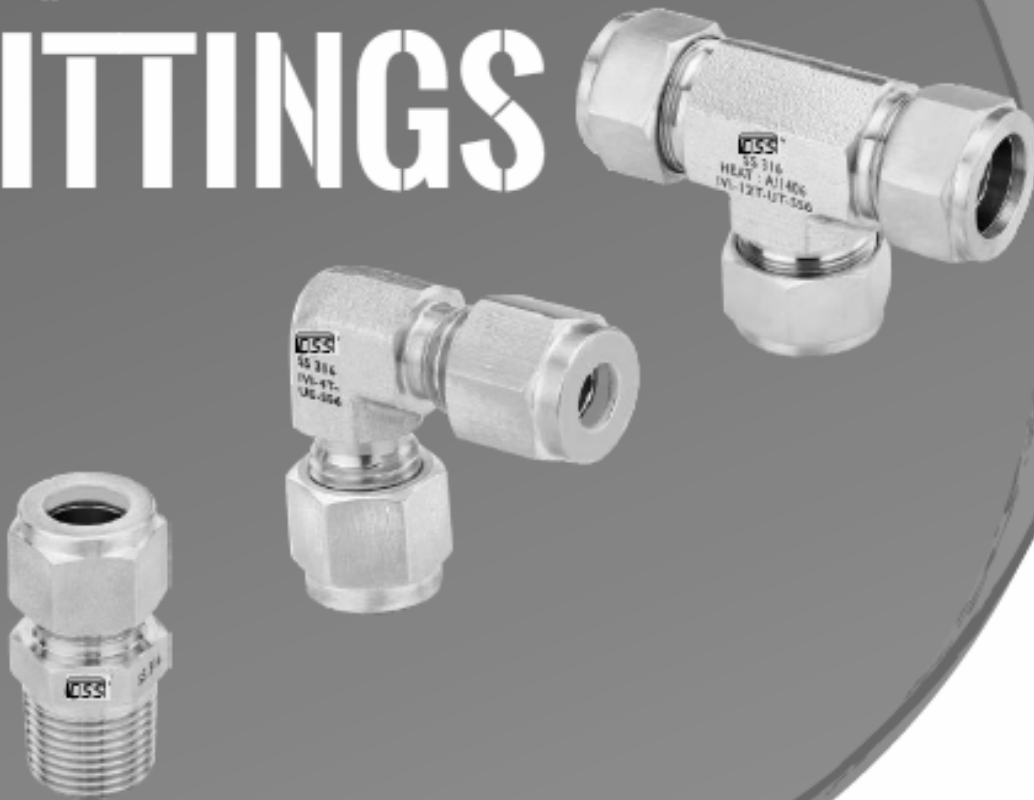




INSTRUMENTATION TUBE FITTINGS

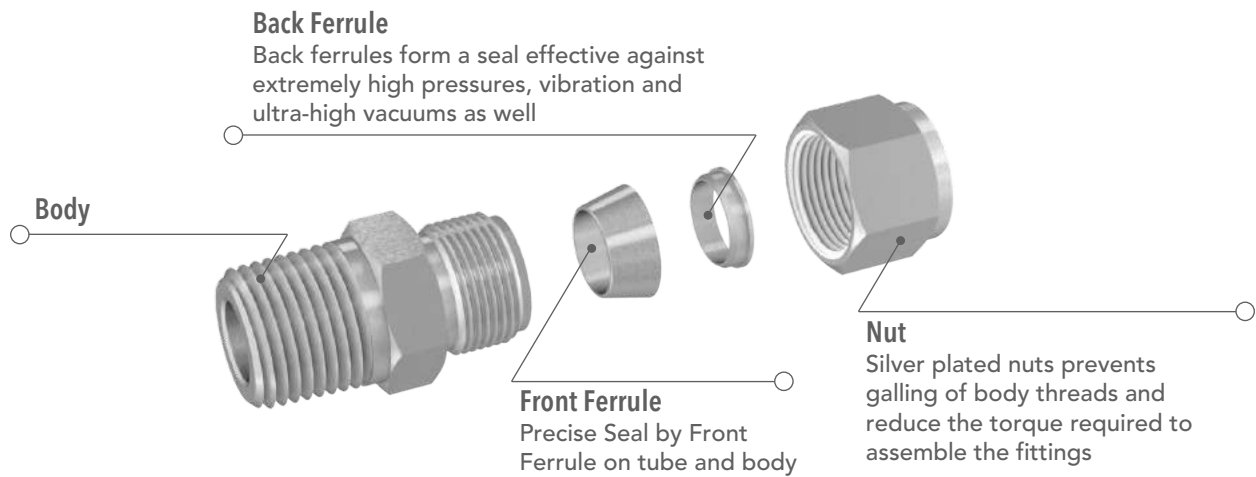


GUARANTEED
Reliability With
Economy



FEATURES

- Size ranges from 1/16" to 1" and 2mm to 25mm
- All fittings have a high-quality appearance.
- Straight fittings are manufactured from Bar stock and Shaped fittings are manufactured from forgings.
- Every fitting is marked with Manufacturer's name, Size, Material and heat code for traceability
- Precision machined components ensure perfect deformation of ferrules and the tubing
- Excellent leak-free sealing integrity on heavy vibration, vacuum and impulse.
- Case hardened back ferrules for additional strength
- Female nut threads are silver plated to reduce friction against the body threads and avoid galling.
- Radius junction design for elbows provides smooth flow path.
- Fittings are easy to disconnect and retighten



PRESSURE RATING


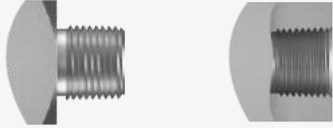




NPT/ISO Pipe Size	Stainless steel 316				Brass				Carbon Steel			
	Male		Female		Male		Female		Male		Female	
	Bar	Psig	Bar	Psig	Bar	Psig	Bar	Psig	Bar	Psig	Bar	Psig
1/8	689	10,000	420	6,100	337	4,900	207	3,000	689	10,000	420	6,100
1/4	558	8,100	434	6,300	275	4,000	214	3,200	558	8,100	434	6,300
3/8	524	7,600	345	5,000	262	3,800	172	2,500	524	7,600	345	5,000
1/2	517	7,500	324	4,700	255	3,700	158	2,300	517	7,500	324	4,700
3/4	496	7,200	303	4,400	248	3,600	152	2,200	496	7,200	303	4,400
1	365	5,300	296	4,300	172	2,500	145	2,100	365	5,300	296	4,300

- Pressure ratings are calculated at -28 to 37°C (-20 to 100°F) using allowable stress value of 20,000psi for SS 316, 10,000psi for Brass and 20,000psi for Carbon Steel as per ASME B31.3 Process Piping Code
- Pressure ratings are listed for temperatures up to 37°C (100°F)
- To determine the pressure ratings in accordance with ASME B31.1, Power Piping:
 - Carbon Steel material – multiply by 0.85
 - Stainless Steel and Brass material – remains the same

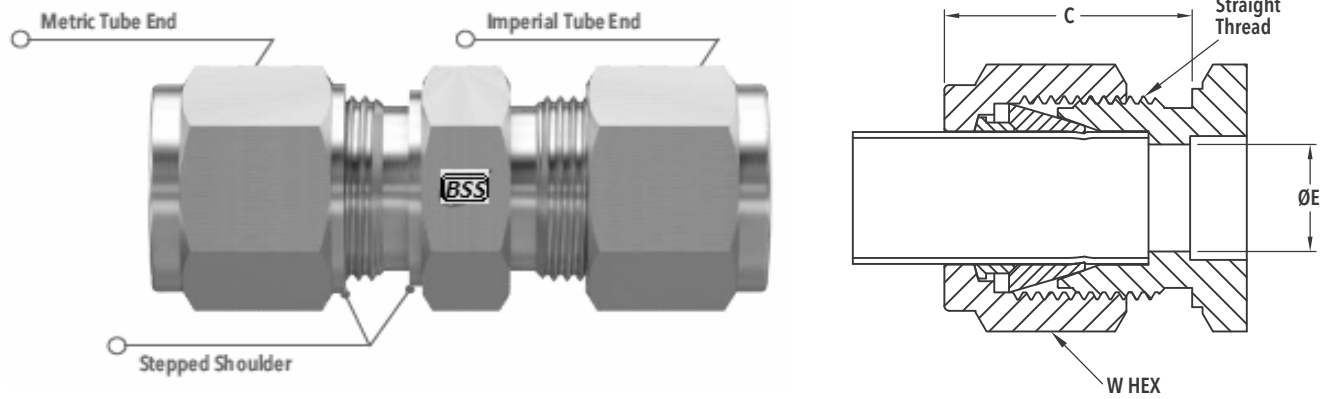
MATERIAL STANDARDS

Material	Bar Stock	Forging
316 SS	ASTM A276, ASME SA479, EN 1.4401	ASTM A182, ASME SA182, EN 1.4401
304 SS	ASTM A276, ASME SA479, EN 1.4301	ASTM A182, ASME SA182, EN 1.4301
Alloy 400	ASTM B164, ASME SB164	ASTM B564, ASME SB564
Alloy 600	ASTM B166, ASME SB166	ASTM B564, ASME SB564
Alloy 625	ASTM B446	ASTM B564, ASME SB564
Alloy C-276	ASTM B574	ASTM B564
Carbon Steel	ASTM A108	ASTM A105
Brass	ASTM B16/ B453	ASTM B283
Nylon	ASTM D4066	/
PTFE	ASTM D1710	/

THREAD SPECIFICATIONS

End / Thread Types	Standard	Illustration	Use Code
NPT	ASME B1.20.1, SAE AS71051		N
ISO Tapered Threads	ISO-7-1, BS EN 10226-1, JIS B0203		G
ISO Parallel Threads	ISO 228, JIS B0202		GT
Unified (SAE)	ASME B1.1/ SAE J475		UN
Metric	ISO 261		M
Weld Ends	ASME B16.11 - Socket Weld Ends ASME B16.9 - Butt Weld Ends		SW, BW

TUBE END DIMENSIONAL DATA



Imperial Tube End

Size No.	Dimensions (in)					
	Tube O.D.	Straight Thread	C	W HEX	ØE	D Tube Ins. Depth
1	1/16	10-32	.43	5/16	.052	.34
2	1/8	5/16-20	.60	7/16	.093	.50
3	3/16	3/8-20	.64	1/2	.125	.54
4	1/4	7/16-20	.70	9/16	.187	.60
5	5/16	1/2-20	.73	5/8	.250	.64
6	3/8	9/16-20	.76	11/16	.281	.67
8	1/2	3/4-20	.87	7/8	.406	.90
10	5/8	7/8-20	.87	1	.500	.96
12	3/4	1-20	.87	1-1/8	.625	.96
14	7/8	1-1/8-20	.87	1-1/4	.750	1.03
16	1	1-5/16-20	1.05	1-1/2	.875	1.24
20	1-1/4	1-5/8-20	1.52	1-7/8	1.09	1.61
24	1-1/2	1-15/16-20	1.77	2-1/4	1.34	1.96

Metric Tube End

Size No.	Dimensions (mm)					
	Tube O.D.	Straight Thread	C	W HEX	ØE	D Tube Ins. Depth
2	2mm	5/16-20	15.3	12.0	1.7	12.9
3	3mm	5/16-20	15.3	12.0	2.4	12.9
4	4mm	3/8-20	16.1	12.0	2.4	13.7
6	6mm	7/16-20	17.7	14.0	4.8	15.3
8	8mm	1/2-20	18.6	15.0	6.4	16.2
10	10mm	5/8-20	19.5	18.0	7.9	17.2
12	12mm	3/4-20	22.0	22.0	9.5	22.8
14	14mm	7/8-20	22.0	24.0	11.1	24.4
15	15mm	7/8-20	22.0	24.0	11.9	24.4
16	16mm	7/8-20	22.0	24.0	12.7	24.4
18	18mm	1-20	22.0	27.0	15.1	24.4
20	20mm	1-1/8-20	22.0	30.0	15.9	26.0
22	22mm	1-1/8-20	22.0	30.0	18.3	26.0
25	25mm	1-5/16-20	26.5	35.0	21.8	31.3

INSTALLATION INSTRUCTIONS

BSS tube fittings are supplied finger tight and ready for immediate use. There disassembly is not necessary for installation.

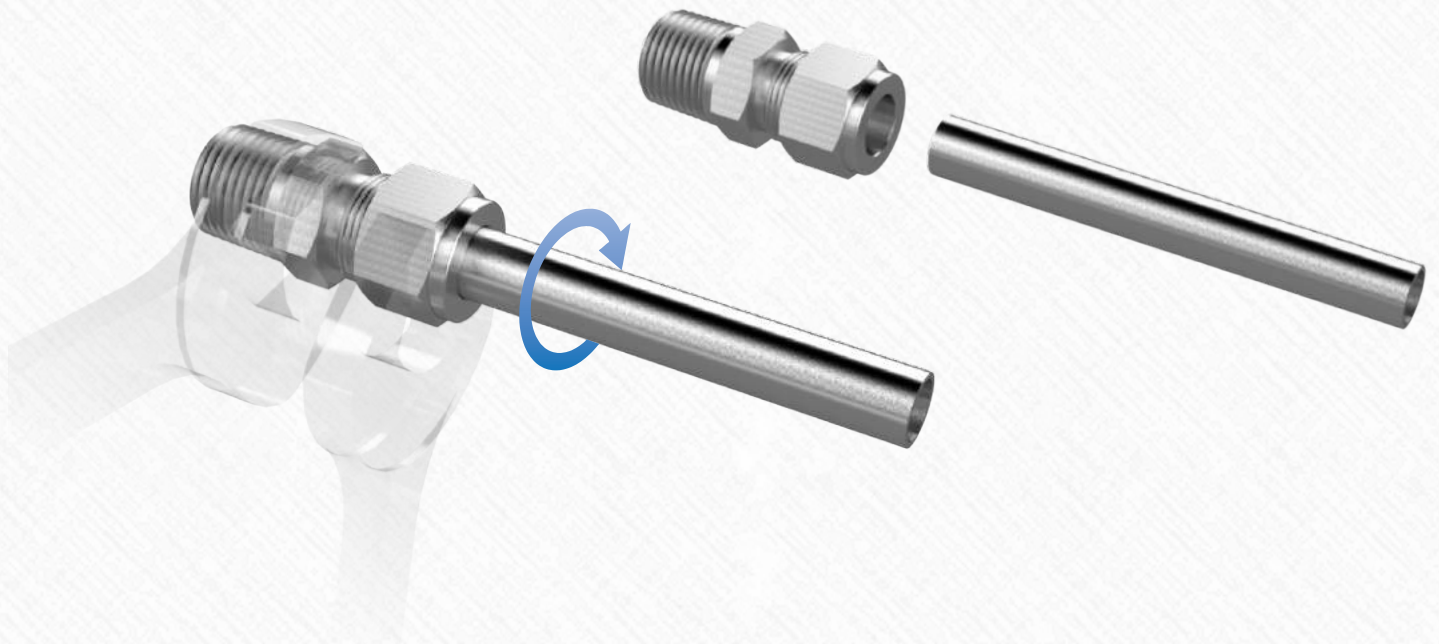
BSS Tube Fittings up to 1"/25mm

- Fully insert the tubing into the BSS Tube Fitting until the end bottoms on the shoulder of the fitting
- body. Wrench tighten the nut until the tubing does not rotate by hand or moves axially in the fitting.
- Mark the nut at 6 o'clock position
- While holding the body steady, tighten the nut one and one quarter turns (1-1/4") to the 9 o'clock position.

*For 1/16", 1/8" and 3/16", 2, 3 and 5mm tube fittings, tighten the nut only three-quarters (3/4") to the 3 o'clock position.

Safety Precautions:

- Do not bleed systems by loosening fitting nut or fitting plug
- Do not assemble or tighten fittings when the system is pressurized
- Make sure the tubing rests firmly on the shoulder of the tube fitting body before tightening the nut
- Always use proper sealants on taper pipe threads
- Never turn fitting body. Instead, hold the fitting body and turn nut
- Avoid unnecessary disassembly of unused fittings





TUBE SELECTION AND HANDLING

BSS twin ferrule tube fittings perform best when good quality tubing is used. Tubing should be considered a fitting component. Tubing selection by relying only on ASTM or other equivalent. Specifications is not enough. Here are some points to be considered:

- Materials and manufacturing method
- Material hardness
- Surface finish
- Outside diameter and its tolerance
- Wall thickness and its tolerance
- Ovality
- Concentricity
- Packing and transportation

Always try to use good quality tubing for best performance.

Tubing must be handled with great care in transportation and in storage to avoid damage to the tubing surface. Copper tubing must not lose its circularity. If necessary, the tubing must be covered and tubing ends must be plugged to be kept from dirt.

TUBING CONSIDERATIONS

- Tubing material should be softer than fitting material. For example, Stainless steel tubing should not be used with Brass Fittings
- When tubing and fittings are made of the same material, tubing must be fully annealed.
- Surface finish is very important to proper sealing. Tubing with any kind of depression, scratch, raised portion or any other surface defect will be difficult to seal, especially in gas service.

STAINLESS STEEL TUBING

Fractional Seamless Stainless Steel Tubing

Fully annealed austenitic Type 304 or 316 seamless tubing ASTM A269 or ASTM A213, or equivalent. Tubing to be free from scratches, draw mark, dirt, dust, flat spots, and should be suitable for bending and flaring.

Recommended hardness : 80 HRB or less.

OD in.	Wall Thickness (in)															
	0.012	0.014	0.016	0.02	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.12	0.134	0.156	0.188	
1/16	6800	8100	9400	12000												
1/8					8500	10900										
3/16					5400	7000	10200									
1/4				4000	5100	7500	10200									
5/16					4000	5800	8000									
3/8						3300	4800	6500	8600							
1/2						2400	3500	4700	6200							
5/8							2900	4000	5200	6000						
3/4							2400	3300	4200	4900	5800					
7/8							2000	2800	3600	4200	4800					
1								2400	3100	3600	4200	4700				
1 1/4									2400	2800	3300	3600	4100	4900		
1 1/2										2300	2700	3000	3400	4000	4900	
2											2000	2200	2500	2900	3600	

Metric Seamless Stainless Steel Tubing

OD mm	Wall Thickness (mm)													
	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0	3.5	4.0	4.5	
3	710													
6	330	420	520	670										
8		310	380	490										
10		240	300	380										
12		200	240	310	380	430								
14		180	220	280	340	390	430							
15		170	200	260	320	360	400							
16			190	240	300	330	370							
18			170	210	260	290	320	370						
20			150	190	230	260	290	330	380					
22			130	170	210	230	260	300	340					
25					180	200	230	260	300	320				
28						180	200	230	260	280	330			
30						170	190	210	240	260	310			
32						160	170	200	230	240	290	330		
38							140	170	190	200	240	280	310	
50										150	180	210	240	

- According to the requirements of ASME B31.3 Process Piping Code and ASME B31.1 Power Piping Code, allowable working pressure calculated at -20 to 100°F (-28 to 37°C) using S value of 20,000 psi.
- Pressure calculations are based on maximum O.D. and minimum wall thickness and no allowance is made for corrosion and erosion.
i.e., ASTM A269 1/2 in. OD x 0.035 in. WT: OD tolerance ± 0.005 in., WT tolerance ± 15%.
Calculations are based on 0.505 in. OD x 0.0298 in. WT.
- Safety Factor is 3.75 to 1, considering ultimate tensile strength of 75,000 psi.

Weld Stainless Steel Tubing Allowable Working Pressure

To determine the working pressure of weld tubing to the requirements of ASME B31.3 Code, de-rating factors below must be applied. For single weld tubing multiply by 0.80, and for double weld tubing multiply by 0.85:

Example: SS316 seamless 1/2 in. O.D. x 0.065 in. WT allowable working pressure: 4700 psi.

To determine the work pressure of the single weld tubing, multiply 4700 psi by 0.80.

4700 psig x 0.80 = 3760 psig at -20 to 100°F (-28 to 37°C).



COPPER TUBING

Fractional Seamless Copper Tubing

Soft annealed seamless copper tubing ASME B75 or equivalent. Soft annealed (Temper 0) copper water tube, type K or Type L ASTM B88.

Recommended hardness: 60 HRB or less.

OD in.	Wall Thickness (in)											
	0.010	0.012	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120		
1/8			2700	3600								
3/16			1800	2300	3400							
1/4			1300	1600	2500	3500						
5/16				1300	1900	2700						
3/8				1000	1600	2200						
1/2				800	1100	1600	2100					
5/8					900	1200	1600	1900				
3/4					700	1000	1300	1500	1800			
7/8					600	800	1100	1300	1500			
1					500	700	900	1100	1300	1500		

Fractional Seamless Copper Tubing

OD mm	Wall Thickness (mm)									
	0.7	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	
3	225	260								
4	165	191	244	295						
6		122	157	192	245					
8			114	140	179					
10			89	109	140					
12			73	89	114	140	158			
14			62	76	96	118	133			
16					83	102	114	127	147	
18					74	90	101	112	129	
22					59	72	81	90	103	
25					52	63	71	78	90	

- According to the requirements of ASME B31.3 Process Piping Code and ASME B31.1 Power Piping Code, allowable working pressure calculated at -20 to 100°F (-28 to 37°C) using S value of 6000 psi.
- Safety Factor is 5 to 1, considering ultimate tensile strength of 30,000 psi.

CARBON STEEL TUBING

Fractional Seamless Carbon Steel Tubing

Soft annealed seamless carbon steel hydraulic tubing ASTM A179 or equivalent. Tubing to be free from scratches, draw mark, dirt, dust, flat spots, and suitable for bending and flaring. Recommended hardness: 72 HRB or less.

OD in.	Wall Thickness (in)												
	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120	0.134	0.148	0.165	0.180	0.220
1/8	8000	10200											
3/16	5100	6600	9600										
1/4	3700	3700	7000	9600									
5/16		3800	5500	7600									
3/8		3100	4500	6200									
1/2		2300	3300	4500	5900								
5/8		1800	2600	3500	4600	5300							
3/4			2100	2900	3700	4300	5100						
7/8			1800	2400	3200	3700	4300						
1			1500	2100	2700	3200	3700	4100					
1 1/4				1600	2100	2500	2900	3200	3600	4000	4600	5000	
1 1/2					1800	2000	2400	2600	3000	3300	3700	4100	5100
2						1500	1700	1900	2200	2400	2700	3000	3700

Metric Seamless Carbon Steel Tubing

OD mm	Wall Thickness (mm)													
	0.8	0.1	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0	3.5	4.0	4.5	
3	670	830												
6	310	400	490	630										
8		290	360	460										
10		230	280	360										
12		190	230	290	360	410	450							
14		160	190	250	300	340	380							
15		150	180	230	280	320	350							
16			170	210	260	290	330	380						
18			150	190	230	260	290	330						
20			130	170	200	230	250	290	330					
22			120	150	180	210	230	260	300					
25					160	180	200	230	260	280				
28						160	180	200	230	250	290			
30						150	160	190	210	230	270			
32						140	150	170	200	210	250	290		
38							130	140	160	180	210	240	280	

- Allowable working pressure calculated at -20 to 100°F (-28 to 37°C) using S value of 15,700 psi according to ASME B31.3 Process Piping Code.
- Safety Factor is 3 to 1, considering ultimate tensile strength of 47,000 psi.
- To determine working pressure of ASME B31.1 Power Piping Code, multiply the ASME B31.3 rating by 0.85.

FRACTIONAL SEAMLESS ALLOY 400 TUBING

Fully annealed seamless Alloy 400 tubing ASTM B165 or equivalent. Tubing to be free from scratches, draw mark, dirt, dust, flat spots, and suitable for bending and flaring. Recommended hardness: 75 HRB or less.

OD in.	Wall Thickness (in)							
	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/8	7900	10100						
1/4	3700	4800	7000	9500				
3/8		3100	4400	6100				
1/2		2300	3200	4400				
3/4			2200	3000	4000	4600		
1				2200	2900	3400	3900	4300

- According to the requirements of ASME B31.3 Process Piping Code and ASME B31.1 Power Piping Code, allowable working pressure calculated at -20 to 100°F (-28 to 37°C) using S value of 18,700 psi.
- Safety Factor is 3.74 to 1, considering ultimate tensile strength of 70,000 psi.

CLEANING

BSS tube fittings are free from machine oils, loose particles and grease throughout the close cleaning process.



ORDERING INFORMATION

TUBE FITTINGS

BSS - 8T - UC - 8TM - SS6 - N

MANUFACTURER

(BSS)

CONNECTION SIZE		CONNECTION SIZE		CONNECTION TYPE	
Size	Use Code	Size	Use Code	TYPE	Use Code
1/16"	1	3/4"	12	TUBE OD	T
1/8"	2	1"	16	TUBE OD METRIC	MT
1/4"	4				
3/8"	6				
1/2"	8				

FITTING TYPES

MC	Male Connector	UE	Union Elbow
BMC	Male Bulkhead Connector	UT	Union Tee
ME	Male Elbow	UC	Union Cross
ME45	Male Elbow 45 deg.	RE	Tube End Reducer
MRT	Male Run Tee	EAB	Tube End Bulkhead Adapter
MBT	Male Branch Tee	MA	Tube End Male Adapter
FC	Female Connector	FA	Tube End Female Adapter
BFC	Female Bulkhead Connector	PC	Port Connector
FE	Female Elbow	N	Tube Nut
FE45	Female Elbow 45 deg.	FF	Front Ferrule
FRT	Female Run Tee	BF	Back Ferrule
FBT	Female Branch Tee	NB	Bulkhead Locknut
U	Union	TC	Tube Cap
CU	Conversion Union	TP	Tube Plug
RU	Reducing Union	WC	Weld Connector
BU	Bulkhead Union	WE	Weld Elbow

CONNECTION SIZE		CONNECTION SIZE		CONNECTION TYPE	
Size	Use Code	Size	Use Code	TYPE	Use Code
1/16"	1	3/4"	12	NPT	N
1/8"	2	1"	16	BSP	G
1/4"	4	1-1/4"	20	BSPT	GT
3/8"	6	1-1/8"	24	METRIC	M
1/2"	8	2"	32	TUBE OD	T
				TUBE OD METRIC	MT
				BUTT WELD	BW
				SOCKET WELD	SW

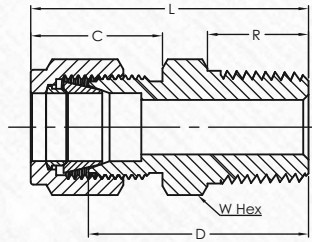
MATERIAL

(SS6)	SS316	(M)	Monel 400
(SS6L)	SS316L	(HC-276)	Hastelloy C-276
(SS4)	SS304	(IC625)	Inconel 625
(D)	Duplex	(IC825)	Inconel 825
(SD)	Super Duplex	(CS)	Carbon Steel

SPECIAL REQUIREMENTS (MULTIPLE OPTIONS AVAILABLE)

(N) NACE Compliance

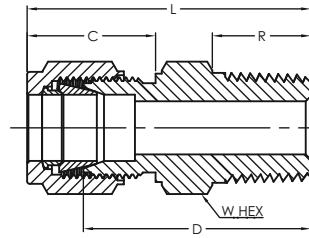
MALE CONNECTOR



Imperial Range: NPT Thread

Part Number	Dimensions (in)						
	Tube O.D.	NPT Pipe thread	L	C	D	R	W HEX
BSS-1T-MC-1N	1/16	1/16	.93	.43	.78	.38	5/16
BSS-1T-MC-2N	1/16	1/8	1.03	.43	.88	.38	7/16
BSS-1T-MC-4N	1/16	1/4	1.23	.43	1.08	.56	9/16
BSS-2T-MC-1N	1/8	1/16	1.17	.60	.91	.38	3/8
BSS-2T-MC-2N	1/8	1/8	1.20	.60	.94	.38	7/16
BSS-2T-MC-4N	1/8	1/4	1.40	.60	1.14	.56	9/16
BSS-2T-MC-6N	1/8	3/8	1.42	.60	1.16	.56	11/16
BSS-2T-MC-8N	1/8	1/2	1.67	.60	1.41	.75	7/8
BSS-3T-MC-1N	3/16	1/16	1.23	.64	.97	.38	7/16
BSS-3T-MC-2N	3/16	1/8	1.23	.64	.97	.38	7/16
BSS-3T-MC-4N	3/16	1/4	1.43	.64	1.17	.56	9/16
BSS-4T-MC-1N	1/4	1/16	1.29	.70	1.00	.38	1/2
BSS-4T-MC-2N	1/4	1/8	1.29	.70	1.00	.38	1/2
BSS-4T-MC-4N	1/4	1/4	1.49	.70	1.20	.56	9/16
BSS-4T-MC-6N	1/4	3/8	1.51	.70	1.22	.56	11/16
BSS-4T-MC-8N	1/4	1/2	1.76	.70	1.47	.75	7/8
BSS-4T-MC-12N	1/4	3/4	1.82	.70	1.53	.75	1-1/16
BSS-5T-MC-2N	5/16	1/8	1.34	.73	1.05	.38	9/16
BSS-5T-MC-4N	5/16	1/4	1.52	.73	1.23	.56	9/16
BSS-5T-MC-6N	5/16	3/8	1.55	.73	1.25	.56	11/16
BSS-5T-MC-8N	5/16	1/2	1.79	.73	1.5	.75	7/8
BSS-6T-MC-2N	3/8	1/8	1.38	.76	1.09	.38	5/8
BSS-6T-MC-4N	3/8	1/4	1.57	.76	1.28	.56	5/8
BSS-6T-MC-6N	3/8	3/8	1.57	.76	1.28	.56	11/16
BSS-6T-MC-8N	3/8	1/2	1.82	.76	1.53	.75	7/8
BSS-6T-MC-12N	3/8	3/4	1.88	.76	1.59	.75	1-1/16
BSS-8T-MC-2N	1/2	1/8	1.53	.87	1.13	.38	13/16
BSS-8T-MC-4N	1/2	1/4	1.71	.87	1.31	.56	13/16
BSS-8T-MC-6N	1/2	3/8	1.71	.87	1.31	.56	13/16
BSS-8T-MC-8N	1/2	1/2	1.93	.87	1.53	.75	7/8
BSS-8T-MC-12N	1/2	3/4	1.99	.87	1.59	.75	1-1/16
BSS-8T-MC-16N	1/2	1	2.28	.87	1.88	.94	1-3/8
BSS-10T-MC-6N	5/8	3/8	1.74	.87	1.34	.56	15/16
BSS-10T-MC-8N	5/8	1/2	1.93	.87	1.53	.75	15/16
BSS-10T-MC-12N	5/8	3/4	1.99	.87	1.59	.75	1-1/16
BSS-12T-MC-8N	3/4	1/2	1.99	.87	1.59	.75	1-1/16
BSS-12T-MC-12N	3/4	3/4	1.99	.87	1.59	.75	1-1/16
BSS-12T-MC-16N	3/4	1	2.28	.87	1.88	.94	1-3/8
BSS-14T-MC-12N	7/8	3/4	1.99	.87	1.59	.75	1-3/16
BSS-14T-MC-16N	7/8	1	2.28	.87	1.88	.94	1-3/8

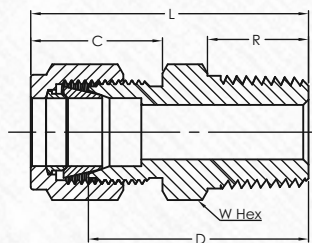
MALE CONNECTOR



Metric Range: NPT Thread

Part Number	Dimensions (mm)						
	Tube O.D.	NPT Pipe thread	L	C	D	R	W HEX
BSS-2MT-MC-2N	2	1/8	29.7	15.3	23.1	9.5	12.0
BSS-3MT-MC-2N	3	1/8	29.7	15.3	23.1	9.5	12.0
BSS-3MT-MC-4N	3	1/4	35.3	15.3	28.7	14.3	14.0
BSS-4MT-MC-2N	4	1/8	31.2	16.1	24.6	9.5	12.0
BSS-4MT-MC-4N	4	1/4	36.3	16.1	29.7	14.3	14.0
BSS-6MT-MC-2N	6	1/8	32.9	17.7	25.4	9.5	14.0
BSS-6MT-MC-4N	6	1/4	38.1	17.7	30.6	14.3	14.0
BSS-6MT-MC-6N	6	3/8	38.5	17.7	31.0	14.3	18.0
BSS-6MT-MC-8N	6	1/2	44.8	17.7	37.3	19.1	22.0
BSS-8MT-MC-2N	8	1/8	34.2	18.6	26.7	9.5	15.0
BSS-8MT-MC-4N	8	1/4	38.8	18.6	31.3	14.3	15.0
BSS-8MT-MC-6N	8	3/8	39.3	18.6	31.8	14.3	18.0
BSS-8MT-MC-8N	8	1/2	45.6	18.6	38.1	19.1	22.0
BSS-10MT-MC-2N	10	1/8	36.1	19.5	28.6	9.5	18.0
BSS-10MT-MC-4N	10	1/4	40.9	19.5	33.3	14.3	18.0
BSS-10MT-MC-6N	10	3/8	40.9	19.5	33.3	14.3	18.0
BSS-10MT-MC-8N	10	1/2	47.5	19.5	38.9	19.1	22.0
BSS-10MT-MC-12N	10	3/4	46.4	19.5	38.9	19.1	27.0
BSS-10MT-MC-16N	10	1	55.0	19.5	47.5	23.8	35.0
BSS-12MT-MC-4N	12	1/4	43.4	22.0	33.3	14.3	22.0
BSS-12MT-MC-6N	12	3/8	43.4	22.0	33.3	14.3	22.0
BSS-12MT-MC-8N	12	1/2	49.0	22.0	38.9	19.1	22.0
BSS-12MT-MC-12N	12	3/4	50.5	22.0	40.4	19.1	27.0
BSS-16MT-MC-6N	16	3/8	44.1	22.0	34.01	14.3	24.0
BSS-16MT-MC-8N	16	1/2	49.0	22.0	38.9	19.1	24.0
BSS-16MT-MC-12N	16	3/4	50.5	22.0	40.5	19.1	27.0
BSS-18MT-MC-8N	18	1/2	50.6	22.0	40.5	19.1	27.0
BSS-18MT-MC-12N	18	3/4	50.6	22.0	40.5	19.1	27.0
BSS-25MT-MC-8N	25	1/2	57.5	26.5	45.3	19.1	35.0
BSS-25MT-MC-12N	25	3/4	57.5	26.5	45.2	19.1	35.0
BSS-25MT-MC-16N	25	1	62.3	26.5	50.0	23.8	35.0

MALE CONNECTOR

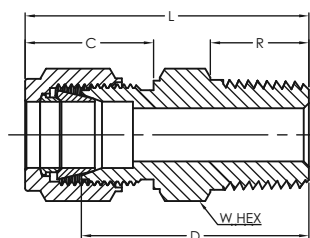


Imperial Range: ISO Tapered Thread

Part Number	Dimensions (in)						
	Tube O.D.	BSPT thread	L	C	D	R	W HEX
BSS-2T-MC-2GT	1/8	1/8	1.20	.60	0.94	.38	7/16
BSS-2T-MC-4GT	1/8	1/4	1.40	.60	1.14	.56	9/16
BSS-4T-MC-2GT	1/4	1/8	1.30	.70	1.00	.38	1/2
BSS-4T-MC-4GT	1/4	1/4	1.50	.70	1.20	.56	9/16
BSS-4T-MC-6GT	1/4	3/8	1.52	.70	1.22	.56	11/16
BSS-4T-MC-8GT	1/4	1/2	1.77	.70	1.47	.75	7/8
BSS-5T-MC-2GT	5/16	1/8	1.34	.73	1.05	.38	9/16
BSS-5T-MC-4GT	5/16	1/4	1.52	.73	1.23	.56	9/16
BSS-6T-MC-2GT	3/8	1/8	1.39	.76	1.09	.38	5/8
BSS-6T-MC-4GT	3/8	1/4	1.57	.76	1.28	.56	5/8
BSS-6T-MC-6GT	3/8	3/8	1.57	.76	1.28	.56	11/16
BSS-6T-MC-8GT	3/8	1/2	1.82	.76	1.53	.75	7/8
BSS-8T-MC-4GT	1/2	1/4	1.69	.86	1.31	.56	13/16
BSS-8T-MC-6GT	1/2	3/8	1.69	.86	1.31	.56	13/16
BSS-8T-MC-8GT	1/2	1/2	1.91	.66	1.53	.75	7/8



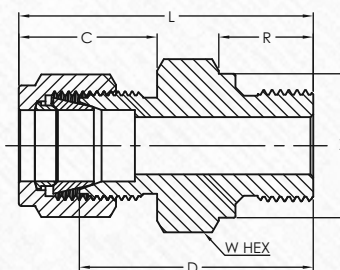
MALE CONNECTOR



Metric Range: ISO Tapered Thread

Part Number	Dimensions (mm)						
	Tube O.D.	BSPT thread	L	C	D	R	W HEX
BSS-2MT-MC-2GT	2	1/8	29.7	15.3	23.1	9.5	12.0
BSS-3MT-MC-2GT	3	1/8	29.7	15.3	23.1	9.7	12.0
BSS-3MT-MC-4GT	3	1/4	35.3	15.3	28.7	14.2	14.0
BSS-4MT-MC-2GT	4	1/8	31.2	16.1	24.6	9.7	12.0
BSS-4MT-MC-4GT	4	1/4	36.3	16.1	29.7	14.2	14.0
BSS-6MT-MC-2GT	6	1/8	32.9	17.7	25.4	9.7	14.0
BSS-6MT-MC-4GT	6	1/4	40.0	17.7	30.5	14.2	14.0
BSS-6MT-MC-6GT	6	3/8	38.5	17.7	31.0	14.2	18.0
BSS-6MT-MC-8GT	6	1/2	45.6	17.7	38.1	19.1	22.0
BSS-8MT-MC-2GT	8	1/8	33.9	18.6	26.4	9.5	15.0
BSS-8MT-MC-6GT	8	3/8	39.3	18.6	31.8	14.2	18.0
BSS-8MT-MC-8GT	8	1/2	45.6	18.6	38.1	19.1	22.0
BSS-10MT-MC-2GT	10	1/8	36.2	19.5	28.6	9.5	18.0
BSS-10MT-MC-4GT	10	1/4	40.9	19.5	33.3	14.2	18.0
BSS-10MT-MC-6GT	10	3/8	40.9	19.5	33.3	14.2	18.0
BSS-10MT-MC-8GT	10	1/2	46.5	19.5	38.9	19.1	22.0
BSS-12MT-MC-4GT	12	1/4	43.4	22.0	33.3	14.2	22.0
BSS-12MT-MC-6GT	12	3/8	43.4	22.0	33.3	14.2	22.0
BSS-12MT-MC-8GT	12	1/2	49.0	22.0	38.9	19.1	22.0
BSS-12MT-MC-12GT	12	3/4	49.5	22.0	40.4	19.1	27.0
BSS-15MT-MC-8GT	15	1/2	49.0	22.0	38.9	19.1	24.0
BSS-16MT-MC-6GT	16	3/8	44.2	22.0	34.1	14.2	24.0
BSS-16MT-MC-8GT	16	1/2	49.0	22.0	38.9	19.1	24.0
BSS-16MT-MC-12GT	16	3/4	49.5	22.0	40.5	19.1	27.0
BSS-18MT-MC-8GT	18	1/2	50.6	22.0	40.4	19.1	27.0
BSS-18MT-MC-12GT	18	3/4	50.6	22.0	40.4	19.1	27.0
BSS-20MT-MC-8GT	20	1/2	52.3	22.0	42.2	19.1	30.0
BSS-20MT-MC-12GT	20	3/4	52.3	22.0	42.2	19.1	30.0
BSS-22MT-MC-12GT	22	3/4	52.3	22.0	42.2	19.1	30.0
BSS-25MT-MC-12GT	25	3/4	57.5	26.5	45.2	19.1	35.0
BSS-22MT-MC-16GT	25	1	62.3	26.5	50.0	23.9	35.0

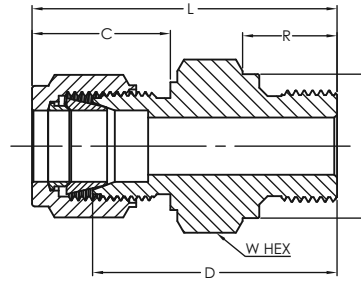
MALE CONNECTOR



Imperial Range: ISO Parallel Thread

Part Number	Dimensions (in)							
	Tube O.D.	BSPP thread	L	C	D	R	X	W HEX
BSS-2T-MC-2G	1/8	1/8	1.18	.60	0.92	.28	0.54	9/16
BSS-2T-MC-4G	1/8	1/4	1.27	.60	1.13	.44	0.70	3/4
BSS-2T-MC-6G	1/8	3/8	1.46	.60	1.17	.44	0.86	7/8
BSS-4T-MC-2G	1/4	1/8	1.28	.70	1.17	.28	0.54	9/16
BSS-4T-MC-4G	1/4	1/4	1.49	.70	1.19	.44	0.70	3/4
BSS-4T-MC-6G	1/4	3/8	1.55	.70	1.25	.44	0.86	7/8
BSS-4T-MC-8G	1/4	1/2	1.77	.70	1.47	.56	1.01	1-1/16
BSS-6T-MC-2G	3/8	1/8	1.35	.76	1.06	.28	0.54	5/8
BSS-6T-MC-4G	3/8	1/4	1.54	.76	1.25	.44	0.70	3/4
BSS-6T-MC-6G	3/8	3/8	1.57	.76	1.28	.44	0.86	7/8
BSS-6T-MC-8G	3/8	1/2	1.82	.76	1.53	.56	1.01	1-1/16
BSS-8T-MC-4G	1/2	1/4	1.66	.86	1.28	.44	0.70	13/16
BSS-8T-MC-6G	1/2	3/8	1.69	.86	1.31	.44	0.86	7/8
BSS-8T-MC-8G	1/2	1/2	1.91	.86	1.53	.56	1.01	1-1/16
BSS-12T-MC-8G	3/4	1/2	1.93	.86	1.53	.56	1.01	1-1/16
BSS-12T-MC-12G	3/4	3/4	2.07	.86	1.69	.63	1.25	1-3/8
BSS-16T-MC-8G	1	1/2	2.21	1.04	1.72	.56	1.01	1-3/8
BSS-16T-MC-16G	1	1	2.35	1.04	1.88	.72	1.52	1-5/8

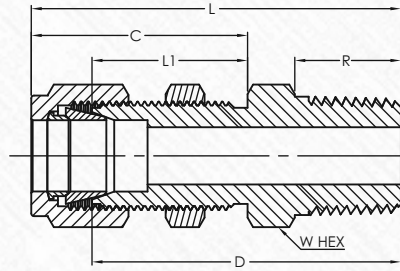
MALE CONNECTOR



Metric Range: ISO Parallel Thread

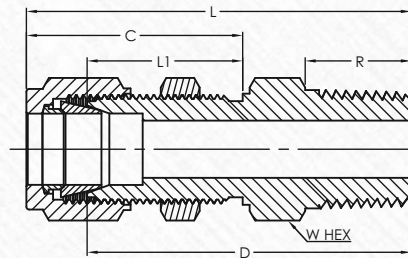
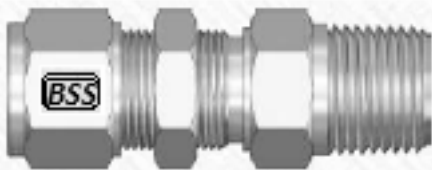
Part Number	Dimensions (mm)							
	Tube O.D.	BSP thread	L	C	D	R	X	W HEX
BSS-2MT-MC-2G	2	1/8	28.4	15.3	21.8	7.1	14.0	13.7
BSS-3MT-MC-2G	3	1/8	30.0	15.3	23.4	7.1	13.7	14.0
BSS-3MT-MC-4G	3	1/4	35.3	15.3	28.7	11.2	17.8	19.2
BSS-6MT-MC-2G	6	1/8	32.5	17.7	25.0	7.1	13.7	14.0
BSS-6MT-MC-4G	6	1/4	37.7	17.7	30.2	11.2	17.8	19.0
BSS-6MT-MC-6G	6	3/8	39.0	17.7	31.5	11.2	21.8	22.0
BSS-6MT-MC-8G	6	1/2	45.6	17.7	38.1	14.2	25.7	27.0
BSS-8MT-MC-2G	8	1/8	33.1	18.6	25.6	7.1	15.0	13.7
BSS-8MT-MC-4G	8	1/4	38.5	18.6	31.0	11.2	17.8	19.0
BSS-8MT-MC-6G	8	3/8	39.8	18.6	32.3	11.2	21.8	22.0
BSS-8MT-MC-8G	8	1/2	45.6	18.6	38.1	14.2	25.7	27.0
BSS-10MT-MC-4G	10	1/4	39.4	19.5	31.8	11.2	17.8	19.0
BSS-10MT-MC-6G	10	3/8	40.6	19.5	33.0	11.2	21.8	22.0
BSS-10MT-MC-8G	10	1/2	46.5	19.5	38.9	14.2	25.7	27.0
BSS-12MT-MC-4G	12	1/4	42.6	22.0	32.5	11.2	17.8	22.0
BSS-12MT-MC-6G	12	3/8	43.1	22.0	33.0	11.2	21.8	22.0
BSS-12MT-MC-8G	12	1/2	49.0	22.0	38.9	14.2	25.7	27.0
BSS-12MT-MC-12G	12	3/4	52.8	22.0	42.7	16.0	31.8	35.0
BSS-16MT-MC-6G	16	3/8	43.5	22.0	33.4	11.2	22.0	21.8
BSS-16MT-MC-8G	16	1/2	49.0	22.0	38.9	14.2	26.0	27.0
BSS-18MT-MC-8G	18	1/2	49.0	22.0	38.9	14.2	26.0	27.0
BSS-18MT-MC-12G	18	3/4	53.1	22.0	43.0	16.0	35.0	32.0
BSS-20MT-MC-8G	20	1/2	50.5	22.0	40.4	14.2	30.0	25.7
BSS-20MT-MC-12G	20	3/4	52.8	22.0	42.7	16.0	32.0	35.0
BSS-22MT-MC-12G	22	3/4	52.8	22.0	42.7	16.0	32.0	35.0
BSS-25MT-MC-12G	25	3/4	59.8	26.5	47.6	16.0	35.0	31.8
BSS-25MT-MC-16G	25	1	60.1	26.5	47.8	18.3	39.0	41.0

BULKHEAD MALE CONNECTOR



Imperial Range: NPT Thread

Part Number	Dimensions (mm)							
	Tube O.D.	NPT Pipe thread	L	C	D	L1	R	W HEX
BSS-1T-BMC-1N	1/16	1/16	1.19	0.68	1.038	.53	.38	5/16
BSS-1TBMC-2N	1/16	1/8	1.27	0.68	1.116	.53	.38	7/16
BSS-2TBMC-2N	1/8	1/8	1.83	1.23	1.571	.97	.38	1/2
BSS-3TBMC-2N	3/16	1/8	1.89	1.26	1.634	1.00	.38	9/16
BSS-4TBMC-2N	1/4	1/8	1.95	1.31	1.655	1.02	.38	5/8
BSS-4TBMC-4N	1/4	1/4	2.132	1.31	1.842	1.02	.56	5/8
BSS-4TBMC-6N	1/4	3/8	2.162	1.31	1.872	1.02	.56	11/16
BSS-4TBMC-8N	1/4	1/2	2.374	1.31	2.084	1.02	.75	7/8
BSS-5TBMC-2N	5/16	1/8	2.08	1.42	1.779	1.12	.38	11/16
BSS-5TBMC-4N	5/16	1/4	2.27	1.42	1.966	1.12	.56	11/16
BSS-6TBMC-2N	3/8	1/8	2.08	1.44	1.788	1.15	.38	3/4
BSS-6TBMC-4N	3/8	1/4	2.265	1.44	1.975	1.15	.56	3/4
BSS-6TBMC-6N	3/8	3/8	2.265	1.44	1.975	1.15	.56	3/4
BSS-6TBMC-8N	3/8	1/2	2.48	1.44	2.219	1.15	.75	7/8
BSS-8TBMC-4N	1/2	1/4	2.494	1.65	2.094	1.25	.56	15/16
BSS-8TBMC-6N	1/2	3/8	2.494	1.65	2.094	1.25	.56	15/16
BSS-8TBMC-8N	1/2	1/2	2.712	1.65	2.312	1.25	.75	15/16
BSS-8TBMC-12N	1/2	3/4	2.722	1.65	2.322	1.25	.75	1-1/8
BSS-10TBMC-6N	5/8	3/8	2.628	1.68	2.228	1.28	.56	1-1/16
BSS-10TBMC-8N	5/8	1/2	2.816	1.68	2.416	1.28	.75	1-1/16
BSS-12TBMC-8N	3/4	1/2	3.00	1.87	2.601	1.47	.75	1-3/16
BSS-12TBMC-12N	3/4	3/4	3.00	1.87	2.601	1.47	.75	1-3/16
BSS-14TBMC-12N	7/8	3/4	3.31	2.09	2.913	1.69	.75	1-3/8
BSS-16TBMC-12N	1	3/4	3.54	2.27	3.006	1.78	.75	1-5/8
BSS-16TBMC-16N	1	1	3.72	2.27	3.194	1.78	.94	1-5/8

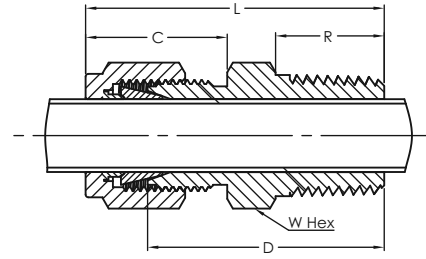


Metric Range: NPT Thread

Part Number	Dimensions (mm)									
	Tube O.D.	NPT Pipe thread	L	C	D	L1	R	W HEX	B'head Hole Drill Size	Max. B'head Thick.
BSS-6 MT BMC2N	6	1/8	49.6	33.7	42.1	26.2	9.5	16.0	11.5	10.2
BSS-6MT-BMC-4N	6	1/4	53.5	33.7	46.0	26.2	14.3	16.0	11.5	10.2
BSS-8MT-BMC-2N	8	1/8	52.3	36.0	44.8	28.5	9.5	18.0	13.1	11.2
BSS-8MT-BMC-4N	8	1/4	57.5	36.0	50.0	28.5	14.3	18.0	13.1	11.2
BSS-10MT-BMC-4N	10	1/4	58.4	37.0	50.8	29.4	14.3	22.0	16.3	11.2
BSS-10MT-BMC-6N	10	3/8	58.4	37.0	50.8	29.4	14.3	22.0	16.3	11.2
BSS-10MT-BMC-8N	10	1/2	63.1	37.0	55.5	29.4	19.0	22.0	16.3	11.2
BSS-12MT-BMC-4N	12	1/4	63.3	10.1	53.2	31.8	14.3	24.0	19.5	12.7
BSS-12MT-BMC-6N	12	3/8	64.5	10.1	54.4	31.8	14.3	24.0	19.5	12.7
BSS-12MT-BMC-8N	12	1/2	67.5	10.1	57.4	31.8	19.0	24.0	19.5	12.7



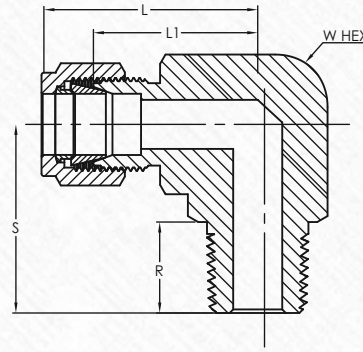
THERMOCOUPLE CONNECTOR



Imperial Range: NPT Thread

Part Number	Dimensions (mm)						
	Tube O.D.	NPT Pipe thread	L	C	D	R	W HEX
BSS-1TC-1N	1/16	1/16	0.93	.43	0.78	.38	5/16
BSS-1TC-2N	1/16	1/8	1.03	.43	0.88	.38	7/16
BSS-1TC-4N	1/16	1/4	1.23	.43	1.08	.56	9/16
BSS-2TC-1N	1/8	1/16	1.17	.60	0.91	.38	3/8
BSS-2TC-2N	1/8	1/8	1.20	.60	0.94	.38	7/16
BSS-2TC-4N	1/8	1/4	1.40	.60	1.14	.56	9/16
BSS-3TC-2N	3/16	1/8	1.23	.64	0.97	.38	7/16
BSS-3TC-4N	3/16	1/4	1.43	.64	1.17	.56	9/16
BSS-4TC-2N	1/4	1/8	1.29	.70	1.00	.38	1/2
BSS-4TC-4N	1/4	1/4	1.49	.70	1.20	.56	9/16
BSS-4TC-6N	1/4	3/8	1.60	.70	1.22	.56	11/16
BSS-4TC-8N	1/4	1/2	1.87	.70	1.47	.75	7/8
BSS-5TC-4N	5/16	1/4	1.52	.73	1.22	.56	9/16
BSS-6TC-4N	3/8	1/4	1.57	.76	1.28	.56	5/8
BSS-6TC-6N	3/8	3/8	1.57	.76	1.28	.56	11/16
BSS-6TC-8N	3/8	1/2	1.82	.76	1.53	.75	7/8
BSS-6TC-12N	3/8	3/4	1.88	.76	1.59	.75	1-1/16
BSS-8TC-8N	1/2	1/2	1.93	.87	1.53	.76	7/8
BSS-8TC-12N	1/2	3/4	1.99	.87	1.59	.75	1-1/16
BSS-10TC-12N	5/8	3/4	1.99	.87	1.59	.75	1-1/16
BSS-12TC-12N	3/4	3/4	1.99	.87	1.59	.75	1-1/16
BSS-16TC-16N	1	1	2.46	1.05	1.97	.94	1-3/8

MALE ELBOW

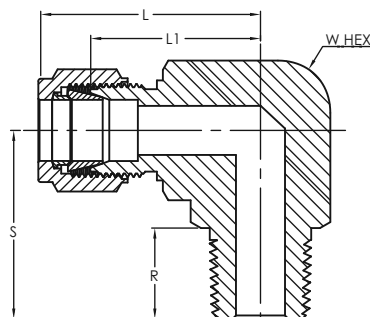


Imperial Range: NPT Thread

Part Number	Dimensions (in)						
	Tube O.D.	NPT Pipe thread	L	S	L1	R	W HEX
BSS-1T-ME-1N	1/16	1/16	.75	0.70	.60	.38	7/16
BSS-1T-ME-2N	1/16	1/8	.75	0.70	.60	.38	7/16
BSS-2T-ME-1N	1/8	1/16	.93	0.70	.67	.38	7/16
BSS-2T-ME-2N	1/8	1/8	.93	0.70	.67	.38	7/16
BSS-2T-ME-4N	1/8	1/4	.97	0.93	.72	.56	9/16
BSS-3T-ME-2N	3/16	1/8	1.00	0.74	.74	.38	1/2
BSS-3T-ME-4N	3/16	1/4	1.00	0.93	.74	.56	9/16
BSS-4T-ME-1N	1/4	1/16	1.06	0.74	.77	.38	1/2
BSS-4T-ME-2N	1/4	1/8	1.06	0.74	.77	.38	1/2
BSS-4T-ME-4N	1/4	1/4	1.06	0.93	.77	.56	9/16
BSS-4T-ME-6N	1/4	3/8	1.17	1.04	.88	.56	11/16
BSS-4T-ME-8N	1/4	1/2	1.25	1.31	.96	.75	13/16
BSS-5T-ME-2N	5/16	1/8	1.13	0.79	.84	.38	9/16
BSS-5T-ME-4N	5/16	1/4	1.13	0.97	.84	.56	9/16
BSS-6T-ME-2N	3/8	1/8	1.20	0.82	.91	.38	5/8
BSS-6T-ME-4N	3/8	1/4	1.20	1.01	.91	.56	5/8
BSS-6T-ME-6N	3/8	3/8	1.23	1.13	.97	.56	11/16
BSS-6T-ME-8N	3/8	1/2	1.31	1.31	1.02	.75	13/16
BSS-6T-ME-12N	3/8	3/4	1.46	1.46	1.17	.75	1-1/16
BSS-8T-ME-4N	1/2	1/4	1.42	1.12	1.02	.56	13/16
BSS-8T-ME-6N	1/2	3/8	1.42	1.12	1.02	.56	13/16
BSS-8T-ME-8N	1/2	1/2	1.42	1.31	1.02	.75	7/8
BSS-8T-ME-12N	1/2	3/4	1.57	1.46	1.17	.75	1-1/16
BSS-10T-ME-6N	5/8	3/8	1.50	1.20	1.10	.56	15/16
BSS-10T-ME-8N	5/8	1/2	1.50	1.39	1.10	.75	15/16
BSS-10T-ME-12N	5/8	3/4	1.57	1.46	1.17	.75	1-1/16
BSS-12T-ME-8N	3/4	1/2	1.57	1.46	1.17	.75	1-1/16
BSS-12T-ME-12N	3/4	3/4	1.57	1.46	1.17	.75	1-1/16
BSS-14T-ME-12N	7/8	3/4	1.76	1.65	1.36	.75	1-3/8
BSS-16T-ME-12N	1	3/4	1.93	1.65	1.45	.75	1-3/8
BSS-16T-ME-16N	1	1	1.93	1.84	1.45	.94	1-3/8



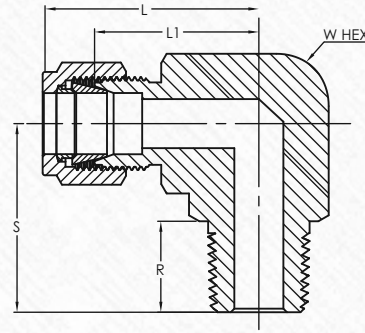
MALE ELBOW



Metric Range: NPT Thread

Part Number	Dimensions (mm)						(inch)
	Tube O.D.	NPT Pipe thread	L	S	L1	R	W HEX
BSS-3MT-ME-2N	3	1/8	23.6	17.8	17.0	9.7	7/16
BSS-3MT-ME-4N	3	1/4	24.6	23.4	18.0	14.2	1/2
BSS-4MT-ME-2N	4	1/8	25.4	18.8	19.2	9.7	1/2
BSS-4MT-ME-4N	4	1/4	26.2	25.4	19.6	14.2	1/2
BSS-6MT-ME-2N	6	1/8	27.0	18.8	19.6	9.7	1/2
BSS-6MT-ME-4N	6	1/4	27.0	23.4	19.6	14.2	1/2
BSS-6MT-ME-6N	6	3/8	29.8	26.2	22.4	14.2	11/16
BSS-6MT-ME-8N	6	1/2	31.8	33.0	24.4	19.0	13/16
BSS-8MT-ME-2N	8	1/8	28.8	19.8	21.3	9.7	9/16
BSS-8MT-ME-4N	8	1/4	28.8	24.4	21.3	14.2	9/16
BSS-8MT-ME-6N	8	3/8	30.6	26.2	23.1	14.2	11/16
BSS-8MT-ME-8N	8	1/2	32.7	33.0	25.2	19.1	13/16
BSS-10MT-ME-2N	10	1/8	31.5	21.6	23.9	9.7	11/16
BSS-10MT-ME-4N	10	1/4	31.5	26.2	23.9	14.2	11/16
BSS-10MT-ME-6N	10	3/8	31.5	26.2	23.9	14.2	11/16
BSS-10MT-ME-8N	10	1/2	33.5	33.0	25.9	19.0	13/16
BSS-12MT-ME-4N	12	1/4	36.0	28.2	25.9	14.2	13/16
BSS-12MT-ME-6N	12	3/8	36.0	28.2	25.9	14.2	13/16
BSS-12MT-ME-8N	12	1/2	36.0	33.0	25.9	19.0	13/16
BSS-12MT-ME-12N	12	3/4	39.8	36.8	29.7	19.0	1-1/16
BSS-15MT-ME-8N	15	1/2	38.0	35.1	27.9	19.0	15/16
BSS-16MT-ME-6N	16	3/8	38.0	30.2	27.9	14.2	15/16
BSS-16MT-ME-8N	16	1/2	38.0	35.1	27.9	19.0	15/16
BSS-16MT-ME-12N	16	3/4	39.8	36.8	29.7	19.0	1-1/16
BSS-18MT-ME-8N	18	1/2	39.8	36.8	29.7	19.0	1-1/16
BSS-18MT-ME-12N	18	3/4	39.8	36.8	29.7	19.0	1-1/16
BSS-20MT-ME-8N	20	1/2	44.6	41.7	34.5	19.0	1-3/8
BSS-20MT-ME-12N	20	3/4	44.6	41.7	34.5	19.0	1-3/8
BSS-22MT-ME-12N	22	3/4	44.6	41.7	34.5	19.0	1-3/8
BSS-25MT-ME-12N	25	3/4	49.1	41.7	36.8	19.0	1-3/8
BSS-25MT-ME-16N	25	1	49.1	46.5	36.8	23.9	1-3/8

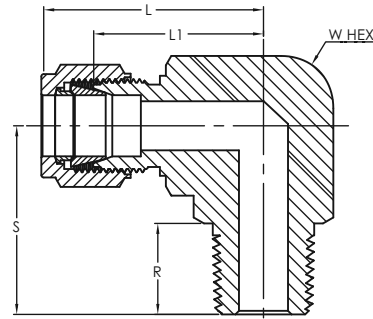
MALE ELBOW



Imperial Range: ISO Tapered Thread

Part Number	Dimensions (in)						
	Tube O.D.	NPT Pipe thread	L	S	L1	R	W HEX
BSS-4T-ME-2GT	1/4	1/8	1.06	0.75	0.77	.38	1/2
BSS-4T-ME-4GT	1/4	1/4	1.06	0.94	0.77	.56	9/16
BSS-4T-ME-6GT	1/4	3/8	1.17	1.05	0.88	.56	11/16
BSS-4T-ME-8GT	1/4	1/2	1.25	1.32	0.96	.75	7/8
BSS-5T-ME-4GT	5/16	1/4	1.13	0.98	0.84	.38	9/16
BSS-6T-ME-4GT	3/8	1/4	1.20	1.02	0.91	.56	5/8
BSS-6T-ME-6GT	3/8	3/8	1.23	1.05	0.97	.56	11/16
BSS-8T-ME-6GT	1/2	3/8	1.42	1.13	1.02	.56	13/16
BSS-8T-ME-8GT	1/2	1/2	1.42	1.32	1.02	.75	7/8

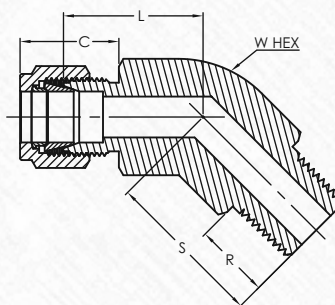
MALE ELBOW



Metric Range: ISO Tapered Thread

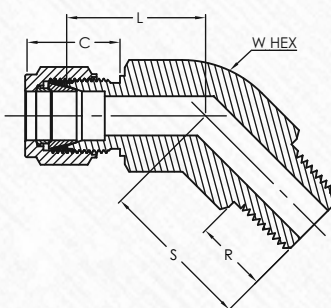
Part Number	Dimensions (mm)						(inch)
	Tube O.D.	NPT Pipe thread	L	S	L1	R	W HEX
BSS-3MT-ME-2GT	3	1/8	23.6	17.8	17.0	9.7	7/16
BSS-3MT-ME-4GT	3	1/4	24.6	23.4	18.0	14.2	1/2
BSS-4MT-ME-2GT	4	1/8	25.4	18.8	18.8	9.7	1/2
BSS-4MT-ME-4GT	4	1/4	24.6	23.4	18.8	14.2	1/2
BSS-6MT-ME-2GT	6	1/8	27.0	18.8	19.6	9.7	1/2
BSS-6MT-ME-4GT	6	1/4	27.0	23.4	19.6	14.2	1/2
BSS-6MT-ME-6GT	6	3/8	29.8	26.2	22.4	14.2	11/16
BSS-6MT-ME-8GT	6	1/2	31.8	33.0	24.4	19.0	13/16
BSS-8MT-ME-2GT	8	1/8	28.8	19.8	21.3	9.7	9/16
BSS-8MT-ME-4GT	8	1/4	28.8	24.4	21.3	14.2	9/16
BSS-8MT-ME-6GT	8	3/8	30.6	26.2	23.1	14.2	11/16
BSS-8MT-ME-8GT	8	1/2	32.7	33.0	25.2	19.1	13/16
BSS-10MT-ME-2GT	10	1/8	31.5	21.6	23.9	9.7	11/16
BSS-10MT-ME-4GT	10	1/4	31.5	26.2	23.9	14.2	11/16
BSS-10MT-ME-6GT	10	3/8	31.5	26.2	23.9	14.2	11/16
BSS-10MT-ME-8GT	10	1/2	33.5	33.0	25.9	19.0	13/16
BSS-12MT-ME-4GT	12	1/4	36.0	28.2	25.9	14.2	13/16
BSS-12MT-ME-6GT	12	3/8	36.0	28.2	25.9	14.2	13/16
BSS-12MT-ME-8GT	12	1/2	36.0	33.0	25.9	19.0	13/16
BSS-12MT-ME-12GT	12	3/4	39.8	36.8	29.7	19.1	1-1/16
BSS-16MT-ME-6GT	16	3/8	38.0	30.2	27.9	14.2	15/16
BSS-16MT-ME-8GT	16	1/2	38.0	35.1	27.9	19.0	15/16
BSS-18MT-ME-8GT	18	1/2	39.8	36.8	29.7	19.0	1-1/16
BSS-18MT-ME-12GT	18	3/4	39.8	36.8	29.7	19.0	1-1/16
BSS-20MT-ME-12GT	20	3/4	44.6	41.7	34.5	19.0	1-3/8
BSS-25MT-ME-12GT	25	3/4	49.0	41.7	36.8	19.1	1-3/8
BSS-25MT-ME-16GT	25	1	49.1	46.5	36.8	23.9	1-3/8

45 DEGREES ELBOW



Imperial Range: NPT Thread

Part Number	Dimensions (in)						
	Tube O.D.	NPT Pipe thread	C	L	S	R	W HEX
BSS-1T-ME45-1N	1/16	1/16	0.43	0.47	0.57	.38	7/16
BSS-2T-ME45-2N	1/8	1/8	0.60	0.53	0.57	.38	7/16
BSS-3T-ME45-2N	3/16	1/8	0.64	0.56	0.58	.38	7/16
BSS-4T-ME45-2N	1/4	1/8	0.70	0.66	0.66	.38	9/16
BSS-4T-ME45-4N	1/4	1/4	0.70	0.66	0.86	.56	9/16
BSS-5T-ME45-2N	5/16	1/8	0.73	0.66	0.66	.38	9/16
BSS-6T-ME45-2N	3/8	1/8	0.76	0.72	0.67	.38	9/16
BSS-6T-ME45-4N	3/8	1/4	0.76	0.72	0.86	.56	9/16
BSS-6T-ME45-6N	3/8	3/8	0.76	0.75	0.95	.56	3/4
BSS-8T-ME45-6N	1/2	3/8	0.87	0.75	0.95	.56	3/4
BSS-10T-ME45-8N	5/8	1/2	0.87	0.84	1.20	.75	1-1/16
BSS-12T-ME45-12N	3/4	3/4	0.87	0.84	1.20	.75	1-1/16
BSS-14T-ME45-12N	7/8	3/4	0.87	1.36	1.27	.75	1-5/16
BSS-16T-ME45-16N	1	1	1.05	1.19	1.14	.94	1-5/16

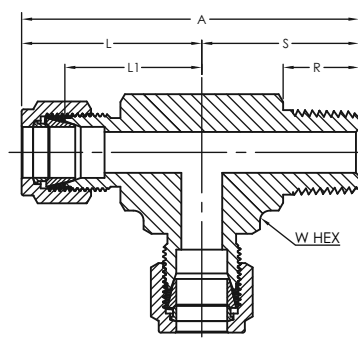


Metric Range: NPT Thread

Part Number	Dimensions (mm)						
	Tube O.D.	NPT Pipe thread	C	L	S	R	W HEX
BSS-6MT-ME45-2N	6	1/8	17.7	16.0	16.8	9.5	14.0
BSS-6MT-ME45-4N	6	1/4	17.7	16.0	21.8	14.3	14.0
BSS-8MT-ME45-2N	8	1/8	18.6	16.8	16.8	9.5	14.0
BSS-10MT-ME45-4N	10	1/4	19.5	19.0	24.1	14.3	19.0
BSS-12MT-ME45-6N	12	3/8	22.0	19.0	24.1	14.3	19.0
BSS-12MT-ME45-8N	12	1/2	22.0	20.6	29.7	19.0	22.0
BSS-16MT-ME45-8N	16	1/2	22.0	20.6	29.7	19.0	22.0

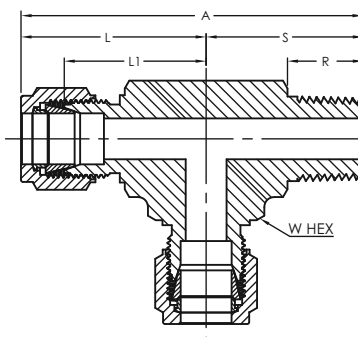
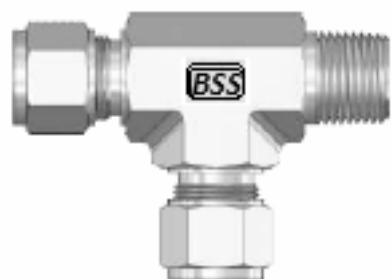


MALE RUN TEE



Imperial Range: NPT Thread

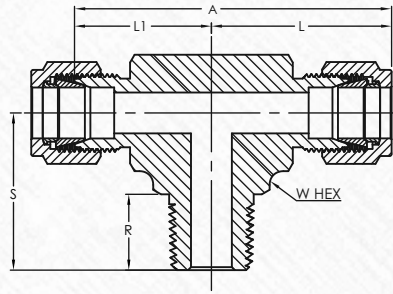
Part Number	Dimensions (in)							
	Tube O.D.	NPT Pipe thread	A	L	S	L1	R	W HEX
BSS-2T-MRT-2N	1/8	1/8	1.63	0.93	0.71	0.66	.38	7/16
BSS-2T-MRT-4N	1/8	1/4	1.89	0.97	0.93	0.70	.56	9/16
BSS-3T-MRT-2N	3/16	1/8	1.66	0.96	0.70	0.70	.38	7/16
BSS-4T-MRT-2N	1/4	1/8	1.80	1.06	0.74	0.77	.38	1/2
BSS-4T-MRT-4N	1/4	1/4	1.98	1.06	0.93	0.77	.56	1/2
BSS-5T-MRT-2N	5/16	1/8	1.99	1.17	0.82	0.88	.38	5/8
BSS-5T-MRT-4N	5/16	1/4	2.18	1.17	1.01	0.88	.56	5/8
BSS-6T-MRT-4N	3/8	1/4	2.20	1.20	1.01	0.91	.56	5/8
BSS-6T-MRT-6N	3/8	3/8	2.42	1.31	1.12	1.02	.56	13/16
BSS-8T-MRT-6N	1/2	3/8	2.53	1.42	1.12	1.02	.56	13/16
BSS-8T-MRT-8N	1/2	1/2	2.72	1.42	1.31	1.02	.75	7/8
BSS-10T-MRT-8N	5/8	1/2	2.88	1.50	1.39	1.10	.75	15/16
BSS-12T-MRT-12N	3/4	3/4	3.02	1.57	1.46	1.17	.75	1-1/16
BSS-14T-MRT-12N	7/8	3/4	3.41	1.76	1.65	1.36	.75	1-3/8
BSS-16T-MRT-12N	1	3/4	3.59	1.94	1.65	1.45	.75	1-3/8
BSS-16T-MRT-16N	1	1	3.78	1.94	1.84	1.45	.94	1-3/8



Metric Range: NPT Thread

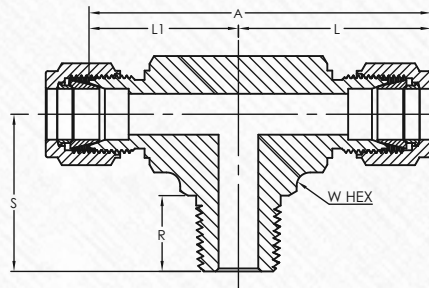
Part Number	Dimensions (mm)								(inch)
	Tube O.D.	NPT Pipe thread	A	L	S	L1	R	W HEX	
BSS-6MT-MRT-2N	6	1/8	45.8	27.0	18.0	19.6	9.7	1/2	
BSS-6MT-MRT-4N	6	1/4	50.3	27.0	23.4	19.6	14.2	1/2	
BSS-8MT-MRT-2N	8	1/8	50.7	29.9	20.8	22.4	9.7	5/8	
BSS-8MT-MRT-4N	8	1/4	55.3	29.9	25.4	22.4	14.2	5/8	
BSS-10MT-MRT-4N	10	1/4	61.7	33.5	28.2	25.9	14.2	13/16	
BSS-10MT-MRT-8N	10	1/2	66.5	33.5	33.0	25.9	19.0	7/8	
BSS-12MT-MRT-4N	12	1/4	64.2	36.0	28.2	25.9	14.2	13/16	
BSS-12MT-MRT-6N	12	1/2	69.0	36.0	33.0	25.9	19.0	13/16	
BSS-12MT-MRT-8N	12	3/8	64.2	36.0	28.2	25.9	14.2	7/8	
BSS-16MT-MRT-16N	16	1	93.1	46.6	46.5	34.4	23.9	1-3/8	

MALE BRANCH TEE



Imperial Range: NPT Thread

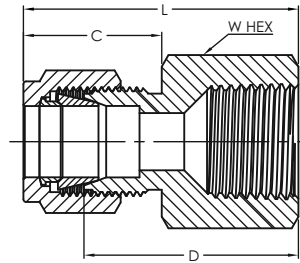
Part Number	Dimensions (in)							
	Tube O.D.	NPT Pipe thread	A	L	S	L1	R	W HEX
BSS-2T-MBT-2N	1/8	1/8	1.84	0.92	0.70	0.66	.38	7/16
BSS-2T-MBT-4N	1/8	1/4	1.96	0.98	0.93	0.72	.56	1/2
BSS-3T-MBT-2N	3/16	1/8	2.00	1.00	0.74	0.74	.38	1/2
BSS-4T-MBT-2N	1/4	1/8	2.12	1.06	0.74	0.77	.38	1/2
BSS-4T-MBT-4N	1/4	1/4	2.12	1.07	0.93	0.77	.56	1/2
BSS-5T-MBT-2N	5/16	1/8	2.34	1.17	0.82	0.88	.38	5/8
BSS-5T-MBT-4N	5/16	1/4	2.34	1.17	1.01	0.88	.56	5/8
BSS-6T-MBT-4N	3/8	1/4	2.40	1.20	1.01	0.91	.56	5/8
BSS-6T-MBT-6N	3/8	3/8	2.62	1.31	1.12	1.02	.56	13/16
BSS-8T-MBT-6N	1/2	3/8	2.84	1.42	1.12	1.02	.56	13/16
BSS-8T-MBT-8N	1/2	1/2	2.86	1.43	1.31	1.03	.75	7/8
BSS-10T-MBT-8N	5/8	1/2	2.86	1.53	1.42	1.13	.75	1
BSS-12T-MBT-12N	3/4	3/4	3.14	1.57	1.46	1.17	.75	1-1/16
BSS-14T-MBT-12N	7/8	3/4	3.52	1.76	1.65	1.36	.75	1-3/8
BSS-16T-MBT-12N	1	3/4	3.88	1.94	1.65	1.45	.75	1-3/8
BSS-16T-MBT-16N	1	1	3.88	1.94	1.84	1.45	.94	1-3/8



Metric Range: NPT Thread

Part Number	Dimensions (mm)								(inch)
	Tube O.D.	NPT Pipe thread	A	L	S	L1	R	W HEX	
BSS-6MT-MBT-4N	6	1/8	53.9	27.0	18.0	19.6	9.7	1/2	
BSS-6MT-MBT-4N	6	1/4	53.9	27.0	23.4	19.6	14.2	1/2	
BSS-8MT-MBT-2N	8	1/8	59.7	29.9	20.8	22.4	9.7	5/8	
BSS-8MT-MBT-4N	8	1/4	59.7	29.9	25.4	22.4	14.2	5/8	
BSS-10MT-MBT-4N	10	1/4	67.0	33.5	28.2	25.9	14.2	13/16	
BSS-10MT-MBT-6N	10	3/8	67.0	33.5	28.2	25.9	14.2	13/16	
BSS-12MT-MBT-4N	12	1/4	72.0	36.0	28.2	25.9	14.2	13/16	
BSS-12MT-MBT-6N	12	3/8	72.0	36.0	28.2	25.9	14.2	13/16	
BSS-12MT-MBT-8N	12	1/2	72.0	36.0	33.0	25.9	19.0	13/16	
BSS-16MT-MBT-8N	16	1/2	77.6	38.8	35.8	28.7	19.1	1	

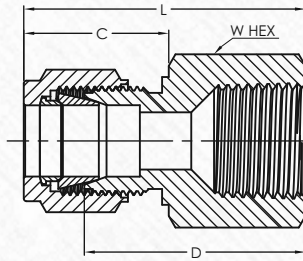
FEMALE CONNECTOR



Imperial Range: NPT Thread

Part Number	Dimensions (in)					
	Tube O.D.	NPT Pipe thread	L	C	D	W HEX
BSS-1T-FC-1N	1/16	1/16	0.93	0.43	0.78	7/16
BSS-1T-FC-2N	1/16	1/8	0.95	0.43	0.81	9/16
BSS-2T-FC-2N	1/8	1/8	1.14	0.60	0.88	9/16
BSS-2T-FC-4N	1/8	1/4	1.32	0.60	1.06	3/4
BSS-3T-FC-2N	3/16	1/8	1.17	0.64	0.91	9/16
BSS-3T-FC-4N	3/16	1/4	1.35	0.64	1.09	3/4
BSS-4T-FC-2N	1/4	1/8	1.23	0.70	0.94	9/16
BSS-4T-FC-4N	1/4	1/4	1.42	0.70	1.13	3/4
BSS-4T-FC-6N	1/4	3/8	1.48	0.70	1.19	7/8
BSS-4T-FC-8N	1/4	1/2	1.67	0.70	1.38	1-1/16
BSS-5T-FC-2N	5/16	1/8	1.27	0.73	0.97	9/16
BSS-5T-FC-4N	5/16	1/4	1.46	0.73	1.16	3/4
BSS-5T-FC-6N	5/16	3/8	1.51	0.73	1.22	7/8
BSS-6T-FC-2N	3/8	1/8	1.29	0.76	1.00	5/8
BSS-6T-FC-4N	3/8	1/4	1.48	0.76	1.19	3/4
BSS-6T-FC-6N	3/8	3/8	1.54	0.76	1.25	7/8
BSS-6T-FC-8N	3/8	1/2	1.73	0.76	1.44	1-1/16
BSS-6T-FC-12N	3/8	3/4	1.85	0.76	1.56	1-1/4
BSS-8T-FC-4N	1/2	1/4	1.59	0.87	1.19	13/16
BSS-8T-FC-6N	1/2	3/8	1.65	0.87	1.25	7/8
BSS-8T-FC-8N	1/2	1/2	1.84	0.87	1.44	1-1/16
BSS-8T-FC-12N	1/2	3/4	1.96	0.87	1.56	1-1/4
BSS-10T-FC-6N	5/8	3/8	1.65	0.87	1.25	15/16
BSS-10T-FC-8N	5/8	1/2	1.84	0.87	1.44	1-1/16
BSS-10T-FC-12N	5/8	3/4	1.96	0.87	1.56	1-3/8
BSS-12T-FC-8N	3/4	1/2	1.84	0.87	1.44	1-1/16
BSS-12T-FC-12N	3/4	3/4	1.96	0.87	1.56	1-3/8
BSS-14T-FC-12N	7/8	3/4	1.96	0.87	1.56	1-3/8
BSS-16T-FC-12N	1	3/4	2.15	1.05	1.66	1-3/8
BSS-16T-FC-16N	1	1	2.46	1.05	1.97	1-5/8

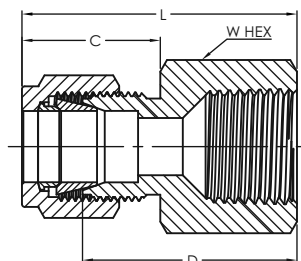
FEMALE CONNECTOR



Metric Range: NPT Thread

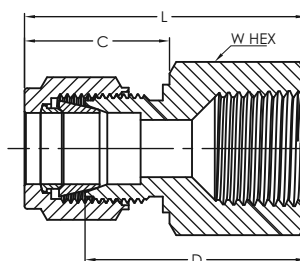
Part Number	Dimensions (mm)					
	Tube O.D.	NPT thread	L	C	D	W HEX
BSS-3MT-FC-2N	3	1/8	28.8	15.3	22.2	14.0
BSS-3MT-FC-4N	3	1/4	33.6	15.3	27.0	19.0
BSS-4MT-FC-2N	4	1/8	29.6	16.1	23.0	14.0
BSS-6MT-FC-2N	6	1/8	31.3	17.7	23.8	14.0
BSS-6MT-FC-4N	6	1/4	36.1	17.7	28.6	19.0
BSS-6MT-FC-6N	6	3/8	37.7	17.7	30.2	22.0
BSS-6MT-FC-8N	6	1/2	42.5	17.7	35.0	27.0
BSS-8MT-FC-2N	8	1/8	32.1	18.6	24.6	14.0
BSS-8MT-FC-4N	8	1/4	36.9	18.6	29.4	19.0
BSS-8MT-FC-6N	8	3/8	38.5	18.6	31.0	22.0
BSS-10MT-FC-4N	10	1/4	37.8	19.5	30.2	19.0
BSS-10MT-FC-6N	10	3/8	39.4	19.5	31.8	22.0
BSS-10MT-FC-8N	10	1/2	44.1	19.5	36.5	27.0
BSS-12MT-FC-4N	12	1/4	41.9	22.0	31.8	22.0
BSS-12MT-FC-6N	12	3/8	41.9	22.0	31.8	22.0
BSS-12MT-FC-8N	12	1/2	46.6	22.0	36.5	27.0
BSS-16MT-FC-6N	16	3/8	41.9	22.0	31.8	27.0
BSS-16MT-FC-8N	16	1/2	46.9	22.0	36.5	27.0
BSS-20MT-FC-8N	20	1/2	47.9	22.0	37.8	30.0
BSS-20MT-FC-12N	20	3/4	49.7	22.0	39.6	35.0
BSS-22MT-FC-12N	22	3/4	49.7	22.0	39.6	35.0
BSS-25MT-FC-12N	25	3/4	53.6	26.5	41.3	35.0
BSS-25MT-FC-16N	25	1	62.3	26.5	50.0	41.0

FEMALE CONNECTOR



Imperial Range: ISO Tapered Thread

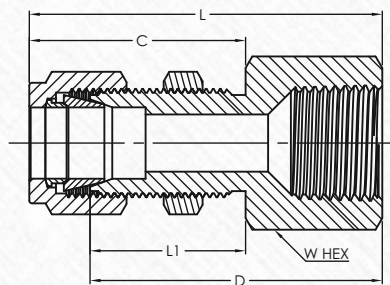
Part Number	Dimensions (in)					
	Tube O.D.	BSPT thread	L	C	D	W HEX
BSS-4T-FC-2GT	1/4	1/8	1.24	.70	0.94	9/16
BSS-4T-FC-4GT	1/4	1/4	1.42	.70	1.13	3/4
BSS-4T-FC-6GT	1/4	3/8	1.49	.70	1.19	7/8
BSS-4T-FC-8GT	1/4	1/2	1.68	.70	1.38	1-1/16
BSS-6T-FC-4GT	3/8	1/4	1.48	.76	1.19	3/4
BSS-6T-FC-6GT	3/8	3/8	1.54	.76	1.25	7/8
BSS-6T-FC-8GT	3/8	1/2	1.73	.76	1.44	1-1/16
BSS-8T-FC-4GT	1/2	1/4	1.59	.87	1.19	13/16
BSS-8T-FC-6GT	1/2	3/8	1.65	.87	1.25	7/8
BSS-8T-FC-8GT	1/2	1/2	1.84	.87	1.44	1-1/16



Metric Range: ISO Tapered Thread

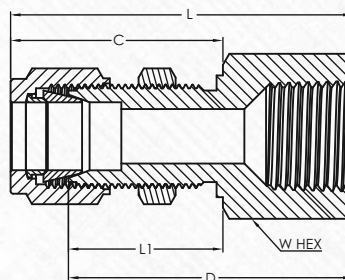
Part Number	Dimensions (mm)					
	Tube O.D.	BSPT thread	L	C	D	W HEX
BSS-3MT-FC-2GT	3	1/8	29,2	15,3	22,6	14,0
BSS-6MT-FC-2GT	6	1/8	31,3	17,7	23,8	14,0
BSS-6MT-FC-4GT	6	1/4	35,8	17,7	28,3	19,0
BSS-6MT-FC-6GT	6	3/8	37,6	17,7	30,1	22,0
BSS-6MT-FC-8GT	6	1/2	42,5	17,7	35,0	27,0
BSS-8MT-FC-2GT	8	1/8	32,8	18,6	25,3	15,0
BSS-8MT-FC-4GT	8	1/4	37,0	18,6	29,5	19,0
BSS-8MT-FC-6GT	8	3/8	38,5	18,6	31,0	22,0
BSS-8MT-FC-8GT	8	1/2	43,3	18,6	35,8	27,0
BSS-10MT-FC-2GT	10	1/8	44,2	19,5	36,6	19,0
BSS-10MT-FC-4GT	10	1/4	33,0	19,5	25,4	19,0
BSS-10MT-FC-6GT	10	3/8	37,8	19,5	30,2	22,0
BSS-10MT-FC-8GT	10	1/2	39,4	19,5	31,8	27,0
BSS-12MT-FC-4GT	12	1/4	40,3	22,0	30,2	22,0
BSS-12MT-FC-6GT	12	3/8	41,9	22,0	31,8	22,0
BSS-12MT-FC-8GT	12	1/2	46,7	22,0	36,6	27,0
BSS-16MT-FC-8GT	16	1/2	48,4	22,0	38,3	18,0
BSS-20MT-FC-8GT	20	1/2	54,7	22,0	44,6	30,0
BSS-20MT-FC-12GT	20	3/4	49,7	22,0	39,6	35,0
BSS-22MT-FC-16GT	22	1	57,9	22,0	47,8	41,0
BSS-25MT-FC-12GT	25	3/4	54,3	26,5	42,1	35,0
BSS-25MT-FC-16GT	25	1	61,5	26,5	49,3	41,0

BULKHEAD FEMALE CONNECTOR



Imperial Range: NPT Thread

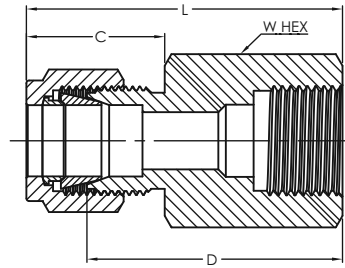
Part Number	Dimensions (in)						
	Tube O.D.	NPT pipe thread	L	C	D	L1	W HEX
BSS-2T-BFC-2N	1/8	1/8	1.76	1.23	1.50	0.97	9/16
BSS-3T-BFC-2N	3/16	1/8	1.79	1.26	1.53	1.00	9/16
BSS-4T-BFC-2N	1/4	1/8	1.85	1.31	1.56	1.02	5/8
BSS-4T-BFC-4N	1/4	1/4	2.04	1.31	1.75	1.02	3/4
BSS-5T-BFC-2N	5/16	1/8	1.96	1.42	1.66	1.12	11/16
BSS-5T-BFC-8N	5/16	1/2	2.38	1.42	2.08	1.12	1-1/16
BSS-6T-BFC-4N	3/8	1/4	2.17	1.44	1.88	1.15	3/4
BSS-8T-BFC-6N	1/2	3/8	2.43	1.65	2.03	1.25	15/16
BSS-8T-BFC-8N	1/2	1/2	2.62	1.65	2.22	1.25	1-1/16
BSS-10T-BFC-8N	5/8	1/2	2.65	1.68	2.25	1.28	1-1/16
BSS-12T-BFC-12N	3/4	3/4	2.90	1.87	2.50	1.47	1-3/8
BSS-14T-BFC-12N	7/8	3/4	3.18	2.09	2.78	1.69	1-3/8
BSS-16T-BFC-16N	1	1	3.68	2.27	3.19	1.78	1-3/8



Metric Range: NPT Thread

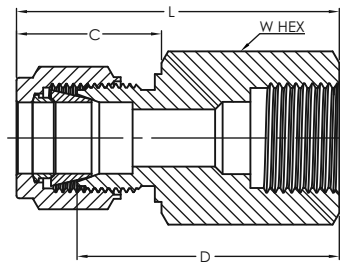
Part Number	Dimensions (mm)							B'head Hole Drill Size	Max. B'head Thick.
	Tube O.D.	NPT thread	L	C	D	L	W HEX		
BSS-6MT-BFC-2N	6	1/8	47.2	33.7	39.7	26.2	16.0	11.5	10.2
BSS-6MT-BFC-4N	6	1/4	52.0	33.7	44.5	26.2	19.0	11.5	10.2
BSS-8MT-BFC-2N	8	1/8	49.6	36.1	42.1	28.5	18.0	13.1	11.2
BSS-10MT-BFC-4N	10	1/4	55.2	37.0	47.6	29.4	19.0	16.3	11.2
BSS-12MT-BFC-6N	12	3/8	60.9	41.9	50.8	31.8	24.0	19.5	12.7
BSS-12MT-BFC-8N	12	1/2	66.4	41.9	56.3	31.8	27.0	19.5	12.7

GAUGE CONNECTOR



Imperial Range: ISO Parallel Thread

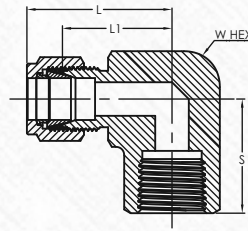
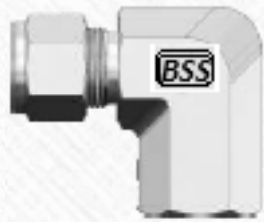
Part Number	Dimensions (in)					
	Tube O.D.	BSPP thread	L	C	D	W HEX
BSS-4T-GC-4G	1/4	1/4	1.48	.70	1.19	3/4
BSS-4T-GC-6G	1/4	3/8	1.48	.70	1.19	7/8
BSS-4T-GC-8G	1/4	1/2	1.70	.70	1.41	1-1/16
BSS-5T-GC-4G	5/16	1/4	1.51	.73	1.22	3/4
BSS-5T-GC-8G	5/16	1/2	1.59	.73	1.30	1-1/16
BSS-6T-GC-4G	3/8	1/4	1.55	.76	1.25	3/4
BSS-6T-GC-6G	3/8	3/8	1.55	.76	1.25	7/8
BSS-6T-GC-8G	3/8	1/2	1.63	.76	1.33	1-1/16
BSS-8T-GC-4G	1/2	1/4	1.65	.86	1.25	13/16
BSS-8T-GC-6G	1/2	3/8	1.75	.86	1.35	7/8
BSS-8T-GC-8G	1/2	1/2	1.90	.86	1.50	1-1/16



Metric Range: ISO Parallel Thread

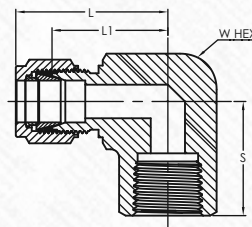
Part Number	Dimensions (mm)					
	Tube O.D.	BSPP thread	L	C	D	W HEX
BSS-3MT-GC-4G	3	1/4	35.3	15.3	28.7	19.0
BSS-6MT-GC-4G	6	1/4	37.7	17.7	30.2	19.0
BSS-6MT-GC-6G	6	3/8	37.7	17.7	30.2	22.0
BSS-6MT-GC-8G	6	1/2	43.2	17.7	35.7	27.0
BSS-8MT-GC-4G	8	1/4	38.5	18.6	31.0	19.0
BSS-8MT-GC-6G	8	3/8	40.8	18.6	33.3	22.0
BSS-8MT-GC-8G	8	1/2	44.0	18.6	36.5	27.0
BSS-10MT-GC-4G	10	1/4	39.4	19.5	31.8	19.0
BSS-10MT-GC-6G	10	3/8	38.8	19.5	31.2	22.0
BSS-10MT-GC-8G	10	1/2	41.3	19.5	33.7	27.0
BSS-12MT-GC-4G	12	1/4	41.9	22.0	31.8	22.0
BSS-12MT-GC-6G	12	3/8	44.4	22.0	34.3	22.0
BSS-12MT-GC-8G	12	1/2	48.2	22.0	38.1	27.0

FEMALE ELBOW



Imperial Range: NPT Thread

Part Number	Dimensions (in)					
	Tube O.D.	NPT Pipe thread	L	S	L1	W HEX
BSS-1T-FE-1N	1/16	1/16	0.75	0.50	0.60	7/16
BSS-1T-FE-2N	1/16	1/8	0.79	0.75	0.64	9/16
BSS-2T-FE-2N	1/8	1/8	0.97	0.75	0.71	9/16
BSS-2T-FE-4N	1/8	1/4	1.10	0.88	0.84	3/4
BSS-3T-FE-2N	3/16	1/8	1.00	0.75	0.74	9/16
BSS-4T-FE-2N	1/4	1/8	1.06	0.75	0.77	9/16
BSS-4T-FE-4N	1/4	1/4	1.20	0.88	0.91	11/16
BSS-4T-FE-6N	1/4	3/8	1.25	0.88	0.96	13/16
BSS-4T-FE-8N	1/4	1/2	1.36	1.13	1.07	1
BSS-5T-FE-2N	5/16	1/8	1.13	0.75	0.84	9/16
BSS-5T-FE-4N	5/16	1/4	1.24	0.88	0.94	11/16
BSS-6T-FE-2N	3/8	1/8	1.20	0.75	0.91	5/8
BSS-6T-FE-4N	3/8	1/4	1.26	0.88	0.97	11/16
BSS-6T-FE-6N	3/8	3/8	1.31	0.88	1.02	13/16
BSS-6T-FE-8N	3/8	1/2	1.42	1.13	1.13	1
BSS-8T-FE-4N	1/2	1/4	1.42	0.88	1.02	13/16
BSS-8T-FE-6N	1/2	3/8	1.42	0.88	1.02	13/16
BSS-8T-FE-8N	1/2	1/2	1.53	1.13	1.13	1
BSS-10T-FE-6N	5/8	3/8	1.50	0.88	1.10	15/16
BSS-10T-FE-8N	5/8	1/2	1.57	1.13	1.17	1-1/16
BSS-12T-FE-8N	3/4	1/2	1.57	1.13	1.17	1-1/16
BSS-12T-FE-12N	3/4	3/4	1.76	1.25	1.36	1-3/8
BSS-14T-FE-12N	7/8	3/4	1.76	1.25	1.36	1-3/8
BSS-16T-FE-12N	1	3/4	1.93	1.25	1.45	1-3/8
BSS-16T-FE-16N	1	1	2.02	1.50	1.53	1-5/8

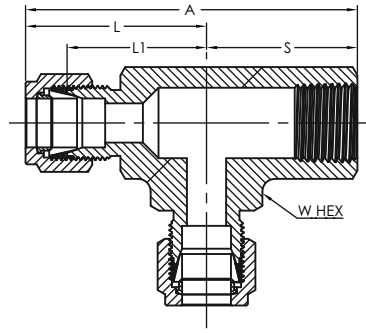


Metric Range: NPT Thread

Part Number	Dimensions (mm)						Inch
	Tube O.D.	NPT thread	L	S	L1	W HEX	
BSS-6MT-FE-2N	6	1/8	27.0	19.0	19.6	1/2	
BSS-6MT-FE-4N	6	1/4	29.8	22.4	22.4	11/16	
BSS-8MT-FE-2N	8	1/8	28.8	19.1	21.3	11/16	
BSS-8MT-FE-4N	8	1/4	30.6	22.4	23.1	11/16	
BSS-10MT-FE-4N	10	1/4	33.5	22.4	25.9	13/16	
BSS-10MT-FE-6N	10	3/8	33.5	22.4	25.9	13/16	
BSS-10MT-FE-8N	10	1/2	36.3	28.5	28.7	1	
BSS-12MT-FE-4N	12	1/4	36.0	22.4	25.9	13/16	
BSS-12MT-FE-6N	12	3/8	36.0	22.4	25.9	13/16	
BSS-12MT-FE-8N	12	1/2	38.8	28.4	28.7	1	
BSS-16MT-FE-6N	16	3/8	39.5	23.6	29.7	1-1/16	
BSS-16MT-FE-8N	16	1/2	39.5	28.4	29.7	1-1/16	

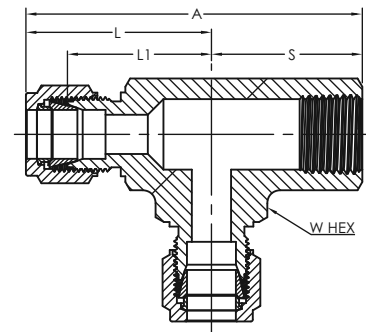


FEMALE RUN TEE



Imperial Range: NPT Thread

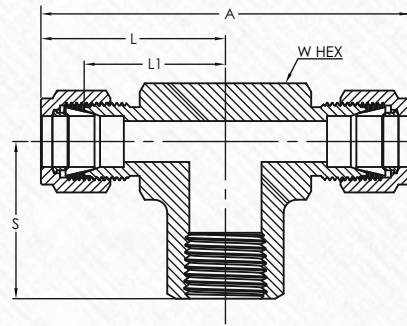
Part Number	Dimensions (in)						
	Tube O.D.	NPT Pipe thread	A	L	S	L1	W HEX
BSS-2T-FRT-2N	1/8	1/8	1.72	0.96	0.75	0.70	1/2
BSS-3T-FRT-2N	3/16	1/8	1.76	1.01	0.75	0.74	1/2
BSS-4T-FRT-2N	1/4	1/8	1.81	1.06	0.75	0.77	1/2
BSS-4T-FRT-4N	1/4	1/4	2.05	1.17	0.88	0.88	11/16
BSS-5T-FRT-2N	5/16	1/8	1.92	1.17	0.75	0.88	5/8
BSS-6T-FRT-4N	3/8	1/4	2.11	1.23	0.88	0.94	11/16
BSS-8T-FRT-4N	1/2	1/4	2.56	1.42	0.88	1.02	13/16
BSS-8T-FRT-6N	1/2	3/8	2.30	1.42	0.88	1.02	7/8
BSS-8T-FRT-8N	1/2	1/2	2.66	1.53	1.13	1.13	1
BSS-10T-FRT-8N	5/8	1/2	2.70	1.57	1.13	1.17	1-1/16
BSS-12T-FRT-12N	3/4	3/4	3.01	1.76	1.25	1.36	1-3/8
BSS-14T-FRT-8N	7/8	1/2	3.01	1.76	1.25	1.36	1-3/8
BSS-14T-FRT-12N	7/8	3/4	3.01	1.76	1.25	1.36	1-3/8
BSS-16T-FRT-12N	1	3/4	3.18	1.93	1.25	1.45	1-3/8
BSS-16T-FRT-16N	1	1	3.52	2.02	1.50	1.65	1-5/8



Metric Range: NPT Thread

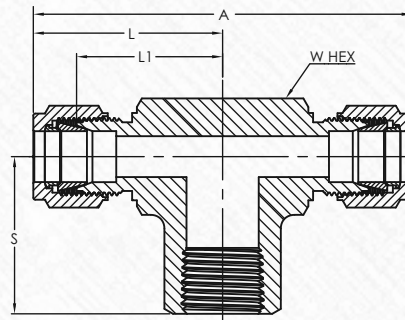
Part Number	Dimensions (mm)							Inch
	Tube O.D.	NPT thread	A	L	S	L1	W HEX	
BSS-6MT-FRT-2N	6	1/8	46.0	27.0	19.0	19.6	1/2	
BSS-6MT-FRT-4N	6	1/4	52.1	29.8	22.4	22.4	11/16	
BSS-8MT-FRT-2N	8	1/8	48.9	29.9	19.0	22.4	5/8	
BSS-10MT-FRT-4N	10	1/4	55.9	33.5	22.4	25.9	13/16	
BSS-12MT-FRT-4N	12	1/4	58.4	36.0	22.4	25.9	13/16	
BSS-12MT-FRT-6N	12	3/8	58.4	36.0	22.4	25.9	13/16	
BSS-12MT-FRT-8N	12	1/2	67.3	38.8	28.5	28.7	1	
BSS-16MT-FRT-8N	16	1/2	68.2	39.8	28.4	29.7	1-1/16	

FEMALE BRANCH TEE



Imperial Range: NPT Thread

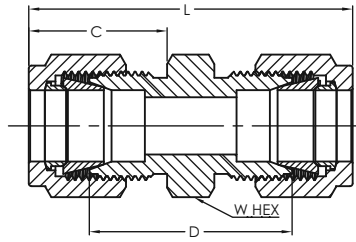
Part Number	Dimensions (in)						
	Tube O.D.	NPT Pipe thread	A	L	S	L1	W HEX
BSS-2T-FBT-2N	1/8	1/8	1.91	1.01	0.75	0.70	1/2
BSS-3T-FBT-2N	3/16	1/8	2.02	1.01	0.75	0.74	1/2
BSS-4T-FBT-2N	1/4	1/8	2.12	1.06	0.75	0.77	1/2
BSS-4T-FBT-4N	1/4	1/4	2.34	1.17	0.88	0.88	11/16
BSS-5T-FBT-2N	5/16	1/8	2.34	1.17	0.75	0.88	5/8
BSS-6T-FBT-4N	3/8	1/4	2.46	1.23	0.88	0.94	11/16
BSS-8T-FBT-4N	1/2	1/4	2.84	1.42	0.88	1.02	13/16
BSS-8T-FBT-6N	1/2	3/8	2.84	1.42	0.88	1.02	7/8
BSS-8T-FBT-8N	1/2	1/2	3.06	1.53	1.13	1.13	1
BSS-10T-FBT-8N	5/8	1/2	3.06	1.53	1.13	1.13	1
BSS-12T-FBT-12N	3/4	3/4	3.52	1.76	1.25	1.36	1-3/8
BSS-14T-FBT-12N	7/8	3/4	3.52	1.76	1.25	1.36	1-3/8
BSS-16T-FBT-12N	1	3/4	3.86	1.94	1.25	1.45	1-3/8
BSS-16T-FBT-16N	1	1	4.28	2.14	1.50	1.65	1-3/8



Metric Range: NPT Thread

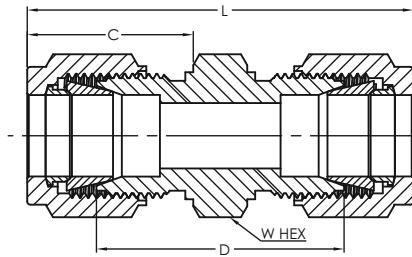
Part Number	Dimensions (mm)						Inch
	Tube O.D.	NPT thread	A	L	S	L1	W HEX
BSS-6MT-FBT-2N	6	1/8	53,9	27,0	19,0	19,6	1/2
BSS-6MT-FBT-4N	6	1/4	59,5	29,8	22,4	22,4	11/16
BSS-8MT-FBT-2N	8	1/8	59,7	29,9	19,0	22,4	5/8
BSS-10MT-FBT-4N	10	1/4	67,0	33,5	22,4	25,9	13/16
BSS-12MT-FBT-2N	12	1/8	72,0	36,0	22,3	25,9	13/16
BSS-12MT-FBT-4N	12	1/4	72,0	36,0	22,3	25,9	13/16
BSS-12MT-FBT-6N	12	3/8	72,0	36,0	22,4	25,9	13/16
BSS-12MT-FBT-8N	12	1/2	77,6	38,8	28,5	28,7	1
BSS-16MT-FBT-8N	16	1/2	77,6	38,8	28,4	28,7	1

UNION



Imperial Range

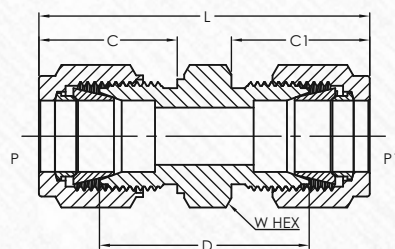
Part Number	Dimensions (in)				
	Tube O.D.	L	C	D	W HEX
BSS-1T-U	1/16	0.99	0.43	0.69	5/16
BSS-2T-U	1/8	1.39	0.60	0.88	7/16
BSS-3T-U	3/16	1.48	0.64	0.95	7/16
BSS-4T-U	1/4	1.62	0.70	1.03	1/2
BSS-5T-U	5/16	1.70	0.73	1.11	9/16
BSS-6T-U	3/8	1.77	0.76	1.19	5/8
BSS-8T-U	1/2	2.02	0.87	1.22	13/16
BSS-10T-U	5/8	2.05	0.87	1.25	15/16
BSS-12T-U	3/4	2.11	0.87	1.31	1-1/16
BSS-14T-U	7/8	2.18	0.87	1.38	1-3/16
BSS-16T-U	1	2.57	1.05	1.59	1-3/8



Metric Range

Part Number	Dimensions (mm)				
	Tube O.D.	L	C	D	W HEX
BSS-2MT-U	2	35.6	15.3	22.4	12.0
BSS-3MT-U	3	35.3	15.3	22.1	12.0
BSS-4MT-U	4	37.4	16.1	24.2	12.0
BSS-6MT-U	6	41.2	17.7	26.2	14.0
BSS-8MT-U	8	43.2	18.6	28.2	15.0
BSS-10MT-U	10	46.2	19.5	31.0	18.0
BSS-12MT-U	12	51.2	22.0	31.0	22.0
BSS-14MT-U	14	52.0	22.0	31.8	24.0
BSS-16MT-U	16	52.0	22.0	31.8	24.0
BSS-18MT-U	18	53.5	22.0	33.3	27.0
BSS-20MT-U	20	55.0	22.0	34.8	30.0
BSS-22MT-U	22	55.0	22.0	34.8	30.0
BSS-25MT-U	25	65.1	26.5	40.5	35.0

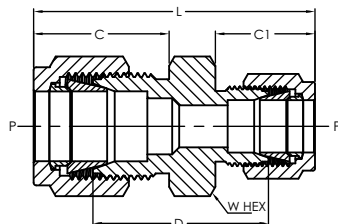
CONVERSION UNION



Part Number	Tube O.D.		Dimensions (in)				
	P (mm)	P1 (in)	L	C	C1	D	W HEX
BSS-3MT-UC-2N	3	1/8	36.3	15.3	15.3	22.6	12.0
BSS-4MT-UC-2N	4	1/8	36.5	16.1	15.3	23.6	12.0
BSS-4MT-UC-4N	4	1/4	39.3	16.1	17.7	26.4	14.0
BSS-6MT-UC-2N	6	1/8	38.5	17.7	15.3	24.6	14.0
BSS-6MT-UC-4N	6	1/4	41.1	17.7	17.7	25.9	14.0
BSS-6MT-UC-5N	6	5/16	42.3	17.7	18.8	27.2	14.0
BSS-8MT-UC-4N	8	1/4	42.3	18.6	17.7	27.2	15.0
BSS-8MT-UC-6N	8	3/8	44.0	18.6	19.3	29.1	15.0
BSS-10MT-UC-2N	10	1/8	41.8	19.5	15.3	27.9	18.0
BSS-10MT-UC-4N	10	1/4	44.5	19.5	17.7	29.2	18.0
BSS-10MT-UC-6N	10	3/8	46.0	19.5	19.3	30.7	18.0
BSS-12MT-UC-6N	12	3/8	48.4	22.0	19.3	30.7	22.0
BSS-12MT-UC-8N	12	1/2	51.1	22.0	21.8	31.0	22.0
BSS-15MT-UC-8N	15	1/2	52.0	22.0	21.8	32.0	24.0
BSS-16MT-UC-6N	16	3/8	52.0	22.0	19.3	34.3	24.0
BSS-18MT-UC-12N	18	3/4	53.5	22.0	21.8	33.5	27.0

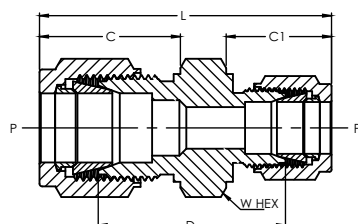


REDUCING UNION



Imperial Range

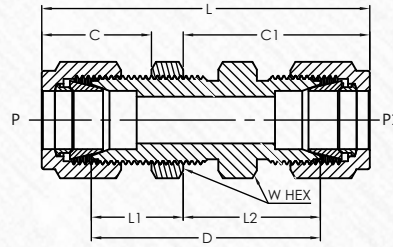
Part Number	Dimensions (In)						
	P Tube O.D.	P1 Tube O.D.	L	C	C1	D	W HEX
BSS-2T-RU-1N	1/8	1/16	1.21	0.60	.43	0.81	7/16
BSS-3T-RU-1N	3/16	1/16	1.27	0.64	.43	0.86	7/16
BSS-3T-RU-2N	3/16	1/8	1.44	0.64	.60	0.92	7/16
BSS-4T-RU-1N	1/4	1/16	1.38	0.70	.43	0.91	1/2
BSS-4T-RU-2N	1/4	1/8	1.52	0.70	.60	0.97	1/2
BSS-4T-RU-3N	1/4	3/16	1.55	0.70	.64	1.00	1/2
BSS-5T-RU-2N	5/16	1/8	1.58	0.73	.60	1.03	9/16
BSS-5T-RU-4N	5/16	1/4	1.67	0.73	.70	1.08	9/16
BSS-6T-RU-1N	3/8	1/16	1.44	0.76	.43	1.00	5/8
BSS-6T-RU-2N	3/8	1/8	1.61	0.76	.60	1.06	5/8
BSS-6T-RU-4N	3/8	1/4	1.71	0.76	.70	1.13	5/8
BSS-6T-RU-5N	3/8	5/16	1.75	0.76	.73	1.16	5/8
BSS-8T-RU-2N	1/2	1/8	1.75	0.87	.60	1.09	13/16
BSS-8T-RU-4N	1/2	1/4	1.85	0.87	.70	1.16	13/16
BSS-8T-RU-6N	1/2	3/8	1.91	0.87	.76	1.22	13/16
BSS-10T-RU-6N	5/8	3/8	1.94	0.87	.76	1.25	15/16
BSS-10T-RU-8N	5/8	1/2	2.05	0.87	.87	1.25	15/16
BSS-12T-RU-4N	3/4	1/4	1.95	0.87	.76	1.25	1-1/16
BSS-12T-RU-6N	3/4	3/8	2.00	0.87	.76	1.31	1-1/16
BSS-12T-RU-8N	3/4	1/2	2.11	0.87	.87	1.31	1-1/16
BSS-12T-RU-10N	3/4	5/8	2.11	0.87	.87	1.31	1-1/16
BSS-16T-RU-8N	1	1/2	2.39	1.05	.87	1.50	1-3/8
BSS-16T-RU-12N	1	3/4	2.39	1.05	.87	1.50	1-3/8



Metric Range

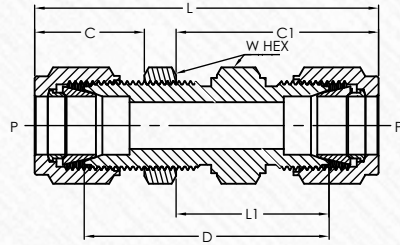
Part Number	Dimensions (mm)						
	P Tube O.D.	P1 Tube O.D.	L	C	C1	D	W HEX
BSS-3MT-RU-2TM	3	2	35.8	15.3	15.3	22.6	12.0
BSS-6MT-RU-2TM	6	2	38.7	17.7	15.3	24.6	14.0
BSS-6MT-RU-3TM	6	3	38.7	17.7	15.3	24.6	14.0
BSS-6MT-RU-4TM	6	4	39.5	17.7	16.1	25.4	14.0
BSS-8MT-RU-6TM	8	6	42.4	18.6	17.7	27.4	15.0
BSS-10MT-RU-6TM	10	6	1.55	44.5	17.7	29.4	18.0
BSS-10MT-RU-8TM	10	8	1.58	44.5	18.6	29.4	18.0
BSS-12MT-RU-6TM	12	6	1.67	47.0	17.7	29.4	22.0
BSS-12MT-RU-8TM	12	8	1.44	47.8	18.6	30.2	22.0
BSS-12MT-RU-10TM	12	10	1.61	48.7	19.5	31.0	22.0
BSS-16MT-RU-10TM	16	10	49.5	22.0	19.5	31.8	24.0
BSS-16MT-RU-12TM	16	12	52.0	22.0	22.0	31.8	24.0
BSS-18MT-RU-12TM	18	12	53.5	22.0	22.0	33.3	27.0
BSS-25MT-RU-18TM	25	18	60.5	26.5	22.0	38.1	35.0
BSS-25MT-RU-20TM	25	20	62.3	26.5	22.0	39.9	35.0

BULKHEAD UNION



Imperial Range

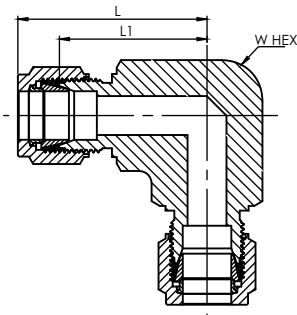
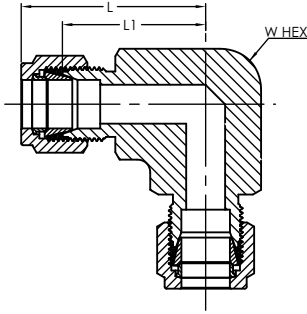
Part Number	Dimensions (In)									
	Tube O.D.	L	C	C1	D	L1	L2	W HEX	Bulkhead hole Drill size	Maximum bulkhead Thickness
BSS-1T-BU	1/16	1.23	.43	0.68	0.94	.28	0.53	5/16	13/64	1/8
BSS-2T-BU	1/8	2.02	.60	1.23	1.50	.34	0.97	1/2	21/64	1/2
BSS-3T-BU	3/16	2.11	.64	1.26	1.59	.38	1.00	9/16	25/64	1/2
BSS-4T-BU	1/4	2.27	.70	1.31	1.69	.41	1.02	5/8	29/64	17/32
BSS-5T-BU	5/16	2.40	.73	1.42	1.81	.44	1.12	11/16	33/64	9/16
BSS-6T-BU	3/8	2.46	.76	1.44	1.88	.47	1.16	3/4	37/64	9/16
BSS-8T-BU	1/2	2.80	.87	1.65	2.00	.47	1.25	15/16	49/64	19/32
BSS-10T-BU	5/8	2.86	.87	1.68	2.06	.47	1.28	1-1/16	57/64	19/32
BSS-12T-BU	3/4	3.11	.87	1.87	2.31	.47	1.47	1-3/16	1-1/64	25/32
BSS-14T-BU	7/8	3.33	.87	2.09	2.53	.47	1.69	1-3/8	1-9/64	15/16
BSS-16T-BU	1	3.78	1.05	2.27	2.81	.56	1.78	1-5/8	1-21/64	15/16



Metric Range

Part Number	Dimensions (mm)								
	Tube O.D.	L	C	C1	D	L1	W HEX	B'head hole Drill size	Max. B'head Thick
BSS-3MT-BU	3	51.3	15.3	31.2	38.2	24.6	14.0	8.3	12.7
BSS-4MT-BU	4	53.7	16.1	32.0	40.5	25.4	14.0	9.9	12.7
BSS-6MT-BU	6	57.9	17.7	33.7	42.9	26.2	16.0	11.5	10.2
BSS-8MT-BU	8	61.0	18.6	36.0	46.0	28.5	18.0	13.1	11.2
BSS-10MT-BU	10	63.6	19.5	37.0	48.4	29.4	22.0	16.3	11.2
BSS-12MT-BU	12	2.27	22.0	41.9	50.8	31.8	24.0	19.5	12.7
BSS-15MT-BU	15	2.40	22.0	42.6	52.3	32.5	27.0	22.5	12.7
BSS-16MT-BU	16	2.46	22.0	42.6	52.4	32.5	27.0	22.5	12.7
BSS-18MT-BU	18	2.80	22.0	47.4	58.7	37.3	30.0	26.0	16.8
BSS-20MT-BU	20	2.86	22.0	51.0	68.0	40.9	35.0	29.0	19.0
BSS-25MT-BU	25	2.86	26.5	54.4	71.4	42.2	41.0	33.8	24.0

UNION ELBOW



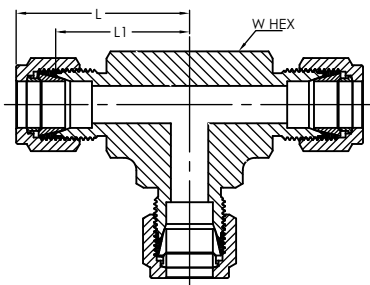
Imperial Range

Part Number	Dimensions (in)			
	Tube O.D.	L	L1	W HEX
BSS-1T-UE	1/16	.70	.55	3/8
BSS-2T-UE	1/8	.88	.62	3/8
BSS-3T-UE	3/16	1.00	.74	1/2
BSS-4T-UE	1/4	1.06	.77	1/2
BSS-5T-UE	5/16	1.13	.84	9/16
BSS-6T-UE	3/8	1.20	.91	5/8
BSS-8T-UE	1/2	1.42	1.02	13/16
BSS-10T-UE	5/8	1.50	1.10	15/16
BSS-12T-UE	3/4	1.57	1.17	1-1/16
BSS-14T-UE	7/8	1.76	1.36	1-3/8
BSS-16T-UE	1	1.93	1.45	1-3/8

Metric Range

Part Number	Dimensions (mm)			
	Tube O.D.	L	L1	W HEX
BSS-3MT-UE	3	22.3	15.7	3/8
BSS-4MT-UE	4	25.4	18.8	1/2
BSS-6MT-UE	6	27.0	19.6	1/2
BSS-8MT-UE	8	28.8	21.3	9/16
BSS-10MT-UE	10	31.5	23.9	11/16
BSS-12MT-UE	12	36.0	25.9	13/16
BSS-16MT-UE	16	38.0	27.9	15/16
BSS-18MT-UE	18	39.8	29.7	1-1/16
BSS-20MT-UE	20	44.6	34.5	1-3/8
BSS-22MT-UE	22	44.6	34.5	1-3/8
BSS-25MT-UE	25	49.1	36.8	1-3/8

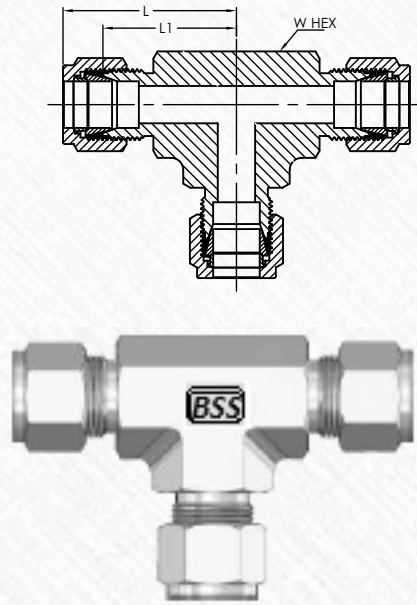
UNION TEE



Imperial Range

Part Number	Dimensions (In)			
	Tube O.D.	L	L1	W HEX
BSS-1T-UT	1/16	0.71	0.56	3/8
BSS-2T-UT	1/8	0.88	0.62	3/8
BSS-3T-UT	3/16	0.96	0.70	7/16
BSS-4T-UT	1/4	1.06	0.77	1/2
BSS-5T-UT	5/16	1.17	0.88	5/8
BSS-6T-UT	3/8	1.20	0.91	5/8
BSS-8T-UT	1/2	1.42	1.02	13/16
BSS-10T-UT	5/8	1.53	1.13	1
BSS-12T-UT	3/4	1.57	1.16	1-1/16
BSS-14T-UT	7/8	1.76	1.36	1-3/8
BSS-16T-UT	1	1.93	1.45	1-3/8

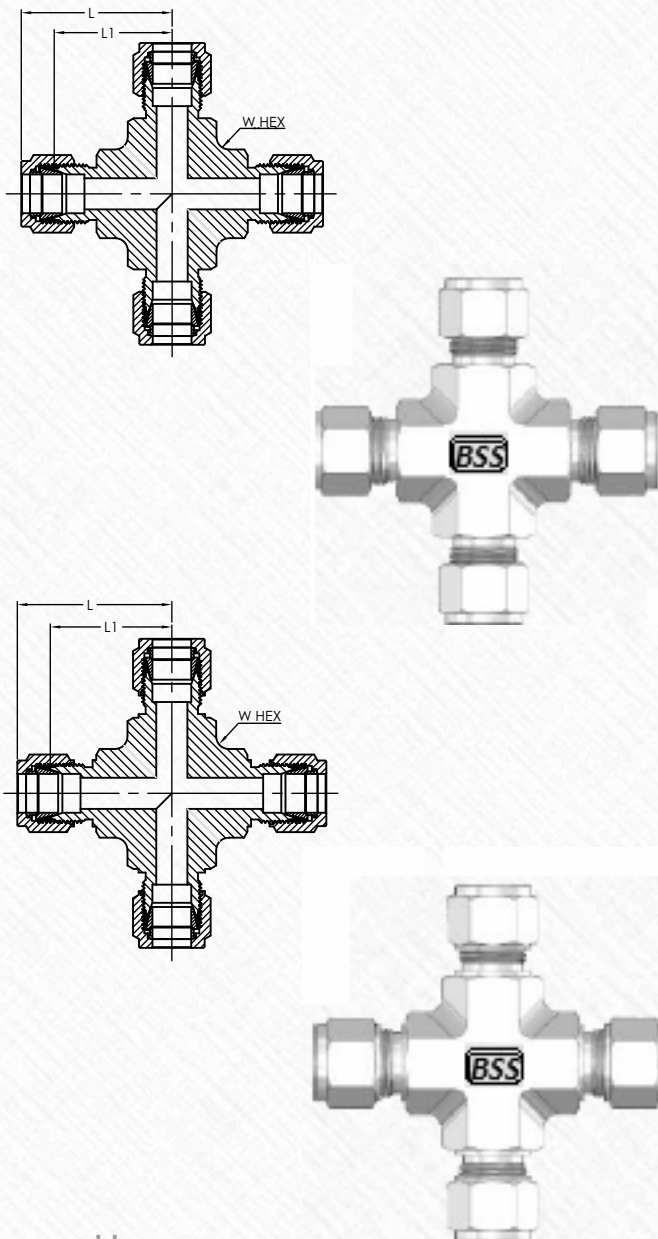
UNION TEE



Metric Range

Part Number	Dimensions (mm)			
	Tube O.D.	L	L1	W HEX (In)
BSS-2MT-UT	2	22.3	15.7	3/8
BSS-3MT-UT	3	22.3	15.7	3/8
BSS-4MT-UT	4	25.4	18.8	1/2
BSS-6MT-UT	6	27.0	19.6	1/2
BSS-8MT-UT	8	29.9	22.4	5/8
BSS-10MT-UT	10	31.5	23.9	11/16
BSS-12MT-UT	12	36.0	25.9	13/16
BSS-16MT-UT	16	38.8	28.7	1
BSS-18MT-UT	18	38.8	29.7	1-1/16
BSS-20MT-UT	20	44.6	34.5	1-3/8
BSS-22MT-UT	22	44.6	34.5	1-3/8
BSS-25MT-UT	25	49.1	36.8	1-3/8

UNION CROSS



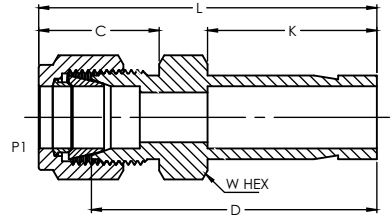
Imperial Range

Part Number	Dimensions (in)			
	Tube O.D.	L	L1	W HEX
BSS-2T-UC	1/8	0.98	0.62	7/16
BSS-3T-UC	3/16	0.96	0.70	7/16
BSS-4T-UC	1/4	1.06	0.76	1/2
BSS-5T-UC	5/16	1.17	0.88	5/8
BSS-6T-UC	3/8	1.20	0.91	5/8
BSS-8T-UC	1/2	1.42	1.02	13/16
BSS-10T-UC	5/8	1.53	1.13	1-1/16
BSS-12T-UC	3/4	1.57	1.16	1-1/16
BSS-14T-UC	7/8	1.76	1.36	1-5/16
BSS-16T-UC	1	1.93	1.45	1-5/16

Metric Range

Part Number	Dimensions (mm)			
	Tube O.D.	L	L1	W HEX (In)
BSS-3MT-UC	3	22.3	15.7	7/16
BSS-4MT-UC	4	25.4	18.8	1/2
BSS-6MT-UC	6	27.0	19.6	1/2
BSS-8MT-UC	8	29.9	22.4	5/8
BSS-10MT-UC	10	33.5	25.9	13/16
BSS-12MT-UC	12	36.0	25.9	13/16
BSS-16MT-UC	16	37.0	26.9	15/16
BSS-18MT-UC	18	38.3	28.2	1-1/16

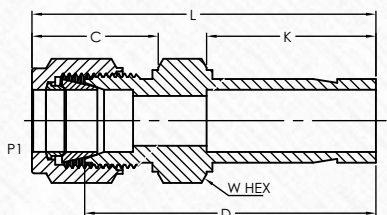
TUBE END REDUCER



Imperial Range

Part Number	Dimensions (in)						
	P turned end tube O.D.	P1 machined end tube O.D.	L	C	D	K	W HEX
BSS-2T-RE-1T	1/8	1/16	1.10	0.43	0.95	0.53	5/16
BSS-3T-RE-1T	3/16	1/16	1.13	0.43	0.98	0.58	5/16
BSS-4T-RE-1T	1/4	1/16	1.24	0.43	1.09	0.63	7/16
BSS-1T-RE-2T	1/16	1/8	1.18	0.60	0.92	0.38	7/16
BSS-2T-RE-2T	1/8	1/8	1.34	0.43	1.09	0.54	7/16
BSS-3T-RE-2T	3/16	1/8	1.35	0.60	1.09	0.58	7/16
BSS-4T-RE-2T	1/4	1/8	1.42	0.60	1.16	0.63	7/16
BSS-6T-RE-2T	3/8	1/8	1.48	0.60	1.22	0.69	7/16
BSS-8T-RE-2T	1/2	1/8	1.74	0.60	1.48	0.91	9/16
BSS-2T-RE-3T	1/8	3/16	1.37	0.63	1.11	0.53	7/16
BSS-4T-RE-3T	1/4	3/16	1.46	0.63	1.20	0.63	7/16
BSS-2T-RE-4T	1/8	1/4	1.45	0.70	1.16	0.53	1/2
BSS-3T-RE-4T	3/16	1/4	1.48	0.60	1.19	0.56	1/2
BSS-4T-RE-4T	1/4	1/4	1.54	0.70	1.25	0.63	1/2
BSS-5T-RE-4T	5/16	1/4	1.57	0.70	1.28	0.66	1/2
BSS-6T-RE-4T	3/8	1/4	1.60	0.70	1.31	0.69	1/2
BSS-8T-RE-4T	1/2	1/4	1.82	0.70	1.53	0.91	9/16
BSS-10T-RE-4T	5/8	1/4	1.89	0.70	1.60	0.97	11/16
BSS-12T-RE-4T	3/4	1/4	1.88	0.70	1.59	0.97	13/16
BSS-6T-RE-5T	3/8	5/16	1.65	0.73	1.36	0.69	9/16
BSS-8T-RE-5T	1/2	5/16	1.87	0.73	1.58	0.91	9/16
BSS-4T-RE-6T	1/4	3/8	1.63	0.76	1.34	0.63	5/8
BSS-6T-RE-6T	3/8	3/8	1.70	0.76	1.41	0.69	5/8
BSS-8T-RE-6T	1/2	3/8	1.91	0.76	1.62	0.91	5/8
BSS-10T-RE-6T	5/8	3/8	1.98	0.76	1.69	0.97	11/16
BSS-12T-RE-6T	3/4	3/8	1.98	0.76	1.69	0.97	13/16
BSS-4T-RE-8T	1/4	1/2	1.77	0.87	1.37	0.63	13/16
BSS-6T-RE-8T	3/8	1/2	1.84	0.87	1.44	0.69	13/16
BSS-10T-RE-8T	5/8	1/2	2.12	0.87	1.72	0.97	13/16
BSS-12T-RE-8T	3/4	1/2	2.12	0.87	1.72	0.97	13/16
BSS-16T-RE-10T	1	1/2	2.37	0.87	1.97	1.22	1-1/16
BSS-12T-RE-10T	3/4	5/8	2.15	0.87	1.75	0.97	15/16
BSS-14T-RE-10T	7/8	5/8	2.21	0.87	1.81	1.03	15/16
BSS-16T-RE-12T	1	5/8	2.40	0.87	2.00	1.22	1-1/16
BSS-8T-RE-12T	1/2	3/4	2.15	0.87	1.75	0.91	1-1/16
BSS-16T-RE-16T	1	3/4	2.46	0.87	2.06	1.22	1-1/16

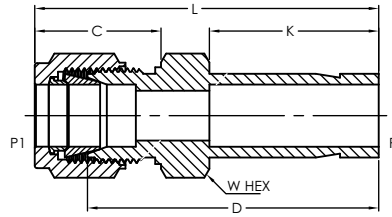
TUBE END REDUCER



Metric Range

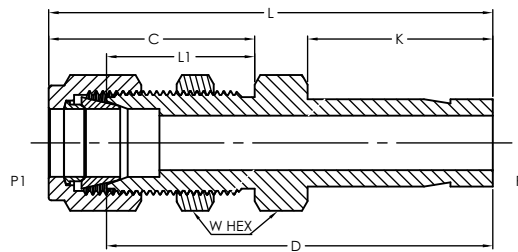
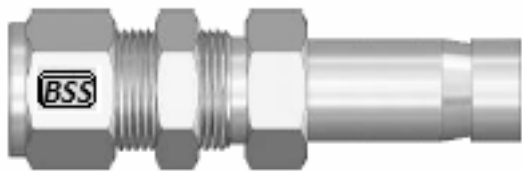
Part Number	Dimensions (mm)							
	P Tube O.D.	P1 Tube O.D.	L	C	D	K	O	W HEX
BSS-3MT-RE-2TM	3	2	34.3	15.3	27.7	13.5	0.6	14.0
BSS-3MT-RE-6TM	3	6	37.0	17.7	29.5	13.5	0.6	14.0
BSS-4MT-RE-3TM	4	3	35.0	15.3	28.4	14.3	1.0	12.0
BSS-6MT-RE-3TM	6	3	36.1	15.3	29.5	15.9	1.0	12.0
BSS-6MT-RE-4TM	6	4	37.1	16.1	30.5	15.9	1.0	12.0
BSS-6MT-RE-8TM	6	8	40.0	18.6	32.5	15.9	1.0	15.0
BSS-6MT-RE-10TM	6	10	41.7	19.5	34.1	15.9	1.0	18.0
BSS-6MT-RE-12TM	6	12	44.9	22.0	34.8	15.9	1.0	22.0
BSS-8MT-RE-6TM	8	6	40.0	17.7	32.5	16.7	0.8	14.0
BSS-8MT-RE-10TM	8	10	43.4	19.5	35.8	15.3	1.5	19.5
BSS-10MT-RE-3TM	10	3	38.6	15.3	32.0	17.7	2.0	15.3
BSS-10MT-RE-6TM	10	6	40.8	17.7	33.3	17.5	1.3	14.0
BSS-10MT-RE-8TM	10	8	42.0	18.6	34.5	17.5	1.3	15.0
BSS-10MT-RE-12TM	10	12	46.6	22.0	36.5	17.5	1.3	22.0
BSS-12MT-RE-6TM	12	6	46.4	17.7	38.9	23.0	1.4	14.0
BSS-12MT-RE-8TM	12	8	47.6	18.6	40.1	23.0	1.4	15.0
BSS-12MT-RE-10TM	12	10	49.7	19.5	42.1	23.0	1.4	18.0
BSS-12MT-RE-16TM	12	16	53.0	22.0	42.9	23.0	1.4	24.0
BSS-12MT-RE-18TM	12	18	54.6	22.0	44.5	23.0	1.4	27.0
BSS-15MT-RE-10TM	15	10	51.3	19.5	43.7	23.8	1.6	27.0
BSS-16MT-RE-12TM	16	12	53.8	22.0	43.7	24.6	1.7	22.0
BSS-16MT-RE-18TM	16	18	56.1	22.0	46.0	24.6	1.7	27.0
BSS-16MT-RE-20TM	16	20	57.9	22.0	47.8	24.6	1.7	27.0
BSS-16MT-RE-25TM	16	25	63.2	26.5	51.0	24.8	2.0	26.5
BSS-18MT-RE-12TM	18	12	53.8	22.0	43.7	24.6	2.0	22.0
BSS-18MT-RE-16TM	18	16	54.7	22.0	44.6	24.8	2.0	22.0
BSS-18MT-RE-20TM	18	20	57.9	22.0	47.8	24.6	2.5	30.0
BSS-18MT-RE-25TM	18	25	63.1	26.5	50.8	24.6	2.0	35.0
BSS-20MT-RE-12TM	20	12	56.1	22.0	46.0	25.4	2.0	22.0
BSS-20MT-RE-16TM	20	16	55.3	22.0	45.2	25.6	2.5	22.0
BSS-20MT-RE-18TM	20	18	57.6	22.0	47.5	25.4	2.5	27.0
BSS-20MT-RE-25TM	20	25	64.5	26.5	52.3	25.4	2.5	35.0
BSS-22MT-RE-18TM	22	18	56.1	22.0	46.0	26.2	2.5	27.0
BSS-22MT-RE-20TM	22	20	57.7	22.0	47.6	26.2	2.5	30.0
BSS-25MT-RE-12TM	25	12	60.9	22.0	50.8	31.8	2.5	27.0
BSS-25MT-RE-16TM	25	16	64.0	22.0	51.8	32.0	3.0	27.0
BSS-25MT-RE-18TM	25	18	62.5	22.0	52.4	31.8	2.6	27.0
BSS-25MT-RE-20TM	25	20	64.2	22.0	54.1	31.8	2.6	30.0

TUBE END REDUCER CONVERTER



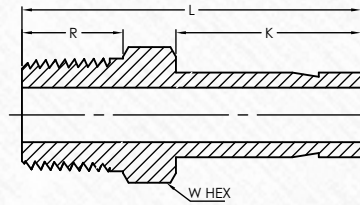
Part Number	Dimensions (mm)						
	P Tube O.D. (In)	P1 Tube O.D.	L	C	D	K	W HEX
BSS-2T-RE-3TM	1/8	3	34.3	15.3	27.7	13.5	12.0
BSS-4T-RE-3TM	1/4	3	36.1	15.3	29.5	16.0	12.0
BSS-4T-RE-6TM	1/4	6	39.3	17.7	31.8	16.0	14.0
BSS-5T-RE-6TM	5/16	6	40.0	17.7	32.5	16.8	14.0
BSS-6T-RE-6TM	3/8	6	40.8	17.7	33.3	17.5	14.0
BSS-8T-RE-6TM	1/2	6	46.4	17.7	38.9	23.1	14.0
BSS-6T-RE-8TM	3/8	8	42.0	18.6	34.5	17.5	15.0
BSS-8T-RE-8TM	1/2	8	47.5	18.6	40.1	23.1	15.0
BSS-6T-RE-10TM	3/8	10	44.4	19.5	36.8	17.5	18.0
BSS-8T-RE-10TM	1/2	10	47.6	19.5	41.4	23.1	18.0
BSS-8T-RE-12TM	1/2	12	52.3	22.0	42.2	23.1	22.0
BSS-12T-RE-12TM	3/4	12	53.8	22.0	43.7	24.6	22.0
BSS-12T-RE-18TM	3/4	18	57.5	22.0	47.5	24.6	27.0

TUBE END BULKHEAD ADAPTER



Imperial Range								
Part Number	Dimensions (in)							
	Tube O.D.	L	C	L1	K	D	BORE	W HEX
BSS-2T-EAB	1/8	1.95	1.23	0.97	.53	1.69	.093	1/2
BSS-4T-EAB	1/4	2.20	1.31	1.02	.63	1.91	.187	5/8
BSS-6T-EAB	3/8	2.42	1.44	1.16	.69	2.13	.281	3/4
BSS-8T-EAB	1/2	2.87	1.65	1.25	.91	2.47	.406	15/16

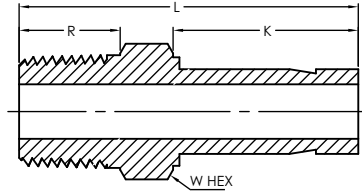
TUBE END MALE ADAPTER



Imperial Range: NPT Thread

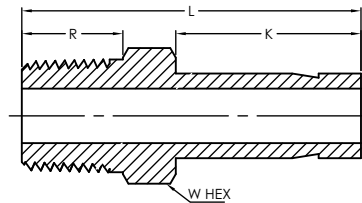
Part Number	Dimensions (in)					
	P Tube O.D.	NPT Pipe thread	L	R	K	W HEX
BSS-1T-MA-2N	1/16	1/8	1.00	0.38	0.38	7/16
BSS-2T-MA-2N	1/8	1/8	1.16	0.38	0.54	7/16
BSS-2T-MA-4N	1/8	1/4	1.38	0.56	0.54	9/16
BSS-3T-MA-2N	3/16	1/8	1.20	0.38	0.58	7/16
BSS-3T-MA-4N	3/16	1/4	1.42	0.56	0.58	9/16
BSS-4T-MA-2N	1/4	1/8	1.25	0.38	0.63	7/16
BSS-4T-MA-4N	1/4	1/4	1.46	0.56	0.63	9/16
BSS-4T-MA-6N	1/4	3/8	1.49	0.56	0.63	11/16
BSS-4T-MA-8N	1/4	1/2	1.71	0.75	0.63	7/8
BSS-5T-MA-2N	5/16	1/8	1.29	0.38	0.66	7/16
BSS-5T-MA-4N	5/16	1/4	1.50	0.56	0.66	9/16
BSS-5T-MA-6N	5/16	3/8	1.53	0.56	0.66	11/16
BSS-5T-MA-8N	5/16	1/2	1.74	0.75	0.66	7/8
BSS-6T-MA-2N	3/8	1/8	1.32	0.38	0.69	7/16
BSS-6T-MA-4N	3/8	1/4	1.53	0.56	0.69	9/16
BSS-6T-MA-6N	3/8	3/8	1.56	0.56	0.69	11/16
BSS-6T-MA-8N	3/8	1/2	1.78	0.75	0.69	7/8
BSS-8T-MA-4N	1/2	1/4	1.75	0.56	0.91	9/16
BSS-8T-MA-6N	1/2	3/8	1.78	0.56	0.91	11/16
BSS-8T-MA-8N	1/2	1/2	2.00	0.75	0.91	7/8
BSS-10T-MA-8N	5/8	1/2	2.06	0.75	0.97	7/8
BSS-12T-MA-8N	3/4	1/2	2.06	0.75	0.97	7/8
BSS-12T-MA-12N	3/4	3/4	2.06	0.75	0.97	1-1/16
BSS-12T-MA-16N	3/4	1	2.41	0.94	0.97	1-3/8
BSS-16T-MA-12N	1	3/4	2.31	0.75	1.22	1-1/16
BSS-16T-MA-16N	1	1	2.68	0.94	1.22	1-3/8

TUBE END MALE ADAPTER



Metric Range: NPT Thread

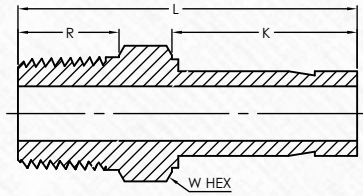
Part Number	Dimensions (mm)					
	P Tube O.D.	NPT thread	L	K	R	W HEX
BSS-3MT-MA-2N	3	1/8	29.4	13.5	9.7	12.0
BSS-4MT-MA-2N	4	1/8	29.4	14.3	9.7	12.0
BSS-6MT-MA-2N	6	1/8	31.0	15.9	9.7	12.0
BSS-6MT-MA-4N	6	1/4	35.7	16.1	14.2	14.0
BSS-6MT-MA-6N	6	3/8	36.5	16.1	14.2	18.0
BSS-6MT-MA-8N	6	1/2	42.1	16.7	19.1	22.0
BSS-8MT-MA-4N	8	1/4	37.3	16.7	14.2	14.0
BSS-8MT-MA-6N	8	3/8	38.1	17.5	14.2	12.0
BSS-10MT-MA-4N	10	1/4	38.1	17.5	14.2	14.0
BSS-10MT-MA-6N	10	3/8	43.7	17.5	14.2	18.0
BSS-10MT-MA-8N	10	1/2	44.5	23.0	19.1	22.0
BSS-12MT-MA-4N	12	1/4	43.7	23.0	14.2	14.0
BSS-12MT-MA-6N	12	3/8	44.5	23.0	14.2	27.0
BSS-12MT-MA-8N	12	1/2	49.2	24.6	19.1	22.0
BSS-16MT-MA-8N	16	1/2	50.8	24.6	19.1	22.0
BSS-16MT-MA-12N	16	3/4	51.6	24.6	19.1	27.0
BSS-18MT-MA-8N	18	1/2	50.8	24.6	19.1	22.0
BSS-18MT-MA-12N	18	3/4	51.6	24.6	19.1	27.0
BSS-20MT-MA-8N	20	1/2	51.8	25.6	19.1	22.0
BSS-20MT-MA-12N	20	3/4	52.4	25.4	19.1	27.0
BSS-25MT-MA-16N	25	1	65.9	31.8	23.9	35.0



Imperial Range: ISO Tapered Thread

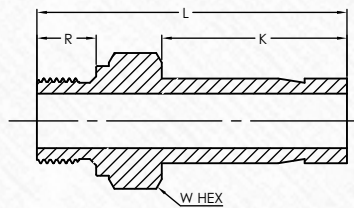
Part Number	Dimensions (mm)					
	Tube O.D.	BSPT thread	L	K	R	W HEX
BSS-4T-MA-2G	1/4	1/8	1.25	.63	.38	7/16
BSS-4T-MA-4G	1/4	1/4	1.46	.63	.56	9/16
BSS-4T-MA-6G	1/4	3/8	1.44	.63	.56	11/16
BSS-4T-MA-8G	1/4	1/2	1.66	.63	.75	7/8
BSS-5T-MA-2G	5/16	1/8	1.29	.63	.38	7/16
BSS-5T-MA-4G	5/16	1/4	1.50	.66	.56	9/16
BSS-6T-MA-4G	3/8	1/4	1.50	.69	.56	9/16
BSS-6T-MA-6G	3/8	3/8	1.50	.69	.56	11/16
BSS-6T-MA-8G	3/8	1/2	1.72	.69	.75	7/8
BSS-8T-MA-4G	1/2	1/4	1.72	.91	.56	9/16
BSS-8T-MA-6G	1/2	3/8	1.75	.91	.56	11/16
BSS-8T-MA-8G	1/2	1/2	1.94	.91	.75	7/8
BSS-10T-MA-8G	5/8	1/2	2.06	.97	.75	7/8

TUBE END MALE ADAPTER



Metric Range: ISO Tapered Thread

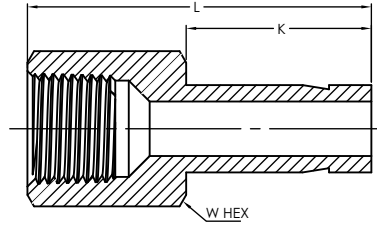
Part Number	Dimensions (mm)					
	Tube O.D.	BSPT thread	L	K	R	W HEX
BSS-3MT-MA-2GT	3	1/8	29.4	13.5	9.7	12.0
BSS-4MT-MA-2GT	4	1/8	29.4	14.3	9.7	12.0
BSS-6MT-MA-2GT	6	1/8	31.0	15.9	9.7	12.0
BSS-6MT-MA-4GT	6	1/4	35.7	15.9	14.2	14.0
BSS-8MT-MA-4GT	8	1/4	37.3	16.7	14.2	14.0
BSS-8MT-MA-6GT	8	3/8	38.3	16.8	14.2	18.0
BSS-10MT-MA-4GT	10	1/4	38.1	17.5	14.2	14.0
BSS-10MT-MA-6GT	10	3/8	38.1	17.5	14.2	18.0
BSS-10MT-MA-8GT	10	1/2	44.5	17.5	19.1	22.0
BSS-12MT-MA-2GT	12	1/4	43.7	23.0	14.2	14.0
BSS-12MT-MA-6GT	12	3/8	44.5	23.0	14.2	18.0
BSS-12MT-MA-8GT	12	1/2	49.2	23.0	19.1	22.0
BSS-16MT-MA-2GT	16	1/2	50.8	24.6	19.1	22.0
BSS-18MT-MA-12GT	18	3/4	51.6	24.6	19.1	27.0
BSS-20MT-MA-2GT	20	1/8	52.4	25.4	19.1	27.0
BSS-25MT-MA-16GT	25	1	65.9	31.8	23.9	35.0



Imperial Range: ISO Parallel Thread

Part Number	Dimensions (in)					
	Tube O.D.	BSPP thread	L	K	R	W HEX
BSS-2T-MA-2GT	1/8	1/8	1.09	0.53	.28	9/16
BSS-2T-MA-4GT	1/8	1/4	1.31	0.53	.44	3/4
BSS-4T-MA-2GT	1/4	1/8	1.19	0.63	.28	9/16
BSS-4T-MA-4GT	1/4	1/4	1.50	0.63	.44	3/4
BSS-6T-MA-2GT	3/8	1/8	1.34	0.69	.28	3/4
BSS-6T-MA-4GT	3/8	1/4	1.47	0.69	.44	3/4
BSS-6T-MA-6GT	3/8	3/8	1.50	0.69	.44	7/8
BSS-6T-MA-8GT	3/8	1/2	1.69	0.69	.56	1-1/16
BSS-8T-MA-4GT	1/2	1/4	1.69	0.91	.44	3/4
BSS-8T-MA-6GT	1/2	3/8	1.72	0.91	.44	7/8
BSS-8T-MA-8GT	1/2	1/2	1.94	0.91	.56	1-1/16
BSS-10T-MA-8GT	5/8	1/2	1.97	0.97	.56	1-1/16
BSS-12T-MA-12GT	3/4	3/4	2.09	0.97	.63	1-5/16
BSS-16T-MA-16GT	1	1	2.53	1.22	.72	1-5/8

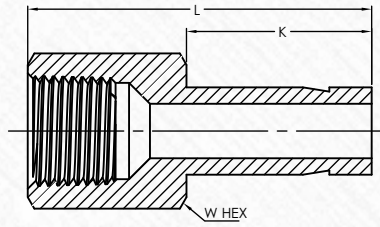
TUBE END FEMALE ADAPTER



Imperial Range: NPT Thread

Part Number	Dimensions (in)				
	Tube O.D.	NPT pipe thread	L	K	W HEX
BSS-1T-FA-2N	1/16	1/8	1.07	0.34	9/16
BSS-2T-FA-2N	1/8	1/8	1.23	0.53	9/16
BSS-2T-FA-4N	1/8	1/4	1.38	0.53	3/4
BSS-3T-FA-2N	3/16	1/8	1.25	0.56	9/16
BSS-3T-FA-4N	3/16	1/4	1.42	0.56	3/4
BSS-4T-FA-2N	1/4	1/8	1.31	0.63	9/16
BSS-4T-FA-4N	1/4	1/4	1.47	0.63	3/4
BSS-4T-FA-6N	1/4	3/8	1.56	0.63	7/8
BSS-4T-FA-8N	1/4	1/2	1.80	0.63	1-1/16
BSS-5T-FA-2N	5/16	1/8	1.34	0.66	9/16
BSS-5T-FA-4N	5/16	1/4	1.50	0.66	3/4
BSS-5T-FA-6N	5/16	3/8	1.59	0.66	7/8
BSS-6T-FA-2N	3/8	1/8	1.36	0.69	9/16
BSS-6T-FA-4N	3/8	1/4	1.55	0.69	3/4
BSS-6T-FA-6N	3/8	3/8	1.59	0.69	7/8
BSS-6T-FA-8N	3/8	1/2	1.84	0.69	1-1/16
BSS-8T-FA-4N	1/2	1/4	1.72	0.91	3/4
BSS-8T-FA-6N	1/2	3/8	1.80	0.91	7/8
BSS-8T-FA-8N	1/2	1/2	2.10	0.91	1-1/16
BSS-10T-FA-6N	5/8	3/8	1.86	0.97	7/8
BSS-10T-FA-8N	5/8	1/2	2.09	0.97	1-1/16
BSS-12T-FA-8N	3/4	1/2	2.10	0.97	1-1/16
BSS-12T-FA-12N	3/4	3/4	2.16	0.97	1-1/4
BSS-12T-FA-16N	3/4	1	2.30	0.97	1-5/8
BSS-14T-FA-12N	7/8	3/4	2.22	1.02	1-5/16
BSS-16T-FA-12N	1	3/4	2.41	1.22	1-5/16
BSS-16T-FA-16N	1	1	2.54	1.22	1-5/8

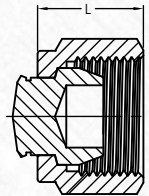
TUBE END FEMALE ADAPTER



Metric Range: NPT Thread

Part Number	Dimensions (in)				
	Tube O.D.	NPT thread	L	K	W HEX
BSS-3MT-FE-2N	3	1/8	31.3	13.5	14.0
BSS-4MT-FE-2N	4	1/8	29.4	14.3	14.0
BSS-6MT-FE-2N	6	1/8	29.4	15.9	14.0
BSS-6MT-FE-4N	6	1/4	34.1	15.9	19.0
BSS-8MT-FE-2N	8	1/8	35.5	16.7	14.0
BSS-8MT-FE-4N	8	1/4	35.1	16.7	19.0
BSS-8MT-FE-6N	8	3/8	36.5	16.7	22.0
BSS-10MT-FE-4N	10	1/4	37.3	17.5	19.0
BSS-10MT-FE-6N	10	3/8	37.3	17.5	22.0
BSS-10MT-FE-8N	10	1/2	42.1	17.5	27.0
BSS-12MT-FE-4N	12	1/4	41.3	23.0	19.0
BSS-12MT-FE-6N	12	3/8	42.9	23.0	22.0
BSS-12MT-FE-8N	12	1/2	47.6	23.0	27.0
BSS-16MT-FE-8N	16	1/2	49.2	24.6	27.0
BSS-18MT-FE-12N	18	3/4	52.4	24.6	33.0
BSS-20MT-FE-8N	20	1/2	50.0	25.6	27.0
BSS-20MT-FE-12N	20	3/4	53.2	25.4	33.0
BSS-25MT-FE-16N	25	1	66.7	31.8	41.0

TUBE PLUG



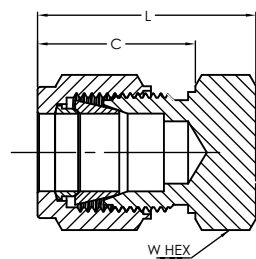
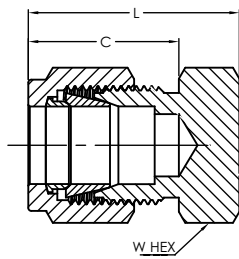
Imperial Range

Part Number	Dimensions (in)			
	Tube O.D.	Thread	L	W HEX
BSS-1T-TP	1/16	10-32	0.31	5/16
BSS-2T-TP	1/8	5/16-20	0.47	7/16
BSS-3T-TP	3/16	3/8-20	0.47	1/2
BSS-4T-TP	1/4	7/16-20	0.50	9/16
BSS-5T-TP	5/16	1/2-20	0.53	5/8
BSS-6T-TP	3/8	9/16-20	0.56	11/16
BSS-8T-TP	1/2	3/4-20	0.69	7/8
BSS-10T-TP	5/8	7/8-20	0.69	1
BSS-12T-TP	3/4	1-20	0.69	1-1/8
BSS-14T-TP	7/8	1-1/8-20	0.69	1-1/4
BSS-16T-TP	1	1-5/16-20	0.81	1-1/2

Metric Range

Part Number	Dimensions (mm)			
	Tube O.D.	Thread	L	W HEX
BSS-2MT-TP	2	5/16-20	11.9	12.0
BSS-3MT-TP	3	5/16-20	11.9	12.0
BSS-4MT-TP	4	3/8-20	11.9	12.0
BSS-6MT-TP	6	7/16-20	12.7	14.0
BSS-8MT-TP	8	1/2-20	13.5	16.0
BSS-10MT-TP	10	5/8-20	15.1	19.0
BSS-12MT-TP	12	3/4-20	17.5	22.0
BSS-14MT-TP	14	7/8-20	17.5	25.0
BSS-15MT-TP	15	7/8-20	17.5	25.0
BSS-16MT-TP	16	7/8-20	17.5	25.0
BSS-18MT-TP	18	1-20	17.5	30.0
BSS-20MT-TP	20	1-1/8-20	17.5	32.0
BSS-22MT-TP	22	1-1/8-20	17.5	32.0
BSS-25MT-TP	25	1-5/16-20	20.6	38.0

TUBE CAP



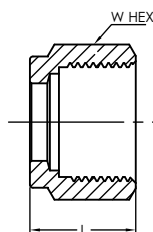
Imperial Range

Part Number	Dimensions (in)			
	Tube O.D.	L	C	W HEX
BSS-1T-TC	1/16	0.56	0.43	5/16
BSS-2T-TC	1/8	0.79	0.60	7/16
BSS-3T-TC	3/16	0.84	0.64	7/16
BSS-4T-TC	1/4	0.92	0.70	1/2
BSS-5T-TC	5/16	0.96	0.73	9/16
BSS-6T-TC	3/8	1.01	0.76	5/8
BSS-8T-TC	1/2	1.15	0.87	13/16
BSS-10T-TC	5/8	1.18	0.87	15/16
BSS-12T-TC	3/4	1.25	0.87	1-1/16
BSS-14T-TC	7/8	1.31	0.87	1-3/16
BSS-16T-TC	1	1.52	1.05	1-3/8

Metric Range

Part Number	Dimensions (mm)			
	Tube O.D.	L	C	W HEX
BSS-2MT-TC	2	13.5	15.3	12.0
BSS-3MT-TC	3	13.5	15.3	12.0
BSS-4MT-TC	4	14.3	16.1	12.0
BSS-6MT-TC	6	15.9	17.7	14.0
BSS-8MT-TC	8	17.1	18.6	15.0
BSS-10MT-TC	10	19.1	19.5	18.0
BSS-12MT-TC	12	19.1	22.0	22.0
BSS-14MT-TC	14	19.8	22.0	24.0
BSS-15MT-TC	15	19.8	22.0	24.0
BSS-16MT-TC	16	19.8	22.0	24.0
BSS-18MT-TC	18	21.3	22.0	27.0
BSS-20MT-TC	20	23.9	22.0	30.0
BSS-22MT-TC	22	23.9	22.0	30.0
BSS-25MT-TC	25	26.0	26.5	35.0

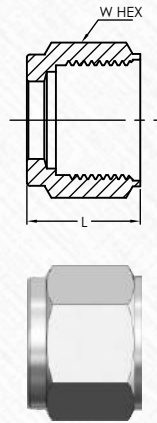
TUBE NUT



Imperial Range

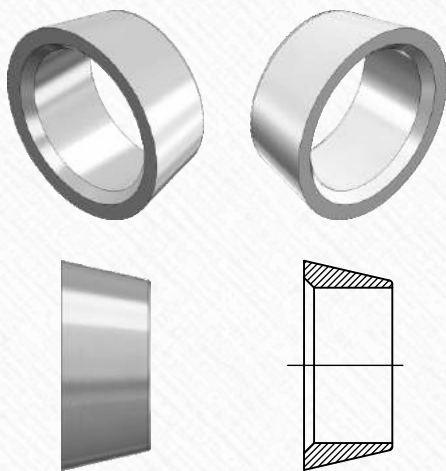
Part Number	Dimensions (in)		
	Tube O.D.	L	W HEX
BSS-1T-N	1/16	0.31	5/16
BSS-2T-N	1/8	0.47	7/16
BSS-3T-N	3/16	0.47	1/2
BSS-4T-N	1/4	0.50	9/16
BSS-5T-N	5/16	0.53	5/8
BSS-6T-N	3/8	0.56	11/16
BSS-8T-N	1/2	0.69	7/8
BSS-10T-N	5/8	0.69	1
BSS-12T-N	3/4	0.69	1-1/8
BSS-14T-N	7/8	0.69	1-1/4
BSS-16T-N	1	0.81	1-1/2

TUBE NUT



Metric Range			
Part Number	Dimensions (mm)		
	Tube O.D.	L	W HEX
BSS-2MT-N	2	11.9	12.0
BSS-3MT-N	3	11.9	12.0
BSS-4MT-N	4	11.9	12.0
BSS-6MT-N	6	12.7	14.0
BSS-8MT-N	8	13.5	16.0
BSS-10MT-N	10	15.1	19.0
BSS-12MT-N	12	17.5	22.0
BSS-14MT-N	14	17.5	25.0
BSS-15MT-N	15	17.5	25.0
BSS-16MT-N	16	17.5	25.0
BSS-18MT-N	18	17.5	30.0
BSS-20MT-N	20	17.5	32.0
BSS-20MT-N	22	17.5	32.0
BSS-25MT-N	25	20.6	38.0

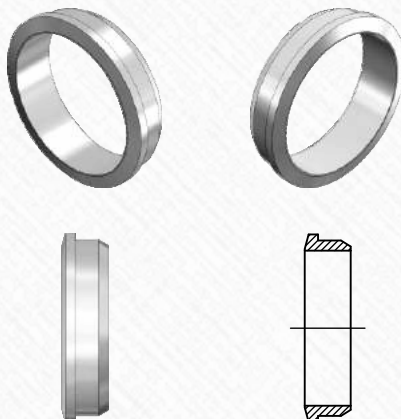
FRONT FERRULE



Imperial Range	
Part Number	Dimensions (in)
	Tube O.D.
BSS-1T-FF	1/16
BSS-2T-FF	1/8
BSS-3T-FF	3/16
BSS-4T-FF	1/4
BSS-5T-FF	5/16
BSS-6T-FF	3/8
BSS-8T-FF	1/2
BSS-10T-FF	5/8
BSS-12T-FF	3/4
BSS-14T-FF	7/8
BSS-16T-FF	1

Metric Range	
Part Number	Dimensions (mm)
	Tube O.D.
BSS-2MT-FF	2
BSS-3MT-FF	3
BSS-4MT-FF	4
BSS-6MT-FF	6
BSS-8MT-FF	8
BSS-10MT-FF	10
BSS-12MT-FF	12
BSS-14MT-FF	14
BSS-15MT-FF	15
BSS-16MT-FF	16
BSS-18MT-FF	18
BSS-20MT-FF	20
BSS-22MT-FF	22
BSS-25MT-FF	25

BACK FERRULE



Imperial Range	
Part Number	Dimensions (in)
	Tube O.D.
BSS-1T-BF	1/16
BSS-2T-BF	1/8
BSS-3T-BF	3/16
BSS-4T-BF	1/4
BSS-5T-BF	5/16
BSS-6T-BF	3/8
BSS-8T-BF	1/2
BSS-10T-BF	5/8
BSS-12T-BF	3/4
BSS-14T-BF	7/8
BSS-16T-BF	1

Metric Range	
Part Number	Dimensions (mm)
	Tube O.D.
BSS-2MT-BF	2
BSS-3MT-BF	3
BSS-4MT-BF	4
BSS-6MT-BF	6
BSS-8MT-BF	8
BSS-10MT-BF	10
BSS-12MT-BF	12
BSS-14MT-BF	14
BSS-15MT-BF	15
BSS-16MT-BF	16
BSS-18MT-BF	18
BSS-20MT-BF	20
BSS-22MT-BF	22
BSS-25MT-BF	25