

TEST REPORT



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5001 East Philadelphia Street • Ontario, California 91761-2816 - USA

Report Number: 1698-12001 **Project No.:** 20329

Report Issued: June 26, 2012

Client: Chicago Fitting Company
756 Landmark Drive
Belvidere, IL 61003 **Contact:** Joseph Tarquini

Source of Samples: The samples were sent by Chicago Fitting Company, and received by IAPMO R&T Lab in good condition on April 16, 2012.

Date of Testing: May 01, 2012 through June 26, 2012

Sample Description: Gas fittings (Category 1 mechanical fittings).
Refer to attached model list.

Scope of Testing: The purpose of the testing was to determine if the samples tested of the gas fittings met applicable requirements of ASTM F1948-2012, entitled, "Standard Specification for Metallic Mechanical Fittings for Use on Outside Diameter Controlled Thermoplastic Gas Distribution Pipe and Tubing".

Conclusion: the samples tested of the gas fittings, models listed on the attached pages, from Chicago Fitting Corporation, COMPLIED with the applicable requirements of ASTM F1948-2012.

By our signatures below, we certify that all the testing and sample preparation for this report was performed under continuous, direct supervision of IAPMO R&T Lab unless otherwise stated.

Tested by,

Reviewed by,

Handwritten signature of Hanks Ninh in black ink.

Handwritten signature of Sean Vuu in black ink.

Hanks Ninh, Project Engineer

Sean Vuu, P.E., Manager, Specialty Projects

Primary Standard: ASTM F1948-2012, clauses tested / evaluated:

4. Material
5. Dimensions
6. Qualification Requirements
7. Test Methods
8. Product Instructions
9. Product Marking

Clauses of ASTM F1948-2012 not specifically listed above were considered not applicable to subject product.

Test Results: All tests and evaluations were conducted per the written procedures specified in the standard.

ASTM F1948-2012:

4. Material - FOLLOWED

4.1 The physical properties of each material used to produce the fitting shall be available from the fitting manufacturer upon request.

4.2 Specifications outlining the physical and chemical properties of all fitting materials shall be available from the fitting manufacturer upon request.

5. Dimensions - FOLLOWED

5.1 The dimensions and tolerances shall be determined by the manufacturer.

6. Qualification Requirements

6.1 General – FOLLOWED

Unless otherwise specified, each nominal size of fitting shall be tested. Testing the fitting with the thickest wall pipe for which the fitting is designed qualifies that type of fitting for use with pipe of lesser wall thickness.

6.1.1 Mechanical joint qualification shall be performed on assembled joints using the fitting manufacturer's joining procedure. All mechanical fittings offered by the manufacturer shall be capable of meeting the requirements of this standard when connecting thermoplastic piping materials complying with Specification D2513. It is not the intent of this standard to require the testing of all fitting configurations (that is, tee, ells, etc.) but each joint design in each size.

6.1.2 All mechanical fittings described in 3.3 shall have an internal pipe reinforcing tubular stiffener that extends at least under the seal and gripping device (where used).

6.2 Performance Requirements:

6.2.1 Tensile Strength – COMPLIED

The pipe joint accommodated the tensile loads, when tested in accordance with 7.2.

6.2.1.1 Category 1— The joint provided resistance to a force on the pipe joint equal to or greater than that which would cause no less than 25 % elongation of the pipe, or which causes the pipe to fail outside the joint area when tested in accordance with 7.2.

Finding: elongation at failure occurred: 62.8% (1/2" fittings) and 56.5% (2" fittings).

6.2.2 Temperature Cycling Test – COMPLIED

The mechanical joints provided a pressure seal after 10 cycles of the temperature cycling test (-20°F and 140°F) when tested in accordance with 7.3.

6.2.3 Constant Tensile Load Test – COMPLIED

The joint did not fail by leakage or pullout when loaded to an axial tensile stress of 1320 psi (9101 kPa) and tested in accordance with 7.4 for 1000 hours.

6.3 Elevated Temperature Sustained Pressure – COMPLIED

The fitting, joint or pipe in the area affected by the fitting did not fail as defined in Test Method D1598, when tested in accordance with 7.5. The fitting or joint met this requirement when tested in accordance with condition C listed in 7.5.

7. Test Methods – FOLLOWED

7.1 General - The test methods in this specification cover mechanical joint designs. Test methods that are applicable from other specifications are referenced in the paragraph pertaining to that particular test.

7.1.1 Conditioning - Unless otherwise specified, condition the specimens (pipe and fittings) prior to joining at $73.4 \pm 3.6^\circ\text{F}$ ($23 \pm 2^\circ\text{C}$) for not less than 16 h.

7.1.2 Test Conditions - Conduct the testing at the standard laboratory temperature of $73.4 \pm 3.6^\circ\text{F}$ ($23 \pm 2^\circ\text{C}$) unless otherwise specified.

7.1.3 Test Specimens - Test joints shall be prepared with the appropriate size thermoplastic pipe, complying with the dimensional requirements of Specification D2513, in accordance with the manufacturer's joining procedures.

7.1.4 Precautions and Safety Considerations - It is strongly recommended that liquid be used as the pressurizing fluid when testing systems that may fail in a brittle manner (specifically PVC systems). If that is not possible, the test specimens must be placed in a strong chamber at all times when pressurized. Also, fittings as specified in 6.2.1.2 should be restrained to prevent pull-out during testing.

7.2 Tensile Strength Test:

7.2.1 The test pipes, for sizes below NPS 4, shall be prepared so that the minimum length of unreinforced pipe from a joint being tested is equal to five times the nominal outside diameter of the pipe being tested. It is permissible to test multiple joints together, provided that the minimum length of unreinforced pipe (as stated above) exists on at least one joint.

7.2.2 The apparatus and report shall be as specified in Test Method D638. Test six joints.

7.2.3 The test shall be conducted at $73.4^\circ\text{F} \pm 3.6^\circ\text{F}$ ($23^\circ\text{C} \pm 2^\circ\text{C}$).

7.2.4 The speed of the testing shall be 0.2 in. (5 mm)/min. $\pm 25\%$.

7.2.5 Failure of any sample shall constitute failure of the test.

7.3 Temperature Cycling Test:

7.3.1 The test shall be conducted on six of the smallest and six of the largest nominal pipe sizes of each mechanical joint design and assembled as outlined in 6.1.1.

7.3.2 Leak test specimens at ambient temperature at 7 ± 3 psig (48.3 ± 20.7 kPa) and a minimum of 1.5 X MAOP.

7.3.3 Cool specimens to a temperature of $-20^{\circ}\text{F} \pm 3.6^{\circ}\text{F}$ ($-29^{\circ}\text{C} \pm 2^{\circ}\text{C}$) and maintain for a minimum of 2.5 h.

7.3.4 Condition specimens to a temperature of $140^{\circ}\text{F} \pm 3.6^{\circ}\text{F}$ ($60^{\circ}\text{C} \pm 2^{\circ}\text{C}$) and maintain for a minimum of 2.5 h.

7.3.5 Repeat 7.3.3 and 7.3.4 for a total of 10 cycles.

7.3.6 Pressurize 50 % of the specimens of each size at 7 ± 3 psig (48.3 ± 20.7 kPa) and the remaining 50 % of each size at 1.5 X MAOP of the piping material and SDR for which the fittings are designed to be used. Leak test first at $140 \pm 3.6^{\circ}\text{F}$ ($60 \pm 2^{\circ}\text{C}$) and then at $-20 \pm 3.6^{\circ}\text{F}$ ($-29 \pm 2^{\circ}\text{C}$).

7.4 Constant Tensile Load Joint Test:

7.4.1 One specimen of each nominal pipe size shall be tested in accordance with Test Method F1588 for a minimum of 1000 h at an internal pressure between 4 psig (27.6 kPa) and the pipe MAOP.

7.4.2 Failure of the specimen shall constitute failure of the test.

7.5 Elevated Temperature Sustained Pressure Test:

7.5.1 The test shall be conducted on six of the smallest and six of the largest nominal pipe sizes of each mechanical joint design and assembled as outlined in 6.1.1.

7.5.2 The apparatus and report shall be as specified in Test Method D1598.

7.5.3 The assembled joints shall be tested in accordance with Test Method D1598 with the exception that it is not required that 12 in. or five times the nominal outside diameter of the pipe used in conducting the test be placed on each side of the fitting tested. The test shall be conducted at one of the time/temperature/hoop stress combinations shown in Table 1 with the test pressure calculated using the following equation:

$$P = \frac{2S}{DR - 1}$$

Where:

P = test pressure (psig)

S = hoop stress

DR = Dimension Ratio (OD/wall)

If ductile failure occurs in the pipe at 176°F (80°C)/670 psi (4620 kPa) hoop stress, retest at 176°F (80°C)/580 psi (3999 kPa) hoop stress.

7.5.4 Failure of any two of the six specimens tested shall constitute failure of the test. Failure of one of the six specimens tested is cause for re-test of six additional specimens. Failure of one of the six specimens in re-test shall constitute failure of the test. Evidence of failure of the pipe shall be defined in Test Method D1598.

8. Product Instructions - FOLLOWED

8.1 Qualified installation instructions shall be available from the manufacturer and supplied with the fitting.

9. Product Marking – COMPLIED (per drawings).

9.1 Fittings were marked with the following:

9.1.1 ASTM F1948,

9.1.2 Date and lot code identification,

9.1.3 Manufacturer’s name or trademark “CF”,

9.1.4 Size, followed by “IPS” or “CTS” designation, SDR or wall thickness range,

9.1.5 The word “gas”

9.1.6 “Category 1”.

9.2 All required markings were legible and so applied as to remain legible under normal handling and installation practices.

9.3 Fittings intended for transport of natural gas and meeting the requirements of this specification shall be marked with the 16-character gas distribution component tracking and traceability identifier in accordance with Specification F2897. The 16-character code shall be expressed in alpha-numeric format and Code 128 bar code format with a minimum bar thickness value of 0.005 in. or an alternative **1D** or **2D** bar code symbology as agreed upon between manufacturer and end user. All fittings shall have the 16-character codes marked or affixed to the product, product packaging, or any manner agreed upon between manufacturer and end user.

Photograph of Samples



85C1-090

PART NO.
(P)



50

QUANTITY
(Q)



85C1-090

DATE: MONTH/DAY/ YEAR ***6/22/2012***



SERIAL
(S)

LOCATION

SUPPLIER #
LOT. NO. **XXXXX**

DEPT.

PO. NO.
(K)

XXXXX



SHIP TO: XYZ CORPORATION
123 MAIN STREET

CHICAGO FITTINGS, BELVIDERE, IL 61008

ANY WHERE CA 90210



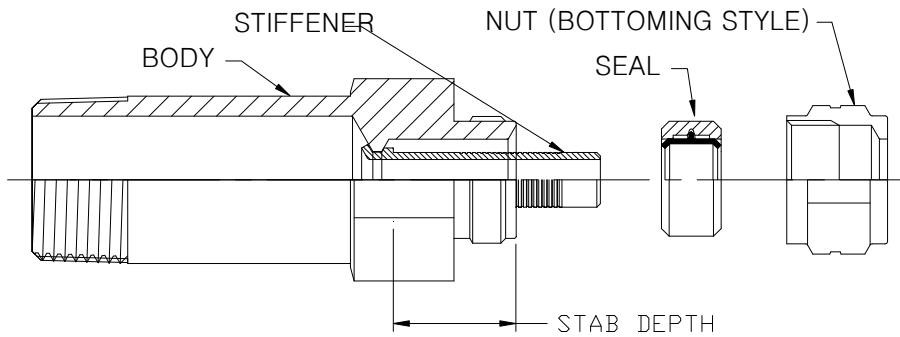
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

557 Series Male Adapters (20 Models)

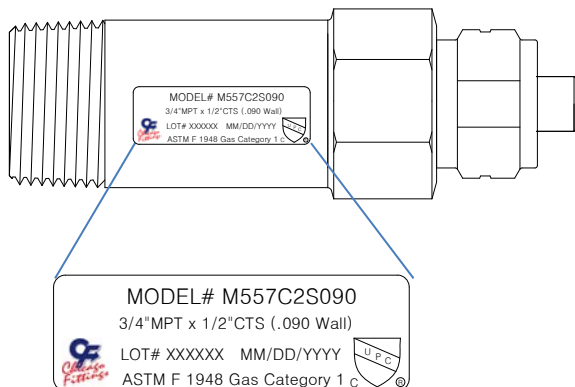
PART #	TUBE SIZE	WALL	IPS SIZE (Thread End)
M557C2S062	1/2" CTS	0.062"	3/4"
M557C2S090	1/2" CTS	0.090"	3/4"
M557C3S062	1/2" CTS	0.062"	1"
M557C3S090	1/2" CTS	0.090"	1"
M557C12S090	1/2" IPS	0.090"	3/4"
M557C23S090	3/4" CTS	0.090"	1"
M557C32S095	3/4" IPS	0.095"	3/4"
M557C33S095	3/4" IPS	0.095"	1"
M557C43S090	1" CTS	0.090"	1"
M557C43S100	1" CTS	0.100"	1"
M557C44S090	1" CTS	0.090"	1 1/4"
M557C44S100	1" CTS	0.100"	1 1/4"
M557C45S090	1" CTS	0.090"	1 1/2"
M557C45S100	1" CTS	0.100"	1 1/2"
M557C64S090	1 1/4" CTS	0.090"	1 1/4"
M557C64S121	1 1/4" CTS	0.121"	1 1/4"
M557C65S090	1 1/4" CTS	0.090"	1 1/2"
M557C65S121	1 1/4" CTS	0.121"	1 1/2"
M557C66S090	1 1/4" CTS	0.090"	2"
M557C66S121	1 1/4" CTS	0.121"	2"



STAB DEPTH/STIFFENER CHART

TUBE SIZE	STAB DEPTH	WALL	COLOR
1/2" CTS	1"	0.062"	GOLD
		0.090"	STEEL
3/4" CTS	1"	0.080"	GOLD
		0.090"	STEEL
1" CTS	1"	0.090"	STEEL
		0.100"	GOLD
1 1/4" CTS	1"	0.090"	STEEL
		0.121"	BLACK
1/2" IPS	1"	0.090"	STEEL
3/4" IPS	1"	0.095"	STEEL
1" IPS	3/4"	0.119"	STEEL
1 1/4" IPS	1 1/4"	0.151"	STEEL
		0.166"	BLACK
1 1/2" IPS	1 1/4"	0.173"	STEEL
2" IPS	1 1/4"	0.216"	STEEL

NOTE: .100" IS USED FOR .098"-.102" WALL THICKNESSES





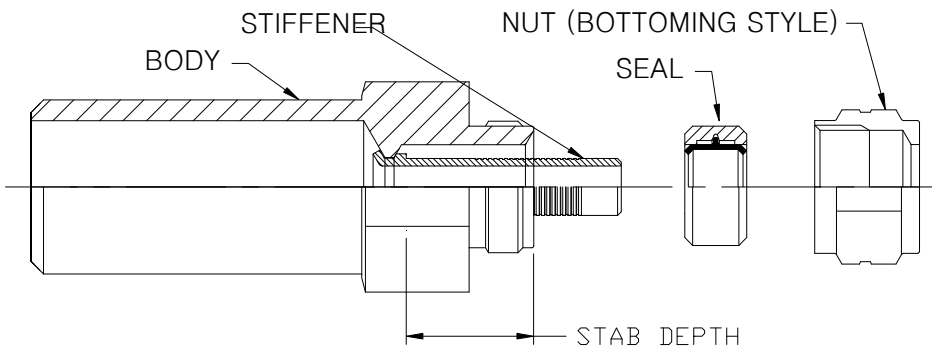
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

575 Series Male Adapters (22 Models)

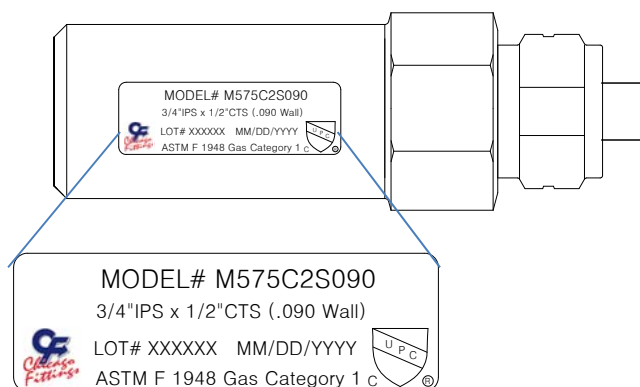
PART #	TUBE SIZE	WALL	IPS SIZE (Thread End)
M575C2S062	1/2" CTS	0.062"	3/4"
M575C2S090	1/2" CTS	0.090"	3/4"
M575C3S062	1/2" CTS	0.062"	1"
M575C3S090	1/2" CTS	0.090"	1"
M575C12S090	1/2" IPS	0.090"	3/4"
M575C23S090	3/4" CTS	0.090"	1"
M575C32S095	3/4" IPS	0.095"	3/4"
M575C33S095	3/4" IPS	0.095"	1"
M575C42S090	1" CTS	0.090"	3/4"
M575C42S100	1" CTS	0.100"	3/4"
M575C43S090	1" CTS	0.090"	1"
M575C43S100	1" CTS	0.100"	1"
M575C44S090	1" CTS	0.090"	1 1/4"
M575C44S100	1" CTS	0.100"	1 1/4"
M575C45S090	1" CTS	0.090"	1 1/2"
M575C45S100	1" CTS	0.100"	1 1/2"
M575C64S090	1 1/4" CTS	0.090"	1 1/4"
M575C64S121	1 1/4" CTS	0.121"	1 1/4"
M575C65S090	1 1/4" CTS	0.090"	1 1/2"
M575C65S121	1 1/4" CTS	0.121"	1 1/2"
M575C66S090	1 1/4" CTS	0.090"	2"
M575C66S121	1 1/4" CTS	0.121"	2"



STAB DEPTH/STIFFENER CHART

TUBE SIZE	STAB DEPTH	WALL	COLOR
1/2" CTS	1"	0.062"	GOLD
		0.090"	STEEL
3/4" CTS	1"	0.080"	GOLD
		0.090"	STEEL
1" CTS	1"	0.090"	STEEL
		0.100"	GOLD
1 1/4" CTS	1"	0.090"	STEEL
		0.121"	BLACK
1/2" IPS	1"	0.090"	STEEL
3/4" IPS	1"	0.095"	STEEL
1" IPS	3/4"	0.119"	STEEL
1 1/4" IPS	1 1/4"	0.151"	STEEL
		0.166"	BLACK
1 1/2" IPS	1 1/4"	0.173"	STEEL
		0.216"	STEEL

NOTE: .100" IS USED FOR .098"- .102" WALL THICKNESSES





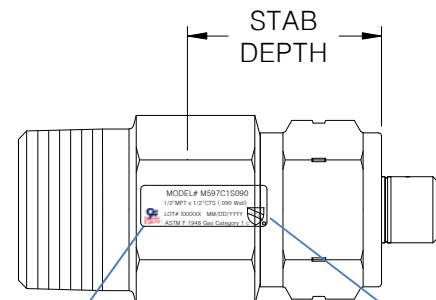
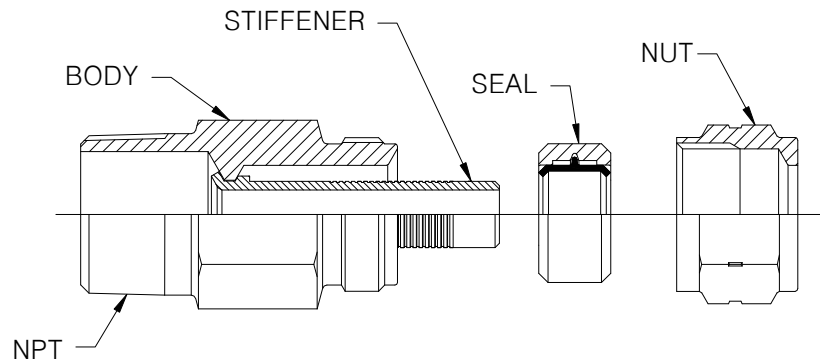
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

597 Series Male Adapters (42 Models)

PART #	TUBE SIZE	WALL	MPT
M597C1S062	1/2" CTS	0.062"	1/2"
M597C1S090	1/2" CTS	0.090"	1/2"
M597C2S062	1/2" CTS	0.062"	3/4"
M597C2S090	1/2" CTS	0.090"	3/4"
M597C3S062	1/2" CTS	0.062"	1"
M597C3S090	1/2" CTS	0.090"	1"
M597C11S090	1/2" IPS	0.090"	1/2"
M597C12S090	1/2" IPS	0.090"	3/4"
M597C13S090	1/2" IPS	0.090"	1"
M597C22S090	3/4" CTS	0.090"	3/4"
M597C23S090	3/4" CTS	0.090"	1"
M597C32S095	3/4" IPS	0.095"	3/4"
M597C33S095	3/4" IPS	0.095"	1"
M597C42S090	1" CTS	0.090"	3/4"
M597C42S100	1" CTS	0.100"	3/4"
M597C43S090	1" CTS	0.090"	1"
M597C43S100	1" CTS	0.100"	1"
M597C44S090	1" CTS	0.090"	1 1/4"
M597C44S100	1" CTS	0.100"	1 1/4"
M597C45S090	1" CTS	0.090"	1 1/2"
M597C45S100	1" CTS	0.100"	1 1/2"
M597C52S119	1" IPS	0.119"	3/4"
M597C53S119	1" IPS	0.119"	1"
M597C54S119	1" IPS	0.119"	1 1/4"
M597C55S119	1" IPS	0.119"	1 1/2"
M597C64S090	1 1/4" CTS	0.090"	1 1/4"
M597C64S121	1 1/4" CTS	0.121"	1 1/4"
M597C65S090	1 1/4" CTS	0.090"	1 1/2"
M597C65S121	1 1/4" CTS	0.121"	1 1/2"
M597C66S090	1 1/4" CTS	0.090"	2"
M597C66S121	1 1/4" CTS	0.121"	2"
M597C73S151	1 1/4" IPS	0.151"	1"
M597C73S166	1 1/4" IPS	0.166"	1"
M597C74S151	1 1/4" IPS	0.151"	1 1/4"
M597C74S166	1 1/4" IPS	0.166"	1 1/4"
M597C75S151	1 1/4" IPS	0.151"	1 1/2"
M597C75S166	1 1/4" IPS	0.166"	1 1/2"
M597C81S173	1 1/2" IPS	0.173"	1 1/4"
M597C82S173	1 1/2" IPS	0.173"	1 1/2"
M597C83S173	1 1/2" IPS	0.173"	2"
M597C95S216	2" IPS	0.216"	1 1/2"
M597C96S216	2" IPS	0.216"	2"



MODEL# M597C1S090
1/2"MPT x 1/2"CTS (.090 Wall)
LOT# XXXXXX MM/DD/YYYY U.F.C.
ASTM F 1948 Gas Category 1 c



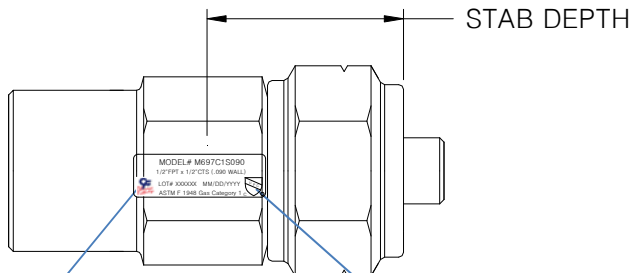
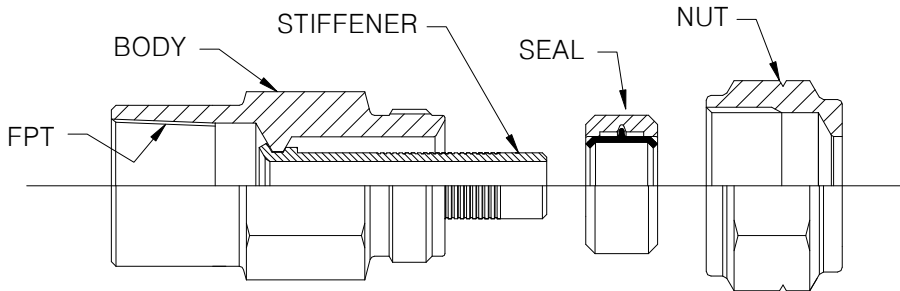
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

697 Series Female Adapters (15 Models)

PART #	TUBE SIZE	WALL	FPT
M697C1S062	1/2" CTS	0.062"	1/2"
M697C1S090	1/2" CTS	0.090"	1/2"
M697C2S062	1/2" CTS	0.062"	3/4"
M697C2S090	1/2" CTS	0.090"	3/4"
M697C3S062	1/2" CTS	0.062"	1"
M697C3S090	1/2" CTS	0.090"	1"
M697C32S095	3/4" IPS	0.095"	3/4"
M697C42S090	1" CTS	0.090"	3/4"
M697C42S100	1" CTS	0.100"	3/4"
M697C43S090	1" CTS	0.090"	1"
M697C43S100	1" CTS	0.100"	1"
M697C74S151	1 1/4" IPS	0.151"	1 1/4"
M697C74S166	1 1/4" IPS	0.166"	1 1/4"
M697C76S151	1 1/4" IPS	0.151"	2"
M697C76S166	1 1/4" IPS	0.166"	2"



MODEL# M697C1S090
1/2" FPT x 1/2" CTS (.090 WALL)
LOT# XXXXXX MM/DD/YYYY
ASTM F 1948 Gas Category 1 c

STAB DEPTH/STIFFENER CHART

TUBE SIZE	STAB DEPTH	WALL	COLOR
1/2" CTS	1 3/8"	0.062"	GOLD
		0.090"	STEEL
3/4" CTS	1 1/2"	0.080"	GOLD
		0.090"	STEEL
1" CTS	1 5/8"	0.090"	STEEL
		0.100"	GOLD
1 1/4" CTS	1 1/2"	0.090"	STEEL
		0.121"	BLACK
1/2" IPS	1 3/8"	0.090"	STEEL
3/4" IPS	1 1/2"	0.095"	STEEL
1" IPS	1 1/4"	0.119"	STEEL
		0.151"	STEEL
1 1/4" IPS	1 7/8"	0.151"	STEEL
		0.166"	BLACK
1 1/2" IPS	2"	0.173"	STEEL
2" IPS	2 1/8"	0.216"	STEEL

NOTE: .100" IS USED FOR .098"-.102" WALL THICKNESSES



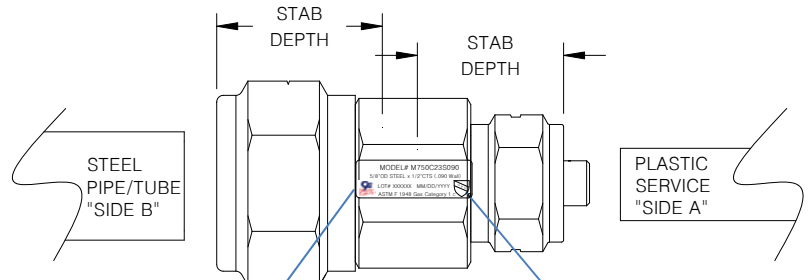
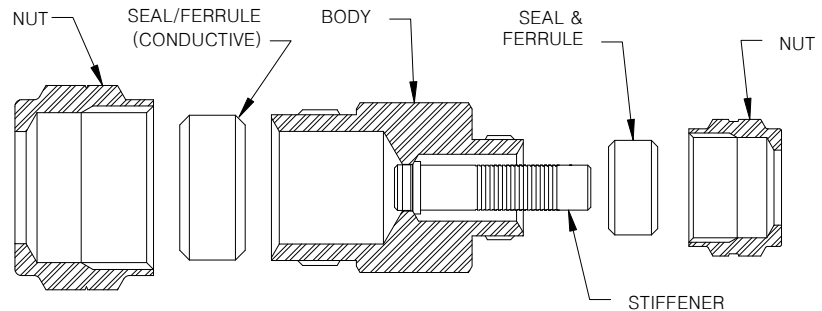
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

PART #	STEEL SIZE (Side A)	TUBE SIZE (Side B)	WALL
M750DC23S062	5/8" OD	1/2" CTS	0.062"
M750DC23S090	5/8" OD	1/2" CTS	0.090"
M750DC33S062	1/2" IPS	1/2" CTS	0.062"
M750DC33S090	1/2" IPS	1/2" CTS	0.090"
M750DC53S062	3/4" IPS	1/2" CTS	0.062"
M750DC53S090	3/4" IPS	1/2" CTS	0.090"
M750DC55S077	3/4" IPS	3/4" CTS	0.077"
M750DC55S090	3/4" IPS	3/4" CTS	0.090"
M750DC57S090	3/4" IPS	1" CTS	0.090"
M750DC57S100	3/4" IPS	1" CTS	0.100"
M750DC73S062	1" IPS	1/2" CTS	0.062"
M750DC73S090	1" IPS	1/2" CTS	0.090"
M750DC74S090	1" IPS	1/2" IPS	0.090"
M750DC75S077	1" IPS	3/4" CTS	0.077"
M750DC75S090	1" IPS	3/4" CTS	0.090"
M750DC76S095	1" IPS	3/4" IPS	0.095"
M750DC77S090	1" IPS	1" CTS	0.090"
M750DC77S100	1" IPS	1" CTS	0.100"
M750DC78S119	1" IPS	1" IPS	0.119"
M750DC93S062	1 1/4" IPS	1/2" CTS	0.062"
M750DC93S090	1 1/4" IPS	1/2" CTS	0.090"
M750DC94S090	1 1/4" IPS	1/2" IPS	0.090"
M750DC95S077	1 1/4" IPS	3/4" CTS	0.077"
M750DC95S090	1 1/4" IPS	3/4" CTS	0.090"
M750DC96S095	1 1/4" IPS	3/4" IPS	0.095"
M750DC97S090	1 1/4" IPS	1" CTS	0.090"
M750DC97S100	1 1/4" IPS	1" CTS	0.100"
M750DC98S090	1 1/4" IPS	1 1/4" CTS	0.090"
M750DC98S121	1 1/4" IPS	1 1/4" CTS	0.121"
M750DC99S151	1 1/4" IPS	1 1/4" IPS	0.151"
M750DC99S166	1 1/4" IPS	1 1/4" IPS	0.166"
M750DC106S095	1 1/2" IPS	3/4" IPS	0.095"
M750DC107S090	1 1/2" IPS	1" CTS	0.090"
M750DC107S100	1 1/2" IPS	1" CTS	0.100"
M750DC108S090	1 1/2" IPS	1 1/4" CTS	0.090"
M750DC108S121	1 1/2" IPS	1 1/4" CTS	0.121"
M750DC109S151	1 1/2" IPS	1 1/4" IPS	0.151"
M750DC109S166	1 1/2" IPS	1 1/4" IPS	0.166"
M750DC110S173	1 1/2" IPS	1 1/2" IPS	0.173"
M750DC116S095	2" IPS	3/4" IPS	0.095"
M750DC117S090	2" IPS	1" CTS	0.090"
M750DC117S100	2" IPS	1" CTS	0.100"
M750DC118S090	2" IPS	1 1/4" CTS	0.090"
M750DC118S121	2" IPS	1 1/4" CTS	0.121"
M750DC119S151	2" IPS	1 1/4" IPS	0.151"
M750DC119S166	2" IPS	1 1/4" IPS	0.166"
M750DC120S173	2" IPS	1 1/2" IPS	0.173"
M750DC121S216	2" IPS	2" IPS	0.216"

750 Series Couplings (48 Models)



MODEL# M750C23S090
5/8"OD STEEL x 1/2"CTS (.090 Wall)
LOT# XXXXXX MM/DD/YYYY
ASTM F 1948 Gas Category 1 c





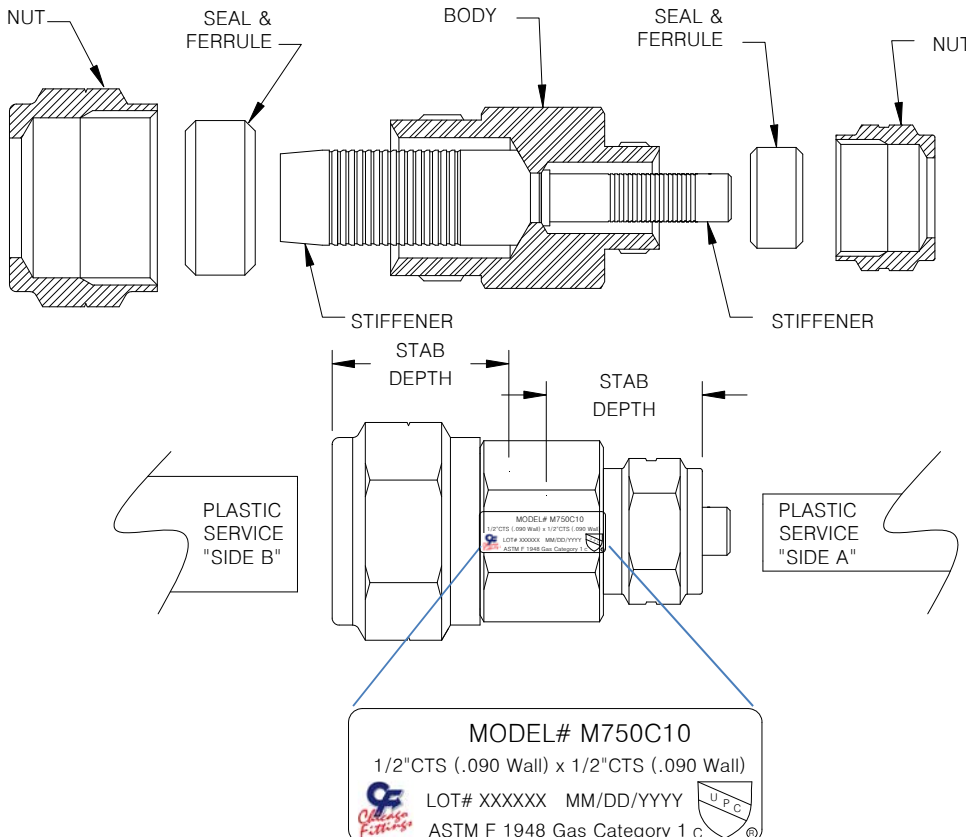
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

750PP Series Couplings (12 Models)

PART #	TUBE SIZE (Side A)	WALL	TUBE SIZE (Side B)	WALL
M750C10	1/2" CTS	0.090"	1/2" CTS	0.090"
M750C13	1/2" IPS	0.090"	1/2" IPS	0.090"
M750C14	3/4" CTS	0.090"	3/4" CTS	0.090"
M750C17	3/4" IPS	0.095"	3/4" IPS	0.095"
M750C18	1" CTS	0.090"	1" CTS	0.090"
M750C18-100	1" CTS	0.100"	1" CTS	0.100"
M750C21	1" IPS	0.119"	1" IPS	0.119"
M750C22	1 1/4" CTS	0.090"	1 1/4" CTS	0.090"
M750C27	1 1/4" IPS	0.151"	1 1/4" IPS	0.151"
M750C27-166	1 1/4" IPS	0.166"	1 1/4" IPS	0.166"
M750C31	1 1/2" IPS	0.173"	1 1/2" IPS	0.173"
M750C38	2" IPS	0.216"	2" IPS	0.216"



STAB DEPTH/STIFFENER CHART

TUBE/PIPE SIZE	STAB DEPTH	WALL	COLOR
3/8" OD	1 3/8"	0.062"	GOLD
3/8" OD	1 3/8"	0.075"	STEEL
1/2" CTS	1 3/8"	0.062"	GOLD
1/2" CTS	1 3/8"	0.090"	STEEL
3/4" CTS	1 1/2"	0.080"	GOLD
3/4" CTS	1 1/2"	0.090"	STEEL
1" CTS	1 5/8"	0.090"	STEEL
1" CTS	1 5/8"	0.100"	GOLD
1 1/4" CTS	1 1/2"	0.090"	STEEL
1 1/4" CTS	1 1/2"	0.121"	BLACK
1/2" IPS	1 3/8"	0.090"	STEEL
3/4" IPS	1 1/2"	0.095"	STEEL
1" IPS	1 1/4"	0.119"	STEEL
1 1/4" IPS	1 7/8"	0.151"	STEEL
1 1/4" IPS	1 7/8"	0.166"	BLACK
1 1/2" IPS	2"	0.173"	STEEL
2" IPS	2 1/8"	0.216"	STEEL

NOTE 1: .100" IS USED FOR .098"- .102" WALL THICKNESSES



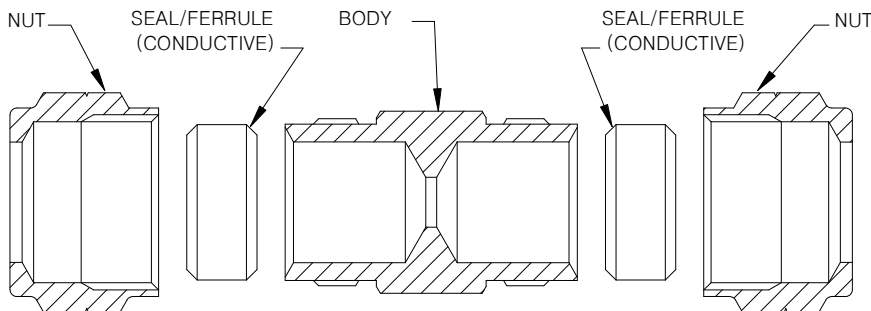
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

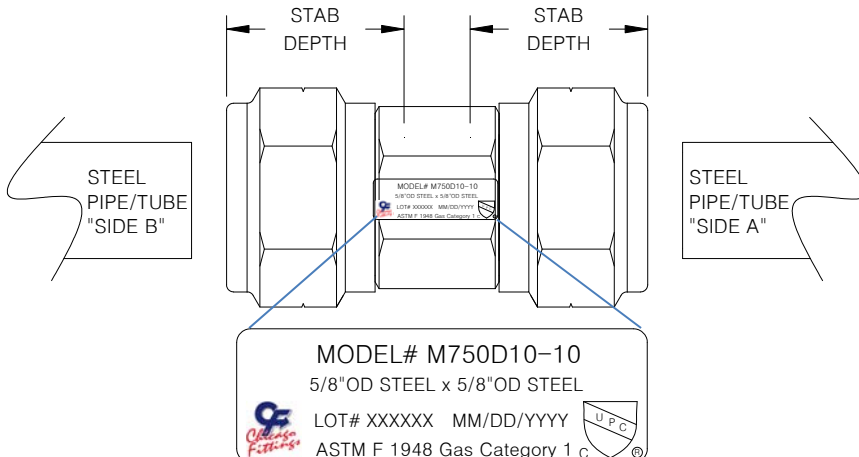
PART #	STEEL SIZE (Side A)	STEEL SIZE (Side B)
M750D8-8	1/2" OD	1/2" OD
M750D10-8	5/8" OD	1/2" OD
M750D10-10	5/8" OD	5/8" OD
M750D13-10	1/2" IPS	5/8" OD
M750D13-13	1/2" IPS	1/2" IPS
M750D17-13	3/4" IPS	1/2" IPS
M750D17-17	3/4" IPS	3/4" IPS
M750D21-13	1" IPS	1/2" IPS
M750D21-17	1" IPS	3/4" IPS
M750D21-21	1" IPS	1" IPS
M750D27-13	1 1/4" IPS	1/2" IPS
M750D27-17	1 1/4" IPS	3/4" IPS
M750D27-21	1 1/4" IPS	1" IPS
M750D27-27	1 1/4" IPS	1 1/4" IPS
M750D31-13	1 1/2" IPS	1/2" IPS
M750D31-17	1 1/2" IPS	3/4" IPS
M750D31-21	1 1/2" IPS	1" IPS
M750D31-27	1 1/2" IPS	1 1/4" IPS
M750D31-31	1 1/2" IPS	1 1/2" IPS
M750D38-13	2" IPS	1/2" IPS
M750D38-17	2" IPS	3/4" IPS
M750D38-21	2" IPS	1" IPS
M750D38-27	2" IPS	1 1/4" IPS
M750D38-31	2" IPS	1 1/2" IPS
M750D38-38	2" IPS	2" IPS

750SS Series Couplings (12 Models)



STAB DEPTH CHART

TUBE/PIPE SIZE	STAB DEPTH	WALL
1/2" IPS	1 3/8"	N/A
3/4" IPS	1 1/2"	N/A
1" IPS	1 1/4"	N/A
1 1/4" IPS	1 7/8"	N/A
1 1/2" IPS	2"	N/A
2" IPS	2 1/8"	N/A





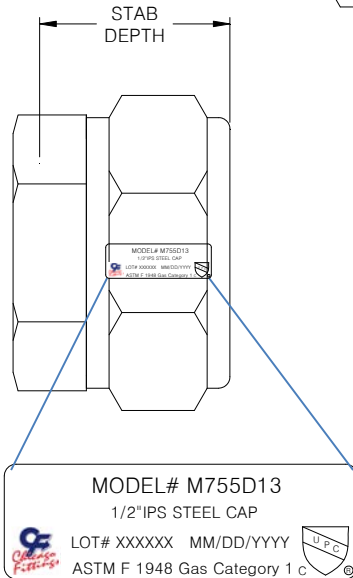
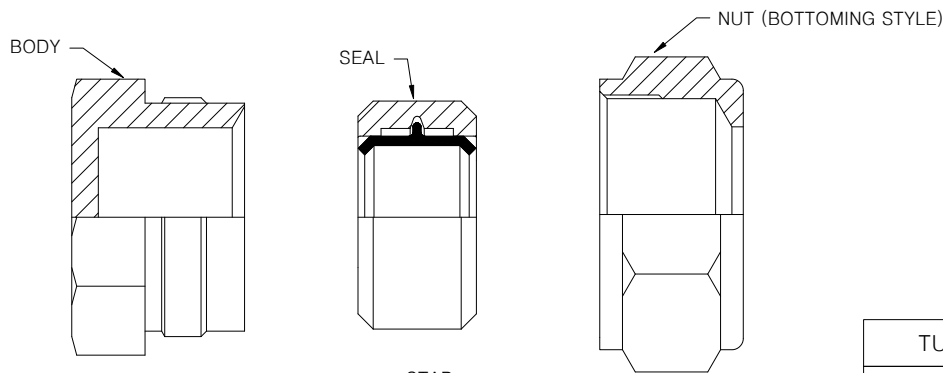
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

755 Series Line Caps (10 Models)

PART #	TUBE/PIPE SIZE
M755C10	1/2" CTS
M755D13	1/2" IPS
M755C14	3/4" CTS
M755D17	3/4" IPS
M755C18	1" CTS
M755D21	1" IPS
M755C22	1" CTS
M755D27	1 1/4" IPS
M755D31	1 1/2" IPS
M755D38	2" IPS



STAB DEPTH CHART

TUBE SIZE	STAB DEPTH
1/2" IPS	1 3/8"
3/4" IPS	1 3/4"
1" IPS	2"
1 1/4" IPS	2"
1 1/2" IPS	2"
2" IPS	2 1/8"



CHICAGO FITTINGS CORPORATION

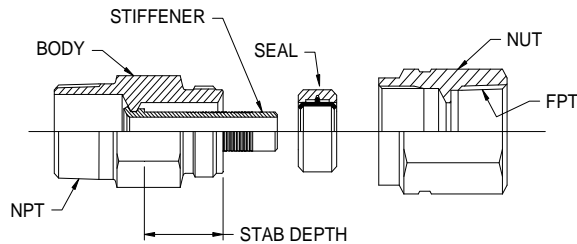
756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

85 Series Service Head Adapters (67 Models)



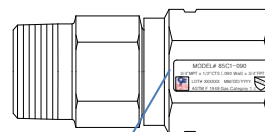
Part #	Tube Size	Wall	MPT	FPT
85C1-062	1/2" CTS	.062"	3/4"	3/4"
85C1-090	1/2" CTS	.090"	3/4"	3/4"
85C2-062	1/2" CTS	.062"	3/4"	1"
85C2-090	1/2" CTS	.090"	3/4"	1"
85C3-062	1/2" CTS	.062"	3/4"	1-1/4"
85C3-090	1/2" CTS	.090"	3/4"	1-1/4"
85C4-062	1/2" CTS	.062"	3/4"	1-1/2"
85C4-090	1/2" CTS	.090"	3/4"	1-1/2"
85C5-062	1/2" CTS	.062"	1"	3/4"
85C5-090	1/2" CTS	.090"	1"	3/4"
85C6-062	1/2" CTS	.062"	1"	1"
85C6-090	1/2" CTS	.090"	1"	1"
85C22-090	1/2" IPS	.090"	3/4"	1"
85C23-090	1/2" IPS	.090"	3/4"	1-1/4"
85C24-090	1/2" IPS	.090"	3/4"	1-1/2"
85C26-090	1/2" IPS	.090"	1"	1"
85C27-090	1/2" IPS	.090"	1"	1-1/4"
85C28-090	1/2" IPS	.090"	1"	1-1/2"
85C44-080	3/4" CTS	.080"	3/4"	1"
85C44-090	3/4" CTS	.090"	3/4"	1"
85C45-080	3/4" CTS	.080"	3/4"	1 1/4"
85C45-090	3/4" CTS	.090"	3/4"	1 1/4"
85C46-080	3/4" CTS	.080"	1"	1"
85C46-090	3/4" CTS	.090"	1"	1"
85C47-080	3/4" CTS	.080"	1"	1 1/4"
85C47-090	3/4" CTS	.090"	1"	1 1/4"
85C49-080	3/4" CTS	.080"	1-1/4"	1"
85C49-090	3/4" CTS	.090"	1-1/4"	1"
85C50-080	3/4" CTS	.080"	1-1/4"	1-1/4"
85C50-090	3/4" CTS	.090"	1-1/4"	1-1/4"
85C54-080	3/4" CTS	.080"	1-1/2"	1-1/2"
85C54-090	3/4" CTS	.090"	1-1/2"	1-1/2"
85C63-095	3/4" IPS	.095"	3/4"	1-1/4"
85C67-095	3/4" IPS	.095"	1"	1-1/4"
85C70-095	3/4" IPS	.095"	1-1/4"	1-1/4"
85C83-090	1" CTS	.090"	3/4"	1-1/4"
85C83-100	1" CTS	.100"	3/4"	1-1/4"
85C87-090	1" CTS	.090"	1"	1-1/4"
85C87-100	1" CTS	.100"	1"	1-1/4"
85C88-090	1" CTS	.090"	1"	1-1/2"
85C88-100	1" CTS	.100"	1"	1-1/2"
85C90-090	1" CTS	.090"	1-1/4"	1-1/4"
85C90-100	1" CTS	.100"	1-1/4"	1-1/4"
85C91-090	1" CTS	.090"	1-1/4"	1-1/2"
85C91-100	1" CTS	.100"	1-1/4"	1-1/2"
85C94-090	1" CTS	.090"	1-1/2"	1-1/4"
85C94-100	1" CTS	.100"	1-1/2"	1-1/4"
85C95-090	1" CTS	.090"	1-1/2"	1-1/2"
85C95-100	1" CTS	.100"	1-1/2"	1-1/2"
X2615	1" IPS	.119"	1"	1-1/2"
85C113-090	1 1/4" CTS	.090"	1-1/4"	1 1/2"
85C113-121	1 1/4" CTS	.121"	1-1/4"	1 1/2"
85C114-090	1 1/4" CTS	.090"	1-1/4"	2"
85C114-121	1 1/4" CTS	.121"	1-1/4"	2"
85C115-090	1 1/4" CTS	.090"	1-1/2"	1 1/2"
85C115-121	1 1/4" CTS	.121"	1-1/2"	1 1/2"
85C116-090	1 1/4" CTS	.090"	1-1/2"	2"
85C116-121	1 1/4" CTS	.121"	1-1/2"	2"
85C117-090	1 1/4" CTS	.090"	2"	2"
85C117-121	1 1/4" CTS	.121"	2"	2"
85C132-151	1 1/4" IPS	.151"	1-1/4"	2"
85C132-166	1 1/4" IPS	.166"	1-1/4"	2"
85C135-151	1 1/4" IPS	.151"	1-1/2"	2"
85C135-166	1 1/4" IPS	.166"	1-1/2"	2"
85C139-151	1 1/4" IPS	.151"	2"	2"
85C139-166	1 1/4" IPS	.166"	2"	2"
85C180-216	2" IPS	.216"	2"	3"



STAB DEPTH/STIFFENER CHART

TUBE SIZE	STAB DEPTH	WALL	COLOR
1/2" CTS	1"	0.062" 0.090"	GOLD STEEL
3/4" CTS	1"	0.080" 0.090"	GOLD STEEL
1" CTS	1"	0.090" 0.100"	STEEL GOLD
1 1/4" CTS	1"	0.090" 0.121"	STEEL BLACK
1/2" IPS	1"	0.090"	STEEL
3/4" IPS	1"	0.095"	STEEL
1" IPS	3/4"	0.119"	STEEL
1 1/4" IPS	1 1/4"	0.151" 0.166"	STEEL BLACK
1 1/2" IPS	1 1/4"	0.173"	STEEL
2" IPS	1 1/4"	0.216"	STEEL

NOTE: .100" IS USED FOR .098"- .102" WALL THICKNESSES



MODEL# 85C1-090
3/4" MPT x 1/2" CTS (.090 Wall) x 3/4" FPT

LOT# XXXXXX MM/DD/YYYY

ASTM F 1948 Gas Category 1 c



CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

87 Series Service Head Adapters (31 Models)

Part #	Tube Size	Wall	MPT (Outlet)	FPT (Inlet)
87C21-17-10L090	1/2" CTS	.090"	1"	3/4"
87C21-21-10L090	1/2" CTS	.090"	1"	1"
87C21-27-10L090	1/2" CTS	.090"	1"	1 1/4"
87C27-17-10L090	1/2" CTS	.090"	1 1/4"	3/4"
87C27-21-10L090	1/2" CTS	.090"	1 1/4"	1"
87C27-27-10L090	1/2" CTS	.090"	1 1/4"	1 1/4"
87C31-17-10L090	1/2" CTS	.090"	1 1/2"	3/4"
87C31-21-10L090	1/2" CTS	.090"	1 1/2"	1"
87C31-27-10L090	1/2" CTS	.090"	1 1/2"	1 1/4"
87C31-27-18L090	1" CTS	.090"	1 1/2"	1 1/4"
87C31-27-18L100	1" CTS	.100"	1 1/2"	1 1/4"
87C31-27-18L121	1" CTS	.121"	1 1/2"	1 1/4"
87C31-31-18L090	1" CTS	.090"	1 1/2"	1 1/2"
87C31-31-18L100	1" CTS	.100"	1 1/2"	1 1/2"
87C31-31-18L121	1" CTS	.121"	1 1/2"	1 1/2"
87C31-38-18L090	1" CTS	.090"	1 1/2"	2"
87C31-38-18L100	1" CTS	.100"	1 1/2"	2"
87C31-38-18L121	1" CTS	.121"	1 1/2"	2"
87C38-27-18L090	1" CTS	.090"	2"	1 1/4"
87C38-27-18L100	1" CTS	.100"	2"	1 1/4"
87C38-27-18L121	1" CTS	.121"	2"	1 1/4"
87C38-31-18L090	1" CTS	.090"	2"	1 1/2"
87C38-31-18L100	1" CTS	.100"	2"	1 1/2"
87C38-31-18L121	1" CTS	.121"	2"	1 1/2"
87C38-38-18L090	1" CTS	.090"	2"	2"
87C38-38-18L100	1" CTS	.100"	2"	2"
87C38-38-18L121	1" CTS	.121"	2"	2"
87C38-31-22L090	1 1/4" CTS	.090"	2"	1 1/2"
87C38-31-22L121	1 1/4" CTS	.121"	2"	1 1/2"
87C38-38-22L090	1 1/4" CTS	.090"	2"	2"
87C38-38-22L121	1 1/4" CTS	.121"	2"	2"

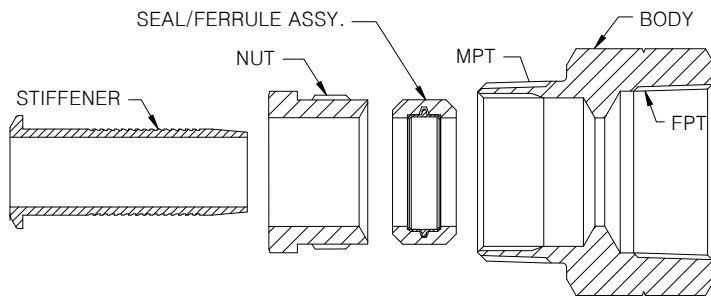


FIGURE 1

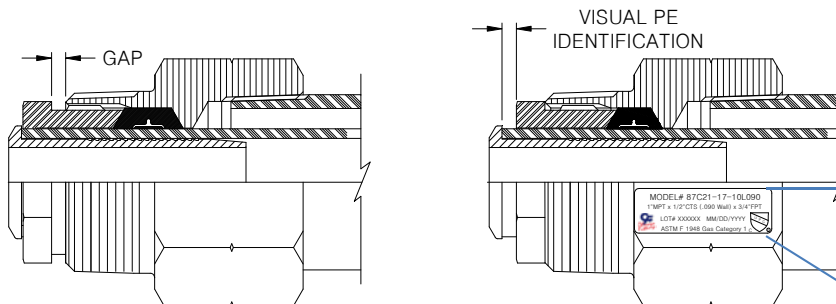


FIGURE 2

FIGURE 3

STIFFENER SIZING CHART

TUBE SIZE	WALL	COLOR
1/2" CTS	0.062"	GOLD
	0.090"	STEEL
1" CTS	0.090"	STEEL
	0.100"	GOLD
1 1/4" CTS	0.090"	STEEL
	0.121"	BLACK

NOTE: .100" IS USED FOR .090"- .102" WALL THICKNESSES

MODEL# 87C21-17-10L090

1" MPT x 1/2" CTS (.090 Wall) x 3/4" FPT

LOT# XXXXXX MM/DD/YYYY

ASTM F 1948 Gas Category 1 c





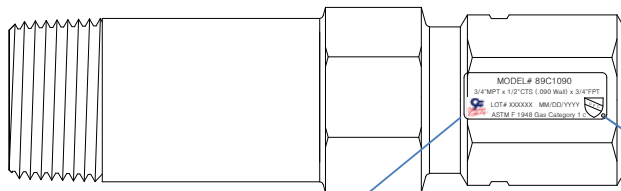
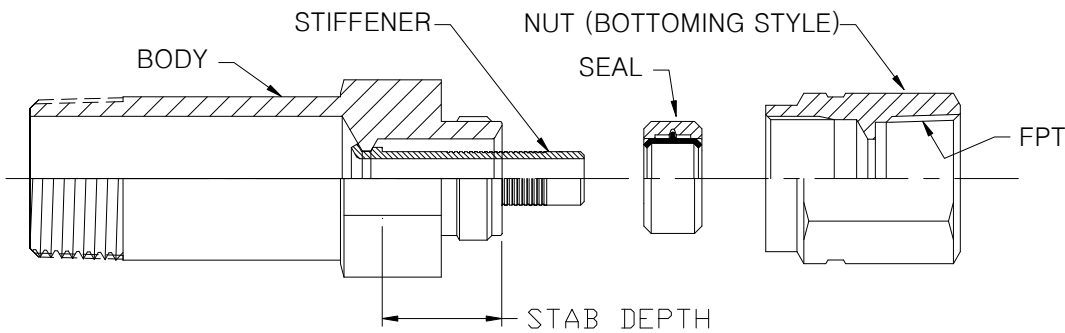
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

89 Series Service Head Adapters (10 Models)

Part #	Tube Size	Wall	IPS	FPT
89C1-062	1/2" CTS	.062"	3/4"	3/4"
89C1-090	1/2" CTS	.090"	3/4"	3/4"
89C44-080	3/4" CTS	.080"	3/4"	1"
89C44-090	3/4" CTS	.090"	3/4"	1"
89C90-090	1" CTS	.090"	1-1/4"	1-1/4"
89C90-100	1" CTS	.100"	1-1/4"	1-1/4"
89C113-090	1 1/4" CTS	.090"	1-1/4"	1 1/2"
89C113-121	1 1/4" CTS	.121"	1-1/4"	1 1/2"
89C115-090	1 1/4" CTS	.090"	1-1/2"	1 1/2"
89C115-121	1 1/4" CTS	.121"	1-1/2"	1 1/2"



MODEL# 89C1090
 3/4" MPT x 1/2" CTS (.090 Wall) x 3/4" FPT
 LOT# XXXXXX MM/DD/YYYY
 ASTM F 1948 Gas Category 1 C

STAB DEPTH/STIFFENER CHART

TUBE SIZE	STAB DEPTH	WALL	COLOR
1/2" CTS	1"	0.062"	GOLD
		0.090"	STEEL
3/4" CTS	1"	0.080"	GOLD
		0.090"	STEEL
1" CTS	1"	0.090"	STEEL
		0.100"	GOLD
1 1/4" CTS	1"	0.090"	STEEL
		0.121"	BLACK
1/2" IPS	1"	0.090"	STEEL
3/4" IPS	1"	0.095"	STEEL
1" IPS	3/4"	0.119"	STEEL
1 1/4" IPS	1 1/4"	0.151"	STEEL
		0.166"	BLACK
1 1/2" IPS	1 1/4"	0.173"	STEEL
2" IPS	1 1/4"	0.216"	STEEL

NOTE: .100" IS USED FOR .098"- .102" WALL THICKNESSES



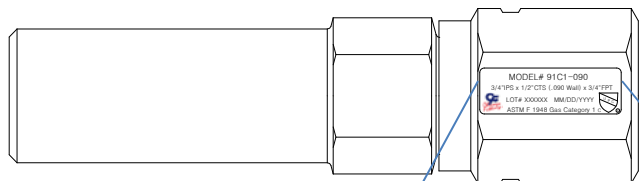
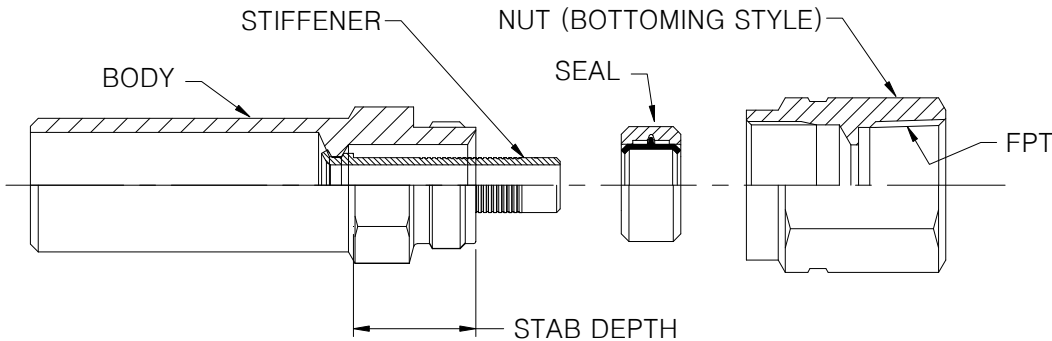
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BELVIDERE, IL 61008
Fax: 815-547-5492

91 Series Service Head Adapters (10 Models)

Part #	Tube Size	Wall	IPS	FPT
91C1-062	1/2" CTS	.062"	3/4"	3/4"
91C1-090	1/2" CTS	.090"	3/4"	3/4"
91C44-080	3/4" CTS	.080"	3/4"	1"
91C44-090	3/4" CTS	.090"	3/4"	1"
91C91-090	1" CTS	.090"	1-1/4"	1-1/4"
91C91-100	1" CTS	.100"	1-1/4"	1-1/4"
91C113-090	1 1/4" CTS	.090"	1-1/4"	1 1/2"
91C113-121	1 1/4" CTS	.121"	1-1/4"	1 1/2"
91C115-090	1 1/4" CTS	.090"	1-1/2"	1 1/2"
91C115-121	1 1/4" CTS	.121"	1-1/2"	1 1/2"



MODEL# 91C1-090
 3/4"IPS x 1/2"CTS (.090 Wall) x 3/4"FPT
 LOT# XXXXXX MM/DD/YYYY
 ASTM F 1948 Gas Category 1 c

STAB DEPTH/STIFFENER CHART

TUBE SIZE	STAB DEPTH	WALL	COLOR
1/2" CTS	1"	0.062"	GOLD
		0.090"	STEEL
3/4" CTS	1"	0.080"	GOLD
		0.090"	STEEL
1" CTS	1"	0.090"	STEEL
		0.100"	GOLD
1 1/4" CTS	1"	0.090"	STEEL
		0.121"	BLACK
1/2" IPS	1"	0.090"	STEEL
3/4" IPS	1"	0.095"	STEEL
1" IPS	3/4"	0.119"	STEEL
1 1/4" IPS	1 1/4"	0.151"	STEEL
		0.166"	BLACK
1 1/2" IPS	1 1/4"	0.173"	STEEL
2" IPS	1 1/4"	0.216"	STEEL

NOTE: .100" IS USED FOR .098"-.102" WALL THICKNESSES



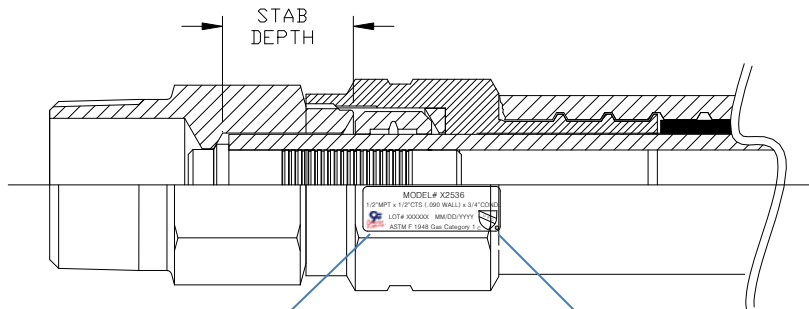
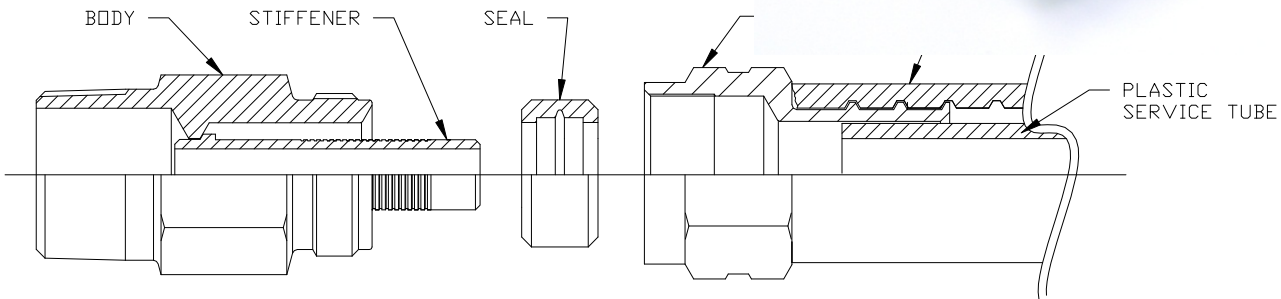
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

X Series Adapters (3 Models)



PART #	TUBE SIZE	WALL	MPT	Conduit MPT
X2536	1/2" CTS	0.090"	1/2"	3/4"
X2706	1/2" CTS	0.090"	3/4"	3/4"
X2500-17-12	3/4" IPS	0.095"	3/4"	1 1/4"



STAB DEPTH/STIFFENER CHART

TUBE SIZE	STAB DEPTH	WALL	COLOR
1/2" CTS	1 3/8"	0.062" 0.090"	GOLD STEEL
3/4" IPS	1 1/2"	0.095"	STEEL

MODEL# X2536
1/2" MPT x 1/2" CTS (.090 WALL) x 3/4" COND.


 LOT# XXXXXX MM/DD/YYYY
 

ASTM F 1948 Gas Category 1 c



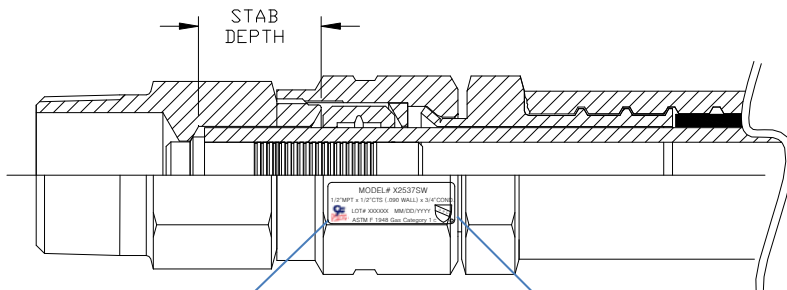
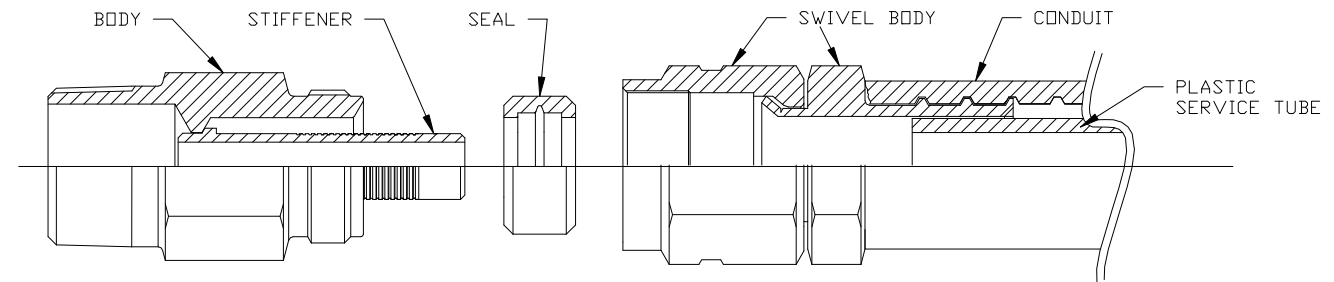
CHICAGO FITTINGS CORPORATION

756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

X Swivel Series Adapters (2 Models)

PART #	TUBE SIZE	WALL	MPT	Conduit MPT
X2537SW	1/2" CTS	0.090"	1/2"	3/4"
X2707SW	1/2" CTS	0.090"	3/4"	3/4"



STAB DEPTH/STIFFENER CHART

TUBE SIZE	STAB DEPTH	WALL	COLOR
1/2" CTS	1 3/8"	0.062" 0.090"	GOLD STEEL
3/4" IPS	1 1/2"	0.095"	STEEL

MODEL# X2537SW
1/2" MPT x 1/2" CTS (.090 WALL) x 3/4" COND.
LOT# XXXXXX MM/DD/YYYY
ASTM F 1948 Gas Category 1 C



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756 LANDMARK DR.
Phone: 815-547-5471

BELVIDERE, IL 61008
Fax: 815-547-5492

X-Riser Series Meter Risers (10 PE Sizes, Multiple Models)

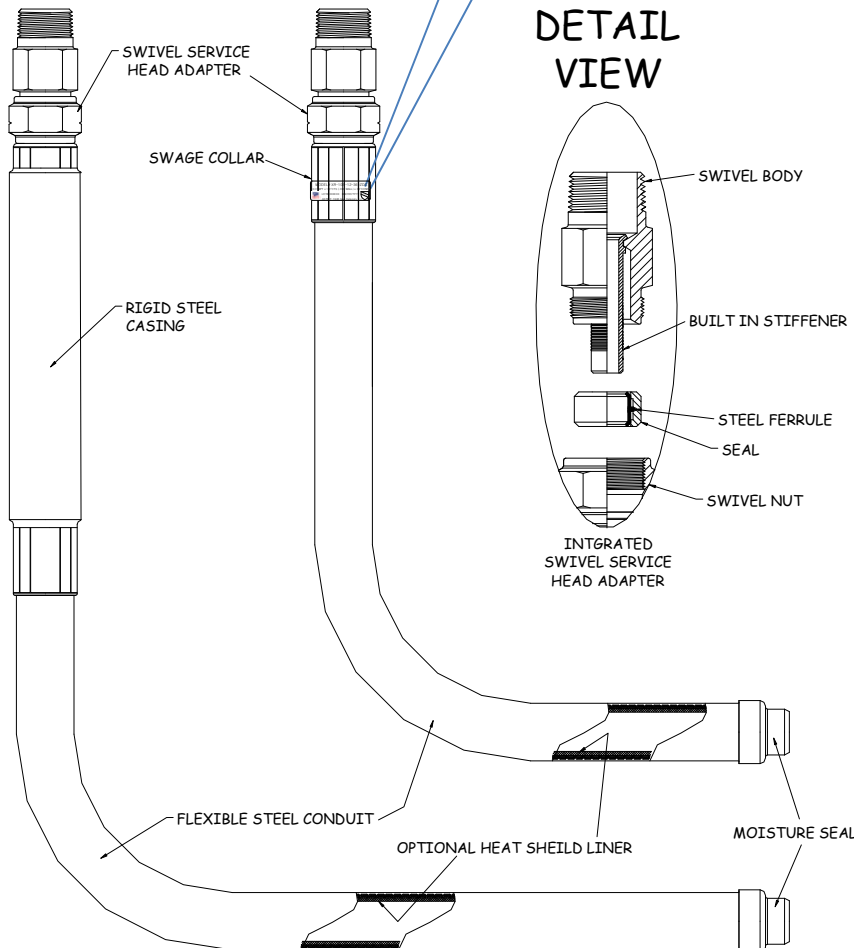


MODEL# XR-10B-12-36-ZDC
3/4" MPT x 1/2" CTS (.090 WALL) x 36" COND.
LOT# XXXXXX MM/DD/YYYY
ASTM F 1948 Gas Category 1 C



SEMI-RIGID RISER

FLEXIBLE RISER



RXR-10B-12-36-24-L-ZDC

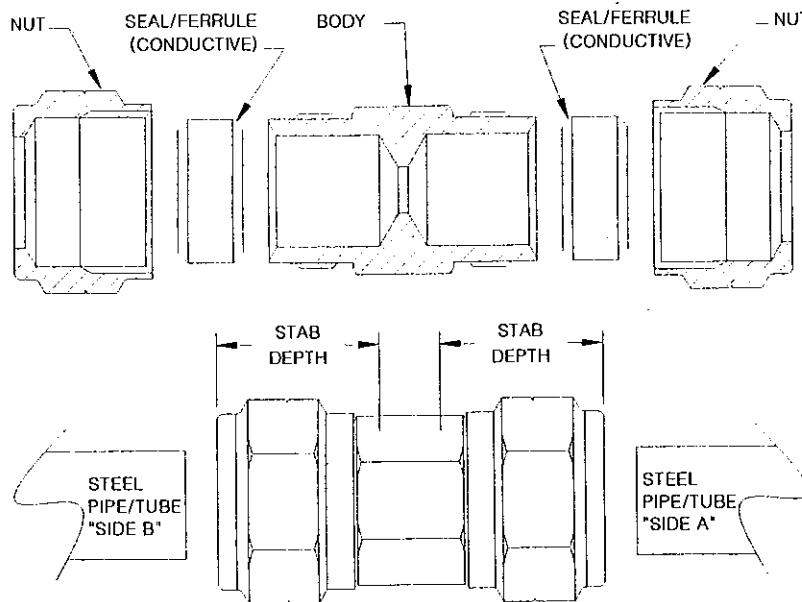
<p>RISER CODE</p> <p>RXR = SEMI RIGID/PARTIAL FLEXIBLE XR = FLEXIBLE</p>	<p>RIGID CODE</p> <p>12 = 12' OF RIGID CASING 24 = 24' OF RIGID CASING 36 = 36' OF RIGID CASING 48 = 48' OF RIGID CASING</p>
<p>PE SIZE CODE</p> <p>10 = 1/2" CTS 21 = 1" IPS 13 = 1/2" IPS 22 = 1 1/4" CTS 14 = 3/4" CTS 27 = 1 1/4" IPS 17 = 3/4" IPS 31 = 1 1/2" IPS 18 = 1" CTS 38 = 2" IPS</p>	<p>FLEX CODE</p> <p>24 = 24' OF FLEXIBLE CONDUIT 24 = 24' OF RIGID CASING 36 = 36' OF FLEXIBLE CONDUIT 48 = 48' OF FLEXIBLE CONDUIT 60 = 60' OF FLEXIBLE CONDUIT 72 = 72' OF FLEXIBLE CONDUIT 96 = 96' OF FLEXIBLE CONDUIT</p>
<p>PE WALL CODE</p> <p>A = .062 WALL E = .100 WALL B = .090 WALL F = .121 WALL C = .095 WALL G = .151 WALL H = .166 WALL</p>	<p>LINER CODE</p> <p>L = LINER OPTIONAL</p>
<p>MPT CODE</p> <p>8 = 1/2" MPT 12 = 3/4" MPT 16 = 1" MPT 20 = 1 1/4" MPT 24 = 1 1/2" MPT 32 = 2" MPT</p>	<p>FINISH CODE</p> <p>ZDC = YELLOW ZINC ZP = ZINC PHOSPHATE P = PLAIN</p>

- RISER CODE :** DEFINES THE TYPE OF CONSTRUCTION OF THE PRODUCT
- PE CODE :** DEFINES THE SIZE OF THE GAS SERVICE BEING USED.
- PE WALL CODE :** DEFINES THE WALL THICKNESS OF PE GAS SERVICE BEING USED.
- MPT CODE :** DEFINES THE TYPE OF MALE THREAD BEING USED TO ATTACH RISER INTO METER SET OR REGULATOR.
- RIGID CODE :** OPTIONAL CODE ONLY USED IN CONJUNCTION WITH RISER CODE IF "RXR" IS USED. THIS CODE DEFINES THE AMOUNT OF RIGID CASING TO BE USED.
- FLEX CODE :** DEFINES THE LENGTH OF FLEXIBLE CONDUIT TO BE USED.
- LINER CODE :** OPTIONAL CODE, ONLY TO BE USED IF LINER IS REQUIRED.
- FINISH CODE :** DEFINES THE FINISH OF SERVICE HEAD ADAPTER, COLLAR AND RIGID PORTION OF THE RISER.

750SS Series Installation Procedures

Coupling, Steel to Steel Service (Working Pressure = 125psig)

1. Cut steel pipe square and deburr O.D and I.D. Remove all coatings from the steel pipe to expose bare steel for conductivity purposes. Be very cautious to remove coatings without gouging or pitting the sealing surface.
2. Loosen compression nuts on fitting 1 to 2 turns. Make sure seals are free.
3. Mark steel pipe to stab depth as indicated on chart with felt tip pen or suitable marker. Inspect the steel pipe to ensure there is no damage which would impair the seal of the fitting.
4. Insert Steel pipe into side "A" compression nut and seal assembly until bottoming occurs (making sure steel pipe remains seated). Tighten nut until nut and body of the fitting become iron bound, that is, "metal to metal". Stab Depth marking should be no more than 1/4" beyond end of nut.
5. Mark steel pipe to stab depth as indicated on chart with felt tip pen or suitable marker. Inspect the steel pipe to ensure there is no damage which would impair the seal of the fitting.
6. Insert Steel pipe into side "B" compression nut and seal assembly until bottoming occurs (making sure steel pipe remains seated). Tighten nut until nut and body of the fitting become iron bound, that is, "metal to metal". Stab Depth marking should be no more than 1/4" beyond end of nut.



STAB DEPTH CHART

TUBE/PIPE SIZE	STAB DEPTH	WALL
1/2" IPS	1 3/8"	N/A
3/4" IPS	1 1/2"	N/A
1" IPS	1 1/4"	N/A
1 1/4" IPS	1 7/8"	N/A
1 1/2" IPS	2"	N/A
2" IPS	2 1/8"	N/A

CFC# M750D13-13
1/2" IPS x 1/2" IPS

⚠ Improper installation may result in leaks and/or pullout leading to injury and/or death.

⚠ Use of improper materials may result in leaks and/or pullout leading to injury and/or death.