



MANUFACTURERS OF PRECISION-MADE  
FLEXIBLE TUBING & SPIRAL RECOIL HOSE



**ADVANCED  
TECHNOLOGY  
PRODUCTS**

[www.atp4fluid.com](http://www.atp4fluid.com)



**Imbibe™ NSF61® - Fluidfit™ NSF61® - Surethane® NSF51®**  
**- Vinyl-Flex™ PVC NSF61® - Dura-Pure® PVC NSF61®**  
**- Mercury™ PTFE - Venus™ FEP - Technifit™ - Oetiker®**  
NSF Certified Plastic Tubing & Hose, Plastic & Stainless Steel Fittings,  
Clamps & tools Designed for the  
Food, Beverage, Dairy, Pharmaceuticals & Potable Water Markets





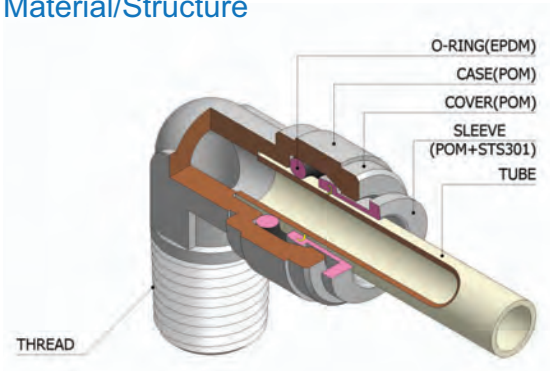
Advanced Technology Products (ATP) opened the doors in 1990 and has been manufacturing plastic tubing and spiral/recoil hose in Ohio since the mid 90's. Initially, the products mostly served the industrial markets. Now, our Surethane<sup>®</sup> polyurethane tubing and Imbibe<sup>™</sup> linear low density polyethylene tubing are NSF certified to 51 and 61 respectively. In our latest catalog release we are introducing our new line of PVC tube and hose products which are also NSF 61<sup>®</sup> certified. ATP has partnered with CDC to provide Fluidfit<sup>™</sup> plastic push to connect fittings that are also NSF 61<sup>®</sup> certified for potable water applications. We believe this combination provides a competitive one stop shopping experience for the food, beverage & potable water markets from America's heartland. Please check out the back cover of this brochure or our web site at [www.atp4fluid.com](http://www.atp4fluid.com) for our entire product line. You can trust ATP to provide affordable quality products.

#### INDEX

Fluidfit <sup>™</sup> specification	.....	P3
Fluidfit <sup>™</sup> inch fittings	.....	P4
Fluidfit <sup>™</sup> metric fittings	.....	P9
Imbibe <sup>™</sup> NSF 61 <sup>®</sup> Polyethylene LLDPE	.....	P14
Surethane <sup>®</sup> NSF 51 <sup>®</sup> Polyurethane	.....	P16
Tubing & Hose Cutter	.....	P18
Vinyl-Flex <sup>™</sup> PVC NSF 61 <sup>®</sup> tubing	.....	P19
Dura-Pure <sup>™</sup> PVC NSF 61 <sup>®</sup> hose	.....	P20
Mercury <sup>™</sup> PTFE tubing	.....	P21
Venus <sup>™</sup> FEP tubing	.....	P22
Stainless Steel fittings	.....	P23
OETIKER <sup>®</sup> clamps & tools	.....	P28
Chemical resistance	.....	P30

# Fluidfit

## Material/Structure



## Applications and Features

Fluidfit Products are designed for water, food and air contact but can be used with selected gases, vacuum & liquids. A single action allows the tube to release and connect easily, saving time and expense.

Fluidfit products are made from NSF approved non-toxic materials.

Various uses depending on the user's environment and application

## Color Codes

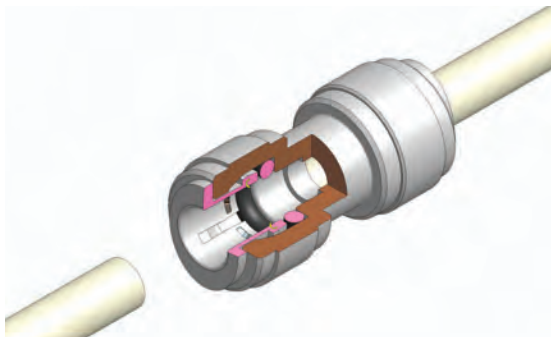
HUT 0606-G G(Gray)	HUT 0606-B B(Black)	HUT 0606-W W(Natural)

\* Stock

\* 3 weeks

\* Special order

## Connection & Disconnection



▲ Use a tube cutter for a square cross section

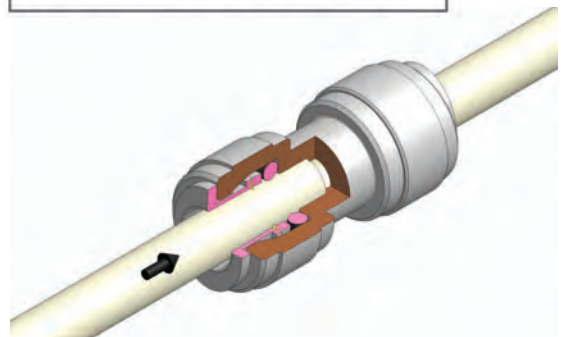
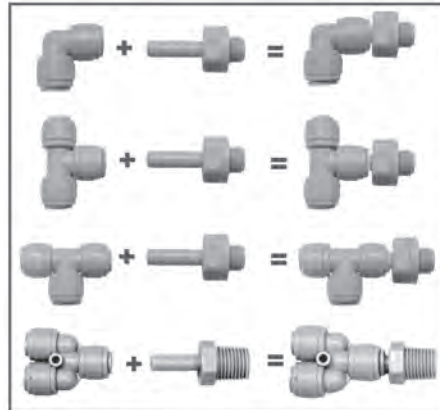
## Specifications

Fluid Type	Water, Beverages		
Tube Type	Polyethylene(PE), Polyamid(PA) and Polyurethane (PU)		
Temperature	Working Pressure		
	5/32"(4mm)-5/16"(8mm)	3/8", 1/2", 10mm, 12mm	
1° C/34° F	16 Bar/232 PSI	10 Bar/145 PSI	
25° C/77° F	16 Bar/232 PSI	10 Bar/145 PSI	
70° C/158° F	10 Bar/145 PSI	7 Bar/102 PSI	

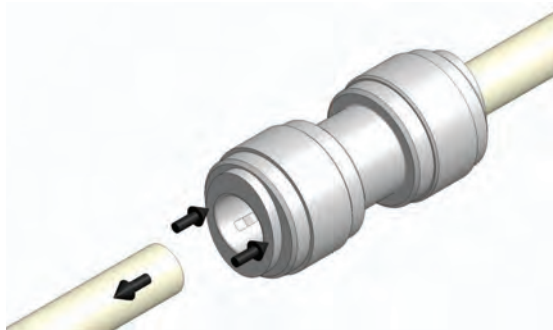
## Maximum Torque Values for BSP, BSPT, & NPT Plastic Threads

Threads	1/8	1/4	3/8	1/2
Max. Torque N.m.	1.5N.m	1.5N.m	3.0N.m	3.0N.m
Max. Torque LBF.	1.1LBF.	1.1LBF.	2.21LBF.	2.21LBF.

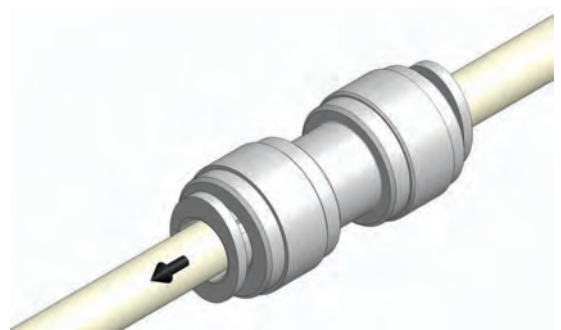
## Adaptability



▲ Insert tube into the fitting fully to the tube stop



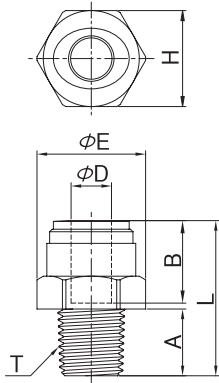
▲ To remove the tube press and hold collet while pulling out tube



▲ Before use, pull the tube to check that it is secure

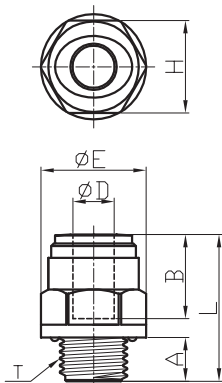
Fittings designed for the food, beverage & potable water markets

### HPC Straight Adaptor



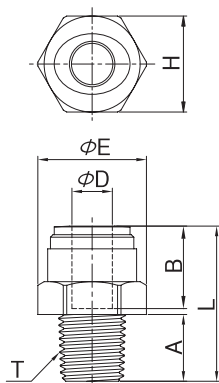
Model(inch)	ØD	T(NPTF)	A	B	ØE	H(inch)	L	Weight g
HPC 5/32-N01	5/32	1/8	9.1	14.7	17.8	15.8(5/8)	22.2	3.2
HPC 5/32-N02	5/32	1/4	13.2	14.7	17.8	15.8(5/8)	25.3	4.3
HPC 3/16-N01	3/16	1/8	9.1	15.0	17.8	15.8(5/8)	22.4	3.1
HPC 3/16-N02	3/16	1/4	13.2	15.0	17.8	15.8(5/8)	25.5	4.2
HPC 1/4-N01	1/4	1/8	9.1	16.9	17.8	15.8(5/8)	27.0	3.9
HPC 1/4-N02	1/4	1/4	13.2	16.9	17.8	15.8(5/8)	27.0	4.3
HPC 1/4-N03	1/4	3/8	13.8	16.9	21.4	19.0(3/4)	26.1	6.1
HPC 5/16-N01	5/16	1/8	9.1	17.5	21.4	19.0(3/4)	28.4	5.6
HPC 5/16-N02	5/16	1/4	13.2	17.5	21.4	19.0(3/4)	27.9	5.2
HPC 5/16-N03	5/16	3/8	13.8	17.5	21.4	19.0(3/4)	26.5	6.0
HPC 5/16-N04	5/16	1/2	17.8	17.5	25.0	22.2(7/8)	33.5	11.5
HPC 3/8-N01	3/8	1/8	9.1	20.2	23.0	20.6(3/4)	30.4	6.7
HPC 3/8-N02	3/8	1/4	13.2	20.2	23.0	20.6(3/4)	34.3	7.9
HPC 3/8-N03	3/8	3/8	13.8	20.2	23.0	20.6(3/4)	29.6	7.5
HPC 3/8-N04	3/8	1/2	17.8	20.2	25.0	22.2(7/8)	33.9	11.0
HPC 1/2-N03	1/2	3/8	13.8	25.1	27.4	25.4(1)	38.4	11.7
HPC 1/2-N04	1/2	1/2	17.8	25.1	27.4	25.4(1)	37.9	12.7

### HPC-G Straight Adaptor



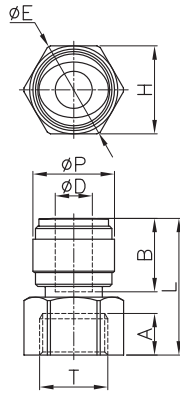
Model(inch)	ØD	T(BSPP,G)	A	B	ØE	H(hex)	L	Weight g
HPC 5/16-G03	5/16	3/8	9.0	17.5	24.0	21.0	26.5	7.0
HPC 3/8-G02	3/8	1/4	8.5	20.2	21.1	19.0	30.9	7.3

### HPC-R Straight Adaptor



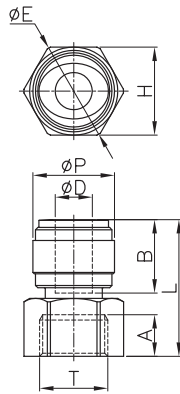
Model(inch)	ØD	T(BSPT,R)	A	B	ØE	H(hex)	L	Weight g
HPC 3/8-R03	3/8	3/8	13.5	20.2	23.2	21.0	28.9	6.8

**HCF**  
Female adapter



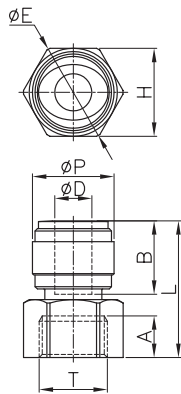
Model(inch)	ØD	ØP	T(NPTF)	A	B	ØE	H(hex)	L	Weight g
HCF 1/4-N01	1/4	15.5	1/8	11.5	16.9	19.0	17.0	30.9	-
HCF 1/4-N02	1/4	15.5	1/4	11.5	16.9	21.5	19.0	30.9	6.5
HCF 3/8-N02	3/8	20.0	1/4	11.5	20.2	21.5	19.0	34.2	6.5

**HCF-G**  
Female adapter



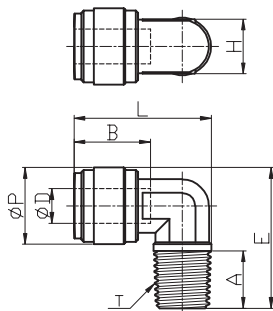
Model(inch)	ØD	ØP	T(BSPP,G)	A	B	ØE	H(hex)	L	Weight g
HCF 1/4-G04	1/4	20.0	1/2	12.5	16.9	30.0	27.0	37.6	-
HCF 3/8-G04	3/8	20.0	1/2	12.5	20.2	30.0	27.0	38.4	13.4
HCF 3/8-G05	3/8	20.0	5/8	13.5	20.2	32.0	29.0	38.2	14.8
HCF 3/8-G06	3/8	20.0	3/4	10.0	20.2	41.6	36.7	37.0	39.3
HCF 1/2-G04	1/2	23.0	1/2	12.5	25.1	30.0	27.0	41.9	-

**HCF-UNF**  
Female adapter



Model(inch)	ØD	ØP	T(UNF)	A	B	ØE	H(hex)	L	Weight g
HCF 5/16-UNF7/16	5/16	17.6	7/16-20	9.5	17.5	19.0	17.0	30.5	-
HCF 3/8-UNF7/16	3/8	20.0	7/16-20	9.5	20.2	19.0	17.0	33.2	7.5

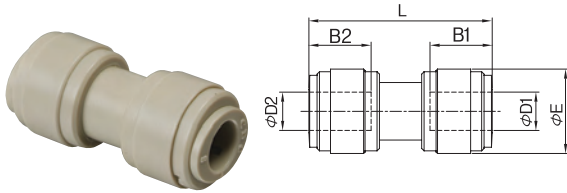
**HPL**  
Rigid Elbow



Model(inch)	ØD	ØP	T(NPT,F)	A	B	ØE	H(inch)	L	Weight g
HPL 5/32-N01	5/32	15.5	1/8	9.1	14.7	26.4	11.0(7/16)	25.4	4.9
HPL 3/16-N01	3/16	15.5	1/8	9.1	15.0	26.4	11.0(7/16)	25.6	4.7
HPL 1/4-N01	1/4	15.5	1/8	9.1	16.9	26.4	11.0(7/16)	25.6	4.2
HPL 1/4-N02	1/4	15.5	1/4	13.2	16.9	31.9	11.0(7/16)	27.0	5.7
HPL 1/4-N03	1/4	15.5	3/8	13.8	16.9	32.7	11.0(7/16)	28.9	7.1
HPL 5/16-N02	5/16	20.0	1/4	13.2	17.5	35.2	14.3(9/16)	31.4	9.0
HPL 5/16-N03	5/16	20.0	3/8	13.8	17.5	35.8	14.3(9/16)	33.5	10.3
HPL 3/8-N02	3/8	20.0	1/4	13.2	20.2	35.2	14.3(9/16)	31.8	8.6
HPL 3/8-N03	3/8	20.0	3/8	13.8	20.2	35.8	14.3(9/16)	33.9	9.9
HPL 1/2-N03	1/2	23.6	3/8	13.8	25.1	39.3	17.4(11/16)	39.7	13.3
HPL 1/2-N04	1/2	23.6	1/2	17.8	25.1	43.3	17.4(11/16)	41.5	16.2

## HUC

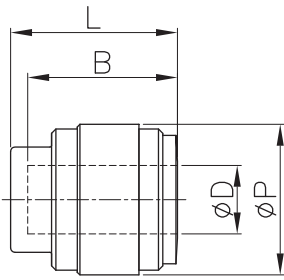
Equal & Reducing Union Straight



Model(inch)	ØD1	ØD2	B1	B2	ØE	L	Weight g
HUC 5/32-5/32	5/32	5/32	14.7	14.7	13.3	31.8	3.8
HUC 3/16-3/16	3/16	3/16	15.0	15.0	13.8	32.5	4.0
HUC 1/4-1/4	1/4	1/4	16.9	16.9	15.5	36.2	5.2
HUC 5/16-1/4	5/16	1/4	17.5	16.9	17.6	36.8	6.0
HUC 5/16-5/16	5/16	5/16	17.5	17.5	17.6	38.2	6.9
HUC 3/8-5/16	3/8	5/16	20.2	17.5	20.0	42.5	9.9
HUC 3/8-1/4	3/8	1/4	20.2	16.9	20.0	42.1	9.9
HUC 3/8-3/8	3/8	3/8	20.2	20.2	20.0	42.9	9.7
HUC 1/2-5/16	1/2	5/16	25.1	17.5	23.6	52.0	16.7
HUC 1/2-3/8	1/2	3/8	25.1	25.1	23.6	52.4	16.3
HUC 1/2-1/2	1/2	1/2	25.1	25.1	23.6	53.2	14.6

## HPF

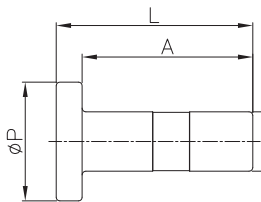
Female Straight



Model(inch)	ØD	ØP	B	L	Weight g
HPF 1/4	1/4	15.5	16.9	18.9	2.7
HPF 5/16	5/16	17.6	17.5	19.5	3.6
HPF 3/8	3/8	20.0	20.2	22.2	5.0
HPF 1/2	1/2	23.0	24.9	26.9	7.0

## HPP

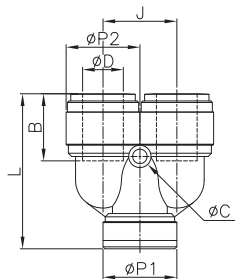
Male Plug



Model(inch)	ØD	ØP	A	L	Weight g
HPP 1/4	1/4	13	21.0	24.5	1.2
HPP 3/8	3/8	18	26.0	30.0	2.7

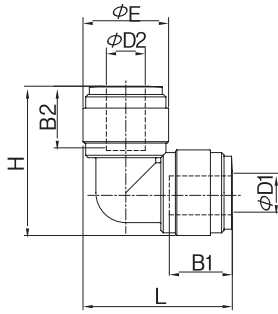
## HBU

U-Bend



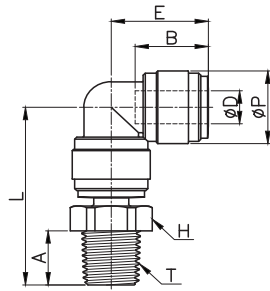
Model(inch)	ØD	ØP1	ØP2	L	J	Weight g
HBU 1/2-1/2	1/2	25.1	23.0	48.3	23.0	4.5

**HUL**  
Equal & Reducing Union Elbow



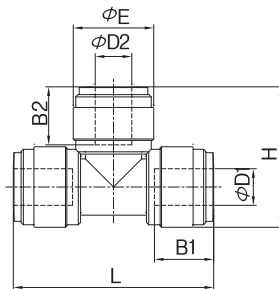
Model(inch)	ØD1	ØD2	B1	B2	ØE	L	H	Weight g
HUL 5/32-5/32	5/32	5/32	14.7	14.7	13.2	24.5	24.5	4.0
HUL 3/16-3/16	3/16	3/16	15.0	15.0	13.8	25.5	25.5	4.3
HUL 1/4-1/4	1/4	1/4	16.9	16.9	15.5	28.8	28.8	5.5
HUL 5/16-1/4	5/16	1/4	17.5	16.9	17.6	30.7	30.3	7.6
HUL 5/16-5/16	5/16	5/16	17.5	17.5	17.6	30.7	30.7	7.5
HUL 3/8-1/4	3/8	1/4	20.2	17.5	20.0	35.9	35.5	11.0
HUL 3/8-5/16	3/8	5/16	20.2	20.2	20.0	35.9	35.9	11.1
HUL 3/8-3/8	3/8	3/8	20.2	20.2	20.0	35.9	35.9	10.06
HUL 1/2-3/8	1/2	3/8	25.1	20.2	23.0	43.4	42.6	17.5
HUL 1/2-1/2	1/2	1/2	25.1	25.1	23.0	43.4	43.4	16.7

**HSPL**  
HUL + HCJ Swivel Elbow



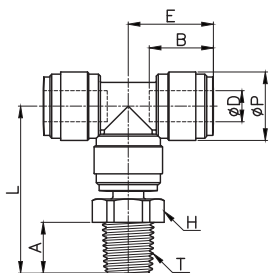
Model(inch)	ØD	ØP	T(NPTF)	A	B	E	Hex	L	Weight g
<b>HSPL 5/32-N01</b> HUL 5/32-5/32 + HCJ 5/32-N01	5/32	13.2	1/8	9.1	14.7	17.9	12.7(1/2)	36.3	5.9
<b>HSPL 5/32-N02</b> HUL 5/32-5/32 + HCJ 5/32-N02	5/32	13.2	1/4	13.2	14.7	17.9	15.8(5/8)	40.0	7.6
<b>HSPL 3/16-N01</b> HUL 3/16-3/16 + HCJ 3/16-N01	3/16	13.8	1/8	9.1	15.0	18.6	12.7(1/2)	36.7	6.3
<b>HSPL 1/4-N01</b> HUL 1/4-1/4 + HCJ 1/4-N01	1/4	15.5	1/8	9.1	16.9	21.0	12.7(1/2)	38.2	7.6
<b>HSPL 1/4-N02</b> HUL 1/4-1/4 + HCJ 1/4-N02	1/4	15.5	1/4	13.2	16.9	21.0	15.8(5/8)	42.3	9.3
<b>HSPL 5/16-N01</b> HUL 5/16-5/16 + HCJ 5/16-N01	5/16	17.6	1/8	9.1	17.5	21.9	12.7(1/2)	39.5	10.3
<b>HSPL 5/16-N02</b> HUL 5/16-5/16 + HCJ 5/16-N02	5/16	17.6	1/4	13.2	17.5	21.9	15.8(5/8)	43.6	11.4
<b>HSPL 5/16-N03</b> HUL 5/16-5/16 + HCJ 5/16-N03	5/16	17.6	3/8	13.8	17.5	21.9	19.0(3/4)	44.7	14.4
<b>HSPL 3/8-N02</b> HUL 3/8-3/8 + HCJ 3/8-N02	3/8	20.0	1/4	13.2	20.2	25.9	15.8(5/8)	47.9	15.1
<b>HSPL 3/8-N03</b> HUL 3/8-3/8 + HCJ 3/8-N03	3/8	20.0	3/8	13.8	20.2	25.9	19.0(3/4)	49.0	17.1
<b>HSPL 1/2-N03</b> HUL 1/2-1/2 + HCJ 1/2-N03	1/2	23.0	3/8	13.8	25.1	31.9	19.0(3/4)	54.1	23.6
<b>HSPL 1/2-N04</b> HUL 1/2-1/2 + HCJ 1/2-N04	1/2	23.0	1/2	17.8	25.1	31.9	23.8(15/16)	58.1	28.1

**HUT**  
Equal Union Tee



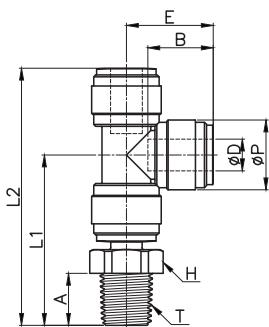
Model(inch)	ØD1	ØD2	B1	B2	ØE	H	L	Weight g
HUT 5/32-5/32	5/32	5/32	14.7	14.7	13.2	24.5	35.8	5.7
HUT 3/16-3/16	3/16	3/16	15.0	15.0	13.8	25.5	37.2	6.2
HUT 1/4-1/4	1/4	1/4	16.9	16.9	15.5	28.8	42.0	8.1
HUT 5/16-5/16	5/16	5/16	17.5	17.5	17.6	30.7	43.8	10.6
HUT 3/8-3/8	3/8	3/8	20.2	20.2	20.0	35.9	51.8	15.4
HUT 1/2-1/2	1/2	1/2	25.1	25.1	23.0	43.4	63.8	23.2

## HSPT HUT + HCJ Swivel Branch Tee



Model(inch)	ØD	ØP	T(NPTF)	A	B	E	Hex	L	Weight g
<b>HSPT 5/32-N01</b> HUT 5/32-5/32 + HCJ 5/32-N01	5/32	13.2	1/8	9.1	14.7	17.9	12.7(1/2)	36.3	7.6
<b>HSPT 5/32-N02</b> HUT 5/32-5/32 + HCJ 5/32-N02	5/32	13.2	1/4	13.2	14.7	17.9	15.8 (5/8)	40.0	9.3
<b>HSPT 3/16-N01</b> HUT 3/16-3/16 + HCJ 3/16-N01	3/16	13.8	1/8	9.1	15.0	18.6	12.7 (1/2)	36.7	8.2
<b>HSPT 1/4-N01</b> HUT 1/4-1/4 + HCJ 1/4-N01	1/4	15.5	1/8	9.1	16.9	21.0	12.7 (1/2)	38.2	10.2
<b>HSPT 1/4-N02</b> HUT 1/4-1/4 + HCJ 1/4-N02	1/4	15.5	1/4	13.2	16.9	21.0	15.8 (5/8)	42.3	11.9
<b>HSPT 5/16-N01</b> HUT 5/16-5/16 + HCJ 5/16-N01	5/16	17.6	1/8	9.1	17.5	21.9	12.7 (1/2)	39.5	13.4
<b>HSPT 5/16-N02</b> HUT 5/16-5/16 + HCJ 5/16-N02	5/16	17.6	1/4	13.2	17.5	21.9	15.8 (5/8)	43.6	14.5
<b>HSPT 5/16-N03</b> HUT 5/16-5/16 + HCJ 5/16-N03	5/16	17.6	3/8	13.8	17.5	21.9	19.0 (3/4)	44.7	16.5
<b>HSPT 3/8-N02</b> HUT 3/8-3/8 + HCJ 3/8-N02	3/8	20.0	1/4	13.2	20.2	25.9	15.8 (5/8)	47.9	19.9
<b>HSPT 3/8-N03</b> HUT 3/8-3/8 + HCJ 3/8-N03	3/8	20.0	3/8	13.8	20.2	25.9	19.0 (3/4)	49.0	21.9
<b>HSPT 1/2-N03</b> HUT 1/2-1/2 + HCJ 1/2-N03	1/2	23.0	3/8	13.8	25.1	31.9	19.0 (3/4)	54.1	30.1
<b>HSPT 1/2-N04</b> HUT 1/2-1/2 + HCJ 1/2-N04	1/2	23.0	1/2	17.8	25.1	31.9	23.8 (15/16)	58.1	34.6

## HSST HUT + HCJ Swivel Run Tee

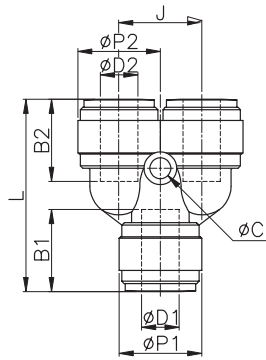


Model(inch)	ØD	ØP	T(NPTF)	A	B	E	Hex	L1	L2	Weight g
<b>HSST 5/32-N01</b> HUT 5/32-5/32 + HCJ 5/32-N01	5/32	13.2	1/8	9.1	14.7	17.9	12.7(1/2)	36.3	54.2	7.6
<b>HSST 5/32-N02</b> HUT 5/32-5/32 + HCJ 5/32-N02	5/32	13.2	1/4	13.2	14.7	17.9	15.8 (5/8)	40.0	58.3	9.3
<b>HSST 3/16-N01</b> HUT 3/16-3/16 + HCJ 3/16-N01	3/16	13.8	1/8	9.1	15.0	18.6	12.7 (1/2)	36.7	55.3	8.2
<b>HSST 1/4-N01</b> HUT 1/4-1/4 + HCJ 1/4-N01	1/4	15.5	1/8	9.1	16.9	21.0	12.7 (1/2)	38.2	59.2	10.2
<b>HSST 1/4-N02</b> HUT 1/4-1/4 + HCJ 1/4-N02	1/4	15.5	1/4	13.2	16.9	21.0	15.8 (5/8)	42.3	63.3	11.9
<b>HSST 5/16-N01</b> HUT 5/16-5/16 + HCJ 5/16-N01	5/16	17.6	1/8	9.1	17.5	21.9	12.7 (1/2)	39.5	61.4	13.4
<b>HSST 5/16-N02</b> HUT 5/16-5/16 + HCJ 5/16-N02	5/16	17.6	1/4	13.2	17.5	21.9	15.8 (5/8)	43.6	65.5	14.5
<b>HSST 5/16-N03</b> HUT 5/16-5/16 + HCJ 5/16-N03	5/16	17.6	3/8	13.8	17.5	21.9	19.0 (3/4)	44.7	66.6	16.5
<b>HSST 3/8-N02</b> HUT 3/8-3/8 + HCJ 3/8-N02	3/8	20.0	1/4	13.2	20.2	25.9	15.8 (5/8)	47.9	73.8	19.9
<b>HSST 3/8-N03</b> HUT 3/8-3/8 + HCJ 3/8-N03	3/8	20.0	3/8	13.8	20.2	25.9	19.0 (3/4)	49.0	74.9	21.9
<b>HSST 1/2-N03</b> HUT 1/2-1/2 + HCJ 1/2-N03	1/2	23.0	3/8	13.8	25.1	31.9	19.0 (3/4)	54.1	86.0	30.1
<b>HSST 1/2-N04</b> HUT 1/2-1/2 + HCJ 1/2-N04	1/2	23.0	1/2	17.8	25.1	31.9	23.8 (15/16)	58.1	90.0	34.6



## HUY

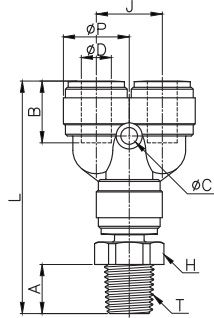
Equal Union Y



Model(inch)	ØD1	ØD2	B1	B2	ØP1	ØP2	L	J	ØC	Weight g
HUY 5/32-5/32	5/32	5/32	14.7	14.7	13.8	13.8	33.7	13.5	3.3	6.7
HUY 3/16-3/16	3/16	3/16	15.0	15.0	13.8	13.8	34.1	13.5	3.3	6.8
HUY 1/4-1/4	1/4	1/4	16.9	16.9	15.5	15.5	38.8	15.5	3.3	8.8
HUY 5/16-5/16	5/16	5/16	17.5	17.5	17.6	17.6	41.0	17.6	4.5	11.8
HUY 3/8-3/8	3/8	3/8	20.2	20.2	20.0	20.0	46.4	20.0	4.5	16.7
HUY 1/2-1/2	1/2	1/2	25.1	25.1	23.0	23.0	56.8	23.0	4.5	25.1

## HSWT

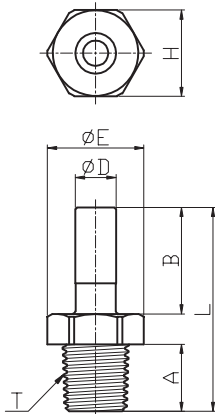
HUY + HCJ Swivel Y



Model(inch)	ØD	ØP	T(NPT,F)	A	B	J	H	L	ØC	Weight g
<b>HSWT5/32-N01</b> HUY 5/32-5/32 + HCJ 5/32-N01	5/32	13.2	1/8	9.1	14.7	13.5	12.7(1/2)	52.1	3.3	8.6
<b>HSWT 5/32-N02</b> HUY 5/32-5/32 + HCJ 5/32-N02	5/32	13.2	1/4	13.2	14.7	13.5	15.8(5/8)	56.2	3.3	10.3
<b>HSWT 3/16-N01</b> HUY 3/16-3/16 + HCJ 3/16-N01	3/16	13.8	1/8	9.1	15.0	13.5	12.7(1/2)	52.2	3.3	8.8
<b>HSWT 1/4-N01</b> HUY 1/4-1/4 + HCJ 1/4-N01	1/4	15.5	1/8	9.1	16.9	15.5	12.7(1/2)	56.0	3.3	10.9
<b>HSWT 1/4-N02</b> HUY 1/4-1/4 + HCJ 1/4-N02	1/4	15.5	1/4	13.2	16.9	15.5	15.8(5/8)	60.1	3.3	12.6
<b>HSWT 5/16-N01</b> HUY 5/16-5/16 + HCJ 5/16-N01	5/16	17.6	1/8	9.1	17.5	17.6	12.7(1/2)	58.6	4.5	14.6
<b>HSWT 5/16-N02</b> HUY 5/16-5/16 + HCJ 5/16-N02	5/16	17.6	1/4	13.2	17.5	17.6	15.8(5/8)	62.7	4.5	15.7
<b>HSWT 5/16-N03</b> HUY 5/16-5/16 + HCJ 5/16-N03	5/16	17.6	3/8	13.8	17.5	17.6	19.0(3/4)	63.8	4.5	17.7
<b>HSWT 3/8-N02</b> HUY 3/8-3/8 + HCJ 3/8-N02	3/8	20.0	1/4	13.2	20.2	20.0	15.8(5/8)	68.4	4.5	21.2
<b>HSWT 3/8-N03</b> HUY 3/8-3/8 + HCJ 3/8-N03	3/8	20.0	3/8	13.8	20.2	20.0	19.0(3/4)	69.5	4.5	23.2
<b>HSWT1/2-N03</b> HUY 1/2-1/2 + HCJ 1/2-N03	1/2	23.0	3/8	13.8	25.1	23.0	19.0(3/4)	79.0	4.5	32.0
<b>HSWT 1/2-N04</b> HUY 1/2-1/2 + HCJ 1/2-N04	1/2	23.0	1/2	17.8	25.1	23.0	23.8(15/16)	83.0	4.5	36.5

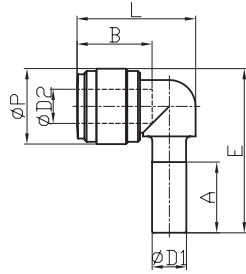
## HCJ

Stem Adaptor



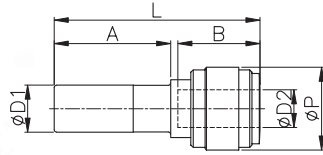
Model(inch)	ØD	T(NPT,F)	A	B	ØE	H(inch)	L	Weight g
HCJ 5/32-N01	5/32	1/8	9.1	18.0	14.1	12.7(1/2)	33.1	14.1
HCJ 5/32-N02	5/32	1/4	13.2	18.0	17.8	15.8(5/8)	37.2	17.8
HCJ 3/16-N01	3/16	1/8	9.1	18.0	14.1	12.7(1/2)	33.1	14.1
HCJ 1/4-N01	1/4	1/8	9.1	19.0	14.1	12.7(1/2)	34.1	14.1
HCJ 1/4-N02	1/4	1/4	13.2	19.0	17.8	15.8(5/8)	38.2	17.8
HCJ 5/16-N01	5/16	1/8	9.1	20.0	14.1	12.7(1/2)	35.1	14.1
HCJ 5/16-N02	5/16	1/4	13.2	20.0	17.8	15.8(5/8)	39.2	17.8
HCJ 5/16-N03	5/16	3/8	13.8	20.0	21.5	19.0(3/4)	40.3	21.5
HCJ 3/8-N02	3/8	1/4	13.2	23.0	17.8	15.8(5/8)	42.2	17.8
HCJ 3/8-N03	3/8	3/8	13.8	23.0	21.5	19.0(3/4)	43.3	21.5
HCJ 1/2-N03	1/2	3/8	13.8	27.0	21.5	19.0(3/4)	47.3	21.5
HCJ 1/2-N04	1/2	1/2	17.8	27.0	26.8	23.8(15/16)	51.3	26.8

## HLJ Stem Elbow



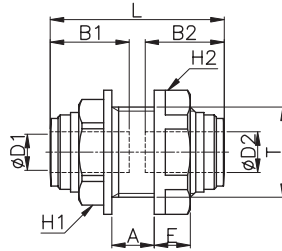
Model(inch)	ØD1	ØD2	ØP	A	B	E	L	Weight g
HLJ 5/32-5/32	5/32	5/32	13.2	18.0	14.7	30.1	21.9	2.5
HLJ 3/16-3/16	3/16	3/16	13.8	18.5	15.0	31.4	22.5	2.9
HLJ 1/4-1/4	1/4	1/4	15.5	21.0	16.9	34.8	25.1	3.7
HLJ 5/16-5/16	5/16	5/16	17.6	22.5	17.5	38.3	27.7	5.4
HLJ 3/8-1/4	3/8	1/4	15.5	24.8	16.9	38.6	25.1	4.5
HLJ 3/8-5/16	3/8	5/16	20.0	24.8	17.5	43.2	31.0	8.1
HLJ 3/8-3/8	3/8	3/8	20.0	24.8	20.2	43.2	31.4	7.9
HLJ 1/2-1/2	1/2	1/2	23.6	29.5	25.1	51.2	39.2	12.7

## HGJ Tube Reducer



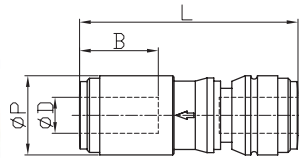
Model(inch)	ØD1	ØD2	ØP	L	A	B	Weight g
HGJ 1/4-5/32	1/4	5/32	13.2	36.7	21.0	14.7	2.4
HGJ 5/16-1/4	5/16	1/4	15.5	40.6	22.5	16.9	3.4
HGJ 3/8-1/4	3/8	1/4	17.6	43.9	24.8	16.9	4.7
HGJ 3/8-5/16	3/8	5/16	17.6	44.3	24.8	17.5	4.6
HGJ 1/2-3/8	1/2	3/8	20.0	51.7	29.5	20.2	4.7

## HMM Bulkhead Union



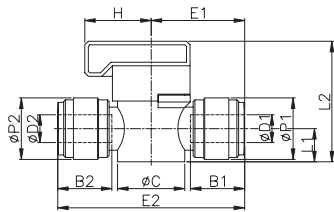
Model(inch)	ØD1	ØD2	T	L	E	A	B1	B2	H1 Hex	H2 Hex	Weight g
HMM 5/32-5/32	5/32	5/32	M15*1.5P	31.4	6.5	7.2	14.7	14.7	17	18	6.9
HMM 1/4-1/4	1/4	1/4	M17*1.5P	34.2	7.0	7.9	16.9	16.9	19	21	9.4
HMM 1/4-3/8	1/4	3/8	M24*1.75p	47.9	8.5	11.1	16.9	20.2	24	28.5	20.9
HMM 5/16-5/16	5/16	5/16	M20*1.75P	38.5	8.0	9.4	17.5	17.5	21	25.5	14.2
HMM 3/8-3/8	3/8	3/8	M24*1.75P	42.4	8.5	10.8	20.2	20.2	24	28.5	20.1
HMM 1/2-1/2	1/2	1/2	M27*2.0P	51.8	9.0	16.4	25.1	25.1	27	31	27.6

## HCVU Single non-return valve



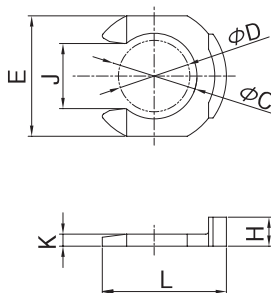
Model(inch)	ØD1	ØP	L	B	Weight g
HCVU 1/4-1/4	1/4	15.5	45.5	16.1	7.4
HCVU 5/16-5/16	5/16	17.6	48.6	17.5	10.0
HCVU 3/8-3/8	3/8	20.0	57.8	19.4	15.0
HCVU 1/2-1/2	1/2	23.6	67.9	24.1	21.5

## HBVU Ball valve



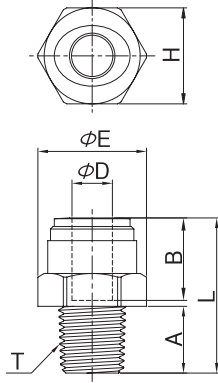
Model(inch)	ØD1	ØD2	B1	B2	ØP1	ØP2	L1	L2	E1	E2	H	Ø	Weight g
HBVU 1/4-1/4	1/4	1/4	16.1	16.1	15.5	15.5	9.5	34.5	25.9	51.7	19.0	19.2	16.0
HBVU 5/16-5/16	5/16	5/16	17.5	17.5	17.6	17.6	9.5	34.5	26.8	53.5	19.0	19.2	17.4
HBVU 3/8-3/8	3/8	3/8	20.2	20.2	20.0	20.0	12.5	42.3	31.6	63.2	26.3	24.2	29.0
HBVU 1/2-1/2	1/2	1/2	23.9	23.9	23.0	23.0	12.5	42.3	35.4	70.8	26.3	24.2	35.4

## HCP Clip



Model(inch)	ØD1	ØC	E	L	H	J	K	Weight g
HCP 5/32	5/32	6.2	10.2	11.0	2.8	4.3	1.1	0.09
HCP 3/16	3/16	6.2	10.2	11.0	2.8	4.3	1.1	0.09
HCP 1/4	1/4	8.0	11.6	11.6	3.1	6.4	1.3	0.12
HCP 5/16	5/16	9.6	13.5	13.9	3.3	7.3	1.4	0.16
HCP 3/8	3/8	11.8	16.0	16.4	3.4	9.2	1.4	0.23
HCP 1/2	1/2	14.4	19.0	19.0	3.6	11.1	1.4	0.30

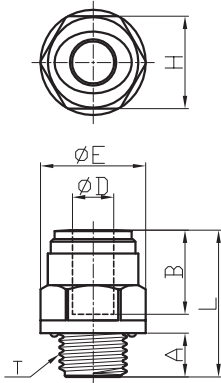
**HPC**  
Straight Adaptor



Model(mm)	ØD	T(BSPT,R)	A	B	ØE	H(Hex)	L	Weight g
HPC 06R01	06	1/8	9.1	16.1	18.5	17.0	26.2	3.9
HPC 06R02	06	1/4	13.1	16.1	18.5	17.0	26.7	4.2
HPC 08R01	08	1/8	9.1	17.5	21.0	19.0	28.1	5.2
HPC 08R02	08	1/4	13.1	17.5	21.0	19.0	30.6	5.8
HPC 10R03	10	3/8	13.5	20.1	23.2	21.0	28.8	6.7
HPC 10R04	10	1/2	16.3	20.1	24.4	21.0	32.1	9.6
HPC 12R03	12	3/8	13.5	24.7	26.5	24.0	32.2	8.9
HPC 12R04	12	1/2	16.3	24.7	26.5	24.0	34.3	11.0

Non stock, Deliver in 3 weeks

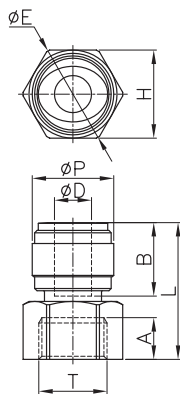
**HPC-G**  
Straight Adaptor



Model(mm)	ØD	T(BSPP,G)	A	B	ØE	H(Hex)	L	Weight g
HPC 04G01	04	1/8	6.0	14.7	16.6	15.0	21.9	3.3
HPC 04G02	04	1/4	8.5	14.7	20.5	18.0	23.9	4.9
HPC 06G01	06	1/8	6.0	16.1	16.6	15.0	24.1	3.3
HPC 06G02	06	1/4	8.5	16.1	20.5	18.0	24.1	4.8
HPC 08G01	08	1/8	6.0	17.5	18.5	17.0	27.0	5.2
HPC 08G02	08	1/4	8.5	17.5	20.5	18.0	28.5	6.1
HPC 08G03	08	3/8	9.0	17.5	24.0	21.0	26.5	7.0
HPC 08G04	08	1/2	12.5	17.5	28.5	26.0	29.5	11.9
HPC 10G02	10	1/4	8.5	20.1	21.1	19.0	30.8	7.2
HPC 10G03	10	3/8	9.0	20.1	24.2	21.0	26.3	7.0
HPC 10G04	10	1/2	12.5	20.1	28.5	26.0	29.8	11.3
HPC 12G03	12	3/8	9.0	24.7	27.0	24.0	34.2	11.6
HPC 12G04	12	1/2	12.5	24.7	28.5	26.0	32.7	12.4

Non stock, Deliver in 3 weeks

**HCF-G**  
Female adaptor

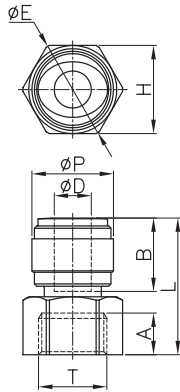


Model(mm)	ØD	ØD	T(BSPP,G)	A	B	ØE	H(Hex)	L	Weight g
HCF 06G01	06	17.6	1/8	6.0	16.1	19.2	17	27.1	6.1
HCF 06G02	06	17.6	1/4	8.5	16.1	21.5	19	29.1	7.0
HCF 06G03	06	17.6	3/8	9.0	16.1	27.3	24	30.6	9.9
HCF 08G01	08	17.6	1/8	6.0	17.5	19.2	17	27.5	6.0
HCF 08G02	08	17.6	1/4	8.5	17.5	21.5	19	29.5	6.7
HCF 08G03	08	17.6	3/8	9.0	17.5	27.3	24	31.0	9.7
HCF 08G04	08	20.0	1/2	12.5	17.5	30.0	27	38.0	13.8
HCF 10G03	10	23.0	3/8	9.0	20.1	27.3	24	37.0	13.7
HCF 10G04	10	20.0	1/2	12.5	20.1	30.0	27	38.3	13.3
HCF 12G03	12	23.0	3/8	9.0	24.7	27.3	24	37.7	13.0
HCF 12G04	12	23.0	1/2	12.5	24.7	30.0	27	41.7	15.4

Non stock, Deliver in 3 weeks

## HCF-UNF

Female adapter

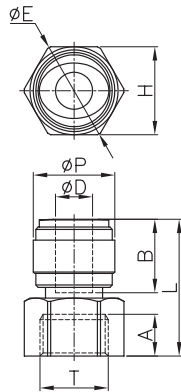


Model(mm)	ØD	ØP	T(UNF)	A	B	L	H(Hex)	ØE	Weight g
HCF 06-UNF7/16	06	17.6	7/16-20	9.5	16.1	30.1	17	19.0	6.5
HCF 08-UNF7/16	08	17.6	7/16-20	9.5	17.5	30.5	17	19.0	6.5
HCF 10-UNF7/16	10	20.0	7/16-20	9.5	20.1	33.1	17	19.0	-

Non stock, Deliver in 3 weeks

## HCF-NH

Female adapter

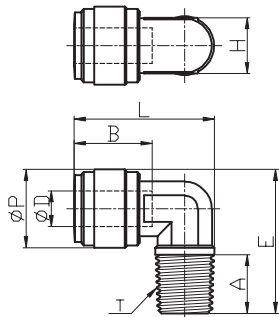


Model(mm)	ØD	ØP	T(NH)	A	B	L	H(Hex)	ØE	Weight g
HCF 06-NH06	06	15.5	3/4	10.0	16.1	34.2	36.7	41.6	-
HCF 08-NH06	08	20.0	3/4	10.0	17.5	36.6	36.7	41.6	-

Non stock, Deliver in 3 weeks

## HPL

Rigid Elbow

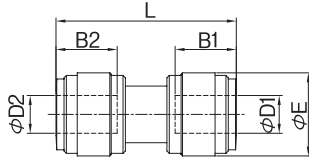


Model(mm)	ØD	ØP	T(BSPT,R)	A	B	E	H	L	Weight g
HPL 04R01	04	15.0	1/8	9.1	14.7	25.6	10.0	25.2	4.2
HPL 06R01	06	15.0	1/8	9.1	16.1	25.6	10.0	25.4	4.1
HPL 06R02	06	15.0	1/4	13.1	16.1	30.6	10.0	27.0	5.1
HPL 06R03	06	17.6	3/8	13.5	16.1	32.6	13.0	33.1	8.4
HPL 08R02	08	17.6	1/4	13.1	17.5	32.2	13.0	31.5	7.0
HPL 08R03	08	17.6	3/8	13.5	17.5	32.6	13.0	33.5	8.0
HPL 10R03	10	20.0	3/8	13.5	20.1	35.7	17.0	33.9	9.2
HPL 12R04	12	23.0	1/2	16.3	24.7	41.4	17.0	40.7	15.6

Non stock, Deliver in 3 weeks

## HUC

Equal & Reducing Union Straight

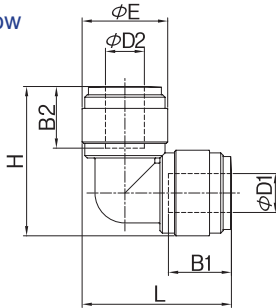


Model(mm)	ØD1	ØD2	B1	B2	ØE	L	Weight g
HUC 0404	04	04	14.7	14.7	13.2	31.8	3.8
HUC 0604	06	04	16.1	14.7	15.0	35.0	5.0
HUC 0606	06	06	16.1	16.1	15.0	35.2	4.7
HUC 0806	08	06	17.5	16.1	17.6	37.8	7.1
HUC 0808	08	08	17.5	17.5	17.6	38.2	6.9
HUC 1006	10	06	20.1	16.1	20.0	42.0	9.8
HUC 1008	10	08	20.1	17.5	20.0	42.4	9.6
HUC 1010	10	10	20.1	20.1	20.0	42.7	9.2
HUC 1210	12	10	24.7	20.1	23.0	51.7	15.0
HUC 1212	12	12	24.7	24.7	23.0	52.4	14.4

Non stock, Deliver in 3 weeks

## HUL

Equal & Reducing Union Elbow

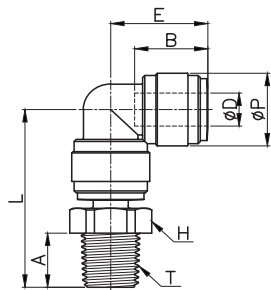


Model(mm)	ØD1	ØD2	B1	B2	ØE1	ØE2	L	H	Weight g
HUL 0404	04	04	14.7	14.7	13.2	13.2	24.5	24.5	3.9
HUL 0606	06	06	16.1	16.1	15.0	15.0	27.6	27.6	5.1
HUL 0806	08	06	17.5	16.1	17.6	17.6	30.7	30.3	7.7
HUL 0808	08	08	17.5	17.5	17.6	17.6	30.7	30.7	7.6
HUL 1010	10	10	20.1	20.1	20.0	20.0	35.8	36.1	10.2
HUL 1206	12	06	24.7	16.1	23.0	17.6	38.5	36.5	10.2
HUL 1212	12	12	24.7	24.7	23.0	23.0	43.2	43.2	16.4

Non stock, Deliver in 3 weeks

## HSPL

HUL + HCJ Swivel Elbow

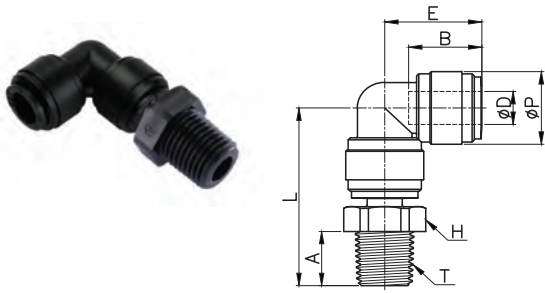


Model(mm)	ØD	ØP	T(BSPT,R)	A	B	E	Hex	L	Weight g
<b>HSPL 04R01</b>	04	13.2	1/8	9.1	14.7	17.9	13.0	36.3	5.7
HUL 0404 + HCJ 04R01									
<b>HSPL 04R02</b>	04	13.2	1/4	13.1	14.7	17.9	17.0	40.3	7.4
HUL 0404 + HCJ 04R02									
<b>HSPL 06R01</b>	06	15.0	1/8	9.1	16.1	20.1	13.0	38.6	7.1
HUL 0606 + HCJ 06R01									
<b>HSPL 06R02</b>	06	15.0	1/4	13.1	16.1	20.1	17.0	42.6	8.8
HUL 0606 + HCJ 06R02									
<b>HSPL 08R01</b>	08	17.6	1/8	9.1	17.5	21.9	13.0	40.5	9.8
HUL 0808 + HCJ 08R01									
<b>HSPL 08R02</b>	08	17.6	1/4	13.1	17.5	21.9	17.0	44.5	11.4
HUL 0808 + HCJ 08R02									
<b>HSPL 08R03</b>	08	17.6	3/8	13.5	17.5	21.9	21.0	44.9	12.9
HUL 0808 + HCJ 08R03									
<b>HSPL 10R02</b>	10	20.0	1/4	13.1	20.1	25.8	17.0	48.8	14.7
HUL 1010 + HCJ 10R02									
<b>HSPL 10R03</b>	10	20.0	3/8	13.5	20.1	25.8	21.0	49.7	16.3
HUL 1010 + HCJ 10R03									
<b>HSPL 10R04</b>	10	20.0	1/2	16.5	20.1	25.8	24.0	52.7	19.9
HUL 1010 + HCJ 10R04									
<b>HSPL 12R03</b>	12	23.0	3/8	13.5	24.7	31.7	21.0	55.0	23.2
HUL 1212 + HCJ 12R03									
<b>HSPL 12R04</b>	12	23.0	1/2	16.5	24.7	31.7	24.0	58.0	26.6
HUL 1212 + HCJ 12R04									

Non stock, Deliver in 3 weeks

## HSPL-G

HUL + HCJ-G Swivel Elbow

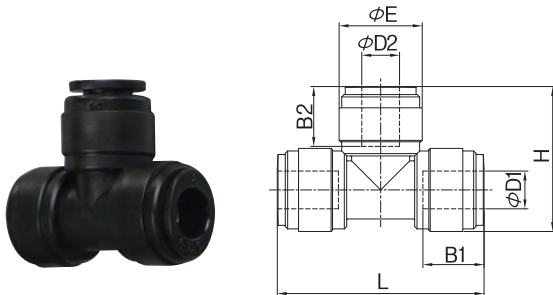


Model(mm)	ØD	ØP	T(BSPP,G)	A	B	E	Hex	L	Weight g
<b>HSPL 04G01</b> HUL 0404 + HCJ 04G01	04	13.2	1/8	6.0	14.7	17.9	15.0	35.7	6.6
<b>HSPL 04G02</b> HUL 0404 + HCJ 04G02	04	13.2	1/4	8.5	14.7	17.9	18.0	38.2	8.1
<b>HSPL 06G01</b> HUL 0606 + HCJ 06G01	06	15.0	1/8	6.0	16.1	20.1	15.0	38.0	7.9
<b>HSPL 06G02</b> HUL 0606 + HCJ 06G02	06	15.0	1/4	8.5	16.1	20.1	18.0	40.5	9.4
<b>HSPL 08G01</b> HUL 0808 + HCJ 08G01	08	17.6	1/8	6.0	17.5	21.9	15.0	39.9	10.6
<b>HSPL 08G02</b> HUL 0808 + HCJ 08G02	08	17.6	1/4	8.5	17.5	21.9	18.0	42.4	12.2
<b>HSPL 08G03</b> HUL 0808 + HCJ 08G03	08	17.6	3/8	9.0	17.5	21.9	22.0	42.9	13.8
<b>HSPL 10G02</b> HUL 1010 + HCJ 10G02	10	20.0	1/4	8.5	20.1	25.8	18.0	46.7	15.4
<b>HSPL 10G03</b> HUL 1010 + HCJ 10G03	10	20.0	3/8	9.0	20.1	25.8	22.0	47.2	17.0
<b>HSPL 10G04</b> HUL 1010 + HCJ 10G04	10	20.0	1/2	12.5	20.1	25.8	26.0	50.7	20.9
<b>HSPL 12G03</b> HUL 1212 + HCJ 12G03	12	23.0	3/8	9.0	24.7	31.7	22.0	52.5	23.7
<b>HSPL 12G04</b> HUL 1212 + HCJ 12G04	12	23.0	1/2	12.5	24.7	31.7	26.0	56.0	27.6

Non stock, Deliver in 3 weeks

## HUT

Equal & Reducing Union Tee

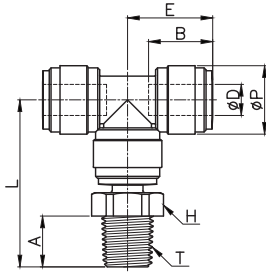


Model(mm)	ØD1	ØD2	ØD3	B1	B2	B3	ØE	H	L	Weight g
HUT 0404	04	04	04	14.7	14.7	14.7	13.2	24.5	35.8	5.8
HUT 0606	06	06	06	16.1	16.1	16.1	15.0	27.6	40.2	7.3
HUT 0808	08	08	08	17.5	17.5	17.5	17.6	30.7	43.8	10.6
HUT 100806	10	08	06	20.1	16.1	20.0	20.0	35.1	51.3	15.6
HUT 101006	10	10	06	20.1	16.1	20.0	20.0	32.1	51.6	12.0
HUT 1010	10	10	10	20.1	20.1	20.0	20.0	35.8	51.6	14.6
HUT 1212	12	12	12	24.7	24.7	23.0	23.0	43.2	63.4	23.2

Non stock, Deliver in 3 weeks

## HSPT

HUT + HCJ Swivel Branch Tee

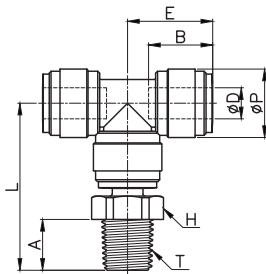


Model(mm)	ØD	ØP	T(BSPT,R)	A	B	E	H	L	Weight g
<b>HSPT 04-R01</b> HUT 0404 + HCJ 04R01	04	13.2	1/8	9.1	14.7	17.9	13.0	36.3	7.6
<b>HSPT 04-R02</b> HUT 0404 + HCJ 04R02	04	13.2	1/4	13.1	14.7	17.9	17.0	40.3	9.3
<b>HSPT 06-R01</b> HUT 0606 + HCJ 06R01	06	15.0	1/8	9.1	16.1	21.0	13.0	38.6	9.3
<b>HSPT 06-R02</b> HUT 0606 + HCJ 06R02	06	15.0	1/4	13.1	16.1	21.0	17.0	42.6	11.0
<b>HSPT 08-R01</b> HUT 0808 + HCJ 08R01	08	17.6	1/8	9.1	17.5	21.9	13.0	40.5	12.8
<b>HSPT 08-R02</b> HUT 0808 + HCJ 08R02	08	17.6	1/4	13.1	17.5	21.9	17.0	44.5	14.4
<b>HSPT 08-R03</b> HUT 0808 + HCJ 08R03	08	17.6	3/8	13.5	17.5	21.9	21.0	44.9	15.9
<b>HSPT10-R02</b> HUT 1010 + HCJ 10R02	10	20.0	1/4	13.1	20.1	25.8	17.0	48.8	19.1
<b>HSPT 10-R03</b> HUT 1010 + HCJ 10R03	10	20.0	3/8	13.5	20.1	25.8	21.0	49.7	20.7
<b>HSPT 10-R04</b> HUT 1010 + HCJ 10R04	10	20.0	1/2	16.5	20.1	25.8	24.0	52.7	24.3
<b>HSPT 12-R03</b> HUT 1212 + HCJ 12R03	12	23.0	3/8	13.5	24.7	31.7	21.0	55.0	30.0
<b>HSPT 12-R04</b> HUT 1212 + HCJ 12R04	12	23.0	1/2	16.5	24.7	31.7	24.0	58.0	33.4

Non stock, Deliver in 3 weeks

## HSPT-G

HUT + HCJ-G Swivel Branch Tee

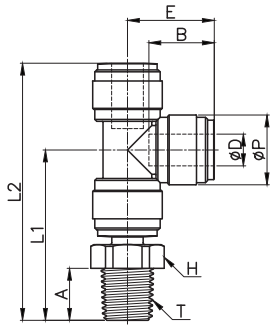


Model(mm)	ØD	ØP	T(BSPP,G)	A	B	E	H	L	Weight g
<b>HSPT 04-G01</b> HUT 0404 + HCJ 04G01	04	13.2	1/8	6.0	14.7	17.9	15.0	35.7	8.5
<b>HSPT 04-G02</b> HUT 0404 + HCJ 04G02	04	13.2	1/4	8.5	14.7	17.9	18.0	38.2	10.0
<b>HSPT 06-G01</b> HUT 0606 + HCJ 06G01	06	15.0	1/8	6.0	16.1	21.0	15.0	38.0	10.1
<b>HSPT 06-G02</b> HUT 0606 + HCJ 06G02	06	15.0	1/4	8.5	16.1	21.0	18.0	40.5	11.6
<b>HSPT 08-G01</b> HUT 0808 + HCJ 08G01	08	17.6	1/8	6.0	17.5	21.9	15.0	39.9	13.6
<b>HSPT 08-G02</b> HUT 0808 + HCJ 08G02	08	17.6	1/4	8.5	17.5	21.9	18.0	42.4	15.2
<b>HSPT 08-G03</b> HUT 0808 + HCJ 08G03	08	17.6	3/8	9.0	17.5	21.9	22.0	42.9	16.8
<b>HSPT10-G02</b> HUT 1010 + HCJ 10G02	10	20.0	1/4	8.5	20.1	25.8	18.0	46.7	19.8
<b>HSPT 10-G03</b> HUT 1010 + HCJ 10R03	10	20.0	3/8	9.0	20.1	25.8	22.0	47.2	21.4
<b>HSPT 10-G04</b> HUT 1010 + HCJ 10G04	10	20.0	1/2	12.5	20.1	25.8	26.0	50.7	25.3
<b>HSPT 12-G03</b> HUT 1212 + HCJ 12G03	12	23.0	3/8	9.0	24.7	31.7	22.0	52.5	30.5
<b>HSPT 12-G04</b> HUT 1212 + HCJ 12G04	12	23.0	1/2	12.5	24.7	31.7	26.0	56.0	34.4

Non stock, Deliver in 3 weeks

## HSST

HUT + HCJ Swivel Run Tee

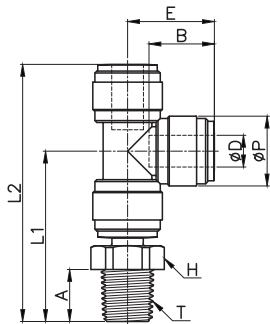


Model(mm)	ØD	ØP	T(BSPT,R)	A	B	E	H	L 1	L 2	Weight g
<b>HSST 04-R01</b> HUT 0404 + HCJ 04R01	04	13.2	1/8	9.1	14.7	17.9	13.0	36.3	54.2	7.6
<b>HSST 04-R02</b> HUT 0404 + HCJ 04R02	04	13.2	1/4	13.1	14.7	17.9	17.0	40.3	58.2	9.3
<b>HSST 06-R01</b> HUT 0606 + HCJ 06R01	06	13.8	1/8	9.1	16.1	21.0	13.0	38.6	58.7	9.3
<b>HSST 06-R02</b> HUT 0606 + HCJ 06R02	06	15.5	1/8	13.1	16.1	21.0	17.0	42.6	67.2	11.0
<b>HSST 08-R01</b> HUT 0808 + HCJ 08R01	08	15.5	1/4	9.1	17.5	21.9	13.0	40.5	62.4	12.8
<b>HSST 08-R02</b> HUT 0808 + HCJ 08R02	08	17.6	1/8	13.1	17.5	21.9	17.0	44.5	66.4	14.4
<b>HSST 08-R03</b> HUT 0808 + HCJ 08R03	08	17.6	1/4	13.5	17.5	21.9	21.0	44.9	66.8	15.9
<b>HSST10-R02</b> HUT 1010 + HCJ 10R02	10	17.6	3/8	13.1	20.1	25.8	17.0	48.8	74.6	19.1
<b>HSST 10-R03</b> HUT 1010 + HCJ 10R03	10	20.0	1/4	13.5	20.1	25.8	21.0	49.7	75.5	20.7
<b>HSST 10-R04</b> HUT 1010 + HCJ 10R04	10	20.0	3/8	16.5	20.1	25.8	24.0	52.7	78.5	24.3
<b>HSST 12-R03</b> HUT 1212 + HCJ 12R03	12	23.0	3/8	13.5	24.7	31.7	21.0	55.0	86.7	30.0
<b>HSST 12-R04</b> HUT 1212 + HCJ 12R04	12	23.0	1/2	16.5	24.7	31.7	24.0	58.0	89.7	33.4

Non stock, Deliver in 3 weeks

## HSST-G

HUT + HCJ-G Swivel Run Tee



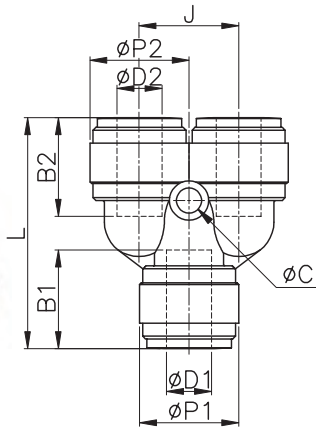
Model(mm)	ØD	ØP	T(BSPP,G)	A	B	E	H	L 1	L 2	Weight g
<b>HSST 04-G01</b> HUT 0404 + HCJ 04G01	04	13.2	1/8	6.0	14.7	17.9	15.0	35.7	53.6	8.5
<b>HSST 04-G02</b> HUT 0404 + HCJ 04G02	04	13.2	1/4	8.5	14.7	17.9	18.0	38.2	56.1	10.0
<b>HSST 06-G01</b> HUT 0606 + HCJ 06G01	06	13.8	1/8	6.0	16.1	21.0	15.0	38.0	58.1	10.1
<b>HSST 06-G02</b> HUT 0606 + HCJ 06G02	06	15.5	1/8	8.5	16.1	21.0	18.0	40.5	60.6	11.6
<b>HSST 08-G01</b> HUT 0808 + HCJ 08G01	08	15.5	1/4	6.0	17.5	21.9	15.0	39.9	61.8	13.6
<b>HSST 08-G02</b> HUT 0808 + HCJ 08G02	08	17.6	1/8	8.5	17.5	21.9	18.0	42.4	64.3	15.2
<b>HSST 08-G03</b> HUT 0808 + HCJ 08G03	08	17.6	1/4	9.0	17.5	21.9	22.0	42.9	64.8	16.8
<b>HSST10-G02</b> HUT 1010 + HCJ 10G02	10	17.6	3/8	8.5	20.1	25.8	18.0	46.7	72.5	19.8
<b>HSST 10-G03</b> HUT 1010 + HCJ 10G03	10	20.0	1/4	9.0	20.1	25.8	22.0	47.2	73.0	21.4
<b>HSST 10-G04</b> HUT 1010 + HCJ 10G04	10	20.0	3/8	12.5	20.1	25.8	26.0	50.7	76.0	25.3
<b>HSST 12-G03</b> HUT 1212 + HCJ 12G03	12	23.0	3/8	9.0	24.7	31.7	22.0	52.5	84.2	30.5
<b>HSST 12-G04</b> HUT 1212 + HCJ 12G04	12	23.0	1/2	12.5	24.7	31.7	26.0	56.0	87.7	34.4

Non stock, Deliver in 3 weeks



## HUY

Equal Union Y

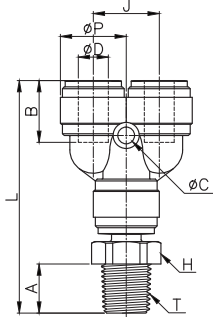


Model(mm)	ØD1	ØD2	B1	B2	ØP1	ØP2	L	J	ØC	Weight g
HUY 0404	04	04	14.7	14.7	13.8	13.8	33.7	13.5	3.3	6.7
HUY 0606	06	06	16.1	16.1	15.5	15.5	38.8	15.5	3.3	9.2
HUY 0808	08	08	17.5	17.5	17.6	17.6	41.0	17.6	4.5	11.6
HUY 1008	10	08	20.1	17.5	20.0	20.0	45.9	20.0	4.5	16.8
HUY 1010	10	10	20.1	20.1	20.0	20.0	46.2	20.0	4.5	16.0
HUY 1212	12	12	24.7	24.7	23.0	23.0	56.4	23.0	4.5	26.3

Non stock, Deliver in 3 weeks

## HSWT

HUY + HCJ Swivel Y

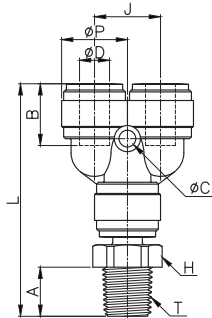


Model(mm)	ØD	ØP	T(BSPT,R)	A	B	J	H	L	ØDC	Weight g
<b>HSWT 04-R01</b> HUY 0404 + HCJ 04R01	04	13.8	1/8	9.1	14.7	13.5	13.0	52.1	3.3	8.5
<b>HSWT 04-R02</b> HUY 0404 + HCJ 04R02	04	13.8	1/4	13.1	14.7	13.5	17.0	56.1	3.3	10.2
<b>HSWT 06-R01</b> HUY 0606 + HCJ 06R01	06	15.5	1/8	9.1	16.1	15.5	13.0	57.3	3.3	11.2
<b>HSWT 06-R02</b> HUY 0606 + HCJ 06R02	06	15.5	1/4	13.1	16.1	15.5	17.0	61.3	3.3	12.9
<b>HSWT 08-R01</b> HUY 0808 + HCJ 08R01	08	17.6	1/8	9.1	17.5	17.6	13.0	59.6	4.5	13.8
<b>HSWT 08-R02</b> HUY 0808 + HCJ 08R02	08	17.6	1/4	13.1	17.5	17.6	17.0	63.6	4.5	15.4
<b>HSWT 08-R03</b> HUY 0808 + HCJ 08R03	08	17.6	3/8	13.5	17.5	17.6	21.0	64.0	4.5	16.9
<b>HSWT 10-R02</b> HUY 1010 + HCJ 10R02	10	20.0	1/4	13.1	20.1	20.0	17.0	67.2	4.5	20.5
<b>HSWT 10-R03</b> HUY 1010 + HCJ 10R03	10	20.0	3/8	13.5	20.1	20.0	21.0	70.1	4.5	22.1
<b>HSWT 10-R04</b> HUY 1010 + HCJ 10R04	10	20.0	1/2	16.5	20.1	20.0	24.0	73.1	4.5	25.7
<b>HSWT 12-R03</b> HUY 1212 + HCJ 12R03	12	23.0	3/8	13.5	24.7	23.0	21.0	79.7	4.5	33.1
<b>HSPY 12-R04</b> HUY 1212 + HCJ 12R04	12	23.0	1/2	16.5	24.7	23.0	24.0	82.7	4.5	36.5

Non stock, Deliver in 3 weeks

## HSWT-G

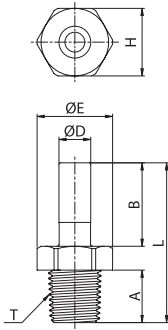
HUY + HCJ-G Swivel Y



Model(mm)	ØD	ØP	T(BSPP,G)	A	B	J	H	L	ØDC	Weight g
<b>HSWT 04-G01</b> HUY 0404 + HCJ 04G01	04	13.8	1/8	6.0	14.7	13.5	15.0	51.5	3.3	9.4
<b>HSWT 04-G02</b> HUY 0404 + HCJ 04G02	04	13.8	1/4	8.5	14.7	13.5	18.0	54.0	3.3	10.9
<b>HSWT 06-G01</b> HUY 0606 + HCJ 06G01	06	15.5	1/8	6.0	16.1	15.5	15.0	56.7	3.3	12.0
<b>HSWT 06-G02</b> HUY 0606 + HCJ 06G02	06	15.5	1/4	8.5	16.1	15.5	18.0	59.2	3.3	13.5
<b>HSWT 08-G01</b> HUY 0808 + HCJ 08G01	08	17.6	1/8	6.0	17.5	17.6	15.0	59.0	4.5	14.6
<b>HSWT 08-G02</b> HUY 0808 + HCJ 08G02	08	17.6	1/4	8.5	17.5	17.6	18.0	61.5	4.5	16.2
<b>HSWT 08-G03</b> HUY 0808 + HCJ 08G03	08	17.6	3/8	9.0	17.5	17.6	22.0	62.0	4.5	17.8
<b>HSWT 10-G02</b> HUY 1010 + HCJ 10G02	10	20.0	1/4	8.5	20.1	20.0	18.0	67.1	4.5	21.2
<b>HSWT 10-G03</b> HUY 1010 + HCJ 10G03	10	20.0	3/8	9.0	20.1	20.0	22.0	67.6	4.5	22.8
<b>HSWT 10-G04</b> HUY 1010 + HCJ 10G04	10	20.0	1/2	12.5	20.1	20.0	26.0	71.1	4.5	26.7
<b>HSWT 12-G03</b> HUY 1212 + HCJ 12G03	12	23.0	3/8	9.0	24.7	23.0	22.0	77.2	4.5	33.6
<b>HSWT 12-G04</b> HUY 1212 + HCJ 12G04	12	23.0	1/2	12.5	24.7	23.0	26.0	80.7	4.5	37.5

Non stock, Deliver in 3 weeks

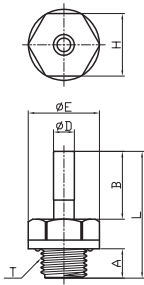
**HCJ**  
Stem Adaptor



Model(mm)	ØD	T(BSPT,R)	A	B	ØE	H(Hex)	L	Weight g
HCJ 04R01	04	1/8	9.1	18.0	14.4	13.0	33.1	1.8
HCJ 04R02	04	1/4	13.1	18.0	18.5	17.0	37.1	3.5
HCJ 06R01	06	1/8	9.1	19.5	14.4	13.0	34.6	2.0
HCJ 06R02	06	1/4	13.1	19.5	18.5	17.0	38.6	3.7
HCJ 08R01	08	1/8	9.1	21.0	14.4	13.0	36.1	2.2
HCJ 08R02	08	1/4	13.1	21.0	18.5	17.0	40.1	3.8
HCJ 08R03	08	3/8	13.5	21.0	23.0	21.0	40.50	5.3
HCJ 10R02	10	1/4	13.1	24.0	18.5	17.0	43.1	4.5
HCJ 10R03	10	3/8	13.5	24.0	23.0	21.0	44.0	6.1
HCJ 10R04	10	1/2	16.5	24.0	26.5	24.0	47.0	9.7
HCJ 12R03	12	3/8	13.5	28.0	23.0	21.0	48.0	6.8
HCJ 12R04	12	1/2	16.5	28.0	26.5	24.0	51.0	10.2

Non stock, Deliver in 3 weeks

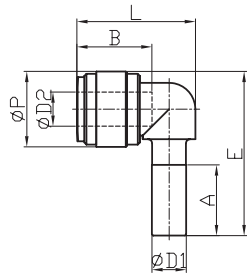
**HCJ-G**  
Stem Adaptor



Model(mm)	ØD	T(BSPP,G)	A	B	ØE	H(Hex)	L	Weight g
HCJ 04G01	04	1/8	6.0	18.0	14.4	15.0	32.5	2.7
HCJ 04G02	04	1/4	8.5	18.0	18.5	18.0	35.0	4.2
HCJ 06G01	06	1/8	6.0	19.5	14.4	15.0	34.0	2.8
HCJ 06G02	06	1/4	8.5	19.5	18.5	18.0	36.5	4.3
HCJ 08G01	08	1/8	6.0	21.0	14.4	15.0	35.5	3.0
HCJ 08G02	08	1/4	8.5	21.0	18.5	18.0	38.0	4.6
HCJ 08G03	08	3/8	9.0	21.0	23.0	22.0	38.5	6.2
HCJ 10G02	10	1/4	8.5	24.0	18.5	18.0	41.0	5.2
HCJ 10G03	10	3/8	9.0	24.0	23.0	22.0	41.5	6.8
HCJ 10G04	10	1/2	12.5	24.0	26.5	26.0	45.0	10.7
HCJ 12G03	12	3/8	9.0	28.0	23.0	22.0	45.5	7.3
HCJ 12G04	12	1/2	12.5	28.0	26.5	26.0	49.0	11.2

Non stock, Deliver in 3 weeks

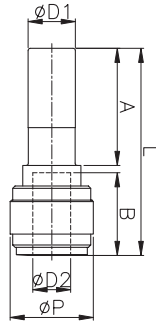
**HLJ**  
Stem Elbow



Model(mm)	ØD1	ØD2	ØP	A	B	E	L	Weight g
HLJ 0404	04	04	13.2	18.0	14.7	30.1	21.9	2.5
HLJ 0606	06	06	15.5	21.0	16.1	34.8	25.1	3.7
HLJ 0808	08	08	17.6	22.5	17.5	38.3	27.7	5.3
HLJ 1006	10	06	20.0	24.8	16.1	43.2	30.6	7.8
HLJ 1008	10	08	20.0	24.8	17.5	43.2	31.0	8.2
HLJ 1010	10	10	20.0	24.8	20.1	43.2	31.3	7.4
HLJ 1212	12	12	23.6	29.5	24.7	51.2	39.0	12.6

Non stock, Deliver in 3 weeks

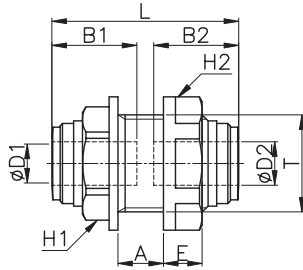
**HGJ**  
Tube Reducer



Model(mm)	ØD1	ØD2	ØP	L	A	B	Weight g
HGJ 0604	06	04	10.5	36.7	21.0	14.7	2.4
HGJ 0806	08	06	10.5	40.6	22.5	16.1	3.5
HGJ 0810	08	10	20.0	44.9	22.5	20.1	5.4
HGJ 1008	10	08	12.5	43.8	24.8	17.5	5.1

Non stock, Deliver in 3 weeks

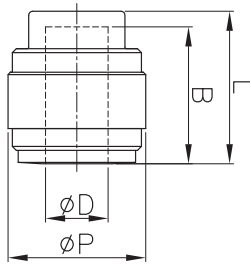
**HMM**  
Bulkhead Union



Model(mm)	ØD1	ØD2	T	L	E	A	B1	B2	H1 Hex	H2 Hex	Weight g
HMM 0404	04	04	M15*1.5P	32.4	6.5	8.1	14.7	14.7	17	18	6.9
HMM 0604	06	04	M17*1.5P	35.5	7.0	9.4	16.1	14.7	19	21	9.8
HMM 0606	06	06	M17*1.5P	35.7	7.0	9.4	16.1	16.1	19	21	9.6
HMM 0806	08	06	M20*1.75P	38.1	8.0	9.4	17.5	16.1	21	25.5	14.3
HMM 0808	08	08	M20*1.75P	38.5	8.0	9.4	17.5	17.5	21	25.5	14.0
HMM 1010	10	10	M24*1.75P	42.2	8.5	11.1	20.1	20.1	24	28.5	19.5
HMM 1212	12	12	M27*2.0P	51.4	9.0	16.4	24.7	24.7	27	31	28.2

Non stock, Deliver in 3 weeks

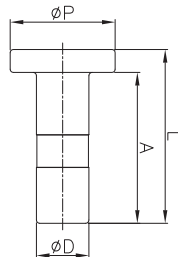
**HPF**  
Female plug



Model(mm)	ØD	ØP	L	Weight g
HPF 06	06	15.5	18.5	16.1
HPF 08	08	17.6	19.5	17.5

Non stock, Deliver in 3 weeks

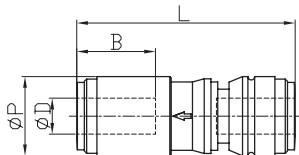
**HPP**  
Male plug



Model(mm)	ØD	ØP	L	A	Weight g
HPP 06	06	13	24.5	21.0	1.1
HPP 08	08	16	26.5	23.0	1.8
HPP 10	10	18	30.0	26.0	2.8

Non stock, Deliver in 3 weeks

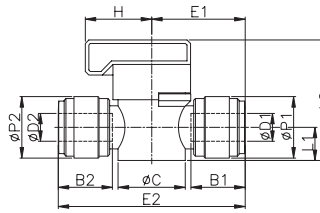
**HCVU**  
Single non-return valve



Model(mm)	ØD1	ØP	L	B	Weight g
HCVU 0606	06	15.5	45.5	16.1	7.4
HCVU 0808	08	17.6	48.6	17.5	10.0
HCVU 1010	10	20.0	57.6	19.4	14.5
HCVU 1212	12	23.6	67.9	23.9	22.1

Non stock, Deliver in 3 weeks

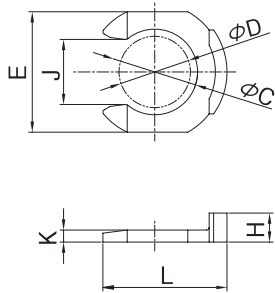
**HBVU**  
Ball valve



Model(mm)	ØD1	ØD2	B1	B2	ØP1	ØP2	L1	L2	E1	E2	H	ØC	Weight g
HBVU 0606	06	06	16.1	16.1	15.5	15.5	9.5	34.5	25.9	51.7	19.0	19.2	16.0
HBVU 0808	08	08	17.5	17.5	17.6	17.6	9.5	34.5	26.8	53.5	19.0	19.2	17.4
HBVU 1010	10	10	20.1	20.1	20.0	20.0	12.5	42.3	31.5	63.0	26.3	24.2	29.0
HBVU 1212	12	12	23.7	23.7	23.0	23.0	12.5	42.3	35.2	70.4	26.3	24.2	35.4

Non stock, Deliver in 3 weeks

**HCP**  
Clip



Model(mm)	ØD	ØC	E	L	H	J	K	Weight g
HCP 04	04	6.2	10.2	11.0	2.8	4.3	1.1	0.09
HCP 06	06	8.0	11.6	11.6	3.1	6.4	1.3	0.12
HCP 08	08	9.6	13.5	13.9	3.3	7.3	1.4	0.16
HCP 10	10	11.8	16.0	16.4	3.4	9.2	1.4	0.23
HCP 12	12	14.4	19.0	19.0	3.6	11.1	1.4	0.30

Non stock, Deliver in 3 weeks

# Tubing & Hose designed for the food, beverage & potable water markets

## Imbibe™ NSF 61® LLDPE Tubing

# ATP



IMBIBE™ exceeds FDA expectations with its NSF 61® Certification for drinking water applications. Manufactured from 100% non-toxic ingredients, IMBIBE™ is perfect for drinking water, beverage and food applications. With a complete range of sizes, colors and packaged lengths, IMBIBE™ is the perfect one stop shop tubing option. Include NSF 61® Certified Fluidfit™ Push-to-Connect fittings and complete your assembly needs.

- Features**
- Chemically Inert
  - Chemical Resistant
  - Lightweight & Flexible
  - Good Dielectric Properties
  - Impermeable to Gases
  - Meets FDA Requirements
  - NSF 61® Certified

### Package Lengths

- A = 100'
- B = 250' (Non-Stock)
- C = 500'
- D = 1000'

### Part Numbering System

DWPE 14 A NA

Polyethylene      Tubing O.D.      Package Length      Tubing color

Insert color designation into part number when ordering

### Specifications

- Temperature Range: -50°F To +140°F
- Hardness: Shore A 98A  
Shore D 45D
- Vacuum Rating: To 28" Hg
- Tolerances:  
1/8" - 1/4" O.D. +/- .004  
3/8" - 1/2" O.D. +/- .006

### Stock Color Chart: ● = Stock, x = Non Stock

PE	BK	B	G	NA	R	W	Y
4mm/ 5/32	x	x	x	x	x	x	x
1/4	●	●	●	●	●	●	●
8mm/ 5/16	●	●	x	●	●	x	x
3/8	●	●	●	●	●	●	●
1/2	●	●	x	●	●	●	x
6mm	●	●	x	●	●	x	x
10mm	●	●	x	●	●	x	x
12mm	●	●	x	●	●	x	x

BK = Black, B = Blue, G = Green, NA = Natural, R = Red, W = White, Y = Yellow

### Applications

- Food & Beverage
- Pneumatic Tools
- Pneumatic Piping
- Electrical Jacketing
- Drain Lines
- Instrumentation
- Chemical Transfer
- Process Control
- Laboratories
- Water Purification
- Water Conditioners
- Ice Makers
- Misting systems

**Fractional Sizes**

Part Number	O.D. (IN)	I.D. (IN)	wall thickness (IN)	bend radius (IN)	W.P. @70° F (PSI)	W.P. @150° F (PSI)	3:1 burst pressure	package length	package Weight (lbs)
DWPE04M/532A_	4MM,5/32	.106	.025	1.000	180	75	540	100'	.60
DWPE04M/532B_*	4MM,5/32	.106	.025	1.000	180	75	540	250'	1.50
DWPE04M/532C_	4MM,5/32	.106	.025	1.000	180	75	540	500'	3.00
DWPE04M/532D_	4MM,5/32	.106	.025	1.000	180	75	540	1000'	6.00
DWPE14A_	.250	.170	.040	1.250	150	70	450	100'	1.20
DWPE14B_*	.250	.170	.040	1.250	150	70	450	250'	3.00
DWPE14C_	.250	.170	.040	1.250	150	70	450	500'	6.00
DWPE14D_	.250	.170	.040	1.250	150	70	450	1000'	12.00
DWPE08M/516A_	8MM,5/16	.236	.038	1.500	150	75	450	100'	1.50
DWPE08M/516B_*	8MM,5/16	.236	.038	1.500	150	75	450	250'	3.75
DWPE08M/516C_	8MM,5/16	.236	.038	1.500	150	75	450	500'	7.50
DWPE08M/516D_	8MM,5/16	.236	.038	1.500	150	75	450	1000'	15.00
DWPE38A_	.375	.250	.062	2.000	150	75	450	100'	3.00
DWPE38B_*	.375	.250	.062	2.000	150	75	450	250'	7.00
DWPE38C_	.375	.250	.062	2.000	150	75	450	500'	14.00
DWPE38D_	.375	.250	.062	2.000	150	75	450	1000'	25.00
DWPE12A_	.500	.375	.062	2.500	125	50	375	100'	3.40
DWPE12B_*	.500	.375	.062	2.500	125	50	375	250'	8.50
DWPE12C_	.500	.375	.062	2.500	125	50	375	500'	17.00

\_Insert color designation into part number when ordering. \* Non Stock Packaged Length

**Metric Sizes**

Part Number	O.D. (mm)	I.D. (mm)	wall thickness (mm)	bend radius (mm)	W.P. @70° F (PSI)	W.P. @150° F (PSI)	3:1 burst pressure	package length	package Weight (lbs)
DWPE06MA_	6.0	4.0	1.0	31.8	150	70	450	100'	1.10
DWPE06MB_*	6.0	4.0	1.0	31.8	150	70	450	250'	2.75
DWPE06MC_	6.0	4.0	1.0	31.8	150	70	450	500'	5.50
DWPE06MD_	6.0	4.0	1.0	31.8	150	70	450	1000'	11.00
DWPE10MA_	10.0	8.0	1.0	51.0	125	50	375	100'	2.10
DWPE10MB_*	10.0	8.0	1.0	51.0	125	50	375	250'	5.25
DWPE10MC_	10.0	8.0	1.0	51.0	125	50	375	500'	10.50
DWPE12MA_	12.0	9.0	1.5	63.5	100	50	300	100'	2.50
DWPE12MB_*	12.0	9.0	1.5	63.5	100	50	300	250'	6.50
DWPE12MC_	12.0	9.0	1.5	63.5	100	50	300	500'	13.00

\_Insert color designation into part number when ordering. \* Non Stock Packaged Length

# Surethane<sup>®</sup> NSF 51<sup>®</sup> Polyurethane (Shore A 98)

# ATP



ATP Surethane<sup>®</sup> NSF 51<sup>®</sup> polyurethane (PUR) Shore A 98 tubing is made from the highest quality raw materials available. It is ether-based to provide excellent hydrolysis, oil and cold resistance. Surethane<sup>®</sup> NSF 51<sup>®</sup> is strong and flexible and offers superior kink resistance compared to other tubing. It is 5 to 10 times more wear resistant and lighter in weight than any rubber hose. ATP Surethane<sup>®</sup> NSF 51<sup>®</sup> tubing has an outside diameter made to extremely tight tolerances. It is ideal for use with Technifit<sup>™</sup> push-to-connect fittings, as well as barb-type and compression fittings for simple installation.

It is ideal for use with Technifit<sup>™</sup> push-to-connect fittings, as well as barb-type and compression fittings for simple installation.

## Package Lengths

- A = 100'
- B = 250'
- C = 500'
- D = 1000'
- E = 25 Meters
- F = 100 Meters

## Part Numbering System

**PU 18 A BK**

Polyurethane  
Tubing O.D.  
Package Length  
Tubing color  
Insert color designation into part number when ordering

## Stock Color Chart: ● = Stock, x = Non Stock

PU	BK	C	CB	CG	CR	G	GY	LB	LG	NB	OR	R	W	Y
1/8	●	●	●	x	x	●	●	●	x	●	●	●	●	●
4mm/5/32	●	●	●	x	x	●	●	●	x	●	●	●	●	●
3/16	●	●	●	x	x	●	x	●	x	●	●	●	●	●
1/4	●	●	●	x	x	●	●	●	x	●	●	●	●	●
1/4 - 1/8	x	x	x	x	x	x	x	x	x	●	x	x	x	x
8mm/5/16	●	●	●	x	x	●	●	●	x	●	●	●	●	●
3/8	●	●	●	x	x	●	●	●	x	●	●	●	●	●
1/2	●	●	●	x	x	●	●	●	x	●	●	●	●	●
9/16	●	●	●	x	x	x	x	x	x	x	x	x	x	x
5/8	●	●	●	x	x	x	x	x	x	x	x	x	x	x
3/4	●	●	●	x	x	●	x	x	x	●	x	●	●	●
6mm	●	●	●	x	x	●	●	●	x	●	x	●	●	●
10mm	●	●	●	x	x	●	x	●	x	●	●	●	●	●
12mm	●	●	●	x	x	●	x	●	x	●	x	●	●	●
16mm	●	●	●	x	x	●	x	●	x	●	x	●	●	●

BK = Black, C = Clear, CB = Clear Blue, CG = Clear Green, CR = Clear Red, G = Green, GY = Gray, LB = Light Blue, LG = Light Green, NB = Navy Blue, OR = Orange, R = Red, Y = Yellow, W = White

## Features

- Strong
- Lightweight
- Flexible
- Abrasion Resistant
- Heat & Cold Resistant
- Chemical Resistant
- Kink Resistant
- NSF 51<sup>®</sup> Certified
- Meets NSF 61<sup>®</sup> Requirements

## Specifications

Temperature Range:

-40°F To +160°F

\*color green, clear green, yellow, clear yellow Temperature Range: -40°F To +150°F

Hardness: Shore A 98

Vacuum Rating:

To 28" Hg

Tolerances:

1/8" - 1/2" O.D. +/- .005

9/16" - 3/4" O.D. +/- .006

RoHS Compliant

## Applications

- Pneumatic Tools
- Pneumatic Piping
- Vacuum
- Laboratories
- Robotics
- Motion Control
- Instrumentation
- Agriculture
- Lube Lines
- Painting Systems
- Food & Beverage

**Fractional Sizes**

Part Number	O.D. (IN)	I.D. (IN)	wall thickness (IN)	bend radius (IN)	W.P. @70° F (PSI)	W.P. @150° F (PSI)	3:1 burst pressure	package length	package weight (lbs)
PU18A_	.125	.062	.031	.200	240	100	720	100'	.50
PU18B_	.125	.062	.031	.200	240	100	720	250'	1.25
PU18C_	.125	.062	.031	.200	240	100	720	500'	2.50
PU18D_	.125	.062	.031	.200	240	100	720	1000'	5.00
PU04M/532A_	4MM,5/32	.093	.031	.250	200	85	600	100'	.70
PU04M/532B_	4MM,5/32	.093	.031	.250	200	85	600	250'	1.75
PU04M/532C_	4MM,5/32	.093	.031	.250	200	85	600	500'	3.50
PU04M/532D_	4MM,5/32	.093	.031	.250	200	85	600	1000'	7.00
PU04M/532E_	4MM,5/32	.093	.031	.250	200	85	600	25M	.57
PU04M/532F_	4MM,5/32	.093	.031	.250	200	85	600	100M	2.30
PU316A_	.187	.125	.031	.339	150	90	450	100'	1.01
PU316B_	.187	.125	.031	.339	150	90	450	250'	2.53
PU316C_	.187	.125	.031	.339	150	90	450	500'	5.05
PU316D_	.187	.125	.031	.339	150	90	450	1000'	10.10
PU14A_	.250	.156	.047	.476	180	70	540	100'	1.50
PU14B_	.250	.156	.047	.476	180	70	540	250'	3.75
PU14C_	.250	.156	.047	.476	180	70	540	500'	7.50
PU14D_	.250	.156	.047	.476	180	70	540	1000'	15.00
PU14-18A_	.250	.125	.063	.500	270	105	810	100'	1.83
PU14-18B_	.250	.125	.063	.500	270	105	810	250'	4.58
PU14-18C_	.250	.125	.063	.500	270	105	810	500'	9.15
PU14-18D_	.250	.125	.063	.500	270	105	810	1000'	18.30
PU08M/516A_	8MM,5/16	.187	.063	.594	175	75	525	100'	2.60
PU08M/516B_	8MM,5/16	.187	.063	.594	175	75	525	250'	6.50
PU08M/516C_	8MM,5/16	.187	.063	.594	175	75	525	500'	13.00
PU08M/516D_	8MM,5/16	.187	.063	.594	175	75	525	1000'	26.00
PU08M/516E_	8MM,5/16	.187	.063	.594	175	75	525	25M	2.13
PU08M/516F_	8MM,5/16	.187	.063	.594	175	75	525	100M	8.53
PU38A_	.375	.250	.063	1.000	150	70	450	100'	3.40
PU38B_	.375	.250	.063	1.000	150	70	450	250'	8.50
PU38C_	.375	.250	.063	1.000	150	70	450	500'	17.00
PU38D_	.375	.250	.063	1.000	150	70	450	1000'	34.00
PU12A_	.500	.328	.086	1.102	150	70	450	100'	5.60
PU12B_	.500	.328	.086	1.102	150	70	450	250'	14.90
PU12C_	.500	.328	.086	1.102	150	70	450	500'	28.05
PU916A_	.562	.375	.093	1.142	140	60	420	100'	7.50
PU916B_	.562	.375	.093	1.142	140	60	420	250'	18.75
PU58A_	.625	.406	.109	1.375	140	70	450	100'	9.50
PU58B_	.625	.406	.109	1.375	140	70	450	250'	23.75
PU34A_	.750	.500	.125	1.500	140	70	420	100'	14.90
PU34B_	.750	.500	.125	1.500	140	70	420	250'	37.25

\_Insert color designation into part number when ordering.



**Metric Sizes**

Part Number	O.D. (mm)	I.D. (mm)	wall thickness (mm)	bend radius (mm)	W.P. @70° F (PSI)	W.P. @150° F (PSI)	3:1 burst pressure	package length	package weight (lbs)
PU06MA_	6.0	4.0	1.000	12	180	65	540	100'	1.30
PU06MB_	6.0	4.0	1.000	12	180	65	540	250'	3.24
PU06MC_	6.0	4.0	1.000	12	180	65	540	500'	6.48
PU06MD_	6.0	4.0	1.000	12	180	65	540	1000'	13.00
PU06ME_	6.0	4.0	1.000	12	180	65	540	25M	1.07
PU06MF_	6.0	4.0	1.000	12	180	65	540	100M	4.28
PU10MA_	10.0	6.5	1.750	25	180	70	450	100'	3.90
PU10MB_	10.0	6.5	1.750	25	150	70	450	250'	9.75
PU10MC_	10.0	6.5	1.750	25	150	70	450	500'	19.50
PU10ME_	10.0	6.5	1.750	25	150	70	450	25M	3.25
PU10MF_	10.0	6.5	1.750	25	150	70	450	100M	12.76
PU12MA_	12.0	8.0	2.000	28	150	60	450	100'	5.30
PU12MB_	12.0	8.0	2.000	28	150	60	450	250'	13.25
PU12MC_	12.0	8.0	2.000	28	150	60	450	500'	26.50
PU12ME_	12.0	8.0	2.000	28	150	60	450	25M	4.39
PU12MF_	12.0	8.0	2.000	28	150	60	450	100M	17.34
PU16MA_	16.0	11.0	2.500	30	150	70	450	100'	9.50
PU16MB_	16.0	11.0	2.500	30	150	70	450	250'	23.75
PU16ME_	16.0	11.0	2.500	30	150	70	450	25M	7.79
PU16MF_	16.0	11.0	2.500	30	150	70	450	100M	31.16

\_Insert color designation into part number when ordering.

\*4mm O.D. & 8mm O.D. found on page 13

**Tubing & Hose Cutter**



Part Number	Description
TC-14	Small Tubing Cutter, Blue, 1/8" - 1/2"
TC-100	Large Hose Cutter, Black, Up to 1.6"

# Vinyl-Flex™ PVC NSF 61® Tubing

# ATP



ATP Vinyl-Flex™ PVC NSF 61® is suitable for general, low-pressure, industrial applications for the conveyance of liquids and semi solids. It also certified with FDA regulations and is NSF 61® certified for use in potable water and food and beverage applications. Although it is not intended for use in higher pressure applications, it does provide good chemical resistance, is lightweight, flexible and economically priced.

## Part Numbering System

**PVC 18-14 A NA**

Polyvinylchloride  
Tubing I.D.  
Tubing O.D.  
Package Length  
Color: Clear

## Package Lengths

**A = 100'    2A = 50'**

## Colors Available

**Clear**

### Features

- Lightweight
- Flexible
- Food Grade
- Clear Color
- DEHP Free

### Specifications

Temperature Range:

+15°F To +150°F

Hardness:

Shore A 73 PVC

Meets FDA Requirements

USP Class VI Rated Materials

NSF 61® Certified

RoHS Compliant

Reach Prop 65

Tolerances:

1/8" - 1/2" I.D.: + 0.004/ - 0.008

5/8" - 1" I.D.: + 0.008/ - 0.012

1.25" - 1.5" I.D.: + 0.012/ - 0.016

2" I.D.: + 0.016/ - 0.020

### Applications

Beverage Dispensing

Drain

Potable Water

Laboratory

Low Pressure Air

Distilled Water Transfer

Light Vacuum

Spa & Hot Tub

Part Number	I.D. (IN)	O.D. (IN)	W.P. @70° F (PSI)	package length	package weight (lbs)
PVC18-14ANA	.125	.250	65	100'	2.20
PVC316-14ANA*	.187	.250	50	100'	1.17
PVC316-516ANA	.187	.313	55	100'	2.69
PVC316-38ANA*	.187	.375	60	100'	3.75
PVC14-38ANA	.250	.375	55	100'	3.35
PVC14-716ANA*	.250	.438	55	100'	5.53
PVC14-12ANA	.250	.500	60	100'	7.89
PVC516-716ANA	.312	.438	50	100'	3.88
PVC516-12ANA*	.312	.500	55	100'	6.37
PVC516-916ANA*	.312	.563	60	100'	9.22
PVC38-12ANA	.375	.500	45	100'	4.65
PVC38-916ANA	.375	.563	50	100'	7.47
PVC38-58ANA*	.375	.625	55	100'	10.65
PVC716-916ANA*	.437	.563	35	100'	6.60
PVC12-58ANA	.500	.625	30	100'	6.00
PVC12-1116ANA*	.500	.688	40	100'	9.50
PVC12-34ANA	.500	.750	45	100'	13.07
PVC58-34ANA	.625	.750	30	100'	7.10
PVC58-1316ANA*	.625	.813	35	100'	12.32
PVC58-78ANA	.625	.875	40	100'	15.72
PVC34-1ANA	.750	1.000	35	100'	18.37
PVC34-54ANA*	.750	1.250	45	100'	20.00
PVC78-118ANA*	.875	1.125	30	100'	33.10
PVC1-54ANA	1.000	1.250	25	100'	23.99
PVC1-138ANA*	1.000	1.375	30	100'	37.00
PVC54-64ANA	1.250	1.500	20	100'	29.00
PVC54-1582ANA	1.250	1.625	30	50'	44.60
PVC64-1782ANA	1.500	1.875	30	50'	52.70
PVC2-2.52ANA+	2.000	2.500	20	50'	30.00

\* Non Stock Packaged Length    + = Non NSF 61® Size Certified

# Dura-Pure® PVC NSF 61® Hose

# ATP



ATP Dura-Pure® PVC NSF 61® Hose is manufactured with a polyester spiraled yarn allowing the hose to be used in higher working pressure applications. It also complies with FDA regulations, and is Phthalate Free and NSF 61® certified for use in potable water and food beverage applications. It provides good chemical resistance, is lightweight, flexible and economically priced.

## Part Numbering System

PVCBH 12-34 A NA

Polyvinylchloride  
Hose  
Hose I.D.  
Hose O.D.  
Package Length  
Color: Clear

## Package Lengths

2A = 50' A = 100' A3 = 300'

## Colors Available

Clear

Part Number	I.D. (IN)	O.D. (IN)	W.P. @70°F (PSI)	package length	package weight (lbs)
PVCBH316-375ANA	.187	.375	250	100'	4.41
PVCBH316-375A3NA	.187	.375	250	300'	13.23
PVCBH14-438ANA	.250	.438	250	100'	5.84
PVCBH14-438A3NA	.250	.438	250	300'	17.52
PVCBH516-531ANA	.313	.531	250	100'	7.39
PVCBH516-531A3NA	.313	.531	250	300'	22.17
PVCBH38-594ANA	.375	.594	225	100'	9.02
PVCBH38-594A3NA	.375	.594	225	300'	27.06
PVCBH12-34ANA	.500	.750	200	100'	13.33
PVCBH12-34A3NA	.500	.750	200	300'	39.99
PVCBH58-891ANA	.625	.891	200	100'	15.93
PVCBH58-891A3NA	.625	.891	200	300'	47.79
PVCBH34-103ANA	.750	1.030	150	100'	20.72
PVCBH34-103A3NA	.750	1.030	150	300'	62.16
PVCBH1-1.3ANA	1.000	1.300	125	100'	29.08
PVCBH1-1.3A2NA	1.000	1.300	125	200'	58.16
PVCBH54-1.62ANA	1.250	1.62	100	100'	45.50
PVCBH64-1.938ANA	1.500	1.938	100	100'	63.49
PVCBH2-2.492ANA+	2.000	2.490	75	50'	92.59

+ = Non NSF 61® Size Certified

## Features

- Lightweight
- Flexible
- Clear Color
- Phthalate Free

## Specifications

Temperature Range:

+15°F To +150°F

Hardness:

Shore A 73 PVC

Meets FDA Requirements  
USP Class VI Rated Materials

NSF 61® Certified

RoHS Compliant

Reach Prop 65

ASTMF930-03

EN-71 & PAHS

Tolerances:

3/16" - 1/2" I.D.: + 0.004/ - 0.008

5/8" - 1" I.D.: + 0.008/ - 0.012

1.25" - 1.5" I.D.: + 0.012/ - 0.016

2" I.D.: + 0.016/ - 0.020

## Applications

- Beverage
- Drain
- Potable Water
- Laboratory
- Low Pressure Air
- Distilled Water Transfer
- Light Vacuum
- Spa & Hot Tub

# Mercury™ PTFE Tubing



Mercury™ tubing, which is extruded with very tight tolerances, is a good choice for many advanced, high heat applications. Its properties allow exceptional resistance to degeneration of mechanical properties under severe conditions. Mercury™ tubing does not support combustion and has very good dielectric properties. Mercury™ PTFE is available in tubing, and spiral profiles.

# ATP

## Features

- Chemically Inert
- Low Extractible
- Biocompatible -
- USP Class VI Approved
- Flame Rating: UL 94 V0
- ASTM - D3295
- Meets FDA Requirements
- Easily Cleaned

## Part Numbering System

**PTFE 18 A NA**

Polytetrafluoroethylene  
Tubing O.D.  
Package Length 100'  
Color: Natural

## Package Lengths

A = 100'

## Colors Available

Natural

## Specifications

- Temperature Range:  
-454°F To +500°F
- Hardness: Shore D 55
- Tolerance:  
1/8" O.D. +/- .004  
1/4" - 3/8" O.D. +/- .005
- Vacuum Rating: To 28" Hg

## Fractional Sizes

Part Number	O.D. (IN)	I.D. (IN)	Wall Thickness (IN)	Bend Radius (in)	W.P. @70° F (PSI)	4:1 Burst Pressure	package length	package Weight (lbs)
PTFE18ANA	.125	.063	.031	.39	381	1524	100'	1.14
PTFE14-18ANA	.250	.125	.063	1.18	372	1488	100'	2.29
PTFE14-532ANA	.250	.156	.047	1.97	275	1100	100'	2.02
PTFE14-316ANA	.250	.188	.031	2.56	174	696	100'	1.75
PTFE38ANA	.375	.250	.063	4.33	240	960	100'	5.84
PTFE438-38ANA	.438	.375	.032	4.50	95	380	100'	6.00
PTFE12ANA	.500	.375	.063	6.50	150	600	100'	6.50

Custom sizes, colors, lengths are available with minimum quantity

## Applications

- Aerospace & Aviation
- Electronic
- Chemical Processing
- Automotive & Medical
- Industrial & Mechanical

## Metric Sizes

Part Number	O.D. (mm)	I.D. (mm)	Wall Thickness (mm)	Bend Radius (mm)	W.P. @70° F (PSI)	4:1 Burst Pressure	package length	package Weight (lbs)
PTFE04MANA	4.0	2.5	.75	25	292	1168	100'	1.51
PTFE06MANA	6.0	4.0	1.00	40	275	1100	100'	2.29
PTFE08MANA	8.0	6.0	1.00	60	138	552	100'	3.20
PTFE10MANA	10.0	8.0	1.00	100	112	448	100'	4.13
PTFE12MANA	12.0	10.0	1.00	100	105	420	100'	6.00

Custom sizes, colors, lengths are available with minimum quantity

# Venus™ FEP Tubing



Venus™ FEP tubing is a more durable alternative to PTFE, yet more flexible. It is a semi-clear material with low permeability, plus it is UV resistant, abrasion resistant, and virtually chemically inert. Venus™ FEP material meets UL94 V0 for flammability and also meets FDA requirements.

# ATP

## Features

- Flexible
- Chemically Inert
- Low Extractible
- Biocompatible –  
USP Class VI Approved
- Flame Rating: UL 94 V0
- ASTM - D3296
- Meets FDA Requirements
- Easily Cleaned

## Part Numbering System

### FEP 18 A

Fluorinated Ethylene  
Propylene  
Tubing O.D.  
Package Length 100'

## Package Lengths

A = 100'

## Colors Available

Semi-Clear

## Specifications

- Temperature Range:  
-400°F To +400°F
- Hardness: Shore D 55
- Tolerance:  
1/8" O.D. +/- .004  
1/4" - 3/8" O.D. +/- .005
- Vacuum Rating: To 28" Hg

## Fractional Sizes

Part Number	O.D. (IN)	I.D. (IN)	Wall Thickness (IN)	Bend Radius (in)	W.P. @70° F (PSI)	4:1 Burst Pressure	package length	package Weight (lbs)
FEP18A	.125	.063	.031	.39	410	1640	100'	1.14
FEP14-18A	.250	.125	.063	1.18	400	1600	100'	2.29
FEP14-532A	.250	.156	.047	1.97	300	1200	100'	2.02
FEP14-316A	.250	.188	.031	2.56	174	696	100'	1.75
FEP38A	.375	.250	.063	4.33	240	960	100'	5.84
FEP12A	.500	.375	.063	6.50	180	720	100'	6.50

Custom sizes, colors, lengths are available with minimum quantity

## Metric Sizes

Part Number	O.D. (mm)	I.D. (mm)	Wall Thickness (mm)	Bend Radius (mm)	W.P. @70° F (PSI)	4:1 Burst Pressure	package length	package Weight (lbs)
FEP04MA	4.0	2.5	.75	25	292	1168	100'	1.51
FEP06MA	6.0	4.0	1.0	40	275	1100	100'	2.29
FEP08MA	8.0	6.0	1.0	60	138	552	100'	3.20
FEP10MA	10.0	8.0	1.0	75	133	532	100'	4.13
FEP12MA	12.0	10.0	1.0	100	105	420	100'	6.00

Custom sizes, colors, lengths are available with minimum quantity

## Applications

- Aerospace & Aviation
- Electronic
- Chemical Processing
- Automotive & Medical
- Industrial & Mechanical

Fittings designed for the food, beverage & potable water markets

### Part Numbering System



SS06-01ML-PT

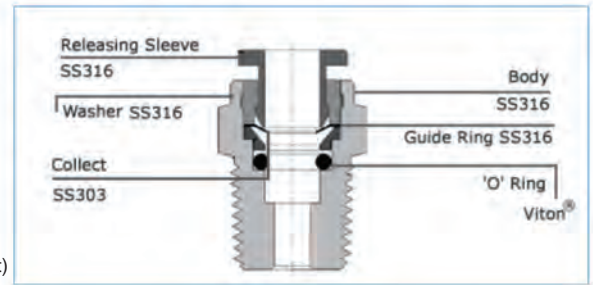
Body Material SS=Stainless Steel (316) Tube OD 1032 = 10-32 UNF Thread size M5 = M5 x 0.8 Model 01 = 1/8" NPT Thread = No Mark BSPT Thread = PT BSPB Thread = PP (upon request)

01U = 1/8" Uni-Thread  
02 = 1/4"  
02U = 1/4" Uni-Thread  
03 = 3/8"  
04 = 1/2"

Fractional tubing sizes are with NPT thread.  
Metric tubing sizes are with BSPT thread.

Uni-Thread Fittings can be used in ports with NPT, BSPT, BSPB

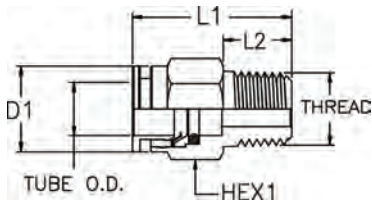
### Material of Construction:



Note : 'O' ring EPDM are available on request  
The Stainless Steel 316 raw material meets the following specifications

- a) SS-316 Bar Stock : ASTM A-479
- b) SS-316 Forging : ASTM A-182

### Male Straight



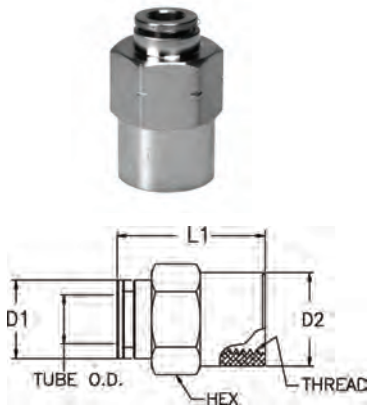
\*Actual dimensions for above diagram available upon request

Metric Tube BSPP (G) Thread available upon request

Model (inch)	Tube O.D.	Thread	Weight lbs	Model (mm)	Tube O.D.	Thread	Weight lbs
SS532-1032M	5/32	10-32	.02	SS04-M5M	4mm	M5	.02
SS532-01M	5/32	1/8	.02	SS04-01M-PT	4mm	1/8	.02
SS532-02M	5/32	1/4	.02	SS04-02M-PT	4mm	1/4	.04
SS532-03M	5/32	3/8	.03	SS06-M5M	6mm	M5	.03
SS187-01M*	3/16	1/8	.03	SS06-01M-PT	6mm	1/8	.03
SS187-02M	3/16	1/4	.03	SS06-02M-PT	6mm	1/4	.04
SS14-1032M	1/4	10-32	.02	SS06-03M-PT	6mm	3/8	.06
SS14-01UM	1/4	1/8U	.03	SS08-01M-PT	8mm	1/8	.04
SS14-01M	1/4	1/8	.03	SS08-02M-PT	8mm	1/4	.04
SS14-02UM	1/4	1/4U	.04	SS08-03M-PT	8mm	3/8	.06
SS14-02M	1/4	1/4	.04	SS10-02M-PT	10mm	1/4	.06
SS14-03M	1/4	3/8	.06	SS10-03M-PT	10mm	3/8	.06
SS516-01M	5/16	1/8	.04	SS12M-01M-PT*	12mm	1/8	.06
SS516-02M	5/16	1/4	.04	SS12M-02M-PT	12mm	1/4	.08
SS516-03M	5/16	3/8	.07	SS12M-03M-PT	12mm	3/8	.10
SS516-04M	5/16	1/2	.09	SS12M-04M-PT	12mm	1/2	.12
SS38-01M	3/8	1/8	.05				
SS38-02M	3/8	1/4	.06				
SS38-03M	3/8	3/8	.07				
SS38-04M	3/8	1/2	.09				
SS12-02M	1/2	1/4	.09				
SS12-03M	1/2	3/8	.09				
SS12-04M	1/2	1/2	.12				
SS58-04M	5/8	1/2	.19				

\* Non-stock item, but available with minimum 8 week lead time.

## Female Straight

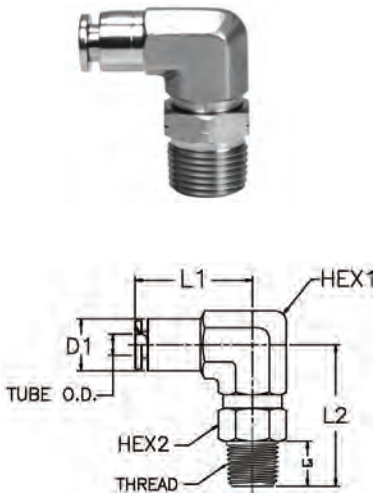


\*Actual dimensions for above diagram available upon request

Model (inch)	Tube O.D.	Thread	Weight lbs	Model (mm)	Tube O.D.	Thread	Weight lbs
SS532-01F	5/32	1/8	.03	SS04-01F-PT	4mm	1/8	.03
SS187-01F*	3/16	1/8	.03	SS06-01F-PT	6mm	1/8	.03
SS14-01F	1/4	1/8	.03	SS06-02F-PT	6mm	1/4	.06
SS14-02F	1/4	1/4	.06	SS08-02F-PT	8mm	1/4	.07
SS516-02F*	5/16	1/4	.07	SS08-03F-PT	8mm	3/8	.10
SS516-03F	5/16	3/8	.10	SS10-02F-PT	10mm	1/4	.10
SS38-02F	3/8	1/4	.10	SS10-03F-PT	10mm	3/8	.15
SS38-03F	3/8	3/8	.10				
SS38-04F	3/8	1/2	.15				
SS12-03F	1/2	3/8	.15				
SS12-04F	1/2	1/2	.20				

\* Non-stock item, but available with minimum 8 week lead time.

## Swivel Male elbow



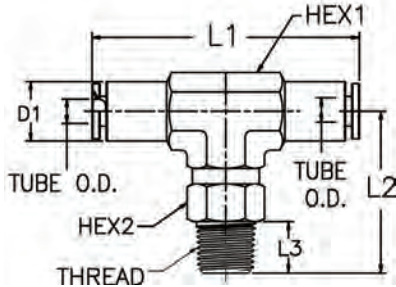
\*Actual dimensions for above diagram available upon request

Metric Tube BSPP (G) Thread available upon request

Model (inch)	Tube O.D.	Thread	Weight lbs	Model (mm)	Tube O.D.	Thread	Weight lbs
SS532-1032ML	5/32	10-32	.05	SS04-M5ML	4mm	M5	.05
SS532-01ML	5/32	1/8	.06	SS04-01ML-PT	4mm	1/8	.06
SS532-02ML	5/32	1/4	.09	SS04-02ML-PT	4mm	1/4	.09
SS532-03ML	5/32	3/8	.12	SS06-M5ML	6mm	M5	.06
SS187-01ML*	3/16	1/8	.05	SS06-01ML-PT	6mm	1/8	.09
SS14-1032ML	1/4	10-32	.05	SS06-02ML-PT	6mm	1/4	.09
SS14-01ML	1/4	1/8	.07	SS06-03ML-PT	6mm	3/8	.11
SS14-01UML	1/4	1/8U	.07	SS08-01ML-PT	8mm	1/8	.09
SS14-02ML	1/4	1/4	.10	SS08-02ML-PT	8mm	1/4	.11
SS14-02UML	1/4	1/4U	.10	SS08-03ML-PT	8mm	3/8	.13
SS14-03ML	1/4	3/8	.14	SS10-01ML-PT	10mm	1/8	.11
SS516-01ML	5/16	1/8	.12	SS10-02ML-PT	10mm	1/4	.16
SS516-02ML	5/16	1/4	.14	SS10-03ML-PT	10mm	3/8	.17
SS516-03ML	5/16	3/8	.16	SS10-04ML-PT	10mm	1/2	.17
SS516-04ML	5/16	1/2	.18	SS12M-01ML-PT	12mm	1/8	.20
SS38-01ML	3/8	1/8	.15	SS12M-02ML-PT	12mm	1/4	.22
SS38-02ML	3/8	1/4	.17	SS12M-03ML-PT	12mm	3/8	.24
SS38-03ML	3/8	3/8	.18	SS12M-04ML-PT	12mm	1/2	.28
SS38-04ML	3/8	1/2	.20				
SS12-02ML	1/2	1/4	.23				
SS12-03ML	1/2	3/8	.24				
SS12-04ML	1/2	1/2	.28				
SS58-04ML	5/8	1/2	.35				

\* Non-stock item, but available with minimum 8 week lead time.

## Swivel Male Tee



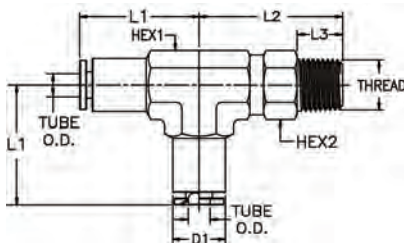
\*Actual dimensions for above diagram available upon request

Metric Tube BSPP (G) Thread available upon request

Model (inch)	Tube O.D.	Thread	Weight lbs	Model (mm)	Tube O.D.	Thread	Weight lbs
SS532-1032MT*	5/32	10-32	.08	SS04-M5MT	4mm	M5	.08
SS532-01MT	5/32	1/8	.08	SS04-01MT-PT	4mm	1/8	.08
SS187-01MT*	3/16	1/8	.08	SS04-02MT-PT	4mm	1/4	.11
SS14-01UMT*	1/4	1/8U	.10	SS06-01MT-PT	6mm	1/8	.10
SS14-01MT	1/4	1/8	.10	SS06-02MT-PT	6mm	1/4	.11
SS14-02UMT*	1/4	1/4U	.11	SS08-01MT-PT	8mm	1/8	.12
SS14-02MT	1/4	1/4	.11	SS08-02MT-PT	8mm	1/4	.13
SS516-01MT	5/16	1/8	.14	SS08-03MT-PT	8mm	3/8	.16
SS516-02MT*	5/16	1/4	.16	SS10-02MT-PT	10mm	1/4	.19
SS516-03MT*	5/16	3/8	.18	SS10-03MT-PT	10mm	3/8	.21
SS38-01MT	3/8	1/8	.18	SS12M-02MT-PT	12mm	1/4	.23
SS38-02MT	3/8	1/4	.20	SS12M-03MT-PT	12mm	3/8	.25
SS38-03MT	3/8	3/8	.22	SS12M-04MT-PT	12mm	1/2	.27
SS12-02MT	1/2	1/4	.27				
SS12-03MT	1/2	3/8	.27				
SS12-04MT	1/2	1/2	.32				

\* Non-stock item, but available with minimum 8 week lead time.

## Swivel Male Run Tee



\*Actual dimensions for above diagram available upon request

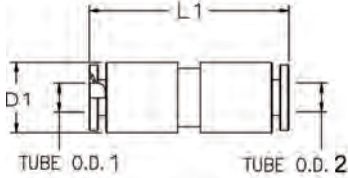
Metric Tube BSPP (G) Thread available upon request

Model (inch)	Tube O.D.	Thread	Weight lbs	Model (mm)	Tube O.D.	Thread	Weight lbs
SS532-1032RT*	5/32	10-32	.08	SS04-M5RT*	4mm	M5	.08
SS532-01RT	5/32	1/8	.08	SS04-01RT-PT	4mm	1/8	.08
SS187-01RT*	3/16	1/8	.08	SS04-02RT-PT	4mm	1/4	.11
SS14-01RT	1/4	1/8	.10	SS06-01RT-PT	6mm	1/8	.10
SS14-02RT	1/4	1/4	.11	SS06-02RT-PT	6mm	1/4	.11
SS14-03RT	1/4	3/8	.13	SS06-03RT-PT*	6mm	3/8	.14
SS516-01RT*	5/16	1/8	.14	SS08-01RT-PT	8mm	1/8	.12
SS516-02RT*	5/16	1/4	.16	SS08-02RT-PT	8mm	1/4	.13
SS516-03RT*	5/16	3/8	.16	SS08-03RT-PT	8mm	3/8	.16
SS38-02RT	3/8	1/4	.20	SS10-02RT-PT	10mm	1/4	.19
SS38-03RT	3/8	3/8	.22	SS10-03RT-PT	10mm	3/8	.21
SS12-02RT	1/2	1/4	.27	SS12M-02RT-PT*	12mm	1/4	.23
SS12-03RT	1/2	3/8	.27	SS12M-03RT-PT	12mm	3/8	.25
SS12-04RT	1/2	1/2	.32	SS12M-04RT-PT	12mm	1/2	.27

\* Non-stock item, but available with minimum 8 week lead time.



## Union & Union Reducer

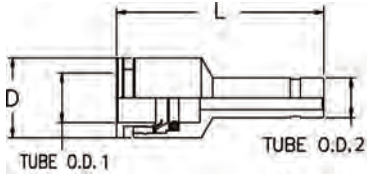


\*Actual dimensions for above diagram available upon request

Model (inch)	Tube O.D. 1	Tube O.D. 2	Weight lbs	Model (mm)	Tube O.D. 1	Tube O.D. 2	Weight lbs
SS532U	5/32	5/32	.03	SS04U	4mm	4mm	.03
SS187U*	3/16	3/16	.04	SS06-04UR	6mm	4mm	.04
SS1/4-5/32UR	1/4	5/32	.04	SS06U	6mm	6mm	.04
SS14U	1/4	1/4	.04	SS08-06UR	8mm	6mm	.06
SS516U	5/16	5/16	.05	SS08U	8mm	8mm	.05
SS3/8-1/4UR	3/8	1/4	.05	SS10-6UR	10mm	6mm	.08
SS3/8-5/16UR*	3/8	5/16	.06	SS10-08UR*	10mm	8mm	.06
SS38U	3/8	3/8	.06	SS10U	10mm	10mm	.06
SS1/2-3/8UR*	1/2	3/8	.09	SS12M-10UR*	12mm	10mm	.10
SS12U	1/2	1/2	.10	SS12MU	12mm	12mm	.10

\* Non-stock item, but available with minimum 8 week lead time.

## Tube Reducer

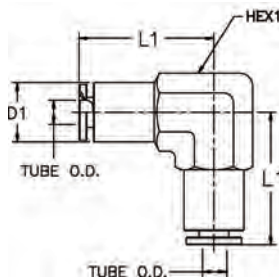


\*Actual dimensions for above diagram available upon request

Model (inch)	Tube O.D. 1	Tube O.D. 2	Weight lbs	Model (mm)	Tube O.D. 1	Tube O.D. 2	Weight lbs
SS532-14R	5/32	1/4	.01	SS04-06R	4mm	6mm	.01
SS187-14R*	3/16	1/4	.02	SS04-08R*	4mm	8mm	.03
SS187-516R*	3/16	5/16	.03	SS06-08R	6mm	8mm	.03
SS14-516R	1/4	5/16	.03	SS06-10R*	6mm	10mm	.03
SS14-38R	1/4	3/8	.03	SS08-10R	8mm	10mm	.04
SS516-38R	5/16	3/8	.04	SS08-12MR*	8mm	12mm	.05
SS516-12R*	5/16	1/2	.05	SS10-12MR*	10mm	12mm	.06
SS38-12R	3/8	1/2	.06				

\* Non-stock item, but available with minimum 8 week lead time.

## Union Elbow

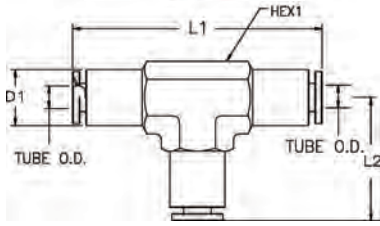


\*Actual dimensions for above diagram available upon request

Model (inch)	Tube O.D.	Weight lbs	Model (mm)	Tube O.D.	Weight lbs
SS532UL	5/32	.05	SS04UL	4mm	.05
SS187UL*	3/16	.06	SS06UL	6mm	.06
SS14UL	1/4	.06	SS08UL	8mm	.08
SS516UL	5/16	.08	SS10UL	10mm	.14
SS38UL	3/8	.14	SS12MUL	12mm	.18
SS12UL	1/2	.18			

\* Non-stock item, but available with minimum 8 week lead time.

## Union Tee

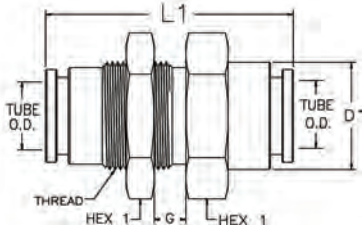


\*Actual dimensions for above diagram available upon request

Model (inch)	Tube O.D.	Weight lbs	Model (mm)	Tube O.D.	Weight lbs
SS532UT	5/32	.06	SS04UT	4mm	.06
SS187UT*	3/16	.08	SS06UT	6mm	.09
SS14UT	1/4	.08	SS08UT	8mm	.09
SS516UT	5/16	.09	SS10UT	10mm	.13
SS38UT	3/8	.17	SS12MUT	12mm	.18
SS12UT	1/2	.21			

\* Non-stock item, but available with minimum 8 week lead time.

## Bulkhead Union

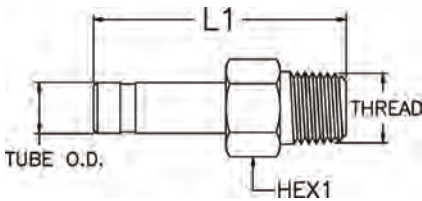


\*Actual dimensions for above diagram available upon request

Model (inch)	Tube O.D.	Thread	Weight lbs	Model (mm)	Tube O.D.	Thread	Weight lbs
SS532BU	5/32	M11 x .75	.05	SS04BU*	4mm	M11 x .75	.05
SS187BU	3/16	7/16-28 UN	.07	SS06BU	6mm	M13 x .75	.09
SS14BU	1/4	9/16-20 UN	.09	SS08BU	8mm	5/8-20 UN	.13
SS516BU	5/16	5/8-20 UN	.13	SS10BU*	10mm	M18X1	.17
SS38BU	3/8	3/4-20 UN	.15	SS12MBU*	12mm	M22X1.5	.21
SS12BU	1/2	7/8-20 UN	.22				

\* Non-stock item, but available with minimum 8 week lead time.

## Stem Adapter



\*Actual dimensions for above diagram available upon request

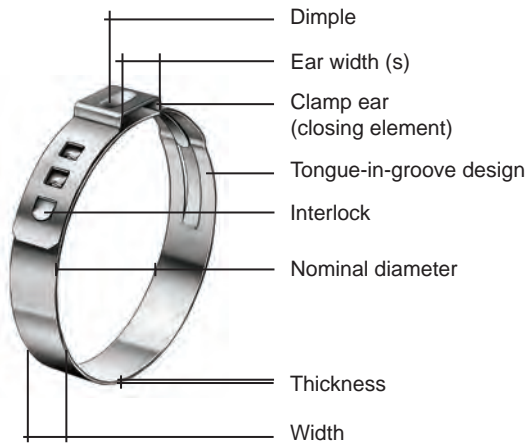
Metric Tube BSPP (G) Thread available upon request

Model (inch)	Tube O.D.	Thread	Weight lbs	Model (mm)	Tube O.D.	Thread	Weight lbs
SS532-1032SA*	5/32	10-32	.02	SS04-M5SA*	4mm	M5	.02
SS532-01SA*	5/32	1/8	.02	SS04-01SA-PT*	4mm	1/8	.02
SS187-01SA*	3/16	1/8	.03	SS06-01SA-PT*	6mm	1/8	.02
SS187-02SA*	3/16	1/4	.03	SS06-02SA-PT*	6mm	1/4	.03
SS14-01SA	1/4	1/8	.02	SS08-01SA-PT*	8mm	1/8	.02
SS14-02SA	1/4	1/4	.03	SS08-02SA-PT*	8mm	1/4	.04
SS516-01SA*	5/16	1/8	.02	SS08-03SA-PT*	8mm	3/8	.05
SS516-02SA*	5/16	1/4	.04	SS10-02SA-PT	10mm	1/4	.05
SS516-03SA	5/16	3/8	.05	SS10-03SA-PT*	10mm	3/8	.05
SS38-02SA	3/8	1/4	.04	SS12M-02SA-PT*	12mm	1/4	.05
SS38-03SA	3/8	3/8	.05	SS12M-03SA-PT*	12mm	3/8	.06
SS12-02SA	1/2	1/4	.05	SS12M-04SA-PT*	12mm	1/2	.10
SS12-03SA	1/2	3/8	.06				
SS12-04SA	1/2	1/2	.10				

\* Non-stock item, but available with minimum 8 week lead time.



## Beverage Industry Stepless® Ear Clamps Product Group 167



**Narrow band:** concentrates transmission of clamping force, less weight  
**Stepless over 360°:** uniform compression or uniform surface pressure  
**Clamp ear:** compensates for component tolerances, adjustable surface pressure

**Dimple:** increases clamping force, spring-effect compensates for changes in diameter due to thermal expansion

**Specially formed strip edges:** reduced risk of damage to parts being clamped

**Material:** 167 Stainless Steel, Material no. 1.4301/UNS S30400

Part Number	Size Ref. mm	Range (mm) Close-Open	Range (inch) Close-Open
Clamp Band Dimension: 5 x 0.5 mm			
16700001	7.0	5.8 - 7.0	.228 - .276
16700002	8.0	6.8 - 8.0	.268 - .315
16700003	8.7	7.0 - 8.7	.276 - .343
16700004	9.5	7.8 - 9.5	.307 - .374
16700005	10.0	8.3 - 10.0	.327 - .394
16700006	10.5	8.8 - 10.5	.346 - .413
16702492	10.9	9.2 - 10.9	.362 - .429
16700007	11.3	9.6 - 11.3	.378 - .445
16700008	11.8	10.1 - 11.8	.398 - .465
Clamp Band Dimension: 7 x 0.6 mm			
16700009	12.3	9.8 - 12.3	.386 - .484
16702493	12.8	10.3 - 12.8	.406 - .504
16700010	13.3	10.8 - 13.3	.425 - .524
16700011	13.8	11.3 - 13.8	.445 - .543
16700012	14.0	11.5 - 14.0	.453 - .551
16700013	14.5	12.0 - 14.5	.472 - .571
16700014	14.8	12.3 - 14.8	.484 - .583
16700015	15.3	12.8 - 15.3	.504 - .602
16700016	15.7	13.2 - 15.7	.520 - .618
16702494	16.2	13.7 - 16.2	.539 - .638
16700017	17.0	14.5 - 17.0	.571 - .669
16700020	18.5	15.3 - 18.5	.602 - .728
16702498	19.8	16.6 - 19.8	.654 - .780
16700024	21.0	17.8 - 21.0	.701 - .827
16700026	22.6	19.4 - 22.6	.764 - .890
16700029	24.1	20.9 - 24.1	.823 - .949
16700033	27.1	23.9 - 27.1	.941 - 1.067
16700035	28.6	25.4 - 28.6	1.000 - 1.126
16700037	30.1	26.9 - 30.1	1.059 - 1.185



# Manual Installation Tools

## Clamp Tools



Model	Action	Jaw Style
14100386	Compound	Standard (Front)
14100387	Compound	Side (Front & Side)
14100396	Single	Standard (Front)

### Installation Examples

Position an properly-sized ear clamp on the hose fitted with a hose stem. Close clamp ear fully.



When space is restricted, use a side jaw pincers and hold it parallel to the hose during closure



Using standard jaw pincer for Ear Clamps



To remove a Stepless Ear Clamp, grasp the strip end with the pincer and pull it away

## Clamp/Tool Kit



Part Number	Description
18500075	Beverage Clamp Kit

Part Number	18500075 Kit Contents:	Description
14100083	01 Each	Side Jaw Pincers
16700003	50 Each	8.7 mm Clamps
16700006	50 Each	10.5 mm Clamps
16700007	50 Each	11.3 mm Clamps
16700010	50 Each	13.3 mm Clamps
16700013	50 Each	14.5 mm Clamps
16700017	50 Each	17.0 mm Clamps