

Ultra High Purity

WELD & METAL SEAL FITTINGS



Weld & Metal Seal Fittings

Ordering Information

*Additional configurations available upon request.

A	B	C	D	E	-	F	
SM	4	FG	N	6	-	P	

Standard feature
Optional

A	Materials
	Glands, Bodies, and Nuts
SM	316L Stainless Steel
DM	316L Stainless Steel VAR
	Gaskets
SM	316L Stainless Steel
NI	Nickel

B	Connection Size			
	ASTM Tube			
	Designator	Nominal Size	Outside Diameter	Wall Thickness
	2	1/8 in.	3.18 mm	0.7 mm
	4	1/4 in.	6.35 mm	1.0 mm
	6	3/8 in.	9.53 mm	1.0 mm
	8	1/2 in.	12.7 mm	1.24 mm
	12	3/4 in.	19.05 mm	1.65 mm
	16	1 in.	25.4 mm	1.65 mm

Optional End Connection Sizes

For drop size fittings, first size the run and add the suffix "X" then a size designator for the branch. (i.e. Reducer for 3/8" O.D. tube and 1/4" male pipe thread would be 6X4)

C	Body Type
R	Reducer
E	Elbow
HE	45° Elbow
T	Tee
CR	Cross
TB	Tribow
FG	Female Gland
MG	Male Gland
SSG	Socket Weld Short Gland
SLG	Socket Weld Long Gland
RSLG	Reducing Socket Weld Gland
BG	Blind Gland
MWG	Male Weld Gland
TA	Tube Adapter
MU	Double Male Union
MRU	Double Male Reducing Union
BHU	Bulkhead Union
TC	TBW Connector

C	Body Type (continued)
TBHC	TBW Bulkhead Connector
CG	Coupling
FRU	Double Female Reducing Union
RA	Reducing Adapter
RB	Reducing Bushing
ME	Male Elbow
UE	Union Elbow
UT	Union Tee
UC	Union Cross
SC	SUPERLOK Tube Fitting Connector
BHSC	SUPERLOK Tube Fitting Bulkhead Connector
BHMC	Bulkhead Male Connector
MC	Male Connector
FC	Female Connector
GR	Gasket Retainer Assembly
GT	Gasket
BGT	Blind Gasket
FN	Female Nut
MN	Male Nut
PG	Plug
CP	Cap
PGC	Plug (Cable Type)
HFN	High Flow Female Nut
HMN	High Flow Male Nut
HLG	High Flow Long Gland
HTC	High Flow TBW Connector
HBHC	High Flow TBW Bulkhead Connector
WMC	Welded Male Connector
WFC	Welded Female Connector
WSC	Welded Lok Connector
WFU	Welded Female Union

D	Threads Type
Designator	Thread Option
N	NPT (National Pipe Thread)
R	PT (Tapered Thread)
U	SAE (Unified)

Weld & Metal Seal Fittings

E	Tube Length	
6	6.35 mm	
10	10 mm	
19	19.05 mm	
22	22.5 mm	
23	23.3 mm	

F	Wetted Surface Grade	
	Glands, Bodies, and Nuts	
	BA is standard. No part designator needed.	
P	EP	
	Gaskets	
	Leave Blank: <i>Unplated gasket</i>	
SP	Silver plated	

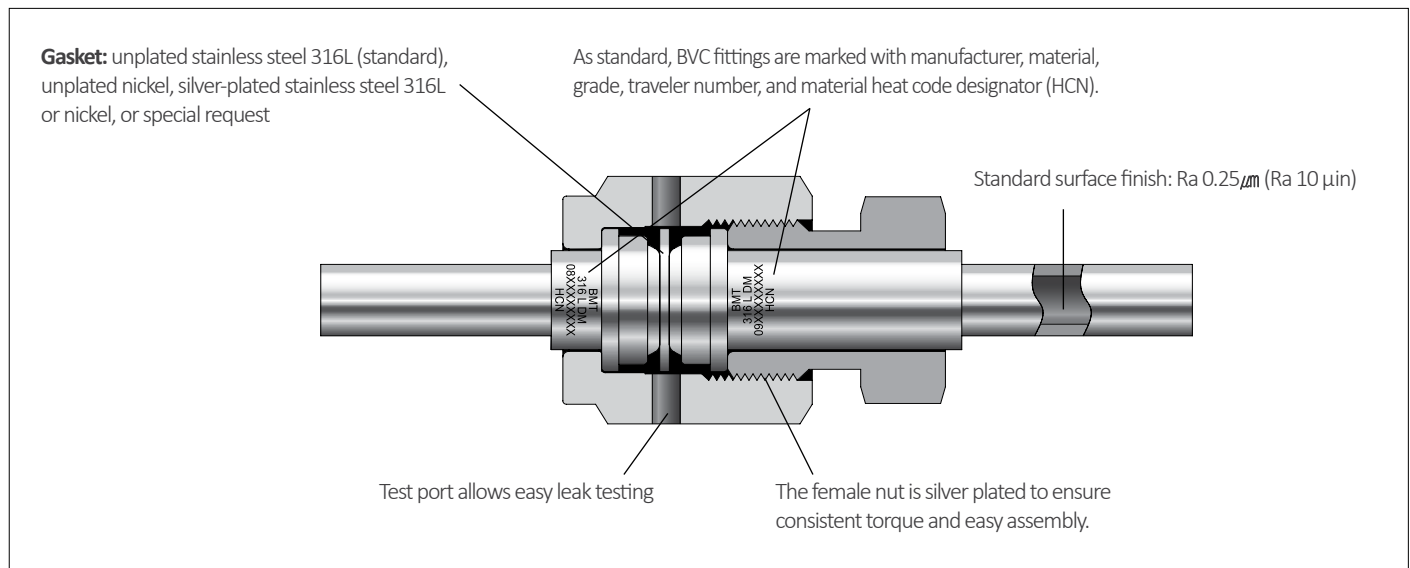
Part Number Examples

	SM8FG6-P			SM6X4R19			SM16T23	
Material	SM	316L Stainless Steel	SM	316L Stainless Steel	SM	316L Stainless Steel		
Connection Size	8	1/2 in	6X4	3/8 in. (Run) X 1/4 in. (Branch)	16	1 in.		
Body Type	FG	Female Gland	R	Reducer	T	Tee		
Thread Type		<i>Not applicable</i>		<i>Not applicable</i>		<i>Not applicable</i>		
Tube Length	6	6.35 mm	19	19.05 mm	23	23.3 mm		
Surface Grade	P	EP Grade		BA Grade (standard)		BA Grade (standard)		
































































	DM4MEN-P			NI16GT			SM4GR-SP	
Material	DM	316L Stainless Steel VAR	NI	Nickel	SM	316L Stainless Steel		
Connection Size	4	1/4 in. (Run) X 1/4 in. NPT thread (Branch)	16	1 in.	4	1/4 in.		
Body Type	ME	Male Elbow	GT	Gasket	GR	Gasket Retainer		
Thread Type	N	NPT (National Pipe Thread)		<i>Not applicable</i>		<i>Not applicable</i>		
Tube Length		<i>Not applicable</i>		<i>Not applicable</i>		<i>Not applicable</i>		
Surface Grade	P	EP Grade		Unplated (standard)	SP	Silver plated		

BMT Vacuum Coupling (BVC) Fittings

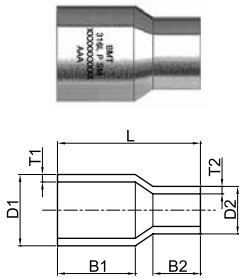
BMT Vacuum Coupling (BVC) Fittings provide the high purity of a metal-to-metal seal for leak-free service from vacuum to positive pressure applications. The gasket is compressed by two highly polished beads when a male nut and a female nut are engaged.



Body Type

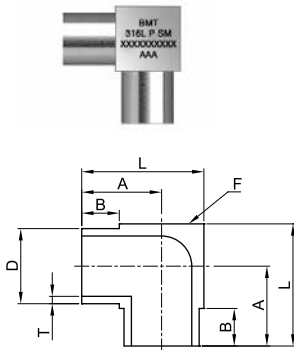
Micro Weld Fittings		Gaskets	
	Micro Reducer		Gasket Retainer Assembly
	Micro 90° Elbow		Gasket
	Micro Reducing 90° Elbow		Blind Gasket
	Micro 45° Elbow	Nuts, Caps and Plugs	
	Micro Tee		Female Nut
	Micro Reducing Tee		Male Nut
	Micro Cross		Plug
	Micro Tribow		Cap
Forged Weld Fittings			Plug (Cable Type)
	90° Elbow	High - Flow Connection - "H" Type	
	Reducing 90° Elbow		High Flow Female Nut
	Tee		High Flow Male Nut
	Reducing Tee		High Flow Long Gland
	Cross		High Flow Tube Butt Weld (TBW) Connector
	Reducer		High Flow Tube Butt Weld (TBW) Bulkhead Connector
Glands		Welded Assembly	
	Female Gland		Welded Male Connector (PT)
	Male Gland		Welded Male Connector (NPT)
	Socket Weld Short Gland		Welded Female Connector (PT)
	Socket Weld Long Gland		Welded Female Connector (NPT)
	Reducing Socket Weld Long Gland		Welded Lok Connector
	Blind Gland		Welded Female Union
	Male Weld Gland		
	Tube Adapter		
	Double Male Union		
	Double Male Reducing Union		
	Bulkhead Union		
	Tube Butt Weld (TBW) Connector		
	Tube Butt Weld (TBW) Bulkhead Connector		
	Coupling		
	Double Female Reducing Union		
	Reducing Adapter		
	Reducing Bushing		
	Male Elbow (NPT)		
	Male Elbow (PT)		
	Union Elbow		
	Union Tee		
	Union Cross		
	SUPERLOK Tube Fitting Connector		
	SUPERLOK Tube Fitting Bulkhead Connector		
	Bulkhead Male Connector (NPT)		
	Male Connector (PT)		
	Male Connector (NPT)		
	Male Connector (ST)		
	Female Connector (PT)		
	Female Connector (NPT)		

Micro Weld Fittings



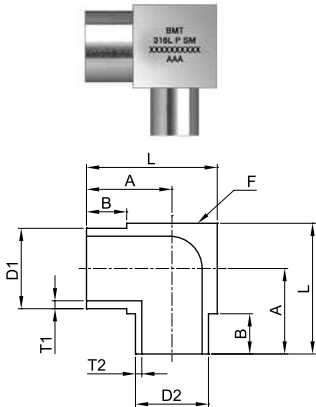
Micro Reducer

Part No.	Tube OD (D1)		Tube OD (D2)		T1	T2	B1	B2	L
	Size (in)	Size	Size (in)	Size					
SM4X2R6	1/4"	6.35	1/8"	3.18	1.00	0.70	10.40	6.35	19.10
SM6X4R6	3/8"	9.53	1/4"	6.35	1.00	1.00	10.40	6.35	19.10
SM8X4R6	1/2"	12.70	1/4"	6.35	1.24	1.00	10.40	6.35	19.10
SM8X6R6	1/2"	12.70	3/8"	9.53	1.24	1.00	10.40	6.35	19.10
SM12X4R6	3/4"	19.05	1/4"	6.35	1.65	1.00	10.40	6.35	19.10
SM12X6R6	3/4"	19.05	3/8"	9.53	1.65	1.00	10.40	6.35	19.10
SM12X8R6	3/4"	19.05	1/2"	12.70	1.65	1.24	10.40	6.35	19.10



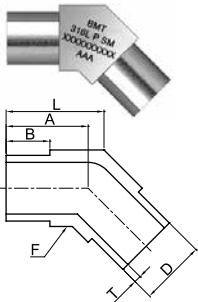
Micro 90° Elbow

Part No.	Tube OD (D)		T	A	B	F Body	L
	Size (in)	Size					
SM2E6	1/8"	3.18	0.70	10.32	6.35	7.94	14.29
SM4E6	1/4"	6.35	1.00	10.32	6.35	7.94	14.29
SM6E6	3/8"	9.53	1.00	11.91	6.35	11.11	17.46
SM8E6	1/2"	12.70	1.24	13.50	6.35	14.29	20.64
SM12E6	3/4"	19.05	1.65	16.68	6.35	20.65	27.00



Micro Reducing 90° Elbow

Part No.	Tube OD (D1)		Tube OD (D2)		T1	T2	A	B	F Body	L
	Size (in)	Size	Size (in)	Size						
SM4X2E6	1/4"	6.35	1/8"	3.18	1.00	0.70	10.32	6.35	7.94	14.29
SM6X4E6	3/8"	9.53	1/4"	6.35	1.00	1.00	11.91	6.35	11.11	17.46
SM8X4E6	1/2"	12.70	1/4"	6.35	1.24	1.00	13.50	6.35	14.29	20.64
SM8X6E6	1/2"	12.70	3/8"	9.53	1.24	1.00	13.50	6.35	14.29	20.64
SM12X4E6	3/4"	19.05	1/4"	6.35	1.65	1.00	16.68	6.35	20.65	27.00
SM12X6E6	3/4"	19.05	3/8"	9.53	1.65	1.00	16.68	6.35	20.65	27.00
SM12X8E6	3/4"	19.05	1/2"	12.70	1.65	1.24	16.68	6.35	20.65	27.00

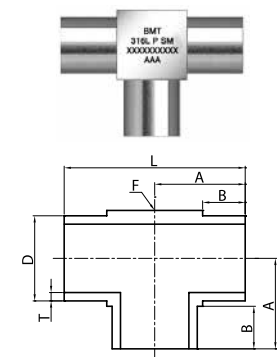


Micro 45° Elbow

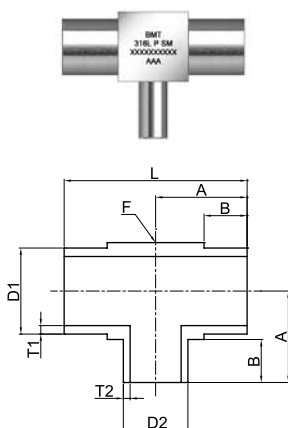
Part No.	Tube OD (D)		T	A	B	F Body	L
	Size (in)	Size					
SM2HE6	1/8"	3.18	0.70	10.32	6.35	7.94	11.96
SM4HE6	1/4"	6.35	1.00	10.32	6.35	7.94	11.96
SM6HE6	3/8"	9.53	1.00	11.91	6.35	11.11	14.21
SM8HE6	1/2"	12.70	1.24	13.50	6.35	14.29	16.46
SM12HE6	3/4"	19.05	1.65	16.68	6.35	20.65	20.95

NOTE:

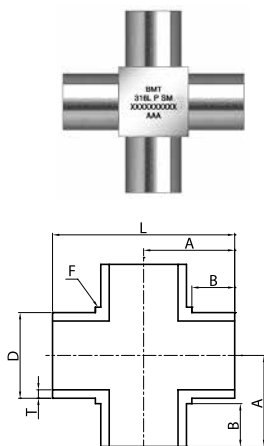
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**Micro Tee**

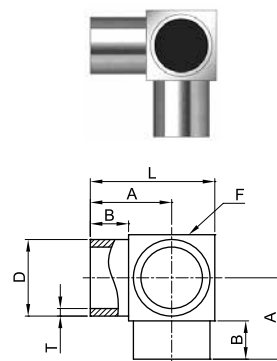
Part No.	Tube OD (D)		T	A	B	F Body	L
	Size (in)	Size					
SM2T6	1/8"	3.18	0.70	10.32	6.35	7.94	20.64
SM4T6	1/4"	6.35	1.00	10.32	6.35	7.94	20.64
SM6T6	3/8"	9.53	1.00	11.91	6.35	11.11	23.81
SM8T6	1/2"	12.70	1.24	13.50	6.35	14.29	26.99
SM12T6	3/4"	19.05	1.65	16.68	6.35	20.65	33.35

**Micro Reducing Tee**

Part No.	Tube OD (D1)		Tube OD (D2)		T1	T2	A	B	F Body	L
	Size (in)	Size	Size (in)	Size						
SM4X2T6	1/4"	6.35	1/8"	3.18	1.00	0.70	10.35	6.35	7.94	20.64
SM6X4T6	3/8"	9.53	1/4"	6.35	1.00	1.00	11.91	6.35	11.11	23.81
SM8X4T6	1/2"	12.70	1/4"	6.35	1.24	1.00	13.50	6.35	14.29	27.00
SM8X6T6	1/2"	12.70	3/8"	9.53	1.24	1.00	13.50	6.35	14.29	27.00
SM12X4T6	3/4"	19.05	1/4"	6.35	1.65	1.00	16.68	6.35	20.65	27.00
SM12X6T6	3/4"	19.05	3/8"	9.53	1.65	1.00	16.68	6.35	20.65	27.00
SM12X8T6	3/4"	19.05	1/2"	12.70	1.65	1.24	16.68	6.35	20.65	27.00

**Micro Cross**

Part No.	Tube OD (D)		T	A	B	F Body	L
	Size (in)	Size					
SM2CR6	1/8"	3.18	0.70	10.32	6.35	7.94	20.64
SM4CR6	1/4"	6.35	1.00	10.32	6.35	7.94	20.64
SM6CR6	3/8"	9.53	1.00	11.91	6.35	11.11	23.81
SM8CR6	1/2"	12.70	1.24	13.50	6.35	14.29	27.00
SM12CR6	3/4"	19.05	1.65	16.68	6.35	20.65	33.35

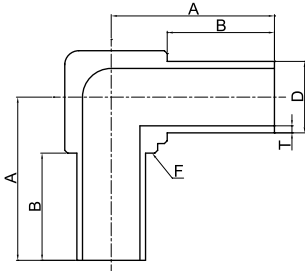
**Micro Tribow**

Part No.	Tube OD (D)		T	A	B	F Body	L
	Size (in)	Size					
SM2TB6	1/8"	3.18	0.70	10.32	6.35	7.94	14.29
SM4TB6	1/4"	6.35	1.00	10.32	6.35	7.94	14.29
SM6TB6	3/8"	9.53	1.00	11.91	6.35	11.11	17.46
SM8TB6	1/2"	12.70	1.24	13.50	6.35	14.29	20.64
SM12TB6	3/4"	19.05	1.65	16.68	6.35	20.65	27.00

NOTE:

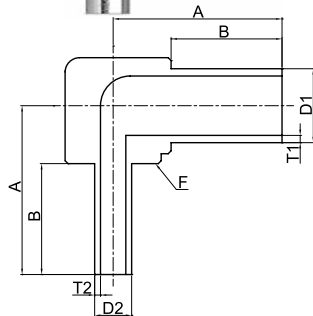
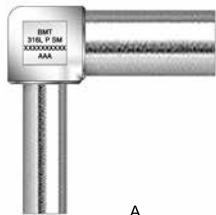
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Forged Weld Fittings



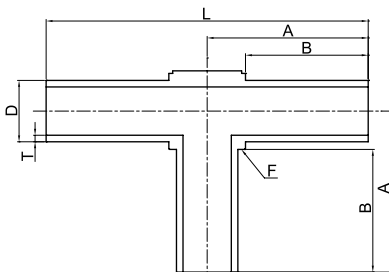
90° Elbow

Part No.	Tube OD (D)		T	A	B	F Body
	Size (in)	Size				
SM4E19	1/4"	6.35	1.00	25.00	19.05	11.10
SM6E19	3/8"	9.53	1.00	25.00	19.05	12.40
SM8E19	1/2"	12.70	1.24	29.00	19.05	17.00
SM12E22	3/4"	19.05	1.65	33.50	22.50	25.00
SM16E23	1"	25.40	1.65	38.30	23.30	30.00
SM4E10	1/4"	6.35	1.00	15.90	10.00	11.10
SM6E10	3/8"	9.53	1.00	15.90	10.00	12.40
SM8E10	1/2"	12.70	1.24	19.90	10.00	17.00
SM12E10	3/4"	19.05	1.65	22.40	10.00	25.00
SM16E10	1"	25.40	1.65	24.95	10.00	30.00



Reducing 90° Elbow

Part No.	Tube OD (D1)		Tube OD (D2)		T1	T2	A	B	F Body
	Size (in)	Size	Size (in)	Size					
SM6X4E19	3/8"	9.53	1/4"	6.35	1.00	1.00	25.00	19.05	12.4
SM8X4E19	1/2"	12.70	1/4"	6.35	1.24	1.00	29.00	19.05	17.0
SM8X6E19	1/2"	12.70	3/8"	9.53	1.24	1.00	29.00	19.05	17.0
SM12X4E22	3/4"	19.05	1/4"	6.35	1.65	1.00	33.50	22.50	25.0
SM12X6E22	3/4"	19.05	3/8"	9.53	1.65	1.00	33.50	22.50	25.0
SM12X8E22	3/4"	19.05	1/2"	12.70	1.65	1.24	33.50	22.50	25.0
SM16X4E23	1"	25.40	1/4"	6.35	1.65	1.00	38.30	23.30	30.0
SM16X8E23	1"	25.40	1/2"	12.70	1.65	1.24	38.30	23.30	30.0
SM16X12E23	1"	25.40	3/4"	19.05	1.65	1.65	38.30	23.30	30.0

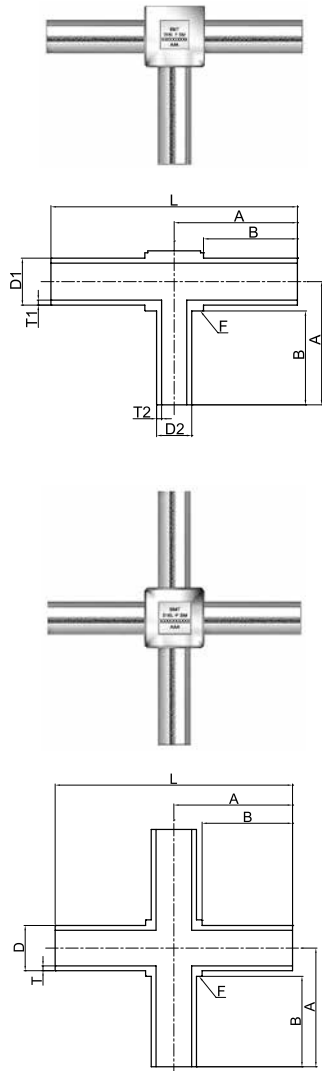


Tee

Part No.	Tube OD (D)		T	A	B	F Body	L
	Size (in)	Size					
SM4T19	1/4"	6.35	1.00	25.00	19.05	11.1	50.00
SM6T19	3/8"	9.53	1.00	25.00	19.05	12.4	50.00
SM8T19	1/2"	12.70	1.24	29.00	19.05	17.0	58.00
SM12T22	3/4"	19.05	1.65	33.50	22.50	25.0	67.00
SM16T23	1"	25.40	1.65	38.30	23.30	30.0	76.60
SM4T10	1/4"	6.35	1.00	15.90	10.00	11.1	31.80
SM6T10	3/8"	9.53	1.00	15.90	10.00	12.4	31.80
SM8T10	1/2"	12.70	1.24	19.90	10.00	17.0	39.80
SM12T10	3/4"	19.05	1.65	22.40	10.00	25.0	44.80
SM16T10	1"	25.40	1.65	24.95	10.00	30.0	49.90

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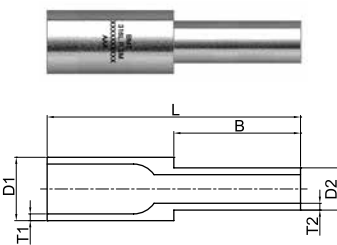
Reducing Tee

Part No.	Tube OD (D1)		Tube OD (D2)		T1	T2	A	B	F Body	L
	Size (in)	Size	Size (in)	Size						
SM6X4T19	3/8"	9.53	1/4"	6.35	1.00	1.00	25.00	19.05	12.4	50.00
SM8X4T19	1/2"	12.70	1/4"	6.35	1.24	1.00	29.00	19.05	17.0	58.00
SM8X6T19	1/2"	12.70	3/8"	9.53	1.24	1.00	29.00	19.05	17.0	58.00
SM12X4T22	3/4"	19.05	1/4"	6.35	1.65	1.00	33.50	22.50	25.0	67.00
SM12X6T22	3/4"	19.05	3/8"	9.53	1.65	1.00	33.50	22.50	25.0	67.00
SM12X8T22	3/4"	19.05	1/2"	12.70	1.65	1.24	33.50	22.50	25.0	67.00
SM16X4T23	1"	25.40	1/4"	6.35	1.65	1.00	38.30	23.30	30.0	76.60
SM16X8T23	1"	25.40	1/2"	12.70	1.65	1.24	38.30	23.30	30.0	76.60
SM16X12T23	1"	25.40	3/4"	19.05	1.65	1.65	38.30	23.30	30.0	76.60
SM6X4T10	3/8"	9.53	1/4"	6.35	1.00	1.00	15.90	10.00	12.4	31.80
SM8X4T10	1/2"	12.70	1/4"	6.35	1.24	1.00	19.90	10.00	17.0	39.80
SM8X6T10	1/2"	12.70	3/8"	9.53	1.24	1.00	19.90	10.00	17.0	39.80
SM12X4T10	3/4"	19.05	1/4"	6.35	1.65	1.00	22.40	10.00	25.0	44.80
SM12X6T10	3/4"	19.05	3/8"	9.53	1.65	1.00	22.40	10.00	25.0	44.80

Cross

Part No.	Tube OD (D)		T	A	B	F Body	L
	Size (in)	Size					
SM4CR19	1/4"	6.35	1.00	25.00	19.05	11.1	50.00
SM6CR19	3/8"	9.53	1.00	25.00	19.05	12.4	50.00
SM8CR19	1/2"	12.7	1.24	29.00	19.05	17.0	58.00
SM12CR22	3/4"	19.05	1.65	31.50	22.50	25.0	67.00
SM16CR23	1"	25.4	1.65	34.00	23.30	30.0	76.60
SM4CR10	1/4"	6.35	1.00	15.90	10.00	11.1	31.80
SM6CR10	3/8"	9.53	1.00	15.90	10.00	12.4	31.80
SM8CR10	1/2"	12.7	1.24	19.90	10.00	17.0	39.80
SM12CR10	3/4"	19.05	1.65	22.40	10.00	25.0	44.80
SM16CR10	1"	25.4	1.65	24.95	10.00	30.0	49.90

Reducer

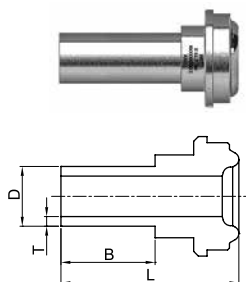


Part No.	Tube OD (D1)		Tube OD (D2)		T1	T2	B	L
	Size (in)	Size	Size (in)	Size				
SM6X4R19	3/8"	9.53	1/4"	6.35	1.00	1.00	19.05	38.1
SM8X4R19	1/2"	12.70	1/4"	6.35	1.24	1.00	19.05	38.1
SM8X6R19	1/2"	12.70	3/8"	9.53	1.24	1.00	19.05	38.1
SM12X4R19	3/4"	19.05	1/4"	6.35	1.65	1.00	19.05	42.9
SM12X6R19	3/4"	19.05	3/8"	9.53	1.65	1.00	19.05	42.9
SM12X8R19	3/4"	19.05	1/2"	12.70	1.65	1.24	19.05	42.9
SM16X4R19	1"	25.40	1/4"	6.35	1.65	1.00	19.05	42.9
SM16X6R19	1"	25.40	3/8"	9.53	1.65	1.00	19.05	42.9
SM16X8R19	1"	25.40	1/2"	12.70	1.65	1.24	19.05	42.9
SM16X12R19	1"	25.40	3/4"	19.05	1.65	1.65	19.05	42.9
SM6X4R10	3/8"	9.53	1/4"	6.35	1.00	1.00	10.00	20.0
SM8X4R10	1/2"	12.70	1/4"	6.35	1.24	1.00	10.00	20.0
SM8X6R10	1/2"	12.70	3/8"	9.53	1.24	1.00	10.00	20.0
SM16X4R10	3/4"	19.05	1/4"	6.35	1.65	1.00	10.00	20.0
SM16X6R10	3/4"	19.05	3/8"	9.53	1.65	1.00	10.00	20.0
SM16X8R10	3/4"	19.05	1/2"	12.70	1.65	1.24	10.00	20.0

NOTE:

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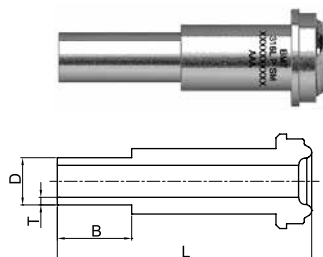
Glands



Female Gland

Part No.	Head Size (in)	Tube OD (D)		T	B	L	ANS (in)
		Size (in)	Size				
SM2FG19	1/8"	1/8"	3.18	0.70	19.05	27.40	1/8"
SM4FG6	1/4"	1/4"	6.35	1.00	6.35	15.24	1/4"
SM4FG10	1/4"	1/4"	6.35	1.00	10.00	18.89	1/4"
SM4FG19	1/4"	1/4"	6.35	1.00	19.05	27.94	1/4"
SM6FG6	1/2"	3/8"	9.53	1.00	6.35	15.75	1/2"
SM6FG10	1/2"	3/8"	9.53	1.00	10.00	19.40	1/2"
SM6FG19	1/2"	3/8"	9.53	1.00	19.05	28.45	1/2"
SM8FG6	1/2"	1/2"	12.70	1.24	6.35	15.75	1/2"
SM8FG10	1/2"	1/2"	12.70	1.24	10.00	19.40	1/2"
SM8FG19	1/2"	1/2"	12.70	1.24	19.05	28.45	1/2"
SM12FG19	3/4"	3/4"	19.05	1.65	19.05	34.50	3/4"
SM16FG19	1"	1"	25.40	1.65	19.05	38.60	1"
SM8X4FG6	1/2"	1/4"	6.35	1.00	6.35	15.75	1/2"
SM8X4FG10	1/2"	1/4"	6.35	1.00	10.00	19.40	1/2"
SM8X4FG19	1/2"	1/4"	6.35	1.00	19.05	28.45	1/2"

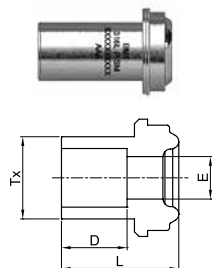
ANS : Available Nut Size



Male Gland

Part No.	Head Size (in)	Tube OD (D)		T	B	L	ANS (in)
		Size (in)	Size				
SM2MG19	1/8"	1/8"	3.18	0.70	19.05	36.00	1/8"
SM4MG6	1/4"	1/4"	6.35	1.00	6.35	30.48	1/4"
SM4MG10	1/4"	1/4"	6.35	1.00	10.00	34.13	1/4"
SM4MG19	1/4"	1/4"	6.35	1.00	19.05	43.18	1/4"
SM6MG6	1/2"	3/8"	9.53	1.00	6.35	32.77	1/2"
SM6MG10	1/2"	3/8"	9.53	1.00	10.00	36.42	1/2"
SM6MG19	1/2"	3/8"	9.53	1.00	19.05	45.47	1/2"
SM8MG6	1/2"	1/2"	12.70	1.24	6.35	32.77	1/2"
SM8MG10	1/2"	1/2"	12.70	1.24	10.00	36.42	1/2"
SM8MG19	1/2"	1/2"	12.70	1.24	19.05	45.47	1/2"
SM12MG19	3/4"	3/4"	19.05	1.65	19.05	51.56	3/4"
SM16MG19	1"	1"	25.40	1.65	19.05	58.93	1"
SM8X4MG6	1/2"	1/4"	6.35	1.00	6.35	32.77	1/2"
SM8X4MG10	1/2"	1/4"	6.35	1.00	10.00	36.42	1/2"
SM8X4MG19	1/2"	1/4"	6.35	1.00	19.05	45.47	1/2"

ANS : Available Nut Size

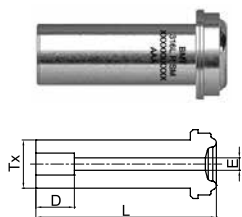


Socket Weld Short Gland

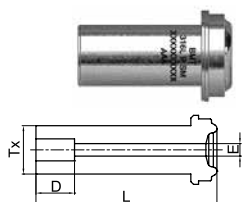
Part No.	Head Size (in)	Socket Size (in)	D	E	L	Tx
SM4SSG	1/4"	1/4"	7.1	4.6	12.7	8.9

NOTE:

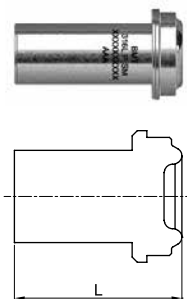
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**Socket Weld Long Gland**

Part No.	Head Size (in)	Socket Size (in)	D	E	L	Tx
SM2SLG	1/8"	1/8"	2.5	2.30	17.8	5.1
SM4SLG	1/4"	1/4"	7.1	4.60	33.3	8.9
SM6SLG	1/2"	1/2"	7.9	7.10	38.1	15.2
SM8SLG	1/2"	1/2"	9.6	10.22	38.1	15.2
SM12SLG	3/4"	3/4"	11.2	15.75	50.8	22.4
SM16SLG	1"	1"	15.7	22.10	56.4	30.2

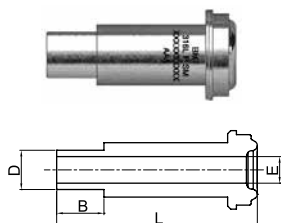
**Reducing Socket Weld Long Gland**

Part No.	Head Size (in)	Socket Size (in)	D	E	L	Tx
SM4X2RSLG	1/4"	1/8"	2.5	2.30	33.3	8.9
SM8X4RSLG	1/2"	1/4"	7.1	4.60	38.1	15.2

**Blind Gland**

Part No.	Head Size (in)	L
SM2BG	1/8"	17.8
SM4BG	1/4"	33.3
SM8BG	1/2"	38.1

Part No.	Head Size (in)	L
SM12BG	3/4"	50.8
SM16BG	1"	56.4

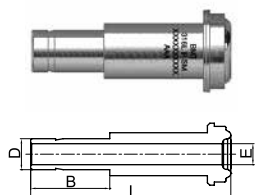
**Male Weld Gland**

Part No.	Head Size (in)	Tube OD (D)		E	B	L	ANS (in)
		Size (in)	Size				
SM2MWG	1/8"	1/8"	3.18	1.5	7.1	17.8	1/8"
SM4MWG	1/4"	1/4"	6.35	3.0	10.4	33.3	1/4"
SM6MWG	1/2"	3/8"	9.53	7.1	10.4	38.1	3/8"
SM8MWG	1/2"	1/2"	12.70	10.2	12.7	38.1	1/2"

ANS : Available Nut Size

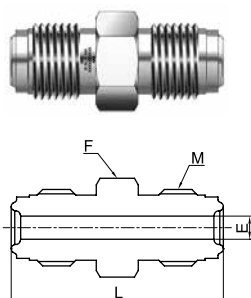
NOTE:

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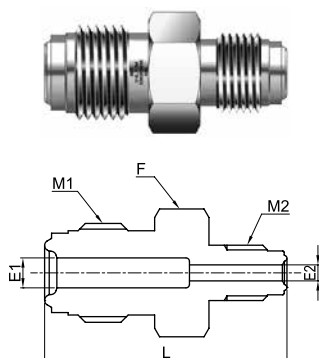
**Tube Adapter**

Part No.	Head Size (in)	Tube OD (D)		E	B	L	ANS (in)
		Size (in)	Size				
SM4TA	1/4"	1/4"	6.35	4.3	16.2	41.0	1/4"
SM6TA	1/2"	3/8"	9.53	6.8	17.8	46.0	3/8"
SM8TA	1/2"	1/2"	12.70	9.4	24.4	49.3	1/2"

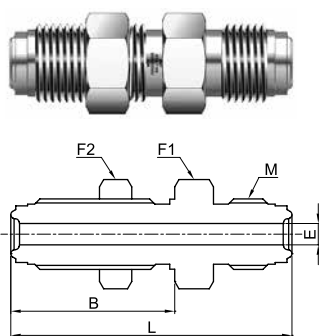
ANS : Available Nut Size

**Double Male Union**

Part No.	Head Size (in)	E	L	F HEX.	M
SM2MU	1/8"	2.30	28.70	9.52	5/16-24UNF
SM4MU	1/4"	4.35	39.37	15.88	9/16-18UNF
SM8MU	1/2"	10.22	46.74	23.81	7/8-14UNF
SM12MU	3/4"	15.75	61.98	33.34	1 1/4-18UNEF
SM16MU	1"	22.10	65.79	41.28	1 1/2-20UN

**Double Male Reducing Union**

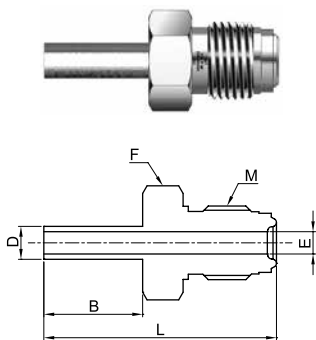
Part No.	Head Size (in)	Head Size (in)	E1	E2	F HEX.	L	M1	M2
SM4X2MRU	1/4"	1/8"	2.30	4.35	15.88	34.8	9/16-18UNF	5/16-24UNF
SM8X4MRU	1/2"	1/4"	4.35	10.22	23.81	43.4	7/8-14UNF	9/16-18UNF

**Bulkhead Union**

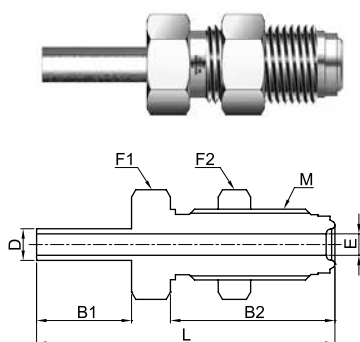
Part No.	Head Size (in)	E	B	L	F1 HEX.	F2 HEX.	M
SM4BHU	1/4"	4.35	33.00	56.60	19.05	19.05	9/16-18UNF
SM8BHU	1/2"	10.22	37.60	65.25	26.90	26.90	7/8-14UNF
SM12BHU	3/4"	15.75	43.40	79.00	38.10	38.10	1 1/4-18UNEF
SM16BHU	1"	22.10	47.10	86.00	44.40	44.40	1 1/2-20UN

NOTE:

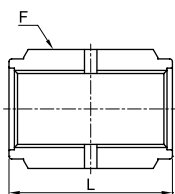
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**Tube Butt Weld (TBW) Connector**

Part No.	Head Size (in)	Tube OD (D)		B	E	L	F HEX.	M
		Size (in)	Size					
SM4TC	1/4"	1/4"	6.35	19.05	4.35	42.65	15.88	9/16-18UNF
SM6TC	1/2"	3/8"	9.53	19.05	10.22	46.70	23.81	7/8-14UNF
SM8TC	1/2"	1/2"	12.70	19.05	10.22	46.70	23.81	7/8-14UNF
SM12TC	3/4"	3/4"	19.05	19.05	15.75	55.55	33.34	1 1/4-18UNEF

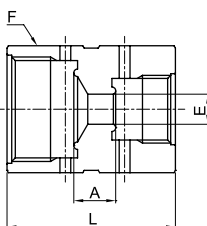
**Tube Butt Weld (TBW) Bulkhead Connector**

Part No.	Head Size (in)	Tube OD (D)		E	B1	B2	L	F1 HEX.	F2 HEX.	M
		Size (in)	Size							
SM4TBHC	1/4"	1/4"	6.35	4.35	19.05	33.00	59.85	19.05	19.05	9/16-18UNF
SM8TBHC	1/2"	1/2"	12.70	10.22	19.05	37.60	65.25	26.90	26.90	7/8-14UNF
SM12TBHC	3/4"	3/4"	19.05	15.75	19.05	43.25	71.30	38.10	38.10	1 1/4-18UNEF

**Coupling**

Part No.	Head Size (in)	F HEX.	L
SM2CG	1/8"	11.11	16.8
SM4CG	1/4"	19.05	30.2
SM8CG	1/2"	26.98	33.3

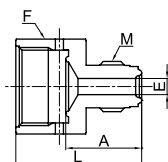
Part No.	Head Size (in)	F HEX.	L
SM12CG	3/4"	38.10	42.7
SM16CG	1"	44.45	51.8

**Double Female Reducing Union**

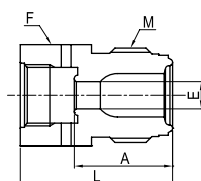
Part No.	Head Size (in)	Head Size (in)	E	F HEX.	A	L
SM8X4FRU	1/2"	1/4"	6.4	26.98	8.9	35.8

NOTE:

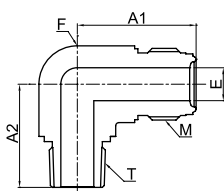
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**Reducing Adapter**

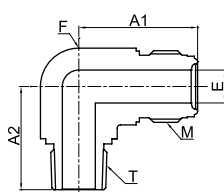
Part No.	Head Size (in)	Head Size (in)	E	F HEX.	A	L	M
SM2X4RA	1/8"	1/4"	2.3	19.05	17.5	30.2	5/16-24UNF
SM4X8RA	1/4"	1/2"	4.6	26.98	21.6	35.8	9/16-18UNF

**Reducing Bushing**

Part No.	Head Size (in)	Head Size (in)	E	F HEX.	A	L	M
SM4X2RB	1/4"	1/8"	3.3	15.88	19.3	26.9	9/16-18UNF
SM8X4RB	1/2"	1/4"	6.4	23.81	23.1	35.8	7/8-14UNF

**Male Elbow (NPT)**

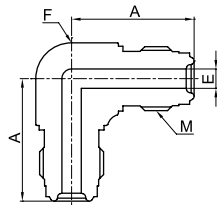
Part No.	Head Size (in)	T (NPT)	E	A1	A2	F Body	M
SM4MEN	1/4"	1/4"	4.35	27.18	27.18	17.0	9/16-18UNF
SM8MEN	1/2"	1/2"	10.22	36.83	36.83	25.0	7/8-14UNF
SM12MEN	3/4"	3/4"	15.75	48.80	43.50	33.3	1 1/4-18UNEF

**Male Elbow (PT)**

Part No.	Head Size (in)	T (PT)	E	A1	A2	F Body	M
SM4MER	1/4"	1/4"	4.35	27.18	27.18	17.0	9/16-18UNF
SM8MER	1/2"	1/2"	10.22	36.83	36.83	25.0	7/8-14UNF
SM12MER	3/4"	3/4"	15.75	48.80	43.50	33.3	1 1/4-18UNEF

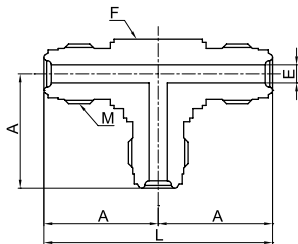
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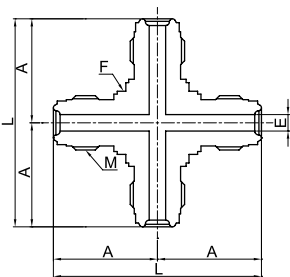
Union Elbow

Part No.	Head Size (in)	E	A	F Body	M
SM4UE	1/4"	4.35	27.18	17.0	9/16-18UNF
SM8UE	1/2"	10.22	36.83	25.0	7/8-14UNF
SM12UE	3/4"	15.75	48.77	33.3	1 1/4-18UNEF
SM16UE	1"	22.10	50.80	42.8	1 1/2-20UN



Union Tee

Part No.	Head Size (in)	E	A	L	F Body	M
SM4UT	1/4"	4.35	27.18	54.36	17.0	9/16-18UNF
SM8UT	1/2"	10.22	36.83	73.66	25.0	7/8-14UNF
SM12UT	3/4"	15.75	48.77	97.54	33.3	1 1/4-18UNEF
SM16UT	1"	22.10	50.80	101.60	42.8	1 1/2-20UN

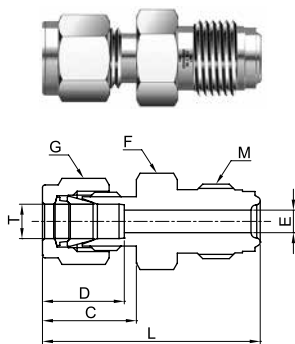


Union Cross

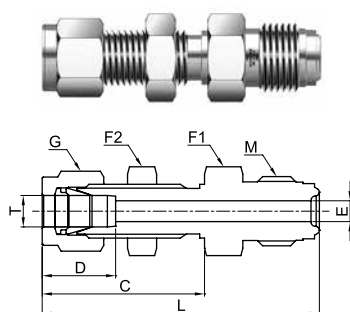
Part No.	Head Size (in)	E	A	L	F Body	M
SM4UC	1/4"	4.35	27.18	54.36	17.0	9/16-18UNF
SM8UC	1/2"	10.22	36.83	73.66	25.0	7/8-14UNF
SM12UC	3/4"	15.75	48.77	97.54	33.3	1 1/4-18UNEF
SM16UC	1"	22.10	50.80	101.60	42.8	1 1/2-20UN

NOTE:

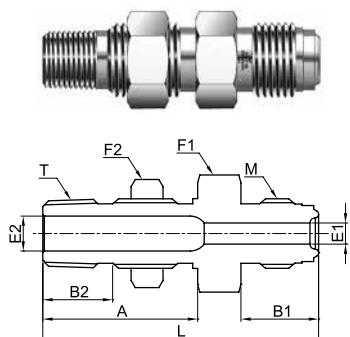
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**SUPERLOK Tube Fitting Connector**

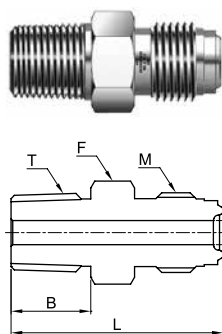
Part No.	Head Size (in)	Tube Size (in)	C	D	E	F HEX.	G HEX.	L	T (in)	M
SM4SC	1/4"	1/4"	17.80	15.20	4.35	15.90	14.29	41.1	1/4"	9/16-18UNF
SM8SC	1/2"	1/2"	21.80	22.90	10.22	23.81	22.23	49.5	1/2"	7/8-14UNF

**SUPERLOK Tube Fitting Bulkhead Connector**

Part No.	Head Size (in)	Tube Size (in)	C	D	E	F1 HEX.	F2 HEX.	G HEX.	L	T (in)	M
SM4BHSC	1/4"	1/4"	33.5	15.2	4.6	15.87	15.87	14.28	57.2	1/4"	9/16-18UNF
SM8BHSC	1/2"	1/2"	41.9	22.9	10.22	23.81	23.81	22.22	69.5	1/2"	7/8-14UNF

**Bulkhead Male Connector (NPT)**

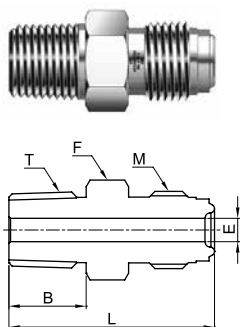
Part No.	Head Size (in)	T (NPT)	B1	B2	E1	E2	F1 HEX.	F2 HEX.	A	L	M
SM4BHMCN	1/4"	1/4"	15.7	14.2	4.60	7.1	20.63	20.63	31.5	56.1	9/16-18UNF

**Male Connector (PT)**

Part No.	Head Size (in)	T (PT)	E	B	L	F HEX.	M
SM2MCR	1/8"	1/8"	2.30	9.60	27.20	11.11	5/16-24UNF
SM4MCR	1/4"	1/4"	4.35	14.22	37.84	15.90	9/16-18UNF
SM8MCR	1/2"	1/2"	10.22	19.05	46.74	23.80	7/8-14UNF
SM12MCR	3/4"	3/4"	15.75	19.05	55.63	33.30	1 1/4-18UNF
SM16MCR	1"	1"	22.10	23.88	62.74	41.28	1 1/2-20UN

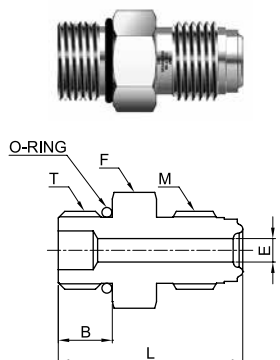
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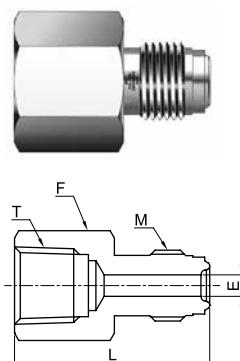
Male Connector (NPT)

Part No.	Head Size (in)	T (NPT)	E	B	L	F HEX.	M
SM2MCN	1/8"	1/8"	2.30	9.60	27.20	11.11	5/16-24UNF
SM4MCN	1/4"	1/4"	4.35	14.22	37.84	15.90	9/16-18UNF
SM8MCN	1/2"	1/2"	10.22	19.05	46.74	23.80	7/8-14UNF
SM12MCN	3/4"	3/4"	15.75	19.05	55.63	33.30	1 1/4-18UNEF
SM16MCN	1"	1"	22.10	23.88	62.74	41.28	1 1/2-20UN



Male Connector (SAE)

Part No.	Head Size (in)	T (SAE)	E	B	L	F HEX.	M
SM4X6MCU	1/4"	9/16-18UNF	4.35	9.9	33.8	19.05	9/16-18UNF
SM8X10MCU	1/2"	7/8-14UNF	10.22	12.7	42.2	25.4	7/8-14UNF
SM8X6MCU	1/2"	9/16-18UNF	10.22	9.9	37.6	23.8	7/8-14UNF
SM12X14MCU	3/4"	1 3/16-12UNF	15.75	15	51.5	34.9	1 1/4-18UNEF

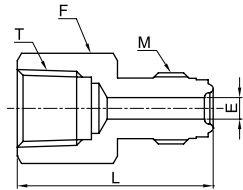


Female Connector (PT)

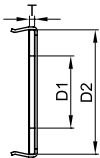
Part No.	Head Size (in)	T (PT)	E	L	F HEX.	M
SM2FCR	1/8"	1/8"	2.3	30.2	14.28	5/16-24UNF
SM4FCR	1/4"	1/4"	4.35	39.1	19.05	9/16-18UNF
SM8FCR	1/2"	1/2"	10.22	50.5	26.98	7/8-14UNF
SM12FCR	3/4"	3/4"	15.75	59.9	33.33	1 1/4-18UNEF
SM16FCR	1"	1"	22.1	63.8	41.27	1 1/2-20UN

NOTE:

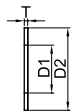
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**Female Connector (NPT)**

Part No.	Head Size (in)	T (NPT)	E	L	F HEX.	M
SM2FCN	1/8"	1/8"	2.3	30.2	14.28	5/16-24UNF
SM4FCN	1/4"	1/4"	4.35	39.1	19.05	9/16-18UNF
SM8FCN	1/2"	1/2"	10.22	50.5	26.98	7/8-14UNF
SM12FCN	3/4"	3/4"	15.75	59.9	33.33	1 1/4-18UNEF
SM16FCN	1"	1"	22.1	63.8	41.27	1 1/2-20UN

Gaskets**Gasket Retainer Assembly**

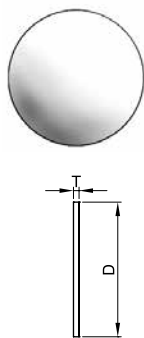
Part No.	Head Size (in)	T	D1	D2
SM4GR	1/4"	0.80	5.60	11.85
SM8GR	1/2"	0.80	11.20	19.27
SM12GR	3/4"	0.80	16.70	27.90
SM16GR	1"	0.80	22.60	34.20

**Gasket**

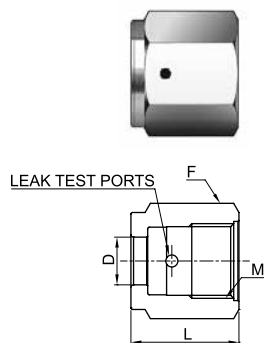
Part No.	Head Size (in)	T	D1	D2
SM2GT	1/8"	0.80	2.30	6.60
SM4GT	1/4"	0.80	5.60	12.70
SM8GT	1/2"	0.80	11.20	19.80
SM12GT	3/4"	0.80	16.70	29.00
SM16GT	1"	0.80	22.60	35.80

NOTE:

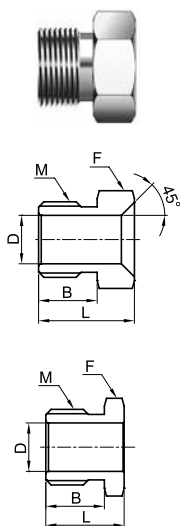
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**Blind Gasket**

Part No.	Head Size (in)	T	D
SM4BGT	1/4"	0.80	11.90
SM8BGT	1/2"	0.80	19.80
SM12BGT	3/4"	0.80	28.90
SM16BGT	1"	0.80	35.50

Nuts, Caps and Plugs**Female Nut**

Part No.	Head Size (in)	L	D	F Hex.	M
SM2FN	1/8"	13.5	5.3	11.11	5/16-24UNF
SM4FN	1/4"	20.5	9.1	19.05	9/16-18UNF
SM8FN	1/2"	22.3	15.5	26.99	7/8-14UNF
SM12FN	3/4"	28.4	22.6	38.1	1 1/4-18UNEF
SM16FN	1"	34.0	30.5	44.45	1 1/2-20UN

**Male Nut**

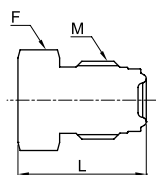
Part No.	Head Size (in)	L	B	D	F Hex.	M
SM2MN	1/8"	12.70	8.20	5.30	9.52	5/16-24UNF
SM4MN	1/4"	18.00	11.00	9.10	15.88	9/16-18UNF
SM4MNS*	1/4"	13.70	11.00	9.10	15.88	9/16-18UNF
SM8MN	1/2"	20.50	12.70	15.50	23.81	7/8-14UNF
SM12MN	3/4"	25.40	16.00	22.60	33.34	1 1/4-18UNEF
SM16MN	1"	30.20	20.00	30.50	41.28	1 1/2-20UN

*SM4MNS : Short Male nut 1/4" only

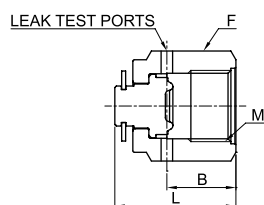
Short Male nut 1/4" only

NOTE:

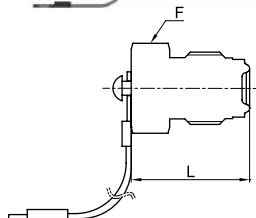
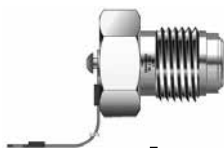
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**Plug**

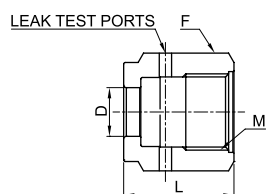
Part No.	Head Size (in)	L	F HEX.	M
SM2PG	1/8"	17.3	9.52	5/16-24UNF
SM4PG	1/4"	23.37	15.88	9/16-18UNF
SM8PG	1/2"	27.43	23.81	7/8-14UNF
SM12PG	3/4"	36.32	33.34	1 1/4-18UNEF
SM16PG	1"	38.61	41.28	1 1/2-20UN

**Cap**

Part No.	Head Size (in)	L	B	F Hex.	M
SM2CP	1/8"	16.00	7.60	11.11	5/16-24UNF
SM4CP	1/4"	24.20	11.18	19.05	9/16-18UNF
SM8CP	1/2"	25.50	11.43	26.99	7/8-14UNF
SM12CP	3/4"	32.77	13.72	38.10	1 1/4-18UNEF
SM16CP	1"	39.12	16.00	44.45	1 1/2-20UN

**Plug (Cable Type)**

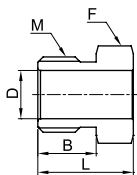
Part No.	Head Size (in)	F HEX.	L	Cable Length
SM4PGC	1/4"	15.88	23.37	260
SM8PGC	1/2"	23.81	27.43	260

High - Flow Connection - "H" Type**High Flow Female Nut**

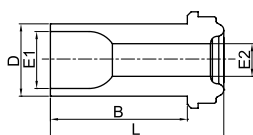
Part No.	Head Size (in)	L	D	F HEX.	M
SM4HFN	1/4"	20.57	9.9	19.05	9/16-18UNF

NOTE:

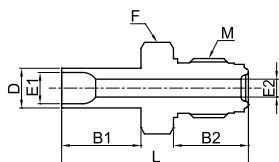
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**High Flow Male Nut**

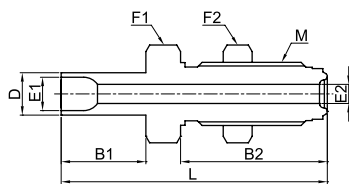
Part No.	Head Size (in)	B	L	D	F HEX.	M
SM4HMN	1/4"	11.0	18.03	9.9	15.88	9/16-18UNF

**High Flow Long Gland**

Part No.	Head Size (in)	Tube OD (D)		B	L	E1	E2
		Size (in)	Size				
SM4X6HLG	1/4"	3/8"	9.53	28.4	33.2	7.5	6.28

**High Flow Tube Butt Weld (TBW) Connector**

Part No.	Head Size (in)	Tube OD (D)		E1	E2	B1	B2	L	F HEX.	M
		Size (in)	Size							
SM4X6HTC	1/4"	3/8"	9.53	7.5	6.35	19.05	15.8	42.75	15.88	9/16-18UNF

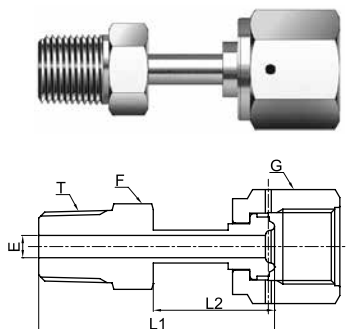
**High Flow Tube Butt Weld (TBW) Bulkhead Connector**

Part No.	Head Size (in)	Tube OD (D)		B1	B2	E1	E2	L	F1 HEX.	F2 HEX.	M
		Size (in)	Size								
SM4X6HBHC	1/4"	3/8"	9.53	19.05	33	7.5	6.35	59.85	19.05	19.05	9/16-18UNF

NOTE:

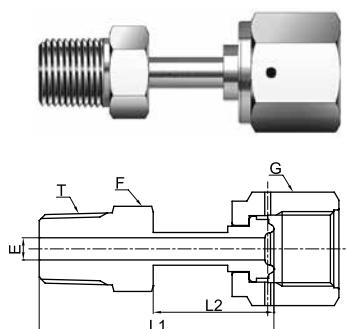
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Welded Assembly



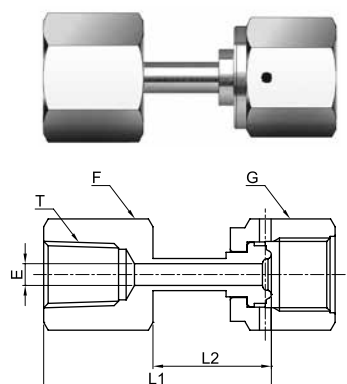
Welded Male Connector (PT)

Part No.	Head Size (in)	T (PT)	E	L1	L2	F HEX.	G HEX.
SM4WMCR	1/4"	1/4"	4.35	45.5	23.4	14.29	19.05
SM8WMCR	1/2"	1/2"	10.22	53.1	25.6	22.23	26.66



Welded Male Connector (NPT)

Part No.	Head Size (in)	T (NPT)	E	L1	L2	F HEX.	G HEX.
SM4WMCN	1/4"	1/4"	4.35	45.5	23.4	14.29	19.05
SM8WMCN	1/2"	1/2"	10.22	53.1	25.6	22.23	26.66

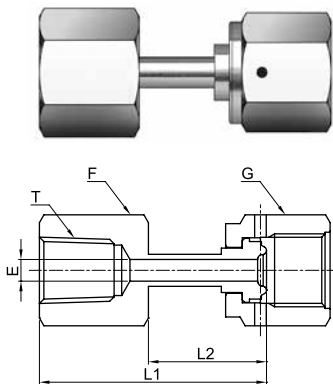


Welded Female Connector (PT)

Part No.	Head Size (in)	T (PT)	E	L1	L2	F HEX.	G HEX.
SM4WFCR	1/4"	1/4"	4.35	45.0	23.4	19.05	19.05
SM8WFCR	1/2"	1/2"	10.22	55.4	26.4	26.99	26.99

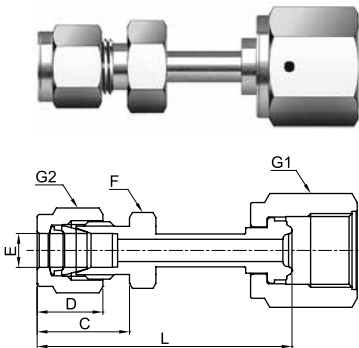
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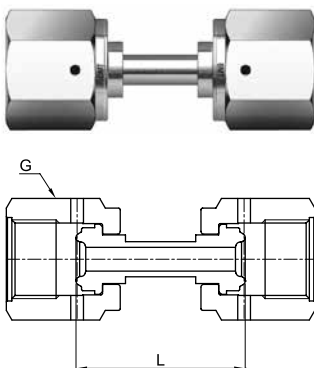
Welded Female Connector (NPT)

Part No.	Head Size (in)	T (NPT)	E	L1	L2	F HEX.	G HEX.
SM4WFCN	1/4"	1/4"	4.35	45.0	23.4	19.05	19.05
SM8WFCN	1/2"	1/2"	10.22	55.4	26.4	26.99	26.99



Welded Lok Connector

Part No.	Head Size (in)	Tube Size (in)	C	D	E	L	F HEX.	G1 HEX.	G2 HEX.
SM4WSC	1/4"	1/4"	17.78	15.24	4.35	49.28	12.70	19.00	14.29
SM8WSC	1/2"	1/2"	21.84	22.86	10.22	56.64	20.64	26.99	22.22



Welded Female Union

Part No.	Head Size (in)	L	G HEX.
SM4WFU	1/4"	43.4	19.05
SM8WFU	1/2"	46.7	26.99

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