

## Stainless Steel Flexible Gas Connectors

Complete selection of flexible connectors for gas appliance applications.

FC STEEL stainless steel gas connectors are engineered with added safety in mind. Their proprietary polymer coating is designed to withstand prolonged exposure to harsh household chemicals.

### Certifications & Approvals

- ANSI Z 21.24 / CSA 6.10 Gas Appliances
- ANSI Z 21.69 / CSA 6.16 Movable Gas Appliances
- ANSI Z 21.75 / CSA 6.27 Outdoor Gas Appliances & Manufactured Homes
- Commonwealth of Massachusetts Board of State Examiners
- City of New York-MEA #376-92-M





## Applications

Dryers/ Boilers/ Fireplace/ Space Heaters/  
Manufactured Homes/ Tankless Water Heaters/  
Rooftop Units/ Ranges/ Ovens/ BBQ Grills/ Furnaces

## Benefits

- Reduced Labor Costs
- Corrosion & Scaling Resistant
- No Special Tools required
- Environmentally Safe

Combining flexibility, durability, and functionality, FC STEEL gas appliance connectors are CSA design certified and 100% leak tested for the quality and security you demand. Available in Safe-Guard Epoxy Coating in yellow, black, or uncoated stainless steel with the largest variety of fittings, we've got the gas connectors that will meet your need.



### FC STEEL Stainless Steel Gas Appliance Connectors

FC STEEL gas connectors offer you a full spectrum of product varieties to fit your need—whatever it may be. Corrosion Resistant Stainless Steel 304 Tubing and Zinc-plated Steel Fittings for 100% quality you can trust.



### FC STEEL Yellow Coated Gas Appliance Connectors

FC STEEL YELLOW COATED gas connectors offer the same full-spectrum product varieties with the Safe-Guard Yellow Epoxy Coating for added durability and extra protection from corrosion, chemical stains from common household products, and plumbing repairs. Corrosion Resistant Stainless Steel 304 Tubing and Zinc-plated Steel Fittings for 100% quality you can trust.

#### Materials

Tubing	Stainless Steel 304(ASTM A240)
Coating	Epoxy
Fitting	Zinc-Plated Steel S45C

#### Pressure-Temperature

Rated Operating Temperature	-40°F to 150°F (-40°C to 65°C)
Rated Pressure	0.5 psi



### FC STEEL Black Coated Gas Appliance Connectors

For GAS HEARTH Installation FC STEEL BLACK COATED gas connectors with Safe-Guard Black Epoxy Coating are durable and corrosion resistant. Safe Guard protects better against common wear and tear, including chemical stains from common household products and plumbing repairs. With the additional benefit of the discreet black coating for minimal visibility, FC STEEL BLACK COATED gas connectors are the ideal product for the fireplace, BBQ grill, or radiant heaters. Corrosion Resistant Stainless Steel 304 Tubing and Zinc-plated Steel Fittings for 100% quality you can trust.

## FC STEEL Yellow Coated Gas Appliance Connectors

### Easy to install

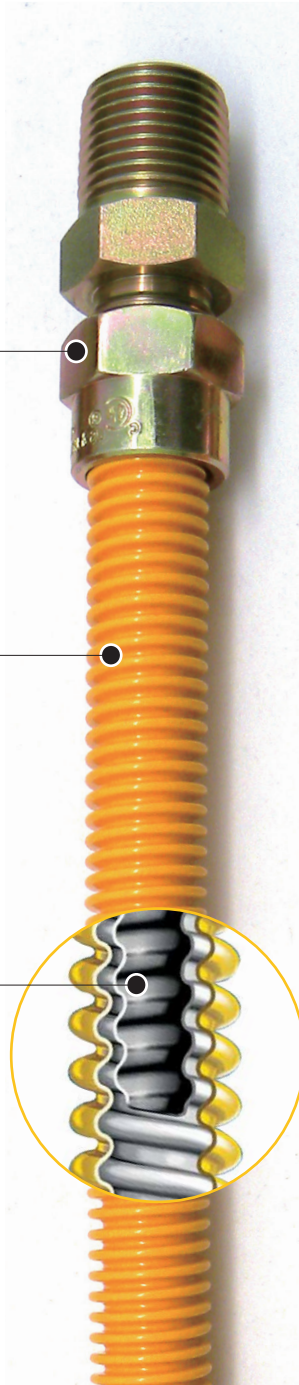
- Smoother, burnished connector ends seal with less torque, making installation easier.

### Advanced corrosion resistance

- Uniform coating over the length of the connector provides complete corrosion resistance.

### Greater strength and flexibility

- High tensile strength stainless steel is less susceptible to work hardening.
- Deep corrugations enhance flexibility, making installation easier.



## FC STEEL Black Coated Gas Appliance Connectors



Unsightly gas connector detracts from the beauty of the fire and must be painted or hidden.

Black Coated Gas Connector from EASYFLEX virtually disappears within the hearth with no effort or mess.

### Specifically engineered for hearth applications such as gas logs, fireplace inserts and free-standing fireplaces

#### Durable connector

is made of heavy-duty 304 stainless steel.

#### Hi-temperature black epoxy coating

hides the connector from view while withstanding up to 350° F.



#### CSA design certified

is made of heavy-duty 304 stainless steel.

#### Proven quality

from the only ISO:9001 certified gas connector manufacturer.

#### Black adapters and flare nuts

from the only ISO:9001 certified gas connector manufacturer.

## Parts Numbering System

### TUBE ID

Part#	Size (ID)	Thread
014	1/4" ID (3/8" OD)	5/8"-18
038	3/8" ID (1/2" OD)	3/4"-16
012	1/2" ID (5/8" OD)	15/16"-16
034	3/4" ID (1" OD)	1-1/8"-16

### COATING

Part#	
SS	Uncoated Stainless Steel 304
YE	Yellow Epoxy Coated Stainless Steel 304
BE	Black Epoxy Coated Stainless Steel 304

### ADAPTERS/ VALVES

Part#	Size (ID)
10	1/2" MIP (Tapped 3/8" FIP)
11	1/2" FIP
12	3/8" MIP (Tapped 1/4" FIP)
13	3/8" FIP
14	3/4" MIP (Tapped 1/2" FIP)
15	3/4" FIP
16	1" MIP (Tapped 3/4" FIP)
17	1" FIP
31	1/2" FIP Ball Valve
33	3/4" FIP Ball Valve
41	1/2" FIP Angle Valve
43	3/4" FIP Angle Valve

### LENGTH

Part#	Size (ID)
12"	25/ Box
18"	25/ Box
24"	25/ Box
30"	25/ Box
36"	25/ Box
48"	25/ Box
60"	12/ Box
72"	12/ Box



**EFGC - 012 - SS - 1010 - 12**

TUBE ID

COATING

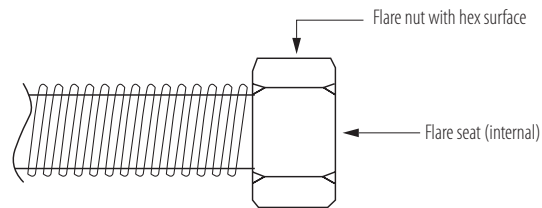
FITTINGS

LENGTH

## Glossary

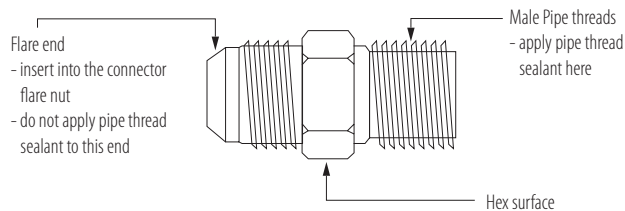
### Flare

Tapered (beveled) surface of connector nut or fitting where the seal occurs. Pipe thread sealant should never be applied to a flare surface.



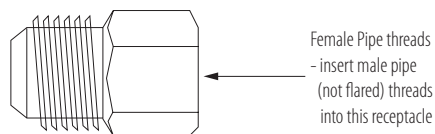
### Male Pipe Threads

the external pipe thread that protrudes from the fitting and fits into a female pipe thread. (Also referred to as MIP – Male Iron Pipe)



### Female Pipe Threads

the internal pipe thread that receives a male pipe thread. (Also referred to as FIP - Female Iron Pipe)



### Male tapped female

all male connector fittings are threaded internally to also function as a female fitting one thread size smaller.

## Safety Precautions:

**⚠ DAN GER:** Read and Understand All Precautions Carefully Before Installing

Gases can be ignited by a flame or spark, which may result in an explosion. Please follow installation instructions carefully. When in doubt, call a licensed plumber or your local gas company.

- DO NOT reuse connectors, fittings and valves; they are designed for use on original installation only. Removal of connector and additional handling may damage connector making it unsafe for reuse.

- DO NOT use this connector if it has been in a fire. Fire can damage the connector making it unsafe for use.

- DO NOT use this connector on appliances equipped with rollers or casters.

This connector is designed for limited movement after installation.

Repeated bending, flexing or extreme vibration can cause metal fatigue.

Normal vibration and movement of standard household gas dryer or similar appliance is okay.

- DO NOT use connectors to make a direct connection to LP gas containers. Connection MUST be made to the regulator device only.

- DO NOT use connector on appliances in moving vehicles such as RV's, trailers, etc. However, this product may be used in manufactured housing (permanent residence mobile homes).

- DO NOT use this connector with infrared radiant tube heaters.

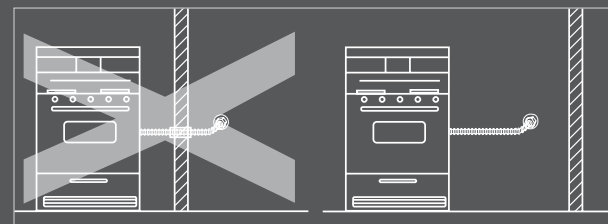
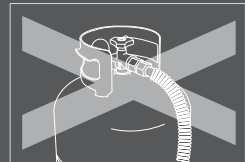
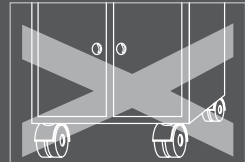
Cyclic movement of heater may cause connector to fail.

- Keep cleaning solvents containing ammonia or chlorine away from an uncoated or damaged gas connector. DO NOT store these solutions near connector or use the connector near a swimming pool or hot tub. Water rinse the connector thoroughly if exposed to these chemical products.

- DO NOT join this connector to another connector.

- DO NOT stretch connector to make it fit. Connector must be at least 2 to inches longer than the distance from the gas supply line to appliance.

**⚠ WARNING:** Connector is for use in accessible locations only. DO NOT conceal connector or run connector through enclosed outdoor BBQ pits, walls, partitions, floors or appliance panels.



1.

Clean all pipe threads with a wire brush and rag to ensure connections are free of any debris such as metal shavings, rust, dirt, oil or water.

Fuel gas codes require a gas shut-off valve within six feet of the appliance

2.

Wrap thread tape starting at outer edge of threads moving in toward hex

thread tape or sealant is applied to the pipe threads.

Do not apply sealant on the flared end of fitting or inside connector nut.

3.

Wrench tighten connection.

If necessary, thread new manual shut-off valve onto gas supply pipe, wrench tighten.



▲ Turn off gas supply before disconnecting old appliance. In absence of manual shut-off valve near appliance location, gas MUST be shut off at main valve, near meter.

4.

Thread flare nuts of gas connector onto shut-off valve and steel fitting. Wrench tighten all connections.

5.

Slowly turn on gas supply and check for leaks

6.

If leak test confirms that connections do not leak and no gas smell is present, turn on appliance



#### Required System Parts

- Qty. 1 : Gas connector
- Qty. 1 : Adapter / valve

#### Required tool

- Wrenches
- Pipe dope or gas pipe thread tape
- Leak detection solution

## INSTALLATION INSTRUCTION



1.

Cut the stainless steel tube



2.

Swaging



3.

Complete swaging



4.

First leak test



5.

Epoxy coating



6.

Complete coating



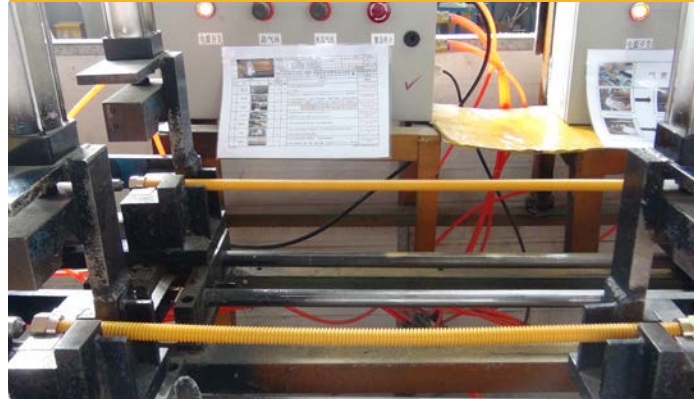
7.

Tighten a nut



8.

Second leak test



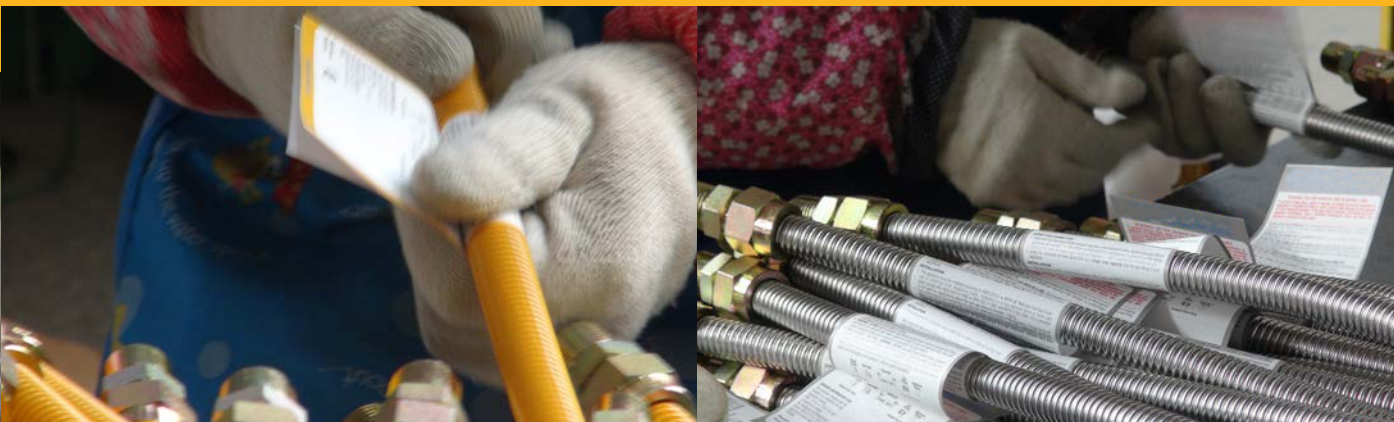
9.

Join the fitting to pipe



10.

Attach the label



11.

Packing



MANUFACTURING PROCESS

## Product Testing

Strength Test	Withstands an internal hydrostatic pressure of 250 psi (17MPa) without bursting or evidence of leakage.
Bending Test	Withstands 30 bends without leakage in depth of not more than 2 inches of water.
Torsion Test	Withstands 15 applications of 90° twists.
Durability at High Temperature Test	Withstands a temperature of 800°F
Strength of Fittings	Does not leak within a tighten torque of 1,040 inch-pounds.

## CERTIFICATIONS, APPROVALS, LISTINGS and COMPLIANCE

### United States | CSA USA Standards Association

- ANSI Z 21.24 Connectors for Gas Appliances
- ANSI Z 21.69 Connectors for Movable Gas Appliances
- ANSI Z 21.75 Connectors for Outdoor Appliances and Manufactured Homes

### Canada | CSA Canadian Standards Association

- CGA 6.10 Connectors for Gas Appliances
- CSA 6.16 Connectors for Movable Gas Appliances
- CSA 6.27 Connectors for Outdoor Appliances and Manufactured
- Meets the requirements of CSA B149.1 National Gas and Propane Installation Code



## Connector Minimum Flow Capacity

Straight Length Capacity (BTU/Hr., 0.64 Sp Gr., 1,000 BTU per cubic ft. at 0.5 inch W.C. pressure drop)

Series	Nominal OD	Nominal ID	12"	18"	24"	30"	36"	48"	60"	72"
014	3/8"	1/4"	48,000	43,800	40,000	36,400	33,400	28,300	24,900	23,100
038	1/2"	3/8"	102,000	93,100	85,000	71,100	71,100	60,500	53,200	49,100
012	5/8"	1/2"	180,000	164,200	150,000	136,000	125,000	106,000	93,200	86,000
034	1"	3/4"	290,900	290,900	290,900	270,500	255,900	215,900	197,400	173,900

The above flow capacities are the minimum performance requirement per ANSI Z21.24 CSA 6.10 & ANSI Z21.75-CSA 6.27. FC STEEL Gas Connectors exceed these minimum flow capacities requirements.