Job Name $\qquad$

Job Location $\qquad$

Engineer $\qquad$
Approval $\qquad$

## LEAD FREE' <br> PPSU ASTM F1960

## Fittings

Sizes: ½" - 1" (12.7-25.4mm)
Lead Free* Polyphenylsulfone (PPSU) Cold Expansion fittings are composed of a high temperature thermoplastic with high impact and chemical resistance. Fittings are used to connect Watts RadiantPERTTM or Watts WaterPEXa ${ }^{\text {TM }}$ pipe. F1960 compression rings are composed of cross-linked polyethylene (PEX) material.

## Specifications

System shall be installed using Watts RadiantPERT or Watts WaterPEXa pipe. All connections shall be made using the Watts Lead Free* PPSU F1960 adapters and fittings in accordance with the ASTM F1960 connection method as outlined in the Instruction Sheet. The Lead Free* PPSU F1960 fittings and adapters shall be constructed using Lead Free* PPSU and shall comply with building codes and standards, where applicable, requiring reduced lead content.

## Features

- Constructed from high temperature, impact resistant polyphenylsulfone.
- Maximum Working Temperature: $210^{\circ} \mathrm{F}\left(99^{\circ} \mathrm{C}\right)$ Maximum Working Pressure: 150psi (1034 kPa)
- Fittings are compatible with domestic hot and cold water as well as hot and cold radiant heating applications.


## NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

## Contractor

Approval
Contractor's P.O. No. $\qquad$
Representative $\qquad$


## Standards and Listings

ASTM F1960, F877
NSF 61, 14, 372
CSA B137.5
Certified to the Uniform Plumbing Code

[^0]!. GAUTION
Do not allow product to come in extended contact with any of at least the commonly encountered construction materials listed below: (This list is not all-inclusive.)

- Pipe thread sealing compounds
- Non-water based fire wall penetration sealing compounds and caulking
- Petroleum-based materials or sealants such as:
- Kerosene, Benzene, Gasoline, Solvents, Fuel Oils, Cutting Oils, Asphaltic Paint, and Asphaltic Road Materials, Acetone, Toluene, and/or Xylene


## Typical Dimensions



Order \#
Model \#


## Couplings F1960 x F1960

| LFWPE15P-0808PB | 0653383 | Coupling, 1/2" $\times 1 / 2^{\prime \prime}$ | 1-1/2" | 39.4 | 7/8" | 21.6 | 1/8" | 3.0 | N/A | 0.19 | 5.51 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LFWPE15P-1212PB | 0653384 | Coupling, $3 / 4$ " $\times 3 / 4$ " | 2' | 51.4 | 1-1/8" | 30.0 |  |  |  | 0.36 | 10.12 |
| LFWPE15P-1616PB | 0653374 | Coupling, $1^{\prime \prime} \times 1$ " | 2-1/2" | 63.4 | 1-3/8" | 36.0 |  |  |  | 0.62 | 17.52 |
| LFWPE15P-1612PB | 0653375 | Coupling, 1" $\times 3 / 4$ " | 2-1/4" | 57.4 | 1-3/8" | 36.0 |  |  |  | 0.50 | 14.15 |

## Elbows F1960 x F1960

|  | LFWPE19P-08PB | 0653385 | Elbow, $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $1-1 / 2^{\prime \prime}$ | 39.2 | $1-3 / 8^{\prime \prime}$ | 35.5 | $1-1 / 4^{\prime \prime}$ | 32.2 | $1-1 / 8^{\prime \prime}$ | 28.5 | 0.25 | 7.08 |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LFWPE19P-12PB | 0653386 | Elbow, $3 / 4^{\prime \prime} \times 3 / 4^{\prime \prime}$ | $2^{\prime \prime}$ | 51.5 | $1-7 / 8^{\prime \prime}$ | 47.0 | $1-5 / 8^{\prime \prime}$ | 41.7 | $1 / 1 / 2^{\prime \prime}$ | 37.2 | 0.46 | 12.93 |
|  | LFWPE19P-1616PB | 0653376 | Elbow, $1^{\prime \prime} \times 1^{\prime \prime}$ | $2-1 / 2^{\prime \prime}$ | 64.7 | $2-3 / 8^{\prime \prime}$ | 59.3 | $2 "$ | 52.2 | $1-7 / 8^{\prime \prime}$ | 46.8 | 0.88 | 25.01 |

## Tees F1960 x F1960 x F1960

| LFWPE18P-120808PB | 0653400 | Tee, $3 / 4{ }^{\prime \prime} \times 1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | 2-7/8" | 72.4 | 1-3/8" | 33.2 | 1-1/4" | 31.9 | N/A | 0.48 | 13.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LFWPE18P-121208PB | 0653399 | Tee, $3 / 4^{\prime \prime} \times 3 / 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ | 3" | 78.4 | 1-1/2" | 39.2 | 1-1/4" | 31.9 | N/A | 0.61 | 17.3 |
| LFWPE18P-120812PB | 0653401 | Tee, $3 / 4{ }^{\prime \prime} \times 1 / 2^{\prime \prime} \times 3 / 4{ }^{\prime \prime}$ | 3" | 77.4 | 1-3/8" | 35.7 | 1-1/2" | 37.9 | N/A | 0.60 | 17.0 |
| LFWPE18P-08PB | 0653387 | Tee, $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | 2-1/2" | 64.3 | 1-3/8" | 32.2 | 1-1/8" | 28.9 | N/A | 0.35 | 9.94 |
| LFWPE18P-12PB | 0653388 | Tee, $3 / 4{ }^{\prime \prime} \times 3 / 4^{\prime \prime} \times 3 / 4{ }^{\prime \prime}$ | 3-1/4" | 83.4 | 1-5/8" | 41.7 | 1-1/2" | 37.9 |  | 0.74 | 20.98 |
| LFWPE18P-16PB | 0653377 | Tee, $1^{\prime \prime} \times 1^{\prime \prime} \times 1^{\prime \prime}$ | 4-1/8" | 104.3 | 2" | 52.2 | 1-7/8" | 46.9 |  | 1.31 | 37.21 |
| LFWPE18P-161608PB | 0653378 | Tee, $1^{\prime \prime} \times 1^{\prime \prime} \times 1 / 2^{\prime \prime}$ | 3-1/2" | 90.4 | 1-3/4" | 45.2 | 1-3/8" | 34.9 |  | 1.14 | 32.19 |
| LFWPE18P-161612PB | 0653379 | Tee,1" $\times 1$ " $\times 3 / 4^{\prime \prime}$ | 3-7/8" | 98.4 | 2 " | 49.2 | 1-5/8" | 40.9 |  | 1.19 | 33.74 |
| LFWPE18P-161212PB | 0653380 | Tee, $1^{\prime \prime} \times 3 / 4^{\prime \prime} \times 3 / 4^{\prime \prime}$ | 3-5/8" | 92.4 | 2" | 49.2 |  |  |  | 1.08 | 30.67 |

## Adaptors F1960 x Male NPT

| LFWPE12P-0808PB | 0653381 | Adptr 1/2" x 1/2" MNPT | 1-5/8" | 40.6 | 7/8" | 22.0 | 1/2" | 12.7 | N/A | 0.31 | 8.93 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LFWPE12P-1212PB | 0653382 | Adptr 3/4" $\times 3 / 4$ " MNPT |  | 41.2 | $1{ }^{\prime \prime}$ | 25.4 | 3/4" | 19.1 |  | 0.35 | 10.04 |

## Plugs F1960

|  | LFWPE24P-08PB | 0653389 | Plug, $1 / 2^{\prime \prime}$ | $7 / 8^{\prime \prime}$ | 21.2 | $7 / 8^{\prime \prime}$ | 21.96 |  |  |  | 0.12 | 3.45 |
| :---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LFWPE24P-12PB | 0653390 | Plug, $3 / 4^{\prime \prime}$ | $1-1 / 8^{\prime \prime}$ | 27.2 | $1-1 / 8^{\prime \prime}$ | 30.0 | $1 / 8^{\prime \prime}$ | 3.0 | N/A | 0.24 | 6.85 |
|  | LFWPE24P-16PB | 0653391 | Plug, $1^{\prime \prime}$ | $1-3 / 8 "$ | 33.2 | $1-3 / 8^{\prime \prime}$ | 36.0 |  |  |  | 0.40 | 11.31 |

## F1960 Compression Rings

| PFS3-10 | 81019401 | Sleeve, PEX, 1/2" F1960 | Nominal Size | 1.00 | 0.50 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PFS4-10 | 81019403 | Sleeve, PEX, 3/4" F1960 |  |  |  |
| PFS5-10 | 81019755 | Sleeve, PEX, 1" F1960 |  |  |  |

*dimension shown represents closest equivalent standard dimension.


[^0]:    * The wetted surface of this product contacted by consumable water contains less than $0.25 \%$ of lead by weight.

