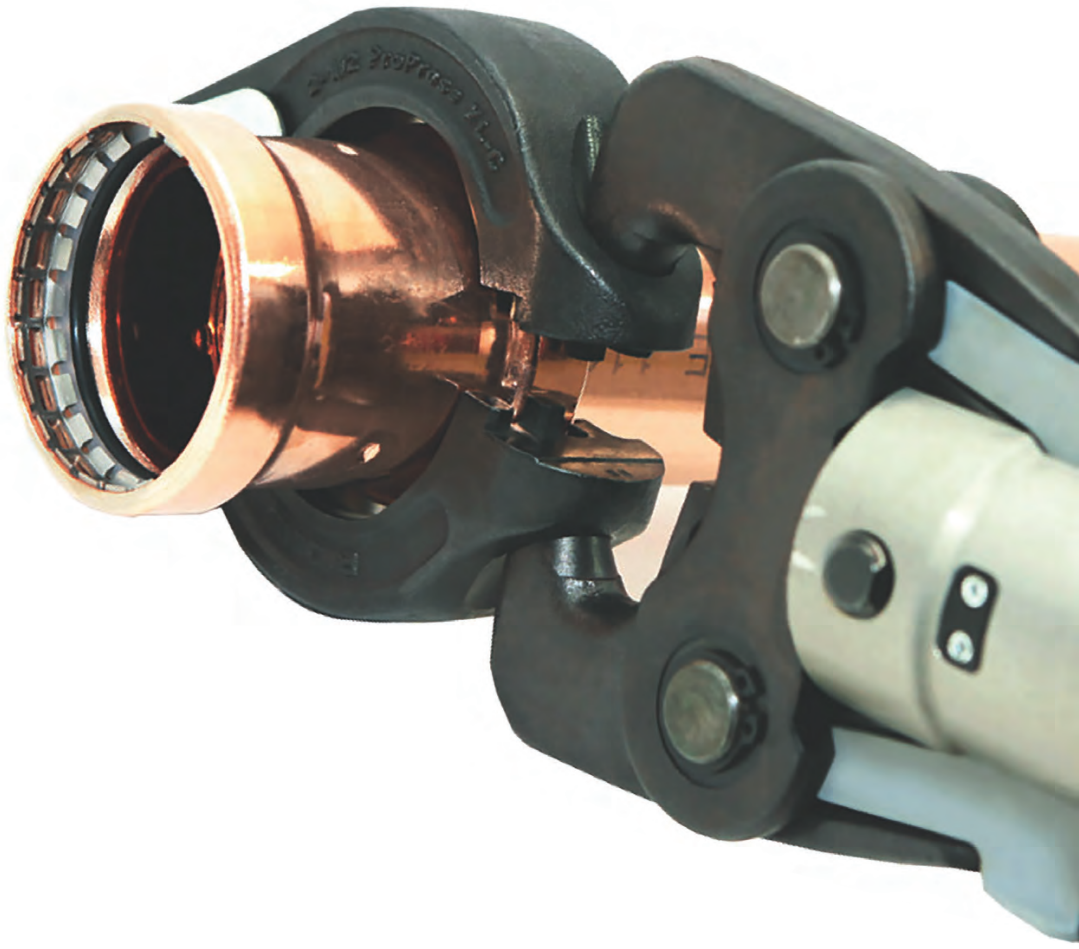
DURA-SEAL TECHNOLOGY
JWpress
EVERFLOW™



PRESS COPPER FITTINGS

ENGINEERING DATA & INSTALLATION

Go with the *FLOW*

877.941.7800 | everflowsupplies.com

SYSTEM DATA

System Description

Using modernized cold press connection technology for a wide assortment of fittings, in dimensions ranging from 1/2" to 4", JWPress provides safe and economical copper pipe installation systems.

Applications

All tubing must comply with the ASTM B88 standard.
JWPress fittings are approved for installations in above and below ground applications as allowed by local code.

Operating Parameters

Operating Pressure 200 PSI Max.
Test Pressure 600 PSI Max.
Low Pressure Steam 15 PSI Max.
Vacuum 24.5" Mercury Max. @ 68°F
Operating Temperature 0°F-250°F

Approved Applications

Potable water
Hydronic heating(w/ Glycol)
Chilled water
Compressed Air(200 PSI Max)
Non medical Gases(140 PSI Max.)
Low Pressure Steam(15 PSI Max.)
Vaccum(24.5" Mercury Max. @68°F)

System benefits

Fast and Easy to use
Flameless
Permanent Connections
Wide Capacity from 1/2" to 4"
Large Selection of Fittings
Consistent Professional Appearance
Less Equipment Required
Environmental Friendly Connection System
Versatility of Fittings and Tools for Variety of Applications

Fittings

JWPress fittings are offered in 350 plus configurations including:
Elbows, Couplings, Reducers, Tees, Reducing Tees, Threaded Adapters, Unions, Caps, Flanges, Cross over, Manifold and accesories.
All fittings are wrot copper or may contain a Lead free brass assembly.
All Parts are Lead free compliant

Warranty

JWPress products carry a 50-year warranty against defects in material and workmanship.

Approvals and Certificates

NSF International
UPC/IPC by IAPMO
CSA International
CRN
MASS Approval
JNS Group - ISO 9001 / 14001 approved company.

JWPress and "JAW COMPATIBILITY MATRIX"

Using the performance requirements outlined in ASME B 16.51-2011, in house testing requirements developed by JWPress, and in conjunction with operational instructions provided by various tool and jaw manufacturers. JWPress has developed the following Jaw compatibility matrix.

It is important to follow the manufacturer's guidelines for best use and practices, and for required and periodic maintenance of both the tool and jaws used in Copper press.

Failure to do so may void the tool and jaw manufacturers warranties, and cause improper pressing of fittings.

½ through 2 inch JWPress

Milwaukee M12 Compact jaws ½" through 11/4"
Milwaukee M18 Standard Jaws ½" through 2"
Nibco Standard Jaws ½" through 2"
REMS Compact jaws ½" through 11/4"
REMS Standard Jaws ½" through 2"
Ridgid Tool compact jaws ½" through 11/4"
Ridgid Tool Standard jaws ½" through 2"
Rothenberger Compact jaws 1/2 " through 1"
Rothenberger Standard jaws ½" through 2"
Stanley Virax copper Jaws ½" through 2"

21/2" to 4" JWPress

Milwaukee M18 Standard Jaws 21/2" through 4"
REMS Standard Pressing Ring 21/2 through 4"
Ridgid tool Standard Jaw for copper press 21/2" through 4"

100% BUY AMERICAN COMPLIANT
Domestic Equivalent

sales@everflowsupplies.com · 908-436-1100 · fax: 908-436-1162

GENERAL

Summary

Copper tubing and fitting system for hot and cold water distribution systems, sprinkler and standpipe systems and Hydronic Piping Systems.

Definitions

EPDM : Ethylene-Propylene-Diene-Monomer
NSF : National Sanitation Foundation
ASME : American Society of Mechanical Engineers
ASTM : American Society for Testing and Materials
IAPMO : International Association of Plumbing & Mechanical Officials
CSA : Canadian Standards Association
CRN : Canadian Registration Number
AWWA : American Water Works Association
FM : Factory Mutual
ICC : International Code Council
MSS : Manufactures Standardization Society
NFPA : National Fire Protection Association
UL : Underwriters Laboratory

References

ASME A13.1 : Scheme for the Identification of Piping Systems
ASME B1.20.1 : Pipe Threads, General Purpose (inch)
ASME B16.18 : Cast Copper Alloy Solder Joint Pressure Fittings
ASME B16.22 : Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings
ASME B16.26 : Cast Copper Alloy Fittings for Flared Copper Tube
ASME B31.9 : Building Services Piping
ASTM B75 : Standard Specification for Seamless Copper Tube
ASTM B88 : Standard Specification for Seamless Copper Water Tube
ASTM B813 : Standard Specification for Liquid and Paste Fluxes for Soldering Applications of Copper and Copper Alloy Tube
ASTM B828 : Standard Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings
AWWA C651 : Standard for Disinfecting Water Mains
IAPMO : Uniform Mechanical Code
IAPMO : Uniform Plumbing Code
ICC : International Plumbing Code
ICC : International Mechanical Code

MSS-SP-58 : Pipe Hangers and Supports Materials, Design and Manufacturer
MSS-SP-69 : Pipe Hangers and Supports Selection and Application
NFPA 14 : Standard for the Installation of Standpipe and Hose Systems
NSF 61 : Drinking Water System Components – Health Effects

Guidelines to ensure Quality Installation

Installer shall be a qualified installer, licensed within the jurisdiction, and familiar with the installation of JWPress copper press joint systems.

JWPress copper press fittings shall be installed using the proper tool, actuator, jaws and rings as instructed by the press fitting manufacturer.

The installation of copper tubing 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 copper tubing in sprinkler or standpipe systems shall conform to NFPA 13, 13D, 13R and 14.

The installation of copper tubing in Hydronic systems shall conform to the requirements of the ICC International Mechanical Code or the IAPMO Uniform Mechanical Code.

Delivery, Storage and Handling of JWPress Fittings

Copper tubing shall be shipped to the job site on truck or in such a manner to protect the tubing. The tubing and fittings shall be carefully handled during shipment. Tubing and fittings shall be unloaded with reasonable care.

Protect the stored product from moisture and dirt. Elevation above grade and away from concrete flooring is desireable.

In the event Press fittings are dropped, exercise the utmost care in visually inspecting them to assure that fittings have not been damaged or deformed.

Lockable vandal resistant storage is recommended because of the high scrap value of copper tubing and fittings.

Warranty

Both copper tubing manufacturers and JWPress warrant that their products are free from defects and conform to the designated standard. The warranty shall only be applicable to tubing and fittings installed in accordance with the manufacturer's installation instructions.

The manufacturer of the fittings shall not be responsible for the improper use, handling or installation of the product.

PRODUCTS

Material

Tubing for use with JWPress fittings shall conform to ASTM B75 or ASTM B88.
Copper and lead free copper alloy JWPress fittings shall conform to ASME B16.18,
ASME B16.22 or ASME B16.26.

Press Fitting: Copper and copper alloy press fittings shall conform to material requirements
of ASME B16.18 or ASME B16.22,
and performance criteria of IAPMO PS 117.

Sealing elements for press fittings shall be EPDM.
Sealing elements shall be factory installed or
an alternative supplied by fitting manufacturer.

Integral Leak path design, assures leakage of liquids and/or gases from inside
the system past the sealing element of an unpressed connection.
This allows for quick and easy identification of connections
which have not been pressed prior to putting the system into operation.

All Threaded JWPress fittings, shall be manufactured with threads conforming to ASME B1.20.1.
All Hangers and supports used in Piping sytems
which include JWPress fittings shall conform to MSS-SP-58.
and shall be installed per local code.

Source Quality Control

All JWPress fittings, are listed by a third party agency to conform to NSF 61 Annex G.
All JWPress fittings have been tested and are compliant with CSA standards.
All JWPress fittings have been registered and assigned CRN numbers for use throughout canada.

EXECUTION

Examination

The installing contractor shall examine the copper tube and press fittings for apparent defects.
Visible defects should be cause rejection of use in installation.
Do not attempt to make filed repairs to fittings when a visible defect has been noted.
The installing contractor shall ensure that sealing elements are properly
in place and free from damage.
For Sizes 2-1/2" to 4", installer should ensure that the stainless steel grip ring is in place.

Preparation

A. Copper tubing shall be cut with a wheeled tubing cutter or
an approved copper tubing cutting tool.
The tubing shall be cut square to permit proper joining with the fittings.

B. Remove scale, slag, dirt and debris from inside and outside of tubing and fittings before assembly.
The tubing end shall be wiped clean and dry.
The burrs on the tubing shall be reamed with a deburring or reaming tool.

Installation General Locations

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

Installation

Pressure Rating: Install components having a pressure rating equal to or greater than the system operating pressure.

Install piping free of sags, bends and kinks.

Change in Direction: Install fittings for changes in direction and branch connections. Where approved, changes in direction may also be made by bending of Types K and L tube.

Solder Joints: Solder joints shall be made in accordance with ASTM B 828.
The temperature of the joint during soldering shall not be raised above the maximum temperature limitation of the flux.

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.

Press connections: Copper and copper alloy press connections shall be made in accordance with the manufacturer's installation instructions. The tubing shall be fully inserted into the fitting and the tubing marked at the shoulder of the fitting. The fitting alignment shall be checked against the mark on the tubing to assure the tubing is fully engaged (inserted) in the fitting. The joints shall be pressed using the tool(s) approved by the manufacturer.

Pipe Protection: Provide protection against abrasion where copper tubing is in contact with other building members by wrapping with an approved tape, pipe insulation or otherwise suitable method of isolation.

Penetration Protection: Provide allowance for thermal expansion and contraction of copper tubing 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.

Backfill Material: When using JWPress fittings protect against contact with cinders, refuse, stones,ash or other materials which can damage or break the tubing or promote corrosive action in any trench or excavation in which tubing is installed.

Install hangers for horizontal piping in accordance with MSS-SP-69 or the following maximum spacing and minimum rod sizes.

Vertical copper tubing shall be supported at each floor, unless otherwise specified by local building code.

To protect against galvanic corrosion, hangers and supports shall be either copper or vinyl coated, or insulated to prevent galvanic corrosion between the tubing and the supporting member.

In seismic areas, copper tubing shall be installed to local code.

Copper tubing systems shall be identified in accordance with the requirements of ASME A13.1.

Field Quality Control

Air testing of system with JWPress
The copper tubing system shall be air tested for joint tightness. The piping system shall be pressurized with air to the maximum pressure of the system or to the code or standard required minimum for the required length of time. The system shall have no leaks at the rated pressure.

Water testing of piping system with JWPress
The copper tubing system shall be water tested for joint tightness. The piping system shall be filled with water. The system shall be pressurized to the maximum pressure and length of time required by the code or standard. The system shall have no leaks at the rated pressure.

Cleaning (Potable Water Systems)

Disinfection of piping system
The copper 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:

The piping system shall be flushed with potable water until discolored water does not appear at any of the outlets.

The system shall then be filled with a water chlorine solution containing at least 50 parts per million of chlorine, and allowed to stand for 24 hours. Consult local code to ascertain if more stringent cleaning is required.

Following the standing time, the system shall be flushed with potable water.

100% BUY AMERICAN COMPLIANT
Domestic Equivalent

PREPARATION

Source Quality Control

1. Use a rotary tube cutter to cut the copper tube and achieve a squared end.

2. Remove burrs from the end of the tube with a file. Make sure that the tube end is smooth and clean to avoid damaging the oring component of the press copper fitting.

3. Alternately, an off the shelf commercial tube end deburring tool may be available. Regardless of the method by which tube end is deburred, the smooth clean tube end is critical to the proper use of copper press fittings.

4. Identify the depth , using the size chart included, of the press fitting cup. Measure the tube from the end, marking it clearly at the desired insertion depth.
When inserting the tube into the press fitting cup, clearly seat the tube until you have reached the mark on the exterior of the tube. This ensures a proper seal of fitting and tube.

1 2 3 4

Nominal Pipe Size	1/2”	3/4”	1”	1 1/4”	1 1/2”	2”	2 1/2”	3”	4”
Insertion Depth(in)	3/4”(0.75”)	14/16”(0.9”)	14/16”(0.9”)	1”(1.02”)	1-7/16”(1.41”)	1-9/16”(1.56”)	1-6/8”(1.7”)	1-7/8”(1.85”)	2-1/8”(2.15”)

INSTALLATION INSTRUCTIONS

Small Size : 1/2" ~ 2"

For Types K, L and M Hard Copper Tubing in 1/2" to 2"
and Soft Copper Tubing in 1/2" to 1-1/4".
This product contains zero lead.

1. Check seal for correct fit. Do not use oils or lubricants.

2. Mark proper insertion depth as indicated by the JWPress Insertion Depth Chart. Improper insertion depth may result in improper seal.

3. While turning slightly, slide press fitting onto tubing to the marked depth.
Note: End of tubing must contact stop.

4. Open the jaw and place at right angles on the fitting. Visually check insertion depth using mark on tubing

5. Start pressing process and hold the trigger until the jaw has engaged the fitting.

6. After pressing, the jaw can be opened again.

⚠WARNING
Read and understand all instructions
for installing JWPress fittings.
Failure to follow all instructions may result
in extensive property damage and serious injury.


1


2


3


4


5


6

Large Size : 2-1/2" ~ 4"

For Types K, L and M Hard Copper Tubing in 2 1/2" to 4"

1. Check seal and grip ring for correct fit. Do not use oils or lubricants
2. Mark proper insertion depth as indicated by JW Press Insertion Depth Chart. Improper insertion depth may result in improper seal. While turning slightly, slide press fitting onto tubing to the marked depth. Note: End of tubing must contact stop.
3. Open ring and place at right angles on the fitting. Ring must be engaged on the fitting bead. Check insertion depth.
4. With actuator inserted into the tool, open the actuator as shown and connect ring
5. Place actuator onto ring and start pressing process. Hold the trigger until the actuator has engaged the ring. Keep extremities and foreign objects away from ring and actuator during pressing operation to prevent injury or incomplete press


1


2


3


4


5

Leak Testing:
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 200psi if required by local code requirements or project specifications.

100% BUY AMERICAN COMPLIANT
Domestic Equivalent

JWPress LEAK PATH and FITTING OVERVIEW

O-ring inside pipe

O-ring detail

Features and Benefits:

1. EPDM oring with circumferential leak track.
2. When not pressed but socketed, the fitting will leak at multiple points of the fitting hub, so that there is no accidental seal.
3. Circumferential leak path is both water & air tight, when the joint is correctly pressed, creating a leak proof joint.
4. Requires use of “v-profile” jaw sets throughout the range from ½” through 4” fittings.
5. Suitable for use with Copper tubes in: Hard temper, half hard temper and soft temper (In limited sizes).
   When using soft temper tube, ascertain that the tube is round and has not been deformed, to assure proper seal.
6. EPDM seal tested and approved for various applications, including hot and cold potable water applications. For a full range of applications and restrictions, see submittal sheet.
7. Rated operating pressure of 200 psi.
8. Rated Operating temperatures of -20 to 250 F.
9. Third party tested and certified to NSF/ANSI 61 annex G.
10. Third party certified to performance standards of CSA MSE 13, and PS17.
11. CRN Listed throughout Canada.

JWPress System:
Testing Instruction for fittings with integral leak detection

Pressure Testing

JWPress and most local inspection authorities recommend/ or require leak testing when installing copper press fittings systems. To assist in making that testing more reliable, JWPress has engineered a unique patented oring design, with integral and continuous leak paths. The following procedures allow installers to detect "un-pressed" fittings in a system under pressure and prior to concealment. Our unique o-ring allows both gasses and approved use fluids to bypass the o-ring and leak in a manner which makes detection easy and allows for timely correction. When JWPress copper press fittings have been pressed correctly, the leak path fully seals and provides a positive seal across the face of the fitting.

Air Testing

When the system, or a portion of the system is installed and isolated, pressurize to 20 psi using dry clean air, carbon dioxide or nitrogen charge.

The system should stabilize over the next several hours (2-3 hours recommended) and the pressure should be checked to see what the reading is at that point.

If the pressure has dropped, as is often the case, add more pressure to bring the system back up to the 20 pound desired initial test level. Bleed off excess pressure. We recommend the use of a set point test gage when testing. Set point gages register the desired test point and give greater visibility of any system leakage. Test gages can be installed in line with either a ppf tee, or at the end or terminus of the section being tested.

Allow another 2-3 hours for complete system stabilization. If upon inspection the system pressure has dropped below the 20 psi test level, there is likely a leaking fitting. This design leak is easily tested and identified either by use of commercial leak locator fluid or with a solution of soap and water which will form identifying bubbles at the leak point. Un-pressed joints should be checked to make sure they are socketed correctly and then pressed. A fitting that appears to be pressed, detectable by the mild deformity to the immediately adjacent tube, should not be re-pressed but removed from the system. The most common failure of any manufactured press fitting is dislodgement of the o-ring when inserting the tube, often caused by failure to remove and deburr the pipe as required. Any such fitting should be removed in its entirety, and sent back to your wholesale distributor to be processed and evaluated.

Once any un-pressed or otherwise leaking system has been tested and repaired, repeat the testing process until pressure of 20 psi is maintained for 24 hours, or for the duration of time specified by local plumbing authority guidelines.

Water Testing

When the system, or a portion of the system is installed and isolated, pressurize to 50 psi maximum, using clean potable water.

The system should stabilize over the next several hours (2-3 hours recommended) and the pressure should be checked to see what the reading is at that point.

If the pressure has dropped, but there is no immediately detectable leakage, add more water pressure to bring the system back up to the 50 pound desired initial test level. Bleed off excess pressure. We recommend the use of a set point test gage when testing. Set point gages register the desired test point and give greater visibility of any system leakage. Test gages can be installed in line with either a ppf tee, or at the end or terminus of the section being tested.

Allow another 2-3 hours for complete system stabilization. If upon inspection the system pressure has dropped below the 50 psi test level, there is likely a leaking fitting, which should be easily identified. Un-pressed joints should be checked to make sure they are socketed correctly and then pressed, as pressure could unseat them from being fully engaged. A fitting that appears to be pressed (identifiable by the mild deformation of the immediately adjacent tube, should not be re-pressed but removed from the system. The most common failure of any manufactured press fitting is dislodgement of the o-ring when inserting the tube, often caused by failure to remove and deburr the pipe as required Any such fitting should be removed in its entirety, and sent back to your wholesale distributor to be processed and evaluated.

Once any un-pressed or otherwise leaking system has been tested and repaired, repeat the testing process until pressure of 50 psi is maintained for 24 hours, or for the duration of time specified by local plumbing authority guidelines.

Once either testing procedure has been completed and verified, water pressures can be introduced and increased to the working pressure design of the system, as long as within the design.

Application

Listed below are common applications approved by Jungwoo for JWPress fitting system.

Types of Service	System Operating Conditions			2-1/2"~ 4"	1/2"~ 2"
	Comments	Pressure	Temperature	EPIM + SS Grip Ring	EPIM
Fluids/Water					
Hot and Cold Potable Water		200 psi	32°F to 250°F	√	√
Rainwater/ Gray Water		200 psi	Note 3	√	√
Fire Sprinkler		175 psi	Note 3		√
Chiled Water	Ethylene Glycol / Propylene Glycol	200 psi	Note 3	√	√
Hydronic Heating	Ethylene Glycol / Propylene Glycol	200 psi	Note 3	√	√
Cooling Water	UP to 50% Ethylene Glycol or Propylene Glycol solution	200 psi	Note 3	√	√
Low-Pressure Steam		Up to 15 psi	248°F	√	√
Fuel, oil and Lubricant					
Heating Fuel Oil		125 psi	Note 3		
Diesel Fuel	Compliant with NFPA 30 and 30A	125 psi	-40°F to 180°F		
Ethanol	Pure Grain Alchol	200 psi		√	√
Liquid Propane	Compliant with CSA LC4	125 psi	-40°F to 180°F		
Liquid Butane	Compliant with CSA LC4	125 psi	-40°F to 180°F		
Lube Oil	Petoleum Based	200 psi	Note 3		
Gases					
Compressed Air	Less than 25mg/m^3 oil content	200 psi	Note 3	√	√
Compressed Air	More than 25mg/m^3 oil content	200 psi	Note 3		
Natural Gas	Compliant with CSA LC4	125 psi	-40 °F to 180° F		
Oxygen - 02 (nonmedical)	keep oil and fat free / non-liquid 02	140 psi	Up to 140° F	√	√
Nitrogen - N2			Note 3	√	√
Carbon Dioxide - CO2	Dry		Note 3		√
Argon	Welding Use		Ambient	√	√
Hydrogen - H2		125 psi	0°F to 250°F	√	√
Vacuum	Maximum vacuum of 29.2 inches of mercury	29.2 inHg	Note 3	√	√

Consult the JWPress Technical Support Department for information on applications not listed and applications outside the temperature and pressure ranges listed above.

JWPress INSTALLATION GUIDE

Tube Selection

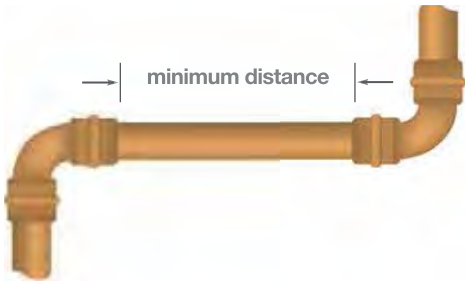
JWPress is compatible with ½"to 1¼" soft copper tubing, and ½" to 4" hard copper tubing in types M, L and K. Tubing for use with JWPress fittings should be compliant with ASTM B88 standard, and additionally should be free of incising marking which may be a potential source of leakage.

Handling of Press Fittings:

JWPress fittings are packaged in polybags, to keep them clean and free from debris. While it unlikely to be needed, the polybag also serves to keep fittings and o-ring seals paired in the event that one were to be dislodged in transit. JWPress, and all press manufacturers recommend a thorough visual inspection of the fittings prior to installation. Fittings should be handled with care and opened just prior to use, to ensure their cleanliness. Fittings which are mishandled could become deformed or mis-shapened.

Distances Between Joints

Mechanical joint pressing causes some engineered degree of deformity to the tubing. To prevent leaks, minimal distances between press joints are set forth in the accompanying table.

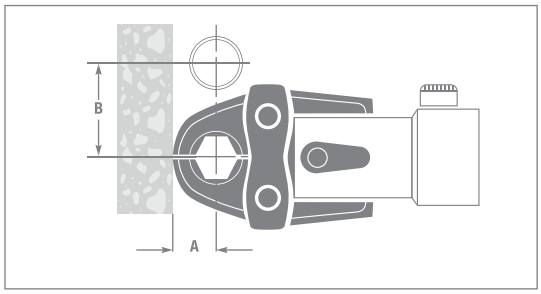


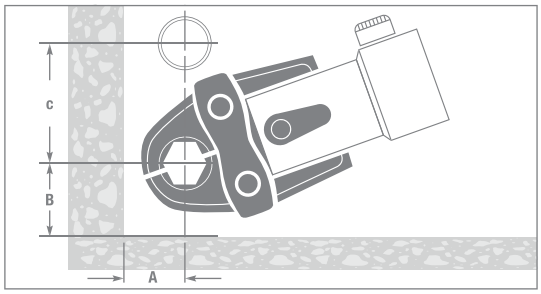
Minimum Distance between JWPress Connection 1/2" to 4		
Tube Dia.	**Minimum Distance**	
Nominal inch	inch	mm
1/2	1/2	13
3/4	1/2	13
1	1/2	13
1 1/4	1/2	13
1 1/2	5/8	16
2	3/4	20
2 1/2	3/4	20
3	3/4	20
4	3/4	20

Pressing Space Limitation:

Press tool and jaw sets can be difficult to get into some tighter spaces. In these instances JWPress recommends that when possible, preassembly be done away from these space restrictions, and then installed to minimize potential for bad alignment of the pressing tools and jaws. For most press joints, use of the press tools and jaws will not pose spatial issues. The following guidelines are recommended for standard installations.

Small Diameter Pressing with Standard Jaw Clearance Requirements

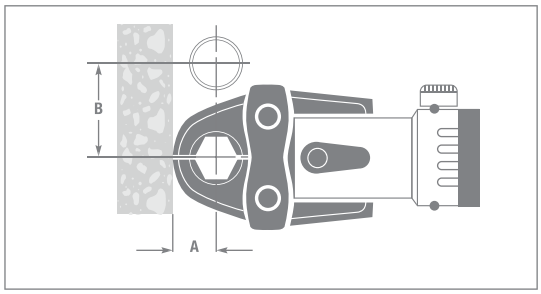


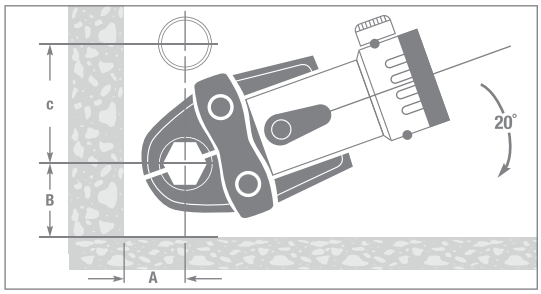


Tube Diameter	A minimum		B minimum	
	inch	mm	inch	mm
½"	¾	19	1⅝	41
¾"	⅞	22	2⅛	54
1"	1	26	2½	64
1¼"	1⅛	29	2⅞	73
1½"	1¾	45	3½	89
2"	2	51	4⅜	111

Tube Diameter	A minimum		B minimum		C minimum	
	inch	mm	inch	mm	inch	mm
½"	⅞	23	1⅜	35	2½	64
¾"	1	26	1½	38	2½	64
1"	1⅛	29	1¾	45	3	76
1¼"	1¼	32	2¼	57	3⅛	80
1½"	1⅞	48	1½	64	3¾	95
2"	2⅛	54	3⅛	80	5	127

Pressing with Compact Jaws Clearance Requirements

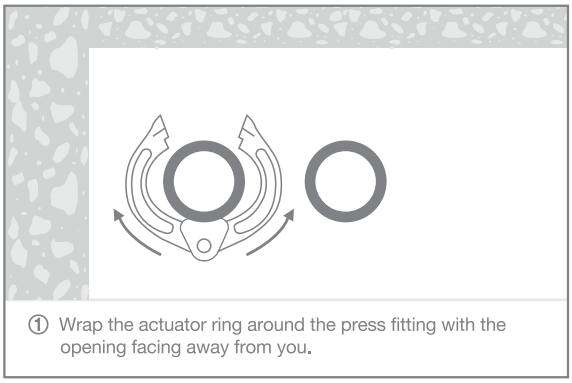




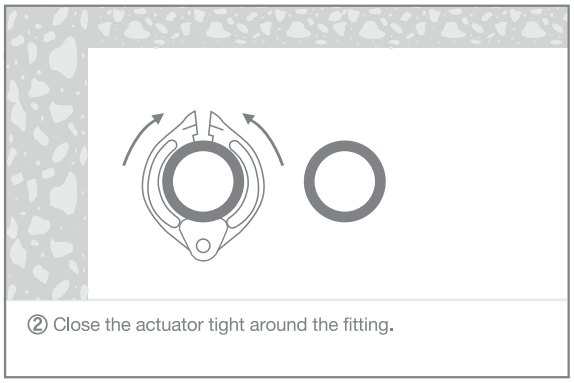
Tube Diameter	A minimum		B minimum	
	inch	mm	inch	mm
½"	¾	19	2	51
¾"	⅞	22	2⅜	60
1"	⅞	26	2⅝	67
1¼"	1⅛	28	3⅛	85

Tube Diameter	A minimum		B minimum		C minimum	
	inch	mm	inch	mm	inch	mm
½"	⅞	23	1⅜	35	2½	64
¾"	1	26	1½	38	2¾	70
1"	1⅛	29	1⅝	41	3	76
1¼"	1⅝	39	2⅛	53	3⅜	85

Large Diameter Pressing Requirements With Standard Press Ring

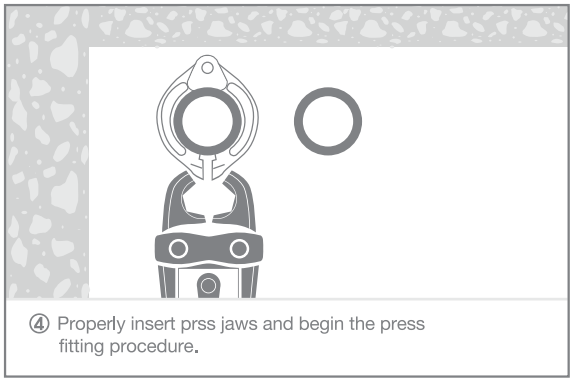


① Wrap the actuator ring around the press fitting with the opening facing away from you.



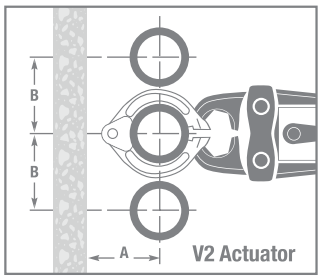
② Close the actuator tight around the fitting.

③ Rotate the actuator ring until the press jaw receptacle is facing toward you.

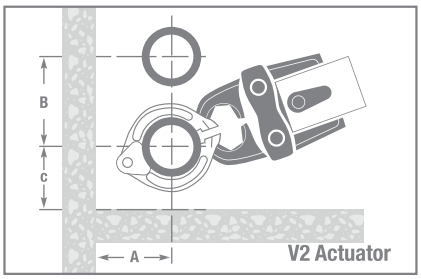


④ Properly insert prss jaws and begin the press fitting procedure.

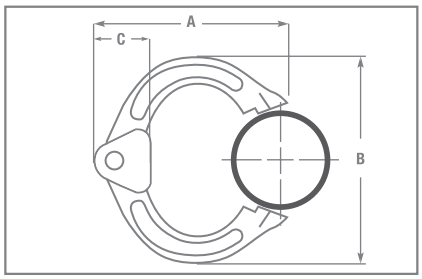
Procedure for laying the copper press ring around the JWPress fitting with minimum space requirements.



Tube Diameter	A in. (mm)	B in. (mm)
2½"	4⅛ (105)	6 (152)
3"	4⅜ (111)	7 (178)
4"	5 (127)	8 (203)



Tube Diameter	A in. (mm)	B in. (mm)	C in. (mm)
2½"	4⅛ (105)	6 (152)	4½ (114)
3"	4⅜ (111)	7 (178)	4⅞ (124)
4"	5 (127)	8 (203)	5¾ (146)



Tube Diameter	A in. (mm)	B in. (mm)	C in. (mm)
2½"	$6^{3/16}$(157)	$6^{15/16}$(176)	$2^{7/16}$(62)
3"	$7^{7/16}$(189)	$8^{13/16}$(224)	$2^{7/16}$(62)
4"	$8^{1/16}$(205)	$10^{7/16}$(265)	$2^{7/16}$(62)

100% BUY AMERICAN COMPLIANT
Domestic Equivalent

sales@everflowsupplies.com · 908-436-1100 · fax: 908-436-1162

Clearance Requirements for JWPress Rings

Ensure that the space required for system pressing tools are available if JWPress fittings will be executed immediately upstream and downstream from ceiling penetratons.

Transition Connections, Threads and Flanges

JWPress threaded transition fittings mate directly with off the shelf 1/2" to 4" NPT threaded fittings. As with any copper based plumbing system, transitions should be non ferrous materials.

When using JW Press flanges, bolt the flange to the valve or flanged fitting to be installed in line, and tighten to reduce any play in the copper press transition. Following this procedure will help to ensure the best possible joint when pressing.

Welding, Soldering or Brazing

Minimum clearance requirement when pressing connections near an existing brazed connection is two pipe diameters.

To ensure proper sealing of both the soldered and press connections, a minimum spacing between connections must be maintained.

Ensure there is no residual solder or other foreign debris on the tubing to be inserted into the JWPress fitting.

Tube Dia.	Minimum Distance	
Nominal inch	inch	mm
1/2	1/4	7
3/4	1/4	7
1	7/16	11
1 1/4	7/16	11
1 1/2	5/8	16
2	3/4	19
2 1/2	1/4	7
3	1/4	7
4	1/4	7

Soldering or Brazing Near an Existing Press Fitting

To ensure proper sealing of the soldered/brazed joint and the press connection, a minimum distance between connections must be maintained.

When soldering or brazing near a JWPress connection, the installer must remain at least two tube diameters away from the connection to prevent damage to the sealing element.

The installer should take precautions to keep the JWPress connection cool.

Included: Wrapping the connection with a cold wet rag.

Fabrication solder connections prior to installing the press fitting.

Applying "Spray Type" spot freezing.

Tube Dia.	Minimum Distance	
Nominal inch	inch	mm
1/2	1 1/2	39
3/4	2 1/4	58
1	3	77
1 1/4	3 3/4	96
1 1/2	4 1/2	115
2	6	153
2 1/2	7 1/2	191
3	9	229
4	12	305

JWPress INSTALLATION GUIDE

General Installation Requirements

The JWPress system must be installed with due consideration to the following industry requirements, as regards: Expansion, Freezing, Corrosion Protection, Underground Installation, Pressure Testing, and Hangers and Supports.

Expansion

Thermal expansion in installed systems generates stresses in pipes and applicance connectors. Compensation must be allowed for expansion and contraction that may occur within the piping system. Expansion joints or mechanical expansion compensators may be used to alleviate these stresses.

Piping Exposed to Freezing

In JWPress system, the o-ring seal, made from a specially formulated EPDM, can be installed in temperatures down to 0F . Lower temperatures may cause stiffness and would increase the change of o-ring cutting if tube were improperly deburred. Systems exposed to freezing temperatures must be protected and should be installed only in accordance with local building code requirements for the protection of such piping systems.

Corrosion Protection

JWPress fittings exposed to corrosive action, such as soil conditions or moisture, must be protected in an approved manner in accordance with 2009 UMC Chapter 13 section 1312.1.3, NFPA 54 section 404.8, 2009 UPC Chapter 6 section 609.3.1, NACE Standard RP0169-2002 section 5 and in a manner satisfactory to the local code official.

Underground Installations

JWPress fitting systems with copper tubing are approved for underground installations. However, any installations must meet all state and local codes, including those for underground.

Proper authorization must be obtained prior to installation from the local authority having jurisdiction.

Pressure Testing

The pressure testing of installed pipe is to be completed in accordance with local codes. For JWPress, in the absence of local codes, test according to NFPA 54 or NFPA 58.

Tube Hangers and Supports

Tube supports perform two functions. The first function is to provide support for the piping system.

The second function is to guide the pipe or tube during thermal expansion and contraction. Industry standard practices and guidelines shall be used for pipiing layout and support. JWPress connections utilize normal guidelines for support.

Hangers and supports must conform to the local code requirements, Hangers and supports must conform to ANSI/MSS SP 59 and SP 69, pipe hangers and supports, materials, design and manufacture.

Supports, hangers and anchors are to be installed in a manner that does not interfere with the free expansion and contraction of the piping.

All parts of the support equipment need to be designed and installed to not disengage due to movement of the supported piping. Sliding hangers must be positioned so that they cannot unintentionally become rigid hangers when the system is in use.