

P.L.P. Petrochemical and Marine Supply SRL
Tiranti E Raccordi Per L'Industria Petrolchimica

Via R.Bianchi, 71a/73
16152 Genova
Tel 0108680851
Fax 0108680853
E-mail: sales.plp@plp-pipingservice.it

HIGH PRESSURE FORGED STEEL FITTINGS THREADED TYPE

Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM
ISO 9001

Member of CISQ Federation



STEEL FITTINGS FOR HIGH PRESSURE SERVICE

A. TYPE

90° and 45° Elbows	Couplings	Hexagonal Nipples	Hex. Head Plugs
Female/Male Elbows	Red. Couplings	Red. Hex. Nipples	Square Head Plugs
Tees	Half Couplings	Hexagonal Bushings	Round Head Plugs
Crosses	Caps	Bosses	

B. DIMENSIONS

Thread is in accordance with ANSI/ASME B1.20.1.
Threaded fittings are supplied according to classes 2000 - 3000 - 6000.
The relation between fitting class and the pipe schedule is as follows:

Class	2000	Schedule	80 / XS
Class	3000	Schedule	160
Class	6000	Schedule	XXS

C. MATERIAL

ASTM A105	Carbon Steel Forgings.
ASTM A182	Forged or Rolled Alloy-Steel Forged Fittings.
ASTM A350	Carbon and Low-Alloy Steel Forgings.
ASTM B564	Nickel Alloy Forgings.

D. MARKING

ASME	B16.11	Forged Fittings Socket-Welding and Threaded.
BSI	BS.3799	Steel Pipe Fittings threaded and socket-welding.
MSS	SP25	Standard Marking System.
ASTM		A105-A182-A350-B564

For hexagonal head plugs, round head plugs, square head plugs and bushing class stamping is not required. They can be used up to class 6000.

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STEEL FITTINGS FOR HIGH PRESSURE SERVICE

E. DOCUMENTS & CERTIFICATES

EN 10204: 3.1

F. SURFACE AND PROTECTIVE TREATMENTS

Carbon Steel fittings	Phosphatizing treatment - Oil treatment
Alloy and low alloy fittings	Oil treatment
Stainless Steel fittings	Pickling treatment

ARC zinc-coated	According to ASTM B633
Hot dip Galvanizing	According to A153

G. PACKING

packing is made in **CARTONS** or **BAGS**.

H. ORDER INSTRUCTIONS

In order to achieve a better service, customers are kindly requested to clearly indicate the following information in the order as per set below:

Parameter name	Value (examples)
Quantity	N°25
Type of product	90° ELBOWS
Dimension	1.1/2"
Class designation	3000
Threading normative and type	ANSI/ASME B1.20.1 - NPT
Material type and grade	ASTM A182 - Gr. F316L
Dimension normative	ASME B16.11
Normative for protective coating	ASTM A153 - Hot dip Galvanizing
Type of certification	EN 10204: 3.1
request for specific certification by external Bodies	

I. USEFUL INFORMATION

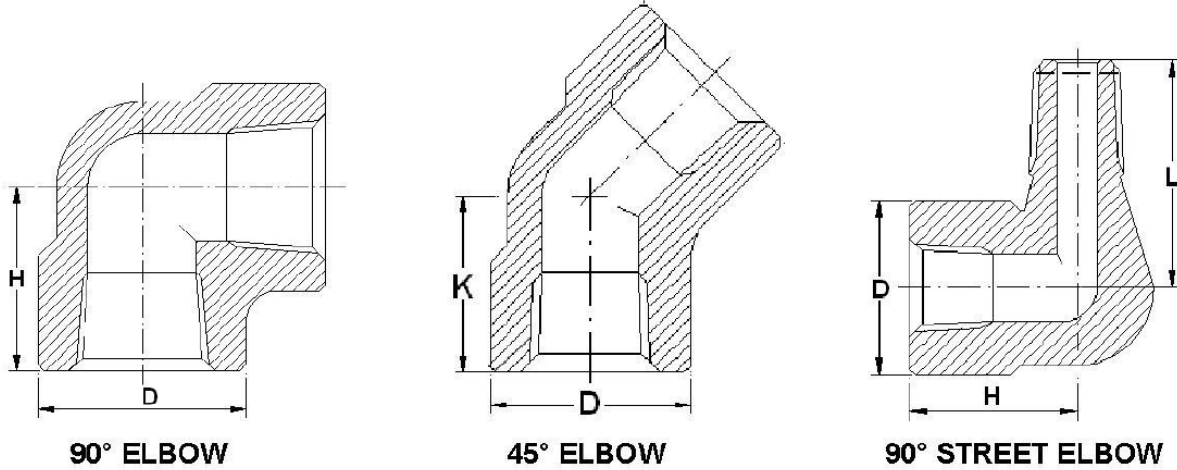
MAINTENANCE

- Do not store pieces in damp areas
- Do not store pieces in contact with water
- Handle all threaded parts with care

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STEEL FITTINGS FOR HIGH PRESSURE SERVICE

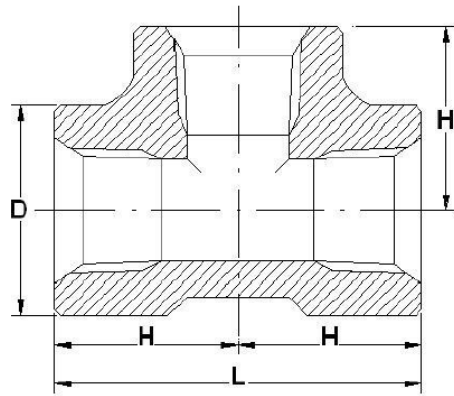


CLASS DESIGN.	NOMINAL SIZE		1/8"	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"	3"	4"
2000	D	MM		26	26	33	38	46	56	62	76	92	110	146
		INCH		1.02	1.02	1.29	1.5	1.81	2.2	2.44	2.99	3.62	4.33	5.75
	H	MM		25	25	29	34	38	45	51	60	76	85	106
		INCH		0.98	0.98	1.14	1.34	1.5	1.77	2.01	2.36	2.99	3.35	4.17
	L	MM		20	20	23	26	29	33	37	43	52	62	76
		INCH		0.79	0.79	0.91	1.02	1.14	1.3	1.46	1.69	2.05	2.44	2.99
3000	D	MM	26	26	33	38	46	56	62	76	84	102	121	153
		INCH	1.02	1.02	1.3	1.5	1.81	2.2	2.44	2.99	3.31	4.02	4.76	6.02
	H	MM	25	25	29	34	38	45	51	60	63	82	95	114
		INCH	0.98	0.98	1.14	1.34	1.5	1.77	2.01	2.36	2.48	3.23	3.74	4.49
	K	MM	20	20	23	26	29	33	37	43	47	56	66	80
		INCH	0.79	0.79	0.91	1.02	1.14	1.3	1.46	1.69	1.85	2.2	2.6	3.15
L	MM	32	32	38	42	48	57	67	72	84				
	INCH	1.26	1.26	1.5	1.65	1.89	2.24	2.64	2.83	3.31				
6000	D	MM		33	38	46	56	62	76	84	102	121	146	153
		INCH		1.3	1.5	1.81	2.2	2.44	2.99	3.31	4.02	4.76	5.75	6.02
	H	MM		29	34	38	45	51	60	63	82	95	106	114
		INCH		1.14	1.34	1.5	1.77	2.01	2.36	2.48	3.23	3.74	4.17	4.49
	K	MM		23	26	29	33	37	43	47	56	66	76	80
		INCH		0.91	1.02	1.14	1.3	1.46	1.69	1.85	2.2	2.6	2.99	3.15

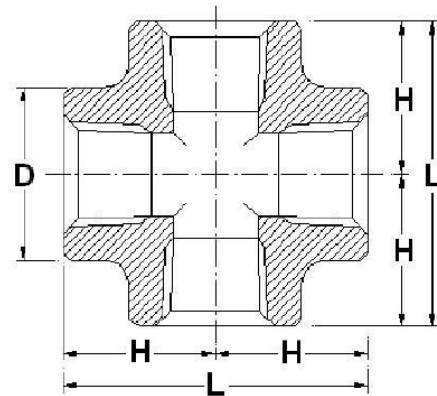
DIMENSIONS IN INCHES
WEIGHTS: SEE APPENDIX PAGE 1

IN ACCORDANCE WITH ANSI-ASME B16.11/BS3799
THREADS: ANSI-ASME B 1.20.1

STEEL FITTINGS FOR HIGH PRESSURE SERVICE



TEE



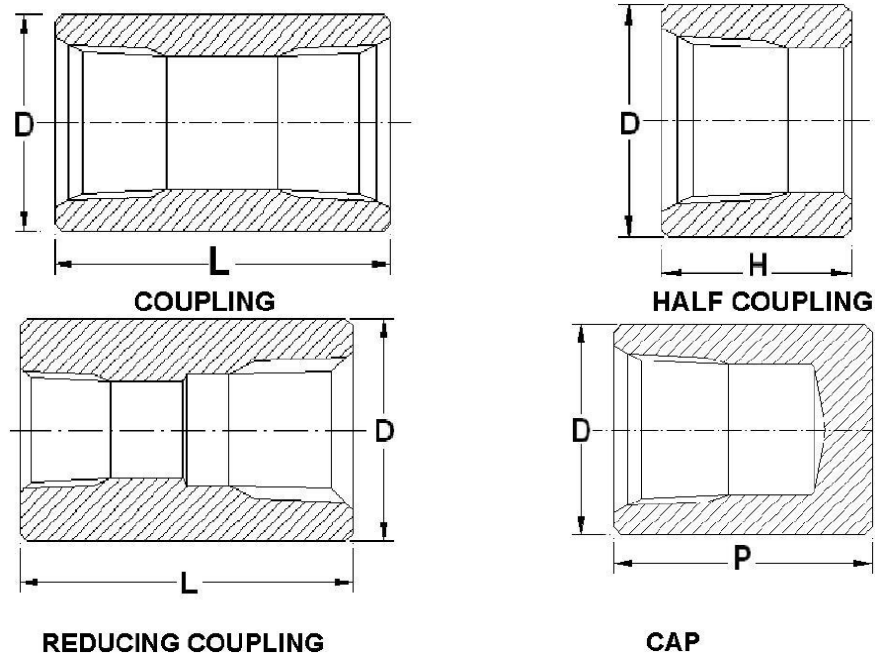
CROSS

CLASS DESIGN.	NOMINAL SIZE														
		1/8"	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"	3"	4"		
2000	D	MM		26	26	33	38	46	56	62	76	92	110	146	
		INCH		1.02	1.02	1.3	1.5	1.81	2.2	2.44	2.99	3.62	4.33	5.75	
	H	MM		25	25	29	34	38	45	51	60	76	85	106	
		INCH		0.98	0.98	1.14	1.34	1.5	1.77	2.01	2.36	2.99	3.35	4.173	
	L	MM		50	50	58	68	76	90	102	120	152	170	212	
		INCH		1.97	1.97	2.28	2.68	2.99	3.54	4.02	4.72	5.98	6.69	8.35	
3000	D	MM	26	26	33	38	46	56	62	76	84	102	121	153	
		INCH	1.02	1.02	1.3	1.5	1.81	2.2	2.44	2.99	3.31	4.02	4.76	6.02	
	H	MM	25	25	29	34	38	45	51	60	63	82	95	114	
		INCH	0.98	0.98	1.14	1.34	1.5	1.77	2.01	2.36	2.48	3.23	3.74	4.49	
	L	MM	50	50	58	68	76	90	102	120	126	164	190	228	
		INCH	1.97	1.97	2.28	2.68	2.99	3.54	4.02	4.72	4.96	6.46	7.48	8.98	
6000	D	MM		33	38	46	56	62	76	84	102	121	146	153	
		INCH		1.3	1.5	1.81	2.2	2.44	2.99	3.31	4.02	4.76	5.75	6.02	
	H	MM		29	34	38	45	51	60	63	82	95	106	114	
		INCH		1.14	1.34	1.50	1.77	2.01	2.36	2.48	3.23	3.74	4.17	4.49	
	L	MM		58	68	76	90	102	120	152	164	190	212	228	
		INCH		2.28	2.68	2.99	3.54	4.02	4.72	5.98	6.46	7.48	835	8.98	

DIMENSIONS IN INCHES
WEIGHTS:SEE APPENDIX PAGE 1

IN ACCORDANCE WITH ANSI-ASME B16.11/BS3799
THREADS: ANSI-ASME B 1.20.1

STEEL FITTINGS FOR HIGH PRESSURE SERVICE

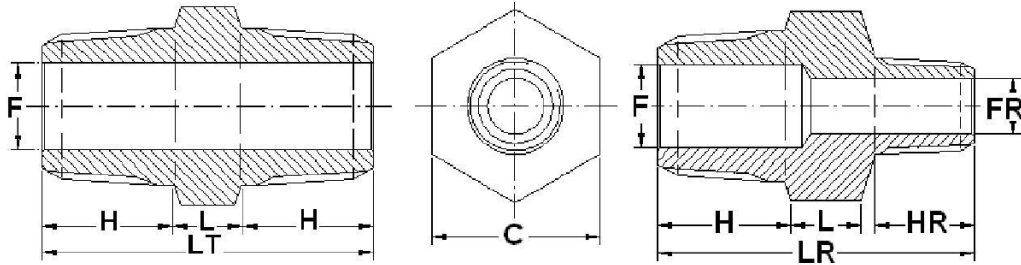


CLASS DESIGN.	NOMINAL SIZE		1/8"	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"	3"	4"	
3 0 0 0	D	MM	19	19	22	29	35	45	57	64	76	92	108	140	
		INCH	0.75	0.75	0.87	1.14	1.38	1.77	2.24	2.52	2.99	3.62	4.25	5.51	
	L	MM	32	35	38	48	51	61	67	80	86	92	108	121	
		INCH	1.26	1.38	1.5	1.89	2.01	2.4	2.64	3.15	3.39	3.62	4.25	4.76	
	H	MM	16	18	19	24	26	31	34	40	43	46	54	61	
		INCH	0.63	0.71	0.75	0.94	1.02	1.22	1.34	1.57	1.69	1.81	2.13	2.4	
	P	MM	23	27	29	36	38	41	45	45	48	61	65	69	
		INCH	0.91	1.06	1.14	1.42	1.5	1.61	1.77	1.77	1.89	2.4	2.56	2.72	
	6 0 0 0	D	MM		26	32	38	45	57	64	76	92	108	127	159
			INCH		1.02	1.26	1.5	1.77	2.24	2.52	2.99	3.62	4.25	5	6.26
L		MM		35	38	48	51	60	67	80	86	92	108	121	
		INCH		1.38	1.50	1.89	2.01	2.36	2.64	3.15	3.39	3.62	4.25	4.76	
H		MM		18	19	24	26	31	34	40	43	46	54	61	
		INCH		0.71	0.75	0.94	1.02	1.22	1.34	1.57	1.69	1.81	2.13	2.40	
P		MM		28	28	34	38	43	46	48	51				
		INCH		1.10	1.10	1.34	1.50	1.69	1.81	1.89	2.01				

DIMENSIONS IN INCHES
WEIGHTS: SEE APPENDIX PAGE 1

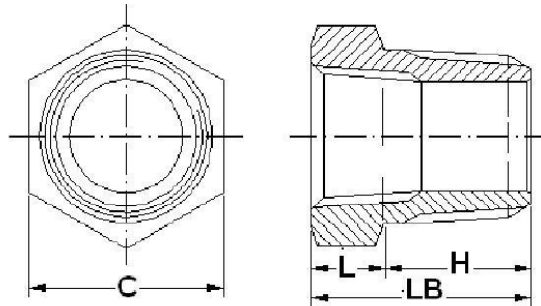
IN ACCORDANCE WITH ANSI-ASME B16.11/BS3799
THREADS: ANSI-ASME B 1.20.1

STEEL FITTINGS FOR HIGH PRESSURE SERVICE



HEXAGONAL NIPPLE

REDUCING HEXAGONAL NIPPLE



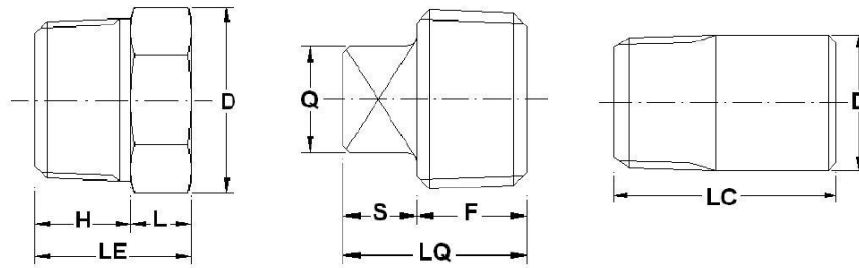
REDUCING BUSHING M/F

CLASS DESIGN	NOMINAL SIZE		1/8"	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"	3"	4"	
3000	C	MM	11	17	19	22	27	36	46	51	64	76	92	118	
		INCH	0.43	0.67	0.75	0.87	1.06	1.42	1.81	2.01	2.52	2.99	3.62	4.65	
	H	MM	12	17	18	22	23	28	29	29	30	42	43	46	
		INCH	0.47	0.67	0.71	0.87	0.91	1.10	1.14	1.14	1.18	1.65	1.69	1.81	
	L	MM	7	8	9	10	11	12	15	16	18	19	20	32	
		INCH	0.28	0.31	0.35	0.39	0.43	0.47	0.59	0.63	0.71	0.75	0.79	1.26	
FR	=F of the D.N. of reducing end														
6000	HR	=H of the D.N. of reducing end													
	LT	MM	31	42	45	54	57	68	73	74	78	103	106	124	
		INCH	1.22	1.65	1.77	2.13	2.24	2.68	2.87	2.91	3.07	4.05	4.17	4.88	
	LR	Variable length working the reduction													
LB	MM		25	27	32	34	40	44	45	48	61	63	78		
	INCH		0.98	1.06	1.26	1.34	1.57	1.73	1.77	1.89	2.40	2.48	3.07		
3000	F	MM	5	7	10	11	15	20	29	33.5	42.5	53.5	66	87	
		INCH	0.20	0.28	0.39	0.43	0.59	0.79	1.14	1.32	1.67	2.11	2.60	3.42	
6000	F	MM	3	4	5	6	11	15	22.5	27.5	38	45	58	80	
		INCH	0.12	0.16	0.20	0.24	0.43	0.59	0.89	1.08	1.50	1.77	2.28	3.15	

DIMENSIONS IN INCHES
WEIGHTS:SEE APPENDIX PAGE 2-4-5

IN ACCORDANCE WITH ANSI-ASME B16.11/BS 3799
THREADS: ANSI-ASME B 1.20.1
BUSHINGS ARE NOT IDENTIFIED BY CLASS, THEY MAY BE
USED FOR RATINGS UP TO CLASS 6000.

STEEL FITTINGS FOR HIGH PRESSURE SERVICE



**HEXAGONAL
HEAD PLUG**

**SQUARE
HEAD PLUG**

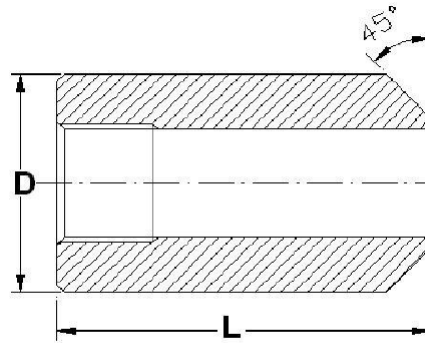
**ROUND
HEAD PLUG**

NOMINAL SIZE		1/8"	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"	3"	4"
	D	MM	11	16	19	22	27	36	46	51	64	76	92
INCH		0.43	0.63	0.75	0.87	1.06	1.42	1.81	2.01	2.52	2.99	3.62	4.65
H	MM	12	17	18	22	22	28	28	29	30	44	45	48
	INCH	0.47	0.67	0.71	0.87	0.87	1.1	1.1	1.14	1.18	1.73	1.77	1.89
L	MM	7	8	9	10	11	12	15	16	18	19	20	32
	INCH	0.28	0.31	0.35	0.39	0.43	0.47	0.59	0.63	0.71	0.75	0.79	1.26
LE	MM	19	25	27	32	33	40	43	45	48	63	65	80
	INCH	0.75	0.98	1.06	1.26	1.3	1.57	1.69	1.77	1.89	2.48	2.56	3.15
Q	MM	7	10	12	14	16	24	28	30	36	38	52	65
	INCH	0.28	0.39	0.47	0.55	0.63	0.94	1.1	1.18	1.42	1.5	2.05	2.56
F	MM	10	15	16	20	20	25	26	26	27	30	32	35
	INCH	0.39	0.59	0.63	0.79	0.79	0.98	1.02	1.02	1.06	1.18	1.26	1.38
S	MM	7	7	8	10	11	13	15	16	18	19	22	32
	INCH	0.28	0.28	0.31	0.39	0.43	0.51	0.59	0.63	0.71	0.75	0.87	1.26
LQ	MM	17	22	24	30	31	38	41	42	45	49	54	67
	INCH	0.67	0.87	0.94	1.18	1.22	1.5	1.61	1.65	1.77	1.93	2.13	2.64
D	MM	10.3	13.8	17.2	21.4	26.7	33.4	42.2	48.3	60.4	73	89	114.3
	INCH	0.41	0.54	0.68	0.84	1.05	1.31	1.66	1.9	2.38	2.87	3.5	4.5
LC	MM	35	42	42	45	45	51	51	51	64	70	70	76
	INCH	1.38	1.65	1.65	1.77	1.77	2.01	2.01	2.01	2.52	2.76	2.76	2.99

DIMENSIONS IN INCHES
WEIGHTS: SEE APPENDIX PAGE 2

IN ACCORDANCE WITH ANSI-ASME B16.11/BS 3799
THREADS: ANSI-ASME B 1.20.1
PLUGS ARE NOT IDENTIFIED BY CLASS, THEY MAY BE
USED FOR RATINGS UP TO CLASS 6000.

STEEL FITTINGS FOR HIGH PRESSURE SERVICE



BOSS

CLASS DESIGN.	NOMINAL SIZE		1/4"	3/8"	1/2"	3/4"	1"	1.1/2"	2"
			3 0 0 0	D	MM	19	22	29	35
		INCH	0.75	0.87	1.14	1.38	1.77	2.52	2.99
	L	MM	41	45	51	51	51	51	51
		INCH	1.61	1.77	2.01	2.01	2.01	2.01	2.01
6 0 0 0	D	MM			38	45	60	76	95
		INCH			1.50	1.77	2.36	2.99	3.74
	L	MM			51	51	51	51	51
		INCH			2.01	2.01	2.01	2.01	2.01
DIMENSIONS IN INCHES			IN ACCORDANCE WITH ANSI-ASME B16.11/BS 3799						
			THREADS: ANSI-ASME B 1.20.1						

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