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# Leak - Proof Flow & Control The Best Partner for Value Creation Solution Partner

**Instrument** Pipe Fittings



한선엔지니어링(주) HANSUN ENGINEERING CO., LTD.





















#### **Certificate List**



API Spec.Q1



API Monogram



ABS



Lloyd;s





GL









**C** 



KR

NK

CCS

Gost - R

ECE RIIO / ISO / 5500 / NGV 3.1 / CSA 12.3

#### ■ Features

- · All instrument thread fittings are designed in accordance with ASME B31.3 for instrument and process.
- Male thread are protected with cap.
- · Burr-free internal and outside surfaces.
- NPT threads are based on requirement of ASME B1.20.1

#### Material Standards & Temperature Ratings

Material	Bar Stock	Forgings	Temperature
SS316	ASTM A479 ASTM A276	ASTM A182	-325°F-1200°F (-198℃-648℃)
Brass	ASTM B16, ASTM B453	ASTM B283	-325°F-400°F (-198℃-204℃)
Carbon steel	ASTM A108 JIS G4051	JIS G4051	-20°F-350°F (-29℃-176℃)

#### Gasket and O-ring Temperature Ratings

Component	Material	Temperature Ratings
O-ring	Buna N	-13°F to 23°F of (-25℃ to 110℃)
O-IIIIg	FKM (Viton®)	-20°F to 400°F (-28℃ to 204℃)
SCG	Copper	-325°F to 400°F (-198℃ to 204℃)
SBG	Buna N	-13°F to 230°F (-25℃ to 100℃)
SBG	FKM(Viton®)	5°F to 400°F (-15℃ to 204℃)
Thread sealant teflon tape		-320°F to 450°F (-196°C to 232°C)

#### Pressure Ratings

			316 Stain	less Steel		Brass			Carbon steel				
Size Designator	NPT Size	Ma	ale	Fen	nale	Ma	ale	Fen	nale	Ma	ale	Fen	nale
	00	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
1	1/16	11,000	757	6,700	416	5,500	378	3,300	227	11,000	757	6,700	461
2	1/8	10,000	689	6,500	447	5,000	344	3,200	220	10,000	689	6,500	447
4	1/4	8,000	551	6,600	454	4,000	275	3,300	227	8,000	551	6,600	454
6	3/8	7,800	537	5,300	365	3,900	268	2,600	179	7,800	537	5,300	365
8	1/2	7,700	530	4,900	337	3,800	261	2,400	165	7,700	530	4,900	337
12	3/4	7,300	502	4.600	316	3,600	248	2,300	158	7,300	502	4,600	316
16	1	5,300	365	4,400	303	2,600	179	2,200	151	5,300	365	4,400	303
20	11/4	6,000	413	5,000	344	3,000	206	2,500	172	6,000	413	5,000	344
24	1½	5,000	344	4,600	316	2,500	172	2,300	158	5,000	344	4,600	316
30	2	3,900	268	3,900	268	1,900	130	1,900	130	3,900	268	3,900	268

- Pressure ratings listed are for temperature up to 37.8C (100°F).
  Based on Pressure Pipe Code ASME B31.3 pressure rating is calculated with an allowable stress value of 20,000psi SS316, 10,000psi, brass 20,000psi, carbon Steel.
- To determine the working pressure in accordance with Power Pipe Code ASME B31.1, multiply psig by 0.94. Brass pressure ratings remain the same.
- Due to larger outer diameter of female threads rating of female are lower than male threads.
- To determine kPa rating, multiply psig by 6.89.
  Reducing Hex Bushing (P-SHB) pressure rating is not covered in this table. See the pressure rating in the dimensional data chart.

#### Ordering Information

Material	S.Steel 316	S.Steel 316L	Carbon Steel	Brass
Identifier	S6	6L	CS	BS
• Evample:	P - SHN - 8	N - S6		

Pipe fitting -Material

#### • Pipe Thread Symbol & Designator

Pine			ISO Thread			
Pipe Size	Designator	NPT	Tapered (7/1)	Paraller (228/1)		
1/8	2	2N	2R	2G		
1/4	4	4N	4R	4G		
3/8	6	6N	6R	6G		
1/2	8	8N	8R	8G		
3/4	12	12N	12R	12G		
1	16	16N	16R	16G		

P-SCN

Close Nipple



06

P-SHN

**Hex Nipple** 



06

**P-SHRN** 

**Hex Reducing Nipple** (Male NPT to reduced male NPT)



P-SHN

**Hex Nipple** 



06

**P-SHN** 

**Hex Nipple** (Male NPT to male ISO parallel)



07

**P-SHLN** 

Hex Long Nipple



07

P-MFAA

Adapter
(Female NPT to male NPT)



**P-MFRA** 

Reducing Adapter (Female NPT to reduced male NPT)



07

P-MFAA

Adapter nale ISO tapered)



P-MFAB

**Adapter** (Female NPT to male ISO parallel)



08

P-SHB

Reducing Hex Bushing (Male NPT to reduced female NPT)



**Branch Tee** 

11

P-SC

Pipe Cap



09

P-SP

Pipe Plug (Male NPT)



P-SHC

**Hex Coupling** 



P-SHRC

**Hex Reducing Coupling** (Female NPT to reduced i



P-SL

**Elbow** (Female NPT both ends)

10



Street Elbow



P-SRSL

Reducing Street Elbow (Female to male NPT)



P-SML Male Elbow

10



Tee (Female NPT)



11



Run Tee (Female to male to female NPT)



11

P-SBT

(Female to male to male NPT)



P-SMT

Male Tee



11

P-SUJ

Union Ball Joint

11

SCG Iso Parallel Gasket

11

P-SWFC

Union 13



**Union Elbow** 



13

P-SWT

**Union Tee** 



13

P-SWMC **Male Connector** 



13

P-SWFCN **Female Connector** 



13

P-SWML Male Elbow

13



P-SWFL

Female Elbow



14

P-SWRM



14

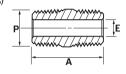
14

Tube Weld to Tube Socket Weld



#### P-SCN

Close Nipple (Male NPT bothe ends)

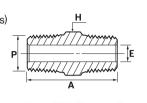




Part Number	P Pipe Size	А	E
P-SCN- 2N	1/8	19.05	4.8
P-SCN- 4N	1/4	28.4	7.1
P-SCN- 6N	3/8	28.4	9.6
P-SCN- 8N	1/2	31.7	11.9
P-SCN-12N	3/4	3.17	15.7
P-SCN-16N	1	47.8	22.4

#### P-SHN

Hex Nipple (Male NPT both ends)

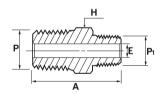




Part Number	P PipeSize	А	E	H Hex
P-SHN- 2N	1/8	25.4	4.8	11.1
P-SHN- 4N	1/4	35.3	7.1	14.2
P-SHN- 6N	3/8	36.1	9.6	17.4
P-SHN- 8N	1/2	46.7	11.9	22.2
P-SHN-12N	3/4	46.7	15.7	26.9
P-SHN-16N	1	58.7	22.3	34.9

# **P-SHRN**

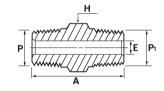
Hex Reducing Nipple (Male NPT to reduced male NPT)





#### P-SHN

Hex Nipple (Male NPT to ISO tapered)



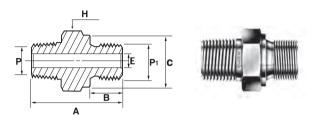


Part Number	P Pipe Size	P1 Reduced Pipe Size	Α	Е	H Hex
P-SHRN- 4-2N	1/4	1/8	30.7	4.8	14.2
P-SHRN- 6-2N	3/8	1/8	32.0	4.8	17.4
P-SHRN- 6-4N	3/8	1/4	36.1	7.1	17.4
P-SHRN- 8-2N	1/2	1/8	37.2	4.8	22.2
P-SHRN- 8-4N	1/2	1/4	41.7	7.1	22.2
P-SHRN- 8-6N	1/2	3/8	41.7	9.6	22.2
P-SHRN-12-4N	3/4	1/4	41.7	7.1	26.9
P-SHRN-12-8N	3/4	1/2	46.7	11.9	26.9
P-SHRN-16-4N	1	1/4	49.3	7.1	34.9
P-SHRN-16-8N	1	1/2	54.1	11.9	34.9

Part Number	P NPT Thread Size	P1 BSP/ISO Thread Size	Α	E	H Hex
P-SHN- 2NR	1/8	1/8-28 7/1	24.6	4.1	11.1
P-SHN- 4NR	1/4	1/4-19 7/1	35.6	6.4	14.2
P-SHN- 6NR	3/8	3/8-19 7/1	36.3	9.7	17.4
P-SHN- 8NR	1/2	1/2-14 7/1	46	11.9	22.2
P-SHN-12NR	3/4	3/4-14 7/1	46.7	15.7	26.9
P-SHN-16NR	1	1-11 7/1	58.9	22.4	34.9

#### **P-SHN**

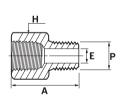
Hex Nipple (Male NPT to male parallel)

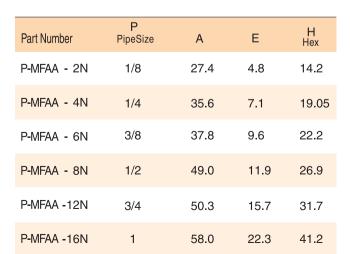


Part Number	P NPT Thread Size	P1 BSP/ISO e Thread Size	Α	В	С	Е	H Hex
P-SHN - 2NG	1/8	1/8-28 228/1	27.4	7.1	13.7	4.1	14.2
P-SHN - 4NG	1/4	1/4-19 228/1	36.8	11.2	17.8	5.8	19.05
P-SHN - 6NG	3/8	3/8-19 228/1	37.6	11.2	21.8	7.9	22.2
P-SHN - 8NG	1/2	1/2-14 228/1	45.0	14.2	26.1	11.9	26.9
P-SHN-12NG	3/4	3/4-14 228/1	49.0	15.7	31.5	15.7	33.3
P-SHN-16NG	1	1-11 228/1	56.9	18.3	38.9	19.8	41

#### P-MFAA

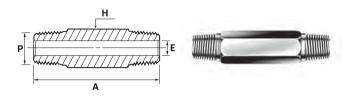
Adapter (Female NPT to male NPT)





# P-SHLN

Hex Long Nipple (Male NPT both ends)

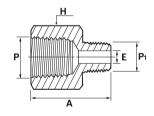


Part Number	P PipeSize	Α	E	H Hex
P-SHLN - 2N	1/8	*	4.8	11.1
P-SHLN - 4N	1/4	*	7.1	14.2
P-SHLN - 6N	3/8	*	9.7	17.4
P-SHLN - 8N	1/2	*	11.9	22.2
P-SHLN -12N	3/4	*	15.7	26.9
P-SHLN -16N	1	*	22.4	34.9

\*: Configure to order

#### P-MFRA

Reducing Adapter (Female NPT to reduced male NPT)

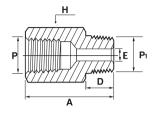




Part Number	P Female Pipe Size	P1 Male Pipe Size	Α	E	H Hex
P-MFRA - 2 - 4N	1/4	1/8	31.5	4.8	19.05
P-MFRA - 2 - 6N	3/8	1/8	33.5	4.8	22.2
P-MFRA - 4 - 6N	3/8	1/4	37.8	7.1	22.2
P-MFRA - 2 - 8N	1/2	1/8	40.0	4.8	26.9
P-MFRA - 4 - 8N	1/2	1/4	44.5	7.1	26.9
P-MFRA - 6 - 8N	1/2	3/8	44.5	9.6	26.9
P-MFRA - 4-12N	3/4	1/4	45.7	7.1	31.8
P-MFRA - 6-12N	3/4	3/8	45.7	9.6	31.8
P-MFRA - 8-12N	3/4	1/2	51.1	11.9	31.8
P-MFRA - 4-16N	1	1/4	50.8	7.1	41.2
P-MFRA - 8-16N	1	1/2	54.9	11.9	41.2
P-MFRA-12-16N	1	3/4	55.1	15.7	41.2

# P-MFAA

Adapter (Female NPT to male ISO tapered)



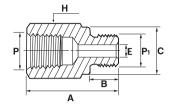


	-36	1-144	4444
400		E S	Ш
	-98	Jun	uni

		P1 BSP/ISO Thread Size	Α	D	E	H Hex
P-MFAA- 2RN	1/8	1/8-28 7/1	27.4	9.7	4.8	14.2
P-MFAA - 4RN	1/4	1/4-19 7/1	35.8	14.2	7.1	19.05
P-MFAA - 6RN	3/8	3/8-19 7/1	37.6	14.2	9.7	22.2
P-MFAA - 8RN	1/2	1/2-14 7/1	49.0	19.1	11.9	26.9
P-MFAA-12RN	3/4	3/4-14 7/1	50.3	19.1	15.7	31.8
P-MFAA-16RN	1	1-11 7/1	58.0	23.9	22.3	41.2

# P-MFAB

Adapter (Female NPT to male ISO parallel)

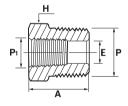




Part Number	P NPT	P1 BSP/ISO Thread Size	Α	В	С	Е	H Hex
P-MFAB - 2GN	1/8	1/8-28 228/1	24.9	7.1	13.7	4.1	14.2
P-MFAB - 4GN	1/4	1/4-19 228/1	33.3	11.2	17.8	5.8	19.05
P-MFAB - 6GN	3/8	3/8-19 228/1	37.8	11.2	21.8	7.9	22.2
P-MFAB - 8GN	1/2	1/2-14 228/1	43.9	14.2	26.1	11.9	26.9
P-MFAB-12GN	3/4	3/4-14 228/1	50.8	15.7	31.5	15.7	33.3
P-MFAB-16GN	1	1-11 228/1	53.1	18.3	38.9	19.8	41.2

#### P-SHB

Reducing Hex Bushing (Male NPT to reduced female NPT)

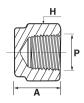




Part Number	P Male	P1 Female	Α	Е	.H	Work	ing Pressure(I	PSIG)
i ait Numbei	Pipe Size	Pipe Size	^	_	Hex	316SS	Brass	Carbon Steel
P-SHB - 4 - 2N	1/4	1/8	26.7	7.1	14.2	5600	3100	6200
P-SHB - 6 - 2N	3/8	1/8	21.8	8.5	17.4			
P-SHB - 6 - 4N	3/8	1/4	30.0	9.6	19.05	5200	3100	6200
P-SHB - 8 - 2N	1/2	1/8	27.4	8.5	22.2	-	-	-
P-SHB - 8 - 4N	1/2	1/4	27.4	11.7	22.2	5800	3100	6200
P-SHB - 8 - 6N	1/2	3/8	35.6	11.9	22.2	4400	2500	5100
P-SHB -12 - 4N	3/4	1/4	27.4	11.4	26.9	-	-	-
P-SHB - 12 - 6N	3/4	3/8	27.4	15.0	26.9	-	-	-
P-SHB - 12 - 8N	3/4	1/2	41.4	15.7	26.9	-	-	-
P-SHB - 16 - 4N	1	1/4	34.8	11.4	34.9	-	-	-
P-SHB - 16 - 8N	1	1/2	34.8	18.5	34.9	-	-	-
P-SHB - 16-12N	1	3/4	34.8	22.4	34.9	-	-	-

#### P-SC

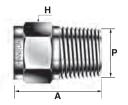
Pipe Cap (Female NPT)





# P-SP

Pipe Plug (Male NPT)

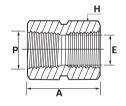


Part Number	P Pipe Size	А	H Hex
P-SC - 2N	1/8	19.1	14.2
P-SC - 4N	1/4	22.9	19.05
P-SC- 6N	3/8	26.2	22.2
P-SC- 8N	1/2	34.0	26.9
P-SC-12N	3/4	36.6	31.8
P-SC-16N	1	41.1	41.2

Part Number	P Pipe Size	А	H Hex
P-SP- 2N	1/8	19.05	11.1
P-SP- 4N	1/4	24.1	14.2
P-SP- 6N	3/8	25	17.4
P-SP- 8N	1/2	30.5	22.2
P-SP-12N	3/4	30.5	26.9
P-SP-16N	1	38.1	34.9

# P-SHC

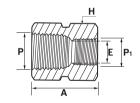
Hex Coupling (Female NPT both ends)





# **P-SHRC**

Hex Reducing coupling (Female NPT to reduced female NPT)



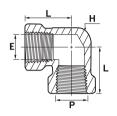


Part Number	P Pipe Size	Α	E	H Wrench Flat
P-SHC- 2N	1/8	20.3	8.9	14.2
P-SHC- 4N	1/4	30.0	11.7	19.05
P-SHC- 6N	3/8	33.0	15.0	22.2
P-SHC- 8N	1/2	39.4	18.7	26.9
P-SHC-12N	3/4	41.0	23.5	31.8
P-SHC-16N	1	50.5	29.7	41.2

Part Number Pip	P e Size	P Reduced Pipe Size	Α	Е	H Hex
P-SHRC - 4 - 2N	1/4	1/8	31.2	8.9	19.05
P-SHRC - 6 - 4N	3/8	1/4	34.8	11.7	22.2
P-SHRC - 8 - 2N	1/2	1/8	39.4	8.7	26.9
P-SHRC - 8 - 4N	1/2	1/4	44.2	11.7	26.9
P-SHRC - 8 - 6N	1/2	3/8	45.0	15.0	26.9
P-SHRC-12 - 4N	3/4	1/4	45.7	11.7	31.8
P-SHRC-12 - 8N	3/4	1/2	52.0	18.7	31.8
P-SHRC-16 - 4N	1	1/4	50.8	11.7	41.2
P-SHRC-16 - 8N	1	1/2	55.4	18.7	41.2
P-SHRC-16-12N	1	3/4	57.0	23.5	41.2

# P-SL

Elbow (Female NPT both ends)

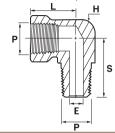




Part Number	P Pipe Size	L	E	H Wrench Flat
P-SL- 2N	1/8	24.1	8.9	12.7
P-SL- 4N	1/4	29.0	11.7	17.5
P-SL- 6N	3/8	34.5	15.0	20.6
P-SL- 8N	1/2	37.0	18.7	25.4
P-SL-12N	3/4	46.5	23.5	31.8
P-SL-16N	1	48.8	29.7	42.9

# P-SSL

Street Elbow (Female to male NPT)

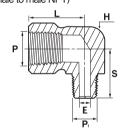




Part Number	P Pipe Size	L	S	Е	H Wrench Flat
P-SSL- 2N	1/8	24.1	19.6	4.8	12.7
P-SSL- 4N	1/4	29.0	26.5	7.1	17.5
P-SSL- 6N	3/8	34.5	28.2	9.6	20.6
P-SSL- 8N	1/2	37.0	35.3	11.9	25.4
P-SSL-12N	3/4	46.5	39.6	15.7	31.8
P-SSL-16N	1	48.8	49.2	22.3	42.9

# P-SRSL

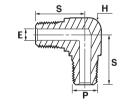
# Reducing Street Elbow (Female to male NPT)





# P-SML

#### Male Elbow (Male NPT both ends)

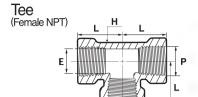




Part Number	P Pipe Size	P1 Male Pipe Size	L	S	E W	H rench Flat
P-SRSL- 4-2N	1/4	1/8	29.0	22.4	4.8	17.5
P-SRSL- 6-4N	3/8	1/4	34.5	28.2	7.1	20.6
P-SRSL- 8-4N	1/2	1/4	37.0	30.5	7.1	25.4
P-SRSL- 8-6N	1/2	3/8	37.0	30.5	9.6	25.4
P-SRSL-12-8N	3/4	1/2	46.5	39.6	11.9	31.8
P-SRSL-16-8N	1	1/2	48.8	44.5	11.9	42.9

Part Number	P Pipe Size	S	E	H Wrench Flat
P-SML - 2N	1/8	19.05	4.8	12.7
P-SML-4N	1/4	24.5	7.1	12.7
P-SML-6N	3/8	26.9	9.6	17.5
P-SML-8N	1/2	33.2	11.9	20.6
P-SML-12N	3/4	35.3	15.7	25.4
P-SML-16N	1	44.5	22.3	31.8

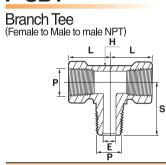
#### P-ST





Part Number	P Pipe Size	L	E	H Wrench Flat
P-ST- 2N	1/8	24.1	8.9	12.7
P-ST- 4N	1/4	29.0	11.7	17.5
P-ST- 6N	3/8	34.5	15.0	20.6
P-ST- 8N	1/2	37.0	18.7	25.4
P-ST-12N	3/4	46.5	23.5	31.8
P-ST-16N	1	48.5	29.7	42.8

# P-SBT

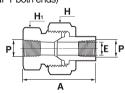




Part Number	P Pipe Size	L	S	E	H Wrench Flat
P-SBT- 2N	1/8	24.1	19.6	4.8	12.7
P-SBT- 4N	1/4	29.0	26.5	7.1	17.5
P-SBT- 6N	3/8	34.5	28.2	9.6	20.6
P-SBT- 8N	1/2	37.0	35.3	11.9	25.4
P-SBT-12N	3/4	46.5	39.6	15.7	31.8
P-SBT-16N	1	48.8	49.2	22.3	42.9

#### P-SUJ

Union Ball Joint (Female NPT both ends)

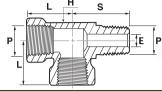




Part Number	P Pipe Size	Α	Е	H Hex	H <sub>1</sub> Hex
P-SUJ-F- 2N	1/8	45.7	6.9	28.6	23.8
P-SUJ-F- 4N	1/4	59.4	9.1	34.9	30.2
P-SUJ-F- 6N	3/8	63.5	13.2	38.1	33.3
P-SUJ-F- 8N	1/2	68.6	15.7	44.5	41.3
P-SUJ-F-12N	3/4	79.2	22.4	50.8	47.6
P-SUJ-F-16N	1	90.4	26.2	63.5	60.3

# **P-SRT**

Run Tee (Female to male to Female NPT)

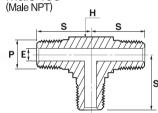




Part Number	P Pipe Size	L	S	E	H Wrench Flat
P-SRT- 2N	1/8	24.1	19.6	4.8	12.7
P-SRT- 4N	1/4	29.0	26.5	7.1	17.5
P-SRT- 6N	3/8	34.5	28.2	9.6	20.6
P-SRT- 8N	1/2	37.0	35.3	11.9	25.4
P-SRT-12N	3/4	46.5	39.6	15.7	31.8
P-SRT-16N	1	48.8	49.2	22.3	42.9

#### P-SMT

Male Tee (Male NPT)

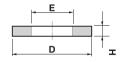




Part Number	P Pipe Size	S	E	H Wrench Flat
P-SMT- 2N	1/8	19.05	4.8	12.7
P-SMT- 4N	1/4	24.5	7.1	12.7
P-SMT- 6N	3/8	26.9	9.6	17.5
P-SMT- 8N	1/2	33.2	11.9	20.6
P-SMT-12N	3/4	35.3	15.7	25.4
P-SMT-16N	1	44.5	22.3	31.8

# **SCG**

#### Iso Parallel Gasket



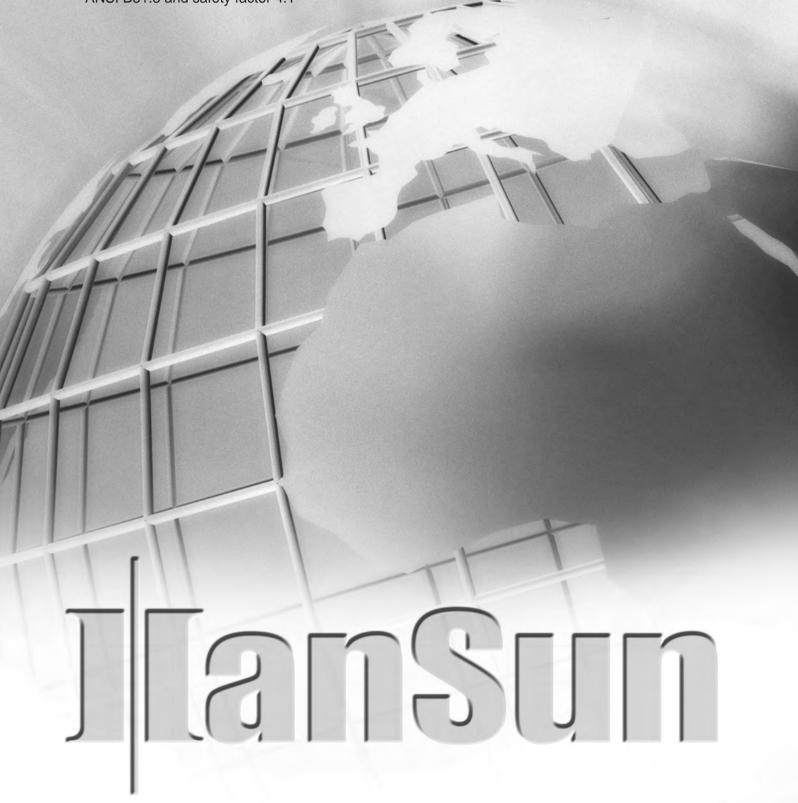


Part Number	P Pipe Size	Е	Н	D
SCG-2N	1/8	10.0	2.0	18.0
SCG - 4N	1/4	14.0	2.0	22.0
SCG-6N	3/8	17.0	2.0	26.0
SCG_8N	1/2	22.0	2.0	32.0
SCG-12N	3/4	27.0	2.0	38.0
SCG-16N	1	34.0	2.0	42.0

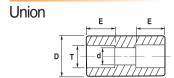
# HANSUN Instrument Weld Fittings

#### **Features**

HANSUN instrument weld fittings are designed in accordance with ASME B16.11 welding connections.
All socket weld ports have a tapered shape at the end that hold tubing properly and consistent alignment.
Pressure ratings for weld fittings are in accordance with ANSI B31.3 and safety factor 4:1



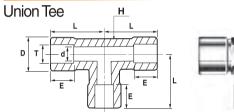
# **P-SWFC**





Part Number Tu	T ube O.D	, d	D	Ε	Α	Working F psig	Pressure bar
P-SWFC- 4T	1/4	4.6	13.0	7.1	19.0	10,000	689
P-SWFC- 6T	3/8	7.1	15.8	7.9	22.4	7,600	523
P-SWFC- 8T	1/2	10.2	19.0	9.7	26.9	6,200	427
P-SWFC-10T	5/8	12.7	24.0	10.4	30.2	6,400	440
P-SWFC-12T	3/4	15.7	26.9	11.2	33.3	5,500	378
P-SWFC-16T	1	22.1	35.0	15.7	36.6	5,200	358

#### **P-SWTA**

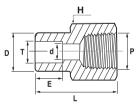




Part Number Ti	T ube O.D	d	D	Е	H Wrench Flat	L	Working Property	essure bar
P-SWTA- 2T	1/8	2.3	13.4	2.5	12.7	15.0	11,800	813
P-SWTA- 4T	1/4	4.6	13.4	7.1	12.7	21.8	11,300	778
P-SWTA- 6T	3/8	7.1	15.8	7.9	12.7	24.5	8,400	578
P-SWTA-8T	1/2	10.2	20.6	9.7	17.4	29.0	7,800	537
P-SWTA-10T	5/8	12.7	23.8	10.4	20.6	34.5	6,700	461
P-SWTA-12T	3/4	15.7	28.6	11.2	25.4	37.0	6,700	461
P-SWTA-16T	1	22.1	35.0	15.7	31.8	46.5	6,100	420

#### P-SSB

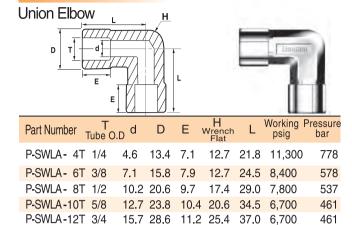
#### Female Connector





Part Number <sub>T</sub>	T ube O.D	P=NPT Female Pipe Size	d	D	Е	H Hex	L	Working psig	Pressure bar
P-SSB - 2T - 2N	1/8	1/8	2.3	7.4	2.5	14.2	21.1	6,100	420
P-SSB - 4T - 2N	1/4	1/8	4.6	12.2	7.1	14.2	26.7	6,100	420
P-SSB - 4T - 4N	1/4	1/4	4.6	12.2	7.1	19.05	30.0	6,200	427
P-SSB - 6T - 4N	3/8	1/4	7.1	15.3	7.9	19.05	31.5	6,200	427
P-SSB - 8T - 6N	1/2	3/8	10.2	18.5	9.7	22.2	34.5	5,000	344
P-SSB - 8T - 8N	1/2	1/2	10.2	18.5	9.7	26.9	40.4	4,600	316
P-SSB - 10T - 8N	5/8	1/2	12.7	23.4	10.4	24.9	41.9	4,600	316
P-SSB-12T-12N	3/4	3/4	15.7	26.7	11.2	33.3	43.9	4,300	296

# P-SWLA

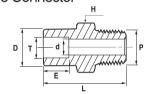


22.1 35.0 15.7 31.8 46.5 6,100

#### P-SSA

#### Male Connector

P-SWLA-16T 1

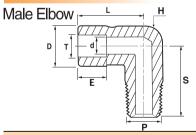




420

Part Number -	T Tube O.D	P-NPT	d	D	Е	H Hex	L	Working psig	Pressure bar
P-SSA-4T-2N	1/4	1/4	4.6	12.2	7.1	14.2	29.2	7,500	516
P-SSA-6T-4N	3/8	1/4	7.1	15.3	7.9	15.8	31.8	7,500	516
P-SSA-6T-6N	3/8	3/8	7.1	15.3	7.9	17.4	31.8	7,300	502
P-SSA-6T-8N	3/8	1/2	7.1	15.3	7.9	22.2	37.3	7,200	496
P-SSA-8T-4N	1/2	1/4	7.1	18.5	9.7	19.05	33.3	6,200	427
P-SSA-8T-6N	1/2	3/8	9.4	18.5	9.7	19.05	33.3	6,200	427
P-SSA-8T-8N	1/2	1/2	10.2	18.5	9.7	22.2	38.9	6,200	427

#### **P-SMLSW**

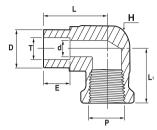




Part Number Tut	T De O.D P-NF	T d	D	ΕV	H Vrench F	<sub>lat</sub> L	S	Working P psig	ressure bar
P-SMLSW - 4T-4N	1/4 1/4	4.6	15.8	7.1	12.7	20.1	24.5	7,500	516
P-SMLSW - 6T-4N	3/8 1/4	7.1	15.8	7.9	12.7	24.1	24.5	7,500	516
P-SMLSW - 6T-6N	3/8 3/8	7.1	20.6	7.9	17.4	24.6	29.0	7,300	502
P-SMLSW - 6T-8N	3/8 1/2	7.1	23.8	7.9	20.6	25.9	34.5	7,200	496
P-SMLSW - 8T-8N	1/2 1/2	10.2	23.8	9.7	20.6	27.4	34.5	6,200	427
P-SMLSW-12T-12N	3/4 3/4	15.7	28.6	11.2	25.4	37.0	37.0	6,700	461

# **P-SFLSW**

#### Female Elbow

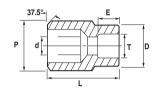




Part Number	Tube O.D	P-NPT Female Pipe Size	d	D	E	<b>H</b> Wrench Fl	at L	L1	Working psig	Pressure bar
P-SFLSW - 4T- 4N	1/4	1/4	4.6	12.2	7.1	17.4	22.9	29.7	6,200	427
P-SFLSW -6T-4N	3/8	1/4	7.1	15.3	7.9	17.4	25.1	29.7	7,000	482
P-SFLSW - 6T- 8N	3/8	1/2	7.1	15.3	7.9	25.4	28.7	37.0	5,400	372
P-SFLSW-8T-8N	1/2	1/2	10.2	18.5	9.7	25.4	30.2	37.0	5,400	372

# P-SWRM

#### Pipe Weld to Tube Socket Weld

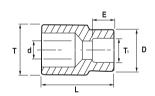




Part Number	P Pipe Size	T Tube Socket Size	d	D	E	L	Working P	ressure bar
P-SWRM-4P-4T	1/4	1/8	4.6	13.7	7.1	22.4	9,600	661
P-SWRM-6P-6T	3/8	3/8	7.1	15.3	7.9	26.2	7,600	523
P-SWRM-6P-8T	3/8	1/2	10.2	18.5	9.7	27.9	6,200	427
P-SWRM-8P-4T	1/2	1/4	4.6	12.2	7.1	28.4	7,300	502
P-SWRM-8P-6T	1/2	3/8	7.1	15.3	7.9	28.4	7,300	502
P-SWRM-8P-8T	1/2	1/2	10.2	18.5	9.7	30.2	6,200	427
P-SWRM-12P-6T	3/4	3/8	7.1	15.3	7.9	38.1	6,200	427
P-SWRM-12P-8T	3/4	1/2	10.2	18.5	9.7	38.1	6,200	427

# P-SWRM

#### Tube Weld to Tube Socket Weld





Part Number	T Tube O.D	T <sub>1</sub> Tube Socket Size	d	D	E	L	Work Press psig	
P-SWRM - 4T-2T	1/4	1/8	2.3	7.4	2.5	14.2	11,800	813
P-SWRM - 6T - 4T	3/8	1/4	4.6	12.2	7.1	19.1	7,700	530
P-SWRM - 8T - 4T	1/2	1/4	4.6	18.2	7.1	22.4	7,000	482
P-SWRM - 8T - 6T	1/2	3/8	8.1	15.7	7.9	22.4	7,000	482
P-SWRM - 12T - 8T	3/4	1/2	10.2	18.5	9.7	28.4	5,900	406
P-SWRM - 16T - 8T	1	1/2	10.2	18.5	9.7	35.1	5,600	344