



S.D. INDUSTRIES

Pipe Fittings



We deliver confidence through quality products



PIPE FITTINGS

☞ INTRODUCTION

SD's Precision pipe fittings are designed and manufactured to very stringent tolerances under rigid quality control procedures, to provide leak free connections for petrochemical, chemical, processing plants, oil, gas and power generation industries, etc.

Pipe fittings cover many components that connect pipe ends for in-line, offset, multi-port, and mounting configurations. Pipe and pipe fittings are manufactured from a wide variety of materials for the transport of an equally wide variety of solids and fluids.

☞ RANGE

Sizes ranges from 1/8" through 1".

☞ MATERIAL SPECIFICATION

SD's Precision pipe fittings are available in various materials which meets the following specification,

SS 316 Bar Stock	ASTMA 479-316, ASTMA 276-316
SS 316 Forgings	ASTMA 182-316
Brass Bar Stock	ASTMB 16, ASTM B 453
Brass Forgings	ASTMB 283
Carbon Steel Bar Stock	ASTMA 108
Carbon Steel Forgings	ASTMA 105

Straight fittings machined from Bar Stock.

Elbows, Tees and Crosses machined from close grain forgings.

☞ THREAD SPECIFICATION

NPT Threads	ANSI B1.20.1, SAE AS71051
ISO / BSP (Parallel) Threads	ISO 228, BS2779, JIS B 0202
ISO / BSP (Tapered) Threads	ISO 7/1, BS21, JIS B 0203

All exposed threads protected with plastic caps to prevent damage and packed in sealed plastic bag.

Working pressures calculated in accordance with Power piping code ANSI B31.1 and Refiner piping code ANSI B31.3.

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CROSS FITTINGS

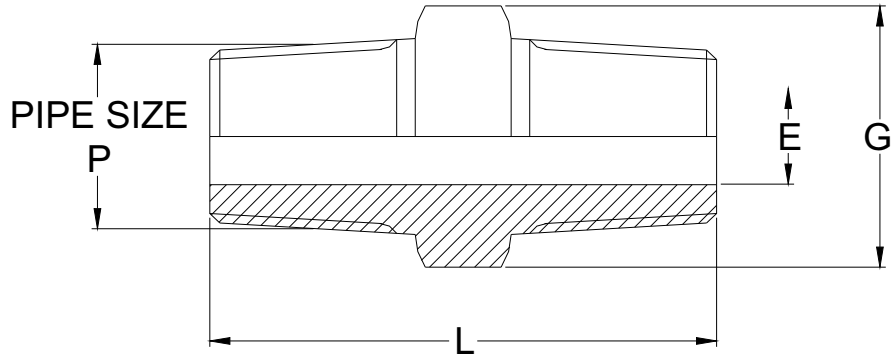
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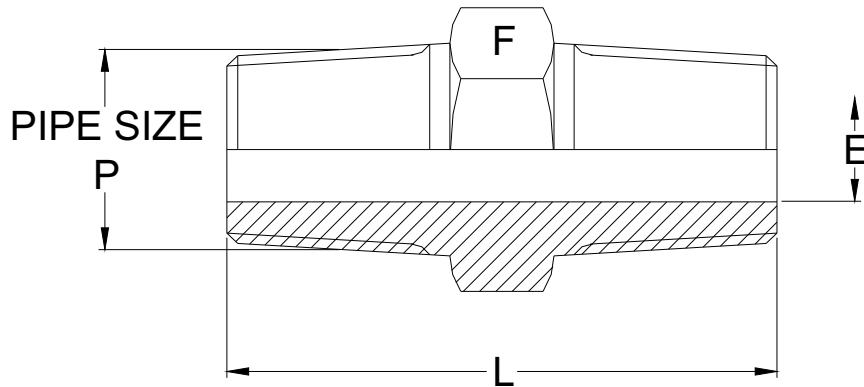


☞ CLOSE NIPPLES



Male NPT Threads X Male NPT Threads

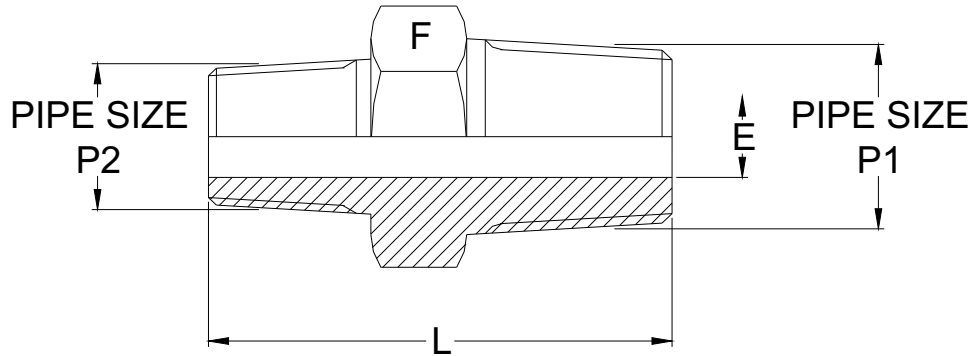
Pipe Size (P) NPT	G	L	E	PART NO.		
Inch	Inch	Inch	Inch			
		(mm)	(mm)			
1/8 -27	7/16	0.75	19.1	4.8	2P-CNN	
1/4 -18	9/16	1.12	28.4	0.28	7.1	4P-CNN
3/8 -18	11/16	1.12	28.4	0.38	9.6	6P-CNN
1/2 -14	7/8	1.5	38.1	0.47	11.9	8P-CNN
3/4 -14	1 1/16	1.5	38.1	0.62	15.7	12P-CNN
1 -11.5	1 3/8	1.88	47.8	0.88	22.4	16P-CNN

**HEX NIPPLES****Male NPT Threads X Male NPT Threads**

Pipe Size (P) NPT	Hex F	L		E		PART NO.
Inch	Inch	Inch	(mm)	Inch	(mm)	
1/16 -27	5/16	1.01	25.6	0.12	3.0	1P-HNN
1/8 -27	7/16	1.01	25.6		4.8	2P-HNN
1/4 -18	9/16	1.4	35.6	0.28	7.1	4P-HNN
3/8 -18	11/16	1.43	36.3	0.38	9.6	6P-HNN
1/2 -14	7/8	1.84	46.7	0.47	11.9	8P-HNN
3/4 -14	1 1/16	1.84	46.7	0.62	15.7	12P-HNN
1 -11.5	1 3/8	2.32	58.9	0.88	22.4	16P-HNN



HEX REDUCING NIPPLES

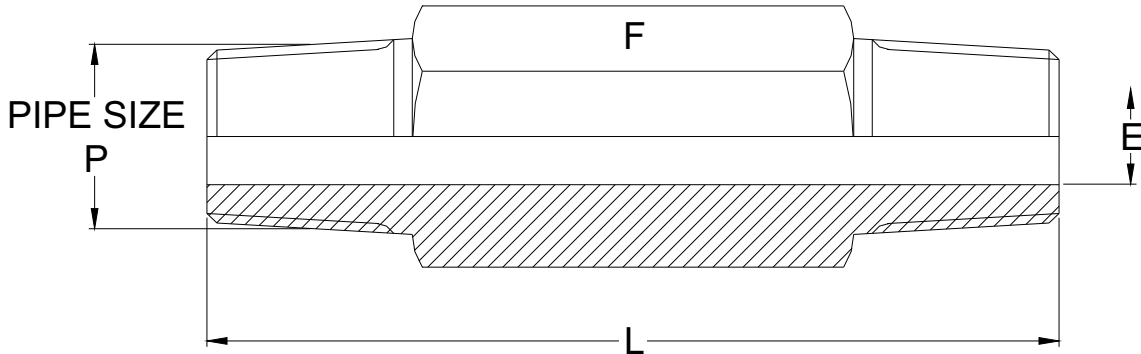


Male NPT Threads X Male NPT Threads

Pipe Size (P1) NPT	Pipe Size (P2) NPT	Hex F	L		E		PART NO.
Inch	Inch	Inch	Inch	(mm)	Inch	(mm)	
1/8 -27	1/16 -27	7/16	1.01	25.6	0.12	3.0	2-1P-HRNN
1/4 -18	1/8 -27	9/16	1.22	31.0		4.8	4-2P-HRNN
3/8 -18	1/8 -27	11/16	1.25	31.8	0.19	4.8	6-2P-HRNN
3/8 -18	1/4 -18	11/16	1.43	36.3	0.28	7.1	6-4P-HRNN
1/2 -14	1/8 -18	7/8	1.47	37.3	0.19	4.8	8-2P-HRNN
1/2 -14	1/4 -18	7/8	1.65	41.9	0.28	7.1	8-4P-HRNN
1/2 -14	3/8 -18	7/8	1.65	41.9	0.38	9.7	8-6P-HRNN
3/4 -14	1/4 -18	1 1/16	1.65	41.9	0.28	7.1	12-4P-HRNN
3/4 -14	1/2 -14	1 1/16	1.84	46.7	0.47	11.9	12-8P-HRNN
1 -11.5	1/4 -18	1 3/8	1.94	49.3	0.28	7.1	16-4P-HRNN
1 -11.5	1/2 -14	1 3/8	2.13	54.1	0.47	11.9	16-8P-HRNN
1 -11.5	3/4 -14	1 3/8	2.13	54.1	0.62	15.7	16-12P-HRNN



HEX LONG NIPPLES



Male NPT Threads X Male NPT Threads

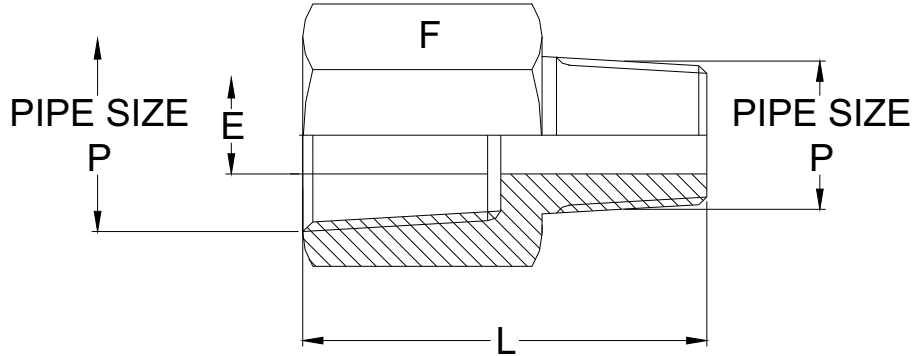
Pipe Size (P) NPT	Hex F	L (Available Lengths) - Inch						E		PART NO.
Inch	Inch	1.5	2.0	2.5	3.0	4.0	6.0	Inch	(mm)	
1/8 -27	7/16	A	A	A	A	N/A	N/A		4.8	2P-HLNN
1/4 -18	9/16	A	A	A	A	A	N/A	0.28	7.1	4P-HLNN
3/8 -18	11/16	A	A	A	A	A	N/A	0.38	9.6	6P-HLNN
1/2 -14	7/8	N/A	A	N/A	A	A	A	0.47	11.9)	8P-HLNN
3/4 -14	1 1/16	N/A	A	N/A	A	A	N/A	0.62	15.7	12P-HLNN
1 -11.5	1 3/8	N/A	N/A	N/A	A	A	N/A	0.88	22.4	16P-HLNN

NOTE :- A = Available, N/A = Not Available

To order , insert the available length as a suffix. For Example : 2P-HLNN-1.5



ADAPTERS

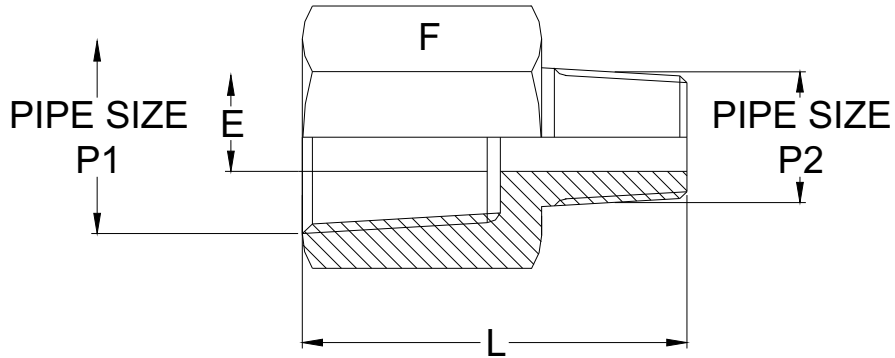


Female NPT Threads X Male NPT Threads

Pipe Size (P) NPT	Hex F	L		E		PART NO.
Inch	Inch	Inch	(mm)	Inch	(mm)	
1/8 -27	9/16	1.10	27.9		4.8	2P-AN
1/4 -18	3/4	1.40	35.6	0.28	7.1	4P-AN
3/8 -18	7/8	1.51	38.4	0.38	9.6	6P-AN
1/2 -14	1 1/16	1.94	49.3	0.47	11.9	8P-AN
3/4 -14	1 5/16	2.02	51.3	0.62	15.7	12P-AN
1 -11.5	1 5/8	2.28	57.9	0.88	22.4	16P-AN



REDUCING ADAPTERS

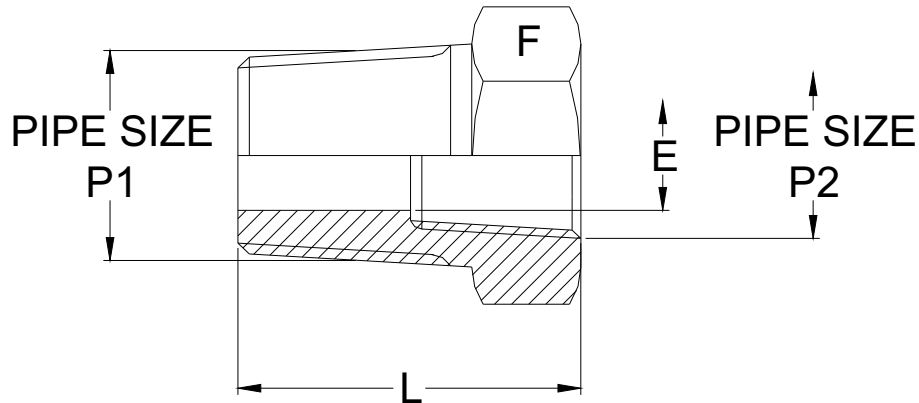


Female NPT Threads X Male NPT Threads

Pipe Size (P1) Female NPT	Pipe Size (P2) Male NPT	Hex F	L		E		PART NO.
Inch	Inch	Inch	Inch	(mm)	Inch	(mm)	
1/8 -27	1/16 -27	9/16	1.09	27.7		3.0	2-1P-RAN
1/4 -18	1/8 -27	3/4	1.26	32.0	0.19	4.8	4-2P-RAN
3/8 -18	1/8 -27	7/8	1.33	33.8	0.19	4.8	6-2P-RAN
3/8 -18	1/4 -18	7/8	1.50	38.1	0.28	7.1	6-4P-RAN
1/2 -14	1/8 -27	1 1/16	1.58	40.1	0.19	4.8	8-2P-RAN
1/2 -14	1/4 -18	1 1/16	1.76	44.7	0.28	7.1	8-4P-RAN
1/2 -14	3/8 -18	1 1/16	1.75	44.5	0.38	9.7	8-6P-RAN
3/4 -14	1/4 -18	1 5/16	1.85	47.0	0.28	7.1	12-4P-RAN
3/4 -14	3/8 -18	1 5/16	1.82	46.2	0.38	9.7	12-6P-RAN
3/4 -14	1/2 -14	1 5/16	2.02	51.3	0.47	11.9	12-8P-RAN
1 -11.5	1/4 -18	1 5/8	1.96	49.8	0.28	7.1	16-4P-RAN
1 -11.5	1/2 -14	1 5/8	2.16	54.9	0.47	11.9	16-8P-RAN
1 -11.5	3/4 -14	1 5/8	2.17	55.1	0.62	15.7	16-12P-RAN



REDUCING BUSHINGS

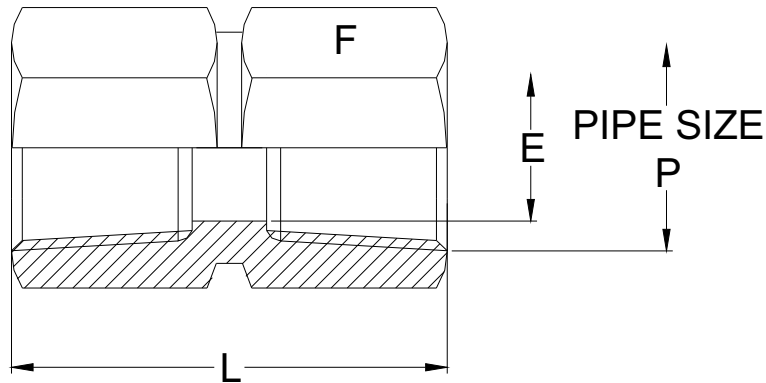


Male NPT Threads X Female NPT Threads

Pipe Size (P1) Male NPT Inch	Pipe Size (P2) Female NPT Inch	Hex F Inch	L		E		PART NO.
			Inch	(mm)	Inch	(mm)	
1/8 -27	1/16 -27	7/16	1.03	26.2		4.8	2-1P-RBN
1/4 -18	1/8 -27	9/16	1.06	26.9	0.28	7.1	4-2P-RBN
3/8 -18	1/8 -27	11/16	0.86	21.8	0.34	8.6	6-2P-RBN
3/8 -18	1/4 -18	3/4	1.19	30.2	0.38	9.7	6-4P-RBN
1/2 -14	1/8 -27	7/8	1.08	27.4	0.34	8.6	8-2P-RBN
1/2 -14	1/4 -18	7/8	1.08	27.4	0.45	11.4	8-4P-RBN
1/2 -14	3/8 -18	7/8	1.41	35.8	0.47	11.9	8-6P-RBN
3/4 -14	1/4 -18	1 1/16	1.08	27.4	0.45	11.4	12-4P-RBN
3/4 -14	3/8 -18	1 1/16	1.08	27.4	0.59	15.0	12-6P-RBN
3/4 -14	1/2 -14	1 1/16	1.63	41.4	0.62	15.7	12-8P-RBN
1 -11.5	1/4 -18	1 3/8	1.37	34.8	0.45	11.4	16-4P-RBN
1 -11.5	3/8 -18	1 3/8	1.37	34.8	0.59	15.0	16-6P-RBN
1 -11.5	1/2 -14	1 3/8	1.37	34.8	0.73	18.5	16-8P-RBN
1 -11.5	3/4 -14	1 3/8	1.85	47.0	0.88	22.4	16-12P-RBN



HEX COUPLINGS

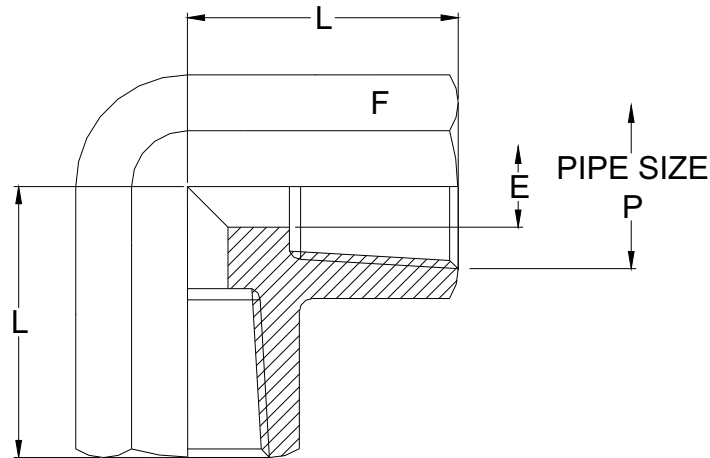


Female NPT Threads X Female NPT Threads

Pipe Size (P) NPT	Hex F	L		E		PART NO.
Inch	Inch	Inch	(mm)	Inch	(mm)	
1/8 -27	9/16	0.81	20.6		8.6	2P-HCN
1/4 -18	3/4	1.19	30.2	0.45	11.4	4P-HCN
3/8 -18	7/8	1.31	33.3	0.59	15.0	6P-HCN
1/2 -14	1 1/16	1.56	39.6	0.73	18.5	8P-HCN
3/4 -14	1 5/16	1.62	41.1	0.94	23.9	12P-HCN
1 -11.5	1 5/8	2.00	50.8	1.17	29.7	16P-HCN



ELBOWS

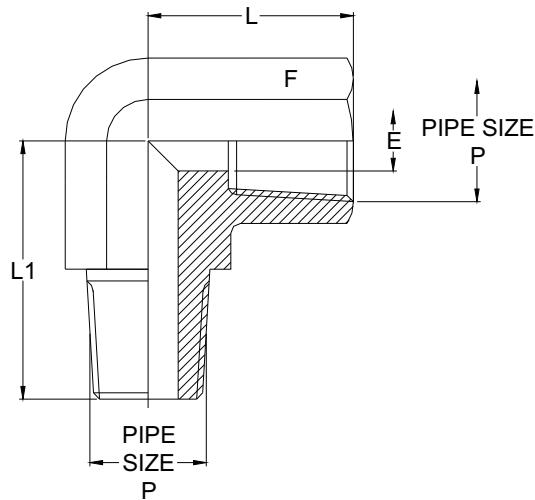


Female NPT Threads X Female NPT Threads

Pipe Size (P) NPT	Hex F	L		E		PART NO.
Inch	Inch	Inch	(mm)	Inch	(mm)	
1/8 -27	9/16	0.66	16.8	0.19	4.8	2P-EN
1/4 -18	3/4	0.88	22.4	0.28	7.1	4P-EN
3/8 -18	7/8	1.02	25.9	0.38	9.6	6P-EN
1/2 -14	1 1/16	1.23	31.2	0.47	11.9	8P-EN
3/4 -14	1 5/16	1.36	34.5	0.62	15.7	12P-EN
1 -11.5	1 5/8	1.62	41.1	0.88	22.4	16P-EN
1 1/4 -11.5	1 7/8	1.70	43.2	1.25	31.8	20P-EN
1 1/2 -11.5	2 1/2	2.08	52.8	1.50	38.1	24P-EN
2 -11.5	2 7/8	2.39	60.7	1.94	49.2	32P-EN



STREET ELBOWS

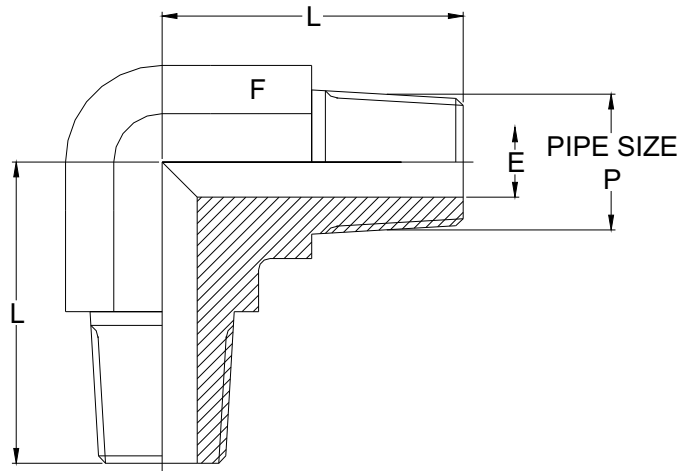


Female NPT Threads X Male NPT Threads

Pipe Size (P) NPT	Hex F	L	L1	E	PART NO.			
Inch	Inch	Inch	(mm)	Inch	(mm)	Inch	(mm)	
1/8 -27	9/16	0.66	16.8	0.80	20.3	0.19	4.8	2P-SEN
1/4 -18	3/4	0.88	22.4	1.09	27.7	0.28	7.1	4P-SEN
3/8 -18	7/8	1.02	25.9	1.22	31.0	0.38	9.6	6P-SEN
1/2 -14	1 1/16	1.23	31.2	1.47	37.3	0.47	11.9	8P-SEN
3/4 -14	1 5/16	1.36	34.5	1.59	40.4	0.62	15.7	12P-SEN
1 -11.5	1 5/8	1.62	41.1	1.97	50.0	0.88	22.4	16P-SEN
1 1/4 -11.5	1 7/8	1.70	43.2	2.38	60.5	1.25	31.8	20P-SEN
1 1/2 -11.5	2 1/2	2.08	52.8	2.64	67.1	1.50	38.1	24P-SEN
2 -11.5	2 7/8	2.39	60.7	3.00	76.2	1.94	49.2	32P-SEN



MALE ELBOWS

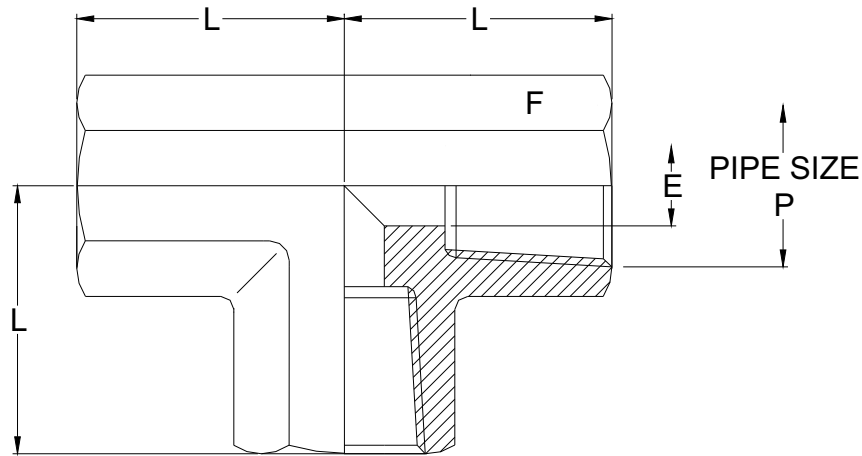


Male NPT Threads X Male NPT Threads

Pipe Size (P) NPT	Hex F	L		E		PART NO.
Inch	Inch	Inch	(mm)	Inch	(mm)	
1/8 -27	9/16	0.80	20.3	0.19	4.8	2P-MEN
1/4 -18	3/4	1.09	27.7	0.28	7.1	4P-MEN
3/8 -18	7/8	1.22	31.0	0.38	9.6	6P-MEN
1/2 -14	1 1/16	1.47	37.3	0.47	11.9	8P-MEN
3/4 -14	1 5/16	1.59	40.4	0.62	15.7	12P-MEN
1 -11.5	1 5/8	1.97	50.0	0.88	22.4	16P-MEN
1 1/4 -11.5	1 7/8	2.38	60.5	1.25	31.8	20P-MEN
1 1/2 -11.5	2 1/2	2.64	67.1	1.50	38.1	24P-MEN
2 -11.5	2 7/8	3.00	76.2	1.94	49.2	32P-MEN



TEES

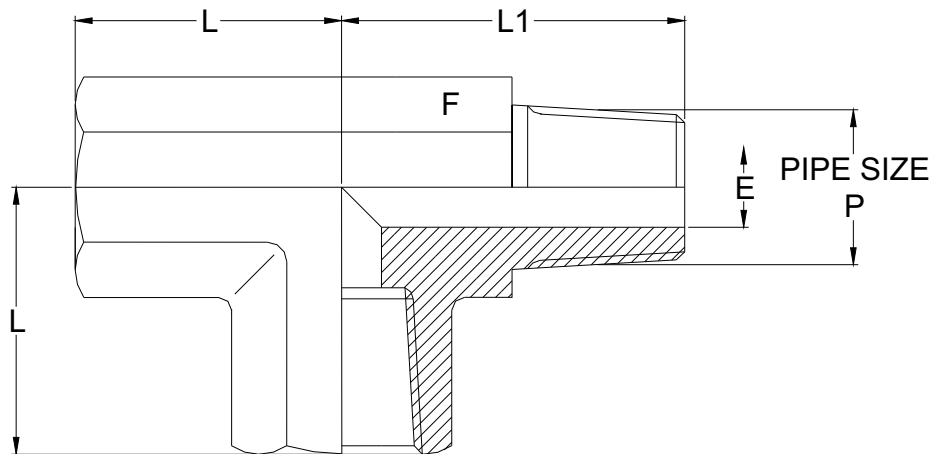


Female NPT Threads

Pipe Size (P) NPT	Hex F	L		E		PART NO.
Inch	Inch	Inch	(mm)	Inch	(mm)	
1/8 -27	9/16	0.66	16.8	0.19	4.8	2P-TN
1/4 -18	3/4	0.88	22.4	0.28	7.1	4P-TN
3/8 -18	7/8	1.02	25.9	0.38	9.6	6P-TN
1/2 -14	1 1/16	1.23	31.2	0.47	11.9	8P-TN
3/4 -14	1 5/16	1.36	34.5	0.62	15.7	12P-TN
1 -11.5	1 5/8	1.62	41.1	0.88	22.4	16P-TN
1 1/4 -11.5	1 7/8	1.70	43.2	1.25	31.8	20P-TN
1 1/2 -11.5	2 1/2	2.08	52.8	1.50	38.1	24P-TN
2 -11.5	2 7/8	2.39	60.7	1.94	49.2	32P-TN



STREET TEES

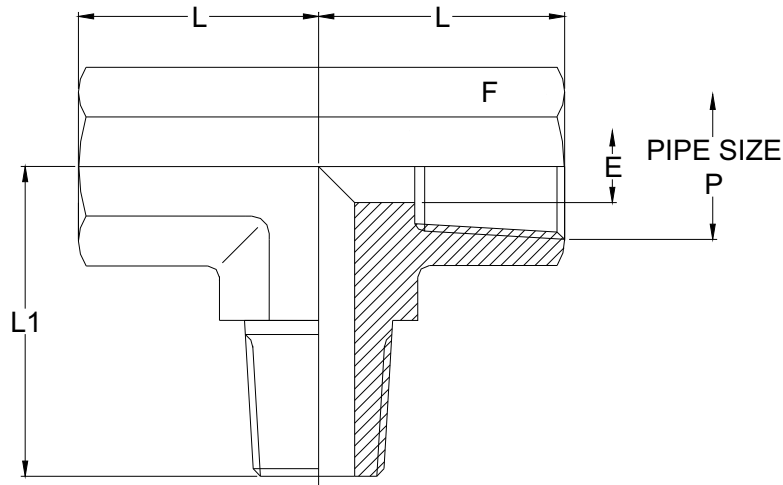


Male And Female NPT Threads

Pipe Size (P) NPT	Hex F	L	L1	E	PART NO.
Inch	Inch	Inch (mm)	Inch (mm)	Inch (mm)	
1/8 -27	9/16	0.66 16.8	0.80 20.3	0.19 4.8	2P-STN
1/4 -18	3/4	0.88 22.4	1.09 27.7	0.28 7.1	4P-STN
3/8 -18	7/8	1.02 25.9	1.22 31.0	0.38 9.6	6P-STN
1/2 -14	1 1/16	1.23 31.2	1.47 37.3	0.47 11.9	8P-STN
3/4 -14	1 5/16	1.36 34.5	1.59 40.4	0.62 15.7	12P-STN
1 -11.5	1 5/8	1.62 41.1	1.97 50.0	0.88 22.4	16P-STN
1 1/4 -11.5	1 7/8	1.70 43.2	2.38 60.5	1.25 31.8	20P-STN
1 1/2 -11.5	2 1/2	2.08 52.8	2.64 67.1	1.50 38.1	24P-STN
2 -11.5	2 7/8	2.39 60.7	3.00 76.2	1.94 49.2	32P-STN



BRANCH TEES

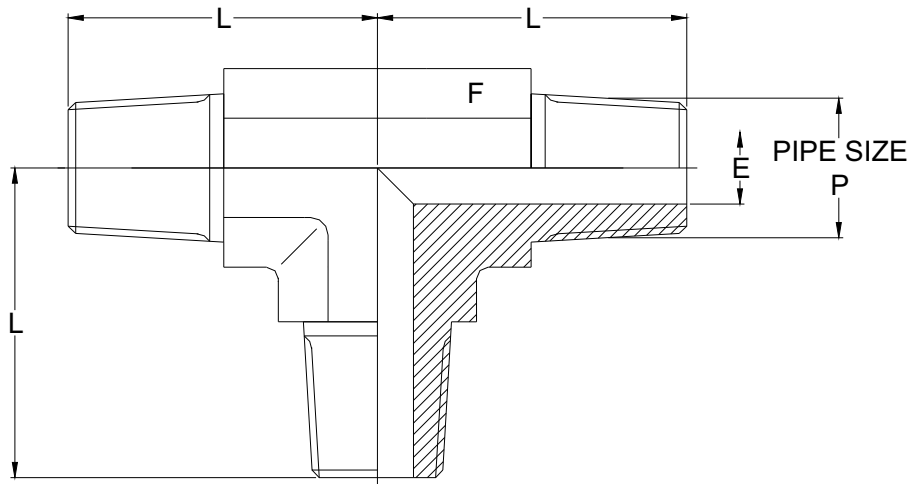


Male And Female NPT Threads

Pipe Size (P) NPT	Hex F	L	L1		E		PART NO.	
Inch	Inch	Inch	(mm)	Inch	(mm)	Inch	(mm)	
1/8 -27	9/16	0.66	16.8	0.80	20.3	0.19	4.8	2P-STN
1/4 -18	3/4	0.88	22.4	1.09	27.7	0.28	7.1	4P-STN
3/8 -18	7/8	1.02	25.9	1.22	31.0	0.38	9.6	6P-STN
1/2 -14	1 1/16	1.23	31.2	1.47	37.3	0.47	11.9	8P-STN
3/4 -14	1 5/16	1.36	34.5	1.59	40.4	0.62	15.7	12P-STN
1 -11.5	1 5/8	1.62	41.1	1.97	50.0	0.88	22.4	16P-STN
1 1/4 -11.5	1 7/8	1.70	43.2	2.38	60.5	1.25	31.8	20P-STN
1 1/2 -11.5	2 1/2	2.08	52.8	2.64	67.1	1.50	38.1	24P-STN
2 -11.5	2 7/8	2.39	60.7	3.00	76.2	1.94	49.2	32P-STN



MALE TEES

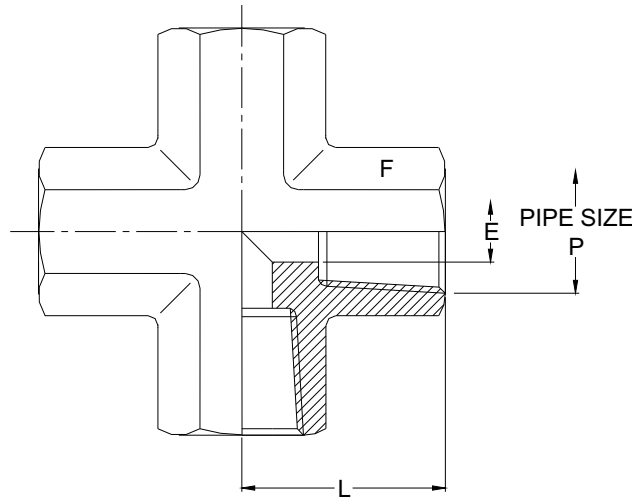


Male NPT Threads

Pipe Size (P) NPT	Hex F	L1		E		PART NO.
Inch	Inch	Inch	(mm)	Inch	(mm)	
1/8 -27	7/16	0.80	20.3	0.19	4.8	2P-MTN
1/4 -18	9/16	1.09	27.7	0.28	7.1	4P-MTN
3/8 -18	11/16	1.22	31.0	0.38	9.6	6P-MTN
1/2 -14	7/8	1.47	37.3	0.47	11.9	8P-MTN
3/4 -14	1 1/16	1.59	40.4	0.62	15.7	12P-MTN
1 -11.5	1 3/8	1.97	50.0	0.88	22.4	16P-MTN
1 1/4 -11.5	1 3/4	2.38	60.5	1.25	31.8	20P-MTN
1 1/2 -11.5	2	2.64	67.1	1.50	38.1	24P-MTN
2 -11.5	2 1/2	3.00	76.2	1.94	49.2	32P-MTN



CROSSES

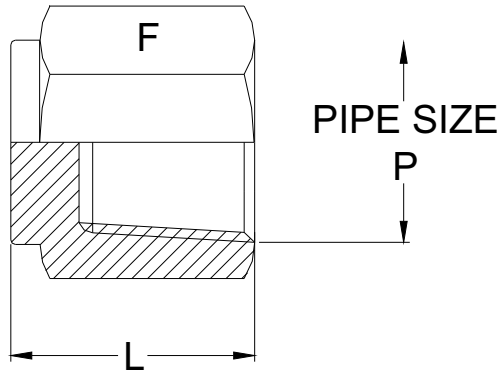


Female NPT Threads

Pipe Size (P) NPT	Hex F	L		E		PART NO.
Inch	Inch	Inch	(mm)	Inch	(mm)	
1/8 -27	9/16	0.66	16.8	0.19	4.8	2P-CSN
1/4 -18	3/4	0.88	22.4	0.28	7.1	4P-CSN
3/8 -18	7/8	1.02	25.9	0.38	9.6	6P-CSN
1/2 -14	1 1/16	1.23	31.2	0.47	11.9	8P-CSN
3/4 -14	1 5/16	1.36	34.5	0.62	15.7	12P-CSN
1 -11.5	1 5/8	1.62	41.1	0.88	22.4	16P-CSN
1 1/4 -11.5	1 7/8	1.70	43.2	1.25	31.8	20P-CSN
1 1/2 -11.5	2 1/2	2.08	52.8	1.50	38.1	24P-CSN
2 -11.5	2 7/8	2.39	60.7	1.94	49.2	32P-CSN

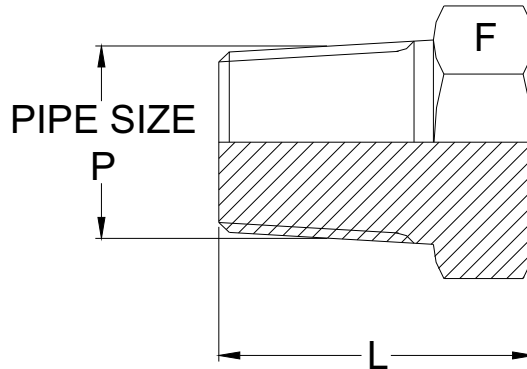


PIPE CAPS



Female NPT Threads

Pipe Size (P) NPT	Hex F	L		PART NO.
Inch	Inch	Inch	(mm)	
1/8 -27	9/16	0.75	19.1	2P-CAP
1/4 -18	3/4	0.91	23.1	4P-CAP
3/8 -18	7/8	1.03	26.2	6P-CAP
1/2 -14	1 1/16	1.34	34.0	8P-CAP
3/4 -14	1 5/16	1.44	36.6	12P-CAP
1 -11.5	1 5/8	1.62	41.1	16P-CAP

**PIPE PLUGS****Male NPT Threads**

Pipe Size (P) NPT	Hex F	L		PART NO.
Inch	Inch	Inch	(mm)	
1/16 -27	5/16	0.75	19.1	1P-PLUG
1/8 -27	7/16	0.75	19.1	2P-PLUG
1/4 -18	9/16	0.96	24.4	4P-PLUG
3/8 -18	11/16	0.99	25.1	6P-PLUG
1/2 -14	7/8	1.21	30.7	8P-PLUG
3/4 -14	1 1/16	1.21	30.7	12P-PLUG
1 -11.5	1 3/8	1.5	38.1	16P-PLUG



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