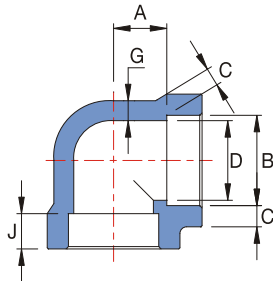


#3000 Forged  
Copper-Nickel 90/10 Fittings

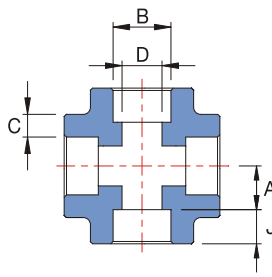


*Copper and Copper Nickel Alloys Products for Seawater Corrosion Resistant Piping Systems*

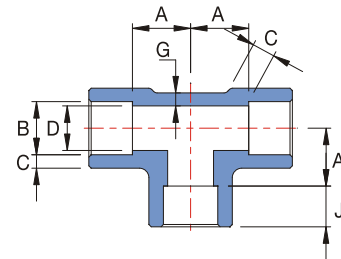
## #3000 Forged Cu-Ni 90/10 Socket-Welding Fittings (ASME B 16.11)



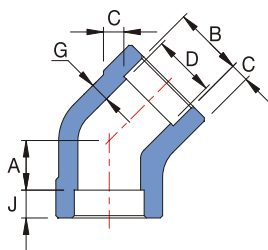
90 deg. Elbow



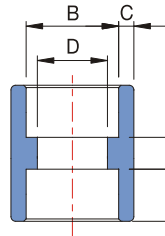
Cross



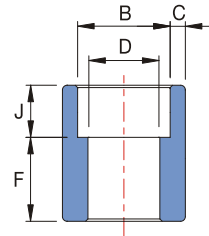
Tee



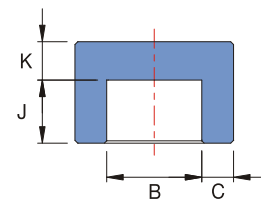
45 deg. Elbow



Coupling



Half-Coupling

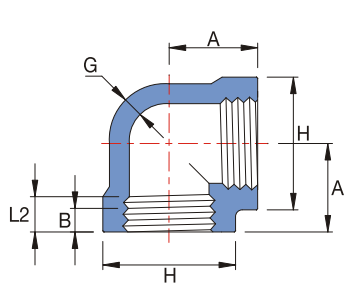


Cap

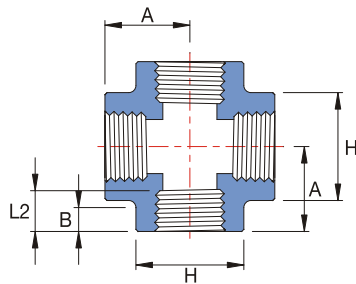
Nom. Pipe Size	Socket Bore Dia. B	Bore Dia. of Fitting D	Socket Wall Thick. - min. C	Body Wall Thick. - min. G	Depth of Socket - min. J	Center To Bottom of Socket		Laying Lengths		End Wall Thick. Caps - min. K
						90° Elbows, Tees, Crosses A	45° Elbows	Couplings E	H-Couplings F	
1/8	10,65-11,15	6,1-7,6	3,20	2,40	10	10~12	7~9	5~8	15~17	5,0
1/4	14,10-14,60	8,5-10,0	3,30	3,00	10	10~12	7~9	5~8	15~17	5,0
3/8	17,55-18,05	11,8-13,3	3,50	3,20	10	12~15	6~9	3~9	16~19	5,0
1/2	21,70-22,20	15,0-16,6	4,10	3,75	10	14~17	10~13	6~13	21~24	6,5
3/4	27,05-27,55	20,2-21,7	4,25	3,90	13	18~21	11~14	6~13	22~25	6,5
1	33,80-34,30	25,9-27,4	5,00	4,55	13	20~24	12~16	9~17	27~31	9,5
1-1/4	42,55-43,05	34,3-35,8	5,30	4,85	13	25~29	15~19	9~17	28~32	9,5
1-1/2	48,65-49,15	40,1-41,7	5,55	5,10	13	30~34	19~23	9~17	30~34	11,0
2	61,10-61,60	51,7-53,5	6,05	5,55	16	36~40	23~27	15~23	39~43	12,5
2-1/2	73,80-74,45	61,2-64,2	7,65	7,00	16	39~44	27~31	14~24	40~45	16,0
3	89,30-90,40	76,4-79,5	8,30	7,60	16	55~60	29~34	14~24	42~47	19,0
4	115,45-116,05	100,7-103,8	9,35	8,55	19	64~69	39~44	14~24	45~50	22,0

\* Dimensions are in millimeters

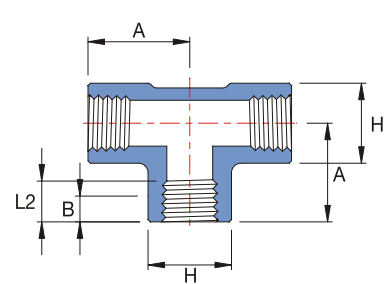
#3000 Forged Cu-Ni 90/10 Threaded Fittings (ASME B 16.11)



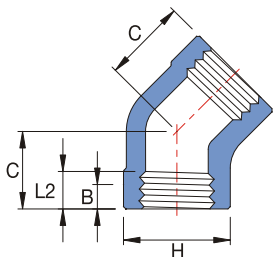
90 deg. Elbow



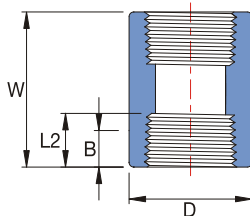
Cross



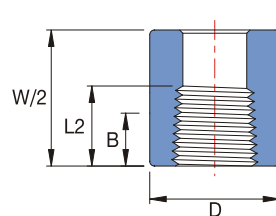
Tee



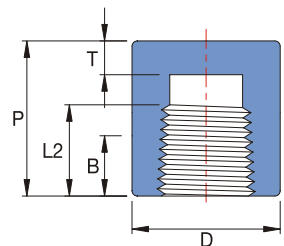
45 deg. Elbow



Coupling



Half-Coupling

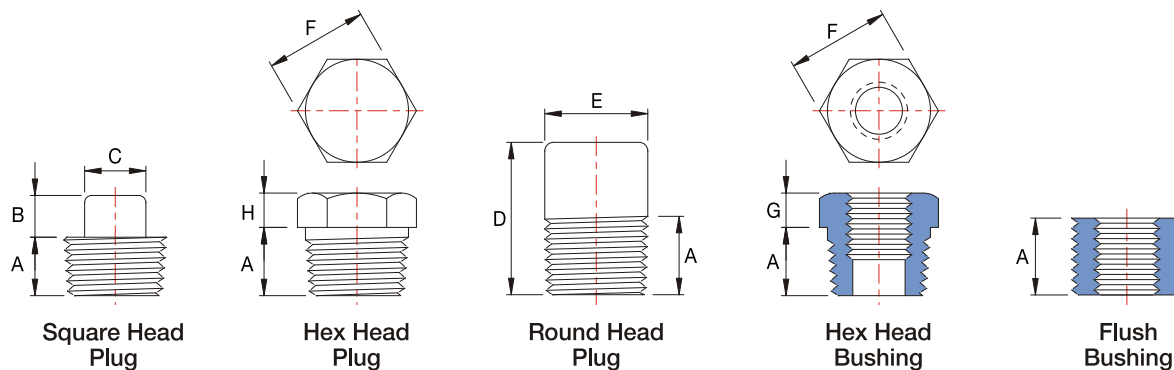


Cap

Nom. Pipe Size	Center to End	Center to End	Outside Dia.	Minimum	Length of Thread		End to End		Outside	End Wall
	Elbows, Tees, Crosses	45° Elbow	of Band	Wall Thick.	min.		Couplings	Caps	Diameter	Thick. - min.
	A	C	H	G	B	L2	W	P	D	T
1/8	21	17	22	3,0	6,5	6,5	32	19	16	5,0
1/4	25	19	25	3,5	8,0	10,0	35	25	19	5,0
3/8	29	22	33	3,5	9,0	10,5	38	25	22	5,0
1/2	33	25	38	4,0	11,0	13,5	48	32	29	6,5
3/4	38	29	46	4,5	12,5	14,0	51	37	35	6,5
1	44	33	56	5,0	14,5	17,5	60	41	44	9,5
1-1/4	51	35	62	5,5	17,0	18,0	67	44	57	9,5
1-1/2	60	43	75	5,5	18,0	18,5	79	44	64	11,0
2	64	45	84	7,0	19,0	19,0	86	48	76	12,5
2-1/2	83	52	102	7,5	23,5	29,0	92	60	92	16,0
3	95	64	121	9,0	26,0	30,5	108	65	108	19,0
4	114	79	152	11,0	27,5	33,0	121	68	140	22,0

\* Dimensions are in millimeters

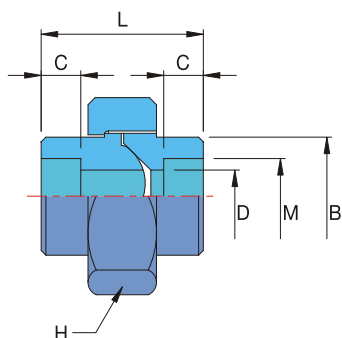
## #3000 Forged Cu-Ni 90/10 Plugs and Bushings (ASME B 16.11)



Nom. Pipe Size	Length (Minimum) A	Plugs Square Head		Plugs Round Head		Hex Plugs & Bushings		
		Height of Square	Width Flats	Nominal Dia. of Head	Length	Width Flats	Hex Height (min.)	
		B (min.)	C (min.)	E	D (min.)	F (nominal)	Bushing G	Plug H
1/8	9,5	6	7,0	10	35	11,0		6
1/4	11,0	6	9,5	13	41	16,0	3	6
3/8	12,5	8	11,0	17	41	17,5	4	8
1/2	14,5	10	14,5	21	44	22,0	5	8
3/4	16,0	11	16,0	27	44	27,0	6	10
1	19,0	13	20,5	33	51	35,0	6	10
1-1/4	20,5	14	24,0	43	51	44,5	7	14
1-1/2	20,5	16	28,5	48	51	51,0	8	16
2	22,0	17	33,5	60	64	63,5	9	17
2-1/2	27,0	19	38,0	73	70	76,0	10	19
3	28,5	21	43,0	89	70	89,0	10	21
4	32,0	25	63,5	114	76	117,5	13	25

\* Dimensions are in millimeters

## #3000 Forged Cu-Ni 90/10 Socket Welding Union (MSS SP-83/TTS-ST'D)



Nom. Pipe Size	Socket Bore Diameter M	B	L	C	D	H
1/4	13,97~14,22	21,0	41,0	10,0	9,4	35 HEX
3/8	17,53~17,78	25,0	46,0	10,0	12,7	40 HEX
1/2	21,59~21,84	32,0	51,0	10,0	16,1	46 HEX
3/4	26,92~27,18	40,0	57,0	13,0	21,2	58 HEX
1	33,78~34,04	48,0	64,0	13,0	27,0	65 HEX
1-1/4	42,42~42,67	55,0	72,0	13,0	35,4	76 OCT
1-1/2	48,51~48,77	63,5	78,0	13,0	41,2	83 OCT
2	61,21~61,47	76,0	88,0	16,0	52,7	103 OCT
2-1/2	73,66~74,17	95,0	110,0	18,0	62,7	124 OCT
3	89,66~90,17	116,0	120,0	22,5	78,0	142 OCT

\* Dimensions are in millimeters