



CARBON PRESS FITTINGS FOR GAS AND FUEL OIL APPLICATIONS

JOB NAME

CONTRACTOR

JOB LOCATION

WHOLESALE

ENGINEER

STREAMLINE® REP

PRODUCT DESCRIPTION:

Streamline® STL-G Carbon Steel Press Fittings for use in fuel gas systems, fuel oil systems, technical gases and other mechanical applications. Available sizes ranging from 1/2" to 2" in diameter. Product is designed for use in piping systems utilizing ASTM A53, Schedule 10 to Schedule 40 carbon steel pipe.

Streamline® STL-G mechanical press fittings are compatible with most common black iron pipe pressing tools (minimum hydraulic ram output of 7200lbs/ 32kN) and jaws.

15-Year Limited Warranty for approved fuel and gas applications (non-industrial and non-marine applications)

MATERIAL:

Streamline® STL-G components in a mechanical press carbon steel fitting are: carbon steel with corrosion-resistant zinc/nickel coating, HNBR engineered sealing element, and 420 stainless steel grip ring with a CuZn15 brass separator ring.

KEY SPECIFICATIONS:

Streamline® STL-G fittings shall conform to material requirements of ASTM A420 or ASME B16.3 and performance criteria ANSI/CSA LC4. Engineered sealing elements for press fittings shall be HNBR and factory installed. Product is rated for maximum operating pressure of 125 PSI for fuel gas applications and 200 PSI for mechanical applications.

INSTALLATION:

Streamline® STL-G 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.

LEAK DETECTION:

These fittings are inherently "leak detecting." Before pressing, fittings are loose on pipe, allowing for gas/air flow to help identify un-pressed connections.

APPROVALS & CERTIFICATES:

CSA: ANSI LC 4a/CSA 6.32a

IAPMO: ANSI LC 4a/CSA 6.32a

REFERENCES:

(UMC) Uniform Mechanical Code

(UPC) Uniform Plumbing Code

(IMC) International Mechanical Code

(IPC) International Plumbing Code

(IFGC) International Fuel Gas Code

NFPA 54 and 58

ASME B31: Code for Pressure Piping



APPROVED APPLICATIONS FOR 1/2" TO 2" STREAMLINE® STL-G:

Types of Service	Comments	Pressure	Temperature	Compatible with HNBR Seal
FUEL, OIL AND LUBRICANT				
Mineral Oil	—	200 PSI	Ambient	√
Lube Oil	Petroleum based	200 PSI	Up to 150°F	√
Propane	—	125 PSI	-40°F to 180°F	√
Butane	—	125 PSI	-40°F to 180°F	√
Natural Gas	—	125 PSI	-40°F to 180°F	√
Heating Fuel Oil	—	125 PSI	Up to 100°F	√
Diesel Fuel	—	125 PSI	Up to 100°F	√
NON-MEDICAL GASES				
Compressed Air	—	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	√
Hydrogen - H ₂	—	125 PSI	Up to 140°F	√
Vacuum	Maximum differential pressure	Max 29.2 inches of Mercury	Up to 160°F	√
Carbon Dioxide - CO ₂	Dry	200 PSI	Up to 140°F	√
Carbon Monoxide - CO	—	200 PSI	Up to 140°F	√
Argon- Ar	—	200 PSI	Up to 140°F	√
Acetylene	Test pressure 350 PSI	20 PSI	Ambient	√

STREAMLINE® STL-G RECOMMENDED PRESSURE TESTING:

The installation, inspection, testing and purging of the fuel gas system shall be in accordance with local codes or, in the absence of local codes, in accordance with the international fuel gas code, NFPA 54/ National fuel gas code 2223.1, the Uniform Plumbing Code, NFPA 58 or CSA B 149.1 as applicable.

SPECIFICATION LANGUAGE:

Press Fitting: Shall conform to material requirements of ASTM A420 or ASME B16.3 and performance criteria ANSI/CSA LC4. Engineered sealing elements for press fittings shall be HNBR. Engineered Sealing elements shall be factory installed.

- a. Operating pressure: 125 PSI Max for fuel gas applications,
200 PSI Max for other approved applications
- b. Temperature range: -40°F to 180°F
- c. HNBR Engineered sealing element, factory installed

-OR-

Mechanical pressed carbon steel fittings for fuel gas applications. Jointing piping similar to Mueller Industries Streamline® STL-G, Viega MegaPressG, or approved equal may be used.



TOOLS & INSTALLATION GUIDELINES

TOOL & JAW COMPATIBILITY*

1/2" — 3/4" ONLY

Rems Radial Press Compact w/ Compact Jaws
Ridgid RP Series Compact w/ Compact Jaws

1/2" — 1" ONLY

Milwaukee M12™ FORCELOGIC™ w/ Compact Jaws

1/2" — 2"

Milwaukee M18™ FORCE LOGIC™ Press Tool w/ Standard Jaws
Milwaukee M18™ FORCE LOGIC™ Long Throw Press Tool w/
Standard Jaws
Rems Radial Press Standard w/ Standard Jaws
Ridgid RP Series Standard w/ Standard Jaws

DISTANCE BETWEEN JOINTS PRESSING NEAR AN EXISTING PRESS CONNECTION

MINIMUM DISTANCE BETWEEN STREAMLINE® STL-G JOINTS		
PIPE DIAMETER	MINIMUM DISTANCE REQUIRED	
NOMINAL INCH	INCH	MM
1/2"	1/4"	6
3/4"	1/4"	6
1"	1/4"	6
1-1/4"	1/2"	13
1-1/2"	1/2"	13
2"	1/2"	13

EQUIVALENT LENGTH VALUE IN FEET OF PIPE

PRESSURE LOSS EXPRESSED AS EQUIVALENT LENGTH (IN FEET OF PIPE)		
TYPE	NOMINAL DIAMETER	EQUIVALENT LENGTH (FT)
Coupling	1"	1
Coupling	1-1/4"	.4
Coupling	1-1/2"	.5
Coupling	2"	.3
Tee (Branch)	1"	4.9
Tee (Branch)	1-1/4"	5.1
Tee (Branch)	1-1/2"	5.6
Tee (Branch)	2"	8.2

WELDING NEAR AN EXISTING PRESS CONNECTION

All welds in the system are to be completed before any press connections are made.

THREADED FITTINGS NEAR PRESS CONNECTIONS

Threaded connections need to be tightened prior to pressing in line fittings.

UNDERGROUND BURIAL

Streamline® STL-G fittings are approved for underground installation in accordance with the latest applicable building codes for the state and local jurisdiction. In addition, underground joints should be wrapped in 3M™ Scotchrap™ Tape 50, Shurtape® PW100 or a comparable impermeable coating system designed to protect joints from moisture, debris, corrosion and other soil stresses.

VERTICAL RUNS

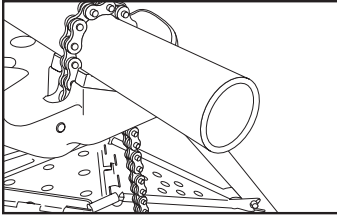
Streamline® STL-G Carbon Steel Press Fittings can be run in a vertical orientation for indoor or outdoor applications. If the system is in an outdoor location prone to regular freezing cycles then it is suggested, after completion of system testing, to wrap the upward-facing cups with a high UV pipe tape such as those listed in the underground burial section. Proper support is up to the designer and installer and must be per local code.

PAINTING

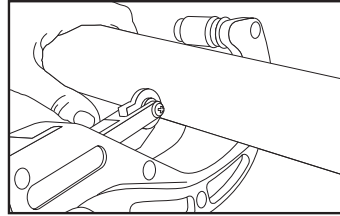
Streamline® STL-G fittings have a factory-applied corrosion-resistant coating but may be painted if desired for color identification

SEAL LUBRICATION

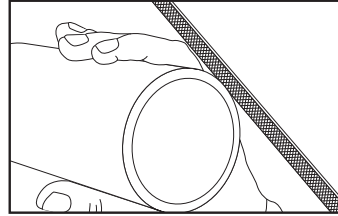
If additional seal lubrication is required, silicon or nonpetroleum based lubricants are recommended.



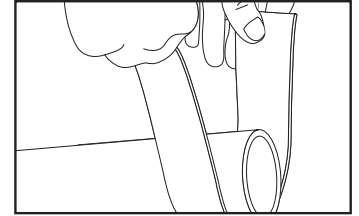
1 Keep vise a minimum of 4" from cutting area to avoid damage to pipe.



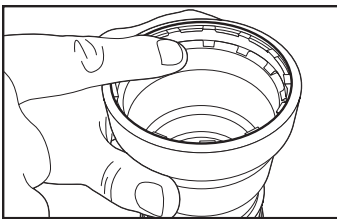
2 Cut pipe square using a displacement-type cutter or fine-toothed saw.



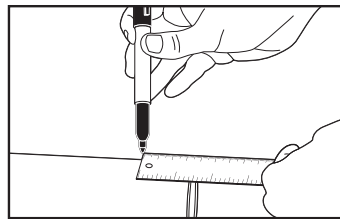
3 Deburr pipe ID and OD using half round file or deburr tool.



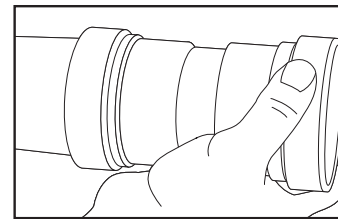
4 Sand pipe OD to proper insertion depth. Pipe surface must be smooth and free of rust, indentation, deformation, and pipe coating.



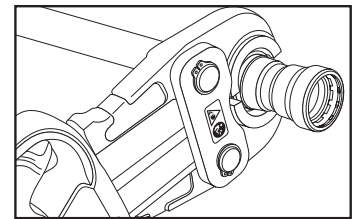
5 Check fitting ends to ensure seal, grip ring, and spacer are present.



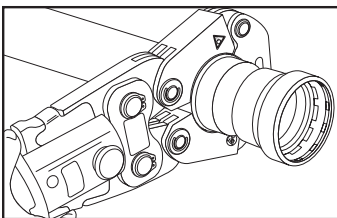
6 Mark pipe to proper fitting insertion depth (see insertion depth chart).



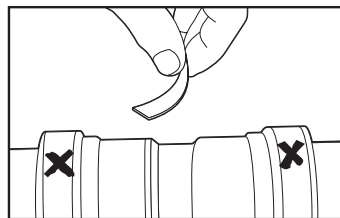
7 Turn slightly while sliding press fitting onto pipe. Slide all the way to insertion mark & make contact with stop.



8a For 1/2" to 1" fittings, place press jaw at a right angle over press fitting bead. Start the pressing process. See specific tool manufacturer for tool instruction.



8b For 1-1/4" - 2" fittings, place press-ring at a right angle over fitting bead and check for proper engagement. Start the pressing process. See specific tool manufacturer for tool instruction.



9 Remove sticker once crimping process is complete to verify the connection has been made. Pressed joint may also be marked with an "X" for additional confirmation.

Insertion Depth Chart (1/2" - 2")

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

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.

WARNING

The installation, inspection, testing, and purging of the fuel gas system shall be in accordance with local codes, or, in the absence of local codes, in accordance with the National Fuel Gas Code, Z223.1/NFPA 54, or the Uniform Plumbing Code, as applicable.

CAUTION:

- (a) The fittings are for use with fuel gases and are intended for the operating pressure 0-125psi.
- (b) The fuel gas system shall not be used as a grounding electrode for an electrical system.

COUPLING • STAKED STOP • SMALL
P x P



Item No.	Diameter	X	Wgt.	Inner	Viega No.
CP10145G	1/2"	0.52	0.22	5	25001
CP10146G	3/4"	0.54	0.30	5	22009
CP10147G	1"	0.59	0.45	5	25011
CP10148G	1-1/4"	0.62	0.75	1	25016
CP10149G	1-1/2"	0.67	0.87	1	25021
CP10150G	2"	0.84	1.06	1	25026

COUPLING • REDUCING • SMALL
P x P



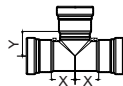
Item No.	Diameter	X	Wgt.	Inner	Viega No.
CP01036G	3/4" x 1/2"	0.31	0.25	5	25931
CP01051G	1" x 1/2"	0.43	0.33	5	25936
CP01049G	1" x 3/4"	0.30	0.35	5	25941
CP01058G	1-1/4" x 3/4"	0.47	0.53	1	25946
CP01056G	1-1/4" x 1"	0.34	0.57	1	25951
CP01064G	1-1/2" x 1-1/4"	0.28	0.77	1	25956
CP01074G	2" x 1-1/4"	0.52	0.89	1	25961
CP01073G	2" x 1-1/2"	0.40	0.90	1	25966

FITTING REDUCER • SMALL
FTG x P



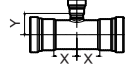
Item No.	Diameter	X	Wgt.	Inner	Viega No.
CP01326G	3/4" x 1/2"	0.12	0.21	5	26001
CP01339G	1" x 1/2"	0.25	0.28	5	26006
CP01337G	1" x 3/4"	0.11	0.30	5	26011
CP01343G	1-1/4" x 1"	0.22	0.49	1	26016
CP01353G	1-1/2" x 3/4"	0.44	0.51	1	26021
CP01351G	1-1/2" x 1"	0.32	0.73	1	26031
CP01350G	1-1/2" x 1-1/4"	0.10	0.88	1	26026
CP01360G	2" x 1"	0.56	0.69	1	26036
CP01359G	2" x 1-1/4"	0.39	0.80	1	26041
CP01358G	2" x 1-1/2"	0.28	0.83	1	26046

TEE • SMALL
P x P x P



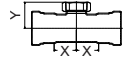
Item No.	Diameter	X	Y	Wgt.	Inner	Viega No.
CP04006G	1/2"	0.93	0.87	0.40	5	25301
CP04031G	3/4"	1.06	0.98	0.58	5	25306
CP04048G	1"	1.22	1.18	0.80	5	25311
CP04068G	1-1/4"	1.40	1.39	1.34	1	25316
CP04084G	1-1/2"	1.53	1.54	1.57	1	25321
CP40102G	2"	1.80	1.87	2.00	1	25326

TEE • REDUCING • SMALL
P x P x P



Item No.	Diameter	X	Y	Wgt.	Inner	Viega No.
CP04033G	3/4" x 3/4" x 1/2"	1.06	0.99	0.53	5	25331
CP04051G	1" x 1" x 1/2"	1.22	1.13	0.74	5	25336
CP04049G	1" x 1" x 3/4"	1.22	1.12	0.80	5	25341
CP04071G	1-1/4" x 1-1/4" x 1/2"	1.40	1.30	1.14	1	25491
CP04070G	1-1/4" x 1-1/4" x 3/4"	1.40	1.30	1.19	1	25496
CP04069G	1-1/4" x 1-1/4" x 1"	1.40	1.36	1.26	1	25351
CP04088G	1-1/2" x 1-1/2" x 1/2"	1.53	1.44	1.24	1	25361
CP04087G	1-1/2" x 1-1/2" x 3/4"	1.53	1.43	1.27	1	25366
CP04086G	1-1/2" x 1-1/2" x 1"	1.53	1.50	1.36	1	25371
CP04085G	1-1/2" x 1-1/2" x 1-1/4"	1.53	1.53	1.51	1	25376
Coming Soon!	2" x 2" x 1/2"	1.80	1.68	1.61	1	25381
Coming Soon!	2" x 2" x 3/4"	1.80	1.67	1.66	1	25386
Coming Soon!	2" x 2" x 1"	1.80	1.73	1.71	1	25391
Coming Soon!	2" x 2" x 1-1/4"	1.80	1.77	1.83	1	25396
Coming Soon!	2" x 2" x 1-1/2"	1.80	1.79	1.90	1	25401

TEE • FEMALE • SMALL
P x P x FPT



Item No.	Diameter	X	Y	Wgt.	Inner	Viega No.
CP01539G	3/4" x 3/4" x 1/2"	1.06	1.38	0.47	5	25406
CP01538G	3/4" x 3/4" x 3/4"	1.06	1.40	0.54	5	25481
CP01570G	1" x 1" x 1/2"	1.22	1.54	0.69	5	25411
CP01572G	1" x 1" x 3/4"	1.22	1.54	0.76	5	25416
CP01613G	1-1/4" x 1-1/4" x 1/2"	1.40	1.71	1.07	1	25486
CP02654G	1-1/4" x 1-1/4" x 3/4"	1.40	1.71	1.13	1	25506
CP02655G	1-1/4" x 1-1/4" x 1"	1.40	1.87	1.20	1	25501
CP01645G	1-1/2" x 1-1/2" x 1/2"	1.53	1.83	1.23	1	25436
CP02673G	1-1/2" x 1-1/2" x 3/4"	1.53	1.83	1.34	1	25441
CP02688G	1-1/2" x 1-1/2" x 1"	1.53	1.99	1.39	1	25446
CP02691G	1-1/2" x 1-1/2" x 1-1/4"	1.53	1.99	1.50	1	25451
CP01699G	2" x 2" x 1/2"	1.80	2.01	1.55	1	25456
CP02706G	2" x 2" x 3/4"	1.80	2.01	1.61	1	25461
CP02703G	2" x 2" x 1"	1.80	2.20	1.66	1	25466
CP02704G	2" x 2" x 1-1/4"	1.80	2.26	1.71	1	25471
CP02704G	2" x 2" x 1-1/2"	1.80	2.20	1.73	1	25476

UNION • SMALL
P x P



Item No.	Diameter	A	L	Wgt.	Inner	Viega No.
CP08003G	1/2"	0.85	3.04	0.42	5	25701
CP08004G	3/4"	0.85	3.23	0.61	5	25706
CP08005G	1"	0.83	3.51	1.01	5	25711
CP11205G	1-1/4"	0.99	4.61	1.49	1	25716
CP11206G	1-1/2"	1.10	4.93	1.83	1	25721
CP11207G	2"	0.83	4.77	2.54	1	25726

UNION • FEMALE • SMALL
P x FPT



Item No.	Diameter	A	L	Wgt.	Inner	Viega No.
CP11422G	1/2"	0.78	2.40	0.37	5	25651
CP11423G	3/4"	0.69	2.48	0.54	5	25656
CP11424G	1"	0.80	2.80	0.88	5	25661
CP11425G	1-1/4"	0.78	3.27	1.26	1	25666
CP11426G	1-1/2"	0.99	3.58	1.64	1	25671
CP11427G	2"	0.85	3.50	2.15	1	25676