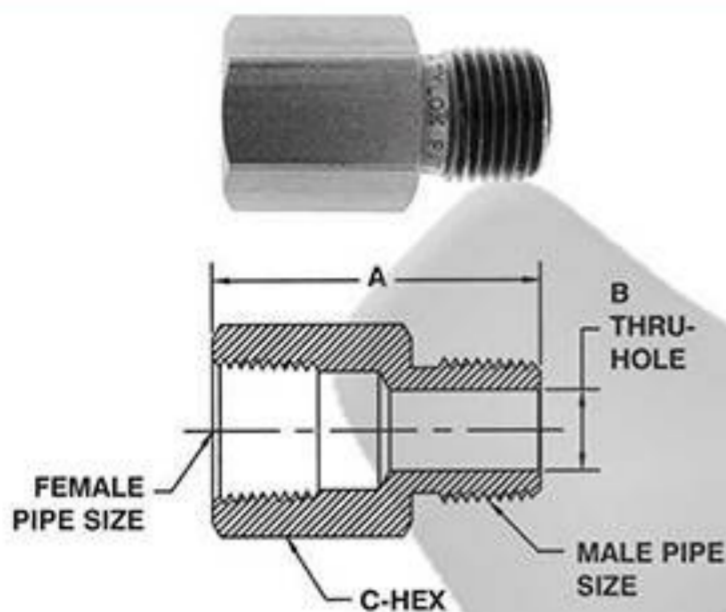
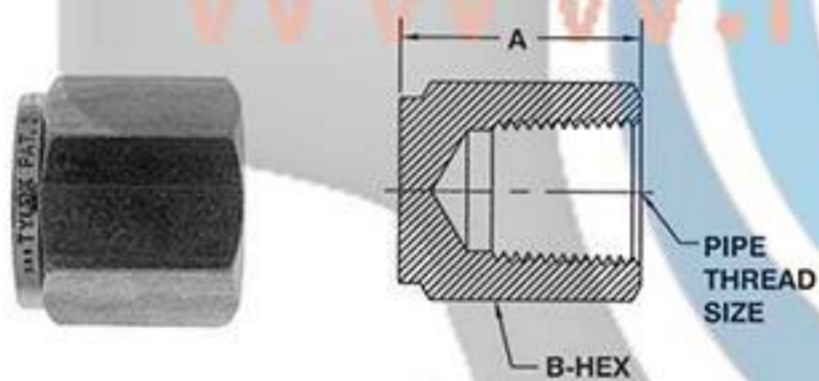


FEMALE TO MALE ADAPTER



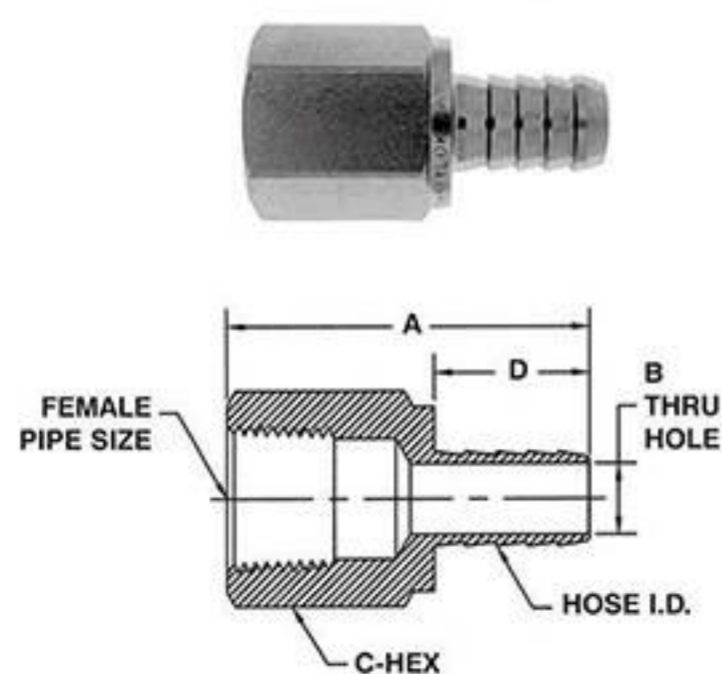
PART NO.	FEMALE PIPE SIZE	MALE PIPE SIZE	A	B THRU-HOLE	C-HEX
1-1FMA	1/16	1/16	1.000	.125	7/16
2-1FMA	1/8	1/8	1.062	.187	9/16
4-1FMA	1/4	1/4	1.375	.281	3/4
6-1FMA	3/8	3/8	1.562	.375	7/8
8-1FMA	1/2	1/2	1.906	.468	1-1/16
12-1FMA	3/4	3/4	1.937	.625	1-1/4
16-1FMA	1	1	2.281	.875	1-5/8

FEMALE PIPE CAP



PART NO.	PIPE THREAD SIZE	A	B-HEX
1-1FPC	1/16	.500	7/16
2-1FPC	1/8	.750	9/16
4-1FPC	1/4	.906	3/4
6-1FPC	3/8	1.031	7/8
8-1FPC	1/2	1.343	1-1/16
12-1FPC	3/4	1.437	1-1/4
16-1FPC	1	1.625	1-5/8

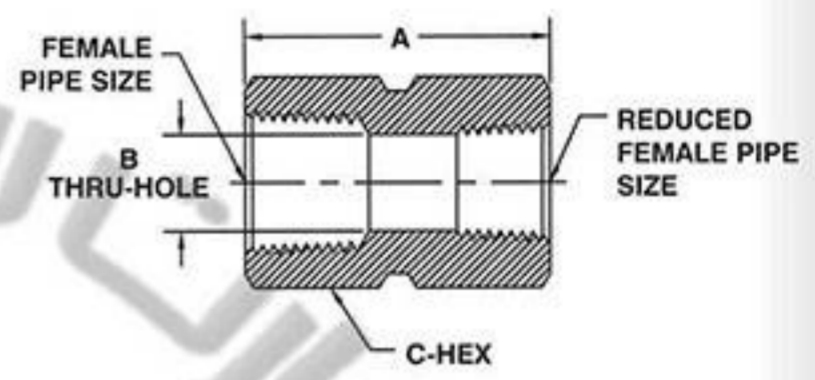
FEMALE PIPE HOSE CONNECTOR



PART NO.	FEMALE PIPE SIZE	HOSE I.D.	A	B THRU-HOLE	C-HEX	D
2-1FPHC-2	1/8	1/8	1.187	.093	9/16	.422
2-1FPHC-3	1/8	3/16	1.344	.125	9/16	.590
2-1FPHC-4	1/8	1/4	1.500	.187	9/16	.790
4-1FPHC-2	1/4	1/8	1.312	.093	3/4	.422
4-1FPHC-3	1/4	3/16	1.465	.125	3/4	.590
4-1FPHC-4	1/4	1/4	1.687	.187	3/4	.790
4-1FPHC-6	1/4	3/8	1.781	.281	3/4	.890
4-1FPHC-8	1/4	1/2	1.781	.406	3/4	.890
6-1FPHC-4	3/8	1/4	1.718	.187	7/8	.790
6-1FPHC-6	3/8	3/8	1.812	.281	7/8	.890
6-1FPHC-8	3/8	1/2	1.812	.406	7/8	.890
8-1FPHC-6	1/2	3/8	2.125	.281	1-1/16	.890
8-1FPHC-8	1/2	1/2	2.078	.406	1-1/16	.890
8-1FPHC-12	1/2	3/4	2.125	.656	1-1/16	.890
12-1FPHC-8	3/4	1/2	2.187	.406	1-1/4	.890
12-1FPHC-12	3/4	3/4	2.187	.656	1-1/4	.890
16-1FPHC-16	1	1	2.312	.906	1-5/8	.890

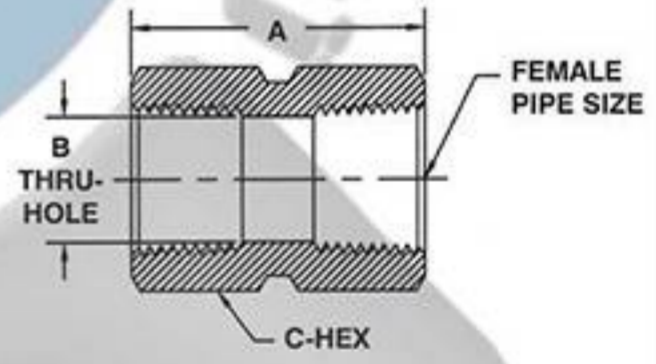
FEMALE PIPE REDUCER UNION

PART NO.	FEMALE PIPE SIZE	REDUCED FEMALE PIPE SIZE	A	B THRU-HOLE	C-HEX
2-1FPRU-1	1/8	1/16	1.062	.234	9/16
4-1FPRU-1	1/4	1/16	1.218	.234	3/4
4-1FPRU-2	1/4	1/8	1.218	.328	3/4
6-1FPRU-1	3/8	1/16	1.312	.234	7/8
6-1FPRU-2	3/8	1/8	1.312	.328	7/8
6-1FPRU-4	3/8	1/4	1.375	.421	7/8
8-1FPRU-2	1/2	1/8	1.562	.328	1-1/16
8-1FPRU-4	1/2	1/4	1.750	.421	1-1/16
8-1FPRU-6	1/2	3/8	1.781	.562	1-1/16
12-1FPRU-2	3/4	1/8	1.718	.328	1-1/4
12-1FPRU-4	3/4	1/4	1.812	.421	1-1/4
12-1FPRU-6	3/4	3/8	1.843	.562	1-1/4
12-1FPRU-8	3/4	1/2	2.062	.687	1-1/4
16-1FPRU-2	1	1/8	1.843	.328	1-5/8
16-1FPRU-4	1	1/4	2.000	.421	1-5/8
16-1FPRU-6	1	3/8	2.062	.562	1-5/8
16-1FPRU-8	1	1/2	2.187	.687	1-5/8
16-1FPRU-12	1	3/4	2.250	.890	1-5/8



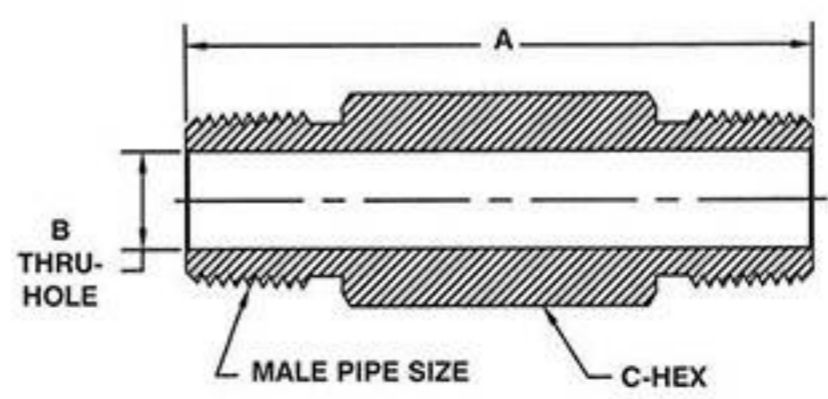
FEMALE PIPE UNION

PART NO.	FEMALE PIPE SIZE	A	B THRU-HOLE	C-HEX
1-1FPU	1/16	.812	.234	7/16
2-1FPU	1/8	.812	.328	9/16
4-1FPU	1/4	1.187	.421	3/4
6-1FPU	3/8	1.312	.562	7/8
8-1FPU	1/2	1.625	.687	1-1/16
12-1FPU	3/4	1.687	.890	1-1/4
16-1FPU	1	2.000	1.125	1-5/8

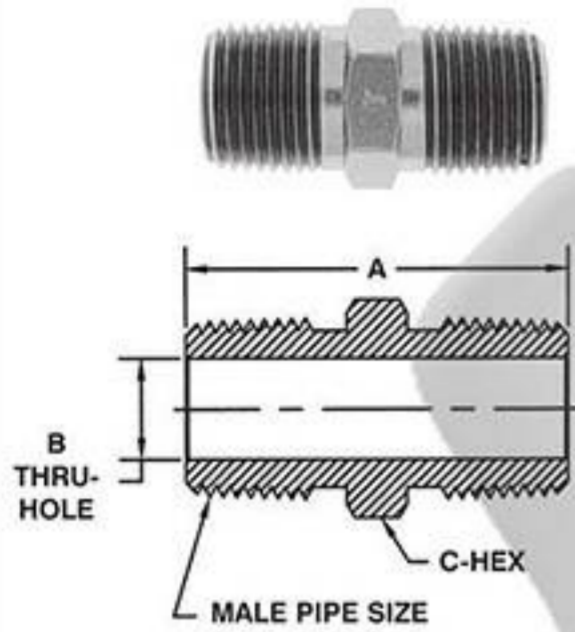


HEX LONG NIPPLE

PART NO.	MALE PIPE SIZE	A	B THRU-HOLE	C-HEX
1-1HLN-★	1/16	★ Made To Order Specify Size	.125 3/8	
2-1HLN-★	1/8		.187	7/16
4-1HLN-★	1/4		.281	9/16
6-1HLN-★	3/8		.375	11/16
8-1HLN-★	1/2		.468	7/8
12-1HLN-★	3/4		.625	1-1/16
16-1HLN-★	1		.875	1-3/8

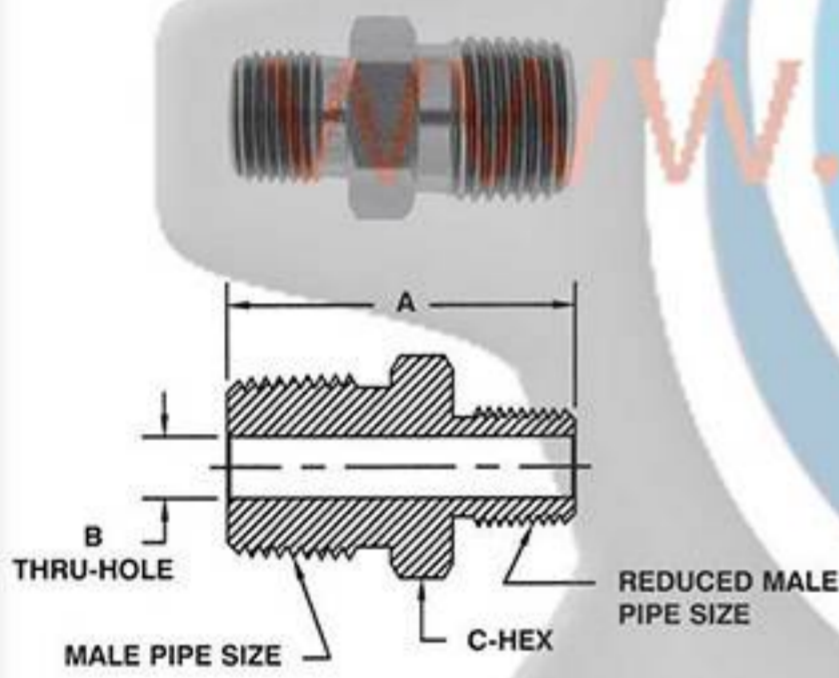


HEX NIPPLE



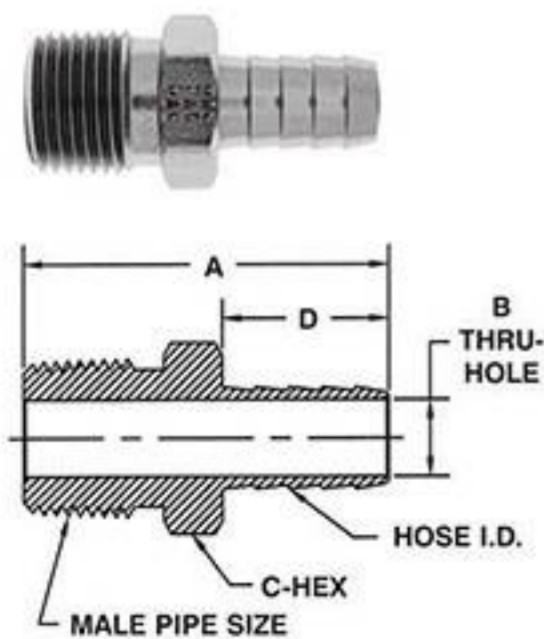
PART NO.	MALE PIPE SIZE	A	B THRU-HOLE	C-HEX
1-1HN	1/16	.937	.125	3/8
2-1HN	1/8	1.000	.187	7/16
4-1HN	1/4	1.375	.281	9/16
6-1HN	3/8	1.406	.375	11/16
8-1HN	1/2	1.781	.468	7/8
12-1HN	3/4	1.812	.625	1-1/16
16-1HN	1	2.281	.875	1-3/8

HEX REDUCING NIPPLE



PART NO.	MALE PIPE SIZE	REDUCED MALE PIPE SIZE	A	B THRU-HOLE	C-HEX
2-1HRN-1	1/8	1/16	1.000	.125	7/16
4-1HRN-1	1/4	1/16	1.187	.125	9/16
4-1HRN-2	1/4	1/8	1.187	.187	9/16
6-1HRN-1	3/8	1/16	1.218	.125	11/16
6-1HRN-2	3/8	1/8	1.218	.187	11/16
6-1HRN-4	3/8	1/4	1.406	.281	11/16
8-1HRN-2	1/2	1/8	1.406	.187	7/8
8-1HRN-4	1/2	1/4	1.593	.281	7/8
8-1HRN-6	1/2	3/8	1.625	.375	7/8
12-1HRN-2	3/4	1/8	1.437	.187	1-1/16
12-1HRN-4	3/4	1/4	1.625	.281	1-1/16
12-1HRN-6	3/4	3/8	1.625	.375	1-1/16
12-1HRN-8	3/4	1/2	1.812	.468	1-1/16
16-1HRN-2	1	1/8	1.718	.187	1-3/8
16-1HRN-4	1	1/4	1.906	.281	1-3/8
16-1HRN-6	1	3/8	1.906	.375	1-3/8
16-1HRN-8	1	1/2	2.093	.468	1-3/8
16-1HRN-12	1	3/4	2.093	.625	1-3/8

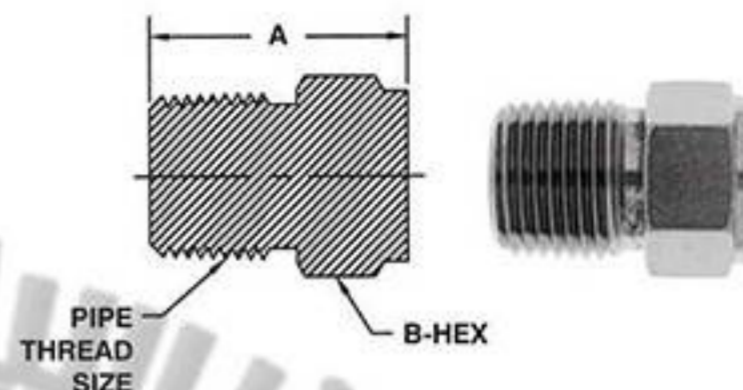
MALE PIPE HOSE CONNECTOR



PART NO.	MALE PIPE SIZE	HOSE I.D.	A	B THRU-HOLE	C-HEX	D
2-1MPHC-2	1/8	1/8	1.062	.093	7/16	.422
2-1MPHC-3	1/8	3/16	1.187	.125	7/16	.590
2-1MPHC-4	1/8	1/4	1.462	.187	7/16	.790
4-1MPHC-2	1/4	1/8	1.234	.093	9/16	.422
4-1MPHC-3	1/4	3/16	1.406	.125	9/16	.590
4-1MPHC-4	1/4	1/4	1.609	.187	9/16	.790
4-1MPHC-6	1/4	3/8	1.718	.281	9/16	.890
4-1MPHC-8	1/4	1/2	1.718	.281	9/16	.890
6-1MPHC-4	3/8	1/4	1.609	.187	11/16	.790
6-1MPHC-6	3/8	3/8	1.781	.281	11/16	.890
6-1MPHC-8	3/8	1/2	1.781	.375	11/16	.890
8-1MPHC-6	1/2	3/8	1.953	.281	7/8	.890
8-1MPHC-8	1/2	1/2	1.953	.406	7/8	.890
8-1MPHC-12	1/2	3/4	1.968	.468	7/8	.890
12-1MPHC-8	3/4	1/2	1.968	.406	1-1/16	.890
12-1MPHC-12	3/4	3/4	1.968	.625	1-1/16	.890
16-1MPHC-16	1	1	2.171	.875	1-3/8	.890

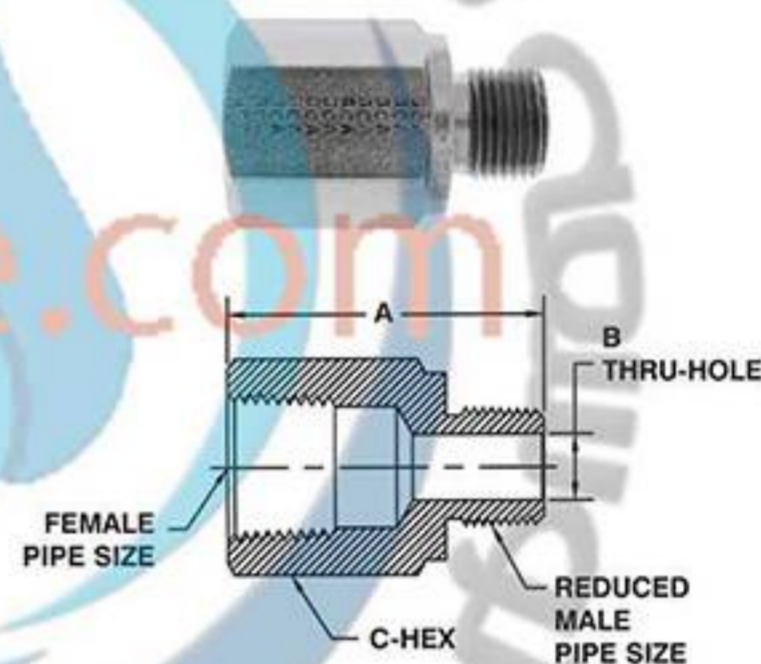
MALE PIPE PLUG

PART NO.	PIPE THREAD	A	B-HEX
1-1MPP	1/16	.750	3/8
2-1MPP	1/8	.750	7/16
4-1MPP	1/4	1.000	9/16
6-1MPP	3/8	1.062	11/16
8-1MPP	1/2	1.312	7/8
12-1MPP	3/4	1.375	1-1/16
16-1MPP	1	1.687	1-3/8



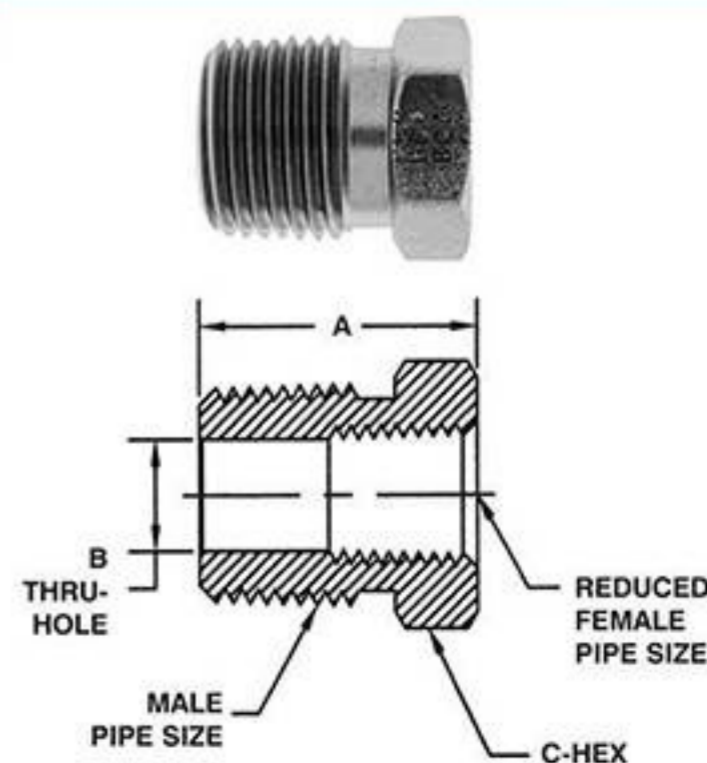
REDUCER ADAPTER - FEMALE TO MALE

PART NO.	FEMALE PIPE SIZE	REDUCED MALE PIPE SIZE	A	B THRU-HOLE	C-HEX
2-1RAFM-1	1/8	1/16	1.093	.125	9/16
4-1RAFM-1	1/4	1/16	1.250	.125	3/4
4-1RAFM-2	1/4	1/8	1.250	.187	3/4
6-1RAFM-1	3/8	1/16	1.437	.125	7/8
6-1RAFM-2	3/8	1/8	1.437	.187	7/8
6-1RAFM-4	3/8	1/4	1.562	.281	7/8
8-1RAFM-2	1/2	1/8	1.687	.187	1-1/16
8-1RAFM-4	1/2	1/4	1.812	.281	1-1/16
8-1RAFM-6	1/2	3/8	1.812	.375	1-1/16
12-1RAFM-2	3/4	1/8	1.812	.187	1-1/4
12-1RAFM-4	3/4	1/4	1.968	.281	1-1/4
12-1RAFM-6	3/4	3/8	1.968	.375	1-1/4
12-1RAFM-8	3/4	1/2	2.062	.468	1-1/4
16-1RAFM-2	1	1/8	2.000	.187	1-5/8
16-1RAFM-4	1	1/4	2.125	.281	1-5/8
16-1RAFM-6	1	3/8	2.125	.375	1-5/8
16-1RAFM-8	1	1/2	2.250	.468	1-5/8
16-1RAFM-12	1	3/4	2.250	.625	1-5/8

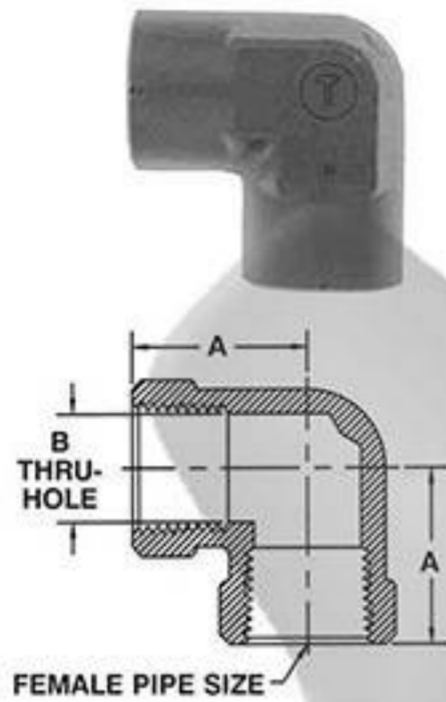


REDUCER BUSHING - MALE TO FEMALE

PART NO.	MALE PIPE SIZE	REDUCED FEMALE PIPE SIZE	A	B THRU-HOLE	C-HEX
2-1RBMF-1	1/8	1/16	1.000	.187	7/16
4-1RBMF-1	1/4	1/16	.812	.234	9/16
4-1RBMF-2	1/4	1/8	1.000	.281	9/16
6-1RBMF-1	3/8	1/16	.843	.234	11/16
6-1RBMF-2	3/8	1/8	.843	.328	11/16
6-1RBMF-4	3/8	1/4	1.125	.375	3/4
8-1RBMF-2	1/2	1/8	1.062	.328	7/8
8-1RBMF-4	1/2	1/4	1.062	.421	7/8
8-1RBMF-6	1/2	3/8	1.312	.468	7/8
12-1RBMF-2	3/4	1/8	1.062	.328	1-1/16
12-1RBMF-4	3/4	1/4	1.062	.421	1-1/16
12-1RBMF-6	3/4	3/8	1.062	.562	1-1/16
12-1RBMF-8	3/4	1/2	1.562	.625	1-1/16
16-1RBMF-2	1	1/8	1.343	.328	1-3/8
16-1RBMF-4	1	1/4	1.343	.421	1-3/8
16-1RBMF-6	1	3/8	1.343	.562	1-3/8
16-1RBMF-8	1	1/2	1.343	.687	1-3/8
16-1RBMF-12	1	3/4	1.750	.875	1-3/8

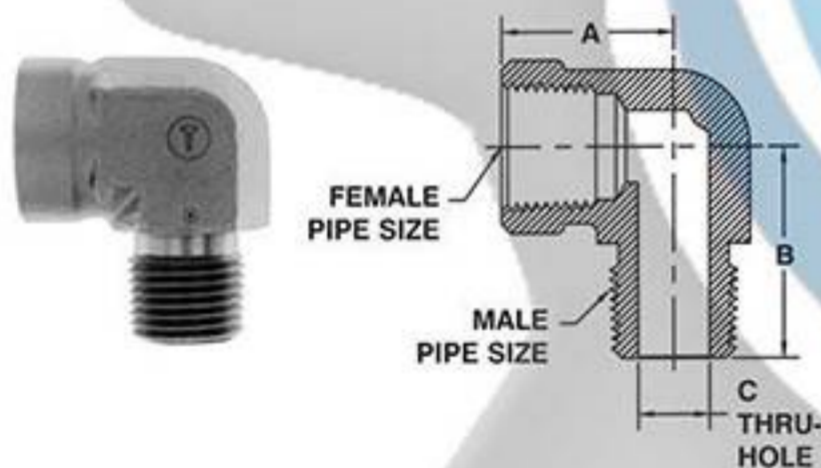


FEMALE PIPE ELBOW



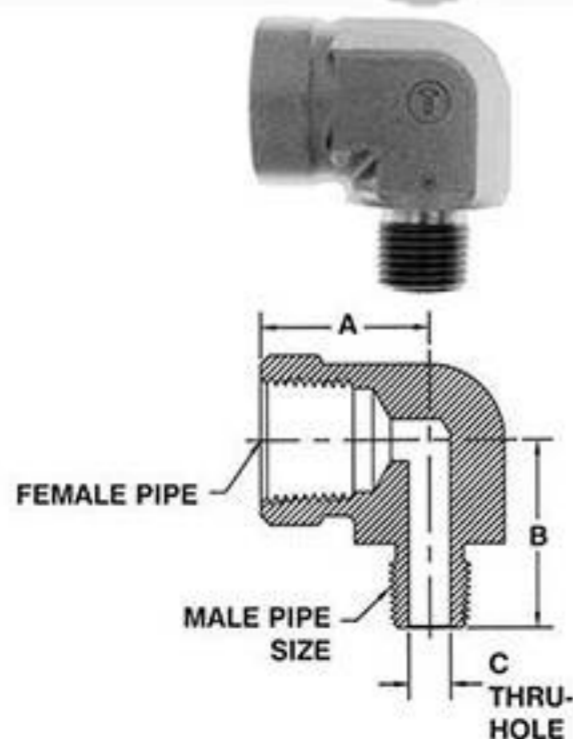
PART NO.	FEMALE PIPE SIZE	A	B THRU-HOLE
1-2FF-1	1/16	.750	.234
2-2FF-2	1/8	.843	.328
4-2FF-4	1/4	.968	.421
6-2FF-6	3/8	1.000	.562
8-2FF-8	1/2	1.125	.687
12-2FF-12	3/4	1.437	.890
16-2FF-16	1	1.625	1.125

FEMALE - MALE PIPE ELBOW



PART NO.	PIPE SIZES	A	B	C THRU-HOLE
1-2FM-1	1/16	.750	.718	.125
2-2FM-2	1/8	.843	.843	.187
4-2FM-4	1/4	.843	1.093	.281
6-2FM-6	3/8	1.000	1.125	.375
8-2FM-8	1/2	1.125	1.375	.468
12-2FM-12	3/4	1.437	1.500	.625
16-2FM-16	1	1.625	1.937	.875

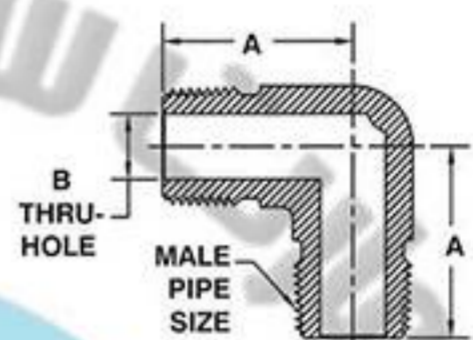
FEMALE - MALE REDUCER PIPE ELBOW



PART NO.	FEMALE PIPE SIZE	MALE PIPE SIZE	A	B	C THRU-HOLE
2-2FMR-1	1/8	1/16	.750	.750	.125
4-2FMR-1	1/4	1/16	.843	.937	.125
4-2FMR-2	1/4	1/8	.843	.937	.187
6-2FMR-1	3/8	1/16	1.000	.937	.125
6-2FMR-2	3/8	1/8	1.000	.937	.187
6-2FMR-4	3/8	1/4	1.125	1.187	.281
8-2FMR-2	1/2	1/8	1.125	1.062	.187
8-2FMR-4	1/2	1/4	1.125	1.250	.281
8-2FMR-6	1/2	3/8	1.125	1.250	.375
12-2FMR-2	3/4	1/8	1.437	1.250	.187
12-2FMR-4	3/4	1/4	1.437	1.375	.281
12-2FMR-6	3/4	3/8	1.437	1.437	.375
12-2FMR-8	3/4	1/2	1.437	1.625	.468
16-2FMR-2	1	1/8	1.625	1.375	.187
16-2FMR-4	1	1/4	1.625	1.625	.281
16-2FMR-6	1	3/8	1.625	1.625	.375
16-2FMR-8	1	1/2	1.625	1.812	.468
16-2FMR-12	1	3/4	1.625	1.875	.625

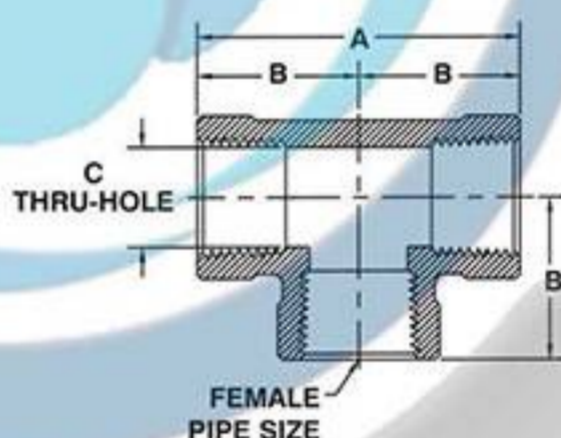
MALE PIPE ELBOW

PART NO.	MALE PIPE SIZE	A	B THRU-HOLE
1-2MM-1	1/16	.718	.125
2-2MM-2	1/8	.750	.187
4-2MM-4	1/4	1.000	.281
6-2MM-6	3/8	1.093	.375
8-2MM-8	1/2	1.375	.468
12-2MM-12	3/4	1.500	.625
16-2MM-16	1	1.875	.875



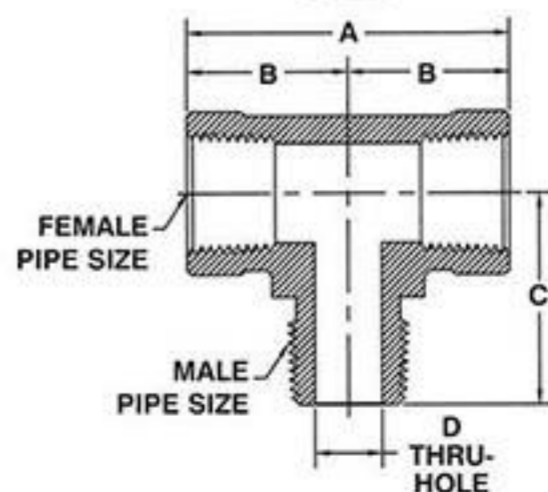
ALL FEMALE PIPE TEE

PART NO.	FEMALE PIPE SIZE	A	B	C THRU-HOLE
1-3FFF-1	1/16	1.500	.750	.234
2-3FFF-2	1/8	1.687	.843	.328
4-3FFF-4	1/4	1.687	.843	.421
6-3FFF-6	3/8	2.000	1.000	.562
8-3FFF-8	1/2	2.250	1.125	.687
12-3FFF-12	3/4	2.625	1.312	.890
16-3FFF-16	1	3.250	1.625	1.125

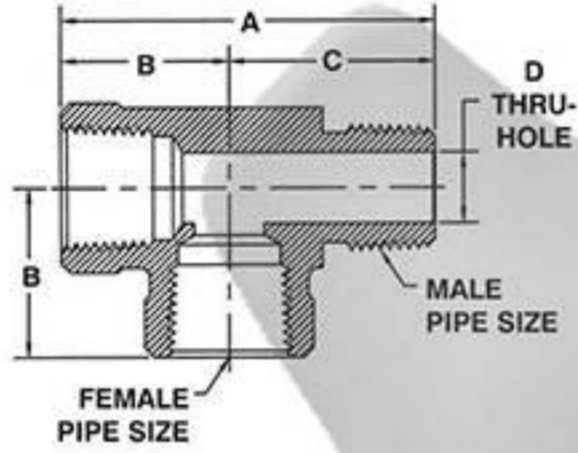


PIPE TEE - FEMALE-FEMALE-MALE

PART NO.	PIPE SIZES	A	B	C	D THRU-HOLE
1-3FFM-1	1/16	1.500	.750	.718	.125
2-3FFM-2	1/8	1.687	.843	.843	.187
4-3FFM-4	1/4	1.875	.937	1.000	.281
6-3FFM-6	3/8	2.000	1.000	1.125	.375
8-3FFM-8	1/2	2.250	1.125	1.375	.468
12-3FFM-12	3/4	2.750	1.375	1.625	.625
16-3FFM-16	1	3.250	1.625	1.937	.875

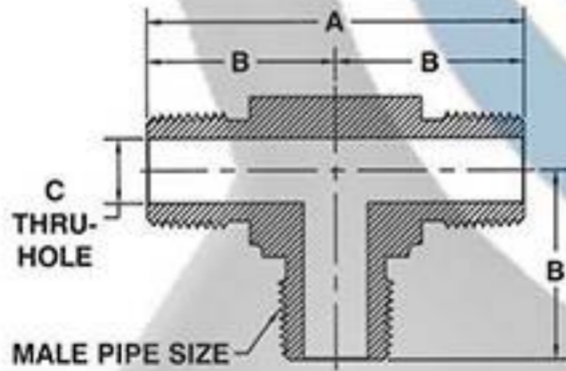


PIPE TEE - FEMALE-MALE-FEMALE



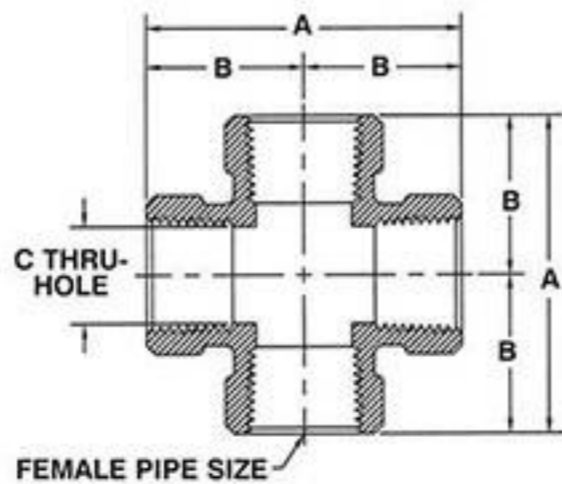
PART NO.	PIPE SIZES	A	B	C	D THRU-HOLE
1-3FMF-1	1/16	1.500	.750	.750	.125
2-3FMF-2	1/8	1.687	.843	.843	.187
4-3FMF-4	1/4	1.890	.843	1.046	.281
6-3FMF-6	3/8	2.125	1.000	1.125	.375
8-3FMF-8	1/2	2.500	1.125	1.375	.468
12-3FMF-12	3/4	2.937	1.437	1.500	.625
16-3FMF-16	1	3.562	1.625	1.937	.875

ALL MALE PIPE TEE



PART NO.	MALE PIPE SIZE	A	B	C THRU-HOLE
1-3MMM-1	1/16	1.437	.718	.125
2-3MMM-2	1/8	1.437	.718	.187
4-3MMM-4	1/4	1.875	.937	.281
6-3MMM-6	3/8	2.000	1.000	.375
8-3MMM-8	1/2	2.750	1.375	.468
12-3MMM-12	3/4	2.750	1.375	.625
16-3MMM-16	1	3.750	1.875	.875

FEMALE PIPE CROSS



PART NO.	FEMALE PIPE SIZE	A	B	C THRU-HOLE
1-4FPCR	1/16	1.250	.625	.246
2-4FPCR	1/8	1.687	.843	.328
4-4FPCR	1/4	1.687	.843	.421
6-4FPCR	3/8	2.125	1.062	.562
8-4FPCR	1/2	2.250	1.125	.687
12-4FPCR	3/4	2.875	1.437	.890
16-4FPCR	1	3.250	1.625	1.125