



Engineering Specification ProPress® Stainless

1. Product Definition:

ProPress® Stainless is a complete Cold Press Mechanical Joint Piping system. The ProPress® Stainless system shall include pipe, valves and fittings from 1/2" to 4" in both 304 and 316 grades of stainless steel.

2. Manufacturer:

Viega LLC.
301 N. Main 9th FLR
Wichita, KS 67202
Tel: 877-Viega-NA
www.viega.net

3. Material:

- 3.1 Viega ProPress® Stainless steel fittings shall conform to dimensional tolerances of ASTM B88 and ANSI B16.22.
- 3.2 Sealing elements for ProPress® shall be EPDM or FKM. Determination shall be based on the evaluation of the system operating parameters.
 - 3.2.1 Alternative sealing elements shall be supplied by Viega.
- 3.3 Press ends shall include the Smart Connect (SC) feature. Smart Connect feature assures leakage of liquid and/or gases past the fitting sealing element of an un-pressed connection thus providing the installer identification of un-pressed connections prior to the systems operation; and shall appear in all fittings.
- 3.4 Fitting markings:
 - 3.4.1 Fittings shall be marked with manufacturers name "Viega," size of the fitting, alloy composition (304 or 316) & appropriate production code.
 - 3.4.2 304 stainless steel fittings with EPDM sealing elements shall be marked with orange dots at the 'SC' feature.
 - 3.4.3 316 stainless steel fittings with EPDM sealing elements shall be marked with green dots at the 'SC' feature.

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3.4.4 304 stainless steel fitting & 316 stainless steel fittings with FKM sealing elements shall be marked with white dots at the 'SC' feature.

3.5 Stainless steel pipe for the Viega ProPress® Stainless System shall only be manufactured by "Viega". Stainless Steel Pipe shall conform with ASTM A312 and A554 in copper tube size conforming to ASTM B88 (CTS). Identifying pipe markings for the Viega ProPress® Stainless System shall conform to ASTM A999 material variations will be Orange stripe on the pipe for 304 Stainless Steel; 316 Stainless steel pipe will be identified by the print line along its entire length.

4. Installation:

4.1 Fittings joints 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. Refer to product instructions **(PI-PPS-410 and PI-PPS-415-XL-S)** for insertion depth. The fitting alignment shall be checked against the mark on the pipe to ensure the pipe is fully engaged (inserted) into the fitting.

4.2 The joints shall be pressed using a press tool recommended by Viega.

5. Codes and Standards:

5.1 Viega ProPress® Stainless conforms to the following :

- ASTM A240 Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
- ASTM A312 Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes
- ASTM A403 Specification for Wrought Austenitic Stainless Steel Piping Fittings
- ASTM A554 Specification for Welded Stainless Steel Mechanical Tubing.
- ASTM A999 Specification for General Requirements for Alloy and Stainless Steel Pipe.
- ASTM B88 Specification for Seamless Copper Water Tube (dimensionally)
- ASME B1.20.1 Pipe Threads, General Purpose, Inch
- ASME B31.1 Power Piping
- ASME B31.3 Process Piping
- ASME B31.9 Building Services Piping
- ASME B36.10M Welded and Seamless Wrought Steel Pipe (dimensionally for 5S pipe wall)