

DIRECTING THE FLOW OF Quality

2024 PRESS OFFERING





CopperPress®

StainlessPress®



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800.726.9800

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PRODUCTS OF MERIT

Pipe Nipples		
Red Brass (Standard/Extra Heavy) ASTM B687**		1/8" – 6"
Chrome Plated Red Brass ASTM B687**		1/8" – 6"
Stainless Steel (304/L & 316/L) ASTM	Schedule 40 Welded	1/8" – 8"
A733	Schedule 40 & 80 Seamless	1/8" – 3"
Aluminum (6061-40)		1/8" – 4"

Pipe		
	Standard H58 Hard Temper	1/8" – 6"
Red Brass ASTM B43**	Standard 061 Annealed Temper	1/8" – 4"
Red Brass Asilvi B43	Extra Heavy H58 Hard Temper	1/8" – 4"
	Chrome Plated H58 Hard Temper	1/4" – 4"
Stainless Steel (304/L & 316/L) ASTM A312/SA312	Welded Schedule 10	1/2" – 12"
	Schedule 40 Welded	1/8" – 12"
	Schedule 80 Welded	1/8" – 4"
	Schedule 40 Seamless	1/8" – 4"
	Schedule 80 Seamless	1/8" – 4"
Aluminum ASTM B241 (6061-T6) - Standard		1/8" – 6"

Tubing		
Stainless Steel (304/L & 316/L) (0.035, 0.049, 0.065, 0.080, 0.095, 0.109 Walls)	Seamless (ASTM A213/A269)	1/4" – 1"
	Welded (ASTM A249/A269)	1/4" – 1"

Syphons	
Brass**	1/4"
Stainless Steel (304/L & 316/L)	1/4"

Таре	
Stainless Steel PTFE Thread Tape	1/2" & 3/4"

Valves	
Stainless Steel - K Series	1/2" – 6"
Stainless Steel - V Series	1/2" – 3"
Brass - Leaded* & Lead-Free**	1/4" – 4"
Instrumentation	1/4" – 1/2"

Tube Fittings		
Stainless Steel		1/8" – 1"

- Threading Capabilities
- » NPT (National Pipe Taper)
- » NPTF (National Pipe Taper Fuel & Oil)
- » NPSL (National Pipe Straight Locknut)
- » NPSM (National Pipe Straight Mechanical)
- » NPSH (National Pipe Straight Hose)
- » BSPT (British Standard Pipe Taper)
- Manufacturing Capabilities
- » Plain Roller Cut
- » Plain Square Cut
- » Plain Ream & Chamfer
- » Groove (Roll or Cut)
- » Per Print Bending (1/8" 1" Diameter)
- » Per Print O.D. & I.D. Machining

Fittings			
	Domestic (125LB & 250LB)		1/8" – 6"
Brass Threaded ASTM B584 Leaded* Lead-Free**	Import (125LB & 250LB)		1/8" – 4"
	Chrome Plated (125LB)		1/8" – 2"
Brass Barstock	Domestic (125LB) – Leaded	d* & Lead-Free**	1/8" – 3/4"
	Cast 150LB (Standard) (AIS	1304 & 316)	1/8" – 4"
	Cast 150LB MSS SP-114	Threaded	1/8" – 4"
		Socket Weld	1/2" – 2"
	Barstock 1000LB ASTM A182 or A479		1/8" – 3"
Stainless Steel (304 & 316)	3000LB (Threaded & Socket Weld) ASTM A182		1/8" – 3"
	Buttweld (Schedules 10 & 40) ASTM A403		1/2" – 12"
	MSS Type A & C Stub Ends ASTM A403	Schedule 10	1/8" – 3"
		Schedule 40 (Type A Only)	1/2" – 8"
Carbon Steel Forged A105-N	2000LB Threaded		1/4" – 2"
	3000LB Threaded		1/8" – 3"
	3000LB Socket Weld		1/2" – 3"

	Outlets	
Stainless Steel (304/L & 316/L)	Threaded	1/8" – 4"
	Socket Weld	1/2" – 4"
	Buttweld (Schedule 40)	1/2" – 4"
Carbon Steel Forged A 105-N	Threaded	1/2" – 4"
	Socket Weld	1/2" – 4"
	Buttweld (Schedule 40)	1/2" – 4"

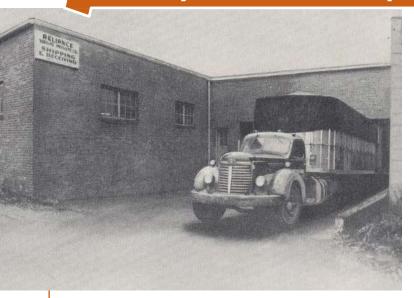
Flanges			
Brass - Import & Domestic Leaded* & Lead-Free**	Companion (Threaded) (150LB & 300LB) ASTM B584		1/2" – 6"
	ANSI 150LB & 300LB (304/L & 316/L) ASTM A182		1/2" – 12"
Stainless Steel	MSS 150LB (304 & 316) ASTM A351		1/2" – 10"
	Plate (304/L & 316/L) (150LB)	Tube OD Slip On	1-1/2" – 12"
		Blind	1" – 12"
	,	IPS Slip On	1" – 12"
Ductile Iron Backup ASTM A536 & Galvanized			1/2" – 12"

Engineered Products		
CopperPress®	Fittings 1/2" – 4" and Valves 1/2" – 2" (EPDM)	
CarbonPress*	Fittings 1/2" – 4" (HNBR, EPDM & FKM)	
StainlessPress*	Fittings and Valves 1/2" – 2" (HNBR, EPDM & FKM)	
MeritPress"	Fittings 1/2" – 2" (EPDM). See CopperPress® for valves and large OD fittings.	

Every precaution has been taken in preparing this sheet. Merit Brass Company cannot be held responsible for omissions or typographical errors.

- * <u>MARNING</u>: This product can expose you to Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to <u>www.P65Warnings.ca.gov</u>. Leaded product is not for use in potable water.
- ** Conforms with lead content requirements for lead-free plumbing as defined by the U.S. Safe Drinking Water Act. Certified <=0.25 weighted average % lead.

Family Owned & Operated Since 1937









Nation's **leading** pipe nipple manufacturer and master distributor of the most comprehensive offering of flow control piping **connections**









Our Vision is to set the industry standard for the highest **TOTAL** value of goods & services

INNOVATIVE SOLUTIONS

Driven to Provide You Value

Merit Brass is a family-owned and operated business headquartered in Cleveland, Ohio. Founded by Lou Schlessinger and Frank Lifshitz in 1937, Merit is the nation's leading pipe nipple manufacturer and master distributor of flow control piping connections. Our goal is to provide a safe and sustainable infrastructure across all vertical markets (both plumbing and industrial).

Merit Brass' legacy has been built on our commitment to quality, our investment in products that offer our customers with solutions that drive value, and our dedication to the success of our associates & their families through Merit's continued vision.

Merit brings to its customers in-depth market intelligence as part of our partnering relationship because we understand how that insight impacts your corporate initiatives. Our long-term supply chain partners fortify our ability to serve your PVF needs around pipe fittings, pipe flanges, pipe, tubing, valves, and thread tape.









Today, Merit Brass continues to live our legacy of addressing industry needs. In 2022, Merit acquired Supply Source Products, a master distributor of press fittings and valves in carbon, copper, and stainless steel. Merit Brass is proud of those that worked diligently to create our legacy and we celebrate the talent that we have today. Our team is comprised of passionate individuals who possess industry knowledge and experience coupled with a drive for success through improvement.

Our commitment to your Merit Experience is to provide trouble-free and on-time service from order inception all the way through shipment with over 200 associates across six locations. Today, Merit's ownership includes the third generation, Marc Schlessinger (CEO) and Alan Lipp (CEO), with its fourth generation, Kyle Schlessinger and Kevin Lipp, actively working in their careers. Merit's ownership alongside Darren Hilliard (President) continues to live out our legacy of serving our wholesale distribution partners by helping you succeed with high quality piping system connections, our knowledge and education, and our decades of experience.





cess

Training at Every Stage of the Process with Your Success in Mind



Saves Time, Money & Labor

No Soldering or Burn Permit Needed. Shorter Lay Lengths for Those Tighter Spaces

MERIT'S PRESS OFFERING

Merit Brass has over 85 years of experience in serving the PVF (Pipe, Valve & Fitting) industry with high quality products to support a wide variety of Applications and Industries. As Merit continues to look to the future, and the continued growth of our Company, we have identified Press Fittings as one of the next steps on the path to our next 85 years.

After listening to the voice of customers across varying applications, Merit's team of engineers developed a solution for improving the installation process. With the design of our Visual Indicator Press Ring® (VIPR®) it makes it easy for the installer to identify any unpressed joints in the system (the VIPR® can be easily removed after the fitting has been pressed), cutting down on the number of errors that can occur on the job site. Each press fitting and valve up to 2" has a color coded VIPR® that identifies the sealing element and helps the Installer ensure the correct sealing element is located in the correct part of the installation. Fittings and valves 2.5" and above have an easily removable identification tag, which is also color coded to match the sealing element.

Merit's press fitting and valve offering includes: CarbonPress®, CopperPress®, StainlessPress® and MeritPress™. Our press technology is focused on quality, safety, reliability and ease of use. Press joints can be readily achieved using several commercially available pressing tools. Several press fittings are available with male or female threaded ends to enable connectivity with threaded piping systems. Conversion to flanged systems can be made with ANSI Class 125/150 Flange Adapters. Where breaks in pipe work may be needed, the union coupling can be used for quick and easy connections/disconnections. Weld and grooved adapters are available to transition to welded or grooved piping systems.

Merit's press fittings and valves also incorporate a unique sealing element design that provides an important Leak-Before-Press (LBP) feature. When the fitting and pipe are pressed together, they deform to create a durable permanent pipe joint, while the sealing element compresses to make the joint leak-proof. An unpressed fitting allows a leak path for liquids and gases, thereby enabling an installer to identify the unpressed fittings easily. The Leak-Before-Press (LBP) feature significantly reduces the chance of unpressed joints, helping to ensure a leak-free system.

- » CopperPress® Fittings $\frac{1}{2}$ " 4" and Valves $\frac{1}{2}$ " 2" (EPDM)
- » StainlessPress® Fittings and Valves ½" 2" (HNBR, EPDM, FKM)
- » CarbonPress® Fittings ½" 4" (HNBR, EPDM, FKM)
- » MeritPress™ Fittings ½" 2" (EPDM). See CopperPress® for valves and large OD fittings.



FEATURES & BENEFITS



CopperPress® By Merit Brass Co.



















SEALING APPLICATIONS

Fitting Housing

Fittings shall be constructed of UNS C12200 copper or equivalent.

Working Pressure

Working Pressure Range from Full Vacuum 300 psi.

SEALING ELEMENT

EPDM SEALING ELEMENT		
EPDM	Ethylene-propylene-diene monomer	
Color	Black	
Temperature	0°F to 250°F	
	Potable Water	
Common Applications*	Hydronic Heating (W/ Glycol)	
	Chilled Water	
Manufacturing Process	Synthetically manufactured & peroxide-cured	
Benefits of Sealing Element	Excellent oxidation resistance	

^{*}Details of approved applications may be found on page 12.







COPPERPRESS® FITTINGS & VALVES

Benefits & Features

- Over 350+ Fittings (0.5" 4") made from UNS C12200 Copper Tube
- Leak Before Press (LBP) Feature on all Fittings/Valves (0.5" 4")
- Visual Indicator Press Ring® (VIPR®) on Sizes up to 2"
 - » 2.5" and above has Removable Tag
- Bag/Box is Color Coded to match the VIPR® and Sealing Element for Ease of Identification
 - » Green = EPDM
- Fluid Media Type is Color Coded on the Fitting
 - » Green "H2O" for EPDM
- Can be Installed with all Major Press Tools/Jaws
 - » 0.5" 2" Press Profile = CTS-V (same as Copper ProPress)
 - » 2.5" 4" Press Profile = CTS-Grab Ring (same as Copper ProPress)
- 50-year Warranty on CopperPress® Fittings
- 5-year Warranty on CopperPress® Valves

Pressure & Temperature

- Working Pressure: Range from Full Vacuum to 300 psi
- Temperature Range: 0°F 250°F



TOOLING REFERENCE GUIDE

Copp	CopperPress® Tools, Kits, Jaws and Rings							
Size	Milwaukee Part #	Tooling Name	Adapter	Ridgid Part #	Tooling Name	Adapter	Profile	
0.5" - 4"	2773-20	M18 Force Logic Press Tool		67063	RP 350 Press Tool			
0.5" - 2"	2773-22	M18 Force Logic Press Tool w/Jaws (0.5" - 2")		67053	RP 350 Press Tool w/Jaws (0.5" - 2")			
0.5"	49-16-2650	0.5" M18 Jaw		76652	0.5" Press Jaw		CTS - V	
0.75"	49-16-2651	0.75" M18 Jaw		76657	0.75" Press Jaw		CTS - V	
1"	49-16-2652	1" M18 Jaw		76662	1" Press Jaw		CTS - V	
1.25"	49-16-2653	1.25" M18 Jaw		76667	1.25" Press Jaw		CTS - V	
1.5"	49-16-2654	1.5" M18 Jaw		76672	1.5" Press Jaw		CTS - V	
2"	49-16-2655	2" M18 Jaw		76677	2" Press Jaw		CTS - V	
2.5"	49-16-2656	2.5" M18 Ring	49-16-2659	20543	2.5" Press Ring	21878	CTS - Grab Ring	
3"	49-16-2657	3" M18 Ring	49-16-2659	20548	3" Press Ring	21878	CTS - Grab Ring	
4"	49-16-2658	4" M18 Ring	49-16-2659	20553	4" Press Ring	21878	CTS - Grab Ring	
2.5" - 4"	49-16-2659	Ring Jaw 1		21878	V2 Press Ring Actuator			
2.5" - 4"	49-16-2690	M18 Press Ring Kit (2.5" - 4")		20483	2.5" - 4" Press Rings and V2 Actuator			

CopperPress®, by Merit Brass Co. products can be used with Milwaukee, REMS, Ridgid, and Rothenberger tools with the associated Jaws for K, L, and M Copper Tube. Please contact Merit Brass Co. for additional information.

SMALL DIAMETER COPPER END PRESS BALL VALVE - SIZES: 1/2" - 2"

CopperPress® Ball Valve Codes & Standards

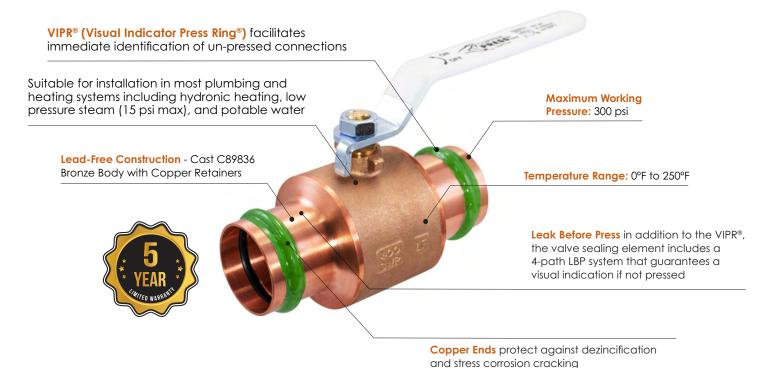
- ASME B31.1 Power Piping, B31.3 Process Piping, B31.9 Building Services Piping
- ASME A112.4.14/CSA B125.14 Manually and Automatically Operated Valves for Use in Plumbing Systems
- IPC, IMC, UPC, UMC
- CPC & CMC (California Plumbing and Mechanical Codes)
- City of Los Angeles Plumbing and Mechanical Codes
- Massachusetts Regulation 248 CMR 10.00: Uniform State Plumbing Code
- Massachusetts State Building Code 780 CMR Ninth Edition: Chapter 28

CopperPress® Ball Valve Certifications

- ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems
- IAPMO/ANSI/CAN Z1157 Ball Valves
- NSF/ANSI/CAN 61 Drinking Water System Components Health Effects
- NSF/ANSI/CAN 372 Drinking Water System Components Lead Content

Design Features

Designed to be used with ASTM B88 Type K, L and M 1/2" - 2" copper tubing in the hard-drawn condition and soft copper tubing in sizes ½" - 1¼".



APPROVED APPLICATIONS



Types Of Service		System Operating Co		CopperPress [®] Seal	
	Types Of Service	Notes	Pressure	Temperature	EPDM
	Chilled Water	Ethylene Glycol/Propylene Glycol	300 psi	32°F - 250°F	✓
	Cooling Water	Up to 50% Ethylene Glycol or Propolene Glycol Solution	300 psi	32°F - 250°F	✓
Fluids/	Hot & Cold Potable Watecr		300 psi	32°F - 250°F	✓
Water	Hydronic Heating	Ethylene Glycol/Propylene Glycol	300 psi	32°F - 250°F	✓
	Low-Pressure Steam		Up to 15 psi	248°F	✓
	Rainwater/Gray Water		300 psi	32°F - 250°F	✓
Fuel, Oil & Lubricant	Ethanol	Pure Grain Alcohol	300 psi	32°F - 250°F	✓
	Argon	Welding Use	300 psi	Ambient	✓
	Carbon Dioxide - CO2	Dry	300 psi	32°F - 250°F	✓
	Compressed Air	Less Than 25mg/m3 Oil Content	300 psi	32°F - 250°F	✓
Gas	Hydrogen - H2		125 psi	0°F - 250°F	✓
	Nitrogen - N2		300 psi	32°F - 250°F	✓
	Oxygen - O2 (Non-Med)	Keep Oil and Fat Free/Non-Liquid O2	140 psi	Up to 140°F	✓
	Vacuum		29.2 in Hg	Call	✓

^{*}Contact Merit Brass for information regarding specific applications

EPDM COPPERPRESS® SYSTEM DATA SHEET

The Merit **CopperPress**[®] system is available in $\frac{1}{2}$ " – 4" on fittings and $\frac{1}{2}$ " – 2" on valves. This system joins ASTM B88 Type K, L, and M $\frac{1}{2}$ " – 4" copper tubing in the hard-drawn condition and soft copper tubing in sizes ½" – 1¼". CopperPress® is available in the EPDM sealing element. Our first to market VIPR® technology provides assurances that each fitting is pressed correctly as the band easily removes after it has been pressed. In addition, CopperPress® has a leak before (LBP) press system which gives a visual indication of a connection that has not been pressed.



The Merit CopperPress® Offering Includes:

- · Adapters: Flange, Pex, Male, Female
- Couplings: with Stop, No Stop and Extended No Stop
- 45° Elbows: Standard & Street
- 90° Elbows: Standard & Street
- Tees: Standard, Reducing and Reducing (P x FPT)
- Unions: Female, Male, Dielectric Female and Standard
- Cross Over: Street and Standard

Product Components:

- Lead-free dezincification resistant copper
- EPDM black sealing element
- Box, bag and band are color-coded GREEN for ease of receipt and proper installation per application

Working Pressure & Temperature:

- Working pressure: range from full vacuum to 300 psi
- Temperature range: 0° to 250°F

CopperPress® Certifications:

- ICC-ES LC1002
- NSF/ANSI/CAN 61
- NSF/ANSI/CAN 372
- IAPMO Z 1117

CopperPress® Valve Certifications:

- ICC-ES LC 1002
- IAPMO/ANSI/CAN Z1157
- NSF/ANSI/CAN 61
- NSF/ANSI/CAN 372







Approved Applications (See Page 12):

 Hot & Cold Potable water, Rainwater/Gray Water, Chilled Water, Hydronic Heating, Cooling water, low pressure steam, ethanol.

Approved Piping:

 ASTM B88 Type K, L, and M ½" – 4" copper tubing in the hard-drawn condition and soft copper tubing in sizes $\frac{1}{4}$ " – $\frac{1}{4}$ ".

Press Tooling Reference Guide (See Page 10).

Please contact our sales team for additional information around our CopperPress® offering at 800.726.9800.

CarbonPress® By Merit Brass Co.











CARBONPRESS® FITTINGS

Benefits & Features

- Over 450 Fittings (0.5" 4") Fittings made from ASTM A420 Carbon Steel
- Leak Before Press (LBP) feature on all Fittings
- Visual Indicator Press Ring® (VIPR®)
- Bag/Box is Color Coded to match the VIPR® and Sealing Element for Ease of Identification
 - » Green = EPDM
 - yellow = HNBR
 - » White = FKM
- Fluid Media Type is Color Coded on the Fitting
 - » Green "H2O" for EPDM
 - » Yellow "GAS" for HNBR
 - » White "IND" for FKM
- Can be Installed with all Major Press Tools/Jaws
 - » 0.5" 2" Press Profile = IPS-Grab Ring (same as Carbon Steel MegaPress)
- 15-year Warranty on CarbonPress® Fittings
- FKM is Available Upon Request. Please Contact Your Sales Representative for More Information



TOOLING REFERENCE GUIDE

Carbo	CarbonPress® Tools, Kits, Jaws and Rings							
Size	Milwaukee Part #	Tooling Name	Adapter	Ridgid Part #	Tooling Name	Adapter	Profile	
0.5" - 2"	2773-20	M18 Force Logic Press Tool		67063	RP 350 Press Tool			
0.5" - 1"	49-16-2696	M18 Black Iron Press Kit (0.5" - 1")		48558	Press Jaw Kit (0.5" - 1")			
0.5" - 2"	49-16-2697	M18 Black Iron Press Kit (0.5" - 2")		48553	Press Jaw Kit (0.5" - 2")			
2.5" - 4"	2773-20L	M18 Force Logic Long Throw Press Tool		60658	Press Booster			
0.5"	49-16-2650B	0.5" M18 Black Iron Press Jaw		37958	0.5" Press Jaw		IPS - Grab Ring	
0.75"	49-16-2651B	0.75" M18 Black Iron Press Jaw		37963	0.75" Press Jaw		IPS - Grab Ring	
1"	49-16-2652B	1" M18 Black Iron Press Jaw		37968	1" Press Jaw		IPS - Grab Ring	
1.25"	49-16-2653B	1.25" M18 Black Iron Press Ring	49-16-2659	37973	1.25" Press Ring	21878	IPS - Grab Ring	
1.5"	49-16-2654B	1.5" M18 Black Iron Press Ring	49-16-2659	37978	1.5" Press Ring	21878	IPS - Grab Ring	
2"	49-16-2655B	2" M18 Black Iron Press Ring	49-16-2659	37983	2" Press Ring	21878	IPS - Grab Ring	
2.5"	49-16-2656B	2.5" M18 Black Iron Press Ring	49-16-2659	60643	2.5" Press Ring	Press Booster	IPS - Grab Ring	
3"	49-16-2657B	3" M18 Black Iron Press Ring	49-16-2659	60648	3" Press Ring	Press Booster	IPS - Grab Ring	
4"	49-16-2658B	4" M18 Black Iron Press Ring	49-16-2659	64653	4" Press Ring	Press Booster	IPS - Grab Ring	
1.25" - 2"	49-16-2659	Ring Jaw 1		21878	V2 Press Ring Actuator			
2.5" - 4"	49-16-2659\$	Ring Jaw 2						
2.5" - 4"	49-16-2698	M18 Black Iron Press Kit XL (2.5" - 4")		60638	Press Booster with Press Rings (2.5" - 4")			

CarbonPress®, by Merit Brass Co. products can be used with Milwaukee, REMS, Ridgid, and Rothenberger tools with the associated Jaws for Carbon Steel/Black Iron Pipe. Please contact Merit Brass Co. for additional information.

SEALING APPLICATIONS

Fitting Housing

Made from ASTM A420 Carbon Steel with a Zn-Ni plating. See below for common applications.

Working Pressure

Working Pressure Range from Full Vacuum to 250 psi (17.2 bar) Water, 125 psi (8.6 bar) Gas, 200 psi (13.7 bar) for industrial applications.

EPDM SEALING ELEMENT				
EPDM	Ethylene-propylene-diene monomer			
Color	Black			
Temperature	-40°F to 300°F (-40°C to 148°C)			
Common Applications	Recommended for hot water, dilute acids, alkalies, oil free air and many chemical services. Excellent oxidation resistance. NOT FOR USE WITH HYDROCARBONS			
Manufacturing Process	Synthetically manufacturered & peroxidically cross-linked			
Benefits of Sealing Element	Excellent oxidation resistance			

HNBR SEALING ELEMENT				
HNBR	Hydrogenated Nitrile Butadiene Rubber			
Color	Yellow			
Temperature	-40°F to 200°F (-40°C to 93°C)			
Common Applications	Recommended for petroleum products, vegetable oils, mineral oils and air with oils. NOT FOR USE IN HOT WATER OR HOT AIR.			
Manufacturing Process	Synthetically manufacturered & peroxidically cross-linked			
Benefits of Sealing Element	Excellent resilience and tear resistance			

FKM SEALING ELEMENT				
FKM	Fluoroelastomer			
Color	Brown			
Temperature	14°F to 293°F (-10°C to 145°C)			
Common Applications	Recommended for oxidizing acids, oils, hydraulic fluids, chlorinated hydrocarbons, and process water. NOT FOR USE WITH AMMONIA			
Manufacturing Process	Synthetically manufacturered & peroxidically cross-linked			
Benefits of Sealing Element	Retains mechanical properties at elevated temperatures			

NOTE: The FKM Sealing Element is available Upon Request. Please contact your sales representative for more information.

APPROVED APPLICATIONS



		System Operating Conditions				Carbonpress® Seals			
Types of Service		Notes	Pressure (EPDM/HNBR)	Pressure (FKM)	Temperature	EPDM (Water)	FKM (Ind.)	HNBR (Gas)	
	Chilled Water	Ethylene Glycol, ProPylene Glycol	230 psi	200 psi	Min40°F	✓	✓		
Fluids/	Fire Sprinkler	Compliant with UL & FM for NFPA 13, 13D & 13R	175 psi	175 psi	Ambient	✓	/		
Water	Hydronic Heating	Ethylene Glycol, Propylene Glycol	230 psi	200 psi	300°F	✓	✓		
	Low-Pressure System Steam		15 psi max.	15 psi Max.	300°F	✓	✓		
	Argon		230 psi	200 psi	Max. 140°F	✓	✓	✓	
	Carbon Dioxide		230 psi	200 psi	Max. 140°F	✓	/	✓	
	Camarana al Air	Oil Concentrate <25mg/m3	230 psi	200 psi	Max. 140°F	/	\	/	
Gases	Compressed Air	Oil Concentrate >25mg/m3	230 psi	200 psi	Max. 140°F		/	✓	
	Natural Gas, LP Gas and Fuel Oil		125 psi max.	125 psi Max.	-40°F to 180°F		<	✓	
	Nitrogen		230 psi	200 psi	Max. 140°F	>	\	/	
	Vacuum		29.2 in Hg max.	29.2in Hg Max.	Max. 140°F		<	✓	
	Diesel Fuel	Compliant with NFPA 30 & 30A	125 psi	125 psi			✓	✓	
Oil &	Engine Oil		150 psi	150 psi	Ambient		\	/	
Lubricants	Heating Fuel Oil		125 psi	125 psi	-40°F to 180°F		✓	✓	
	Hydraulic Fluid	Mineral Based	230 psi	200 psi	Ambient		/	✓	
	Transmission Fluid		230 psi	200 psi	Ambient		/	/	

Please note that all systems are recommended to be labeled clearly with the gas or fluid that is being conveyed.

Additionally, please consult Merit's Engineering & Product Line Management Team for information on applications not listed and applications that are outside the temperature and pressure ranges listed above.

EPDM CARBONPRESS® SYSTEM DATA SHEET

The Merit CarbonPress® system is available in $\frac{1}{2}$ " – 4". This system joins black iron, epoxy coated, and galvanized schedule 10 to 40 carbon steel pipe. CarbonPress® is available in three sealing elements: EPDM, HNBR and FKM. Our first to market VIPR® technology provides assurances that each fitting is pressed correctly as the band easily removes after it has been pressed. In addition, CarbonPress® has a leak before press (LBP) system which gives a visual indication of a connection that has not been pressed.



The Merit CarbonPress® Offering Includes:

- Adapters: Flange, Male, Female
- Cap
- Couplings: with Stop, No Stop and Extended No
- 45° Flbows: Standard & Street
- 90° Flbows: Standard & Street
- Tees: Standard, Reducing and Reducing (P x FPT)
- Unions: Female and Standard

Product Components:

CarbonPress® is a carbon steel alloy (ASTM A420) fitting which includes other high-quality components:

- Grab ring is made of 2Cr13 which deforms & grips the outside diameter of pipe to ensure a tight connection
- Separator ring made of 2Cr13
- Corrosion resistant
- Zinc nickel plating
- EPDM black sealing element
- Box, bag and band are color-coded GREEN for ease of receipt and proper installation per application

Working Pressure & Temperature:

- Working pressure: range from full vacuum to 250 psi (17.2 bar) for water
- Temperature range: -40°F to 300°F (-40°C to 148°C)

CarbonPress® Certifications:

IAPMO Z 1117

Approved Applications (See Page 17):

- Hydronic Heating
- Chilled Water

Approved Piping:

 Steel pipes conforming to ASTM A53, A106, A135, A795 (schedule 10 to 40) and black iron, epoxy coated and galvanized steel.

Press Tooling Reference Guide (See Page 15).

Please contact our sales team for additional information around our CarbonPress® offering at 800.726.9800.

HNBR CARBONPRESS® SYSTEM DATA SHEET

The Merit CarbonPress® system is available in $\frac{1}{2}$ " – 4". This system joins black iron, epoxy coated, and galvanized schedule 10 to 40 carbon steel pipe. CarbonPress® is available in three sealing elements: EPDM, HNBR and FKM. Our first to market VIPR® technology provides assurances that each fitting is pressed correctly as the band easily removes after it has been pressed. In addition, CarbonPress® has a leak before press (LBP) system which gives a visual indication of a connection that has not been pressed.



The Merit CarbonPress® Offering Includes:

- Adapters: Flange, Male, Female
- Cap
- Couplings: with Stop, No Stop and Extended No
- 45° Elbows: Standard & Street
- 90° Elbows: Standard & Street
- Tees: Standard, Reducing and Reducing (P x FPT)
- Unions: Female and Standard

Product Components:

CarbonPress® is a carbon steel alloy (ASTM A420) fitting which includes other high-quality components:

- · Grab ring is made of 2Cr13 which deforms & grips the outside diameter of pipe to ensure a tight connection
- Separator ring made of 2Cr13
- Corrosion resistant
- Zinc nickel plating
- HNBR Yellow sealing element
- Box, bag and band are color-coded YELLOW for ease of receipt and proper installation per application

Working Pressure & Temperature:

- Working pressure: 125 psi (8.6 bar) for gas
- Temperature range: -40°F to 200°F (-40°C to 93°C)

CarbonPress® Certifications:

IAPMO/ANSI 4/CSA 6.32

Approved Applications (See Page 17):

Fuel Gas Applications

Approved Piping:

 Steel pipes conforming to ASTM A53, A106, A135, A795 (schedule 10 to 40) and black iron, epoxy coated and galvanized steel.

Press Tooling Reference Guide (See Page 15).

Please contact our sales team for additional information around our CarbonPress® offering at 800.726.9800.

FKM CARBONPRESS® SYSTEM DATA SHEET

The Merit CarbonPress® system is available in $\frac{1}{2}$ " – 4". This system joins black iron, epoxy coated, and galvanized schedule 10 to 40 carbon steel pipe. CarbonPress® is available in three sealing elements: EPDM, HNBR and FKM. FKM Is available upon request. Please contact your sales representative for more information. Our first to market VIPR® technology provides assurances that each fitting is pressed correctly as the band easily removes after it has been pressed. In addition, CarbonPress® has a leak before press (LBP) system which gives a visual indication of a connection that has not been pressed.



The Merit CarbonPress® Offering Includes:

- Adapters: Flange, Male, Female
- Cap
- Couplings: with Stop, No Stop and Extended No
- 45° Flbows: Standard & Street
- 90° Flbows: Standard & Street
- Tees: Standard, Reducing and Reducing (P x FPT)
- Unions: Female and Standard

Product Components:

CarbonPress® is a carbon steel alloy (ASTM A420) fitting which includes other high-quality components:

- Grab ring is made of 2Cr13 which deforms & grips the outside diameter of pipe to ensure a tight connection
- Separator ring made of 2Cr13
- Corrosion resistant
- Zinc nickel plating
- FKM brown sealing element
- Box, bag and band are color-coded Brown for ease of receipt and proper installation per application

Working Pressure & Temperature:

- Working pressure: 200 psi (13.7 bar) for industrial applications
- Temperature range: 14°F to 293°F (-10°C to 145°C)

CarbonPress® Certifications:

IAPMO Z 1117

Approved Applications (See Page 17):

- Hydronic Heating
- Chilled Water

Approved Piping:

 Steel pipes conforming to ASTM A53, A106, A135, A795 (schedule 10 to 40) and black iron, epoxy coated and galvanized steel.

Press Tooling Reference Guide (See Page 15).

Please contact our sales team for additional information around our CarbonPress® offering at 800.726.9800.

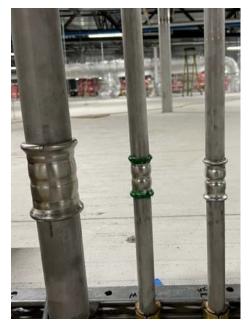
















STAINLESS PRESS® FITTINGS & VALVES

Benefits & Features

- Over 500 Fittings (0.5" 2") Fittings made from ANSI 316L Stainless Steel
- Leak Before Press (LBP) feature on all Fittings
- VIPR® (Visual Indicator Press Ring®)
- Bag/Box is Color Coded to match the VIPR® and Sealing Element for Ease of Identification
 - » Green = EPDM
 - yellow = HNBR
 - » White = FKM
- Can be Installed with all Major Press Tools/Jaws
 - » 0.5" 2" Press Profile = IPS-M
- 15-year Warranty on StainlessPress® Fittings
- 5-year Warranty on StainlessPress® Ball Valves
- FKM is Available Upon Request. Please Contact Your Sales Representative for More Information



TOOLING REFERENCE GUIDE

Stainless	StainlessPress® Tools, Kits, Jaws and Rings					
Size	Milwaukee Part #	Tooling Name	Adapter	Press Profile		
0.5" - 1.25"	2773-20	M18 Force Logic Press Tool				
1.5" - 2"	2773-20L	M18 Force Logic Long Throw Press Tool				
0.5"	49-16-2650S	0.5" M18 IPS-IA Jaw		IPS - M		
0.75"	49-16-2651\$	0.75" M18 IPS-IA Jaw		IPS - M		
1"	49-16-2652S	1" M18 IPS-IA Jaw		IPS - M		
1.25"	49-16-2653S	1.25" M18 IPS-IA Ring	49-16-2659	IPS - M		
1.5"	49-16-2654\$	1.5" M18 IPS-IA Ring	49-16-2659\$	IPS - M		
2"	49-16-2655\$	2" M18 IPS-IA Ring	49-16-2659\$	IPS - M		
1.25"	49-16-2659	Ring Jaw 1				
1.5" - 2"	49-16-2659\$	Ring Jaw 2				
1.25" - 2"	49-16-26918	M18 IPS-IA Press Ring Kit (1.25" - 2")				

StainlessPress®, by Merit Brass Co. products can be used with Milwaukee, REMS, Ridgid, and Rothenberger tools with the associated Jaws for Stainless Steel Pipe, and IPS-M Profile Press Fittings. Please contact Merit Brass Co. for additional information.

THREE PIECE BALL VALVE | SIZES: 1/2" - 2"

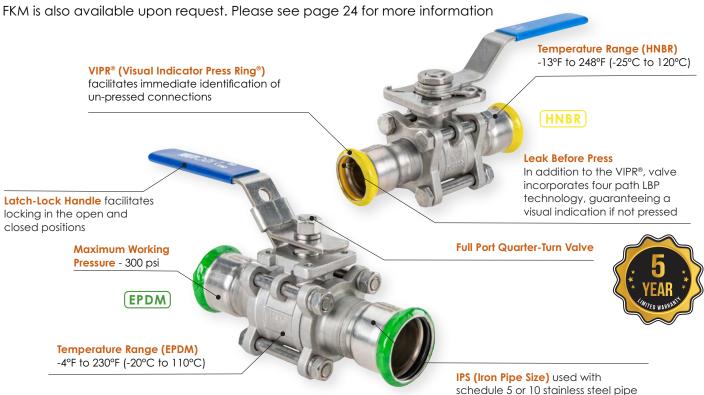
StainlessPress® Ball Valve Codes & Standards

- In compliance with the Buy American Act
- ASME B31.1 Power Piping, B31.3 Process Piping, B31.9 Building Services Piping
- IPC, IMC, UPC, UMC
- CPC & CMC (California Plumbing and Mechanical Codes)
- City of Los Angeles Plumbing and Mechanical Codes
- Massachusetts Regulation 248 CMR 10.00: Uniform State Plumbing Code
- Massachusetts State Building Code 780 CMR Ninth Edition: Chapter 28
- National Standard Plumbing Code (NSPC)
- National Plumbing Code of Canada (NPCC)

StainlessPress® Valve Certifications

- ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems
- IAPMO/ANSI/CAN Z1157 Ball Valves
- NSF/ANSI/CAN 61 Drinking Water System Components Health Effects (EPDM Only)
- NSF/ANSI/CAN 372 Drinking Water System Components Lead Content (EPDM Only)

Design Features



CHEMICAL COMPATIBILITY CHART

				StainlessPress® Seals			Valve Seat
	Chemical	Chemical Formulas	316 SS	EPDM	HNBR	FKM	PTFE
	Acetic Acid 5%	$C_2H_4O_2$	Α	Α	В	Α	А
	Acetic Acid 10%	$C_2H_4O_2$	А	А	С	В	А
Acids	Acetic Acid Glacial	$C_2H_4O_2$	А	А	В	D	А
	Boric Acid 20%	H ₃ BO ₃	А	А	Α	Α	А
	Nitric Acid 20°C	HNO ₃	А	D	D	В	А
D	Ammonium Hydroxide Concentrated	NH₄OH	Α	А	D	В	Α
Bases	Potassium Hydroxide 50% 20°C	КОН	А	А	В	D	А
	Acetylene	C_2H_2	Α	Α	А	Α	А
	Air		Α	А	Α	Α	А
	Argon	Ar	А	Α	Α	Α	А
	Butane	C ₄ H ₁₀	А	D	Α	Α	А
	Carbon Dioxide	CO ₂	Α	Α	Α	Α	А
	Carbon Monoxide	СО	Α	Α	Α	Α	А
	Ethyl Chloride (no moisture)	C ₂ H ₅ CI	Α	В	А	Α	А
Gases	Helium	Не	Α	Α	Α	Α	А
	Hydrogen	H_2	А	Α	Α	Α	А
	Hydrogen Sulfide	H ₂ S	А	А	Α	D	А
	Methane	CH ₄	А	D	Α	Α	А
	Neon	Ne	А	Α	Α	Α	А
	Nitrogen	N	А	Α	Α	Α	А
	Propane	C ₃ H ₈	Α	D	Α	Α	А
	Xenon	Xe	Α	А	Α	Α	А
	Amyl Alcohol	C ₅ H ₁₁ OH	Α	Α	В	В	Α
	Butyl Alcohol (Butanol)	C ₄ H ₁₀ O	Α	В	А	Α	А
	Ethyl Alcohol < 80%	C ₂ H ₆ O	А	А	А	В	А
Alcohols	Ethyl Alcohol > 80%	C ₂ H ₆ O	А	А	А	В	А
	Glycerine (Glycerol)	C ₃ H ₅ (OH) ₃	А	А	А	Α	А
	Isopropyl Alcohol	C ₃ H ₈ O	А	Α	В	Α	Α
	Methanol	CH ₃ OH	Α	А	А	D	А

Recommendations shown above are general in nature. Product service life for a given application is dependent on actual media mixture, pressure, temperature and operational (cycling) parameters. Contact sales@meritbrass.com if you have questions or wish to inquire about compatability with chemicals not shown in the chart.

A = Recommended

B = Minor Effect

C = Moderate Effect

D = Unsatisfactory

SEALING APPLICATIONS

Fitting Housing

Made from 316 Stainless Steel.

Working Pressure

Working Pressure Range from Full Vacuum 300 psi.23

See below tables for common applications and benefits of the sealing element. Details of approved applications may be found on page 23.

EPDM SEALING ELEMENT		
EPDM	Ethylene-propylene-diene monomer	
Color	Black	
Temperature	Fittings & Valves: -4°F to 230°F (-20°C to 110°C)	
Common Applications	Recommended for hot water, dilute acids, alkalies, oil free air and many chemical services. Excellent oxidation resistance. NOT FOR USE WITH HYDROCARBONS	
Manufacturing Process	Synthetically manufactured & peroxide-cured	
Benefits of Sealing Element	Excellent oxidation resistance	

HNBR SEALING ELEMENT				
HNBR	Hydrogenated Nitrile Butadiene Rubber			
Color	Yellow			
Temperature	Fittings: -31°F to 248°F (-35°C to 120°C) Valves: -13°F to 248°F (-25°C to 120°C)			
Common Applications	Recommended for petroleum products, vegetable oils, mineral oils and air with oils. NOT FOR USE IN HOT WATER OR HOT AIR.			
Manufacturing Process	Synthetically manufactured & peroxide-cured			
Benefits of Sealing Element	Excellent resilience and tear resistance			

FKM SEALING ELEMENT				
FKM	Fluoroelastomer			
Color	Green			
Temperature	Fittings & Valves: -4°F to 356°F (-20°C to 180°C)			
Common Applications	Recommended for oxidizing acids, oils, hydraulic fluids, chlorinated hydrocarbons, and process water. NOT FOR USE WITH AMMONIA.			
Manufacturing Process	Synthetically manufactured & peroxide cured			
Benefits of Sealing Element	Retains mechanical properties at elevated temperatures			

NOTE: The FKM Sealing Element is available Upon Request. Please contact your sales representative for more information.

EPDM STAINLESSPRESS® SYSTEM DATA SHEET

The Merit **StainlessPress**® system is available in $\frac{1}{2}$ " – 2" on fittings and $\frac{1}{2}$ " – 2" on valves. This system joins 304 or 316 Stainless steel pipe in schedules 5 or 10. Stainless Press® is available in the EPDM, HNBR and FKM sealing elements. Our first to market VIPR® technology provides assurances that each fitting is pressed correctly as the band easily removes after it has been pressed. In addition, **StainlessPress®** has a Leak Before Press (LBP) System which gives a visual indication of a connection that has not been pressed.

The Merit StainlessPress® Offering Includes:

- Adapters: Flange, Transition, Weld, Van Stone Flange, Male, Female
- Cap
- Couplings: With Stop and w/o Stop
- 90° Elbows: Standard & Street
- 45° Elbows: Standard & Street
- Tees: Equal, Reducing and Reducing (P x FPT)
- **Unions: Standard**
- **Ball Valves**

Product Components:

StainlessPress® is a 316 stainless steel alloy fitting which includes other high quality components:

- Corrosion resistant
- EPDM black sealing element
- Box, bag and band are color-coded GREEN for ease of receipt and proper installation per application

Working Pressure & Temperature:

- Working pressure from full vacuum to 300 psi on schedule 5 or 10 stainless steel pipe
- Fitting and Valve temperature Range: -4°F to 230°F (-20°C to 110°C)

StainlessPress® Certifications:

- ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems
- IAPMO/ANSI/CAN Z1117 Press Connections
- NSF/ANSI/CAN 61 Drinking Water System

- Components Health Effects
- NSF/ANSI/CAN 372 Drinking Water System Components - Lead Content
- FM 1920 Pipe Coupling and Fittings for Above **Ground Fire Protection Systems**
- American Bureau of Shipping Product Design Assessment (PDA) Certificate 1-5-PR1438892-PDA, Piping System and Couplings

StainlessPress® Ball Valve Certifications:

- ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems
- IAPMO/ANSI/CAN Z1157, NSF 61/372 Ball Valves
- NSF/ANSI/CAN 61 Drinking Water System Components - Health Effects
- NSF/ANSI/CAN 372 Drinking Water System Components - Lead Content

NOTE: Code, standard and certification compliance is sealing element dependent. Only products with EPDM seals are suitable for potable water applications. Contact Merit Brass Customer Service for additional information.

Approved Applications:

Please refer to our chemical compatibility chart (see page 24).

Approved Piping:

Stainless steel schedule 5 or schedule 10 stainless steel IPS pipe.

Press Tooling Reference Guide (See Page 22).

Please contact our sales team for additional information around our **StainlessPress®** offering at 800.726.9800.

HNBR STAINLESSPRESS® SYSTEM DATA SHEET

The Merit **StainlessPress**® system is available in $\frac{1}{2}$ " – 2" on fittings and $\frac{1}{2}$ " – 2" on valves. This system joins 304 or 316 Stainless steel pipe in schedules 5 or 10. Stainless Press® is available in the EPDM, HNBR and FKM sealing elements. Our first to market VIPR® technology provides assurances that each fitting is pressed correctly as the band easily removes after it has been pressed. In addition, StainlessPress® has a Leak Before Press (LBP) System which gives a visual indication of a connection that has not been pressed.

The Merit StainlessPress® Offering Includes:

- Adapters: Flange, Transition, Weld, Van Stone Flange, Male, Female
- Cap
- Couplings: With Stop and w/o Stop
- 90° Elbows: Standard & Street
- 45° Elbows: Standard & Street
- Tees: Equal, Reducing and Reducing (P x FPT)
- Unions: Standard
- **Ball Valves**

Product Components:

StainlessPress® is a 316 stainless steel alloy fitting which includes other high quality components:

- Corrosion resistant
- HNBR yellow sealing element
- Box, bag and band are color-coded YELLOW for ease of receipt and proper installation per application

Working Pressure & Temperature:

- Working pressure: from full vacuum to 300 psi on schedule 5 or 10 stainless steel pipe
- Fitting temperature range: -31°F to 248°F (-35°C to 120°C)
- Valve temperature range: -13°F to 248°F (-25°C to 120°C)

StainlessPress® Certifications:

 ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems

- IAPMO/ANSI/CAN Z1117 Press Connections
- FM 1920 Pipe Coupling and Fittings for Above **Ground Fire Protection Systems**
- American Bureau of Shipping Product Design Assessment (PDA) Certificate 1-5-PR1438892-PDA, Piping System and Couplings

StainlessPress® Ball Valve Certifications:

- ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems
- IAPMO/ANSI/CAN Z1157, NSF 61/372 Ball Valves

NOTE: Code, standard and certification compliance is sealing element dependent. Only products with EPDM seals are suitable for potable water applications. Contact Merit Brass Customer Service for additional information.

Approved Applications:

Please refer to our chemical compatibility chart (see page 24).

Approved Piping:

Stainless steel schedule 5 or schedule 10 stainless steel IPS pipe.

Press Tooling Reference Guide (See Page 22).

Please contact our sales team for additional information around our StainlessPress® offering at 800.726.9800.

FKM STAINLESSPRESS® SYSTEM DATA SHEET

The Merit **StainlessPress®** system is available in $\frac{1}{2}$ " – 2" on fittings and $\frac{1}{2}$ " – 2" on valves. This system joins 304 or 316 Stainless steel pipe in schedules 5 or 10. Stainless Press® is available in the EPDM, FKM and HNBR sealing elements. FKM is available upon request. Please contact your sales representative for more information. Our first to market VIPR® technology provides assurances that each fitting is pressed correctly as the band easily removes after it has been pressed. In addition, StainlessPress® has a Leak Before Press (LBP) System which gives a visual indication of a connection that has not been pressed.

The Merit StainlessPress® Offering Includes:

- Adapters: Flange, Transition, Weld, Van Stone Flange, Male, Female
- Cap
- Couplings: With Stop and w/o Stop
- 90° Elbows: Standard & Street
- 45° Elbows: Standard & Street
- Tees: Equal, Reducing and Reducing (P x FPT)
- Unions: Standard
- **Ball Valves**

Product Components:

StainlessPress® is a 316 stainless steel alloy fitting which includes other high quality components:

- Corrosion resistant
- FKM green sealing element
- Box, bag and band are color-coded WHITE for ease of receipt and proper installation per application

Working Pressure & Temperature:

- Working pressure: from full vacuum to 300 psi on schedule 5 or 10 stainless steel pipe
- Fitting and Valve temperature Range: -4°F to 356°F (-20°C to 180°C).

StainlessPress® Certifications:

- ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems
- IAPMO/ANSI/CAN Z1117 Press Connections

- FM 1920 Pipe Coupling and Fittings for Above Ground Fire Protection Systems
- American Bureau of Shipping Product Design Assessment (PDA) Certificate 1-5-PR1438892-PDA, Piping System and Couplings

StainlessPress® Ball Valve Certifications:

- ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems
- IAPMO/ANSI/CAN Z1157, NSF 61/372 Ball Valves

NOTE: Code, standard and certification compliance is sealing element dependent. Only products with EPDM seals are suitable for potable water applications. Contact Merit Brass Customer Service for additional information.

Approved Applications:

Please refer to our chemical compatibility chart (see page 24).

Approved Piping:

Stainless steel schedule 5 or schedule 10 stainless steel IPS pipe.

Press Tooling Reference Guide (See Page 22).

Please contact our sales team for additional information around our StainlessPress® offering at 800.726.9800.





IRAINING CERTIFICATION PRESS TECHNOLOGY

This Certificate Verifies That

Has successfully completed training for the installation of CarbonPress®, CopperPress®, StainlessPress®, Isotubi-USA, and MeritPress™ by Merit Brass Co. fittings and valves.

Trainer's Initials Date







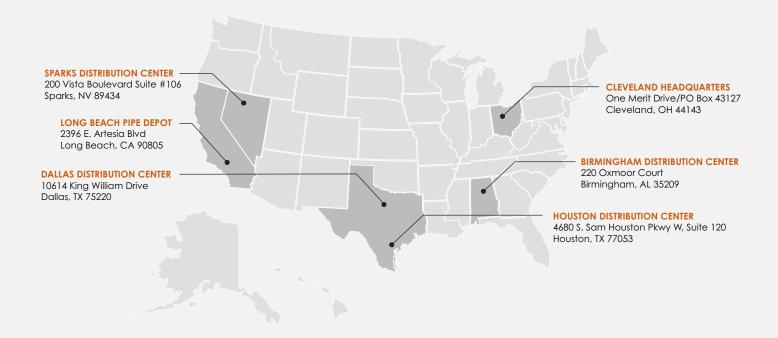








LOCATIONS



LEARN MORE



800.726.9800

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www.meritbrass.com www.mbwebxpress.com contactus@meritbrass.com