



PRESS FITTINGS FOR PLUMBING AND MECHANICAL APPLICATIONS

JOB NAME	CONTRACTOR
JOB LOCATION	WHOLESALE
ENGINEER	STREAMLINE PRS™ REP

PRODUCT DESCRIPTION:

Streamline PRS™ mechanical press copper fittings for use in plumbing or mechanical applications. Available sizes ranging from 1/2" to 4" in diameter. Product is designed to join ASTM B88 (Types K, L, M) hard-drawn copper tube (1/2" to 4") and soft copper tube (1/2" to 1-1/4").

Integral leak featured design, allows for quick and easy identification of connections which have not been pressed prior to putting the system in operation.

Streamline PRS™ mechanical press fittings are compatible with most common pressing tools and jaws.

50 - Year Limited Warranty

MATERIAL:

Streamline PRS™ components in a mechanical press copper fitting are: UNS C12200 Copper / C69300 low-lead brass for the body, EPDM o-ring, silicone o-ring lubrication, and stainless steel grip ring with a nylon spacer (2-1/2"-4" only).

KEY SPECIFICATIONS:

Streamline PRS™ shall conform to material requirements of ASME B16.22, ASME B16.51, or ASME B16.18. Performance criteria of Streamline PRS™ mechanical press copper fittings shall conform to IAPMO PS-117 or ASME B16.51.

INSTALLATION:

Streamline PRS™ fittings are approved for installations in both above and below ground applications, as allowed by local code. Product installation shall comply with the latest applicable building codes for the local jurisdiction and manufacturer's instructions.

REFERENCES:

NSF/ANSI 61	Drinking Water System Components
NSF/ANSI 372	Lead Content Compliance
IAPMO PS-117	Press and Nail Connection
ASME B16.51	Copper and Copper Alloy Press-Connect Pressure Fittings
UPC	Uniform Plumbing Code
CSA TIL-MSE-13	

TOOLS & INSTALLATION GUIDELINES

TOOL & JAW COMPATIBILITY

1/2" — 2"

Milwaukee M12 Tool w/Compact Jaws 1/2" — 1-1/4"
 Milwaukee M18 Tool w/Standard Jaws 1/2" — 2"
 NIBCO Mini Tool w/Mini Jaws 1/2" — 1"
 NIBCO Standard Tool w/Standard Jaws 1/2" — 2"
 REMS Mini Tool w/Mini Jaws 1/2" — 1-1/4"
 REMS Standard Tools w/Standard Jaws 1/2" — 2"
 Ridgid Compact Tools w/Compact Jaws 1/2" — 1-1/4"
 Ridgid Standard Tools w/Standard Jaws 1/2" — 2"
 Rothenberger Compact Tool w/Compact Jaws 1/2" — 1"
 Rothenberger Standard Tools w/Standard Jaws 1/2" — 2"
 Klauke UPA Tool w/Standard Jaws 1/2" — 2"
 Klauke MAP Tool w/Mini Jaws 1/2" — 1-1/4"

2-1/2" — 4"

Milwaukee M18 Tools w/Rings & Ring Jaw
 REMS Standard Tools w/Rings & Z5 Adapter Tong
 Ridgid Standard Tools w/ Rings & V2 Actuator Jaw

DISTANCE BETWEEN JOINTS

PRESSING NEAR AN EXISTING PRESS CONNECTION

MINIMUM DISTANCE BETWEEN STREAMLINE PRS™ JOINTS		
TUBE DIAMETER	MINIMUM DISTANCE REQUIRED	
NOMINAL INCH	INCH	MM
1/2"	—	—
3/4"	—	—
1"	—	—
1-1/4"	7/16"	10
1-1/2"	5/8"	15
2"	3/4"	20
2-1/2"	5/8"	15
3"	5/8"	15
4"	5/8"	15

SOLDERING OR BRAZING NEAR AN EXISTING PRESS CONNECTION

The installer should take precautions to keep the press connection cool. These methods may include 1) wrapping the press connection with a cold wet cloth, 2) fabricating solder connections prior to installing the press fitting, or 3) applying spray-type cooling gels.

TUBE DIAMETER NOMINAL INCH	SOLDERING		BRAZING	
	MINIMUM DISTANCE		MINIMUM DISTANCE	
	INCH	MM	INCH	MM
1/2"	1-1/2"	38	4-1/2"	114
3/4"	2-1/4"	57	6-3/4"	172
1"	3"	76	9"	229
1-1/4"	3-3/4"	95	11-1/4"	286
1-1/2"	4-1/2"	114	13-1/2"	343
2"	6"	153	18"	457
2-1/2"	7-1/2"	191	22-1/2"	572
3"	9"	229	27"	686
4"	12"	305	36"	915

PRESSING NEAR AN EXISTING SOLDERED OR BRAZED CONNECTION

TUBE DIAMETER NOMINAL INCH	MINIMUM DISTANCE	
	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



APPROVED APPLICATIONS FOR 1/2" TO 4" STREAMLINE PRS™:

Types of Service	Comments	Pressure	Temperature	Compatible with EPDM Seal
FLUIDS/WATER POTABLE				
Hot and Cold Water	—	200 PSI	32°F to 250°F	✓
Rainwater / Grey Water	—	200 PSI	-20°F to 250°F	✓
Chilled Water	Ethylene Glycol / Propylene Glycol	200 PSI	-20°F to 250°F	✓
Hydronic Heating	Ethylene Glycol / Propylene Glycol	200 PSI	-20°F to 250°F	✓
Cooling Water	Up to 50% Ethylene Glycol or Propylene Glycol solution	200 PSI	-20°F to 250°F	✓
Low-Pressure Steam	—	UP TO 15 PSI	248°F	✓
FUEL, OIL AND LUBRICANT				
Ethanol	Pure Grain Alcohol	200 PSI	—	✓
GASES				
Compressed Air	Less than 25mg/m ³ oil content	200 PSI	Up to 140°F	✓
Oxygen - O ₂ (non medical)	Keep oil and fat free/non-liquid O ₂	140 PSI	Up to 140°F	✓
Nitrogen - N ₂	—	200 PSI	Up to 140°F	✓
Argon	Welding Use	200 PSI	Up to 140°F	✓
Hydrogen - H ₂	—	125 PSI	Up to 140°F	✓
Vacuum	—	Max 29.2 inches of Mercury	Up to 140°F	✓
Carbon Dioxide - CO ₂	Dry	—	Up to 140°F	✓

STREAMLINE PRS™ RECOMMENDED PRESSURE 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 50 PSI maximum. Leak testing with air can be dangerous at high pressures. When testing with compressed air the proper pressure range up to 15 PSI maximum. Following a successful leak test, the system may be pressure tested up to 200 PSI if required by local code requirements or project specifications.

SPECIFICATION LANGUAGE:

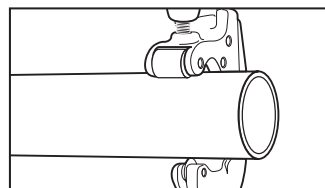
Press Fitting: Shall conform to material requirements of ASME B16.22, ASME B16.51, or ASME B16.18. Performance criteria of mechanical pressed copper fittings shall conform to IAPMO PS-117 or ASME B16.51

- Operating pressure: 200 PSI CWP Max
- Temperature range: -20°F to 250°F
- EPDM sealing element, factory installed

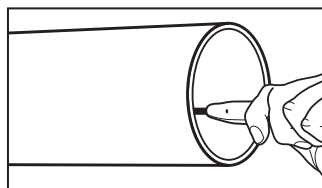
-OR-

Mechanical pressed copper fittings. Jointing piping similar to Mueller Industries Streamline PRS™, Viega ProPress, or approved equal may be used.

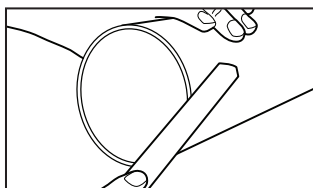
Installation Instructions (1/2" - 2")



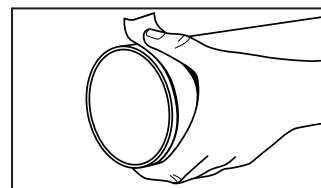
1. Cut tube square using a tube cutter or fine tooth saw.



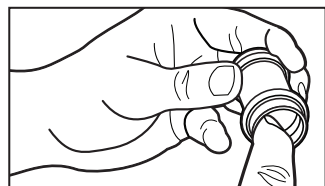
2. Deburr tube ID using a deburring tool.



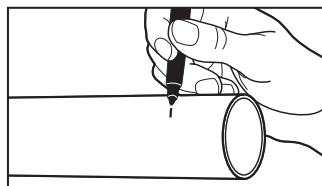
3. Deburr tube OD using half round file.



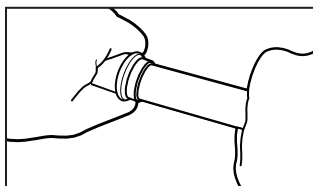
4. Sand tube with OD sand cloth. Tube surface should be free of indentation, scratches, and deformations.



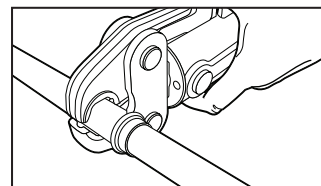
5. Check fitting bead to ensure seal is present. Do not use any type of oil lubrication.



6. Mark tube to proper fitting insertion depth (see Insertion Depth Chart below).



7. Turn slightly while sliding press fitting onto tube. Slide all the way to insertion mark and make contact with stop.



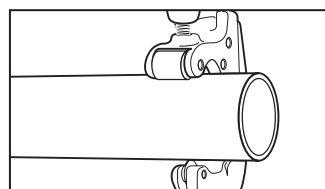
8. Place press tool at a right angle over fitting bead. Start the pressing process. Please see specific tool manufacturer for tool instruction.

Streamline PRS Fitting Insertion Depth Chart (1/2" - 2")

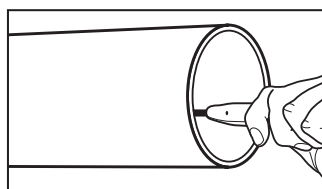
Tube Size	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Insertion Depth	3/4"	7/8"	7/8"	1"	1-7/16"	1-9/16"

Streamline PRS fittings must be connected with approved press tool. Please see specific tool manufacturer for tool instruction.

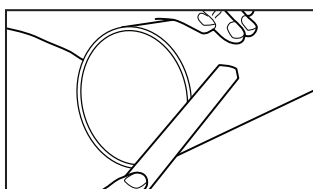
Installation Instructions (2-1/2" - 4")



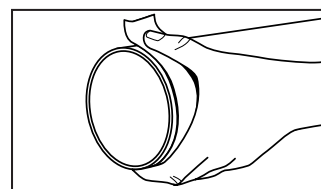
1. Cut tube square using a tube cutter or fine tooth saw.



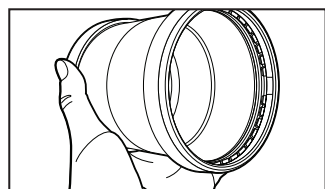
2. Deburr tube ID using a deburring tool.



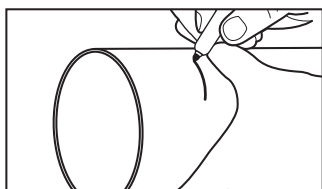
3. Deburr tube OD using half round file.



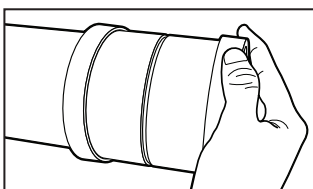
4. Sand tube with OD sand cloth. Tube surface should be free of indentation, scratches, and deformations.



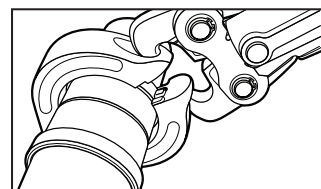
5. Check fitting ends to ensure seal, grip ring and nylon spacer are present. Do not use any type of oil lubrication.



6. Mark tube to proper fitting insertion depth (see Insertion Depth Chart below).



7. Turn slightly while sliding press fitting onto tube. Slide all the way to insertion mark and make contact with stop.



8. Place press-ring at a right angle over fitting bead and check for proper engagement. Start the pressing process. Please see specific tool manufacturer for tool instruction.

Streamline PRS Fitting Insertion Depth Chart (2-1/2" - 4")

Tube Size	2-1/2"	3"	4"
Insertion Depth	1-3/4"	1-7/8"	2-1/8"

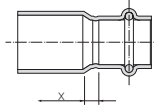


Large diameter (2-1/2" - 4") Streamline PRS fittings must be connected with approved press tool and press-rings. Please see specific tool manufacturer for tool instruction.

WARNING

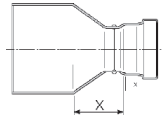
Failure to follow all instructions could affect joint/system integrity and may lead to property damage. Call Customer Service at 1-800-FITTING if you have any questions or need assistance.

FITTING REDUCER • SMALL
FTG x P



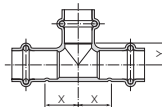
Item No.	Diameter	X	Wgt.	Inner	Viega No.
PF 01326	3/4" x 1/2"	0.50	0.08	10	78077
PF 01339	1" x 1/2"	0.81	0.12	5	78082
PF 01337	1" x 3/4"	0.50	0.13	10	78087
PF 01347	1-1/4" x 1/2"	0.59	0.17	5	22333
PF 01345	1-1/4" x 3/4"	0.41	0.20	5	78092
PF 01343	1-1/4" x 1"	0.59	0.18	1	78097
PF 01355	1-1/2" x 1/2"	0.79	0.27	5	79850
PF 01353	1-1/2" x 3/4"	0.61	0.28	1	14543
PF 01351	1-1/2" x 1"	0.74	0.26	1	78102
PF 01350	1-1/2" x 1-1/4"	0.60	0.30	1	78107
PF 01364	2" x 1/2"	1.16	0.45	1	79855
PF 01362	2" x 3/4"	0.96	0.46	1	79860
PF 01360	2" x 1"	1.30	0.38	1	78112
PF 01359	2" x 1-1/4"	0.61	0.46	1	78117
PF 01358	2" x 1-1/2"	0.47	0.52	1	78122

FITTING REDUCER • LARGE
FTG x P



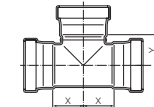
Item No.	Diameter	X	Wgt.	Inner	Viega No.
PF 01370	2-1/2" x 1"	1.36	0.79	1	20814
PF 01369	2-1/2" x 1-1/4"	1.52	0.80	1	20815
PF 01368	2-1/2" x 1-1/2"	1.32	0.88	1	20813
PF 01367	2-1/2" x 2"	0.94	0.90	1	20758
PF 01379	3" x 1-1/4"	1.91	1.10	1	20817
PF 01378	3" x 1-1/2"	1.71	1.21	1	20818
PF 01377	3" x 2"	1.32	1.21	1	20763
PF 01376	3" x 2-1/2"	0.98	1.38	1	20768
PF 01389	4" x 2"	2.11	2.33	1	20773
PF 01388	4" x 2-1/2"	1.75	2.44	1	20778
PF 01387	4" x 3"	1.42	2.51	1	20783

TEE • SMALL
P x P x P



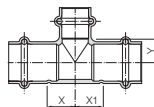
Item No.	Diameter	X	Y	Wgt.	Inner	Viega No.
PF 04006	1/2"	0.75	0.47	0.19	10	77377
PF 04031	3/4"	0.87	0.63	0.32	10	77387
PF 04048	1"	0.94	0.79	0.47	5	77412
PF 04068	1-1/4"	1.02	0.87	0.65	1	77442
PF 04084	1-1/2"	1.41	1.14	0.99	1	77457
PF 40102	2"	1.38	1.38	1.56	1	77477

TEE • LARGE
P x P x P



Item No.	Diameter	X	Y	Wgt.	Inner	Viega No.
PF 40123	2-1/2"	1.81	1.81	2.12	1	20683
PF 40152	3"	2.03	2.11	3.00	1	20693
PF 40200	4"	2.58	2.68	5.46	1	20708

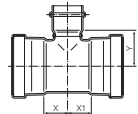
TEE • REDUCING • SMALL
P x P x P



Item No.	Diameter	X	X1	Y	Wgt.	Inner	Viega No.
PF 04047	1/2" x 1/2" x 3/4"	0.75	0.75	0.47	0.24	10	77382
PF 04067	1/2" x 1/2" x 1"	1.12	1.12	0.79	0.72	5	15493

PF 04043	3/4" x 1/2" x 1/2"	0.91	0.71	0.63	0.28	10	77392
PF 04041	3/4" x 1/2" x 3/4"	1.06	0.87	0.63	0.26	10	77397
PF 04033	3/4" x 3/4" x 1/2"	0.68	0.68	0.59	0.27	5	77402
PF 04065	3/4" x 3/4" x 1"	0.87	0.87	0.63	0.35	5	77407
PF 04062	1" x 1/2" x 3/4"	0.81	1.00	0.71	0.44	5	22263
PF 04061	1" x 1/2" x 1"	0.96	1.18	0.79	0.48	5	94767
PF 04058	1" x 3/4" x 1/2"	0.69	0.66	0.79	0.51	5	77417
PF 04056	1" x 3/4" x 3/4"	0.85	1.08	0.75	0.42	5	77422
PF 04055	1" x 3/4" x 1"	0.96	0.99	0.79	0.48	5	77427
PF 04051	1" x 1" x 1/2"	0.71	0.71	0.75	0.37	5	77432
PF 04049	1" x 1" x 3/4"	0.91	0.91	0.79	0.47	5	77437
PF 04082	1" x 1" x 1-1/4"	2.30	2.30	0.83	1.02	1	15488
PF 04083	1-1/4" x 1/2" x 1-1/4"	0.96	2.66	0.83	0.81	1	22253
PF 04081	1-1/4" x 3/4" x 1/2"	0.47	1.99	0.83	0.65	1	22243
PF 04080	1-1/4" x 3/4" x 3/4"	0.61	2.13	0.83	0.73	1	22258
PF 04079	1-1/4" x 3/4" x 1"	0.69	2.20	0.83	0.78	1	22268
PF 04078	1-1/4" x 3/4" x 1-1/4"	0.96	2.48	0.83	0.85	1	22248
PF 04076	1-1/4" x 1" x 1/2"	0.47	1.81	0.83	0.65	1	22238
PF 04075	1-1/4" x 1" x 3/4"	0.67	1.95	0.83	0.70	1	94762
PF 04074	1-1/4" x 1" x 1"	0.69	2.03	0.83	0.75	1	14568
PF 04073	1-1/4" x 1" x 1-1/4"	0.96	2.30	0.83	0.90	1	-
PF 04071	1-1/4" x 1-1/4" x 1/2"	0.47	0.47	0.83	0.45	1	94757
PF 04070	1-1/4" x 1-1/4" x 3/4"	0.61	0.61	0.83	0.50	1	77452
PF 04069	1-1/4" x 1-1/4" x 1"	0.87	0.87	0.79	0.53	1	77447
PF 04244	1-1/2" x 1/2" x 1-1/2"	1.10	3.39	1.10	1.48	1	-
PF 40238	1-1/2" x 3/4" x 3/4"	0.63	2.74	1.10	1.24	1	-
PF 04098	1-1/2" x 1" x 3/4"	0.75	2.68	1.10	1.08	1	79660
PF 04097	1-1/2" x 1" x 1"	0.75	2.68	1.10	1.15	1	15458
PF 04095	1-1/2" x 1" x 1-1/2"	1.10	3.03	1.10	1.46	1	15463
PF 04093	1-1/2" x 1-1/4" x 3/4"	0.63	2.36	1.10	1.11	1	22233
PF 04092	1-1/2" x 1-1/4" x 1"	0.75	2.48	1.10	1.17	1	15453
PF 04091	1-1/2" x 1-1/4" x 1-1/4"	0.96	2.70	1.10	1.24	1	15483
PF 04088	1-1/2" x 1-1/2" x 1/2"	0.47	0.47	1.14	0.72	1	15448
PF 04087	1-1/2" x 1-1/2" x 3/4"	0.59	0.59	1.14	0.79	1	77462
PF 04086	1-1/2" x 1-1/2" x 1"	0.76	0.76	1.15	0.83	1	77467
PF 04085	1-1/2" x 1-1/2" x 1-1/4"	0.96	0.96	1.10	1.06	1	77472
PF 40249	2" x 1/2" x 2"	1.30	4.11	1.34	2.39	1	-
PF 40248	2" x 3/4" x 2"	1.30	3.92	1.34	1.45	1	-
PF 40247	2" x 1" x 1"	0.85	3.29	1.34	1.61	1	-
PF 40245	2" x 1" x 2"	1.30	3.74	1.34	2.09	1	-
PF 40117	2" x 1-1/4" x 1-1/4"	0.96	3.23	1.34	1.72	1	15518
PF 40113	2" x 1-1/2" x 3/4"	0.75	2.81	1.34	1.70	1	15513
PF 40112	2" x 1-1/2" x 1"	0.85	2.91	1.34	1.73	1	15498
PF 40111	2" x 1-1/2" x 1-1/4"	0.96	3.03	1.34	1.82	1	15508
PF 40110	2" x 1-1/2" x 1-1/2"	1.08	3.15	1.34	1.96	1	15503
PF 40109	2" x 1-1/2" x 2"	1.30	3.37	1.34	2.18	1	22228
PF 40107	2" x 2" x 1/2"	0.59	0.59	1.34	0.98	1	15538
PF 40106	2" x 2" x 3/4"	0.75	0.75	1.34	1.19	1	94777
PF 40105	2" x 2" x 1"	0.75	0.75	1.38	1.11	1	94772
PF 40104	2" x 2" x 1-1/4"	0.96	0.96	1.34	1.33	1	77487
PF 40103	2" x 2" x 1-1/2"	1.14	1.14	1.38	1.35	1	77482

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P x P x P



Item No.	Diameter	X	X1	Y	Wgt.	Inner	Viega No.
PF 40222	2-1/2" x 3/4" x 2-1/2"	1.81	5.28	1.81	3.33	1	20684
PF 40221	2-1/2" x 1" x 2-1/2"	1.81	5.14	1.81	3.33	1	20689
PF 40220	2-1/2" x 1-1/4" x 2-1/2"	1.81	5.30	1.81	3.34	1	20694
PF 40138	2-1/2" x 1-1/2" x 2"	1.59	4.90	1.83	3.09	1	-
PF 40137	2-1/2" x 1-1/2" x 2-1/2"	1.81	5.12	1.81	3.46	1	20699
PF 40135	2-1/2" x 2" x 3/4"	0.98	3.92	1.56	2.53	1	20704
PF 40134	2-1/2" x 2" x 1"	1.10	4.04	1.59	2.60	1	20709
PF 40132	2-1/2" x 2" x 1-1/2"	1.34	4.27	1.83	2.88	1	22283
PF 40131	2-1/2" x 2" x 2"	1.59	4.19	1.83	3.05	1	22278
PF 40130	2-1/2" x 2" x 2-1/2"	1.81	4.74	1.81	3.42	1	20714
PF 40129	2-1/2" x 2-1/2" x 1/2"	0.87	0.87	1.81	1.52	1	22303
PF 40128	2-1/2" x 2-1/2" x 3/4"	0.98	0.98	1.52	1.63	1	22298
PF 40127	2-1/2" x 2-1/2" x 1"	1.10	1.10	1.59	1.70	1	22293
PF 40126	2-1/2" x 2-1/2" x 1-1/4"	1.24	1.24	1.83	1.78	1	22288
PF 40125	2-1/2" x 2-1/2" x 1-1/2"	1.34	1.34	1.83	1.92	1	20803
PF 40124	2-1/2" x 2-1/2" x 2"	1.59	1.59	1.83	2.12	1	20688
PF 40179	3" x 3/4" x 3"	2.03	6.02	2.11	4.67	1	20719
PF 40178	3" x 1" x 3"	2.03	5.83	2.11	4.67	1	20724