

# Technical Specifications





#### **Corrugated Stainless Steel**

Provides superior flexibility over copper. Available with yellow and black epoxy coating for improved corrosion resistance. Easily identifiable as a gas connector.



### **Many Configurations**

Our connectors cover a range of connection types and BTUs up to 290,900.



### Easy to Install

Deep corrugations enhance flexibility.



#### 100% Leak Tested

Factory tested for peace of mind.

## **Materials**

Tubing	Stainless Steel 304 (ASTM A240)
Coating	Yellow Epoxy / Black Epoxy / Stainless
Fittings	Zinc-Plated Steel S45C

# **Specifications**

Tubing Coating	-40° F to 150° F (-40° C to 65° C)
Fittings	0.5 psi

## **Design Certifications and Approvals**

ANSI Z 21.24/CSA 6.10 Connectors for Gas Appliances

ANSI Z 21.75/CSA 6.27 Connectors for Outdoor Appliances and Manufactured Homes

ANSI Z 21.60/CSA 6.16 Movable Gas Appliances

ANSI Z 21.93/CSA 6.30 Excess Flow Gas Valves

Commonwealth of Massachusetts Board of State Examiners (except 48", 60", 72")

City of New York-MEA #376-92-M

The excess flow valve has a rate trip flow that is higher than the open-ended flow of the piping system



## Write in the Model Number

Refer to back for help



Job Name	Engineer / Architect:	
Job Location:	Wholesaler:	
Submittal Date:	Contractor:	



# Selecting a Gas Connector

Gas Connector Nomenclature



| YE 30 51 VO 48

Tube Size Tube Style Fitting 1 Fitting 2 Length

Tub	e Size	Tube	e Style	Fitt	ing 1	Fitti	ng 2	Length
10	3/8" OD	ΥE	Yellow epoxy coated	50	1/2" MIP (tapped 3/8" FIP)	50	1/2" MIP (tapped 3/8" FIP)	12"
20	1/2"OD	BE	Black epoxy coated	51	1/2" FIP	51	1/2" FIP	18"
30	5/8" OD	SS	Stainless steel	52	3/8" MIP (tapped 1/4" FIP)	52	3/8" MIP (tapped 1/4" FIP)	24"
40	1" OD			53	3/8" FIP	53	3/8" FIP	30"
				54	3/4" MIP (tapped 1/2" FIP)	54	3/4" MIP (tapped 1/2" FIP)	36"
				55	3/4" FIP	55	3/4" FIP	48"
				56	1" MIP (tapped 3/4" FIP)	56	1" MIP (tapped 3/4" FIP)	60"
				57	1" FIP	57	1" FIP	72"
				61	1/2" FIP straight ball valve	61	1/2" FIP straight ball valve	
				63	3/4" FIP straight ball valve	63	3/4" FIP straight ball valve	
				71	1/2" FIP 90° ball valve	71	1/2" FIP 90° ball valve	
						VO	1/2" MIP (tapped 3/8" FIP) EFV	
						V1	1/2" FIP EFV	
						V2	3/8" MIP (tapped ¼" FIP) EFV	
						V3	3/8" FIP EFV	
						V4	3/4" MIP (tapped 1/2" FIP) EFV	
						V5	3/4" MIP EFV	
						V6	1" MIP (tapped 3/4" FIP) EFV	
						V7	1" FIP EFV	

# **BTU Capacities Chart**

Capacities of Gas Connectors of Various Lengths in BTU/Hr for Natural Gas (Multiply by 1.6 for LP Gas)

OD (in)	ID (in)	Straight Length Capacity in BTU/HR							
OD (III)		12"	18"	24"	30"	36"	48"	60"	72"
3/8"	1/4"	48,000	43,800	40,000	36,400	33,400	28,300	24,900	23,100
1/2"	3/8"	102,000	93,100	85,000	77,100	71,100	60,500	53,200	49,100
5/8"	1/2"	180,000	164,200	150,000	136,000	125,000	106,000	93,200	86,000
1"	3/4"			290,900	270,500	255,900	215,000	197,400	173,900

# ArmorBoost Excess Flow Chart

	3/8" OD	1/2" OD	5/8" OD	l" OD
Max flow capacity (BTU/h)	75,000	123,000	180,000	260,000
Max pressure drop @ max flow capacity (in. wc)	0.63	0.74	1.21	1.96
Flow capacity $@5$ in. wc pressure drop (BTU/h)	66,800	111,000	122,500	159,000
Trip flow rate @ 5 in. wc (BTU/h)	101,000	223,000	217,000	290,000
Max pressure drop @ trip flow (in. wc)	2.76	3.24	2.88	2.88

- \*Rated Trip Flow and Max Flow Capacity values are kBTU/h @ max. "w.c. PD (natural gas. 0.64 s.g., 1000 BTU/cu.ft.)
- A minimum of 5" w.c. inlet pressure is required with a maximum inlet pressure of 14" w.c. (1/2 psig).
- Installation orientation: Multi-poise (horizontal, vertical up, vertical down).
- EFV Type: EFVB (Bypass with automatic reset)

- Bypass rate: MAX 2.5 SCFH at 0.5 psi
- The maximum trip flow is 1.4 times the rated trip flow.
- Operating temperature: -40°F to 150°F (-40°C to 65°C) Reaction Temperature Range: 350°F to 425°F (176.7°C to 218.3°C)



