

FREQUENTLY ASKED QUESTIONS





Merit Brass Co.

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How does a StainlessPress® fitting and valve seal?

A special tool physically "presses" the fittings onto the pipe creating a mechanically sound joint. An elastomeric sealing element prohibits any leaks.

How does a press fitting and valve compare to other joining methods?

Press fit technology allows pipes to be joined mechanically without threading or soldering. This means no solvents, thread sealants or open flames are required. Pressing is a comparably fast joining method requiring less time to install than other means. Press installations typically costs 30% - 50% less than those made with other joining methods due to labor and auxiliary material savings.

Where can Merit's line of StainlessPress® fittings and valves be used?

Anywhere traditional fittings and valves are used - plumbing and heating, commercial, and industrial applications where gas, steam, liquids or vacuums are conveyed.

What type of press fittings and valves does Merit carry?

Merit carries an offering of StainlessPress fittings and valves in HNBR, FKM and EPDM sealing elements in size ranges of ½" – 2" (IPS, Iron Pipe Size). Check out our line card for StainlessPress® Fittings here. Additionally, we carry CarbonPress® fittings in HNBR, EPDM and FKM, and CopperPress® Fittings and Valves which are available with an EPDM sealing element for water applications.

What type of piping should be used with StainlessPress® fittings and valves?

Schedule 5 or 10 Type 304/304L or 316/316/L stainless steel pipe conforming to ASTM A-312.

What are the StainlessPress® fittings and valve made of?

StainlessPress® fittings (with the exception of flange

adapters) are constructed of ASTM AISI 316L stainless steel. Valves and flanges are made of CF8M stainless steel, the 316 cast equivalent. These materials exhibit an exceptionally high corrosion resistance.

Why is stainless steel a better choice than PEX (cross-linked polyethylene), PVC or CPVC?

Plastic piping and fittings can burn and distort during a fire event, and in many cases will give off toxic smoke. Stainless Steel is not flammable. Stainless Steel is also more dimensionally stable than plastics when exposed to thermal fluctuations.

How can I be assured a joint has been pressed in an installation?

Merit's StainlessPress® fittings and valves are designed to leak before press, so any unpressed joint can be quickly identified.

Some other manufacturers use 304 or 304L Stainless Steel. Why do you use 316L?

316L stainless steel exhibits better corrosion resistance and is stronger at elevated temperatures than 304. This is primarily due to the addition of molybdenum which is not contained in 304 stainless steel. The 316L stainless steel is hygienic, exceptionally durable and corrosion resistant, not affected by UV radiation, resistant to erosion corrosion and is visually attractive. The 316L material costs more than 304, but it results in a superior product.

Why should I use press products instead of those joined by traditional methods (soldering, brazing, welding, threading, etc.)?

Press connections can be made in the fraction of the time required by other joining methods, and no open flame or flame permit is required. Faster installations translate into significant labor savings. Connections made by pressing are sound, simple, clean and provide an economical alternative to other means of joining pipe.



Are press connections secure?

Press connections are as secure as any other joining method.

How long does it take to make a press connection?

A press connection can be made in seconds - literally the time it takes to insert the pipe and cycle the tool, and unlike other methods, full structural integrity and sealing capability is realized immediately.

Can Merit's StainlessPress® fittings and valves be used in combination with copper plumbing systems?

Yes. Both copper and stainless steel have similar corrosion potentials in potable water.

Can a joint be adjusted after pressing?

Slight torsional adjustments (generally 5 degrees or less) can be made after pressing. More significant rotations require that the joint to be repressed.

What press tools should I use when making a press connection?

Please access our StainlessPress tooling reference guide <u>here</u>.

Can StainlessPress® fittings and valves be used with deionized water?

Yes. Merit's StainlessPress® fittings and valves have a long track record of use in many types of conditioned waters including softened and deionized.

What applications are StainlessPress® fittings and valves suited for?

The sealing element selected determines suitability for a given service, but Merit's StainlessPress® fittings and valves can be used anywhere other traditionally

joined stainless steel products are specified - including but not limited to water, gases, air (wet or dry), hydraulic fluids, lubricants, oil vapors, acids, alkalies, vegetable and mineral oils, hydrocarbons, and automotive fluids.

Additionally, the hygienic characteristics of our fittings and valves make them a good choice for use in the food, beverage, and pharmaceutical industries. Learn more about our applications here.

What are the pressure and temperature ranges for StainlessPress® fittings and valves?

This line has a working pressure range from a full vacuum (internal absolute pressure of 0 PSI) to 300 PSI on Schedule 5 and 10 Stainless Steel Pipe. Valves have a maximum working pressure of 300 PSI and can be used in vacuum service down to an internal absolute pressure 7.3 PSI.

Temperature ranges are sealing element dependent:

- **EPDM Sealing Element** (Black color code), fittings and valves -4°F to 230°F (-20°C to 110°C)
- HNBR Sealing Element (Yellow color code), Fittings:
 -31°F to 248°F (-35°C to 120°C) | Valves: -13°F to 248°F (-25°C to 120°C)
- FKM Sealing Element (Green color code), fittings and valves -4°F to 356°F (-20°C to 180°C)

Which sealing element should I select?

Merit's brand of StainlessPress® fittings and valves have three sealing element options that cover a wide variety of applications, but it is important to specify the correct one for a given application.

The black **EPDM sealing element** has excellent oxidation resistance and is recommended for use with drinking water, hot water, dilute acids, alkalies, oil free air and many chemical services. DO NOT USE WITH HYDROCARBONS.



The yellow **HNBR sealing element** is recommended for use with petroleum products, vegetable oils, mineral oils and air with oils. DO NOT USE IN HOT AIR OR WATER.

The green **FKM sealing element** is recommended for use with oxidizing acids, petroleum products, hydraulic fluids, lubricants, and halogenated hydrocarbons. DO NOT USE WITH AMMONIA.

What pipe hanger and support requirements should my installation follow?

Support hanger spacing should correspond to the ASME B31.1 Power Piping Code, ASME B31.3 Process Piping Code, or ASME B31.9 Building Services Piping Code as appropriate. Consult the local authority having jurisdiction for possible additional requirements. Proper bearing and spacing of supports is necessary to prevent excessive bending or sagging. The weight of the conveyed material should also be considered.

Can Merit's StainlessPress® fittings and valves be used in compressed air applications?

Yes. Since most compressed air systems contain finely distributed lubricants, the yellow HNBR sealing element should be specified for this service.

Can Merit's StainlessPress® fittings and valves be insulated?

Yes. Insulating material with a maximum level of soluble chloride ions of 0.05% should be specified. Avoid use of insulating materials that may collect and hold moisture such as felt. Closed cell foam insulation is preferred. Protecting the fittings and valves from chemical attack should be considered when installations are made in particularly harsh environments (i.e. paint shops, open tank chemical processing, etc.).



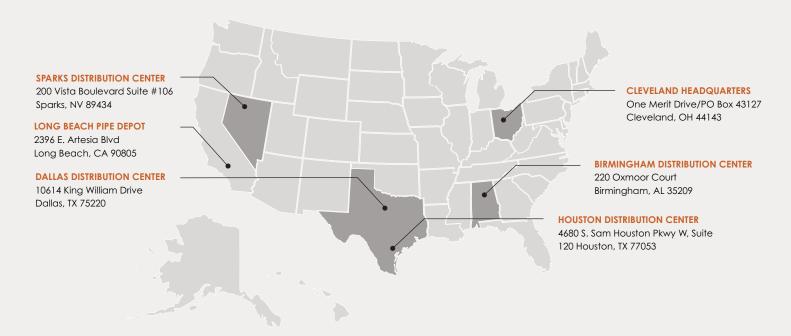








LOCATIONS



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