (Ar) 	WHITE ON BLUE
Fire Suppression	<ul style="list-style-type: none"> Liquid Gas Foam 	<ul style="list-style-type: none"> Sprinklers (Wet/Dry) CO₂ Foam (AFFF) 	WHITE ON RED

Pipe O.D. Including Covering		Minimum Length of Label Field Color		Minimum Height of Letters	
¾" to 1¼"	19 mm to 32 mm	8"	203 mm	½"	13 mm
1½" to 2"	38 mm to 51 mm	8"	203 mm	¾"	19 mm
2½" to 4"	64 mm to 108 mm	12"	305 mm	1¼"	32 mm

Marker Placement

- At all changes in directions
- At both sides of any penetrations (valves, flanges, tees, etc.)
- At frequent intervals on straight run (50 feet is typical)
- Locate pipe markers so they are readily visible
- Provide arrows indicating direction of flow

NOTE: This guide is for general information purposes only. Pipe markings shall be in accordance with local code requirements.

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Frequently Asked Questions

Q: What is the Smart Connect feature?

A: Smart Connect technology provides a quick and easy way to identify unpressed connections during the pressure testing process. Unpressed connections are located by pressurizing the system with air or water. When testing with air, the pressure range is 1/2 psi to 85 psi maximum. Smart Connect technology is removed during the pressing process, creating a leak-proof, permanent connection. Guaranteed.

Q: Why is the Smart Connect feature so valuable?

A: Smart Connect technology provides the user with a strong peace of mind. It allows for faster testing procedures since you do not have to shut down and drain the system. Costly damages and possible insurance claims and premiums can be avoided because it identifies unpressed connections before they can become a problem. Because of the time savings, projects stay on track.

Q: Do I need additional equipment to install Viega ProPress for stainless?

A: No. Viega designed Viega ProPress for Stainless to be compatible with the same jaws and press tools that are used for Viega ProPress and Viega ProPress XL-C.

Q: If a leak is discovered, is it necessary to drain the system prior to pressing the connection?

A: No. It is not necessary to drain the system when making a repair.

Q: How would an inspector know they are looking at a good connection?

A: Good connections can be proven by performing a pressure test, using the same procedure for a fitting system.

Q: What is the lubrication used on the sealing elements?

A: The sealing elements are lubricated with an USDA Approved H1 lubricant, meeting the requirement of FDA 21CFR. If it is necessary to lubricate the seals in the field, use water only. Do not use petroleum-based lubricants. Petroleum and EPDM are incompatible.

Q: How long will the EPDM seal last?

A: When properly installed, the EPDM seal and connection will last as long as the piping system.

Q: How do I fabricate a system in tight places when using Viega ProPress?

A: If necessary pre-fabricate connections that are in tight places and then install.

Q: What is the warranty for Viega ProPress for stainless?

A: Viega ProPress for stainless fittings carry a 2 year warranty against defects in material and workmanship from Viega.

Q: How do Viega ProPress connections hold up to freezing temperatures?

A: Precautions should be taken for any piping system to protect the system from below freezing temperatures.

Q: What level of turbulence occurs in Viega ProPress for stainless steel fittings and will it cause premature wear in the piping?

A: The long radius of Viega ProPress elbows reduce turbulence typically experienced with traditional short radius fittings. Not reaming the ID of the pipe is the largest contributing factor to turbulence and premature wear of any piping system.

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Q: Why use FKM or HNBR sealing elements for compressed air systems with more than 25 mg/m³ of oil content?

A: FKM and HNBR sealing elements are better suited for high oil content due to their high resistance to hydrocarbon substances.

Q: What should a user do if a Viega ProPress for stainless system leaks?

A: In general, Viega ProPress fittings only leak due to one of three reasons; the fitting was never pressed, the fitting was not properly inserted or the pressing jaws were not properly aligned. If the fitting was never pressed, confirm that the tubing is properly installed and proceed with pressing. If the piping was not properly inserted, cut out the fitting and reinstall properly. If the pressing jaws were not properly aligned, cut out the fitting and reinstall properly. If problems persist, be sure to contact Viega immediately.

Q: Is Viega ProPress compatible with the cleaning agents used to disinfect a new plumbing system?

A: Yes, however, it is recommended to contact your local District Manager or the Viega Technical Support Department for consultation.

Q: What should be done if a user accidentally cuts the fitting seal?

A: Any damaged seal must be replaced. Please note that the tolerances of the fitting socket ensure that the piping is inserted at the appropriate angle.

Q: Is Viega ProPress for stainless approved for underground use?

A: Yes. Viega ProPress can be installed underground, however, users must obtain approval from the local jurisdiction. Approval of this application is based upon performance testing conducted by NSF, which includes withstanding pressure, temperature, water hammer, bending forces, torsion, temperature variation, vibration and vacuum.

Q: How should Viega ProPress for stainless steel pipe be prepared for installation?

A: Stainless steel pipe shall be cut with a wheeled pipe cutter or approved stainless steel pipe cutting tool. The pipe shall be cut square to permit proper joining with the fittings. Then, remove scale, slag, dirt and debris from inside and outside of pipe and fittings before assembly. The pipe end should be wiped clean and dry and any burrs should be removed.

Q: Can I mix 304 stainless with 316 stainless components?

A: Viega does NOT recommend the mixing of stainless components. However, Viega offers ball valve in 316, which is acceptable to use on a 304 system. Use of 304 stainless or 316 stainless is determined by YOUR SYSTEM SPECIFIC CHARACTERISTICS.

Q: At what temperature will the EPDM seals begin to distort?

A: there is no detracting or distortion of the EPDM seal within the stated temperature rating of 0°F to 250°F

Q: Does the ProPress for stainless system require the use of special valves?

A: No. Users can continue with their favorite valve line by using the threaded adapters or flange adapters. However, Viega ProPress for stainless offers press connection ball valves in sizes 1/2"-2".

Q: What level of turbulence is caused by Viega ProPress for stainless steel fittings?

A: The long radius of Viega ProPress for stainless fittings reduces the turbulence typically experienced with traditional short radius fittings.

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Viega Limited Warranty for Industrial Applications **Industrial applications are defined as non residential and non commercial applications not normally accessible to the general public, including manufacturing, mining, process or fabrication environments.**

Subject to the terms and conditions of this Limited Warranty, Viega LLC (Viega) warrants to end users, installers and distribution houses that its Viega metal press products (Viega product) when properly installed in industrial applications shall be free from failure caused by manufacturing defects for a period of two (2) years from date of installation.

Under this Limited Warranty, you only have a right to a remedy if the failure or leak resulted from a manufacturing defect in the Viega product and the failure or leak occurs during the warranty period. You do not have a remedy under this warranty and the warranty remedy does not apply if the failure or any resulting damage is caused by (1) components other than those sold by Viega; (2) not designing, installing, inspecting, testing, or maintaining the Viega product in accordance with Viega's installation and product instructions in effect at the time of installation and other specifications and approvals applicable to the installation; (3) improper handling and protection of the Viega product prior to, during and after installation, inadequate freeze protection, or exposure to environmental or operating conditions not recommended for the application; or (4) acts of nature, such as, but not limited to earthquakes, fire, or weather damage. Final approval as to use compatibility to a specific process or fluid application is the responsibility of the engineer of record or responsible design/facilities personnel and this Limited Warranty only applies to manufacturing defects in the Viega Product.

In the event of a leak or other failure in the Viega product covered by this warranty, it is the responsibility of the end user to take appropriate measures to diminish any damage, to include making timely repairs. Only if the warranty applies will Viega be responsible for the remedy under this warranty. The part or parts which you claim failed should be kept and Viega contacted by writing to

the address below or telephoning 1-800-976-9819 within thirty (30) calendar days after the leak or other failure and identifying yourself as having a warranty claim. You should be prepared to ship, at your expense, the product which you claim failed due to a manufacturing defect, document the date of installation, and the amount of the repair or replacement if performed by you. Within a reasonable time after receiving the product, Viega will investigate the reasons for the failure, which includes the right to inspect the product at a Viega location and reasonable access to the site of damage. Viega will notify you in writing as to the results of its review.

In the event that Viega determines that the failure or leak was the result of a manufacturing defect in the Viega Product covered by this warranty and to which this warranty applies, the EXCLUSIVE AND ONLY REMEDY under this warranty shall be the reimbursement for reasonable charges for repair or replacement of the Viega Product itself. VIEGA SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR OTHER DAMAGE (FOR EXAMPLE, ECONOMIC LOSS, WATER OR PROPERTY OR MOLD REMEDIATION) UNDER ANY LEGAL THEORY AND WHETHER ASSERTED BY DIRECT ACTION, FOR CONTRIBUTION OR INDEMNITY OR OTHERWISE.

THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR ANY STATUTE OF LIMITATIONS RELATING TO SUCH WARRANTIES. Other than this Limited Warranty, Viega does not authorize any person or firm to create for it any other obligation or liability in connection with its products.

This Limited Warranty gives you specific legal rights and you also may have other rights which may vary from state to state. This warranty shall be interpreted and applied under the law of the state in which the product is installed and is intended as a Commercial Warranty.

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Viega Limited Warranty for Marine Applications **Marine applications are defined as mobile structures** **used to navigate water or stationary structures in water**

Subject to the terms and conditions of this Limited Warranty, Viega LLC (Viega) warrants to end users, installers and distribution houses that its Viega metal press products (Viega product) when properly installed in approved marine applications and other products sold by Viega LLC when properly installed in marine applications in accordance with our listings shall be free from failure caused by manufacturing defects for a period of two (2) years from date of installation. This warranty applies only to approved applications. Installations that are not approved shall not be covered by this warranty and shall not be the responsibility of Viega LLC.

Under this Limited Warranty, you only have a right to a remedy if the failure or leak resulted from a manufacturing defect in the Viega product and the failure or leak occurs during the warranty period. You do not have a remedy under this warranty and the warranty remedy does not apply if the failure or any resulting damage is caused by (1) components other than those sold by Viega; (2) not designing, installing, inspecting, testing, or maintaining the Viega product in accordance with Viega's installation and product instructions in effect at the time of installation and other specifications and approvals applicable to the installation; (3) improper handling and protection of the Viega product prior to, during and after installation, inadequate freeze protection, or exposure to environmental or operating conditions not recommended for the application; or (4) acts of nature, such as, but not limited to earthquakes, fire, or weather damage. Final approval as to use compatibility to a specific process or fluid application is the responsibility of the engineer of record or responsible design/facilities personnel and this Limited Warranty only applies to manufacturing defects in the Viega Product.

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under this warranty. The part or parts which you claim failed should be kept and Viega contacted by writing to the address below or telephoning 1-800-976-9819 within thirty (30) calendar days after the leak or other failure and identifying yourself as having a warranty claim. You should be prepared to ship, at your expense, the product which you claim failed due to a manufacturing defect, document the date of installation, and the amount of the repair or replacement if performed by you. Within a reasonable time after receiving the product, Viega will investigate the reasons for the failure, which includes the right to inspect the product at a Viega location and reasonable access to the site of damage. Viega will notify you in writing as to the results of its review.

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THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR ANY STATUTE OF LIMITATIONS RELATING TO SUCH WARRANTIES. Other than this Limited Warranty, Viega does not authorize any person or firm to create for it any other obligation or liability in connection with its products.

This Limited Warranty gives you specific legal rights and you also may have other rights which may vary from state to state. This warranty shall be interpreted and applied under the law of the state in which the product is installed and is intended as a Commercial Warranty.

Viega products are designed to be installed by licensed and trained plumbing and mechanical professionals who are familiar with Viega products and their installation. *Installation by non-professionals may void Viega LLC's warranty.*

This document subject to updates. For the most current Viega technical literature please visit www.viega.us.

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