

High Pressure Pipe Fittings (15,000 psi)



PANAM ENGINEERS LTD.

An ISO 9001:2008 Company

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PANAM

Introduction

PANAM has been in the field of manufacturing precision High Pressure Fittings and Instrumentation valves since the last Three decades. With a team of dedicated specialists **PANAM** has always endeavored to satisfy their customers ever widening demands with unmatched precision.

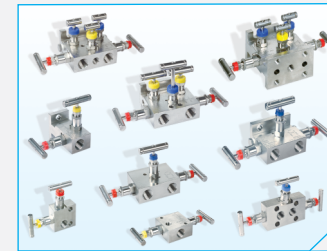
With the latest in-house machinery and infrastructure under one roof, **PANAM** is manufacturing a wide range of High Pressure Fittings and Instrumentation products in different sizes and metals like brass, stainless steel, monel and in various other metals as per the customer's specific requirements. Variety of end connections - Male & Female NPT, BSPP, BSPT, ISO tapered pipe ends, Tube / Pipe socket weld.

PANAM High Pressure Fittings are 100% factory tested and are NACE certified with Heat code traceability. Maximum working pressure upto 15,000 psig (1034 bar) or Higher available upon request

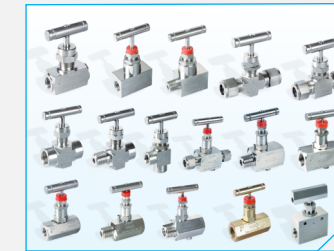
- API ISO 9001:2008 Certified
- API ISO TS 29001 Certified
- API Spec Q1 Certified
- API 6A Certified
- API 6D Certified
- API 600 Certified
- API 602 Certified
- MFG. Facility Approved by ABS Ind.
- ASTM F1387-99
- Leak Test Approved by TUV
- CE Marking



Other Products



2, 3 & 5 Valve Manifolds



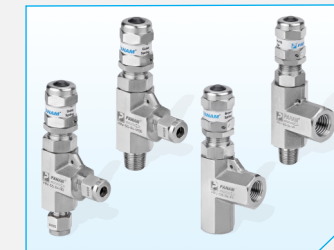
Needle Valves



Ball Valves



Check Valves



Relief Valves



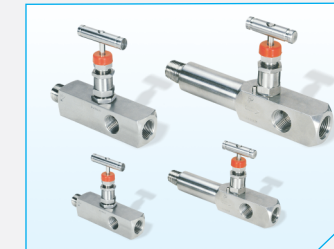
Tube Fittings



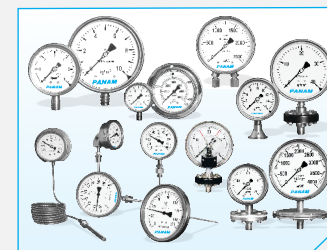
Pipe Fittings



Thermowells



Gauge Root Valves



Pressure, Temperature & Diaphragm Gauges



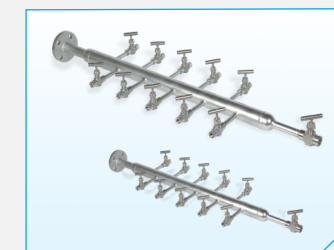
Pressure Transmitters



Pressure Regulators



Double Block & Bleed Valves



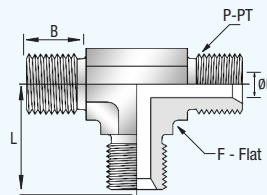
Air Header



Industrial Valves

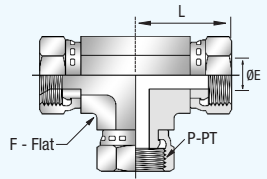
High Pressure Pipe Fittings

Male Tee - ISO Parallel



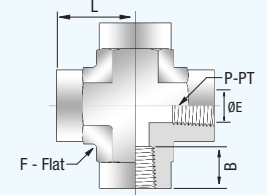
Part No	Pipe Size		Dimensions			
	P-PT, BSPP		L	F	B	E
PMT-2G-SS-15K	1/8		45.5	15.8	9.5	3.0
PMT-4G-SS-15K	1/4		52.5	19.0	14.2	4.8
PMT-6G-SS-15K	3/8		52.5	19.0	14.2	6.0
PMT-8G-SS-15K	1/2		58.0	24.0	19.3	9.0
PMT-12G-SS-10K	3/4		39.5	36.0	22.0	12.0
PMT-16G-SS-10K	1		48.5	42.0	24.0	18.0

Swivel Union Tee



Part No	Pipe Size		Dimensions			
	P-PT, BSPP	P1-PT, BSPP	L	F	B	E
PUT-4GSWL-SS-10K	1/4	1/4	52.5	19.0	11.0	6.0
PUT-6GSWL-SS-10K	3/8	3/8	52.5	19.0	12.0	7.0
PUT-8GSWL-SS-10K	1/2	1/2	58.0	24.0	14.0	9.0
PUT-10GSWL-SS-10K	5/8	5/8	70.0	30.5	16.0	10.0
PUT-12GSWL-SS-10K	3/4	3/4	79.0	36.0	16.0	12.0
PUT-16GSWL-SS-10K	1	1	79.0	36.0	19.0	18.0
PUT-20GSWL-SS-10K	1 1/4	1 1/4	97.0	42.0	20.0	22.0

Female Cross - NPT



Part No	Pipe Size		Dimensions			
	P-PT, NPT		L	F	B	E
PFC-2N-SS-15K	1/8		49.0	19.0	9.5	4.8
PFC-4N-SS-15K	1/4		58.0	24.0	15.5	6.0
PFC-6N-SS-15K	3/8		70.0	30.0	15.5	7.0
PFC-8N-SS-15K	1/2		79.0	36.0	22.0	9.0
PFC-12N-SS-10K	3/4		79.0	36.0	22.0	12.0
PFC-16N-SS-10K	1		97.0	44.5	24.0	18.0

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Features & Ordering Information

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Hex Nipples

ISO Parallel

Hex Nipples

37° JIC x NPT

Hex Nipples

37° JIC Swivel x 37° JIC

Hex Coupling

NPT

Hex Reducing Coupling

ISO Parallel

Hex Plugs

NPT

Pipe Caps

NPT

Male Elbows

NPT

Female Elbows

ISO Parallel

Street Elbows

NPT

Female Tees

ISO Parallel

Swivel Union Tees

Swivel

Male Tees

NPT

Female Cross

NPT

Hex Nipples

NPT

Hex Nipples

NPT x ISO Parallel

Hex Nipples

37° JIC

Hex Nipples

Swivel x ISO Parallel

Hex Long Nipples

NPT x NPT

Hex Nipples

02

Hex Nipples

02

Hex Nipples

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Hex Nipples

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Hex Nipples

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ISO Parallel

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Hex Reducing Coupling

07

Adapters

NPT

Hex Plugs

ISO Parallel

Pipe Caps

ISO Parallel

Male Elbows

ISO Parallel

Swivel Male Elbows

Swivel x ISO Parallel

Street Elbow

ISO Parallel

Male Tee

NPT

Female Cross

NPT

Reducing Hex Nipples

NPT

Hex Nipples

37° JIC

Hex Nipples

Swivel x ISO Parallel

Hex Long Nipples

NPT x NPT

Hex Coupling

ISO Parallel

Hex Coupling

ISO Parallel

Adapters

ISO Parallel

Tube Plugs

37° JIC

Pipe Caps

37° JIC

Female Elbows

NPT

Swivel Union Elbows

Swivel

Female Tees

NPT

Male Tees

ISO Parallel

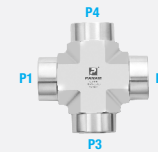
Features

- Size Ranges from 1/16" to 2".
- For smooth flow path elbows are designed with radius junction.
- All Fittings are marked with Size, Material and Heat code for easy source tracing.
- All threads are capped for protection and properly packaged
- Straight fittings are manufactured from bar stock & Forged fittings are manufactured from forgings
- All pipe threads meet the requirement if ASME/ANSI B1.20.1 for tapered pipe threads (NPT)
- Working pressure meets the requirements of ANSI/ASME B31.3 at ambient temperature.

Ordering Information

PANAM **P - HN - 4N - 4N - SS - 15K / 10K (15K - 15,000 PSIG / 10K - 10,000 PSIG)**

Fitting Type	P1 Size	P1 Type	P2, P3, and P4	Material
HN Hex Nipples	1 1/16	N NPT Threads	Specify as per P Type and P Size	SS 316 SS
RHN Reducing Hex Nipples	2 1/8	R ISO Tapered Threads		B Brass
HRN Hex Long Nipples	3 3/16	G ISO Parallel Threads		MO Alloy 400
U Unions	4 1/4	M Metric Threads		INC Alloy 600
HC Hex Couplings	5 5/16-24	S SAE/MS Straight Threads		CS Carbon Steel
RHC Reducing Hex Couplings	6 3/8 or 3/8-24	J 37° Flare		
A Adapters	7 7/16-20	SWL Swivel		
HP Hex Plugs	8 1/2 or M8 x 1	JSWL JIC Swivel		
TP Tube Plugs	9 9/16-18			
PC Pipe Caps	10 M10 x 1			
ME Male Elbows	12 3/4 or 3/4-16 or M12 x 1.5			
FE Female Elbows	14 7/8-14 or M14 x 1.5			
UE Union Elbows	16 1 or M16 x 1.5			
SE Street Elbows	17 1 1/16-12			
FT Female Tees	18 M15 x 1.5			
MT Male Tees	19 1 3/16-12			
UT Union Tees	20 1 1/4 or M20 x 1.5			
FC Female Cross	21 1 5/16-12			
	22 M22 x 1.5			
	24 1 1/2 or M24 x 1.5			
	26 1 5/8-12			
	27 M27 x 2			
	30 1 7/8 or M30 x 2			
	32 2			



P1, P2, P3 & P4 Shall be described in the following orders. For tees the run shall proceed the branch, for cross the run shall proceed the branch

Installation Instructions

To ensure leak proof tight seal, **PANAM** recommends use of pipe thread sealant on all NPT threads. The most effective sealing method is the use of Teflon tape, Tape should be used on male NPT tapered threads. Clean both male and female tapered threads, wrap tape in direction of male tapered, cut off excess tape.

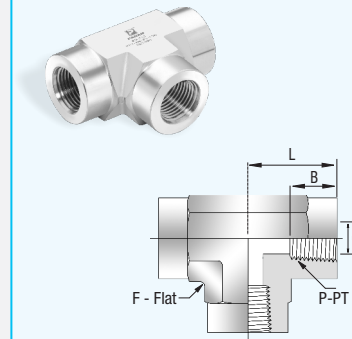
Thread Relevant Standards & Material

Thread Relevant Standards	
NPT Threads	ASME B1.20.1, SAE AS71051
ISO Tapered Threads	ISO 7-1, BS 21, JIS B0203
ISO Parallel Threads	ISO 228, JIS B0202
SAE/MS	ASME B1.1, SAE J475
Metric	ISO 261

Material	Bar Stock	Forging
316 SS	ASTM A276, ASME SA479, EN 1.4401	ASTM A182, ASME SA182, EN 1.4401
304 SS	ASTM A276, ASME SA479, EN 1.4301	ASTM A182, ASME SA182, EN 1.4301
Alloy 400	ASTM B164, ASME SB164	ASTM B564, ASME SB564
Alloy 600	ASTM B166, ASME SB166	ASTM B564, ASME SB564
Brass	ASME B16/ASTM B453	ASTM B283
Carbon Steel	ASTM A108	ASTM A105

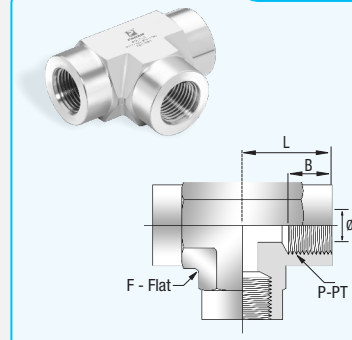
High Pressure Pipe Fittings

Female Tee - NPT



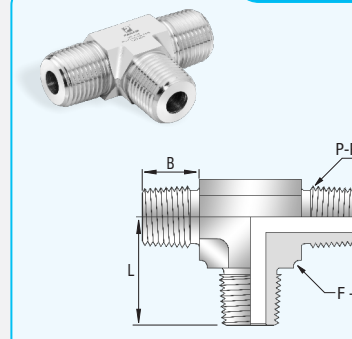
Part No	Pipe Size	Dimensions			
	P-PT, NPT	L	F	B	E
PFT-2N-SS-15K	1/8	52.5	19.0	9.5	4.8
PFT-4N-SS-15K	1/4	58.0	24.0	15.5	6.0
PFT-6N-SS-15K	3/8	70.0	30.5	15.5	7.0
PFT-8N-SS-15K	1/2	79.0	36.0	22.0	9.0
PFT-12N-SS-10K	3/4	39.5	36.0	22.0	12.0
PFT-16N-SS-10K	1	48.5	44.5	24.0	18.0

Female Tee - ISO Parallel



Part No	Pipe Size	Dimensions			
	P-PT, BSPP	L	F	B	E
PFT-2G-SS-15K	1/8	52.5	19.0	9.5	4.8
PFT-4G-SS-15K	1/4	58.0	24.0	15.5	6.0
PFT-6G-SS-15K	3/8	70.0	30.5	15.5	7.0
PFT-8G-SS-15K	1/2	79.0	36.0	19.0	9.0
PFT-12G-SS-10K	3/4	39.5	36.0	22.0	12.0
PFT-16G-SS-10K	1	48.5	44.5	24.0	18.0

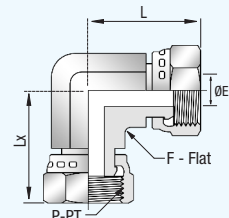
Male Tee - NPT



Part No	Pipe Size	Dimensions			
	P-PT, NPT	L	F	B	E
PMT-2N-SS-15K	1/8	45.5	15.8	9.5	3.0
PMT-4N-SS-15K	1/4	52.5	19.0	14.2	4.8
PMT-6N-SS-15K	3/8	52.5	22.2	14.2	6.0
PMT-8N-SS-15K	1/2	58.0	24.0	19.3	9.0
PMT-12N-SS-10K	3/4	39.5	36.0	22.0	12.0
PMT-16N-SS-10K	1	48.5	42.0	24.0	18.0

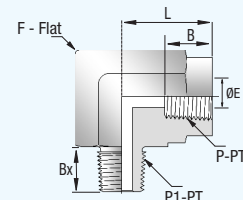
High Pressure Pipe Fittings

Swivel Union Elbow



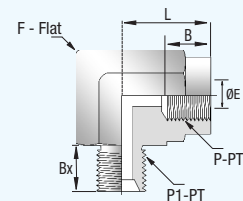
Part No	Pipe Size		Dimensions					
	P-PT, BSPP	P1-PT, BSPP	L	Lx	F	B	E	
PUE-4GSWL-SS-10K	1/4	1/4	28.0	28.0	19.5	11.0	6.0	
PUE-6GSWL-SS-10K	3/8	3/8	28.0	28.0	19.5	12.0	7.0	
PUE-8GSWL-SS-10K	1/2	1/2	29.0	29.0	24.0	14.0	9.0	
PUE-10GSWL-SS-10K	5/8	5/8	35.0	35.0	30.5	16.0	10.0	
PUE-12GSWL-SS-10K	3/4	3/4	39.5	39.5	36.0	16.0	12.0	
PUE-16GSWL-SS-10K	1	1	39.5	39.5	36.0	19.0	18.0	
PUE-20GSWL-SS-10K	1 1/4	1 1/4	48.5	48.5	42.0	20.0	22.0	
PUE-24GSWL-SS-10K	1 1/2	1 1/2	48.5	48.5	42.0	22.0	24.0	

Street Elbow - NPT



Part No	Pipe Size		Dimensions					
	P-PT, NPT	P1-PT, NPT	L	F	B	Bx	E	
PSE-2N-SS-15K	1/8	1/8	28.0	19.0	9.5	9.5	3.0	
PSE-4N-SS-15K	1/4	1/4	29.0	24.0	14.2	15.5	4.8	
PSE-6N-SS-15K	3/8	3/8	35.0	30.5	14.2	15.5	6.0	
PSE-8N-SS-15K	1/2	1/2	39.5	36.0	19.3	22.0	9.0	
PSE-12N-SS-10K	3/4	3/4	39.5	36.0	19.3	19.3	12.0	
PSE-16N-SS-15K	1	1	48.5	44.5	24.0	24.0	18.0	

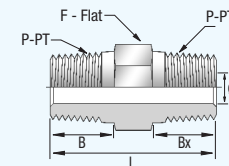
Street Elbow - ISO Parallel



Part No	Pipe Size		Dimensions					
	P-PT, BSPP	P1-PT, BSPP	L	F	B	Bx	E	
PSE-2G-SS-15K	1/8	1/8	28.0	19.0	9.5	9.5	3.0	
PSE-4G-SS-15K	1/4	1/4	29.0	24.0	14.2	15.5	4.8	
PSE-6G-SS-15K	3/8	3/8	35.0	30.5	14.2	15.5	6.0	
PSE-8G-SS-15K	1/2	1/2	39.5	36.0	19.3	19.3	9.0	
PSE-12G-SS-10K	3/4	3/4	39.5	36.0	19.3	19.3	12.0	
PSE-16G-SS-10K	1	1	48.5	44.5	24.0	24.0	18.0	

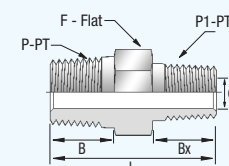
High Pressure Pipe Fittings

Hex Nipples - NPT



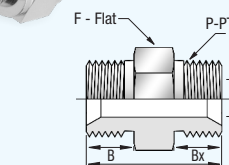
Part No	Pipe Size		Dimensions				
	P-PT, NPT		L	F	B	Bx	E
PHN-2N-SS-15K	1/8		44.5	14.0	9.5	9.5	3.0
PHN-4N-SS-15K	1/4		47.6	15.8	14.2	14.2	4.8
PHN-6N-SS-15K	3/8		50.8	22.2	14.2	14.2	6.0
PHN-8N-SS-15K	1/2		54.0	25.4	19.3	19.3	9.0
PHN-12N-SS-10K	3/4		60.3	28.5	19.3	19.3	12.0
PHN-16N-SS-10K	1		66.6	35.0	24.0	24.0	18.0

Reducing Hex Nipples - NPT



Part No	Pipe Size		Dimensions				
	P-PT, NPT	P1-PT, NPT	L	F	B	Bx	E
PRHN-4N-2N-SS-15K	1/4	1/8	32.9	15.8	14.2	9.7	3.0
PRHN-4N-6N-SS-15K	1/4	3/8	50.8	15.8	14.2	14.2	4.8
PRHN-6N-2N-SS-15K	3/8	1/8	34.1	22.2	14.2	9.7	3.0
PRHN-6N-4N-SS-15K	3/8	1/4	38.6	22.2	14.2	14.2	4.8
PRHN-8N-2N-SS-15K	1/2	1/8	40.2	25.4	19.3	9.5	3.0
PRHN-8N-4N-SS-15K	1/2	1/4	44.7	25.4	19.3	14.2	4.8
PRHN-8N-6N-SS-15K	1/2	3/8	50.8	25.4	19.3	14.2	6.0
PRHN-12N-2N-SS-10K	3/4	1/8	42.4	28.5	19.3	9.5	3.0
PRHN-12N-4N-SS-10K	3/4	1/4	46.9	28.5	19.3	14.2	4.8
PRHN-12N-6N-SS-10K	3/4	3/8	46.9	28.5	19.3	14.2	6.0
PRHN-12N-8N-SS-10K	3/4	1/2	51.8	28.5	19.3	19.3	9.0
PRHN-16N-2N-SS-10K	1	1/8	49.8	35.0	24.0	9.5	3.0
PRHN-16N-4N-SS-10K	1	1/4	54.3	35.0	24.0	14.2	4.8
PRHN-16N-6N-SS-10K	1	3/8	54.3	35.0	24.0	14.2	6.0
PRHN-16N-8N-SS-10K	1	1/2	59.2	35.0	24.0	19.3	9.0
PRHN-16N-12N-SS-10K	1	3/4	59.2	35.0	24.0	19.3	12.0

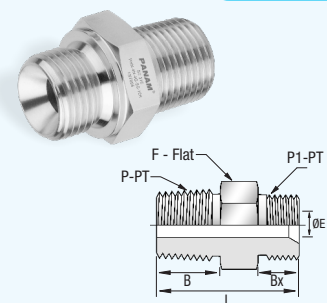
Hex Nipples - ISO Parallel



Part No	Pipe Size		Dimensions				
	P-PT, BSPP		L	F	B	Bx	E
PHN-2G-SS-15K	1/8		23.5	14.0	8.0	8.0	3.0
PHN-4G-SS-15K	1/4		31.5	19.0	11.0	11.0	4.8
PHN-6G-SS-15K	3/8		34.7	22.0	12.0	12.0	6.0
PHN-8G-SS-15K	1/2		40.7	27.0	14.0	14.0	9.0
PHN-10G-SS-10K	5/8		45.2	30.0	16.0	16.0	10.0
PHN-12G-SS-10K	3/4		45.2	32.0	16.0	16.0	12.0
PHN-16G-SS-10K	1		51.9	41.0	19.0	19.0	18.0
PHN-20G-SS-10K	1 1/4		61.4	50.0	20.0	20.0	22.0
PHN-24G-SS-10K	1 1/2		67.4	55.0	22.0	22.0	24.0
PHN-32G-SS-10K	2		76.4	70.0	25.0	25.0	24.0

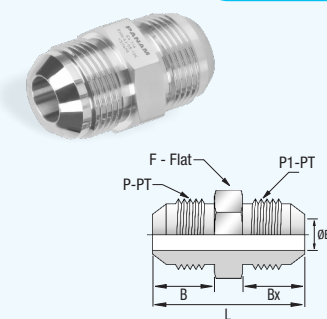
High Pressure Pipe Fittings

Hex Nipples - NPT x ISO Parallel



Part No	Pipe Size		Dimensions					
	P-PT, NPT	P1-PT, BSPP	L	F	B	Bx	E	
PHN-2N-2G-SS-15K	1/8	1/8	7.1	14.2	9.5	7.1	4.3	
PHN-2N-4G-SS-15K	1/8	1/4	11.2	19.0	9.5	11.2	4.3	
PHN-4N-2G-SS-15K	1/4	1/8	7.1	15.8	14.2	7.1	4.3	
PHN-4N-4G-SS-15K	1/4	1/4	11.2	19.0	14.2	11.2	5.8	
PHN-4N-6G-SS-15K	1/4	3/8	11.2	22.2	14.2	11.2	6.3	
PHN-4N-8G-SS-15K	1/4	1/2	14.2	27.0	14.2	14.2	5.8	
PHN-6N-4G-SS-15K	3/8	1/4	11.2	22.2	14.2	11.2	5.8	
PHN-6N-6G-SS-15K	3/8	3/8	11.2	22.2	14.2	11.2	8.1	
PHN-6N-8G-SS-15K	3/8	1/2	14.2	27.0	14.2	14.2	8.1	
PHN-8N-4G-SS-15K	1/2	1/4	11.2	25.4	19.3	11.2	5.8	
PHN-8N-6G-SS-15K	1/2	3/8	11.2	25.4	19.3	11.2	8.1	
PHN-8N-8G-SS-15K	1/2	1/2	14.2	27.0	19.3	14.2	10.2	
PHN-8N-10G-SS-10K	1/2	5/8	14.2	30.0	19.3	14.2	10.4	
PHN-8N-12G-SS-10K	1/2	3/4	15.7	32.0	19.3	15.8	10.4	
PHN-12N-8G-SS-10K	3/4	1/2	14.2	28.5	19.3	14.2	13.4	
PHN-12N-12G-SS-10K	3/4	3/4	15.7	33.3	19.3	15.8	13.4	
PHN-12N-16G-SS-10K	3/4	1	18.3	41.0	19.3	18.3	13.4	
PHN-16N-8G-SS-10K	1	1/2	14.2	41.0	24.0	14.2	11.9	
PHN-16N-12G-SS-10K	1	3/4	15.7	41.0	24.0	15.8	13.4	
PHN-16N-16G-SS-10K	1	1	18.3	41.0	24.0	18.3	17.0	
PHN-16N-20G-SS-10K	1	1 1/4	18.5	50.0	24.0	18.6	17.0	

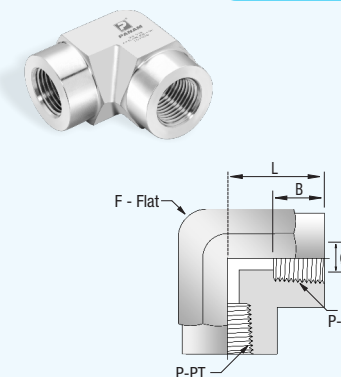
Hex Nipples - 37° JIC x 37° JIC



Part No	Tube Size				Dimensions				
	Inch	P-PT, JIC / UNF	Inch	P1-PT, JIC / UNF	L	F	B	Bx	E
PHN-4J-SS-15K	1/4	7/16-20	1/4	7/16-20	34.8	19.0	14.0	14.0	4.3
PHN-5J-SS-15K	5/16	1/2-20	5/16	1/2-20	34.8	14.2	14.0	14.1	5.8
PHN-6J-SS-15K	3/8	9/16-18	3/8	9/16-18	35.8	15.8	14.2	14.2	6.6
PHN-8J-SS-15K	1/2	3/4-16	1/2	3/4-16	41.1	20.6	16.8	16.8	9.1
PHN-10J-SS-10K	5/8	7/8-14	5/8	7/8-14	47.8	23.8	19.3	19.3	10.7
PHN-12J-SS-10K	3/4	1 1/16-12	3/4	1 1/16-12	54.9	28.5	21.8	21.8	13.2
PHN-16-SS-10K	1	1 5/16-12	1	1 5/16-12	57.1	35.0	23.1	23.1	17.0
PHN-6J-4J-SS-10K	3/8	9/16-18	1/4	7/16-20	35.6	15.8	14.2	14.2	4.3
PHN-8J-4J-SS-15K	1/2	3/4-16	1/4	7/16-20	38.4	20.6	16.8	16.8	4.3
PHN-12J-10J-SS-10K	1/2	3/4-16	3/8	9/16-18	38.6	20.6	16.8	16.8	6.6

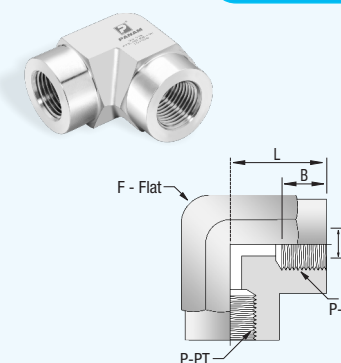
High Pressure Pipe Fittings

Female Elbow - NPT



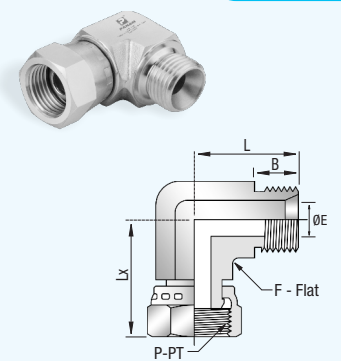
Part No	Pipe Size		Dimensions			
	P-PT, NPT	L	F	B	E	
PFE-2N-SS-15K	1/8	23.5	19.0	9.5	4.8	
PFE-4N-SS-15K	1/4	28.0	24.0	15.5	6.0	
PFE-6N-SS-15K	3/8	28.0	30.5	15.5	7.0	
PFE-8N-SS-15K	1/2	29.0	36.0	22.0	9.0	
PFE-12N-SS-10K	3/4	39.5	36.0	22.0	12.0	
PFE-16N-SS-10K	1	48.5	44.5	24.0	18.0	

Female Elbow - ISO Parallel



Part No	Pipe Size		Dimensions			
	P-PT, BSPP	L	F	B	E	
PFE-2G-SS-15K	1/8	23.5	19.0	9.5	4.8	
PFE-4G-SS-15K	1/4	28.0	24.0	15.5	6.0	
PFE-6G-SS-15K	3/8	28.0	30.5	15.5	7.0	
PFE-8G-SS-15K	1/2	29.0	36.0	19.0	9.0	
PFE-12G-SS-10K	3/4	39.5	36.0	22.0	12.0	
PFE-16G-SS-10K	1	48.5	44.5	24.0	18.0	

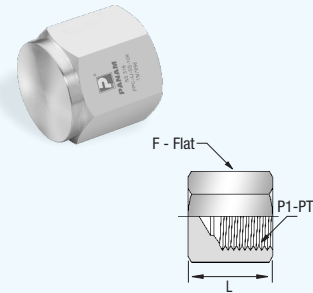
Swivel Male Elbow - Swivel x ISO Parallel



Part No	Pipe Size		Dimensions				
	P-PT, BSPP	P1-PT, BSPP	L	Lx	F	B	E
PME-2GSWL-2G-SS-10K	1/8	1/8	23.5	23.5	15.8	8.0	4.8
PME-4GSWL-4G-SS-10K	1/4	1/4	28.0	28.0	19.5	11.0	6.0
PME-6GSWL-6G-SS-10K	3/8	3/8	28.0	28.0	19.5	12.0	7.0
PME-8GSWL-8G-SS-10K	1/2	1/2	29.0	29.0	24.0	14.0	9.0
PME-10GSWL-10G-SS-10K	5/8	5/8	35.0	35.0	30.5	16.0	10.0
PME-12GSWL-12G-SS-10K	3/4	3/4	39.5	39.5	36.0	16.0	12.0
PME-16GSWL-16G-SS-10K	1	1	39.5	39.5	36.0	19.0	18.0
PME-20GSWL-20G-SS-10K	1 1/4	1 1/4	48.5	48.5	42.0	20.0	22.0
PME-24GSWL-24G-SS-10K	1 1/2	1 1/2	48.5	48.5	42.0	22.0	24.0

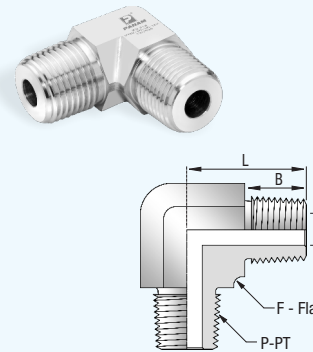
High Pressure Pipe Fittings

Pipe Cap - 37° JIC



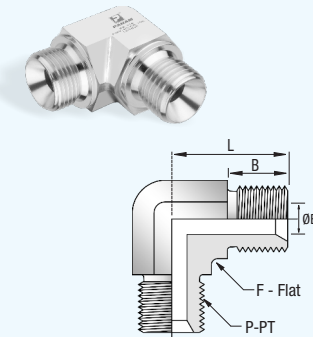
Part No	Tube Size		Dimensions	
	Inch	P-PT, JIC / UNF	L	F
PPC-4J-SS-10K	1/4	7/16-20	17.0	14.3
PPC-5J-SS-10K	5/16	1/2-20	19.6	15.9
PPC-6J-SS-10K	3/8	9/16-18	20.6	17.5
PPC-8J-SS-10K	1/2	3/4-16	23.9	22.2
PPC-10J-SS-10K	5/8	7/8-14	27.2	25.4
PPC-12J-SS-10K	3/4	1 1/16-12	31.5	31.8
PPC-16J-SS-10K	1	1 5/16-12	32.8	38.1

Male Elbow - NPT



Part No	Pipe Size	Dimensions				
	P-PT, NPT	L	Lx	F	B	E
PME-2N-SS-15K	1/8	23.5	23.5	15.8	9.5	3.0
PME-4N-SS-15K	1/4	28.0	28.0	19.5	14.2	4.8
PME-6N-SS-15K	3/8	28.0	28.0	22.5	14.2	6.0
PME-8N-SS-15K	1/2	29.0	29.0	24.0	19.3	9.0
PME-12N-SS-10K	3/4	35.0	35.0	30.5	19.3	12.0
PME-16N-SS-10K	1	48.5	48.5	42.0	24.0	18.0

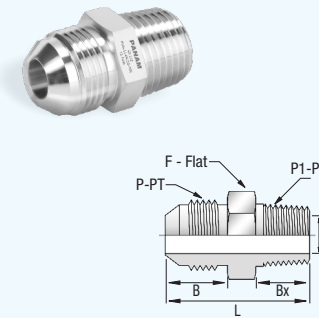
Male Elbow - ISO Parallel



Part No	Pipe Size	Dimensions				
	P-PT, BSPP	L	Lx	F	B	E
PME-2G-SS-15K	1/8	23.5	23.5	15.8	9.0	3.0
PME-4G-SS-15K	1/4	28.0	28.0	19.5	11.0	4.8
PME-6G-SS-15K	3/8	28.0	28.0	22.5	11.0	6.0
PME-8G-SS-15K	1/2	29.0	29.0	24.0	13.5	9.0
PME-12G-SS-10K	3/4	35.0	35.0	30.5	19.3	12.0
PME-16G-SS-10K	1	48.5	48.5	42.0	24.0	18.0

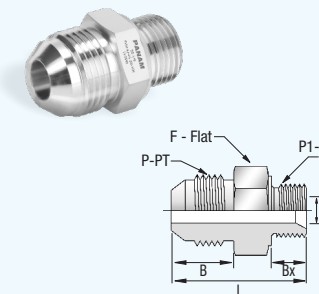
High Pressure Pipe Fittings

Hex Nipples - 37° JIC x NPT



Part No	Tube Size		Pipe Size	Dimensions				
	Inch	P-PT, JIC / UNF	P1-PT, NPT	L	F	B	Bx	E
PHN-2J-4N-SS-10K	1/8	5/16-24	1/4	33.5	14.3	14.2	11.4	1.5
PHN-4J-4N-SS-15K	1/4	7/16-20	1/4	36.1	15.0	14.2	14.0	4.3
PHN-4J-6N-SS-15K	1/4	7/16-20	3/8	36.1	22.2	14.2	14.0	4.3
PHN-4J-8N-SS-15K	1/4	7/16-20	1/2	42.7	28.6	19.3	14.0	4.3
PHN-6J-4N-SS-15K	3/8	9/16-18	1/4	36.3	15.8	14.2	14.2	6.6
PHN-6J-6N-SS-15K	3/8	9/16-18	3/8	36.3	22.2	14.2	14.2	6.6
PHN-6J-8N-SS-15K	3/8	9/16-18	1/2	42.9	25.4	19.3	14.2	6.6
PHN-8J-4N-SS-15K	1/2	3/4-16	1/4	38.9	20.5	14.2	16.8	9.1
PHN-8J-6N-SS-15K	1/2	3/4-16	3/8	38.9	22.2	14.2	16.8	9.1
PHN-8J-8N-SS-15K	1/2	3/4-16	1/2	45.5	28.5	19.3	16.8	9.1
PHN-8J-12N-SS-10K	1/2	3/4-16	3/4	47.0	28.5	19.3	16.8	9.1
PHN-12J-8N-SS-10K	3/4	1 1/16-12	1/2	52.3	28.5	19.3	21.8	13.2
PHN-12J-12N-SS-10K	3/4	1 1/16-12	3/4	52.3	28.5	19.3	21.8	13.2
PHN-16J-6N-SS-10K	1	1 5/16-12	3/8	48.8	35.0	14.2	23.1	17.0
PHN-16J-8N-SS-10K	1	1 5/16-12	1/2	53.6	35.0	19.3	23.1	17.0
PHN-16J-12N-SS-10K	1	1 5/16-12	3/4	53.6	35.0	14.2	23.1	17.0
PHN-16J-16N-SS-10K	1	1 5/16-12	1	58.4	35.0	24.0	23.1	17.0

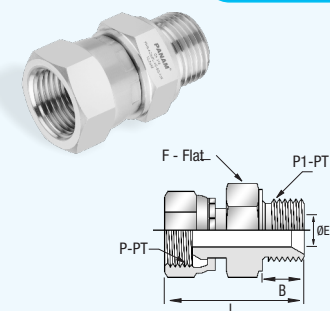
Hex Nipples - 37° JIC x ISO Parallel



Part No	Tube Size		Pipe Size	Dimensions				
	Inch	P-PT, JIC / UNF	P1-PT, BSPP	L	F	B	Bx	E
PHN-4J-4G-SS-15K	1/4	7/16-20	1/4	31.8	15.8	14.0	11.2	4.3
PHN-4J-6G-SS-15K	1/4	7/16-20	3/8	33.0	22.2	14.0	11.2	4.3
PHN-4J-8G-SS-15K	1/4	7/16-20	1/2	38.6	28.6	14.0	14.2	4.3
PHN-6J-6G-SS-15K	3/8	9/16-18	3/8	33.0	22.2	14.2	11.2	6.6
PHN-8J-8G-SS-15K	1/2	3/4-16	1/2	41.4	28.6	16.8	14.2	9.9
PHN-8J-12G-SS-10K	1/4	7/16-20	3/4	39.4	33.3	14.0	15.7	4.3

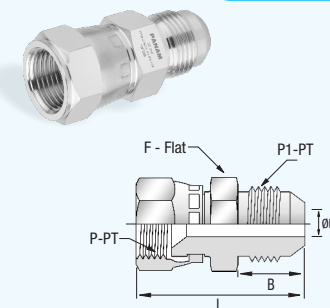
High Pressure Pipe Fittings

Hex Nipples - Swivel x ISO Parallel



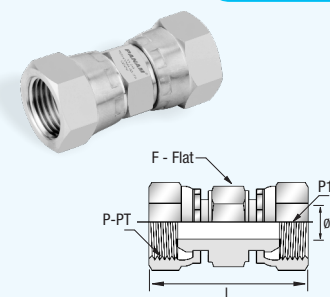
Part No	Pipe Size		Dimensions			
	P-PT, BSPP	P1-PT, BSPP	L	F	B	E
PHN-4GSWL-4G-SS-10K	1/4	1/4	36.6	19.0	11.0	6.0
PHN-4GSWL-6G-SS-10K	1/4	3/8	38.5	22.0	11.0	6.0
PHN-4GSWL-8G-SS-10K	1/4	1/2	42.0	27.0	11.0	6.0
PHN-6GSWL-4G-SS-10K	3/8	1/4	38.3	22.0	12.0	7.0
PHN-6GSWL-6G-SS-10K	3/8	3/8	40.0	22.0	12.0	7.0
PHN-6GSWL-8G-SS-10K	3/8	1/2	43.6	27.0	14.0	7.0
PHN-8GSWL-6G-SS-10K	1/2	3/8	43.5	27.0	14.0	9.0
PHN-8GSWL-8G-SS-10K	1/2	1/2	46.1	27.0	14.0	9.0
PHN-8GSWL-12G-SS-10K	1/2	3/4	48.0	32.0	14.0	9.0
PHN-12GSWL-8G-SS-10K	3/4	1/2	48.6	32.0	16.0	12.0
PHN-12GSWL-12G-SS-10K	3/4	3/4	50.0	32.0	16.0	12.0
PHN-12GSWL-16G-SS-10K	3/4	1	54.3	41.0	16.0	12.0
PHN-16GSWL-16G-SS-10K	1	1	57.3	41.0	19.0	18.0

Hex Nipples - 37° JIC Swivel x 37° JIC



Part No	Tube OD (P-PT)		P1-PT		Dimensions			
	inch	JIC/UNF	inch	JIC/UNF	L	F	B	E
PHN-4JSWL-4J-SS-10K	1/4	7/16-20	1/4	7/16-20	28.4	14.3	14.0	4.3
PHN-4JSWL-6J-SS-10K	1/4	7/16-20	3/8	9/16-18	32.8	17.5	14.0	4.3
PHN-4JSWL-8J-SS-10K	1/4	7/16-20	1/2	3/4-16	34.0	23.8	14.0	4.3
PHN-5JSWL-4J-SS-10K	5/16	1/2-20	1/4	7/16-20	30.0	14.3	14.0	5.8
PHN-6JSWL-4J-SS-10K	3/8	9/16-18	1/4	7/16-20	30.7	14.3	14.2	6.6
PHN-6JSWL-6J-SS-10K	3/8	9/16-18	3/8	9/16-18	33.0	17.5	14.2	6.6
PHN-6JSWL-8J-SS-10K	3/8	9/16-18	1/2	3/4-16	35.1	23.8	14.2	6.6
PHN-8JSWL-4J-SS-10K	1/2	3/4-16	1/4	7/16-20	33.3	20.6	16.8	9.1
PHN-8JSWL-6J-SS-10K	1/2	3/4-16	3/8	9/16-18	35.6	20.6	16.8	9.1
PHN-8JSWL-8J-SS-10K	1/2	3/4-16	1/2	3/4-16	35.6	23.8	16.8	9.1
PHN-8JSWL-12J-SS-10K	1/2	3/4-16	3/4	1 1/16-12	38.1	31.8	16.8	9.1

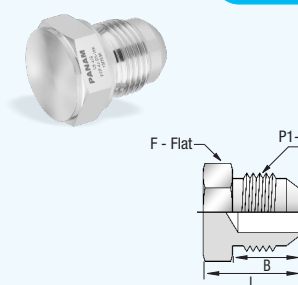
Swivel Union - ISO Parallel



Part No	Pipe Size		Dimensions		
	P-PT, BSPP	P1-PT, BSPP	L	F	E
PSU-4GSWL-SS-10K	1/4	1/4	23.1	14.3	4.3
PSU-6GSWL-4GSWL-SS-10K	3/8	1/4	26.4	17.5	4.3
PSU-6GSWL-SS-10K	3/8	3/8	28.7	17.5	7.6
PSU-8GSWL-4GSWL-SS-10K	1/2	1/4	31.2	23.8	4.3
PSU-8GSWL-6GSWL-SS-10K	1/2	3/8	31.2	23.8	7.6
PSU-8GSWL-SS-10K	1/2	1/2	32.8	23.8	9.9
PSU-12GSWL-SS-10K	3/4	3/4	41.1	31.8	14.2
PSU-16GSWL-SS-10K	1	1	42.2	38.1	19.0

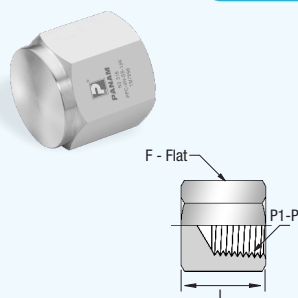
High Pressure Pipe Fittings

Tube Plug - 37° JIC



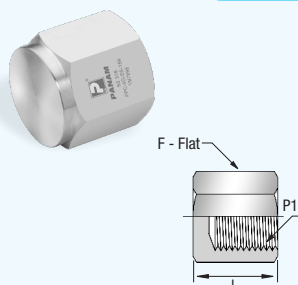
Part No	Tube Size		Dimensions		
	Inch	P-PT, JIC / UNF	L	F	B
PTP-4J-SS-10K	1/4	7/16-20	20.3	12.7	20.3
PTP-5J-SS-10K	5/16	1/2-20	20.3	14.2	20.3
PTP-6J-SS-10K	3/8	9/16-18	21.3	15.8	21.3
PTP-8J-SS-10K	1/2	3/4-16	23.9	20.6	23.9
PTP-10J-SS-10K	5/8	7/8-14	27.9	23.8	27.9
PTP-12J-SS-10K	3/4	1 1/16-12	32.5	28.6	32.5
PTP-16J-SS-10K	1	1 5/16-12	33.8	34.9	33.8

Pipe Cap - NPT



Part No	Pipe Size	Dimensions	
	P-PT, NPT	L	F
PPC-2N-SS-15K	1/8	19.1	16.0
PPC-4N-SS-15K	1/4	25.4	19.1
PPC-6N-SS-15K	3/8	25.4	25.4
PPC-8N-SS-15K	1/2	31.8	35.1
PPC-12N-SS-10K	3/4	38.1	35.1
PPC-16N-SS-10K	1	42.7	44.5

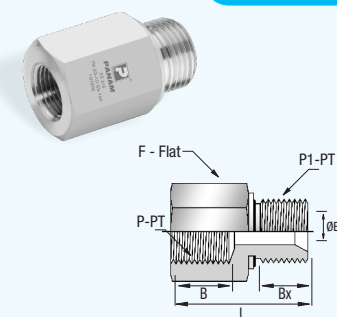
Pipe Cap - ISO Parallel



Part No	Pipe Size	Dimensions		
	P-PT, BSPP	L	F	B
PPC-2G-SS-15K	1/8	19.1	16.0	9.5
PPC-4G-SS-15K	1/4	25.4	19.1	14.2
PPC-6G-SS-15K	3/8	25.4	25.4	14.2
PPC-8G-SS-15K	1/2	31.8	35.1	19.3
PPC-12G-SS-10K	3/4	38.1	35.1	19.3
PPC-16G-SS-10K	1	42.7	44.5	24.0

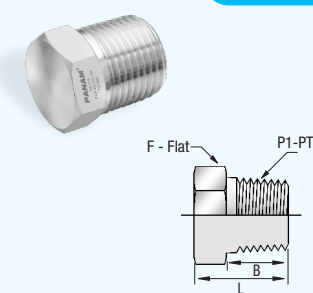
High Pressure Pipe Fittings

Adapters - ISO Parallel



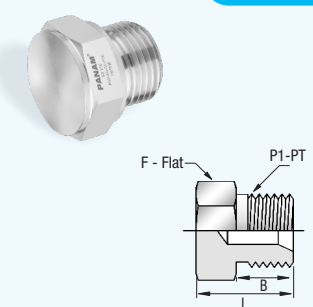
Part No	Pipe Size		Dimensions				
	P-PT, BSPP	P1-PT, BSPP	L	F	B	Bx	E
PA-2G-4G-SS-15K	1/8	1/4	37.1	22.0	12.0	11.0	4.8
PA-2G-6G-SS-15K	1/8	3/8	36.9	22.0	12.0	12.0	6.0
PA-2G-8G-SS-15K	1/8	1/2	38.0	27.0	14.0	11.0	4.8
PA-2G-10G-SS-10K	1/8	5/8	45.3	27.0	14.0	12.0	6.0
PA-12G-4G-SS-10K	3/4	1/4	40.0	30.0	16.0	11.0	4.8
PA-12G-6G-SS-10K	3/4	3/8	41.6	32.0	16.0	12.0	6.0
PA-12G-8G-SS-10K	3/4	1/2	47.3	32.0	16.0	14.0	9.0
PA-16G-4G-SS-10K	1	1/4	43.0	41.0	19.0	11.0	4.8
PA-16G-6G-SS-10K	1	3/8	44.6	41.0	19.0	12.0	6.0
PA-16G-8G-SS-10K	1	1/2	50.3	41.0	19.0	14.0	9.0
PA-16G-12G-SS-10K	1	3/4	52.2	41.0	19.0	16.0	12.0

Hex Plug - NPT



Part No	Pipe Size	Dimensions		
	P-PT, NPT	L	F	B
PHP-2N-SS-15K	1/8	25.4	12.7	9.5
PHP-4N-SS-15K	1/4	28.4	16.0	14.2
PHP-6N-SS-15K	3/8	28.4	19.1	14.2
PHP-8N-SS-15K	1/2	38.1	25.4	19.3
PHP-12N-SS-10K	3/4	38.1	35.1	19.3
PHP-16N-SS-10K	1	47.8	35.1	24.0

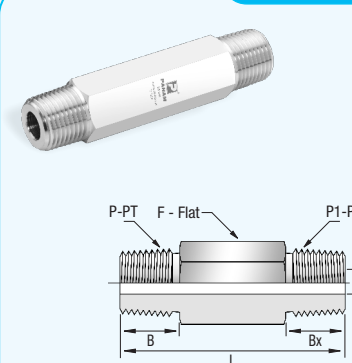
Hex Plug - ISO Parallel



Part No	Pipe Size	Dimensions		
	P-PT, BSPP	L	F	B
PHP-2G-SS-15K	1/8	14.3	14.0	8.0
PHP-4G-SS-15K	1/4	18.8	19.0	11.0
PHP-6G-SS-15K	3/8	20.5	22.0	12.0
PHP-8G-SS-15K	1/2	24.0	27.0	14.0
PHP-10G-SS-10K	5/8	24.0	30.0	16.0
PHP-12G-SS-10K	3/4	26.5	32.0	16.0
PHP-16G-SS-10K	1	30.2	41.0	19.0
PHP-20G-SS-10K	1 1/4	38.7	50.0	20.0
PHP-24G-SS-10K	1 1/2	42.7	55.0	22.0
PHP-32G-SS-10K	2	48.2	70.0	25.0

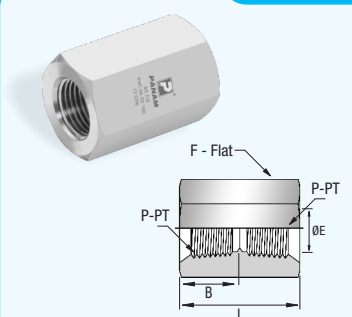
High Pressure Pipe Fittings

Hex Long Nipples - NPT x NPT



Part No	Pipe Size		Dimensions				
	P-PT, NPT	P1-PT, NPT	L	F	B	Bx	E
PHLN-2N-SS-L1.5-15K	1/8	1/8	38.1	14.0	9.5	9.5	3.0
PHLN-4N-SS-L2.0-15K	1/8	1/8	50.8	14.0	9.5	9.5	3.0
PHLN-4N-6N-SS-L2.5-15K	1/8	1/8	63.5	14.0	9.5	9.5	3.0
PHLN-4N-8N-SS-L3.0-15K	1/8	1/8	76.2	14.0	9.5	9.5	3.0
PHLN-6N-SS-L1.5-15K	1/4	1/4	38.1	15.8	14.2	14.2	4.8
PHLN-6N-8N-SS-L2.0-15K	1/4	1/4	50.8	15.8	14.2	14.2	4.8
PHLN-8N-SS-L2.5-15K	1/4	1/4	63.5	15.8	14.2	14.2	4.8
PHLN-12N-SS-L3.0-10K	1/4	1/4	76.2	15.8	14.2	14.2	4.8
PHLN-16N-SS-L4.0-10K	1/4	1/4	101.6	15.8	14.2	14.2	4.8
PHLN-4N-SS-L1.5-15K	3/8	3/8	38.1	22.2	14.2	14.2	6.0
PHLN-4N-6N-SS-L2.0-15K	3/8	3/8	50.8	22.2	14.2	14.2	6.0
PHLN-4N-8N-SS-L2.5-15K	3/8	3/8	63.5	22.2	14.2	14.2	6.0
PHLN-6N-SS-L3.0-15K	3/8	3/8	76.2	22.2	14.2	14.2	6.0
PHLN-6N-8N-SS-L4.0-15K	3/8	3/8	101.6	22.2	14.2	14.2	6.0
PHLN-8N-SS-L2.0-15K	1/2	1/2	50.8	25.4	19.3	19.3	9.0
PHLN-12N-SS-L3.0-10K	1/2	1/2	76.2	25.4	19.3	19.3	9.0
PHLN-16N-SS-L4.0-10K	1/2	1/2	101.6	25.4	19.3	19.3	9.0
PHLN-4N-8N-SS-L6.0-15K	1/2	1/2	152.6	25.4	19.3	19.3	9.0
PHLN-6N-SS-L2.0-15K	3/4	3/4	50.8	28.5	19.3	19.3	12.0
PHLN-6N-8N-SS-L3.0-15K	3/4	3/4	76.2	28.5	19.3	19.3	12.0
PHLN-8N-SS-L4.0-15K	3/4	3/4	101.6	28.5	19.3	19.3	12.0
PHLN-12N-SS-L3.0-10K	1	1	76.2	35.0	24.0	24.0	18.0
PHLN-16N-SS-L4.0-10K	1	1	101.6	35.0	24.0	24.0	18.0

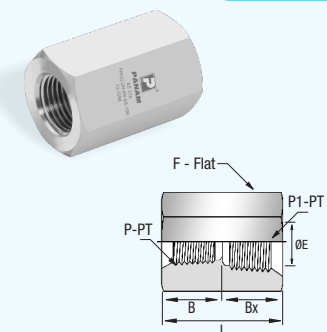
Hex Coupling - NPT



Part No	Pipe Size	Dimensions		
	P-PT, NPT	L	F	B
PHC-2N-SS-15K	1/8	25.4	16.0	9.5
PHC-4N-SS-15K	1/4	31.8	19.1	14.2
PHC-6N-SS-15K	3/8	35.1	25.4	14.2
PHC-8N-SS-15K	1/2	38.1	35.1	19.3
PHC-12N-SS-10K	3/4	44.5	35.1	19.3
PHC-16N-SS-10K	1	55.4	44.5	24.0

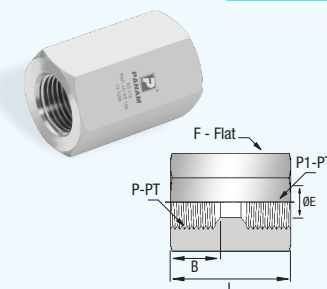
High Pressure Pipe Fittings

Reducing Hex Coupling - NPT



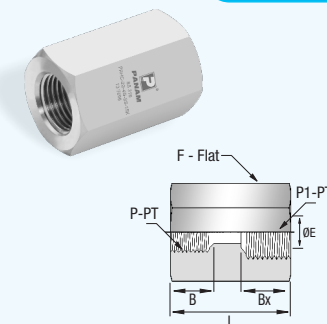
Part No	Pipe Size		Dimensions				
	P-PT, NPT	P1-PT, NPT	L	F	B	Bx	E
PRHC-2N-4N-SS-15K	1/8	1/4	31.8	19.1	9.5	14.2	3.0
PRHC-2N-6N-SS-15K	1/8	3/8	35.1	25.4	9.5	14.2	3.0
PRHC-2N-8N-SS-15K	1/8	1/2	38.1	31.8	9.5	19.3	3.0
PRHC-2N-12N-SS-10K	1/8	3/4	41.1	35.1	9.5	19.3	3.0
PRHC-2N-16N-SS-10K	1/8	1	50.8	44.5	9.5	24.0	3.0
PRHC-4N-6N-SS-15K	1/4	3/8	35.1	25.4	14.2	14.2	4.8
PRHC-4N-8N-SS-15K	1/4	1/2	41.1	35.1	14.2	19.3	4.8
PRHC-4N-12N-SS-10K	1/4	3/4	44.5	35.1	14.2	19.3	4.8
PRHC-4N-16N-SS-10K	1/4	1	50.8	44.5	14.2	24.0	4.8
PRHC-6N-8N-SS-15K	3/8	1/2	41.4	35.1	14.2	19.3	6.0
PRHC-6N-12N-SS-10K	3/8	3/4	44.5	35.1	14.2	19.3	6.0
PRHC-6N-16N-SS-10K	3/8	1	50.8	44.5	14.2	24.0	6.0
PRHC-8N-12N-SS-10K	1/2	3/4	44.5	35.1	19.3	19.3	9.0
PRHC-8N-16N-SS-10K	1/2	1	55.6	44.5	19.3	24.0	9.0

Hex Coupling - ISO Parallel



Part No	Pipe Size	Dimensions			
	P-PT, BSPP	L	F	B	E
PHC-2G-SS-15K	1/8	25.4	16.0	9.5	3.0
PHC-4G-SS-15K	1/4	31.8	19.1	15.5	4.8
PHC-6G-SS-15K	3/8	35.1	25.4	15.5	6.0
PHC-8G-SS-15K	1/2	38.1	35.1	19.0	9.0
PHC-12G-SS-10K	3/4	44.5	35.1	22.0	12.0
PHC-16G-SS-10K	1	55.4	44.5	22.0	18.0

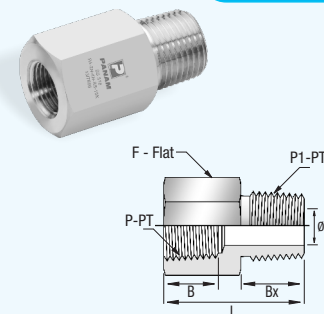
Hex Reducing Coupling - ISO Parallel



Part No	Pipe Size		Dimensions				
	P-PT, BSPP	P1-PT, BSPP	L	F	B	Bx	E
PRHC-2G-4G-SS-15K	1/8	1/4	31.8	19.0	9.5	15.5	3.0
PRHC-2G-6G-SS-15K	1/8	3/8	35.1	22.0	9.5	15.5	3.0
PRHC-2G-8G-SS-15K	1/8	1/2	38.1	35.1	9.5	19.0	3.0
PRHC-2G-12G-SS-10K	1/8	3/4	41.1	35.1	9.5	22.0	3.0
PRHC-2G-16G-SS-10K	1/8	1	50.8	44.5	9.5	24.5	3.0
PRHC-4G-6G-SS-15K	1/4	3/8	35.1	25.4	15.5	15.5	4.8
PRHC-4G-8G-SS-15K	1/4	1/2	41.1	35.1	15.5	19.0	4.8
PRHC-4G-12G-SS-10K	1/4	3/4	44.5	35.1	15.5	22.0	4.8
PRHC-4G-16G-SS-10K	1/4	1	50.8	44.5	15.5	24.5	4.8
PRHC-6G-8G-SS-15K	3/8	1/2	41.4	35.1	15.5	19.0	6.0
PRHC-6G-12G-SS-10K	3/8	3/4	44.5	35.1	15.5	15.5	6.0
PRHC-6G-16G-SS-10K	3/8	1	50.8	44.5	15.5	24.5	6.0
PRHC-8G-12G-SS-10K	1/2	3/4	44.5	35.1	19.0	22.0	9.0
PRHC-8G-16G-SS-10K	1/2	1	55.6	44.5	19.0	24.5	9.0

High Pressure Pipe Fittings

Adapters - NPT



Part No	Pipe Size		Dimensions				
	P-PT, NPT	P1-PT, NPT	L	F	B	Bx	E
PA-2N-4N-SS-15K	1/8	1/4	35.1	19.1	9.5	15.5	8.5
PA-2N-6N-SS-15K	1/8	3/8	39.6	25.4	9.5	15.5	14.0
PA-2N-8N-SS-15K	1/8	1/2	39.6	35.1	9.5	22.0	18.0
PA-2N-12N-SS-10K	1/8	3/4	53.8	35.1	9.5	22.0	22.0
PA-2N-16N-SS-10K	1/8	1	57.2	44.5	9.5	24.5	22.0
PA-4N-2N-SS-15K	1/4	1/8	38.1	19.1	14.2	9.5	8.5
PA-4N-6N-SS-15K	1/4	3/8	44.5	22.4	14.2	15.5	14.0
PA-4N-8N-SS-15K	1/4	1/2	44.5	35.1	14.2	22.0	18.0
PA-4N-12N-SS-10K	1/4	3/4	57.2	35.1	14.2	22.0	22.0
PA-4N-16N-SS-10K	1/4	1	60.5	44.5	14.2	24.5	22.0
PA-6N-2N-SS-15K	3/8	1/8	38.1	22.2	14.2	9.5	8.5
PA-6N-4N-SS-15K	3/8	1/4	41.1	22.2	14.2	15.5	11.0
PA-6N-8N-SS-15K	3/8	1/2	50.8	35.1	14.2	22.0	18.0
PA-6N-12N-SS-10K	3/8	3/4	50.8	35.1	14.2	22.0	22.0
PA-6N-16N-SS-10K	3/8	1	65.0	44.5	14.2	24.5	22.0
PA-8N-2N-SS-15K	1/2	1/8	44.5	25.4	19.3	9.5	8.5
PA-8N-4N-SS-15K	1/2	1/4	46.0	25.4	19.3	15.5	11.0
PA-8N-6N-SS-15K	1/2	3/8	50.8	25.4	19.3	15.5	14.0
PA-8N-12N-SS-10K	1/2	3/4	63.5	35.1	19.3	22.0	22.0
PA-8N-16N-SS-10K	1/2	1	65.0	44.5	19.3	24.5	22.0
PA-12N-2N-SS-10K	3/4	1/8	38.4	28.5	19.3	9.5	8.5
PA-12N-4N-SS-10K	3/4	1/4	38.4	28.5	19.3	15.5	11.0
PA-12N-6N-SS-10K	3/4	3/8	50.8	28.5	19.3	15.5	14.0
PA-12N-8N-SS-10K	3/4	1/2	50.8	28.5	19.3	22.0	18.0
PA-12N-16N-SS-10K	3/4	1	65.0	44.5	19.3	24.5	22.0
PA-16N-2N-SS-10K	1	1/8	50.8	35.1	24.0	9.5	8.5
PA-16N-4N-SS-10K	1	1/4	47.8	35.1	24.0	15.5	11.0
PA-16N-6N-SS-10K	1	3/8	57.2	35.1	24.0	15.5	14.0
PA-16N-8N-SS-10K	1	1/2	60.2	35.1	24.0	22.0	18.0
PA-16N-12N-SS-10K	1	3/4	69.9	35.1	24.0	22.0	22.0