

# POLY CONN<sup>®</sup>

Master *WAIR*house<sup>®</sup>  
Fluid Power Products



# Stainless Steel Compression Fittings



Version 2020  
Revised 06/2020

Email your order to: [sales@polyconn.com](mailto:sales@polyconn.com) or fax to (763) 398-2590 · [www.polyconn.com](http://www.polyconn.com) · Questions call: (763)559-0388  
3062 Ranchview Lane North · Plymouth, MN 55447

# Features and Specifications for Stainless Steel Compression Fittings

Stainless Steel Compression fittings have been designed and manufactured with great care to meet the specifications required for a wide range of applications in chemical, petro-chemical, oil refineries, power generation, ship building, pulp and papers, micro-electronics, etc. Each fitting consists of four parts; body, front ferrule, back ferrule, and nut. The two-ferrule design, front and back, compensates for any tolerances in tube O.D., wall thickness, material hardness and always ensures outstanding leak-tight connections.

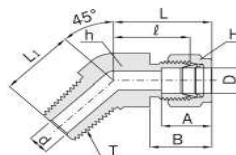
When the nut is tightened, the back and front ferrules move axially. This axial movement does not allow any torque transfer from the fitting to the tubing, and the mechanical properties of tubing are maintained.

During assembly, the back ferrule moves in such a controlled manner that the tubing is not overstressed, and the tubing I.D. is not excessively reduced, resulting in safe operation under high pressure or vibration. The front ferrule does not force the body to expand, which allows the nut to be backed off easily for disassembly and allows the fitting to be used multiple times.

## SPECIFICATIONS

Product	Temperature Range	Operating Pressure Range
Stainless Steel Compression Fittings	-425°F to +1200°F (-245°C to +649° C)	See charts on pages 8 & 9

## 45° MALE ELBOW



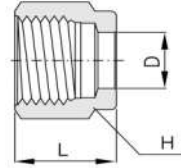
Part #	D	T	A	B	ℓ	L	L <sub>1</sub>	List Price
PC54C-42-SS	1/4"	1/8"	15.24	17.78	17.27	24.63	16.51	\$ 18.34
PC54C-44-SS	1/4"	1/4"	15.24	17.78	17.27	24.63	21.08	\$ 18.60
PC54C-62-SS	3/8"	1/8"	16.76	19.30	20.57	27.94	18.28	\$ 23.80
PC54C-64-SS	3/8"	1/4"	16.76	19.30	20.57	27.94	22.86	\$ 21.98
PC54C-66-SS	3/8"	3/8"	16.76	19.30	21.84	29.21	24.13	\$ 26.40
PC54C-86-SS	1/2"	3/8"	22.86	21.84	21.84	32.00	24.13	\$ 40.70
PC54C-88-SS	1/2"	1/2"	22.86	21.84	21.84	32.00	28.95	\$51.88

## FERRULE SET



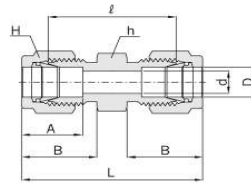
Part #	OD Tube	List Price
PC60C-2-SS	1/8"	\$ 2.66
PC60C-3-SS	3/16"	\$ 2.61
PC60C-4-SS	1/4"	\$ 2.20
PC60C-5-SS	5/16"	\$ 2.66
PC60C-6-SS	3/8"	\$ 2.74
PC60C-8-SS	1/2"	\$ 3.85

## NUT



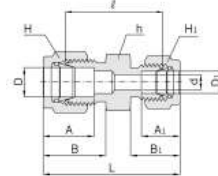
Part #	D	H	List Price
PC61C-2-SS	1/8"	7/16	\$ 2.50
PC61C-3-SS	3/16"	1/2	\$ 2.25
PC61C-4-SS	1/4"	9/16	\$ 2.29
PC61C-5-SS	5/16"	5/8	\$ 2.39
PC61C-6-SS	3/8"	11/16	\$ 3.14
PC61C-8-SS	1/2"	7/8	\$ 5.20

## UNION TUBE



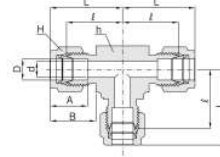
Part #	D	d	h	H	A	B	ℓ	L	List Price
PC62C-2-SS	1/8"	2.28	7/16	7/16	12.70	15.24	22.35	35.56	\$ 11.96
PC62C-3-SS	3/16"	3.04	7/16	1/2	13.71	16.00	24.13	37.33	\$ 11.18
PC62C-4-SS	1/4"	4.82	1/2	9/16	15.24	17.78	26.16	40.89	\$ 11.84
PC62C-5-SS	5/16"	6.35	9/16	5/8	16.25	18.54	28.19	42.92	\$ 13.40
PC62C-6-SS	3/8"	7.11	5/8	11/16	16.76	19.30	30.22	44.95	\$ 17.04
PC62C-8-SS	1/2"	10.41	13/16	7/8	22.86	21.84	30.98	51.30	\$ 25.36

## UNION TUBE REDUCER



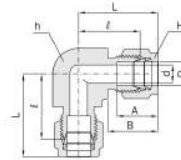
Part #	D	D <sub>1</sub>	d	h	H	H <sub>1</sub>	A	A <sub>1</sub>	B	B <sub>1</sub>	ℓ	L	List Price
PC62CR-32-SS	3/16"	1/8"	2.28	7/16	1/2	7/16	13.71	12.70	16.00	15.24	23.36	36.57	\$ 11.32
PC62CR-42-SS	1/4"	1/8"	2.28	1/2	9/16	7/16	15.24	12.70	17.78	15.24	24.63	38.60	\$ 12.62
PC62CR-43-SS	1/4"	3/16"	3.04	1/2	9/16	1/2	15.24	13.71	17.78	16.00	25.40	39.37	\$ 12.62
PC62CR-52-SS	5/16"	1/8"	2.28	9/16	5/8	7/16	16.25	12.70	18.54	15.24	25.90	39.87	\$ 14.56
PC62CR-54-SS	5/16"	1/4"	4.82	9/16	5/8	9/16	16.25	15.24	18.54	17.78	27.43	42.16	\$ 13.78
PC62CR-62-SS	3/8"	1/8"	1.27	5/8	11/16	5/16	16.76	8.63	19.30	10.92	25.40	36.57	\$ 18.60
PC62CR-64-SS	3/8"	1/4"	4.82	5/8	11/16	9/16	16.76	15.24	19.30	17.78	28.44	43.18	\$ 17.04
PC62CR-65-SS	3/8"	5/16"	6.35	5/8	11/16	5/8	16.76	16.25	19.30	18.54	29.46	44.19	\$ 17.04
PC62CR-82-SS	1/2"	1/8"	2.28	13/16	7/8	7/16	22.86	12.70	21.84	15.24	28.44	45.21	\$ 30.68
PC62CR-84-SS	1/2"	1/4"	4.82	13/16	7/8	9/16	22.86	15.24	21.84	17.78	29.46	46.99	\$ 26.14
PC62CR-86-SS	1/2"	3/8"	7.11	13/16	7/8	11/16	22.86	16.76	21.84	19.30	30.98	48.51	\$ 26.14

## UNION TEE



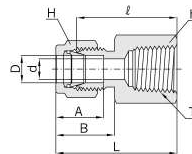
Part #	D	d	h	H	A	B	ℓ	L	List Price
PC64C-2-SS	1/8"	2.28	3/8	7/16	12.70	15.24	15.74	22.35	\$ 26.14
PC64C-3-SS	3/16"	3.04	1/2	1/2	13.71	16.00	17.78	24.38	\$ 26.52
PC64C-4-SS	1/4"	4.82	1/2	9/16	15.24	17.78	19.55	26.92	\$ 24.44
PC64C-5-SS	5/16"	6.35	9/16	5/8	16.25	18.54	21.33	28.70	\$ 28.08
PC64C-6-SS	3/8"	7.11	5/8	11/16	16.76	19.30	23.11	30.48	\$ 31.89
PC64C-8-SS	1/2"	10.41	13/16	7/8	22.86	21.84	25.90	36.06	\$ 48.36

## UNION ELBOW



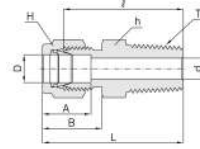
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PC65C-2-SS	1/8"	2.28	3/8	7/16	12.70	15.24	15.74	22.35	\$ 16.12
PC65C-3-SS	3/16"	3.04	1/2	1/2	13.71	16.00	17.78	24.38	\$ 16.12
PC65C-4-SS	1/4"	4.82	1/2	9/16	15.24	17.78	19.55	26.92	\$ 17.30
PC65C-5-SS	5/16"	6.35	9/16	5/8	16.25	18.54	21.33	28.70	\$ 18.08
PC65C-6-SS	3/8"	7.11	5/8	11/16	16.76	19.30	23.11	30.48	\$ 21.20
PC65C-8-SS	1/2"	10.41	13/16	7/8	22.86	21.84	29.71	39.87	\$ 34.84

## FEMALE CONNECTOR



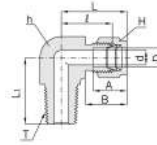
Part #	D	NPT F	d	h	H	A	B	ℓ	L	List Price
PC66C-22-SS	1/8"	1/8"	2.28	9/16	7/16	12.70	15.24	22.09	28.70	\$ 10.28
PC66C-24-SS	1/8"	1/4"	2.28	3/4	7/16	12.70	15.24	26.92	33.52	\$ 11.84
PC66C-32-SS	3/16"	1/8"	3.04	9/16	1/2	13.71	16.00	23.11	29.71	\$ 9.76
PC66C-42-SS	1/4"	1/8"	4.82	9/16	9/16	15.24	17.78	23.87	31.24	\$ 9.88
PC66C-44-SS	1/4"	1/4"	4.82	3/4	9/16	15.24	17.78	30.22	37.59	\$ 12.48
PC66C-46-SS	1/4"	3/8"	4.82	7/8	9/16	15.24	17.78	35.05	42.41	\$ 15.34
PC66C-48-SS	1/4"	1/2"	4.82	1-1/16	9/16	15.24	17.78	35.05	42.41	\$ 17.04
PC66C-52-SS	5/16"	1/8"	6.35	9/16	5/8	16.25	18.54	24.63	32.00	\$ 11.70
PC66C-54-SS	5/16"	1/4"	6.35	3/4	5/8	16.25	18.54	29.46	36.83	\$ 13.26
PC66C-62-SS	3/8"	1/8"	7.11	5/8	11/16	16.76	19.30	25.40	32.76	\$ 13.14
PC66C-64-SS	3/8"	1/4"	7.11	7/8	11/16	16.76	19.30	30.22	37.59	\$ 12.74
PC66C-66-SS	3/8"	3/8"	7.11	7/8	11/16	16.76	19.30	31.75	39.11	\$ 16.90
PC66C-68-SS	3/8"	1/2"	7.11	1-1/16	11/16	16.76	19.30	36.57	43.94	\$ 22.24
PC66C-84-SS	1/2"	1/4"	10.41	13/16	7/8	22.86	21.84	30.22	40.38	\$ 17.68
PC66C-86-SS	1/2"	3/8"	10.41	7/8	7/8	22.86	21.84	31.75	41.91	\$ 18.08
PC66C-88-SS	1/2"	1/2"	10.41	1-1/16	7/8	22.86	21.84	36.57	46.73	\$ 24.96

## MALE CONNECTOR



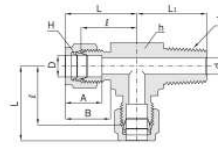
Part #	D	NPT M	d	h	H	A	B	ℓ	L	List Price
PC68C-22-SS	1/8"	1/8"	2.28	7/16	7/16	12.70	15.24	23.87	30.48	\$ 8.06
PC68C-24-SS	1/8"	1/4"	2.28	9/16	7/16	12.70	15.24	28.95	35.56	\$ 8.98
PC68C-26-SS	1/8"	3/8"	2.28	11/16	7/16	12.70	15.24	29.21	35.81	\$ 14.18
PC68C-28-SS	1/8"	1/2"	2.28	7/8	7/16	12.70	15.24	35.56	42.16	\$ 15.74
PC68C-32-SS	3/16"	1/8"	3.04	7/16	1/2	13.71	16.00	24.63	31.24	\$ 8.06
PC68C-34-SS	3/16"	1/4"	3.04	9/16	1/2	13.71	16.00	29.71	36.32	\$ 8.98
PC68C-42-SS	1/4"	1/8"	4.82	1/2	9/16	15.24	17.78	25.40	32.76	\$ 7.42
PC68C-44-SS	1/4"	1/4"	4.82	9/16	9/16	15.24	17.78	30.48	37.84	\$ 7.68
PC68C-46-SS	1/4"	3/8"	4.82	11/16	9/16	15.24	17.78	30.98	38.35	\$ 9.76
PC68C-48-SS	1/4"	1/2"	4.82	7/8	9/16	15.24	17.78	37.33	44.70	\$ 13.26
PC68C-52-SS	5/16"	1/8"	4.82	9/16	5/8	16.25	18.54	26.67	34.03	\$ 8.32
PC68C-54-SS	5/16"	1/4"	6.35	9/16	5/8	16.25	18.54	31.24	38.60	\$ 9.76
PC68C-56-SS	5/16"	3/8"	6.35	11/16	5/8	16.25	18.54	31.75	39.11	\$ 10.92
PC68C-62-SS	3/8"	1/8"	4.82	5/8	11/16	16.76	19.30	27.94	35.30	\$ 9.36
PC68C-64-SS	3/8"	1/4"	7.00	5/8	11/16	16.76	19.30	32.51	39.87	\$ 10.54
PC68C-66-SS	3/8"	3/8"	7.11	11/16	11/16	16.76	19.30	32.51	39.87	\$ 11.84
PC68C-68-SS	3/8"	1/2"	7.11	7/8	11/16	16.76	19.30	38.86	46.22	\$ 14.18
PC68C-82-SS	1/2"	1/8"	4.82	13/16	7/8	22.86	21.84	28.70	38.86	\$ 18.72
PC68C-84-SS	1/2"	1/4"	7.00	13/16	7/8	22.86	21.84	33.27	43.43	\$ 15.34
PC68C-86-SS	1/2"	3/8"	9.50	13/16	7/8	22.86	21.84	33.27	43.43	\$ 15.86
PC68C-88-SS	1/2"	1/2"	10.41	7/8	7/8	22.86	21.84	38.86	49.02	\$ 17.68

## MALE ELBOW



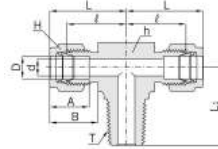
Part #	D	NPT M	d	h	H	A	B	ℓ	L	L <sub>1</sub>	List Price
PC69C-22-SS	1/8"	1/8"	2.28	7/16	7/16	12.70	15.24	17.02	23.62	17.78	\$ 12.88
PC69C-24-SS	1/8"	1/4"	2.28	1/2	7/16	12.70	15.24	18.03	24.64	22.80	\$ 13.92
PC69C-32-SS	3/16"	1/8"	3.04	1/2	1/2	13.71	16.00	18.79	25.40	18.79	\$ 12.88
PC69C-34-SS	3/16"	1/4"	3.04	1/2	1/2	13.71	16.00	18.79	25.40	23.36	\$ 16.12
PC69C-42-SS	1/4"	1/8"	4.82	1/2	9/16	15.24	17.78	19.60	26.47	19.10	\$ 13.66
PC69C-44-SS	1/4"	1/4"	4.82	1/2	9/16	15.24	17.78	19.60	27.18	23.87	\$ 14.70
PC69C-46-SS	1/4"	3/8"	4.82	11/16	9/16	15.24	17.78	22.35	29.71	28.40	\$ 20.68
PC69C-48-SS	1/4"	1/2"	4.82	13/16	9/16	15.24	17.78	24.60	31.97	33.00	\$ 23.54
PC69C-52-SS	5/16"	1/8"	4.82	9/16	5/8	16.25	18.54	21.33	28.70	19.81	\$ 14.70
PC69C-54-SS	5/16"	1/4"	6.35	9/16	5/8	16.25	18.54	21.33	28.70	24.40	\$ 15.08
PC69C-56-SS	5/16"	3/8"	6.35	11/16	5/8	16.25	18.54	23.11	30.48	28.40	\$ 23.18
PC69C-62-SS	3/8"	1/8"	4.82	5/8	11/16	16.76	19.30	23.11	30.48	20.60	\$ 18.72
PC69C-64-SS	3/8"	1/4"	7.00	5/8	11/16	16.76	19.30	23.11	30.48	25.40	\$ 18.34
PC69C-66-SS	3/8"	3/8"	7.11	11/16	11/16	16.76	19.30	25.91	33.27	26.20	\$ 21.98
PC69C-68-SS	3/8"	1/2"	7.11	13/16	11/16	16.76	19.30	25.91	33.27	33.02	\$ 28.22
PC69C-84-SS	1/2"	1/4"	7.00	13/16	7/8	22.86	21.84	25.90	36.06	28.30	\$ 25.88
PC69C-86-SS	1/2"	3/8"	9.5	13/16	7/8	22.86	21.84	25.90	36.06	28.30	\$ 25.88
PC69C-88-SS	1/2"	1/2"	10.41	13/16	7/8	22.86	21.84	25.90	36.06	33.02	\$ 32.12

## MALE TEE RUN SWIVEL



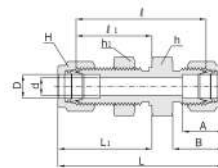
Part #	D	NPT M	d	h	H	A	B	ℓ	L	Li	List Price
PC71C-22-SS	1/8"	1/8"	2.28	1/2	7/16	12.70	15.24	17.00	24.91	17.80	\$ 26.14
PC71C-24-SS	1/8"	1/4"	2.28	1/2	7/16	12.70	15.24	18.03	24.91	23.36	\$ 44.46
PC71C-32-SS	3/16"	1/8"	3.04	1/2	1/2	13.71	16.00	17.78	24.38	17.78	\$ 37.96
PC71C-42-SS	1/4"	1/8"	4.82	1/2	9/16	15.24	17.78	19.55	26.92	18.79	\$ 24.96
PC71C-44-SS	1/4"	1/4"	4.82	1/2	9/16	15.24	17.78	19.55	26.92	23.87	\$ 30.16
PC71C-52-SS	5/16"	1/8"	4.82	9/16	5/8	16.25	1/54	22.35	29.71	20.82	\$ 30.94
PC71C-64-SS	3/8"	1/4"	7.00	5/8	11/16	16.75	19.30	23.11	30.48	25.40	\$ 31.86
PC71C-66-SS	3/8"	3/8"	7.11	11/16	11/16	16.76	19.30	23.87	31.24	26.20	\$ 35.36
PC71C-86-SS	1/2"	3/8"	9.50	13/16	7/8	22.86	21.84	25.90	36.06	28.19	\$ 48.36
PC71C-88-SS	1/2"	1/2"	10.41	13/16	7/8	22.86	21.84	25.90	36.06	33.02	\$ 51.74

## MALE TEE BRANCH SWIVEL



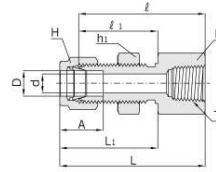
Part #	D	NPT M	d	h	H	A	B	ℓ	L	Li	List Price
PC72C-22-SS	1/8"	1/8"	2.28	1/2	7/16	12.70	15.24	17.00	24.91	17.80	\$ 26.14
PC72C-24-SS	1/8"	1/4"	2.28	1/2	7/16	12.70	15.24	18.03	24.91	23.36	\$ 30.31
PC72C-32-SS	3/16"	1/8"	3.04	1/2	1/2	13.71	16.00	17.78	24.38	17.78	\$ 29.00
PC72C-42-SS	1/4"	1/8"	4.82	1/2	9/16	15.24	17.78	19.55	26.92	18.79	\$ 24.96
PC72C-44-SS	1/4"	1/4"	4.82	1/2	9/16	15.24	17.78	19.55	26.92	23.87	\$ 30.16
PC72C-52-SS	5/16"	1/8"	4.82	9/16	5/8	16.25	18.54	22.35	29.71	20.82	\$ 30.94
PC72C-64-SS	3/8"	1/4"	7.00	5/8	11/16	16.76	19.30	23.11	30.48	25.40	\$ 31.86
PC72C-66-SS	3/8"	3/8"	7.11	11/16	11/16	16.76	19.30	23.87	31.24	26.20	\$ 35.36
PC72C-86-SS	1/2"	3/8"	10.41	13/16	7/8	22.86	21.84	25.90	36.06	28.19	\$ 48.36
PC72C-88-SS	1/2"	1/2"	10.41	13/16	7/8	22.86	21.84	25.90	36.06	33.02	\$ 51.74
PC72C-108-SS	5/8"	1/2"	12.00	1/16	1	24.38	21.84	27.94	38.10	35.05	\$ 59.42
PC72C-1212-SS	3/4"	3/4"	15.74	1-1/16	1-1/8	24.38	21.84	29.71	39.87	36.83	\$ 76.32

## BULKHEAD UNION



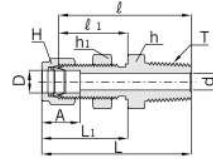
Part #	D	d	h & h <sub>1</sub>	H	A	B	ℓ	ℓ <sub>1</sub>	L	Li	Panel Hole Drill Size	Panel Max Thickness	List Price
PC82C-22-SS	1/8"	2.28	1/2	7/16	12.70	15.24	38.10	24.63	51.30	31.24	8.33	12.70	\$ 24.32
PC82C-33-SS	3/16"	3.04	9/16	1/2	13.71	16.00	40.38	25.40	53.59	32.00	9.92	12.70	\$ 24.32
PC82C-44-SS	1/4"	4.82	5/8	9/16	15.24	17.78	42.92	26.16	57.65	33.52	11.50	10.16	\$ 17.68
PC82C-55-SS	5/16"	6.35	11/16	5/8	16.25	18.54	45.97	28.44	60.70	35.81	13.09	11.17	\$ 20.16
PC82C-66-SS	3/8"	7.11	3/4	11/16	16.76	19.30	47.49	29.46	62.23	36.83	14.68	11.17	\$ 25.48
PC82C-88-SS	1/2"	10.41	15/16	7/8	22.86	21.84	50.80	31.75	71.12	41.91	19.44	12.70	\$ 36.92

## FEMALE BULKHEAD



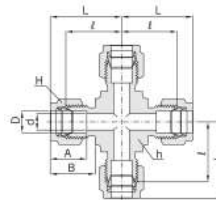
Part #	D	NPT F	d	h	h <sub>1</sub>	H	A	ℓ	ℓ <sub>1</sub>	L	L <sub>1</sub>	Panel Hole Drill Size	List Price
PC86C-22-SS	1/8"	1/8"	2.28	9/16	1/2	7/16	12.70	38.10	24.63	44.70	31.24	8.38	\$ 32.64
PC86C-42-SS	1/4"	1/8"	4.82	5/8	5/8	9/16	15.24	39.62	26.16	46.99	33.52	11.50	\$ 19.12
PC86C-44-SS	1/4"	1/4"	4.82	3/4	5/8	9/16	15.24	44.45	26.16	51.81	33.52	11.50	\$ 19.24
PC86C-64-SS	3/8"	1/4"	7.00	3/4	3/4	11/16	16.76	47.75	29.46	55.11	36.83	14.68	\$ 26.40
PC86C-86-SS	1/2"	3/8"	10.41	15/16	15/16	7/8	22.86	51.56	31.75	61.72	41.91	19.44	\$ 43.04
PC86C-88-SS	1/2"	1/2"	10.41	15/16	15/16	7/8	22.86	56.38	31.75	66.54	47.21	19.44	\$ 42.26

## MALE BULKHEAD



Part #	D	NPT M	d	h	h <sub>1</sub>	H	A	ℓ	ℓ <sub>1</sub>	L	L <sub>1</sub>	Panel Hole Drill Size	Panel Max Thickness	List Price
PC88C-22-SS	1/8"	1/8"	2.28	1/2	1/2	7/16	12.70	39.87	24.63	46.48	31.24	8.33	12.20	\$ 24.44
PC88C-42-SS	1/4"	1/8"	4.82	5/8	5/8	9/16	15.24	42.16	26.16	49.53	33.52	11.50	10.16	\$ 16.52
PC88C-44-SS	1/4"	1/4"	4.82	5/8	5/8	9/16	15.24	45.97	26.16	53.34	33.52	11.50	10.16	\$ 16.52
PC88C-64-SS	3/8"	1/4"	7.11	3/4	3/4	11/16	16.76	50.03	29.46	57.40	36.83	14.68	11.17	\$ 27.44
PC88C-66-SS	3/8"	3/8"	7.11	3/4	3/4	11/16	16.76	50.03	29.46	57.40	36.83	14.68	11.17	\$ 29.64
PC88C-68-SS	3/8"	1/2"	7.11	7/8	3/4	11/16	16.76	56.38	29.46	63.75	36.83	14.68	11.17	\$ 31.08
PC88C-86-SS	1/2"	3/8"	9.39	15/16	15/16	7/8	22.86	53.08	31.75	63.24	41.91	19.44	12.70	\$ 30.94
PC88C-88-SS	1/2"	1/2"	10.41	15/16	15/16	7/8	22.86	58.67	31.75	68.83	41.91	19.44	12.70	\$ 31.86

## CROSS UNION



Part #	D	d	h	H	A	B	ℓ	L	List Price
PC102C-2-SS	1/8"	2.28	3/8	7/16	12.70	15.24	15.74	22.35	\$ 47.20
PC102C-3-SS	3/16"	3.04	1/2	1/2	13.71	16.00	17.78	24.38	\$ 46.68
PC102C-4-SS	1/4"	4.82	1/2	9/16	15.24	17.78	19.55	26.92	\$ 44.20
PC102C-5-SS	5/16"	6.35	1/2	5/8	16.25	18.54	21.33	28.70	\$ 59.54
PC102C-6-SS	3/8"	7.11	5/8	11/16	16.76	19.30	23.11	30.48	\$ 54.86
PC102C-8-SS	1/2"	10.41	13/16	7/8	22.86	21.84	25.90	36.06	\$ 63.70

## Maximum Allowable Working Pressure (MAWP) Table

- Working pressure calculated in accordance with ASME B31.3, Chemical Plant and Petroleum Refinery Piping Code, 2014 Edition

### Stainless Steel Tubing

Fully annealed 304 or 316 high quality seamless stainless-steel tube to ASTM A269 or equivalent.

Hardness: HRB90 (Hv200) or less

Stainless Steel Tube Inch Size									
Tube OD (inches)	Tube Wall Thickness in Inches								
	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109
1/8"			8,500	11,200					
3/16"			5,400	7,000	10,400				
1/4"			4,000	5,100	7,500	10,400			
5/16"				4,000	5,800	8,000			
3/8"	For gas service, applying			3,300	4,800	6,500			
1/2"	tube wall thickness only			2,600	3,700	5,100	6,700		
5/8"	on outside of shade boundary				2,900	4,000	5,200	6,000	
3/4"				2,400	3,300	4,200	4,900	5,800	

- Unless otherwise specified, allowable working pressure is calculated from ASTM A269 tubing and an S value of 20,000psi (137,800kPa) for ASTM A213 tubing at -28°C - 37°C (-20°F - 100°F) as specified in ASME B31.3 and ASME B31.1 respectively.
- Based on minimum wall thickness and maximum OD allowable by ASTM A269
- For welded tubing, the following derating rate to be applied for weld integrity. (ASME B31.3 - 2014 Edition, Table A - 1B)
  - for double welded tubing: 0.85
  - for single welded tubing: 0.80
- To determine bar, multiply psig by 0.0689 and to determine kPa by 6.89

#### Note:

- All Calculations are based on maximum outside diameter and minimum wall thickness without allowance for corrosion and erosion.
- Care should be taken for temperature rating if tubing is coated or plated.
- Figures shown are not for design purpose but for reference only and the accuracy of information here is not liability of our company.

### Copper Tubing

High quality soft annealed seamless copper tube to ASTM B - 75 or equivalent.

Hardness: Rockwell 15T 60 or less

Fractional Copper Tubing									
Tube OD (inches)	Tube Wall Thickness in Inches								
	0.010	0.012	0.028	0.035	0.049	0.065	0.083	0.095	0.109
1/8"			2,804	3,787					
3/16"			1,810	2,343	3,615				
1/4"			1,321	1,696	2,565	3,639			
5/16"				1,329	1,988	2,782			
3/8"	For gas service, applying			1,093	1,623	2,251			
1/2"	tube wall thickness only			806	1,187	1,630	2,160		
5/8"	on outside of shade boundary				935	1,277	1,681	1,970	
3/4"				748	1,017	1,332	1,555	1,823	

- An S value of 6000 psi (41,300kPa) for ASTM B75 tubing and ASTM B88 tubing at -28°C - 37°C (-20°F - 100°F) as specified in ASME B31.3 and B31.1 are used to calculate an allowable working pressure.
- Based on minimum wall thickness and maximum OD allowable by ASTM B75
- To determine bar, multiply psig by 0.0689 and to determine kPa by 6.89.



## Monel 400 Tubing

Fully annealed seamless Monel 400 to ASTM B165 or equivalent.

Hardness: Rb75 or less

Monel 400 Tubing								
Tube OD (inches)	Tube Wall Thickness in Inches							
	0.010	0.012	0.028	0.035	0.049	0.065	0.083	0.095
1/8"			7,900	10,100				
1/4"			3,700	4,800	7,000	9,500		
3/8"	For gas service, applying			3,100	4,400	6,100		
1/2"	tube wall thickness only			2,300	4,400	4,400		
3/4"	on outside of shade boundary				2,200	3,000	4,000	4,600

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