

# TWIN FERRULE COMPRESSION FITTINGS AND VALVES



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CAT34

**Introducing BuTech's** new line of twin ferrule compression fittings and valves to compliment our medium and high pressure products.

For 46 years and counting, BuTech, a leading brand of high-pressure valves, fittings and tubing designed to meet the critical requirements of today's most severe applications, boasts a track record of quality and reliability.

8-DF-001

With the addition of our twin ferrule solutions, BuTech is able to offer you a single source for all of your pressure needs.

Bulleci 8FC4 316SS

#### The BuTech line of twin ferrule solutions combine the cost savings and usability you need, with the proven quality and reliability you expect.

Compatible and interchangeable with all major brands, our twin ferrule compression fittings and valves are manufactured with the best materials available and designed to ensure a proper fit in a variety of environments. Each fitting is made from 316 stainless steel and each valve is 100% pressure tested. This helps our components provide:



Leak free seals



Temperature resistance



Corrosion resistance

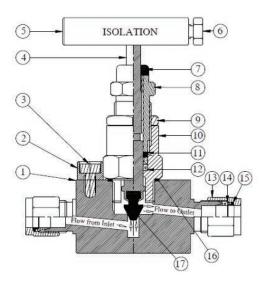
Reusability



 $\sim$ Vibration resistance



### **MATERIAL OF CONSTRUCTION (VALVES)**



Sr. No.	Description	Material	QTY
1	Valve Body	316SS	1
2	Bonnet Lock Nut	316SS	1
3	Lock Nut Tightening Screw	304SS	1
4	Stem	316SS	1
5	Handle	304SS	1
6	Bolt for tightening Handle	304SS	1
7	Dust Cap	Plastic	1
8	Retainer	316SS	1
9	Check Nut	316SS	1
10	Bonnet	316SS	1
11	Washer	316SS	1
12	Washer	P.T.F.E	2
13	NUT - Double Ferrule	316SS	2
14	Front Ferrule	316SS	2
15	Back Ferrule	316SS	2
16	Washer	316SS	1
17	Trim	316SS	1

#### **Test Pressure:**

@ 72°F (22°C) Room Temperature
Hydro-test - Body & Seat – 6,000 PSI / 415 BAR
Pneumatic - Body & Seat – 85 PSI / 6 BAR

#### **Assembly Instructions**

- **STEP 1** Insert the tubing into the BuTech Valve or Tube Fitting. Make sure that the tubing rests firmly on the shoulder of the fitting and that the nut is snug-tight. In this position, the tube does not rotate by hand.
- **STEP 2** Before tightening the Back nut, scribe the nut at the 9 o'clock position.
- **STEP 3** While holding the Valve or Fitting body steady with a backup wrench, tighten the nut 1-1/4 turns. Watch the scribe mark and make one complete revolution. Then continue turning to the 12 o'clock position.

#### **Reassembly Instructions**

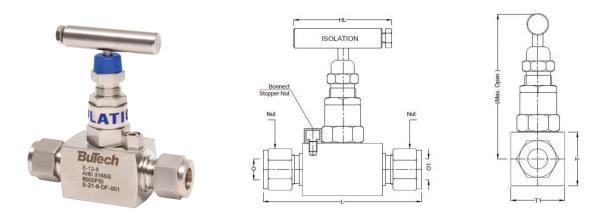
Insert tube into fitting body and hand tighten. Using wrench, rotate the nut approximately 1/4 turn to original 1-1/4 turns position. Then snug slightly with wrench.



### **NEEDLE VALVE - TUBE END**

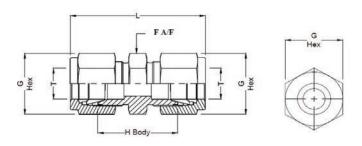
These needle valves are designed for performance under pressure for precise control of liquid and gas flows at pressures up to 6,000 psi (415 bar) and feature a self-centering, non-rotating stem. Packing below the stem threads prevents the process fluid from coming in contact with the threads.

Standard stem packing is PTFE for temperature service up to 480°F (250°C) Use graphite for temperatures up to 840°F (450°C) (Cat# -GR)



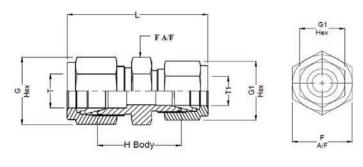
Catalog No.	Description	Orifice	Packing	0	01	т	T1	L	Max Open
E4-NVT	1/4" OD N/V	.197"	P.T.F.E.	1/4" OD	1/4" OD	1.25"	1.25"	3.58"	3.40"
E6-NVT	3/8" OD N/V	.197"	P.T.F.E.	3/8" OD	3/8" OD	1.25"	1.25"	3.58"	3.40"
E8-NVT	1/2" OD N/V	.197"	P.T.F.E.	1/2" OD	1/2" OD	1.25"	1.25"	3.58"	3.40"

### **EQUAL UNIONS**



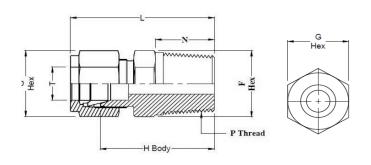
Catalog No.	Tube OD	L	H (Body)	G (Nut)	F (Body)
4U	1/4"	1.61"	1.03"	9/16"	9/16"
6U	3/8"	1.77"	1.19"	11/16"	5/8"
8U	1/2"	2.02"	1.22"	7/8"	7/8"

## **REDUCING UNIONS**



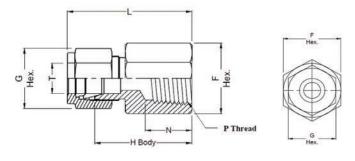
Catalog No.	Tube OD	T1 OD	L	H (Body)	G (Nut)	G1 (Nut)	F (Body)
6RU4	3/8"	1/4"	1.70"	1.12"	11/16"	9/16"	5/8"
8RU4	1/2"	1/4"	1.85"	1.16"	7/8"	9/16"	7/8"
8RU6	1/2"	3/8"	1.91"	1.22"	7/8"	11/16"	7/8"

### **MALE CONNECTOR**



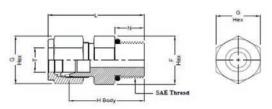
Catalog No.	Tube OD	MNPT	L	N	H (Body)	G (Nut)	F (Body)
4MC4	1/4"	1/4"	1.49"	.56"	1.20"	9/16"	9/16"
4MC6	1/4"	3/8"	1.53"	.56"	1.22"	9/16"	3/4"
4MC8	1/4"	1/2"	1.76"	.75"	1.47"	9/16"	7/8"
6MC4	3/8"	1/4"	1.57"	.56"	1.28"	11/16"	5/8"
6MC6	3/8"	3/8"	1.59"	.56"	1.30"	11/16"	3/4"
6MC8	3/8"	1/2"	1.82"	.75"	1.53"	11/16"	7/8"
8MC4	1/2"	1/4"	1.71"	.56"	1.31"	7/8"	7/8"
8MC6	1/2"	3/8"	1.71"	.56"	1.31"	7/8"	7/8"
8MC8	1/2"	1/2"	1.93"	.75"	1.53"	7/8"	7/8"

### **FEMALE COUPLING**



Catalog No.	Tube OD	FNPT	N	L	H (Body)	G (Nut)	F (Body)
4FC4	1/4"	1/4"	.56"	1.41"	1.12"	9/16"	3/4"
4FC6	1/4"	3/8"	.56"	1.48"	1.19"	9/16"	7/8"
4FC8	1/4"	1/2"	.75"	1.67"	1.38"	9/16"	1 1/16"
6FC4	3/8"	1/4"	.56"	1.48"	1.20"	11/16"	3/4"
6FC6	3/8"	3/8"	.56"	1.54"	1.25"	11/16"	7/8"
6FC8	3/8"	1/2"	.75"	1.73"	1.44"	11/16"	1 1/16"
8FC4	1/2"	1/4"	.56"	1.60"	1.20"	7/8"	7/8"
8FC6	1/2"	3/8"	.56"	1.65"	1.25"	7/8"	7/8"
8FC8	1/2"	1/2"	.75"	1.84"	1.44"	7/8"	1 1/16"

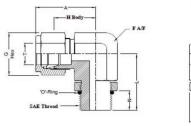
### **MALE CONNECTOR - SAE STRAIGHT THREAD**

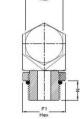


Catalog No.	Tube OD	SAE THREAD	L	N	H (Body)	G (Nut)	F (Body)
4SMC6	1/4"	9/16" x18	1.48"	.46"	1.20"	9/16"	11/16"
6SMC6	3/8"	9/16" x 18	1.51"	.46"	1.22"	11/16"	11/16"
8SMC6	1/2"	9/16" x 18	1.69"	.46"	1.28"	7/8"	7/8"



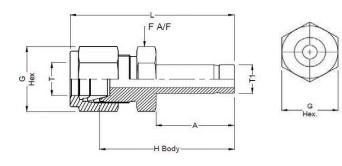
### MALE ELBOW - SAE POSITIONABLE STRAIGHT THREADED ELBOW





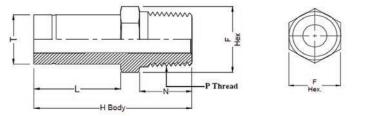
Catalog No.	Tube OD	SAE THREAD	А	N	L	H (Body)	G (Nut)	F (Body)	F1 POS. NUT HEX
4SME6	1/4"	9/16" x18	1.28"	.46"	1.13"	1.00"	9/16"	5/8"	5/8"
6SME6	3/8"	9/16" x 18	1.34"	.46"	1.25"	1.05"	11/16"	11/16"	11/16"
8SME6	1/2"	9/16" x 18	1.66"	.46"	1.33"	1.25"	7/8"	7/8"	11/16"

## **REDUCER-FITTING TO TUBE**



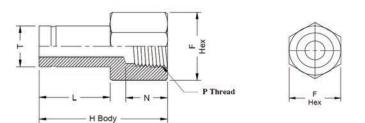
Catalog No.	Tube OD	Tube T1	А	L	H (Body)	G (Nut)	F (Body)
4RFT4	1/4"	1/4"	.67"	1.60"	1.30"	9/16"	9/16"
6RFT4	3/8"	1/4"	.67"	1.69"	1.39"	11/16"	5/8"
6RFT6	3/8"	3/8"	.73"	1.75"	1.46"	11/16"	5/8"
8RFT4	1/2"	1/4"	.67"	1.87"	1.47"	7/8"	7/8"
8RFT6	1/2"	3/8"	.73"	1.94"	1.54"	7/8"	7/8"
8RFT8	1/2"	1/2"	.91"	2.13"	1.73"	7/8"	7/8"

### MALE ADAPTER



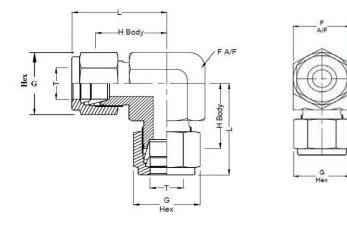
Catalog No.	Tube OD	MNPT	N	L	H (Body)	F (Body)
4ATPM4	1/4"	1/4"	.56"	.69"	1.46"	9/16"
4ATPM6	1/4"	3/8"	.56"	.69"	1.50"	3/4"
4ATPM8	1/4"	1/2"	.75"	.69"	1.74"	7/8"
6ATPM4	3/8"	1/4"	.56"	.73"	1.52"	9/16"
6ATPM6	3/8"	3/8"	.56"	.73"	1.56"	3/4"
6ATPM8	3/8"	1/2"	.75"	.73"	1.80"	7/8"
8ATPM4	1/2"	1/4"	.56"	.91"	1.74"	9/16"
8ATPM6	1/2"	3/8"	.56"	.91"	1.77"	3/4"
8ATPM8	1/2"	1/2"	.75"	.91"	2.01"	7/8"

### **FEMALE ADAPTER**



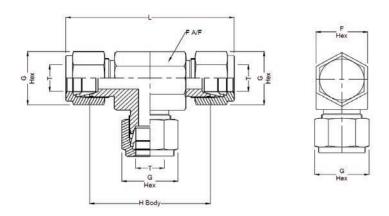
Catalog No.	Tube OD	FNPT	N	L	H (Body)	F (Body)
4ATPF4	1/4"	1/4"	.56"	.67"	1.38"	3/4"
4ATPF6	1/4"	3/8"	.56"	.67"	1.41"	7/8"
4ATPF8	1/4"	1/2"	.75"	.67"	1.62"	1 - 1/16"
6ATPF4	3/8"	1/4"	.56"	.73"	1.45"	3/4"
6ATPF6	3/8"	3/8"	.56"	.73"	1.49"	7/8"
6ATPF8	3/8"	1/2"	.75"	.73"	1.68"	1 - 1/16"
8ATPF4	1/2"	1/4"	.56"	.91"	1.65"	7/8"
8ATPF6	1/2"	3/8"	.56"	.91"	1.65"	7/8"
8ATPF8	1/2"	1/2"	.75"	.91"	1.86"	1 - 1/16"

## UNION ELBOW

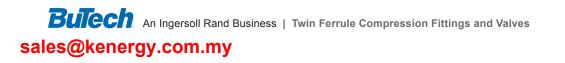


Catalog No.	Tube OD	L	H (Body)	G (Nut)	F (Body)
4ELU	1/4"	1.07"	.78"	9/16"	9/16"
6ELU	3/8"	1.20"	.91"	11/16"	5/8"
8ELU	1/2"	1.42"	1.02"	7/8"	7/8"

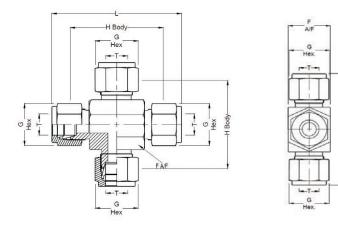
### **UNION TEES**



Catalog No.	Tube OD	L	H (Body)	G (Nut)	F (Body)
4TTT	1/4"	2.15"	1.56"	9/16"	9/16"
6TTT	3/8"	2.40"	1.82"	11/16"	5/8"
8TTT	1/2"	2.84"	2.04"	7/8"	7/8"

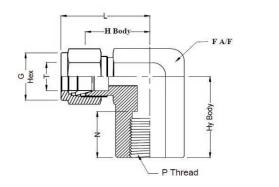


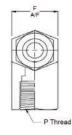
## **EQUAL UNION CROSS**



Catalog No.	Tube OD	L	H (Body)	G (Nut)	F (Body)
4CR	1/4"	2.25"	1.65"	9/16"	5/8"
6CR	3/8"	2.40"	1.82"	11/16"	5/8"
8CR	1/2"	2.84"	2.04"	7/8"	7/8"

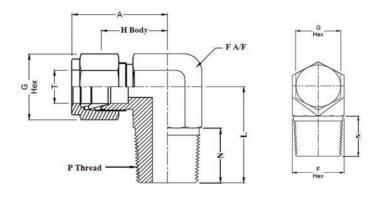
### **FEMALE ELBOW**





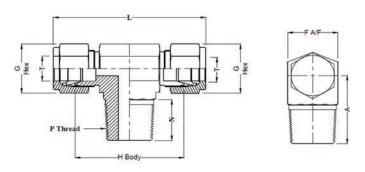
Catalog No.	Tube OD	FNPT	N	L	H (Body)	Hy (Body)	G (Nut)	F (Body)
4FE4	1/4"	1/4"	.56"	.88"	.88"	.88"	9/16"	.88"
4FE6	1/4"	3/8"	.56"	.93"	.96"	.88"	9/16"	7/8"
4FE8	1/4"	1/2"	.75"	1.02"	1.07"	1.12"	9/16"	1.12"
6FE4	3/8"	1/4"	.56"	.88"	.94"	.88"	11/16"	.69"
6FE6	3/8"	3/8"	.56"	.88"	1.02"	.88"	11/16"	.81"
6FE8	3/8"	1/2"	.75"	1.12"	1.12"	1.12"	11/16"	1.12"
8FE4	1/2"	1/4"	.56"	.88"	1.02"	.88"	7/8"	7/8"
8FE6	1/2"	3/8"	.56"	.88"	1.02"	.88"	7/8"	7/8"
8FE8	1/2"	1/2"	.75"	1.12"	1.12"	1.12"	7/8"	1.12"

## MALE ELBOW



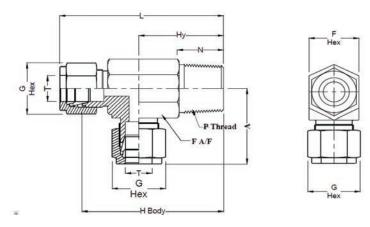
Catalog No.	Tube OD	MNPT	А	N	L	H (Body)	G (Nut)	F (Body)
4ME4	1/4"	1/4"	1.06"	.56"	.92"	.78"	9/16"	9/16"
4ME6	1/4"	3/8"	1.20"	.56"	1.06"	.90"	9/16"	3/4"
4ME8	1/4"	1/2"	1.25"	.75"	1.31"	1.00"	9/16"	7/8"
6ME4	3/8"	1/4"	1.20"	.56"	1.00"	.91"	11/16"	5/8"
6ME6	3/8"	3/8"	1.27"	.56"	1.10"	.97"	11/16"	3/4"
6ME8	3/8"	1/2"	1.34"	.75"	1.34"	1.04"	11/16"	7/8"
8ME4	1/2"	1/4"	1.42"	.56"	1.12"	1.02"	7/8"	7/8"
8ME6	1/2"	3/8"	1.42"	.56"	1.12"	1.02"	7/8"	7/8"
8ME8	1/2"	1/2"	1.42"	.75"	1.34"	1.02"	7/8"	7/8"

### MALE BRANCH TEE



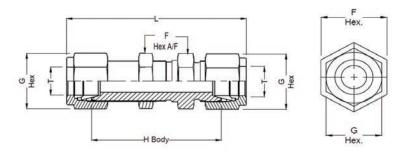
Catalog No.	Tube OD	MNPT	А	N	L	H (Body)	G (Nut)	F (Body)
4MBT4	1/4"	1/4"	.94"	.56"	2.14"	1.56"	9/16"	9/16"
6MBT6	3/8"	3/8"	1.11"	.56"	2.62"	2.04"	11/16"	3/4"
8MBT6	1/2"	3/8"	1.11"	.56"	2.84"	2.04"	7/8"	7/8"
8MBT8	1/2"	1/2"	1.30"	.75"	2.84"	2.04"	7/8"	7/8"

### MALE RUN TEES



Catalog No.	Tube OD	MNPT	А	Ν	Ну	L	H (Body)	G (Nut)	F (Body)
4MRT4	1/4"	1/4"	1.06"	.56"	.93"	1.98"	1.69"	9/16"	9/16"
6MRT6	3/8"	3/8"	1.31"	.56"	1.06"	2.42"	2.13"	9/16"	11/16"
8MRT6	1/2"	3/8"	1.42"	.56"	1.11"	2.53"	2.13"	7/8"	7/8"
8MRT8	1/2"	1/2"	1.42"	.75"	1.30"	2.72"	2.32"	7/8"	7/8"

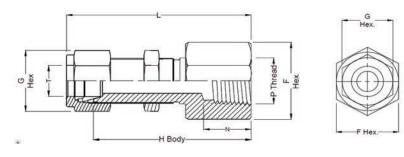
### **BULKHEAD UNIONS**



Catalog No.	Tube OD	L	H (Body)	G (Nut)	F (Body)
4BHU	1/4"	2.27"	1.69"	9/16"	5/8"
6BHU	3/8"	2.46"	1.88"	11/16"	3/4"
8BHU	1/2"	2.80"	2.00"	7/8"	15/16"

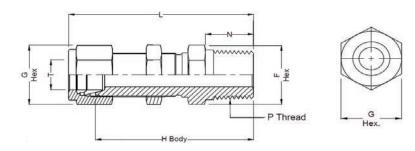


### **BULKHEAD FEMALE CONNECTOR**



Catalog No.	Tube OD	FNPT	N	L	H (Body)	G (Nut)	F (Body)	Panel Hole Drill Size
4FBH4	1/4"	1/4"	.56"	2.04"	1.75"	9/16"	3/4"	.453"
6FBH4	3/8"	1/4"	.56"	2.17"	1.88"	11/16"	3/4"	.578"
6FBH6	3/8"	3/8"	.56"	2.22"	1.92"	11/16"	7/8"	.578"
8FBH4	1/2"	1/4"	.56"	2.40"	2.00"	7/8"	15/16"	.768"
8FBH6	1/2"	3/8"	.56"	2.43"	2.03"	7/8"	15/16"	.768"
8FBH8	1/2"	1/2"	.75"	2.62"	2.22"	7/8"	1 1/16"	.768"

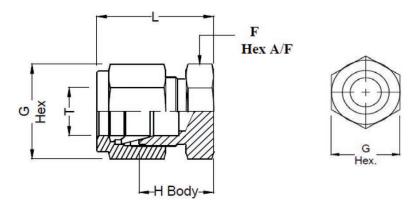
### **BULKHEAD MALE CONNECTORS**



Catalog No.	Tube OD	MNPT	N	L	H (Body)	G (Nut)	F (Body)
4MBH4	1/4"	1/4"	.56"	2.12"	1.83"	9/16"	5/8"
6MBH4	3/8"	1/4"	.56"	2.26"	1.97"	11/16"	3/4"
6MBH6	3/8"	3/8"	.56"	2.30"	2.00"	11/16"	3/4"
8MBH4	1/2"	1/4"	.56"	2.48"	2.08"	7/8"	15/16"
8MBH6	1/2"	3/8"	.56"	2.50"	2.11"	7/8"	15/16"
8MBH8	1/2"	1/2"	.75"	2.68"	2.28"	7/8"	15/16"

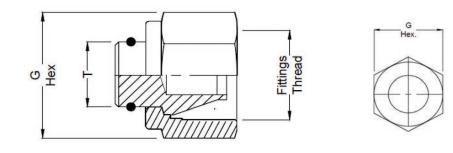
### **SPARE PARTS**

#### **Cap-Tube End Closure**



Catalog No.	Tube OD	L	H (Body)	G (Nut)	F (Body)
4CAP	1/4"	.92"	.63"	9/16"	9/16"
6CAP	3/8"	1.01"	.72"	11/16"	5/8"
8CAP	1/2"	1.15"	.75"	7/8"	7/8"

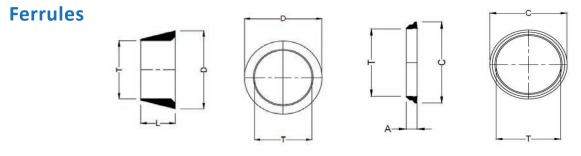
### **Plug-Fitting End Closure**



Catalog No.	Tube OD	G (Nut)		
4PLUG	1/4"	9/16"		
6PLUG	3/8"	11/16"		
8PLUG	1/2"	7/8"		

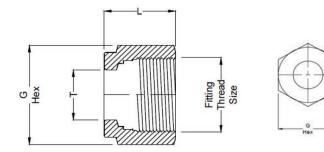


### SPARE PARTS (CONTINUED)



	Front Ring	Back Ring					
Catalog No.	Tube OD	F (Body)	F (Body)	Catalog No.	Tube OD	F (Body)	F (Body)
4FF	1/4"	.192"	.371"	4BR	1/4"	.103"	.363"
6FF	3/8"	.191"	.497"	6BR	3/8"	.103"	.485"
8FF	1/2"	.287"	.683"	8BR	1/2"	.148"	.613"

Nuts

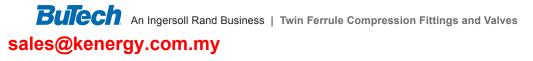


Catalog No.	Tube OD	L	G Hex	Thread Size
4N	1/4"	.50"	9/16"	7/16" x 20 UNF
6N	3/8"	.56"	11/16"	9/16" x 20 UNF
8N	1/2"	.69"	7/8"	3/4" x 20 UNF

### **Tubing Tables**

	Tube Wall Thickness (inches)						
Tube OD (inches)	.020"	.028"	.035"	.049"	.065"	.083"	.095"
	Working Pressure, PSIG						
1/4"		4000	5100	7500			
3/8"			3300	4800	6500		
1/2"			2600	3700	5100	6700	

For higher pressures see our BuTech medium and high pressure valves, fittings and tubing



### **CROSS-REFERENCE LIST**

### **Equal Union**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4U	EQUAL UNION	1/4" TWIN FERRULE	SS-400-6	4SC4
6U	EQUAL UNION	3/8" TWIN FERRULE	SS-600-6	6SC6
8U	EQUAL UNION	1/2" TWIN FERRULE	SS-810-6	8SC8

### **Reducing Unions**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
6RU4	REDUCING UNION	3/8" X 1/4" TWIN FERRULE	SS-600-6-4	6RU4
8RU4	REDUCING UNION	1/2" X 1/4" TWIN FERRULE	SS-810-6-4	8RU4
8RU6	REDUCING UNION	1/2" X 3/8" TWIN FERRULE	SS-810-6-6	8RU6

#### **Male Connector**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4MC4	MALE CONNECTOR	1/4" TWF X 1/4" NPT(M)	SS-400-1-4	4MSC4N
4MC6	MALE CONNECTOR	1/4" TWF X 3/8" NPT(M)	SS-400-1-6	4MSC6N
4MC8	MALE CONNECTOR	1/4" TWF X 1/2" NPT(M)	SS-400-1-8	4MSC8N
6MC4	MALE CONNECTOR	3/8" TWF X 1/4" NPT(M)	SS-600-1-4	6MSC4N
6MC6	MALE CONNECTOR	3/8" TWF X 3/8" NPT(M)	SS-600-1-6	6MSC6N
6MC8	MALE CONNECTOR	3/8" TWF X 1/2" NPT(M)	SS-600-1-8	6MSC8N
8MC4	MALE CONNECTOR	1/2" TWF X 1/4" NPT(M)	SS-810-1-4	8MSC4N
8MC6	MALE CONNECTOR	1/2" TWF X 3/8" NPT(M)	SS-810-1-6	8MSC6N
8MC8	MALE CONNECTOR	1/2" TWF X 1/2" NPT(M)	SS-810-1-8	8MSC8N

#### **Female Coupling**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4FC4	FEMALE COUPLING	1/4" TWF X 1/4" NPT(F)	SS-400-7-4	4FSC4N
4FC6	FEMALE COUPLING	1/4" TWF X 3/8" NPT(F)	SS-400-7-6	4FSC6N
4FC8	FEMALE COUPLING	1/4" TWF X 1/2" NPT(F)	SS-400-7-8	4FSC8N
6FC4	FEMALE COUPLING	3/8" TWF X 1/4" NPT(F)	SS-600-7-4	6FSC4N
6FC6	FEMALE COUPLING	3/8" TWF X 3/8" NPT(F)	SS-600-7-6	6FSC6N
6FC8	FEMALE COUPLING	3/8" TWF X 1/2" NPT(F)	SS-600-7-8	6FSC8N
8FC4	FEMALE COUPLING	1/2" TWF X 1/4" NPT(F)	SS-810-7-4	8FSC4N
8FC6	FEMALE COUPLING	1/2" TWF X 3/8" NPT(F)	SS-810-7-6	8FSC6N
8FC8	FEMALE COUPLING	1/2" TWF X 1/2" NPT(F)	SS-810-7-8	8FSC8N

#### **Male Connector - SAE Straight Thread**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4SMC6	Male Connector	1/4" TWF X 9/16"-18 SAE Thrd	SS-400-1-6ST	4M1SC6-316
6SMC6	Male Connector	3/8" TWF X 9/16"-18 SAE Thrd	SS-600-1-6ST	6M1SC6-316
8SMC6	Male Connector	1/2" TWF X 9/16"-18 SAE Thrd	SS-810-1-6ST	8M1SC6-316

### Male Elbow - SAE Positionable Straight Threaded Elbow

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4SME6	Male Elbow - Positionable	1/4" TWF X 9/16"-18 SAE Thrd	SS-400-2-6ST	4M5SEL6
6SME6	Male Elbow - Positionable	3/8" TWF X 9/16"-18 SAE Thrd	SS-600-2-6ST	6M5SEL6
8SME6	Male Elbow - Positionable	1/2" TWF X 9/16"-18 SAE Thrd	SS-810-2-6ST	8M5SEL6

#### **Reducer-Fitting to Tube**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4RFT4	REDUCER-FITTING TO TUBE	1/4" TWF X 1/4" TUBE(M)	SS-400-R-4	4TUR4
6RFT4	REDUCER-FITTING TO TUBE	3/8" TWF X 1/4" TUBE(M)	SS-600-R-4	4TUR6
6RFT6	REDUCER-FITTING TO TUBE	3/8" TWF X 3/8" TUBE(M)	SS-600-R-6	6TUR6
8RFT4	REDUCER-FITTING TO TUBE	1/2" TWF X 1/4" TUBE(M)	SS-810-R-4	4TUR8
8RFT6	REDUCER-FITTING TO TUBE	1/2" TWF X 3/8" TUBE(M)	SS-810-R-6	6TUR8
8RFT8	REDUCER-FITTING TO TUBE	1/2" TWF X 1/2" TUBE(M)	SS-810-R-8	8TUR8

#### **Male Adapter**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4ATPM4	MALE ADAPTER	1/4" TUBE(M) X 1/4" NPT(M)	SS-4-TA-1-4	4MA4N
4ATPM6	MALE ADAPTER	1/4" TUBE(M) X 3/8" NPT(M)	SS-4-TA-1-6	4MA6N
4ATPM8	MALE ADAPTER	1/4" TUBE(M) X 1/2" NPT(M)	SS-4-TA-1-8	4MA8N
6ATPM4	MALE ADAPTER	3/8" TUBE(M) X 1/4" NPT(M)	SS-6-TA-1-4	6MA4N
6ATPM6	MALE ADAPTER	3/8" TUBE(M) X 3/8" NPT(M)	SS-6-TA-1-6	6MA6N
6ATPM8	MALE ADAPTER	3/8" TUBE(M) X 1/2" NPT(M)	SS-6-TA-1-8	6MA8N
8ATPM4	MALE ADAPTER	1/2" TUBE(M) X 1/4" NPT(M)	SS-8-TA-1-4	8MA4N
8ATPM6	MALE ADAPTER	1/2" TUBE(M) X 3/8" NPT(M)	SS-8-TA-1-6	8MA6N
8ATPM8	MALE ADAPTER	1/2" TUBE(M) X 1/2" NPT(M)	SS-8-TA-1-8	8MA8N

### **Female Adapter**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4ATPF4	FEMALE ADAPTER	1/4" TUBE(M) X 1/4" NPT(F)	SS-4-TA-7-4	4FA4N
4ATPF6	FEMALE ADAPTER	1/4" TUBE(M) X 3/8" NPT(F)	SS-4-TA-7-6	4FA6N
4ATPF8	FEMALE ADAPTER	1/4" TUBE(M) X 1/2" NPT(F)	SS-4-TA-7-8	4FA8N
6ATPF4	FEMALE ADAPTER	3/8" TUBE(M) X 1/4" NPT(F)	SS-6-TA-7-4	6FA4N
6ATPF6	FEMALE ADAPTER	3/8" TUBE(M) X 3/8" NPT(F)	SS-6-TA-7-6	6FA6N
6ATPF8	FEMALE ADAPTER	3/8" TUBE(M) X 1/2" NPT(F)	SS-6-TA-7-8	6FA8N
8ATPF4	FEMALE ADAPTER	1/2" TUBE(M) X 1/4" NPT(F)	SS-8-TA-7-4	8FA4N
8ATPF6	FEMALE ADAPTER	1/2" TUBE(M) X 3/8" NPT(F)	SS-8-TA-7-6	8FA6N
8ATPF8	FEMALE ADAPTER	1/2" TUBE(M) X 1/2" NPT(F)	SS-8-TA-7-8	8FA8N

#### **Union Elbow**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4ELU	UNION ELBOW	1/4" TWIN FERRULE	SS-400-9	4EE4
6ELU	UNION ELBOW	3/8" TWIN FERRULE	SS-600-9	6EE6
8ELU	UNION ELBOW	1/2" TWIN FERRULE	SS-810-9	8EE8

#### **Union Tees**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4TTT	UNION TEE	1/4" TWIN FERRULE	SS-400-3	4ET4
6TTT	UNION TEE	3/8" TWIN FERRULE	SS-600-3	6ET6
8TTT	UNION TEE	1/2" TWIN FERRULE	SS-810-3	8ET8

#### **Equal Union Cross**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4CR	EQUAL UNION CROSS	1/4" TWIN FERRULE	SS-400-4	4ECR4
6CR	EQUAL UNION CROSS	3/8" TWIN FERRULE	SS-600-4	6ECR6
8CR	EQUAL UNION CROSS	1/2" TWIN FERRULE	SS-810-4	8ECR8



#### **Female Elbow**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4FE4	FEMALE ELBOW	1/4" TWF X 1/4" NPT(F)	SS-400-8-4	4FEL4N
4FE6	FEMALE ELBOW	1/4" TWF X 3/8" NPT(F)	SS-400-8-6	4FEL6N
4FE8	FEMALE ELBOW	1/4" TWF X 1/2" NPT(F)	SS-400-8-8	4FEL8N
6FE4	FEMALE ELBOW	3/8" TWF X 1/4" NPT(F)	SS-600-8-4	6FEL4N
6FE6	FEMALE ELBOW	3/8" TWF X 3/8" NPT(F)	SS-600-8-6	6FEL6N
6FE8	FEMALE ELBOW	3/8" TWF X 1/2" NPT(F)	SS-600-8-8	6FEL8N
8FE4	FEMALE ELBOW	1/2" TWF X 1/4" NPT(F)	SS-810-8-4	8FEL4N
8FE6	FEMALE ELBOW	1/2" TWF X 3/8" NPT(F)	SS-810-8-6	8FEL6N
8FE8	FEMALE ELBOW	1/2" TWF X 1/2" NPT(F)	SS-810-8-8	8FEL8N

#### **Male Elbow**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4ME4	MALE ELBOW	1/4" TWF X 1/4" NPT(F)	SS-400-2-4	4MSEL4N
4ME6	MALE ELBOW	1/4" TWF X 3/8" NPT(F)	SS-400-2-6	4MSEL6N
4ME8	MALE ELBOW	1/4" TWF X 1/2" NPT(F)	SS-400-2-8	4MSEL8N
6ME4	MALE ELBOW	3/8" TWF X 1/4" NPT(F)	SS-600-2-4	6MSEL4N
6ME6	MALE ELBOW	3/8" TWF X 3/8" NPT(F)	SS-600-2-6	6MSEL6N
6ME8	MALE ELBOW	3/8" TWF X 1/2" NPT(F)	SS-600-2-8	6MSEL8N
8ME4	MALE ELBOW	1/2" TWF X 1/4" NPT(F)	SS-810-2-4	8MSEL4N
8ME6	MALE ELBOW	1/2" TWF X 3/8" NPT(F)	SS-810-2-6	8MSEL6N
8ME8	MALE ELBOW	1/2" TWF X 1/2" NPT(F)	SS-810-2-8	8MSEL8N

#### **Male Branch Tee**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4MBT4	MALE BRANCH TEE	1/4" TWF X 1/4" NPT(M)	SS-400-3-4TTM	4MBT4N
6MBT6	MALE BRANCH TEE	3/8" TWF X 3/8" NPT(M)	SS-600-3-6TTM	6MBT6N
8MBT6	MALE BRANCH TEE	1/2" TWF X 3/8" NPT(M)	SS-810-3TTM	8MBT6N
8MBT8	MALE BRANCH TEE	1/2" TWF X 1/2" NPT(M)	SS-810-3-8TTM	8MBT8N



#### **Male Run Tees**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4MRT4	MALE RUN TEE	1/4" TWF X 1/4" NPT(M)	SS-400-3-4TMT	4MRT4N
6MRT6	MALE RUN TEE	3/8" TWF X 3/8" NPT(M)	SS-600-3-6TMT	6MRT6N
8MRT6	MALE RUN TEE	1/2" TWF X 3/8" NPT(M)	SS-810-3TMT	8MRT6N
8MRT8	MALE RUN TEE	1/2" TWF X 1/2" NPT(M)	SS-810-3-8TMT	8MRT8N

#### **Bulkhead Unions**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4BHU	BULKHEAD UNION	1/4" TWIN FERRULE	SS-400-61	4MBC4
6BHU	BULKHEAD UNION	3/8" TWIN FERRULE	SS-600-61	6MBC6
8BHU	BULKHEAD UNION	1/2" TWIN FERRULE	SS-810-61	8MBC8

#### **Bulkhead Female Connector**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4FBH4	BULKHEAD FEMALE CONN	1/4" TWF X 1/4" NPT(F)	SS-400-71-4	4FBC4N
6FBH4	BULKHEAD FEMALE CONN	3/8" TWF X 1/4" NPT(F)	SS-600-71-4	6FBC4N
6FBH6	BULKHEAD FEMALE CONN	3/8" TWF X 3/8" NPT(F)	N/A	N/A
8FBH4	BULKHEAD FEMALE CONN	1/2" TWF X 1/4" NPT(F)	N/A	N/A
8FBH6	BULKHEAD FEMALE CONN	1/2" TWF X 3/8" NPT(F)	SS-810-71-6	8FBC6N
8FBH8	BULKHEAD FEMALE CONN	1/2" TWF X 1/2" NPT(F)	SS-810-71-8	8FBC8N

#### **Bulkhead Male Connector**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4MBH4	BULKHEAD MALE CONNECTOR	1/4" TWF X 1/4" NPT(M)	SS-400-11-4	4MBC4N
6MBH4	BULKHEAD MALE CONNECTOR	3/8" TWF X 1/4" NPT(M)	SS-600-11-4	6MBC4N
6MBH6	BULKHEAD MALE CONNECTOR	3/8" TWF X 3/8" NPT(M)	SS-600-11-6	6MBC6N
8MBH4	BULKHEAD MALE CONNECTOR	1/2" TWF X 1/4" NPT(M)	N/A	N/A
8MBH6	BULKHEAD MALE CONNECTOR	1/2" TWF X 3/8" NPT(M)	SS-810-11-6	8MBC6N
8MBH8	BULKHEAD MALE CONNECTOR	1/2" TWF X 1/2" NPT(M)	SS-810-11-8	8MBC8N

### Cap - (Tube end closure)

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4CAP	CAP, TUBE END CLOSURE	1/4" TWIN FERRULE	SS-400-C	4BLEN4
6CAP	CAP, TUBE END CLOSURE	3/8" TWIN FERRULE	SS-600-C	6BLEN6
8CAP	CAP, TUBE END CLOSURE	1/2" TWIN FERRULE	SS-810-C	8BLEN8

### Plug - (Fitting end closure)

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4PLUG	PLUG, FITTING END CLOSURE	1/4" TWIN FERRULE	SS-400-P	4BLP4
6PLUG	PLUG, FITTING END CLOSURE	3/8" TWIN FERRULE	SS-600-P	6BLP6
8PLUG	PLUG, FITTING END CLOSURE	1/2" TWIN FERRULE	SS-810-P	8BLP8

#### **Front Ferrule**

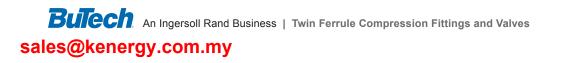
Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4FF	FRONT FERRULE	1/4" Front Ferrule	SS-403-1	4FF4
6FF	FRONT FERRULE	3/8" Front Ferrule	SS-603-1	6FF6
8FF	FRONT FERRULE	1/2" Front Ferrule	SS-813-1	8FF8

#### **Back Ring**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4BR	BACK Ring	1/4" Back Ring	SS-404-1	4BF4
6BR	BACK Ring	3/8" Back Ring	SS-604-1	6BF6
8BR	BACK Ring	1/2" Back Ring	SS-814-1	8BF8

#### **Back Nut**

Part No.	Description 1	Description 2	Swagelok Part No.	Parker Part No.
4N	BACK NUT	1/4" Back Nut	SS-402-1	4NU4
6N	BACK NUT	3/8" Back Nut	SS-602-1	6NU6
8N	BACK NUT	1/2" Back Nut	SS-812-1	8NU8



#### HYDROGEN VALVES Rated to 20k PSI / 1400 BAR



SUBSEA BALL VALVES API-6A 17D Rated to 15k PSI / 1035 BAR



SOUR GAS VALVES Rated to 30k PSI / 2069 BAR



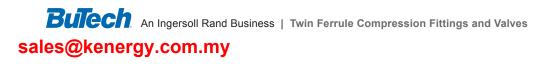


MEDIUM AND HIGH-PRESSURE VALVES Fittings & Tubing Rated to 15k - 150k PSI / 1035 - 10342 BAR



**PIPE EQUIPMENT** Rated to 15k PSI / 1035 BAR





### NOTES


# THE WORLD TRUSTS **Bullech** An Ingersoll Rand Business TO HANDLE HIGH PRESSURE.

For more information on our BuTech twin ferrule solutions, visit BuTech-valve.com or contact your local BuTech representative.

BuTech, a business of Ingersoll Rand, is a leading global provider of precision-engineered, process-critical and technologically-advanced valves, fittings and tubing.

