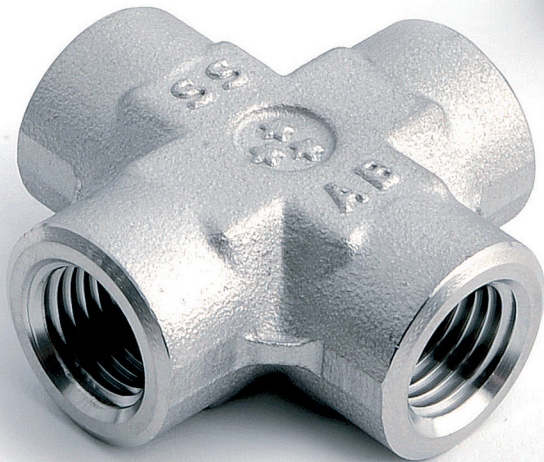
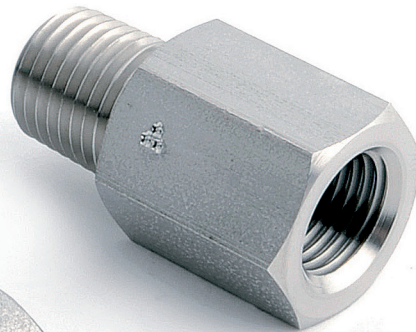
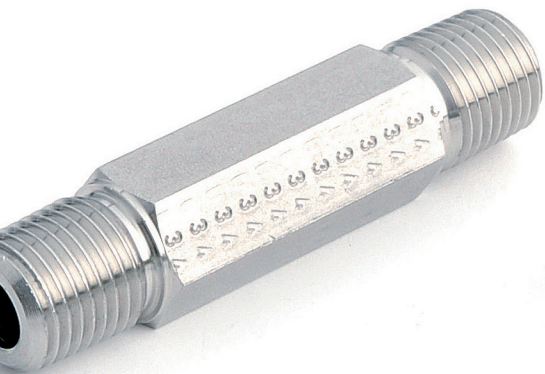




**ROTAREX**  
EQUIPMENT



**THREADED PIPE FITTINGS**



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# STRAIGHT UNIONS



**HMM**  
Hex nipple male P. 008



**CMM**  
Close nipple male P. 008



**HRMM**  
Hex reducing nipple male P. 010



**EMM**  
Male elbow P. 010



**HLMM**  
Hex long nipple male P. 009



**TMM**  
Male Tee P. 011

# ADAPTORS



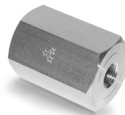
**MFF**  
Hexagonal coupling P. 0012



**EFF**  
Female elbow P. 013



**C**  
Female cross P. 014



**MRFF**  
Hex reducing coupling P. 0012



**TFF**  
Female Tee P. 013

# ADAPTORS



**A**  
Adaptor P. 015



**AR**  
Reducing adaptor P. 015



**BR**  
Reducing bushing P. 016



**EMF**  
Street elbow P. 017



**REMF**  
Reducing street elbow P. 017



**TB**  
Branch Tee P. 018



**TS**  
Street Tee P. 018

# BLANKING



**PC**  
Pipe cap P. 019



**PP**  
Pipe plug P. 019

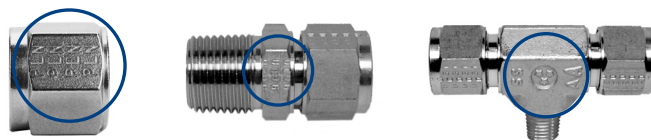
## NORMS

	Bar stock	Forged bodies
<b>Brass</b>	AFNOR CuZn40Pb3 ASTM B16 C36000 BS2874 CZ121	AFNOR CuZn40Pb2 ASTM B124 C37700 BS2874 CZ122
<b>Messing</b>	DIN 2.0401 EN 12164 CW614N	DIN 2.0402 EN 12420 CW617N
<b>Stainless Steel</b>	AFNOR Z6CND 17-12 ASME SA479-316 BS970 316-S31 DIN 1.4404 EN 10088-1	AFNOR Z6CNDT 17-12 ASME SA182-316 BS970 316-S31 DIN 1.4404 EN 10088-1

## TRACEABILITY

Identify the original material heat by means of a specific code number.

By this definition, SAGANA® set itself the task of marking a specific code number on stainless steel bodies and nuts.

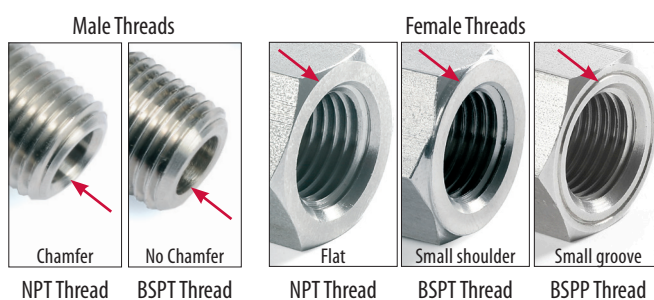


## ADVANTAGES

Dimensions	
<b>mm</b>	3 - 4 - 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 25 - etc.
<b>inch</b>	1/16" - 1/8" - 3/16" - 1/4" - 5/16" - 3/8" - 1/2" - 5/8" - 3/4" - 1" - etc
Threads	
<b>Conical</b>	NPT (Briggs) - BSPT (Whitworth tapered) - etc
<b>Parallel</b>	BSPP (Whitworth cylindrical) - NPSM - UN - SAE - etc
Material	
<b>Standard</b>	Brass , Stainless steel
<b>Others</b>	Aluminium - Carbon - Hastelloy - Incolloy - Inconel - Teflon - Monel - Nylon - Titane - Zirconium - etc
Options	
	- Nickled, chrome plated brass
	- Degreased for oxygene
	- etc.

### VISUAL DIFFERENCES BETWEEN NPT / BSPT THREADS

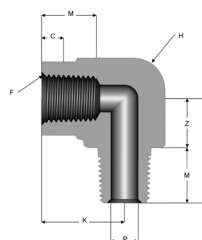
Male NPT end connections have a chamfer at the inside diameter. Female BSPT end connections have a small shoulder on the outside face and BSPP G connections have a groove on the outside face.



### COMMONALITY OF SIZES

We call "standardisation" the ability to replace bodies from a manufacturer already installed in a system with those of an other manufacturer. This is done through a system of common dimensioning.

By this definition, SAGANA® sets itself the task of standards developpements by comparing fittings dimensions on the market (Unions, elbows, tees, crosses).



## ADVANTAGES (continued)

F	(H mini*)		M (NPT-BSPT)		Pmax		Z*		L* = M+Z*		K		C (NPT)		C (BSPT)	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/16"	8	5/16	9,5	3/8	3,2	1/8	7,1	9/32	16,7	21/32	14,3	9/16	4	0,16	3,9	0,15
1/8"	12	7/16	9,5	3/8	4,8	3/16	7,9	5/16	17,5	11/16	19,1	3/4	4,5	0,18	4	0,16
1/4"	14	9/16	14,3	5/16	7,1	9/32	9,5	3/8	23,8	15/16	21,4	27/32	5	0,2	6	0,24
3/8"	19	3/4	14,3	5/16	9,5	3/8	12,7	1/2	27	11/16	21,4	27/32	6	0,24	6,4	0,25
1/2"	22	7/8	19,1	3/4	12,7	1/2	14,3	9/16	33,3	15/16	28,6	11/8	8,1	0,32	8,2	0,32
3/4"	27	11/16	19,1	3/4	15,9	5/8	17,5	11/16	36,5	17/16	31,8	11/4	8,6	0,34	9,5	0,38
1"	36	-1 3/8	23,8	15/16	22,2	7/8	19,1	3/4	42,9	111/16	38,1	11/2	10,1	0,4	10,3	0,41

## NOMENCLATURE

Thread dimensions 1&4	Corps	Type de raccord	Thread dimension 2 or 3	Thread	Material
	CMM	Close Nipple			
1: 1/16"	HMM	Hex Nipple		N: NPT	B: Brass (standard)
2: 1/8"	HLMM	Hex Long nipple		T: BSPT	SS: 316L (standard)
4: 1/4"	EMM	Male Elbow		G: BSPP	
6: 3/8"	TMM	Male Tee			
8: 1/2"					CS: Carbon (on request)
12: 3/4"	MFF	Hex Coupling			
16: 1	EFF	Elbow			
	TFF	Female Tee			
	C	Cross			
	A	Adaptor			
	EMF	Street Elbow			
	TB	Branch Tee			
	TS	Street Tee			
	PC	Pipe Cap			
	PP	Pipe Plug			
	HRMM	Hex reducing nipple	1: 1/16"		
	MRFF	Hex reducing coupl.	2: 1/8"		
			4: 1/4"		
	BR	Reducing-bushing	6: 3/8"		
	AR	Reducing adaptor	8: 1/2"		
			12: 3/4"		
	REMF	Reducing str.elbow	16: 1"		

## CODIFICATION EXAMPLES

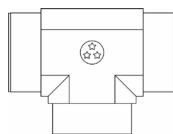
### 4 - TFF N B

Thread 1 : 1/4" => 4

Kind of Fitting : Female Tee => TFF

Kind of Thread : NPT => N

Material : Brass => B



### 8 - REMF - 4 T SS

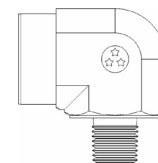
Thread 1 : 1/2" Female => 8

Kind of Fitting : Reducing-Elbow => REMF

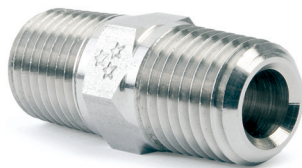
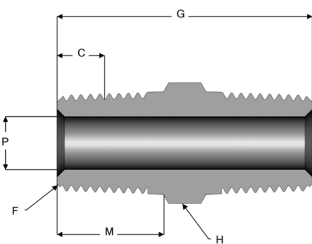
Thread 2 : 1/4" Male => 4

Kind of Thread : BSPT => T

Material : Stainless Steel => SS



## HEX NIPPLE MALE – TAPERED (NPT / BSPT)



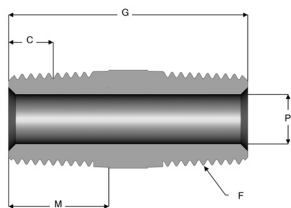
F	Reference	G		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/16"	1-HMM ***	22,2	7/8"	8	5/16"	9,5	3/8"	3,2	1/8"	4	0,16	3,9	0,15
1/8"	2-HMM ***	23,8	19/16"	12	7/16"	9,5	3/8"	4,8	3/16"	4,5	0,18	4	0,16
1/4"	4-HMM ***	34,1	1 11/32"	14	9/16"	14,3	9/16"	7,1	9/32"	5	0,2	6	0,24
3/8"	6-HMM ***	34,9	1 3/8"	19	3/4"	14,3	9/16"	9,5	3/8"	6	0,24	6,4	0,25
1/2"	8-HMM ***	45,2	1 25/32"	22	7/8"	19,1	3/4"	12,7	1/2"	8,1	0,32	8,2	0,32
3/4"	12-HMM ***	47,6	1 7/8"	27	1 1/16"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
1"	16-HMM ***	59,5	2 11/32"	36	1 3/8"	23,8	15/16"	22,2	7/8"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## CLOSE NIPPLE MALE – TAPERED (NPT / BSPT)



F	Reference	G		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/8"	2-CMM ***	19,1	3/4"	9,5	3/8"	4,8	3/16"	4,5	0,18	4,0	0,16
1/4"	4-CMM ***	28,6	1 1/8"	14,3	9/16"	7,1	9/32"	5	0,2	6	0,24
3/8"	6-CMM ***	28,6	1 1/8"	14,3	9/16"	9,5	3/8"	6	0,24	6,4	0,25
1/2"	8-CMM ***	38,1	1 1/2"	19,1	3/4"	12,7	1/2"	8,1	0,32	8,2	0,32
3/4"	12-CMM ***	38,1	1 1/2"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
1"	16-CMM ***	47,6	1 7/8"	23,8	15/16"	22,2	7/8"	10,1	0,4	10,3	0,41

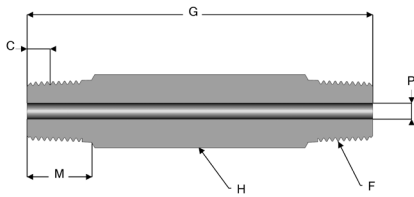
• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)



# HEX LONG NIPPLE MALE - TAPERED (NPT / BSPT)



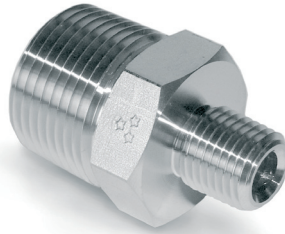
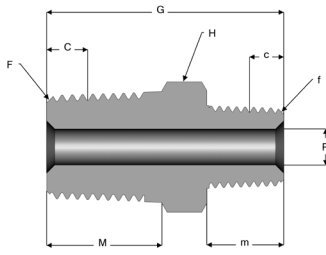
F	Reference	G		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/8"	2-HLMM-1,5 ***.	38,1	1 1/2"	12	7/16"	9,5	3/8"	4,8	3/16"	4,5	0,18	4,0	0,16
1/8"	2-HLMM-2 ***.	50,8	2"	12	7/16"	9,5	3/8"	4,8	3/16"	4,5	0,18	4,0	0,16
1/8"	2-HLMM-2,5 ***.	63,5	2 1/2"	12	7/16"	9,5	3/8"	4,8	3/16"	4,5	0,18	4,0	0,16
1/8"	2-HLMM-3 ***.	76,2	3"	12	7/16"	9,5	3/8"	4,8	3/16"	4,5	0,18	4,0	0,16
1/4"	4-HLMM-1,5 ***.	38,1	1 1/2"	14	9/16"	14,3	9/16"	7,1	9/32"	5,0	0,20	6,0	0,24
1/4"	4-HLMM-2 ***.	50,8	2"	14	9/16"	14,3	9/16"	7,1	9/32"	5,0	0,20	6,0	0,24
1/4"	4-HLMM-2,5 ***.	63,5	2 1/2"	14	9/16"	14,3	9/16"	7,1	9/32"	5,0	0,20	6,0	0,24
1/4"	4-HLMM-3 ***.	76,2	3"	14	9/16"	14,3	9/16"	7,1	9/32"	5,0	0,20	6,0	0,24
1/4"	4-HLMM-4 ***.	101,6	4"	14	9/16"	14,3	9/16"	7,1	9/32"	5,0	0,20	6,0	0,24
1/4"	4-HLMM-6 ***.	152,4	6"	14	9/16"	14,3	9/16"	7,1	9/32"	5,0	0,20	6,0	0,24
3/8"	6-HLMM-2 ***.	50,8	2"	19	3/4"	14,3	9/16"	9,5	3/8"	6,0	0,24	6,4	0,25
3/8"	6-HLMM-3 ***.	76,2	3"	19	3/4"	14,3	9/16"	9,5	3/8"	6,0	0,24	6,4	0,25
1/2"	8-HLMM-2 ***.	50,8	2"	22	7/8"	19,1	3/4"	12,7	1/2"	8,1	0,32	8,2	0,32
1/2"	8-HLMM-4 ***.	101,6	4"	22	7/8"	19,1	3/4"	12,7	1/2"	8,1	0,32	8,2	0,32
1/2"	8-HLMM-6 ***.	152,4	6"	22	7/8"	19,1	3/4"	12,7	1/2"	8,1	0,32	8,2	0,32
3/4"	12-HLMM-3 ***.	76,2	3"	27	1 1/16"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
3/4"	12-HLMM-4 ***.	101,6	4"	27	1 1/16"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
3/4"	12-HLMM-6 ***.	152,4	6"	27	1 1/16"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
1"	16-HLMM-3 ***.	76,2	3"	36	1 3/8"	23,8	15/16"	22,2	7/8"	10,1	0,40	10,3	0,41
1"	16-HLMM-4 ***.	101,6	4"	36	1 3/8"	23,8	15/16"	22,2	7/8"	10,1	0,40	10,3	0,41
1"	16-HLMM-6 ***.	152,4	6"	36	1 3/8"	23,8	15/16"	22,2	7/8"	10,1	0,40	10,3	0,41

\* SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## HEX LONG NIPPLE MALE - TAPERED (NPT / BSPT)



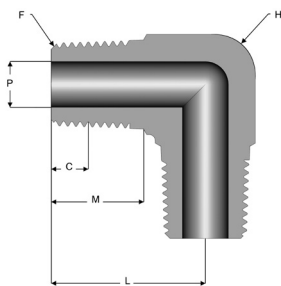
F	f	Reference	G		H		M		m		P		NPT				BSPT			
			mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	C (NPT)		c (NPT)		C (BSPT)		c (BSPT)	
1/8"	1/16"	2-HRMM-1 ***	22,2	7/8"	12	7/16"	9,5	3/8"	9,5	3/8"	3,2	3/16"	4,5	0,18	4	0,16	4	0,16	3,9	0,15
1/4"	1/8"	4-HRMM-2 ***	29,4	15/32"	14	9/16"	14,3	9/16"	9,5	3/8"	4,8	3/32"	5	0,2	4,5	0,24	6	0,24	4	0,16
3/8"	1/8"	6-HRMM-2 ***	30,2	13/16"	19	3/4"	14,3	9/16"	9,5	3/8"	4,8	3/32"	6	0,24	4,5	0,25	6,4	0,25	4	0,16
3/8"	1/4"	6-HRMM-4 ***	34,9	13/8"	19	3/4"	14,3	9/16"	14,3	9/16"	7,1	3/16"	6	0,24	5	0,25	6,4	0,25	6	0,16
1/2"	1/8"	8-HRMM-2 ***	35,7	113/32"	22	7/8"	19,1	3/4"	9,5	3/8"	4,8	3/32"	8,1	0,32	4,5	0,32	8,2	0,32	4	0,24
1/2"	1/4"	8-HRMM-4 ***	40,5	119/32"	22	7/8"	19,1	3/4"	14,3	9/16"	7,1	3/16"	8,1	0,32	5	0,32	8,2	0,32	6	0,16
1/2"	3/8"	8-HRMM-6 ***	40,5	119/16"	22	7/8"	19,1	3/4"	14,3	9/16"	9,5	3/16"	8,1	0,32	6	0,32	8,2	0,32	6,4	0,25
3/4"	1/4"	12-HRMM-4 ***	42,9	111/16"	27	11/16"	19,1	3/4"	19,1	9/16"	7,1	3/16"	8,6	0,34	5	0,38	9,5	0,38	6	0,24
3/4"	1/2"	12-HRMM-8 ***	47,6	17/8"	27	11/16"	19,1	3/4"	19,1	3/4"	12,7	13/32"	8,6	0,34	8,1	0,38	9,5	0,38	8,2	0,32
1"	1/2"	16-HRMM-8 ***	54,8	25/32"	36	-1 3/8"	23,8	15/16"	19,1	3/4"	12,7	13/32"	10,1	0,4	8,1	0,41	10,3	0,41	8,2	0,32
1"	3/4"	16-HRMM-12 ***	54,8	25/32"	36	-1 3/8"	23,8	15/16"	19,1	3/4"	15,9	5/8"	10,1	0,4	8,6	0,41	10,3	0,41	9,5	0,38

\* SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## MALE ELBOW – TAPERED (NPT / BSPT)



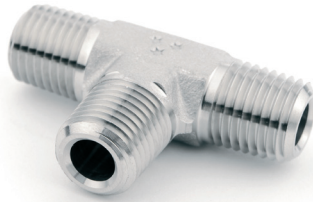
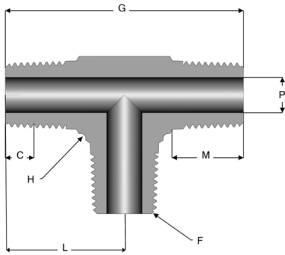
F	Reference	L		H		M		P		NPT		BSPT	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/16"	1-EMM ***	16,7	21/32"	8	5/16"	9,5	3/8"	3,2	3/16"	4	0,16	3,9	0,15
1/8"	2-EMM ***	17,5	1 1/16"	12	7/16"	9,5	3/8"	4,8	3/32"	4,5	0,18	4	0,16
1/4"	4-EMM ***	23,8	1 5/16"	14	9/16"	14,3	9/16"	7,1	3/16"	5	0,2	6	0,24
3/8"	6-EMM ***	27	1 1/16"	19	3/4"	15,3	9/16"	9,5	3/16"	6	0,24	6,4	0,25
1/2"	8-EMM ***	33,3	1 5/16"	22	7/8"	19,1	3/4"	12,7	13/32"	8,1	0,32	8,2	0,32
3/4"	12-EMM ***	36,5	1 7/16"	27	1 1/16"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
1"	16-EMM ***	42,9	1 11/16"	36	1 1/16"	23,8	15/16"	15,9	7/8"	10,1	0,4	10,3	0,41

\* SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

# MALE TEE – TAPERED (NPT / BSPT)



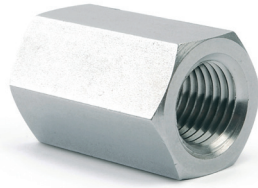
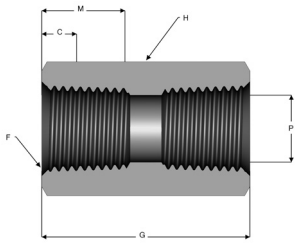
F	Reference	G		L		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/16"	1-TMM ***.	33,3	1 3/16"	16,7	2 1/32"	8	5/16"	9,5	3/8"	3,2	3/16"	4	0,16	3,9	0,15
1/8"	2-TMM ***.	34,9	1 3/8"	17,5	1 1/16"	12	7/16"	9,5	3/8"	4,8	3/32"	4,5	0,18	4	0,16
1/4"	4-TMM ***.	47,6	1 7/8"	23,8	1 5/16"	14	9/16"	14,3	9/16"	7,1	3/16"	5	0,2	6	0,24
3/8"	6-TMM ***.	54	2 1/8"	27	1 1/16"	19	3/4"	15,3	9/16"	9,5	3/16"	6	0,24	6,4	0,25
1/2"	8-TMM ***.	66,7	2 5/8"	33,3	1 5/16"	22	7/8"	19,1	3/4"	12,7	13/32"	8,1	0,32	8,2	0,32
3/4"	12-TMM ***.	73	2 7/8"	36,5	1 7/16"	27	1 1/16"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
1"	16-TMM ***.	85,7	3 3/8"	42,9	1 11/16"	36	1 3/8"	23,8	15/16"	22,2	7/8"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## HEXAGONAL COUPLING (TAPERED/PARALLEL)



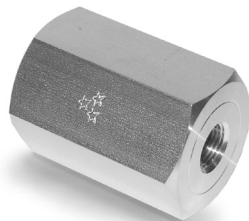
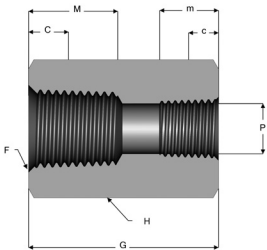
F	Reference	G		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/8"	2-MFF ***.	20,6	13/16"	14	9/16"	9,5	3/8"	8,3	21/64"	4,5	0,18	4	0,16
1/4"	4-MFF ***.	30,2	1 3/16"	19	3/4"	14,3	9/16"	11,1	7/16"	5	0,2	6	0,24
3/8"	6-MFF ***.	33,3	1 5/16"	22	7/8"	14,3	9/16"	14,7	37/64"	6	0,24	6,4	0,25
1/2"	8-MFF ***.	39,7	1 9/16"	27	1 1/16"	19,1	3/4"	18,3	23/32"	8,1	0,32	8,2	0,32
3/4"	12-MFF ***.	41,3	1 5/8"	36	1 3/8"	19,1	3/4"	23,4	59/64"	8,6	0,34	9,5	0,38
1"	16-MFF ***.	50,8	2"	41	1 5/8"	23,8	15/16"	29,8	1 11/64"	10,1	0,4	10,3	0,41

\* SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## HEX REDUCING COUPLING (TAPERED/PARALLEL)



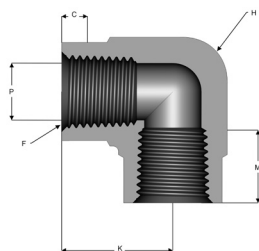
F	f	Reference	G		H		M		m		P		NPT				BSPT												
			mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	C (NPT)		c (NPT)		C (BSPT)		c (BSPT)										
												mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/4"	1/8"	4-MRFF-2 ***.	30,2	1 3/16"	19	3/4"	14,3	9/16"	9,5	3/8"	8,3	21/64"	5	0,2	4,5	0,18	6	0,24	4	0,16									
3/8"	1/4"	6-MRFF-4 ***.	33,3	1 5/16"	22	7/8"	15,3	9/16"	14,3	9/16"	11,1	7/16"	6	0,24	5	0,2	6,4	0,25	6	0,24									
1/2"	1/8"	8-MRFF-2 ***.	39,7	1 3/16"	27	1 1/16"	19,1	3/4"	9,5	3/8"	4,8	3/32"	8,1	0,32	4,5	0,18	8,2	0,32	4	0,16									
1/2"	1/4"	8-MRFF-4 ***.	39,7	1 3/16"	27	1 1/16"	19,1	3/4"	14,3	9/16"	7,1	3/16"	8,1	0,32	5	0,2	8,2	0,32	6	0,24									
1/2"	3/8"	8-MRFF-6 ***.	39,7	1 9/16"	27	1 1/16"	19,1	3/4"	14,3	9/16"	14,7	37/64"	8,1	0,32	6	0,24	8,2	0,32	6,4	0,25									
3/4"	1/4"	12-MRFF-4 ***.	41,3	1 5/8"	36	1 3/8"	19,1	3/4"	14,3	9/16"	11,1	7/16"	8,6	0,34	5	0,2	9,5	0,38	6	0,24									
3/4"	1/2"	12-MRFF-8 ***.	41,3	1 5/8"	36	1 3/8"	19,1	3/4"	19,1	3/4"	18,3	23/32"	8,6	0,34	8,1	0,32	9,5	0,38	8,2	0,32									
1"	1/4"	16-MRFF-4 ***.	50,8	2"	41	1 5/8"	23,8	15/16"	14,3	9/16"	11,1	7/16"	10,1	0,4	5	0,2	10,3	0,41	6	0,24									
1"	1/2"	16-MRFF-8 ***.	50,8	2"	41	1 5/8"	23,8	15/16"	19,1	3/4"	18,3	23/32"	10,1	0,4	8,1	0,32	10,3	0,41	8,2	0,32									
1"	3/4"	16-MRFF-12 ***.	50,8	2"	41	1 5/8"	23,8	15/16"	19,1	3/4"	23,4	59/64"	10,1	0,4	8,6	0,34	10,3	0,41	9,5	0,38									

\* SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## FEMALE ELBOW (TAPERED/PARALLEL)



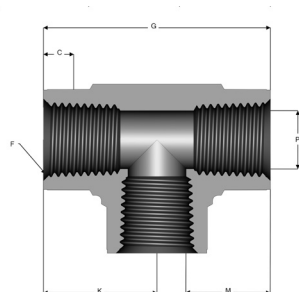
F	Reference	L		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/8"	2-EFF ***	19,1	3/4"	14	9/16"	9,5	3/8"	8,3	21/64"	4,5	0,18	4	0,16
1/4"	4-EFF ***	21,4	27/32"	19	3/4"	14,3	9/16"	11,1	7/16"	5	0,2	6	0,24
3/8"	6-EFF ***	21,4	27/32"	22	7/8"	15,3	9/16"	14,7	37/64"	6	0,24	6,4	0,25
1/2"	8-EFF ***	28,6	1 1/8"	27	1 1/16"	19,1	3/4"	18,3	23/32"	8,1	0,32	8,2	0,32
3/4"	12-EFF ***	31,8	1 1/4"	36	1 3/8"	19,1	3/4"	23,4	59/64"	8,6	0,34	9,5	0,38
1"	16-EFF ***	38,1	1 1/2"	41	1 5/8"	23,8	15/16"	29,8	1 11/64"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## FEMALE TEE (TAPERED/PARALLEL)



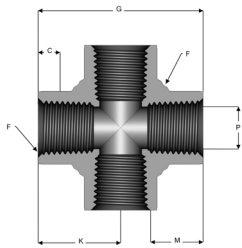
F	Reference	G		K		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/8"	2-TFF ***	38,1	1 1/2"	19,1	3/4"	14	9/16"	9,5	3/8"	8,3	21/64"	4,5	0,18	4	0,16
1/4"	4-TFF ***	42,9	1 11/16"	21,4	27/32"	19	3/4"	14,3	9/16"	11,1	7/16"	5	0,2	6	0,24
3/8"	6-TFF ***	42,9	1 11/16"	21,4	27/32"	22	7/8"	15,3	9/16"	14,7	37/64"	6	0,24	6,4	0,25
1/2"	8-TFF ***	57,2	2 1/4"	28,6	1 1/8"	27	1 1/16"	19,1	3/4"	18,3	23/32"	8,1	0,32	8,2	0,32
3/4"	12-TFF ***	63,5	2 1/2"	31,8	1 1/4"	36	1 3/8"	19,1	3/4"	23,4	59/64"	8,6	0,34	9,5	0,38
1"	16-TFF ***	76,2	3"	38,1	1 1/2"	41	1 5/8"	23,8	15/16"	29,8	1 11/64"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## FEMALE CROSS (TAPERED/PARALLEL)



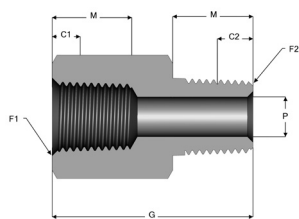
F	Reference	G		L		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/8"	2-C ***.	38,1	1 1/2"	19,1	3/4"	14	9/16"	9,5	3/8"	8,3	21/64"	4,5	0,18	4	0,16
1/4"	4-C ***.	42,9	1 1/16"	21,4	27/32"	19	3/4"	14,3	9/16"	11,1	7/16"	5	0,2	6	0,24
3/8"	6-C ***.	42,9	1 1/16"	21,4	27/32"	22	7/8"	15,3	9/16"	14,7	37/64"	6	0,24	6,4	0,25
1/2"	8-C ***.	57,2	2 1/4"	28,6	1 1/8"	27	1 1/16"	19,1	3/4"	18,3	23/32"	8,1	0,32	8,2	0,32
3/4"	12-C ***.	63,5	2 1/2"	31,8	1 1/4"	36	1 3/8"	19,1	3/4"	23,4	56/64"	8,6	0,34	9,5	0,38
1"	16-C ***.	76,2	3"	38,1	1 1/2"	41	1 5/8"	23,8	15/16"	29,8	1 1/64"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## ADAPTOR – CONIQUE (NPT / BSPT)



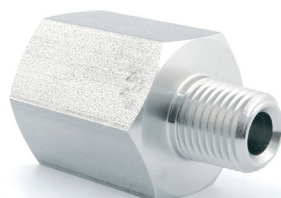
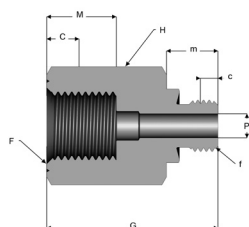
F	Reference	G		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/8"	2-A ***	27,8	1 3/32"	14	9/16"	9,5	3/8"	4,8	3/32"	4,5	0,18	4	0,16
1/4"	4-A ***	35,7	1 13/32"	19	3/4"	14,3	9/16"	7,1	3/16"	5	0,2	6	0,24
3/8"	6-A ***	38,1	1 1/2"	22	7/8"	14,3	9/16"	9,5	3/16"	6	0,24	6,4	0,25
1/2"	8-A ***	49,2	1 15/16"	27	1 1/16"	19,1	3/4"	12,7	13/32"	8,1	0,32	8,2	0,32
3/4"	12-A ***	50,8	2"	36	1 3/8"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
1"	16-A ***	57,9	3/32"	41	1 5/8"	23,8	15/16"	22,2	7/8"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## REDUCING ADAPTOR – TAPERED (NPT / BSPT)



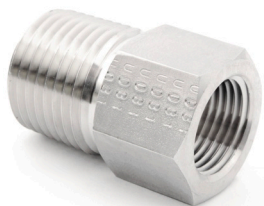
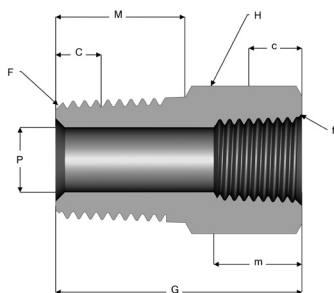
F	f	Reference	G		H		M		m		P		NPT				BSPT										
			mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	C (NPT)		c (NPT)		C (BSPT)		c (BSPT)								
												mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/4"	1/16"	2-AR-1 ***	27,8	1 3/32"	19	3/4"	14,3	9/16"	9,5	3/8"	3,2	3/16"	5	0,2	4	0,16	6	0,24	3,9	0,15							
1/4"	1/8"	4-AR-2 ***	31,8	1 1/4"	19	3/4"	14,3	9/16"	9,5	3/8"	8,3	21/64"	5	0,2	4,5	0,18	6	0,24	4	0,16							
3/8"	1/8"	6-AR-2 ***	33,7	1 21/64"	22	7/8"	15,3	9/16"	9,5	3/8"	8,3	21/64"	6	0,24	4,5	0,18	6,4	0,25	4	0,16							
3/8"	1/4"	6-AR-4 ***	38,1	1 1/2"	22	7/8"	15,3	9/16"	14,3	9/16"	11,1	7/16"	6	0,24	5	0,2	6,4	0,25	6	0,24							
1/2"	1/8"	8-AR-2 ***	40,1	1 37/64"	27	1 1/16"	19,1	3/4"	9,5	3/8"	4,8	3/32"	8,1	0,32	4,5	0,18	8,2	0,32	4	0,16							
1/2"	1/4"	8-AR-4 ***	44,5	1 3/4"	27	1 1/16"	19,1	3/4"	14,3	9/16"	7,1	3/16"	8,1	0,32	5	0,2	8,2	0,32	6	0,24							
1/2"	3/8"	8-AR-6 ***	44,5	1 3/4"	27	1 1/16"	19,1	3/4"	14,3	9/16"	14,7	37/64"	8,1	0,32	6	0,24	8,2	0,32	6,4	0,25							
3/4"	1/4"	12-AR-4 ***	46	1 13/16"	36	1 3/8"	19,1	3/4"	14,3	9/16"	11,1	7/16"	8,6	0,34	5	0,2	9,5	0,38	6	0,24							
3/4"	3/8"	12-AR-6 ***	46	1 13/16"	36	1 3/8"	19,1	3/4"	14,3	9/16"	14,7	37/64"	8,6	0,34	6	0,24	9,5	0,38	6,4	0,25							
3/4"	1/2"	12-AR-8 ***	51,2	2 1/64"	36	1 3/8"	19,1	3/4"	19,1	3/4"	18,3	23/32"	8,6	0,34	8,1	0,32	9,5	0,38	8,2	0,32							
1"	1/4"	16-AR-4 ***	50	1 31/32"	41	1 5/8"	23,8	15/16"	14,3	15/16"	11,1	7/16"	10,1	0,4	5	0,2	10,3	0,41	6	0,24							
1"	1/2"	16-AR-8 ***	54,8	2 5/32"	41	1 5/8"	23,8	15/16"	19,1	15/16"	18,3	23/32"	10,1	0,4	8,1	0,32	10,3	0,41	8,2	0,32							
1"	3/4"	16-AR-12 ***	55,2	2 11/64"	41	1 5/8"	23,8	15/16"	19,1	15/16"	23,4	56/64"	10,1	0,4	8,6	0,34	10,3	0,41	9,5	0,38							

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## REDUCING BUSHING – TAPERED (NPT / BSPT)



F	f	Reference	G		H		M		m		P		NPT				BSPT			
			mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	C (NPT)		c (NPT)		C (BSPT)		c (BSPT)	
1/4"	1/16"	4-BR-1 ***	19,8	25/32"	14	9/16"	9,5	9/16"	9,5	3/8"	3,2	1/8"	5	0,2	4	0,16	6	0,24	3,9	0,15
1/4"	1/8"	4-BR-2 ***	27	25/32"	14	9/16"	9,5	9/16"	9,5	3/8"	4,8	3/16"	5	0,2	4,5	0,18	6	0,24	4	0,16
3/8"	1/8"	6-BR-2 ***	20,6	13/16"	19	-	9,5	9/16"	9,5	3/8"	4,8	3/16"	6	0,24	4,5	0,18	6,4	0,25	4	0,16
3/8"	1/4"	6-BR-4 ***	30,2	1 1/8"	19	-	14,3	9/16"	14,3	9/16"	5,6	7/32"	6	0,24	5	0,2	6,4	0,25	6	0,24
1/2"	1/8"	8-BR-2 ***	26,2	1 1/32"	22	3/4"	9,5	3/4"	9,5	3/8"	4,8	3/16"	8,1	0,32	4,5	0,18	8,2	0,32	4	0,16
1/2"	1/4"	8-BR-4 ***	27,8	1 1/32"	22	3/4"	14,3	3/4"	14,3	9/16"	5,6	7/32"	8,1	0,32	5	0,2	8,2	0,32	6	0,24
1/2"	3/8"	8-BR-6 ***	35,7	1 13/32"	22	3/4"	14,3	3/4"	14,3	9/16"	6,4	1/4"	8,1	0,32	6	0,24	8,2	0,32	6,4	0,25
3/4"	1/4"	12-BR-4 ***	28,6	1 1/8"	27	3/4"	14,3	3/4"	14,3	9/16"	5,6	7/32"	8,6	0,34	5	0,2	9,5	0,38	6	0,24
3/4"	3/8"	12-BR-6 ***	28,6	1 1/8"	27	3/4"	14,3	3/4"	14,3	9/16"	6,4	1/4"	8,6	0,34	6	0,24	9,5	0,38	6,4	0,25
3/4"	1/2"	12-BR-8 ***	38,1	1 1/2"	27	3/4"	19,1	3/4"	19,1	3/4"	7,1	5/32"	8,6	0,34	8,1	0,32	9,5	0,38	8,2	0,32
1"	1/4"	16-BR-4 ***	35,7	1 13/32"	36	15/16"	14,3	15/16"	14,3	9/16"	5,6	7/32"	10,1	0,4	5	0,2	10,3	0,41	6	0,24
1"	1/2"	16-BR-8 ***	35,7	1 13/32"	36	15/16"	19,1	15/16"	19,1	3/4"	7,1	9/32"	10,1	0,4	8,1	0,32	10,3	0,41	8,2	0,32
1"	3/4"	16-BR-12 ***	38,1	1 1/2"	36	15/16"	19,1	15/16"	19,1	3/4"	9,5	3/8"	10,1	0,4	8,6	0,34	10,3	0,41	9,5	0,38

\* SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

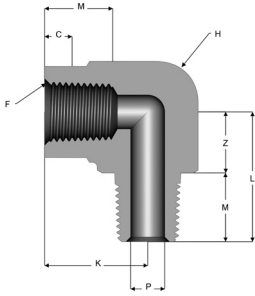
H is hex flat (fractional upon request)

### PRESSURE RATINGS

	Stainless Steel 316 L		Brass	
	Bar	PSI	Bar	PSI
4-BR-2	407	5900	221	3200
6-BR-4	379	5500	221	3200
8-BR-4	420	6100	221	3200
8-BR-6	317	4600	179	2600
24-BR-20	303	4400	159	2300



## STREET ELBOW – TAPERED (NPT / BSPT)



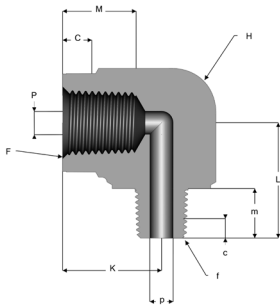
F	Reference	G		L		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/16"	1-EMF ***	14,3	9/16"	16,7	2 1/32"	12	7/16"	9,5	3/8"	3,2	3/16"	4	0,16	3,9	0,15
1/8"	2-EMF ***	19,1	3/4"	17,5	1 1/16"	14	9/16"	9,5	3/8"	4,8	3/32"	4,5	0,18	4	0,16
1/4"	4-EMF ***	21,4	27/32"	23,8	15/16"	19	3/4"	14,3	9/16"	7,1	3/16"	5	0,2	6	0,24
3/8"	6-EMF ***	21,4	27/32"	27	1 1/16"	22	7/8"	15,3	9/16"	9,5	3/16"	6	0,24	6,4	0,25
1/2"	8-EMF ***	28,6	1 1/8"	33,3	1 5/16"	27	1 1/16"	19,1	3/4"	12,7	13/32"	8,1	0,32	8,2	0,32
3/4"	12-EMF ***	31,8	1 1/8"	36,5	1 7/16"	36	1 3/8"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
1"	16-EMF ***	38,1	1 1/2"	42,9	1 11/16"	41	1 5/8"	23,8	15/16"	22,2	7/8"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## REDUCING STREET ELBOW – TAPERED (NPT / BSPT)



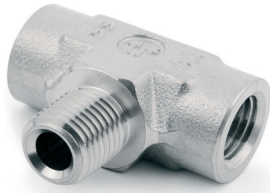
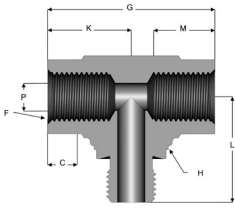
F	f	Reference	K		I		H		M		m		P		NPT				BSPT			
			mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	C (NPT)		c (NPT)		C (BSPT)		c (BSPT)	
															mm	inch	mm	inch	mm	inch	mm	inch
1/4"	1/8"	4-REM-F-2 ***	21,4	27/32"	17,5	1 1/16"	19	3/4"	14,3	9/16"	9,5	3/8"	8,3	2 1/64"	5	0,2	4,5	0,18	6	0,24	4	0,16
3/8"	1/4"	6-REM-F-4 ***	21,4	27/32"	23,8	15/16"	22	7/8"	15,3	9/16"	14,3	9/16"	11,1	7/16"	6	0,24	5	0,2	6,4	0,25	6	0,24
1/2"	1/8"	8-REM-F-2 ***	28,6	1 1/8"	17,5	1 1/16"	27	1 1/16"	19,1	3/4"	9,5	3/8"	4,8	3/32"	8,1	0,32	4,5	0,18	8,2	0,32	4	0,16
1/2"	1/4"	8-REM-F-4 ***	28,6	1 1/8"	23,8	15/16"	27	15/16"	19,1	3/4"	14,3	9/16"	7,1	3/16"	8,1	0,32	5	0,2	8,2	0,32	6	0,24
1/2"	3/8"	8-REM-F-6 ***	28,6	1 1/8"	27	1 1/16"	27	1 1/16"	19,1	3/4"	14,3	9/16"	14,7	37/64"	8,1	0,32	6	0,24	8,2	0,32	6,4	0,25
3/4"	1/4"	12-REM-F-4 ***	31,8	1 1/4"	23,8	15/16"	36	15/16"	19,1	3/4"	14,3	9/16"	11,1	7/16"	8,6	0,34	5	0,2	9,5	0,38	6	0,24
3/4"	1/2"	12-REM-F-8 ***	31,8	1 1/4"	33,3	1 5/16"	36	1 5/16"	19,1	3/4"	19,1	3/4"	18,3	23/32"	8,6	0,34	8,1	0,32	9,5	0,38	8,2	0,32
1"	1/4"	16-REM-F-4 ***	38,1	1 1/2"	23,8	15/16"	41	15/16"	23,8	15/16"	14,3	15/16"	11,1	7/16"	10,1	0,4	5	0,2	10,3	0,41	6	0,24
1"	1/2"	16-REM-F-8 ***	38,1	1 1/2"	33,3	1 5/16"	41	1 5/16"	23,8	15/16"	19,1	15/16"	18,3	23/32"	10,1	0,4	8,1	0,32	10,3	0,41	8,2	0,32
1"	3/4"	16-REM-F-12 ***	38,1	1 1/2"	38,1	1 7/16"	41	1 7/16"	23,8	15/16"	19,1	15/16"	23,4	59/64"	10,1	0,4	8,6	0,34	10,3	0,41	9,5	0,38

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## BRANCH TEE – TAPERED (NPT / BSPT)



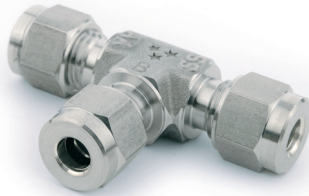
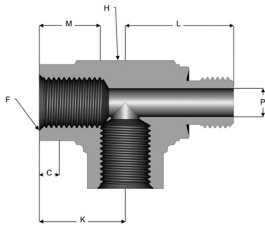
F	Reference	G		K		L		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/16"	1-TB ***	28,6	1 1/8"	14,3	9/16"	16,7	2 1/23"	12	7/16"	9,5	3/8"	3,2	3/16"	4	0,16	3,9	0,15
1/8"	2-TB ***	38,1	1 1/2"	19,1	3/4"	17,5	1 1/16"	14	9/16"	9,5	3/8"	4,8	3/32"	4,5	0,18	4	0,16
1/4"	4-TB ***	42,9	1 11/16"	21,4	27/32"	23,8	15/16"	19	3/4"	14,3	9/16"	7,1	3/16"	5	0,2	6	0,24
3/8"	6-TB ***	42,9	1 11/16"	21,4	27/32"	27	1 1/16"	22	7/8"	15,3	9/16"	9,5	3/16"	6	0,24	6,4	0,25
1/2"	8-TB ***	57,2	2 1/4"	28,6	1 1/8"	33,3	1 5/16"	27	1 1/16"	19,1	3/4"	12,7	13/32"	8,1	0,32	8,2	0,32
3/4"	12-TB ***	63,5	2 1/2"	31,8	1 1/4"	36,5	1 7/16"	36	1 3/8"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
1"	16-TB ***	76,2	3"	38,1	1 1/2"	42,9	1 11/16"	41	1 5/8"	23,8	15/16"	22,2	7/8"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## STREET TEE – TAPERED (NPT / BSPT)



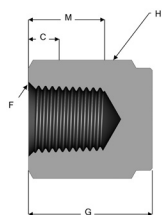
F	Reference	G		K		L		H		M		P		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/16"	1-TS ***	31	1 1/32"	14,3	9/16"	16,7	2 1/23"	12	7/16"	9,5	3/8"	3,2	3/16"	4	0,16	3,9	0,15
1/8"	2-TS ***	36,5	1 7/16"	19,1	3/4"	17,5	1 1/16"	14	9/16"	9,5	3/8"	4,8	3/32"	4,5	0,18	4	0,16
1/4"	4-TS ***	45,3	1 25/32"	21,4	27/32"	23,8	15/16"	19	3/4"	14,3	9/16"	7,1	3/16"	5	0,2	6	0,24
3/8"	6-TS ***	48,4	1 29/16"	21,4	27/32"	27	1 1/16"	22	7/8"	15,3	9/16"	9,5	3/16"	6	0,24	6,4	0,25
1/2"	8-TS ***	61,9	2 7/16"	28,6	1 1/8"	33,3	1 5/16"	27	1 1/16"	19,1	3/4"	12,7	13/32"	8,1	0,32	8,2	0,32
3/4"	12-TS ***	68,3	2 11/16"	31,8	1 1/4"	36,5	1 7/16"	36	1 3/8"	19,1	3/4"	15,9	5/8"	8,6	0,34	9,5	0,38
1"	16-TS ***	81	3 1/16"	38,1	1 1/2"	42,9	1 11/16"	41	1 5/8"	23,8	15/16"	22,2	7/8"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## PIPE CAP – TAPERED (NPT / BSPT)



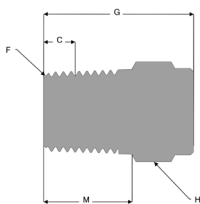
F	Reference	G		H		M		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/16"	1-PC ***.	19,1	3/4"	12	7/16"	9,5	3/8"	4	0,16	3,9	0,15
1/8"	2-PC ***.	19,1	3/4"	14	9/16"	9,5	3/8"	4,5	0,18	4	0,16
1/4"	4-PC ***.	23	3/4"	19	3/4"	14,3	9/16"	5	0,2	6	0,24
3/8"	6-PC ***.	26,2	1 1/32"	22	7/8"	14,3	9/16"	6	0,24	6,4	0,25
1/2"	8-PC ***.	34,1	1 1/32"	27	1 1/16"	15,3	3/4"	8,1	0,32	8,2	0,32
3/4"	12-PC ***.	36,5	1 7/16"	36	1 3/8"	19,1	3/4"	8,6	0,34	9,5	0,38
1"	16-PC ***.	41,3	1 5/8"	41	1 5/8"	19,1	15/16"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## PIPE PLUG – TAPERED (NPT / BSPT)



F	Reference	G		H		M		C (NPT)		C (BSPT)	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/16"	1-PP ***.	12,7	1/2"	8	5/16"	9,5	3/8"	4	0,16	3,9	0,15
1/8"	2-PP ***.	14,3	9/16"	12	7/16"	9,5	3/8"	4,5	0,18	4	0,16
1/4"	4-PP ***.	19,8	25/32"	14	9/16"	14,3	9/16"	5	0,2	6	0,24
3/8"	6-PP ***.	20,6	13/16"	19	3/4"	15,3	9/16"	6	0,24	6,4	0,25
1/2"	8-PP ***.	26,2	1 1/32"	22	7/8"	19,1	3/4"	8,1	0,32	8,2	0,32
3/4"	12-PP ***.	28,6	1 1/8"	27	1 1/16"	19,1	3/4"	8,6	0,34	9,5	0,38
1"	16-PP ***.	35,7	1 13/32"	36	1 3/8"	23,8	15/16"	10,1	0,4	10,3	0,41

• SS for Stainless Steel / B for Brass

\*\*\* Thread: N (NPT) or T (BSPT)

H is hex flat (fractional upon request)

## TECHNICAL DATA

### UNITS

<b>1 bar</b>	=	14,50 psi	=	100 kPa.
<b>1 psi</b>	=	0.069 bar	=	6,89 kPa
<b>1 kPa (ISO)</b>	=	0.01 bar	=	0,1451 psi
<b>1 Kg/cm<sup>2</sup></b>	=	0.980 bar	=	14,22 psi = 98 kPa
<b>T° C (C : Celsius)</b>	=	(T°F - 32) / 1.8	=	T°K - 273,15
<b>T° F (F : Farenheit)</b>	=	(1.8 x T°C) + 32	=	(1.8 x T°K) + 523,69
<b>T° K (K : Kelvin)</b>	=	T°C + 273.16	=	(T°F / 1.8) + 255,38
<b>T° R (R : Rankine)</b>	=	(1.8 x T°C) + 491.69	=	T°F + 459,69
<b>1 inch</b>	=	25.4 mm		
<b>1 mm</b>	=	0.045 inch		

### NORMS TAPERED

#### Tapered (ISO 7/1)

NPT(National Pipe Tapered) NFE 03-601

BSPT (Whitworth) : NFE 03-004



#### Parallel (ISO228/1)

BSPP (Whitworth) : NFE 03-005



## THREAD PRESSURE RATINGS - BRASS

F	Male Thread							Female Thread						
	1/16"	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1/16"	1/8"	1/4"	3/8"	1/2"	3/4"	1"
<b>Bar</b>	379	345	276	269	262	248	179	227	221	227	179	165	159	152
<b>PSI</b>	5500	5000	4000	3900	3800	3600	2600	3300	3200	3300	2600	2400	2300	2200

## FACTOR K TO MULTIPLICATE AT ELEVATED TEMPERATURE - BRASS

T°F	T°C	K
-20 to 100°F	-29 to 38°C	1
100 to 150°F	38 to 66°C	0,85
150 to 200°F	66 to 93°C	0,8
200 to 250°F	93 to 121°C	0,8
250 to 300°F	121 to 149°C	0,78
300 to 350°F	149 to 177°C	0,67
350 to 400°F	177 to 204°C	0,50
400 to 450°F	204 to 232°C	/
450 to 500°F	232 to 260°C	/

## THREAD PRESSURE RATINGS - STAINLESS STEEL 316L

	Male Thread							Female Thread						
F	1/16"	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1/16"	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Bar	717	648	517	503	496	469	345	434	420	427	345	317	296	283
PSI	6300	6100	6200	5000	4600	4300	5000	6300	6100	6200	5000	4600	4300	4100

## FACTOR K TO MULTIPLICATE AT ELEVATED TEMPERATURE - STAINLESS STEEL 316L

T°F	T°C	K
-20 to 100°F	-29 to 38°C	1
100 to 150°F	38 to 66°C	1
150 to 200°F	66 to 93°C	1
200 to 250°F	93 to 121°C	0,99
250 to 300°F	121 to 149°C	0,98
300 to 350°F	149 to 177°C	0,97
350 to 400°F	177 to 204°C	0,96
400 to 450°F	204 to 232°C	0,96
450 to 500°F	232 to 260°C	0,96
500 to 550°F	288 to 316°C	0,93
550 to 600°F	260 to 288°C	0,90
600 to 650°F	316 to 343°C	0,89
650 to 700°F	343 to 371°C	0,87
700 to 750°F	371 to 399°C	0,86
750 to 800°F	399 to 427°C	0,84
800 to 850°F	427 to 454°C	0,83
850 to 900°F	454 to 482°C	0,83
900 to 950°F	482 to 510 °C	0,82
950 to 1000°F	510 to 538°C	0,81

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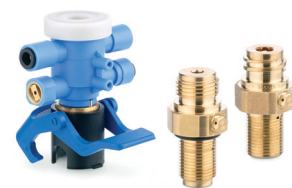
**AUTOMOTIVE**



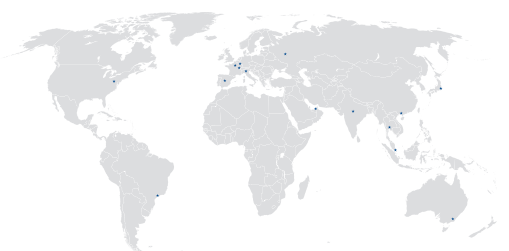
**FIRE SUPPRESSION**



**LPG VALVES  
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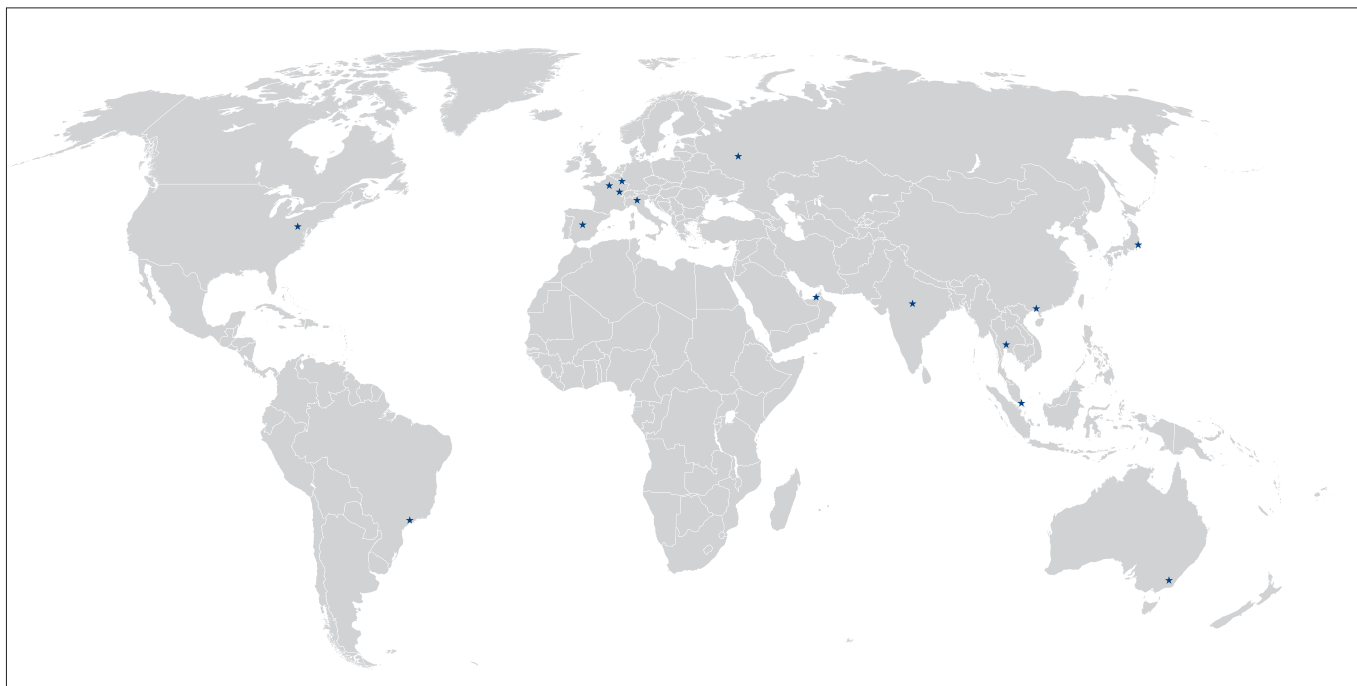


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