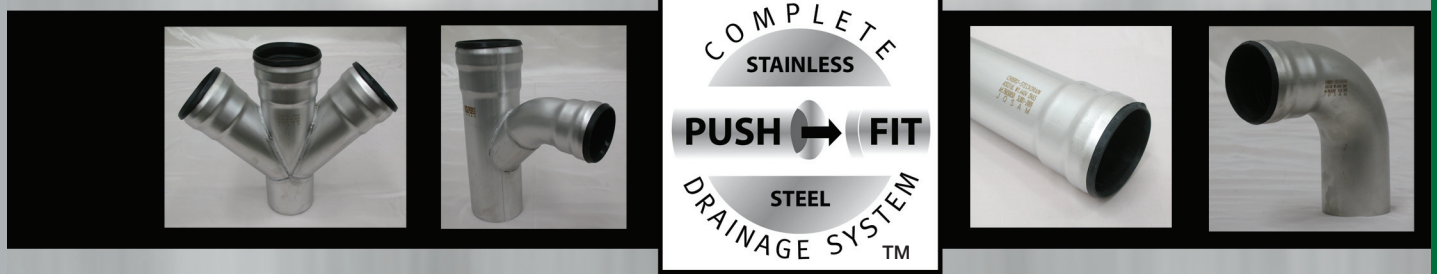
# JOSAM




PUSH-FIT STAINLESS STEEL DRAINAGE SYSTEM

⚠**WARNING:** Cancer and Reproductive Harm - www.p65warnings.ca.gov

**www.josam.com**

# STAINLESS STEEL DRAINAGE PRODUCTS

Manufactured by **ATT Inox**

As a compliment to Josam Company's Push-Fit Pipe and Fittings, Josam Company also offers a complete line of stainless steel drains. Josam Company offers a complete range of 304 or 316L floor drains, retrofit liners, cleanouts, trench drains and slot and mini channels. All drainage products are available with an optional Push-Fit outlet (PFO) for an easy connection to the Josam Push-Fit Drainage System.

In addition to standard products, Josam Company welcomes inquiries for customized drainage products to suit individual requirements.

For more details on Josam Company's Stainless Steel Drainage System please refer to the product catalog, contact your local Josam representative or visit our website at www.JOSAM.com.

⚠**WARNING:** Cancer and Reproductive Harm - www.p65warnings.ca.gov

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## Josam Company

Throughout its long history, Josam Company has stayed true to the vision of maintaining its reputation as the premier manufacturer of engineered and innovative plumbing and drainage products. Firms worldwide have trusted Josam Company to provide quality and competitive products that meet or exceed their customers' expectations.

Over 25 years ago Josam Company introduced the first Push-Fit stainless steel drainage system to the United States market. Whereas welded stainless steel systems had been available for many years, the advantage of the Josam Push-Fit system is that it enables the installer to obtain all the benefits of stainless steel while reducing the overall cost of installation.

## Chibro

Established in Italy in 1946, Chibro is a leading manufacturer of Push-Fit stainless steel plumbing and drainage systems. Chibro offers a full line of stainless steel pipe, fittings and accessories that provides solutions to various industries including the commercial, marine and industrial segments. Chibro's products are manufactured using innovative technology and in accordance with the internationally recognized ISO 9001 quality management standard.

## Josam Company's Push-Fit Stainless Steel Drainage System

As with all Josam Company products, our mission is to provide superior products that are offered at fair and competitive prices, supported by experience, service and technology.

## Corrosion Resistance

The austenitic chromium nickel steel, used in all Josam pipe and fittings, contains sufficient chromium to form a passive film of chromium oxide which aids in the prevention of surface corrosions. To preserve the chromium oxide layer and further enhance it's anti-corrosive nature, all Josam products are acid pickled. When maintained properly, austenitic 316L is resistant to many chemical products and most cleaning agents. For further details, see the Chemical Resistance Chart on page 28.

## Fire and Heat Resistance

Due to the high chromium and nickel alloy content, stainless steel is able to retain its strength at extremely high temperatures and when exposed to fire. Additionally, there are no hazardous substances emitted from stainless steel when exposed to fire.

## Environmentally Friendly

Environmental issues have become important criteria for material selection. All Josam stainless steel products are 100% recyclable. In fact, over 50% of new stainless steel comes from end-of-life products.

## Non-Porous

The significantly lower growth of bacteria on stainless steel than on plastics, cast iron, copper or ordinary steel make it the idea solution for applications where hygiene is a concern. The smooth surface of stainless steel does not harbor bacteria, and although maintenance is less frequently required, it can be regularly sanitized with suitable chemicals and flushing without fear of corrosion.

## Durability

Traditionally, the selection of piping materials for a given application has been on the basis of the least expensive initial material cost. It has been recognized that the least expensive material cost may not be the most economic long term choice. The life expectancy of stainless steel piping systems is over 50 years.

## Aesthetically Pleasing

The bright and easily maintained surface of stainless steel provides a modern and attractive appearance. In fact stainless steel has been used for the construction of many well known sculptures, building facades and structures.

## Impact Resistance

Stainless steel's ability to resist impacts and shocks is excellent at all temperatures. Hard blows to the pipes may cause surface dents but it is extremely difficult to damage the steel or compromise its performance.

## Thermal Stress Resistance

Stainless steel has an extremely low coefficient of expansion factor. This benefit allows stainless steel pipes to retain their shapes at all normal temperatures during drainage installations.

## Strength to Weight Ratio

Stainless steel is considerably lighter in weight than products produced of other materials. The strength of stainless steel allows products to be made thinner and lighter while still providing a strong and durable system.

## Part Numbers

Part numbers are not intended to show compliance to any product standards.

**Josam's Push-Fit joining method results in cost effective installations.**

## Push-Fit the Josam Way

Josam's Push-Fit joint is accomplished by lubricating the joint and pushing the spigot and socket together. The result of this quick and easy joining method is a tight seal that has been tested and proven suitable for both gravity and vacuum applications. Additionally, test results have demonstrated that the Josam Push-Fit joint is pressure rated at least 4 times higher than other stainless steel push-fit systems.

## Product and Size Range

Josam Company offers a complete range of pipes, fittings and hanging accessories. Pipe and fittings are available in 1-1/2", 2", 3", 4", 6" and 8" nominal pipe sizes. Pipes are available in 8 different lengths ranging from 0.8 feet to 9.8 feet, allowing for minimal field cuts. A complete aaarange of stainless steel drains are also offered by Josam. For further details, please see Josam Company's Stainless Steel Drainage Product catalog

## Packaging

Each pipe length is individually wrapped in a protective plastic covering. Sizeable pipe shipments from Josam are crated for protection against damage during shipment. Small pipe shipments may be shipped in protective tubes.

## Markings

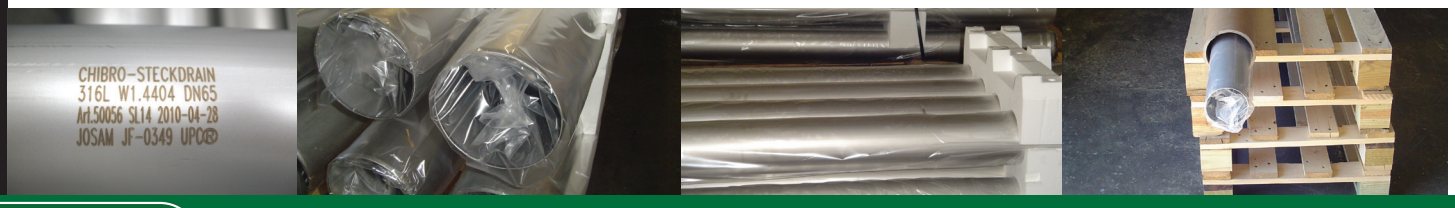
All Josam products are marked in accordance with applicable standards. Markings will include manufacturer's name and/or registered trademark, the grade of stainless steel, Josam name and part number and UPC®.

## Listings and Approvals

Products meet or exceed the performance requirements of ASME A112.3.1-2007 and IGC 275-10. Most Josam products are IAPMO listed under File #6780. Please refer to the IAPMO website or contact Josam Company for a copy of this listing or state and local code approvals. Additional approvals include Registro Italiano Navale, Lloyd's Register, American Bureau of Shipbuilding, Det Norske Veritas, Bureau Veritas and Russian Maritime Register of Shipping. All manufacturing and quality assurance is in accordance with the internationally recognized ISO 9001 standard

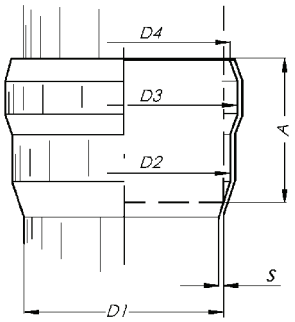
## Labor Savings

The Josam Push-Fit joining method allows joints to be made in a matter of seconds and does not require any tools. Connections are made by lubricating the spigot end and turning it into the socket end. Additionally, due to the fact that stainless steel is lighter in weight, the product is easier to handle and requires less manpower. Considering these two advantages with the life expectancy of the product, the Josam Push-Fit Stainless Steel System is an economical solution for most applications.



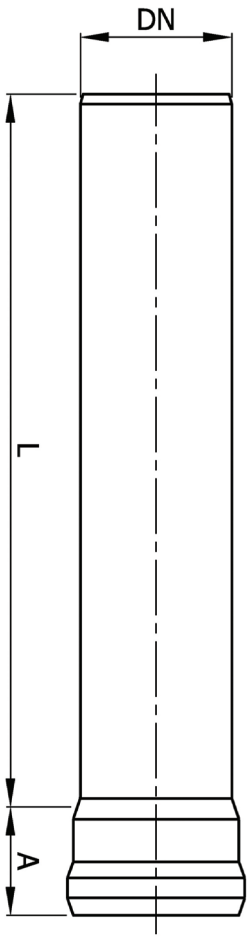



All dimensions in inches with millimeters in parentheses unless noted. 5" material available upon request.




## DIMENSION OF SOCKETS

| SERIES NUMBER | PIPE SIZE NOM. | A - MIN INSERT DEPTH | D1 (PIPE O.D.) | D2 | D3 | D4 | S |
|---|---|---|---|---|---|---|---|
| JP-0100 | 1½" | 1.2 (30) | 1.7 (42) | 1.8 (45) | 1.9 (48) | 1.8 (45) | .04 (1.0) |
| JP-0200 | 2" | 1.5 (38) | 2.1 (53) | 2.2 (56) | 2.4 (60) | 2.2 (56) | .04 (1.0) |
| JP-0300 | 3" | 2.2 (55) | 2.9 (73) | 3 (76) | 3.2 (81) | 3 (76) | .05 (1.25) |
| JP-0400 | 4" | 2.8 (70) | 4.0 (102) | 4.2 (106) | 4.5 (114) | 4.2 (107) | .05 (1.25) |
| JP-0600 | 6" | 3.1 (80) | 6.3 (159) | 6.5 (164) | 6.9 (176) | 6.6 (168) | .06 (1.5) |
| JP-0800 | 8" | 4.7 (120) | 8.6 (219) | 8.8 (224) | 9.5 (241) | 8.9 (227) | .08 (2.0) |




## PUSH-FIT PIPE WITH EPDM GASKETED SOCKET

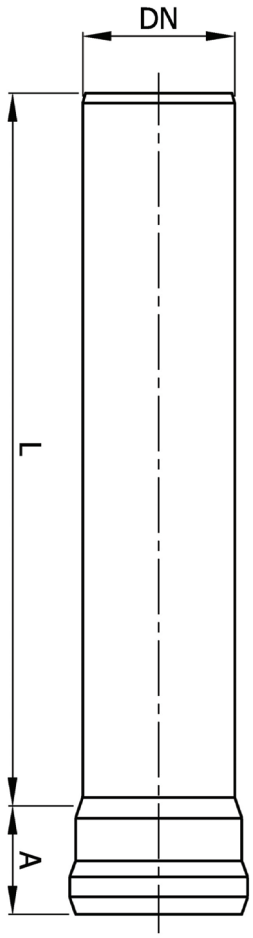
| SERIES NUMBER | PIPE SIZE NOM. | A - MIN INSERT DEPTH | L FT.- (MM) | WT LBS. | DN PIPE O.D. IN. - (MM) |
|---|---|---|---|---|---|
| JP-0108 | 1½" | 1.2 (30) | 0.8 (250) | .75 | 1.7 (42) |
| JP-0116 | 1½" | 1.2 (30) | 1.6 (500) | 1.3 | 1.7 (42) |
| JP-0125 | 1½" | 1.2 (30) | 2.5 (750) | 1.9 | 1.7 (42) |
| JP-0133 | 1½" | 1.2 (30) | 3.3 (1,000) | 2.4 | 1.7 (42) |
| JP-0149 | 1½" | 1.2 (30) | 4.9 (1,500) | 3.5 | 1.7 (42) |
| JP-0166 | 1½" | 1.2 (30) | 6.6 (2,000) | 4.7 | 1.7 (42) |
| JP-0182 | 1½" | 1.2 (30) | 8.2 (2,500) | 6.3 | 1.7 (42) |
| JP-0198 | 1½" | 1.2 (30) | 9.8 (3,000) | 6.7 | 1.7 (42) |
| JP-0208 | 2" | 1.5 (38) | 0.8 (250) | .93 | 2.1 (53) |
| JP-0216 | 2" | 1.5 (38) | 1.6 (500) | 1.6 | 2.1 (53) |
| JP-0225 | 2" | 1.5 (38) | 2.5 (750) | 2.2 | 2.1 (53) |
| JP-0233 | 2" | 1.5 (38) | 3.3 (1,000) | 3.2 | 2.1 (53) |
| JP-0249 | 2" | 1.5 (38) | 4.9 (1,500) | 4.3 | 2.1 (53) |
| JP-0266 | 2" | 1.5 (38) | 6.6 (2,000) | 5.7 | 2.1 (53) |
| JP-0282 | 2" | 1.5 (38) | 8.2 (2,500) | 6.9 | 2.1 (53) |
| JP-0298 | 2" | 1.5 (38) | 9.8 (3,000) | 8.5 | 2.1 (53) |
| JP-0308 | 3" | 2.2 (55) | 0.8 (250) | 1.6 | 2.9 (73) |
| JP-0316 | 3" | 2.2 (55) | 1.6 (500) | 2.8 | 2.9 (73) |
| JP-0325 | 3" | 2.2 (55) | 2.5 (750) | 4.5 | 2.9 (73) |
| JP-0333 | 3" | 2.2 (55) | 3.3 (1,000) | 5.2 | 2.9 (73) |
| JP-0349 | 3" | 2.2 (55) | 4.9 (1,500) | 7.6 | 2.9 (73) |
| JP-0366 | 3" | 2.2 (55) | 6.6 (2,000) | 10.6 | 2.9 (73) |
| JP-0382 | 3" | 2.2 (55) | 8.2 (2,500) | 12.5 | 2.9 (73) |
| JP-0398 | 3" | 2.2 (55) | 9.8 (3,000) | 14.6 | 2.9 (73) |



All dimensions in inches with millimeters in parentheses unless noted. 5" material available upon request.

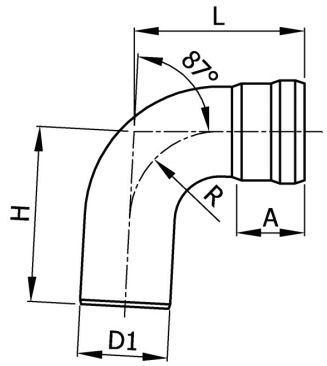
## PUSH-FIT PIPE WITH EPDM GASKETED SOCKET (CONT'D)

| SERIES NUMBER | PIPE SIZE NOM. | A - MIN INSERT DEPTH | L FT.- (MM) | WT LBS. | DN PIPE O.D. IN. - (MM) |
|---|---|---|---|---|---|
| JP-0408 | 4" | 2.8 (70) | 0.8 (250) | 2.4 | 4.0 (102) |
| JP-0416 | 4" | 2.8 (70) | 1.6 (500) | 4.0 | 4.0 (102) |
| JP-0425 | 4" | 2.8 (70) | 2.5 (750) | 5.6 | 4.0 (102) |
| JP-0433 | 4" | 2.8 (70) | 3.3 (1,000) | 7.2 | 4.0 (102) |
| JP-0449 | 4" | 2.8 (70) | 4.9 (1,500) | 10.5 | 4.0 (102) |
| JP-0466 | 4" | 2.8 (70) | 6.6 (2,000) | 14.1 | 4.0 (102) |
| JP-0482 | 4" | 2.8 (70) | 8.2 (2,500) | 16.5 | 4.0 (102) |
| JP-0498 | 4" | 2.8 (70) | 9.8 (3,000) | 19.8 | 4.0 (102) |
| JP-0608 | 6" | 3.1 (80) | 0.8 (250) | 4.6 | 6.3 (159) |
| JP-0616 | 6" | 3.1 (80) | 1.6 (500) | 7.5 | 6.3 (159) |
| JP-0625 | 6" | 3.1 (80) | 2.5 (750) | 10.6 | 6.3 (159) |
| JP-0633 | 6" | 3.1 (80) | 3.3 (1,000) | 13.7 | 6.3 (159) |
| JP-0649 | 6" | 3.1 (80) | 4.9 (1,500) | 19.8 | 6.3 (159) |
| JP-0666 | 6" | 3.1 (80) | 6.6 (2,000) | 26.1 | 6.3 (159) |
| JP-0682 | 6" | 3.1 (80) | 8.2 (2,500) | 32.2 | 6.3 (159) |
| JP-0698 | 6" | 3.1 (80) | 9.8 (3,000) | 38.2 | 6.3 (159) |
| JP-0808 | 8" | 4.7 (120) | 0.8 (250) | 11.0 | 8.6 (219) |
| JP-0816 | 8" | 4.7 (120) | 1.6 (500) | 15.8 | 8.6 (219) |
| JP-0825 | 8" | 4.7 (120) | 2.5 (750) | 21.6 | 8.6 (219) |
| JP-0833 | 8" | 4.7 (120) | 3.3 (1,000) | 27.2 | 8.6 (219) |
| JP-0849 | 8" | 4.7 (120) | 4.9 (1,500) | 36.6 | 8.6 (219) |
| JP-0866 | 8" | 4.7 (120) | 6.6 (2,000) | 50.5 | 8.6 (219) |
| JP-0882 | 8" | 4.7 (120) | 8.2 (2,500) | 63.1 | 8.6 (219) |
| JP-0898 | 8" | 4.7 (120) | 9.8 (3,000) | 67.7 | 8.6 (219) |



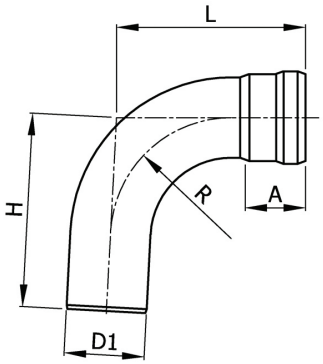



All dimensions in inches with millimeters in parentheses unless noted. 5" material available upon request.



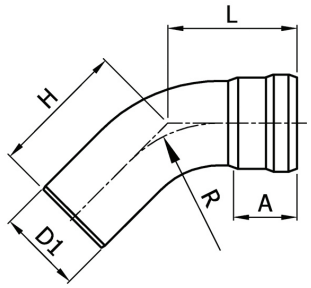

## PUSH-FIT SHORT 1/4 BEND

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | A - MIN INSERT DEPTH | L | H | R | WT LBS |
|---|---|---|---|---|---|---|---|
| JF-0188 | 1½ | 1.7 (42) | 1.2 (30) | 3.3 (85) | 3.5 (88) | 1.7 (42) | .48 |
| JF-0190 | 2 | 2.1 (53) | 1.5 (38) | 4.1 (103) | 4.2 (106) | 2.1 (53) | .70 |
| JF-0192 | 3 | 2.9 (73) | 2.2 (55) | 5.4 (138) | 5.6 (142) | 2.9 (73) | 1.5 |




## PUSH-FIT SWEEP 1/4 BEND

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | A - MIN INSERT DEPTH | L | H | R | WT LBS |
|---|---|---|---|---|---|---|---|
| JF-0460 | 1½ | 1.7 (42) | 1.2 (30) | 4.0 (102) | 4.1 (105) | 2.5 (63) | .44 |
| JF-0462 | 2 | 2.1 (53) | 1.5 (38) | 5.1 (130) | 5.2 (133) | 3.1 (80) | .77 |
| JF-0464 | 3 | 2.9 (73) | 2.2 (55) | 6.8 (172) | 6.9 (176) | 4.3 (110) | 1.7 |
| JF-0468 | 4 | 4.0 (102) | 2.8 (70) | 7.1 (180) | 7.3 (186) | 4.0 (102) | 2.2 |
| JF-0472 | 6 | 6.3 (159) | 3.1 (80) | 9.6 (244) | 9.9 (252) | 6.3 (159) | 7.6 |
| JF-0474 | 8 | 8.6 (219) | 4.7 (120) | 17.4 (443) | 17.8 (452) | 12.0 (305) | 21.2 |




## PUSH-FIT 1/8 BEND

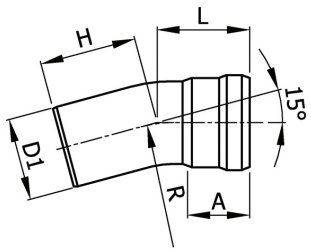
| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | A - MIN INSERT DEPTH | L | H | R | WT LBS |
|---|---|---|---|---|---|---|---|
| JF-0604 | 1½ | 1.7 (42) | 1.2 (30) | 2.7 (68) | 2.8 (71) | 2.5 (63) | .35 |
| JF-0606 | 2 | 2.1 (53) | 1.5 (38) | 3.3 (85) | 3.5 (88) | 3.1 (80) | .57 |
| JF-0608 | 3 | 2.9 (73) | 2.2 (55) | 4.4 (112) | 4.6 (117) | 4.3 (110) | 1.3 |
| JF-0610 | 4 | 4.0 (102) | 2.8 (70) | 4.7 (120) | 5.0 (126) | 4.0 (102) | 1.7 |
| JF-0614 | 6 | 6.3 (159) | 3.1 (80) | 6.2 (158) | 6.5 (166) | 6.3 (159) | 4.8 |
| JF-0616 | 8 | 8.6 (219) | 4.7 (120) | 10.7 (271) | 11.0 (280) | 12.0 (305) | 13.0 |



All dimensions in inches with millimeters in parentheses unless noted. 5" material available upon request.

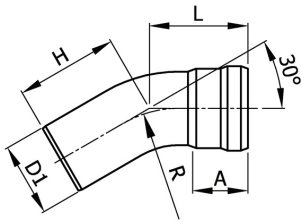
## PUSH-FIT 15 DEGREE BEND

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | A - MIN INSERT DEPTH | L | H | R | WT LBS |
|---|---|---|---|---|---|---|---|
| JF-0650 | 1½ | 1.7 (42) | 1.2 (30) | 2.0 (51) | 2.1 (54) | 2.5 (63) | .24 |
| JF-0652 | 2 | 2.1 (53) | 1.5 (38) | 2.4 (62) | 2.6 (65) | 3.1 (80) | .42 |
| JF-0654 | 3 | 2.9 (73) | 2.2 (55) | 3.2 (82) | 3.4 (86) | 4.3 (110) | .88 |
| JF-0656 | 4 | 4.0 (102) | 2.8 (70) | 3.8 (96) | 4.0 (101) | 4.0 (102) | 1.2 |
| JF-0660 | 6 | 6.3 (159) | 3.1 (80) | 4.5 (114) | 4.8 (121) | 6.3 (159) | 3.7 |
| JF-0662 | 8 | 8.6 (219) | 4.7 (120) | 6.9 (176) | 7.3 (185) | 12.0 (305) | 8.8 |



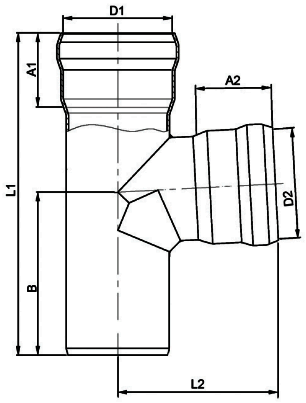

## PUSH-FIT 30 DEGREE BEND

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | A - MIN INSERT DEPTH | L | H | R | WT LBS |
|---|---|---|---|---|---|---|---|
| JF-0720 | 1½ | 1.7 (42) | 1.2 (30) | 2.3 (59) | 2.4 (62) | 2.5 (63) | .26 |
| JF-0722 | 2 | 2.1 (53) | 1.5 (38) | 2.9 (73) | 3.0 (76) | 3.1 (80) | .44 |
| JF-0724 | 3 | 2.9 (73) | 2.2 (55) | 3.9 (98) | 4.0 (102) | 4.3 (110) | 1.0 |
| JF-0726 | 4 | 4.0 (102) | 2.8 (70) | 4.3 (110) | 4.5 (115) | 4.0 (102) | 1.8 |
| JF-0730 | 6 | 6.3 (159) | 3.1 (80) | 5.4 (136) | 5.6 (143) | 6.3 (159) | 3.7 |
| JF-0732 | 8 | 8.6 (219) | 4.7 (120) | 8.7 (221) | 9.1 (230) | 12.0 (305) | 9.4 |



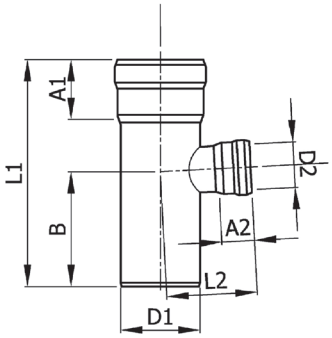



All dimensions in inches with millimeters in parentheses unless noted. 5” material available upon request.




## PUSH-FIT SANITARY SWEEP TEE

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A1 - MIN INSERT DEPTH | A2 - MIN INSERT DEPTH | L1 | L2 | B | WT LBS |
|---|---|---|---|---|---|---|---|---|---|
| JF-0810 | 2X2 | 2.1 (53) | 2.1 (53) | 1.5 (38) | 1.5 (38) | 6.6 (166) | 3.2 (81) | 3.3 (84) | .64 |
| JF-0814 | 3X2 | 2.9 (73) | 2.1 (53) | 2.2 (55) | 1.5 (38) | 8.3 (210) | 3.6 (91) | 4.2 (106) | 1.2 |
| JF-0816 | 3X3 | 2.9 (73) | 2.9 (73) | 2.2 (55) | 2.2 (55) | 8.3 (210) | 4.3 (109) | 4.2 (106) | 1.3 |
| JF-0818 | 4X2 | 4.0 (102) | 2.1 (53) | 2.8 (70) | 1.5 (38) | 9.0 (228) | 4.1 (105) | 4.5 (115) | 1.8 |
| JF-0820 | 4X3 | 4.0 (102) | 2.9 (73) | 2.8 (70) | 2.2 (55) | 11.5 (293) | 4.8 (123) | 5.8 (147) | 2.4 |
| JF-0822 | 4X4 | 4.0 (102) | 4.0 (102) | 2.8 (70) | 2.8 (70) | 11.5 (293) | 5.4 (138) | 5.8 (147) | 1.7 |




## PUSH-FIT TEE

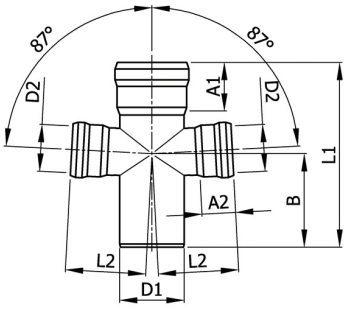
| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A1 - MIN INSERT DEPTH | A2 - MIN INSERT DEPTH | L1 | L2 | B | WT LBS |
|---|---|---|---|---|---|---|---|---|---|
| JF-0902 | 1½X1½ | 1.7 (42) | 1.7 (42) | 1.2 (30) | 1.2 (30) | 5.4 (137) | 2.6 (67) | 2.8 (70) | .48 |
| JF-0904 | 2X1½ | 2.1 (53) | 1.7 (42) | 1.5 (38) | 1.2 (30) | 6.5 (165) | 2.9 (73) | 3.3 (84) | .88 |
| JF-0906 | 2X2 | 2.1 (53) | 2.1 (53) | 1.6 (38) | 1.6 (38) | 6.5 (165) | 3.2 (81) | 3.3 (84) | .81 |
| JF-0908 | 3X1½ | 2.9 (73) | 1.7 (42) | 2.2 (55) | 1.2 (30) | 8.2 (209) | 3.3 (83) | 4.2 (107) | 1.3 |
| JF-0910 | 3X2 | 2.9 (73) | 2.1 (53) | 2.2 (55) | 1.6 (38) | 8.2 (209) | 3.6 (91) | 4.2 (107) | 1.2 |
| JF-0912 | 3X3 | 2.9 (73) | 2.9 (73) | 2.2 (55) | 2.2 (55) | 8.2 (209) | 4.3 (109) | 4.2 (107) | 1.7 |
| JF-0914 | 4X1½ | 4.0 (102) | 1.7 (42) | 2.8 (70) | 1.2 (30) | 8.5 (216 ) | 3.8 (97) | 4.4 (111) | 1.7 |
| JF-0916 | 4X2 | 4.0 (102) | 2.1 (53) | 2.8 (70) | 1.5 (38) | 8.5 (216) | 4.1 (105) | 4.4 (111) | 2.1 |
| JF-0918 | 4X3 | 4.0 (102) | 2.9 (73) | 2.8 (70) | 2.2 (55) | 11.4 (291) | 4.8 (123) | 5.8 (148) | 2.6 |
| JF-0920 | 4X4 | 4.0 (102) | 4.0 (102) | 2.8 (70) | 2.8 (70) | 11.4 (291) | 5.4 (138) | 5.8 (148) | 3.3 |
| JF-0926 | 6X3 | 6.3 (159) | 2.9 (73) | 3.1 (80) | 2.2 (55) | 13.5 (343) | 6.0 (152) | 6.9 (175) | 5.0 |
| JF-0928 | 6X4 | 6.3 (159) | 4.0 (102) | 3.1 (80) | 2.8 (70) | 13.5 (343) | 6.5 (166) | 6.9 (175) | 5.2 |
| JF-0930 | 6X6 | 6.3 (159) | 6.3 (159) | 3.1 (80) | 3.1 (80) | 15.9 (403) | 7.0 (178) | 8.1 (205) | 6.6 |
| JF-0934 | 8X4 | 8.6 (219) | 4.0 (102) | 4.7 (120) | 2.8 (70) | 17.4 (441) | 7.7 (196) | 8.9 (225) | 12.7 |
| JF-0936 | 8X6 | 8.6 (219) | 6.3 (159) | 4.7 (120) | 3.1 (80) | 17.4 (441) | 8.2 (208) | 8.9 (225) | 11.2 |
| JF-0938 | 8X8 | 8.6 (219) | 8.6 (219) | 4.7 (120) | 4.7 (120) | 19.3 (491) | 9.8 (249) | 9.8 (250) | 22.0 |



All dimensions in inches with millimeters in parentheses unless noted. 5" material available upon request.

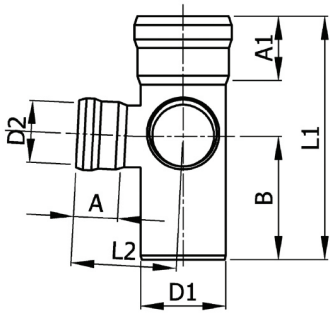
## PUSH-FIT CROSS

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A1 - MIN INSERT DEPTH | A2 - MIN INSERT DEPTH | L1 | L2 | B | WT LBS |
|---|---|---|---|---|---|---|---|---|---|
| JF-1851 | 2X1½ | 2.1 (53) | 1.7 (42) | 1.5 (38) | 1.2 (30) | 6.5 (165) | 2.9 (73) | 3.3 (84) | 1.3 |
| JF-1852 | 2X2 | 2.1 (53) | 2.1 (53) | 1.5 (38) | 1.5 (38) | 6.5 (165) | 3.2 (81) | 3.3 (84) | 1.2 |
| JF-1854 | 3X2 | 2.9 (73) | 2.1 (53) | 2.2 (55) | 1.5 (38) | 7.6 (192) | 3.6 (91) | 3.9 (98) | 1.6 |
| JF-1856 | 3X3 | 2.9 (73) | 2.9 (73) | 2.2 (55) | 2.2 (55) | 8.2 (209) | 4.3 (109) | 4.2 (107) | 2.0 |
| JF-1860 | 4X3 | 4.0 (102) | 2.9 (73) | 2.8 (70) | 2.2 (55) | 11.5 (291) | 4.8 (123) | 5.8 (148) | 3.4 |
| JF-1862 | 4X4 | 4.0 (102) | 4.0 (102) | 2.8 (70) | 2.8 (70) | 11.5 (291) | 5.4 (138) | 5.8 (148) | 4.0 |
| JF-1864 | 6X4 | 6.3 (159) | 4.0 (102) | 3.1 (80) | 2.8 (70) | 13.5 (343) | 6.5 (166) | 6.9 (175) | 5.9 |
| JF-1867 | 6X6 | 6.3 (159) | 6.3 (159) | 3.1 (80) | 3.1 (80) | 15.9 (403) | 7.0 (178) | 8.1 (205) | 7.0 |
| JF-1874 | 8X4 | 8.6 (219) | 4.0 (102) | 4.7 (120) | 2.8 (70) | 17.4 (441) | 7.7 (196) | 8.9 (225) | 11.0 |
| JF-1877 | 8X6 | 8.6 (219) | 6.3 (159) | 4.7 (120) | 3.1 (80) | 17.4 (441) | 8.2 (208) | 8.9 (225) | 12.7 |
| JF-1878 | 8X8 | 8.6 (219) | 8.6 (219) | 4.7 (120) | 4.7 (120) | 19.3 (491) | 9.8 (249) | 9.8 (250) | 20.2 |



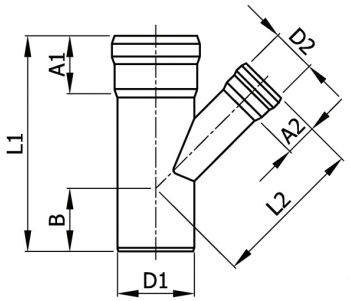

## PUSH-FIT OFFSET DOUBLE TEE

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A1 - MIN INSERT DEPTH | A2 - MIN INSERT DEPTH | L1 | L2 | B | WT LBS |
|---|---|---|---|---|---|---|---|---|---|
| JF-1920 | 2X1½ | 2.1 (53) | 1.7 (42) | 1.5 (38) | 1.2 (30) | 6.5 (165) | 2.9 (73) | 3.3 (84) | .90 |
| JF-1922 | 2X2 | 2.1 (53) | 2.1 (53) | 1.5 (38) | 1.5 (38) | 6.5 (165) | 3.2 (81) | 3.3 (84) | .77 |
| JF-1926 | 3X2 | 2.9 (73) | 2.1 (53) | 2.2 (55) | 1.5 (38) | 7.6 (192) | 3.6 (91) | 3.9 (98) | 1.6 |
| JF-1928 | 3X3 | 2.9 (73) | 2.9 (73) | 2.2 (55) | 2.2 (55) | 8.2 (209) | 4.3 (109) | 4.2 (107) | 2.0 |
| JF-1934 | 4X3 | 4.0 (102) | 2.9 (73) | 2.8 (70) | 2.2 (55) | 11.5 (291) | 4.8 (123) | 5.8 (148) | 3.2 |
| JF-1936 | 4X4 | 4.0 (102) | 4.0 (102) | 2.8 (70) | 2.8 (70) | 11.5 (291) | 5.4 (138) | 5.8 (148) | 4.0 |
| JF-1944 | 6X4 | 6.3 (159) | 4.0 (102) | 3.1 (80) | 2.8 (70) | 13.5 (343) | 6.5 (166) | 6.9 (175) | 5.4 |
| JF-1952 | 6X6 | 6.3 (159) | 6.3 (159) | 3.1 (80) | 3.1 (80) | 15.9 (403) | 7.0 (178) | 8.1 (205) | 7.0 |
| JF-1956 | 8X4 | 8.6 (219) | 4.0 (102) | 4.7 (120) | 2.8 (70) | 17.4 (441) | 7.7 (196) | 8.9 (225) | 11.2 |
| JF-1960 | 8X6 | 8.6 (219) | 6.3 (159) | 4.7 (120) | 3.1 (80) | 17.4 (441) | 8.2 (208) | 8.9 (225) | 12.1 |
| JF-1962 | 8X8 | 8.6 (219) | 8.6 (219) | 4.7 (120) | 4.7 (120) | 19.3 (491) | 9.8 (249) | 9.8 (250) | 20.2 |






All dimensions in inches with millimeters in parentheses unless noted. 5” material available upon request.




## PUSH-FIT 45 DEGREE WYE

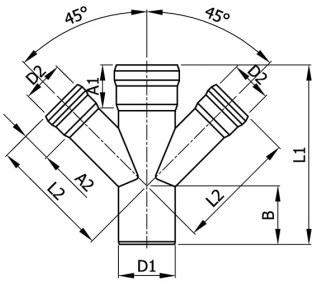
| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A1 - MIN INSERT DEPTH | A2 - MIN INSERT DEPTH | L1 | L2 | B | WT LBS |
|---|---|---|---|---|---|---|---|---|---|
| JF-1312 | 1½X1½ | 1.7 (42) | 1.7 (42) | 1.2 (30) | 1.2 (30) | 6.1 (155) | 3.9 (100) | 2.2 (55) | .60 |
| JF-1313 | 2X1½ | 2.1 (53) | 1.7 (42) | 1.5 (38) | 1.2 (30) | 7.8 (198) | 5.8 (148) | 2.6 (65) | .88 |
| JF-1314 | 2X2 | 2.1 (53) | 2.1 (53) | 1.5 (38) | 1.5 (38) | 7.8 (198) | 5.2 (133) | 2.6 (65) | 1.0 |
| JF-1315 | 3X1½ | 2.9 (73) | 1.7 (42) | 2.2 (55) | 1.2 (30) | 8.1 (205) | 5.7 (145) | 2.4 (60) | 1.3 |
| JF-1316 | 3X2 | 2.9 (73) | 2.1 (53) | 2.2 (55) | 1.5 (38) | 9.1 (230) | 6.1 (155) | 3.0 (75) | 1.3 |
| JF-1318 | 3X3 | 2.9 (73) | 2.9 (73) | 2.2 (55) | 2.2 (55) | 10.0 (255) | 6.7 (170) | 3.3 (85) | 2.0 |
| JF-1319 | 4X1½ | 4.0 (102) | 1.7 (42) | 2.8 (70) | 1.2 (30) | 9.8 (250) | 7.3 (185) | 2.6 (65) | 1.7 |
| JF-1320 | 4X2 | 4.0 (102) | 2.1 (53) | 2.8 (70) | 1.5 (38) | 10.6 (270) | 7.7 (195) | 3.0 (75) | 2.1 |
| JF-1322 | 4X3 | 4.0 (102) | 2.9 (73) | 2.8 (70) | 2.2 (55) | 11.8 (300) | 8.3 (210) | 3.5 (90) | 2.6 |
| JF-1324 | 4X4 | 4.0 (102) | 4.0 (102) | 2.8 (70) | 2.8 (70) | 13.2 (335) | 8.9 (225) | 4.3 (110) | 3.4 |
| JF-1336 | 6X3 | 6.3 (159) | 2.9 (73) | 3.1 (80) | 2.2 (55) | 13.2 (335) | 10.0 (255) | 3.1 (80) | 5.0 |
| JF-1338 | 6X4 | 6.3 (159) | 4.0 (102) | 3.1 (80) | 2.8 (70) | 14.6 (370) | 11.1 (281) | 3.5 (89) | 5.2 |
| JF-1342 | 6X6 | 6.3 (159) | 6.3 (159) | 3.1 (80) | 3.1 (80) | 18.1 (460) | 12.6 (320) | 5.5 (140) | 8.5 |
| JF-1348 | 8X4 | 8.6 (219) | 4.0 (102) | 4.7 (120) | 2.8 (70) | 17.5 (445) | 13.6 (345) | 3.9 (100) | 12.7 |
| JF-1352 | 8X6 | 8.6 (219) | 6.3 (159) | 4.7 (120) | 3.1 (80) | 21.3 (540) | 15.4 (390) | 5.9 (150) | 11.2 |
| JF-1354 | 8X8 | 8.6 (219) | 8.6 (219) | 4.7 (120) | 4.7 (120) | 24.4 (620) | 16.9 (430) | 7.5 (190) | 22.0 |



All dimensions in inches with millimeters in parentheses unless noted. 5” material available upon request.

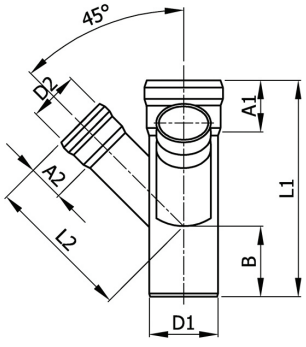
## PUSH-FIT 45 DEGREE DOUBLE WYE

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A1 - MIN INSERT DEPTH | A2 - MIN INSERT DEPTH | L1 | L2 | B | WT LBS |
|---|---|---|---|---|---|---|---|---|---|
| JF-1537 | 2X1½ | 2.1 (53) | 1.7 (42) | 1.5 (38) | 1.2 (30) | 7.8 (198) | 5.8 (148) | 2.6 (65) | .77 |
| JF-1538 | 2X2 | 2.1 (53) | 2.1 (53) | 1.5 (38) | 1.5 (38) | 7.8 (198) | 5.2 (133) | 2.6 (65) | 1.17 |
| JF-1540 | 3X2 | 2.9 (73) | 2.1 (53) | 2.2 (55) | 1.5 (38) | 9.1 (230) | 6.1 (155) | 3.0 (75) | 1.8 |
| JF-1542 | 3X3 | 2.9 (73) | 2.9 (73) | 2.2 (55) | 2.2 (55) | 10.0 (255) | 6.7 (170) | 3.3 (85) | 2.2 |
| JF-1546 | 4X3 | 4.0 (102) | 2.9 (73) | 2.8 (70) | 2.2 (55) | 11.8 (300) | 8.3 (210) | 3.5 (90) | 3.3 |
| JF-1548 | 4X4 | 4.0 (102) | 4.0 (102) | 2.8 (70) | 2.8 (70) | 13.2 (335) | 8.9 (225) | 4.3 (110) | 3.4 |
| JF-1552 | 6X4 | 6.3 (159) | 4.0 (102) | 3.1 (80) | 2.8 (70) | 14.6 (370) | 11.1 (281) | 3.5 (89) | 6.6 |
| JF-1554 | 6X6 | 6.3 (159) | 6.3 (159) | 3.1 (80) | 3.1 (80) | 18.1 (460) | 12.6 (320) | 5.5 (140) | 8.5 |
| JF-1556 | 8X4 | 8.6 (219) | 4.0 (102) | 4.7 (120) | 2.8 (70) | 17.5 (445) | 13.6 (345) | 3.9 (100) | 12.4 |
| JF-1557 | 8X6 | 8.6 (219) | 6.3 (159) | 4.7 (120) | 3.1 (80) | 21.3 (540) | 15.4 (390) | 5.9 (150) | 15.0 |
| JF-1558 | 8x8 | 8.6 (219) | 8.6 (219) | 4.7 (120) | 4.7 (120) | 24.4 (620) | 16.9 (430) | 7.5 (190) | 22.0 |




## PUSH-FIT 90 DEGREE OFFSET DOUBLE WYE

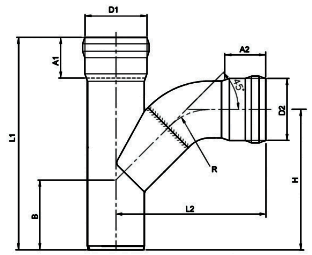
| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A1 - MIN INSERT DEPTH | A2 - MIN INSERT DEPTH | L1 | L2 | B | WT LBS |
|---|---|---|---|---|---|---|---|---|---|
| JF-1602 | 2X1½ | 2.1 (53) | 1.7 (42) | 1.5 (38) | 1.2 (30) | 6.1 (168) | 4.6 (118) | 2.0 (50) | .77 |
| JF-1604 | 2X2 | 2.1 (53) | 2.1 (53) | 1.5 (38) | 1.5 (38) | 7.4 (188) | 5.2 (133) | 2.6 (65) | 1.0 |
| JF-1608 | 3X2 | 2.9 (73) | 2.1 (53) | 2.2 (55) | 1.5 (38) | 9.1 (230) | 6.1 (155) | 3.0 (75) | 1.9 |
| JF-1610 | 3X3 | 2.9 (73) | 2.9 (73) | 2.2 (55) | 2.2 (55) | 10.0 (255) | 6.7 (170) | 3.3 (85) | 2.2 |
| JF-1616 | 4X3 | 4.0 (102) | 2.9 (73) | 2.8 (70) | 2.2 (55) | 11.8 (300) | 8.3 (210) | 3.5 (90) | 4.2 |
| JF-1618 | 4X4 | 4.0 (102) | 4.0 (102) | 2.8 (70) | 2.8 (70) | 13.2 (335) | 8.9 (225) | 4.3 (110) | 5.3 |
| JF-1626 | 6X4 | 6.3 (159) | 4.0 (102) | 3.1 (80) | 2.8 (70) | 14.6 (370) | 10.8 (275) | 3.7 (95) | 6.6 |
| JF-1630 | 6X6 | 6.3 (159) | 6.3 (159) | 3.1 (80) | 3.1 (80) | 18.1 (460) | 12.6 (320) | 5.5 (140) | 10.8 |
| JF-1632 | 8X4 | 8.6 (219) | 4.0 (102) | 4.7 (120) | 2.8 (70) | 17.5 (445) | 13.6 (345) | 3.9 (100) | 13.3 |
| JF-1636 | 8X6 | 8.6 (219) | 6.3 (159) | 4.7 (120) | 3.1 (80) | 21.3 (540) | 15.4 (390) | 5.9 (150) | 18.0 |
| JF-1638 | 8x8 | 8.6 (219) | 8.6 (219) | 4.7 (120) | 4.7 (120) | 24.4 (620) | 16.9 (430) | 7.5 (190) | 26.0 |





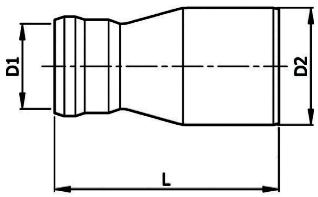

All dimensions in inches with millimeters in parentheses unless noted. 5” material available upon request.

## PUSH-FIT COMBINATION WYE AND 1/8 BEND




| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A1 - MIN INSERT DEPTH | A2 - MIN INSERT DEPTH | L1 | L2 | H | B | WT LBS |
|---|---|---|---|---|---|---|---|---|---|---|
| JF-1698 | 2X2 | 2.1 (53) | 2.1 (53) | 1.5 (38) | 1.5 (38) | 7.8 (198) | 5.5 (140) | 5.2 (131) | 2.6 (65) | 1.0 |
| JF-1700 | 3X2 | 2.9 (73) | 2.1 (53) | 2.2 (55) | 1.5 (38) | 9.1 (230) | 5.9 (150) | 5.9 (151) | 3.0 (75) | 1.5 |
| JF-1702 | 3X3 | 2.9 (73) | 2.9 (73) | 2.2 (55) | 2.2 (55) | 10.0 (255) | 7.4 (187) | 6.9 (174) | 3.3 (85) | 2.1 |
| JF-1704 | 4X2 | 4.0 (102) | 2.1 (53) | 2.8 (70) | 1.5 (38) | 10.6 (270) | 6.5 (165) | 6.5 (166) | 3.0 (75) | 2.2 |
| JF-1706 | 4X3 | 4.0 (102) | 2.9 (73) | 2.8 (70) | 2.2 (55) | 11.8 (300) | 8.0 (202) | 7.6 (194) | 3.5 (90) | 2.9 |
| JF-1708 | 4X4 | 4.0 (102) | 4.0 (102) | 2.8 (70) | 2.8 (70) | 13.2 (335) | 9.5 (242) | 9.1 (232) | 4.3 (110) | 3.7 |
| JF-1722 | 6X4 | 6.3 (159) | 4.0 (102) | 3.1 (80) | 2.8 (70) | 14.6 (370) | 10.7 (271) | 9.4 (240) | 3.5 (89) | 6.6 |
| JF-1726 | 6X6 | 6.3 (159) | 6.3 (159) | 3.1 (80) | 3.1 (80) | 18.1 (460) | 13.7 (347) | 13.0 (329) | 5.5 (140) | 9.2 |

## PUSH-FIT CONCENTRIC METRIC ADAPTER



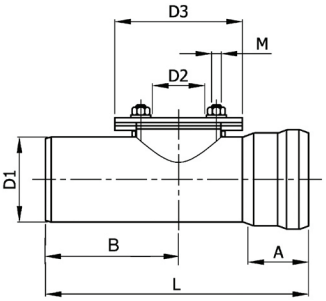

| SERIES NUMBER | PIPE SIZE MM X MM | D1 PIPE O.D. | D2 PIPE O.D. | L | WT LBS |
|---|---|---|---|---|---|
| JF-2003 | 53X50 | 53 | 50 | 98 | .28 |
| JF-2004 | 50X53 | 50 | 53 | 96 | .29 |
| JF-2005 | 73X75 | 73 | 75 | 137 | .65 |
| JF-2006 | 75X73 | 75 | 73 | 137 | .64 |
| JF-2007 | 102X110 | 102 | 110 | 190 | 1.1 |
| JF-2008 | 159X160 | 159 | 160 | 210 | 2.6 |
| JF-2009 | 219X200 | 219 | 200 | 300 | 5.3 |
| JF-2010 | 219X250 | 219 | 250 | 315 | 5.3 |



All dimensions in inches with millimeters in parentheses unless noted. 5" material available upon request.

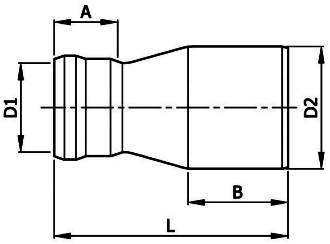
## PUSH-FIT ACCESS PIPE

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | D3 | A - MIN INSERT DEPTH | L | M | B | WT LBS |
|---|---|---|---|---|---|---|---|---|---|
| JF-2045 | 1½ | 1.7 (42) | 1.7 (42) | 2.8 (70) | 1.2 (30) | 5.4 (137) | M6 | 2.8 (70) | .77 |
| JF-2046 | 2 | 2.1 (53) | 2.1 (53) | 3.1 (80) | 1.5 (38) | 6.5 (165) | M6 | 3.3 (84) | 1.1 |
| JF-2048 | 3 | 2.9 (73) | 2.9 (73) | 4.1 (105) | 2.2 (55) | 8.9 (225) | M8 | 4.5 (115) | 2.0 |
| JF-2050 | 4 | 4.0 (102) | 3.5 (89) | 4.9 (125) | 2.8 (70) | 11.5 (291) | M8 | 5.8 (148) | 3.1 |
| JF-2054 | 6 | 6.3 (159) | 5.2 (133) | 6.5 (165) | 3.1 (80) | 15.9 (403) | M8 | 8.1 (205) | 7.0 |
| JF-2056 | 8 | 8.6 (219) | 5.2 (133) | 6.5 (165) | 4.7 (120) | 17.4 (441) | M8 | 8.9 (225) | 12.1 |



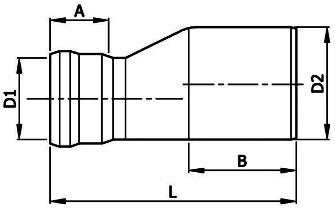

## PUSH-FIT CONCENTRIC REDUCER

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A - MIN INSERT DEPTH | L | B | WT LBS |
|---|---|---|---|---|---|---|---|
| JF-2138 | 2X1½ | 1.7 (42) | 2.1 (53) | 1.2 (30) | 4.7 (120) | 2.4 (62) | .42 |
| JF-2139 | 3X1½ | 1.7 (42) | 2.9 (73) | 1.2 (30) | 5.7 (145) | 2.6 (65) | .51 |
| JF-2140 | 3X2 | 2.1 (53) | 2.9 (73) | 1.5 (38) | 5.5 (140) | 2.6 (65) | .57 |
| JF-2142 | 4X2 | 2.1 (53) | 4.0 (102) | 1.5 (38) | 7.1 (180) | 3.3 (85) | 1.1 |
| JF-2144 | 4X3 | 2.9 (73) | 4.0 (102) | 2.2 (55) | 7.5 (190) | 3.3 (85) | 1.3 |
| JF-2156 | 6X4 | 4.0 (102) | 6.3 (159) | 2.8 (70) | 9.8 (250) | 3.5 (90) | 2.5 |
| JF-2168 | 8X6 | 6.3 (159) | 8.6 (219) | 3.1 (80) | 11.8 (300) | 5.1 (130) | 6.1 |




## PUSH-FIT ECCENTRIC REDUCER

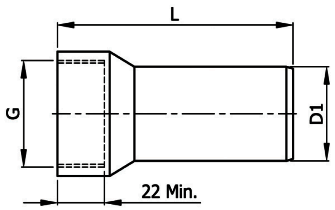
| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 PIPE O.D. | A - MIN INSERT DEPTH | L | B | WT LBS |
|---|---|---|---|---|---|---|---|
| JF-2188 | 2X1½ | 1.7 (42) | 2.1 (53) | 1.2 (30) | 5.1 (130) | 2.2 (55) | .42 |
| JF-2190 | 3X2 | 2.1 (53) | 2.9 (73) | 1.5 (38) | 6.3 (160) | 2.6 (65) | .79 |
| JF-2192 | 4X2 | 2.1 (53) | 4.0 (102) | 1.5 (38) | 7.5 (190) | 3.1 (80) | 1.5 |
| JF-2194 | 4X3 | 2.9 (73) | 4.0 (102) | 2.2 (55) | 7.9 (200) | 3.1 (80) | 1.8 |





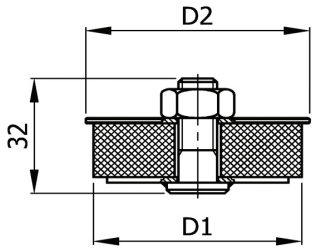

All dimensions in inches with millimeters in parentheses unless noted. 5” material available upon request.

## PUSH-FIT FEMALE THREADED ADAPTER



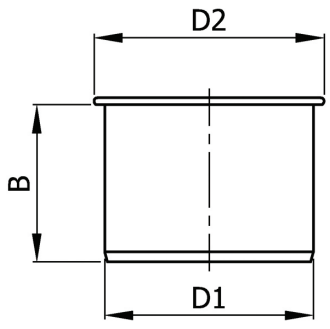

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | G | L | WT LBS |
|---|---|---|---|---|---|
| JF-2300 | 1½"X1" | 1.7 (42) | 1" | 5.5 (140) | .81 |
| JF-2302 | 1½"X1¼" | 1.7 (42) | 1¼" | 5.5 (140) | .68 |
| JF-2306 | 1½"X1½" | 1.7 (42) | 1½" | 5.5 (140) | .77 |
| JF-2310 | 2"X1¼" | 2.1 (53) | 1¼" | 5.5 (140) | .86 |
| JF-2312 | 2"X1½" | 2.1 (53) | 1½" | 5.5 (140) | .75 |
| JF-2314 | 2"X2" | 2.1 (53) | 2" | 5.5 (140) | 1.2 |

## PUSH-FIT EXPANSION PLUG




| SERIES NUMBER | PIPE SIZE NOM. | D1 | D2 | WT LBS |
|---|---|---|---|---|
| JF-2460 | 1½ | 1.7 (43) | 1.9 (47) | .18 |
| JF-2462 | 2 | 2.1 (54) | 2.3 (58) | .26 |
| JF-2464 | 3 | 2.9 (74) | 3.1 (79) | .44 |
| JF-2466 | 4 | 4.1 (105) | 4.3 (110) | 1.0 |

## PUSH-FIT BLIND PLUG



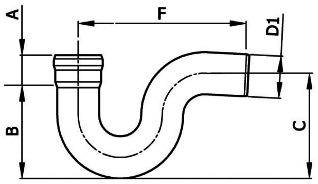

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 | B | WT LBS |
|---|---|---|---|---|---|
| JF-2480 | 1½ | 1.7 (42) | 2.0 (50) | 1.2 (30) | .15 |
| JF-2482 | 2 | 2.1 (53) | 2.4 (60) | 1.5 (38) | .22 |
| JF-2484 | 3 | 2.9 (73) | 3.1 (80) | 2.2 (55) | .46 |
| JF-2486 | 4 | 4.0 (102) | 4.4 (112) | 2.8 (70) | 1.1 |
| JF-2490 | 6 | 6.3 (159) | 6.9 (174) | 3.1 (80) | 1.9 |
| JF-2492 | 8 | 8.6 (219) | 9.4 (239) | 4.7 (120) | 4.5 |



All dimensions in inches with millimeters in parentheses unless noted. 5" material available upon request.

## PUSH-FIT P-TRAP

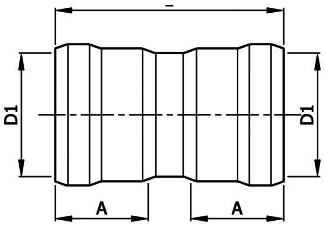
| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | A - MIN INSERT DEPTH | B | C | F | WT LBS |
|---|---|---|---|---|---|---|---|
| JF-2506 | 1½ | 1.7 (42) | 1.2 (30) | 3.0 (76) | 4.1 (105) | 6.8 (172) | 1.0 |
| JF-2508 | 2 | 2.1 (53) | 1.5 (38) | 3.6 (92) | 5.2 (133) | 8.3 (212) | 1.2 |
| JF-2510 | 3 | 2.9 (73) | 2.2 (55) | 4.7 (120) | 7.2 (183) | 11.3 (288) | 2.7 |
| JF-2512 | 4 | 4.0 (102) | 2.8 (70) | 6.3 (161) | 10.2 (260) | 15.4 (390) | 5.0 |
| JF-2514 | 6 | 6.3 (159) | 3.1 (80) | 9.2 (235) | 15.6 (398) | 22.0 (558) | 11.2 |




**-CO option (P-Trap with Cleanout available upon request)

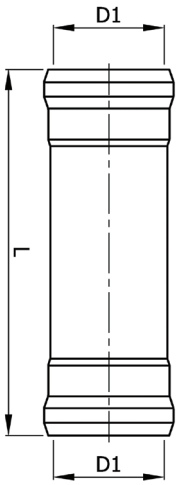
## PUSH-FIT DOUBLE COUPLING

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | A - MIN INSERT DEPTH | L | WT LBS |
|---|---|---|---|---|---|
| JF-6499 | 1½ | 1.7 (42) | 1.2 (30) | 3.3 (84) | .26 |
| JF-6500 | 2 | 2.1 (53) | 1.5 (38) | 3.7 (94) | .46 |
| JF-6501 | 3 | 2.9 (73) | 2.2 (55) | 5.3 (135) | .73 |
| JF-6502 | 4 | 4.0 (102) | 2.8 (70) | 7.1 (180) | 1.3 |
| JF-6504 | 6 | 6.3 (159) | 3.1 (80) | 7.9 (200) | 4.1 |
| JF-6505 | 8 | 8.6 (219) | 4.7 (120) | 11.4 (290) | 7.2 |




## PUSH-FIT SLIP COUPLING

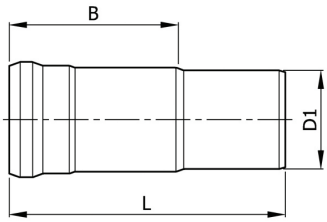
| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | L | WT LBS |
|---|---|---|---|---|
| JF-6550 | 1½ | 1.7 (42) | 5.6 (142) | .40 |
| JF-6552 | 2 | 2.1 (53) | 6.9 (176) | .62 |
| JF-6554 | 3 | 2.9 (73) | 10.0 (255) | .57 |
| JF-6556 | 4 | 4.0 (102) | 13.1 (334) | 2.4 |
| JF-6560 | 6 | 6.3 (159) | 18.6 (473) | 5.5 |
| JF-6562 | 8 | 8.6 (219) | 26.5 (673) | 12.0 |





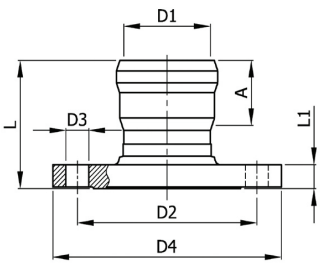

All dimensions in inches with millimeters in parentheses unless noted. 5” material available upon request.

## PUSH-FIT LONG EXPANSION SOCKET



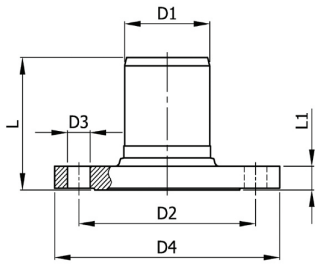

| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | B | L | WT LBS |
|---|---|---|---|---|---|
| JF-6570 | 1-1/2” | 1.7 (42) | 2.8 (70) | 4.7 (120) | .31 |
| JF-6572 | 2” | 2.1 (53) | 3.7 (95) | 6.1 (155) | .51 |
| JF-6574 | 3” | 2.9 (73) | 5.5 (140) | 8.1 (205) | 1.1 |
| JF-6576 | 4” | 4.0 (102) | 5.9 (150) | 9.4 (240) | 2.1 |
| JF-6580 | 6” | 6.3 (159) | 6.7 (170) | 11.2 (285) | 3.3 |
| JF-6582 | 8” | 8.6 (219) | 9.8 (250) | 15.7 (400) | 10.6 |

## PUSH-FIT 150# FEMALE FLANGE ADAPTER




| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 | D3 | D4 | A - MIN INSERT DEPTH | L | L1 | WT LBS |
|---|---|---|---|---|---|---|---|---|---|
| JF-9000 | 1-1/2” | 1.7 (42) | 3.9 (98) | .63 (16) | 5.0 (127) | 1.2 (30) | 2.8 (71) | .69 (18) | 4.2 |
| JF-9002 | 2” | 2.1 (53) | 4.7 (121) | .75 (19) | 6.0 (152) | 1.5 (38) | 3.1 (80) | .75 (19) | 5.1 |
| JF-9004 | 3” | 2.9 (73) | 5.5 (140) | .75 (19) | 7.0 (178) | 2.2 (55) | 4.0 (101) | .87 (22) | 7.9 |
| JF-9006 | 4” | 4.0 (102) | 7.5 (191) | .75 (19) | 9.0 (229) | 2.8 (70) | 4.6 (118) | .94 (24) | 13.2 |
| JF-9010 | 6” | 6.3 (159) | 9.5 (241) | .87 (22) | 11.0 (279) | 3.1 (80) | 5.2 (131) | 1.0 (25) | 19.8 |
| JF-9012 | 8” | 8.6 (219) | 11.8 (299) | .87 (22) | 13.5 (343) | 4.7 (120) | 6.9 (175) | 1.1 (29) | 29.7 |

## PUSH-FIT 150# MALE FLANGE ADAPTER

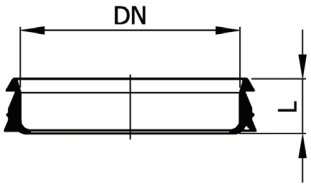



| SERIES NUMBER | PIPE SIZE NOM. | D1 PIPE O.D. | D2 | D3 | D4 | L | L1 | WT LBS |
|---|---|---|---|---|---|---|---|---|
| JF-9016 | 1-1/2" | 1.7 (42) | 3.9 (98) | .63 (16) | 5.0 (127) | 2.5 (65) | .69 (18) | 4.2 |
| JF-9018 | 2" | 2.1 (53) | 4.7 (121) | .75 (19) | 6.0 (152) | 3.0 (76) | .75 (19) | 5.1 |
| JF-9020 | 3" | 2.9 (73) | 5.5 (140) | .75 (19) | 7.0 (178) | 3.9 (99) | .87 (22) | 7.9 |
| JF-9022 | 4" | 4.0 (102) | 7.5 (191) | .75 (19) | 9.0 (229) | 5.2 (131) | .94 (24) | 13.2 |
| JF-9026 | 6" | 6.3 (159) | 9.5 (241) | .87 (22) | 11.0 (279) | 6.8 (173) | 1.0 (25) | 19.8 |
| JF-9028 | 8" | 8.6 (219) | 11.8 (299) | .87 (22) | 13.5 (343) | 8.1 (206) | 1.1 (29) | 29.7 |

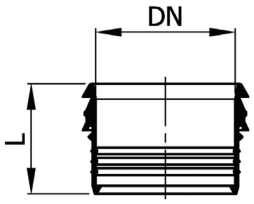


All dimensions in inches with millimeters in parentheses unless noted. 5” material available upon request.

## PUSH-FIT EPDM GASKETS

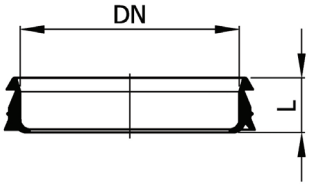



| GRAVITY APPLICATIONS | | | VACUUM APPLICATIONS | | |
|---|---|---|---|---|---|
| SERIES NUMBER | PIPE SIZE NOM. | L | SERIES NUMBER | PIPE SIZE NOM. | L |
| JP-EPDM-0100 | 1½ | .59 (15) | JP-EPDM-0100V | 1½ | 1.4 (35) |
| JP-EPDM-0200 | 2 | .71 (18) | JP-EPDM-0200V | 2 | 1.7 (43) |
| JP-EPDM-0300 | 3 | .83 (21) | JP-EPDM-0300V | 3 | 2.4 (60) |
| JP-EPDM-0400 | 4 | 1.1 (27) | | | |
| JP-EPDM-0600 | 6 | 1.4 (35) | | | |
| JP-EPDM-0800 | 8 | 2.0 (50) | | | |



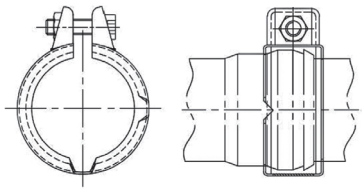

## PUSH-FIT FPM GASKETS

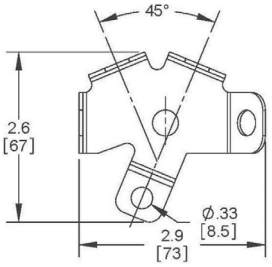
| SERIES NUMBER | PIPE SIZE NOM. | L |
|---|---|---|
| JP-FPM-0100 | 1½ | .59 (15) |
| JP-FPM-0200 | 2 | .71 (18) |
| JP-FPM-0300 | 3 | .83 (21) |
| JP-FPM-0400 | 4 | 1.1 (27) |
| JP-FPM-0600 | 6 | 1.4 (35) |
| JP-FPM-0800 | 8 | 2.0 (50) |




## PUSH-FIT JOINT CLAMP

| SERIES NUMBER | PIPE SIZE NOM. |
|---|---|
| JA-3002 | 1½ |
| JA-3004 | 2 |
| JA-3006 | 3 |
| JA-3008 | 4 |
| JA-3012 | 6 |
| JA-3014 | 8 |



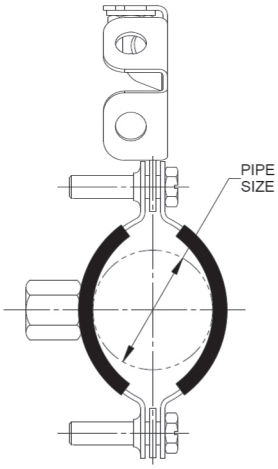



## SWAY BRACE

| SERIES NUMBER |
|---|
| JA-3000 |

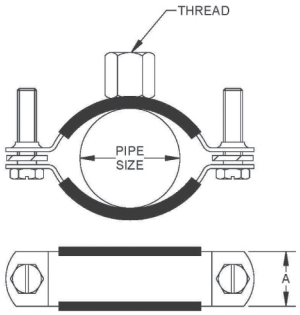


All dimensions in inches with millimeters in parentheses unless noted. 5” material available upon request.



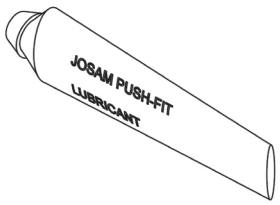

## ADJUSTABLE PIPE HANGER

| SERIES NUMBER | PIPE SIZE NOM. |
|---|---|
| JA-3020 | 1½ |
| JA-3022 | 2 |
| JA-3024 | 3 |
| JA-3026 | 4 |
| JA-3030 | 6 |
| JA-3032 | 8 |




## NON-ADJUSTABLE PIPE HANGER

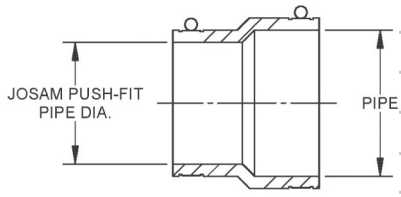
| SERIES NUMBER | PIPE SIZE NOM. |
|---|---|
| JA-3040 | 1½ |
| JA-3042 | 2 |
| JA-3044 | 3 |
| JA-3046 | 4 |
| JA-3050 | 6 |
| JA-3052 | 8 |




## PIPE LUBRICANT

| SERIES NUMBER |
|---|
| JA-3100 |

## TRANSITION COUPLING




| SERIES NUMBER | PUSH-FIT ø | PIPE | SHIELD |
|---|---|---|---|
| JA-4100 | 1-1/2" | 1-1/2" Copper | |
| JA-4101 | 1-1/2" | 1-1/2" NH/Sch40/Glass | |
| JA-4200 | 2" | 2" NH/SV/Copper | |
| JA-4201 | 2" | 2" NH/SV/XH/Sch40/Glass | X |
| JA-4300 | 3" | 3" NH/SV/XH/Sch40/Glass | X |
| JA-4301 | 3" | 3" Copper | X |
| JA-4400 | 4" | 4" NH/SV/XH/Sch40/Glass | X |
| JA-4401 | 4" | 4" Copper | |
| JA-4600 | 6" | 6" NH/SV/XH/Sch40/Glass | X |
| JA-4601 | 6" | 6" Copper | X |
| JA-4602 | 6" | 6" Glass | X |
| JA-4800 | 8" | 8" NH/SV/Sch40 | X |
| JA-4801 | 8" | 8" Copper | X |

*Each coupling is provided with an elastomeric PVC coupling and 300 Series SS shield where noted



All dimensions in inches with millimeters in parentheses unless noted. 5" material available upon request.

## Material Type

Josam Push-Fit pipe and fittings are available in type 316L austenitic stainless steel. All seam welded pipes are acid pickled to provide the best consistent corrosion resistant surface and uniform aesthetic appearance.

Type 304SS is used for some accessories and can be offered for special applications. Properties for both 304 and 316L stainless steel are shown below.

| CHEMICAL COMPOSITION | 316L | | 304 | |
|---|---|---|---|---|
| CARBON (C%) | 0.030 | MAX | 0.080 | MAX |
| MANGANESE (MN%) | 2.00 | MAX | 2.00 | MAX |
| PHOSPHOR (P%) | 0.045 | MAX | 0.045 | MAX |
| SULFUR (S%) | 0.030 | MAX | 0.030 | MAX |
| SILICON (SI%) | 0.75 | MAX | 0.75 | MAX |
| CHROMIUM (CR%) | 16.0 - 18.0 | | 18.0 - 20.0 | |
| NICKEL (NI%) | 10.0 - 14.0 | | 8.0 - 10.5 | |
| MOLYBDENUM (MO%) | 2.0 - 3.0 | | – | |
| NITROGEN (N%) | 0.1 | MAX | 0.1 | MAX |

| PHYSICAL PROPERTIES - UNANNEALED | 316L | 304 | UNITS |
|---|---|---|---|
| SPECIFIC GRAVITY | 0.288 | 0.285 | $LB/IN^3$ |
| MELTING POINT | 2552 | 2552 | °F |
| EXPANSION COEFFICIENT | $8.9X10^6$ | $9.6X10^6$ | 32 - 212 °F |
| THERMAL CONDUCTIVITY | 9.4 | 9.4 | BTU/FT/ °F TO 212 °F |
| ELECTRICAL RESISTIVITY | 740 | 780 | MICROHM-MM AT 68 °F |
| SPECIFIC HEAT | 0.12 | 0.12 | BTU/LB 32 - 212 °F |

| MECHANICAL PROPERTIES | 316L | 304 | UNITS |
|---|---|---|---|
| TENSILE STRENGTH | 70,000 | 70,000 | PSI MIN. |
| YIELD STRENGTH | 25,000 | 25,000 | PSI MIN. |
| MODULES OF ELASTICITY | 28 | 28 | MPSI |
| ELONGATION | 30 | 30 | % MIN. |
| HARDNESS BRINELL | 217 | 217 | HB MAX. |

## Thermal Expansion

The expansion coefficient of stainless steel is very low. A 39.4" (1 meter) pipe expands approximately 0.063 inches (1.6 mm) with a change in temperature of 212 degrees F (100 degrees C).

The design of a Josam Push-Fit drainage system can be accomplished with no special consideration or compensating material for expansion. The pipes are also suitable for installation in concrete due to the similar expansion factor (0.0165 mm/m/degree C).

## Sealing Rings

Standard Josam Push-Fit gaskets are made of Ethylene Propylene Diene Monomer rubber, commonly known as EPDM. Fluorine rubber gaskets, commonly known as FPM, are also available as an option. The shape of the gasket is specifically designed to fit the socket and designed for an engineered water tight joint. When a pipe is inserted into the socket, the gasket is compressed between the socket and outer pipe surface to create a positive seal. As the internal pressure increases, the pressure of the seal against the joint also increases and the joint remains tight. The gasket is designed with a visible lip around the entire perimeter of the socket. This lip holds the seal in proper position and is an indicator of a properly made joint after assembly.

Longer shaped gaskets are required and available from Josam Company for vacuum drainage application. Please advise Josam when pipe systems will be used for vacuum drainage to ensure proper gaskets are furnished.

## Tightness

Push-Fit pipes and fittings create a joint that is suitable for use in typical gravity or vacuum drainage systems. The maximum pressure capacities listed below are based on testing in a lab environment with pipes rigidly fixed. Test pressures illustrate the quality of the gasket material and system design. Pipe and fittings are not intended for installation in pressure applications. Pipe installations must be fixed according to Josam's recommendations in order to meet test pressure requirements. Additional fixing requirements may be necessary for handling elevated pressures. Contact Josam Company with any questions or regarding specific pressure requirements.

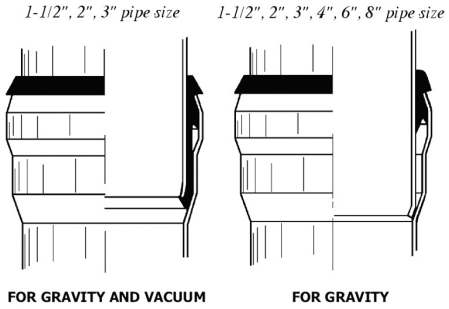
## Gravity

Pipe sizes 1- 1/2" to 5" nominal 10 bar (145 psi)
Pipe sizes 6" to 8" nominal 5 bar (72.5 psi)

## Vacuum

1-1/2" to 3" nominal -0.96 bar (28 in. Hg)

**Vacuum systems typically use only 1-1/2" to 3" nominal pipe sizes.**




### RUBBER TYPES

| INTERNATIONAL DESIGNATION | EPDM | FPM |
|---|---|---|
| RUBBER TYPE | ETHYLENE PROPENE | FLOURINE (VITON) |
| NOMINAL HARDNESS IRHD | 60 | 70 |
| COLOR | BLACK | GREEN |
| TENSILE STRENGTH MPA | 9.5 | 13 |
| ELONGATION AFTER FRACTURE % | 450 | 225 |
| MAX. TEMPERATURE RANGE | 120°C/248°F | 300°C/572°F |

### RESISTANCE

| WEARABILITY | EPDM | FPM |
|---|---|---|
| RESISTANCE TO MINERAL OIL | D | A |
| RESISTANCE TO VEGETABLE OIL | B | A |
| RESISTANCE TO BENZENE/PETROL | D | A |
| RESISTANCE TO AROMATIC COMPOUNDS AND HYDROCARBONS | D | A |
| RESISTANCE TO KETONES | A | D |
| RESISTANCE TO ORDINARY DILUTED ACIDS AND ALKALINES | A | A |
| RESISTANCE TO OZONE AND WEATHER STRESSES | A | A |
| RESISTANCE TO AIR DIFFUSION | A | A |

**A** = VERY GOOD SERVICE **B** = MODERATE SERVICE
**C** = LIMITED OR VARIABLE SERVICE **D** = UNSATISFACTORY

CAUTION!
The information on this chart is intended for use as reference information only. Specific application factors including temperature and concentration may affect suitability and it is recommended that the user test for compatability.

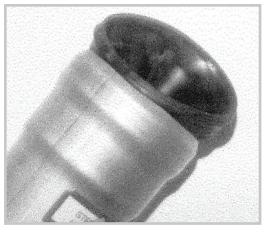
## Cutting the Pipes

Josam Push-Fit pipes can be cut to desired length by various means using manual and electric cutters. The pipes should be cut square and the exterior surface must be free of burrs and slightly rounded or beveled. Fittings may not be cut.

1. Select appropriate pipe lengths. Josam offers 8 different pipe lengths to minimize cuts and waste. Project take-offs should reflect a variety of pipe lengths to suit the pipe layout of the project application.
2. Cut pipe lengths as necessary using the closest pipe length available. In some instances multiple pipe sections may reduce the amount of pipe to be cut.
3. Cut pipes square using either a Josam recommended pipe cutter, a circular saw or a tube style pipe cutter with an appropriate blade or cutting wheel.
4. If using a cutter that does not debur the pipe, remove any burrs from the exterior surface of the pipe prior to making a joint. A slight bevel on the outside edge of the pipe end will facilitate easy insertion into the socket.
5. Contact Josam Company for recommended pipe cutters.

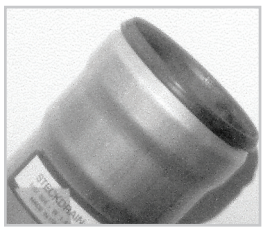
## Assembling a Josam Push-Fit Joint

The Josam Push-Fit socket and spigot joint is designed to be easily assembled and adjusted without the need of any special tools. Using lubricant available from Josam will allow the pipe material to be inserted into the socket and seal. Steps for making a joint are illustrated below.



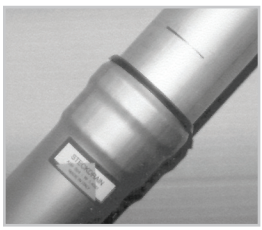
1. Insert the seal into the socket if it is not already installed. The seal and pipe should be clean. If necessary remove the seal and rinse with water to remove any dirt.

a. To insert the seal, squeeze and fold the ring into a heart shape. Press the top lip firmly into the socket with the lip hooking on the top edge.

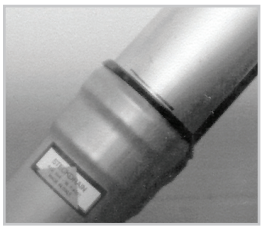


b. Allow the seal to unfold and press the lip tightly against the entire perimeter of the socket

## Assembling a Josam Push-Fit Joint (Cont'd)



2. Apply a small amount of lubricant (item 40930) to the inside of the sealing ring.



3. Before inserting a spigot end into the socket, it is recommended to mark the insertion depth on the spigot. See insertion Depth 'A' from chart on page 6.

4. Insert the spigot into the socket with a slight turning motion. Push the pipe completely into the socket and then back out approximately ¼". The lip of the gasket should be visible around the perimeter of the joint.

**Note:** Make adjustments as soon as possible. After the lubricant dries the parts may be difficult to disassemble. If necessary heat the joint with a gas torch to help loosen the joint for disassembly. If heated in this manner, the seal should be replaced prior to reassembling.

## Hanging and Bracing the Pipe System

The Josam Push-Fit pipe systems should be supported to prevent the pipe joint from pushing apart. Use the following guidelines for fixing pipes.

- Josam Company recommends the use of their hangers for properly supporting the system. See page 20.
- Josam hangers or similar split ring hangers should be used to limit or prevent axial movement.
- Alternative hangers must be stainless steel or lined with rubber or non metallic material to protect against galvanic corrosion.
- Secure pipe penetrations to prevent vertical movement.
- Brace end of pipe runs and changes in direction to prevent the pipes from pushing apart. Utilize joint locking clamps and sway braces as necessary.

The rods and hanger spacing must be sufficient to support the weight of the pipes filled with water.

**WEIGHTS OF 39.4" (1 METER) PIPE FILLED WITH WATER.**

| PIPE SIZE | WEIGHT LBS. (KG) |
|---|---|
| 1½" | 5.1 (2.3) |
| 2" | 7.3 (3.3) |
| 3" | 13.4 (6.1) |
| 4" | 24.0 (10.9) |
| 6" | 55.0 (25.0) |
| 8" | 103.4 (47.0) |

## Additional Bracing

Sway braces should be used for limiting movement of the fixed pipes at intervals of 30-50 ft (10-15 meters) and changes in direction and end of lines as necessary to prevent pipes from pushing apart.

**The Josam Push-Fit system must be properly supported by the hanger system to prevent the pipes from pushing apart. Ends of runs and changes in directions must be braced! If properly supported the Josam Push-Fit joint will handle considerable pressure when properly supported (see maximum tested pressures on page 23).**

### Underground installations

316L pipe systems are suitable for direct burial underground in most areas. Soil conditions in some locations may require additional corrosion protection for the pipes prior to burial.

The following guidelines are recommended for underground installations:

1. Use proper trench safety procedures as required by local codes
2. Leveling course should be free from frozen material, large or sharp stones. A minimum 2-4” thick leveling course is recommended.
3. Ensure that pipes are properly pitched and evenly supported along the length of the pipe. Remove material from under the joint so sockets do not bear the weight of the pipes.
4. Brace changes in direction and end of pipe runs to prevent pipes from pushing apart prior to testing and backfilling.
5. 4” of fill surrounding pipes should be sand or crushed stone with maximum 15% passing through 0.075” screen.
6. Apply fill material carefully and compress evenly to 93% standard proctor.

## Installation in concrete

Some concrete additives such as accelerators or retardants, antifreeze, fluidifiers etc. may be corrosive to stainless steel. If additives are used, wrapping or lacquer coating may be required to protect the pipe system.

## Changes in Direction

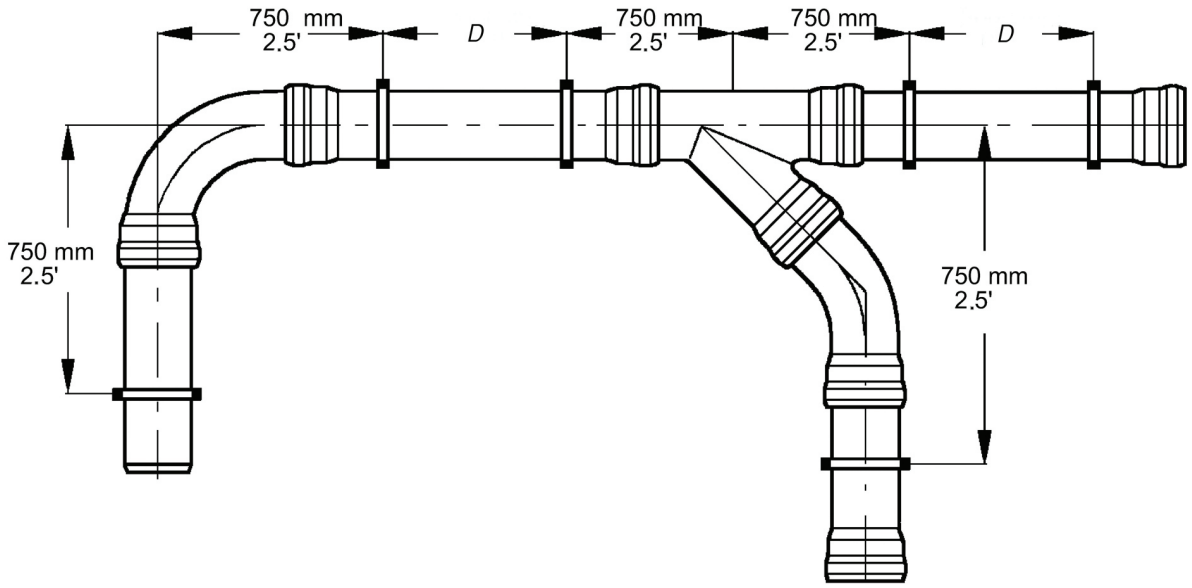
All vertical and horizontal pipes must be fastened at all changes of direction and all branches with hangers spaced no more than 2’6” (750mm).

## Vertical Runs

Vertical pipes should be supported at intervals no more than 9.8’ (3 meters). Straight horizontal pipe runs should be supported at maximum spacing indicated in the chart below.

**HORIZONTAL HANGER SPACING**

| PIPE SIZE | D (max) |
|---|---|
| 1-1/2” | 6.6’ (2.0) |
| 2” | 6.6’ (2.0) |
| 3” | 8.2’ (2.5) |
| 4” | 9.2’ (2.8) |
| 6” | 10.8’ (3.3) |
| 8” | 10.8’ (3.3) |




## Transition Fittings

The Josam Push-Fit system can be easily adapted to most pipe systems. For information on adapting the Josam Push-Fit system to other pipe systems please contact your local Josam representative or Josam Company directly.

# CHEMICAL RESISTANCE CHART

| CHEMICAL | 316 SS | 304 SS | EPDM | FPM |
|---|---|---|---|---|
| Acetic Acid 20% | A | A | A | B |
| Acetic Acid 80% | A | B | A | B |
| Acetic Anhydride | A | B | B | D |
| Acetone | A | A | A | D |
| Alcohols:Amyl | A | A | A | A |
| Alcohols:Benzyl | A | A | B | A |
| Alcohols:Butyl (Butanol) | A | A | A | A |
| Alcohols:Isopropyl | B | B | A | A |
| Alcohols:Methyl | A | A | A | C |
| Aluminum Chloride | C | D | A | A |
| Aluminum Chloride 20% | D | D | A | A |
| Aluminum Sulfate (<200° F) | A | A | A | A |
| Ammonium Carbonate | A | A | A | A |
| Ammonium Chloride | B | C | A | A |
| Ammonium Hydroxide | A | A | A | B |
| Amyl Chloride | A | A | D | B |
| Aniline | A | A | B | C |
| Aniline Hydrochloride | D | D | B | B |
| Antifreeze | A | N/A | A | A |
| Asphalt | A | B | D | A |
| Barium Chloride | B | B | A | A |
| Barium Hydroxide | A | B | A | A |
| Beer | A | A | A | A |
| Beet Sugar Liquids | A | A | A | A |
| Benzaldehyde | A | A | A | D |
| Benzene | A | A | D | A |
| Benzoic Acid | B | B | D | A |
| Borax (Sodium Borate) | A | A | A | A |
| Boric Acid | A | A | A | A |
| Bromine | D | D | D | A |
| Butter | A | C | A | A |
| Buttermilk | A | A | A | A |
| Butylacetate | A | A | B | D |
| Butyric Acid | B | B | B | B |
| Calcium Bisulfate | A | N/A | A | A |
| Calcium Bisulfide | B | B | C | A |
| Calcium Bisulfite | A | B | D | A |
| Calcium Chloride | B | B | A | A |
| Calcium Hydroxide | B | B | A | A |
| Calcium Hypochlorite | B | C | B | A |
| Carbon Dioxide (dry) | A | A | B | B |
| Carbon Dioxide (wet) | A | A | B | B |
| Carbon Disulfide | A | A | D | A |
| Carbon Monoxide | A | A | A | A |
| Carbon Tetrachloride | A | A | D | N/A |
| Carbonic Acid | A | A | B | A |
| Catsup | A | A | A | A |
| Chlorine (dry) | A | A | A | A |
| Chlorine Water | C | C | C | A |
| Chloroacetic Acid | C | C | B | D |
| Chlorobenzene (Mono) | B | A | D | A |
| Chloroform | B | B | D | A |
| Chlorosulfonic Acid | B | D | D | C |
| Chocolate Syrup | A | A | A | A |
| Chromic Acid 5% | C | B | A | A |
| Cider | A | A | A | A |
| Citric Acid | A | B | A | A |
| Citric Oils | A | A | B | A |
| Coffee | A | A | A | A |
| Copper Chloride | C | C | A | A |
| Copper Cyanide | B | B | A | A |
| Copper Nitrate | A | A | N/A | A |
| Copper Sulfate >5% | B | B | A | A |
| Detergents | A | A | A | A |
| Diesel Fuel | A | A | D | A |
| Dyes | A | A | N/A | A |
| Epsom Salt (Magnesum Sulfate) | B | A | A | A |
| Ethanol | A | A | A | A |
| Ethanolamine | A | A | B | D |
| Ether | A | A | C | C |
| Ethyl Chloride | A | A | A | A |
| Ethyl Ether | B | B | D | D |
| Fatty Acids | A | B | D | A |
| Fluorine | A | A | A | C |
| Formaldehyde 100% | A | A | A | D |
| Formic Acid (<100° F) | A | A | A | C |
| Fruit Juice | A | A | N/A | A |
| Fuel Oils | A | A | D | A |
| Furfural | B | A | C | D |
| Gallic Acid | B | A | B | A |
| Gelatin | A | A | A | A |
| Glucose | A | A | A | A |
| Glycerin | A | A | A | A |
| Glycolic Acid | A | A | A | A |
| Grape Juice | A | A | A | A |
| Hydrochloric Acid | D | D | A | A |

| CHEMICAL | 316 SS | 304 SS | EPDM | FPM |
|---|---|---|---|---|
| Hydrogen Peroxide 10% | A | A | A | B |
| Iodine | D | D | B | A |
| Lead Acetate | B | B | A | D |
| Magnesium Chloride | D | D | A | A |
| Magnesium Sulfate (Epsom Salts) | B | A | A | A |
| Mercury | A | A | A | A |
| Methanol (Methyl Alcohol) | A | A | A | C |
| Methyl Chloride | A | A | D | A |
| Methylene Chloride | B | B | C | B |
| Milk | A | A | A | A |
| Mineral Spirits | A | A | D | A |
| Molasses | A | A | A | A |
| Naphthalene | A | A | D | A |
| Natural Gas | A | A | D | A |
| Nickel Chloride (<10%) | B | B | A | A |
| Nickel Sulfate | B | B | A | A |
| Nitric Acid (20%) | A | A | A | A |
| Nitrous Acid | B | B | A | B |
| Oxalic Acid | C | C | A | A |
| Ozone | A | B | A | A |
| Perchloric Acid | D | D | B | A |
| Phosphoric Acid (crude) | B | D | B | A |
| Picric Acid (<10%) | A | A | B | A |
| Potash (Potassium Carbonate) | A | A | A | A |
| Potassium Bicarbonate | B | B | A | A |
| Potassium Bromide | B | B | A | A |
| Potassium Chlorate | A | A | A | A |
| Potassium Chloride | A | B | A | A |
| Potassium Hydroxide (Caust ICPotash) | A | B | A | B |
| Potassium Nitrate | B | B | A | A |
| Potassium Permanganate | A | A | A | A |
| Potassium Sulfate | A | A | A | A |
| Potassium Sulfide | B | B | A | A |
| Propylene Glycol | B | B | A | A |
| Pyridine | A | A | B | D |
| Rum | A | A | A | A |
| Salicylic Acid | B | B | A | A |
| Salt Brine (NaCl saturated) | A | B | A | A |
| Sea Water | C | C | A | A |
| Silver Nitrate | A | B | A | A |
| Soap Solutions | A | A | A | A |
| Soda Ash (see Sodium Carbonate) | A | A | A | A |
| Sodium Acetate | A | A | A | D |
| Sodium Bicarbonate | A | A | A | A |
| Sodium Bisulfate | B | D | A | A |
| Sodium Bisulfite (<100° F) | A | B | A | A |
| Sodium Bromide | B | C | A | A |
| Sodium Carbonate | A | A | A | A |
| Sodium Chlorate | B | A | A | A |
| Sodium Chloride | B | B | A | A |
| Sodium Cyanide (<200° F) | A | A | A | A |
| Sodium Fluoride (<10%) | A | C | A | A |
| Sodium Hydroxide (20%) | A | A | B | C |
| Sodium Hypochlorite (<20%) | C | C | B | A |
| Sodium Hypochlorite (100%) | D | D | B | A |
| Sodium Nitrate | A | A | A | A |
| Sodium Peroxide | A | A | A | A |
| Sodium Polyphosphate | B | B | A | A |
| Sodium Silicate | B | A | A | A |
| Sodium Sulfate | A | A | A | A |
| Sodium Sulfide (<10%) | A | B | A | A |
| Sodium Sulfite | A | B | A | A |
| Stannic Chloride (<10%) | B | B | A | A |
| Stannous Chloride | B | C | C | A |
| Starch | A | A | A | A |
| Stearic Acid | A | B | B | A |
| Sugar (Liquids) | A | A | A | A |
| Sulfate (Liquors) | B | B | A | A |
| Sulfur Chloride (100%) | A | A | D | A |
| Sulfur Dioxide (<10%) | A | D | A | A |
| Sulfuric Acid (<10%) | B | D | A | A |
| Sulfuric Acid (10-75%) | D | D | B | A |
| Sulfurous Acid (Solution) | B | B | B | A |
| Toluene (Toluol) | A | A | D | B |
| Tomato Juice | A | A | A | A |
| Trichloroethylene | A | A | D | A |
| Trisodium Phosphate | B | B | A | A |
| Turpentine | A | A | D | A |
| Urea | B | B | A | A |
| Urine | A | A | A | A |
| Vegetable Juice | A | A | A | A |
| Vinegar | A | A | A | A |
| Water, Deionized | A | A | A | A |
| Whiskey & Wines | A | A | A | A |
| Xylene | A | A | D | B |
| Zinc Sulfate | A | A | A | A |

## RATINGS

| | |
|---|---|
| A | Excellent. |
| B | Good -- Minor Effect, slight corrosion or discoloration. |
| C | Fair -- Moderate Effect, not recommended for continuous use. Softening, loss of strength or swelling may occur. |
| D | Severe Effect, not recommended for ANY use. |
| N/A | Information Not Available. |

CAUTION!
The information in this chart has been compiled from several reputable sources, including "Corrosion Data Survey", 6th Ed., NACE, and is intended for use as reference information only.

Specific application factors including temperature and concentration may affect suitability and it is recommended that the user test for compatibility.

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