

## Poly-Tite® Fittings

### Advantages

A compact brass compression fitting designed to speed any installation. Body, nut and sleeve are furnished pre-assembled, ready for installation. An exclusive acetal copolymer sleeve holds plastic tubing where it belongs, even when the system pressure exceeds the tubing burst point. Poly-Tite sleeves have superior resilience to resist creeping and stress caused from compression. The black acetal copolymer sleeve also resists ultra-violet ray attack and has excellent dimensional stability. Poly-Tite nuts will rotate around the sleeve as it tightens to prevent twisting and weakening of the plastic tubing. Poly-Tite fittings can be assembled and disassembled repeatedly.

### Materials

Bodies and Nuts: CA 377, CA 360, CA 345  
Plastic Sleeves: Acetal Copolymer.

### Applications

Use with Parker Parflex® or other high-quality thermoplastic tubing for pneumatic instrumentation circuits, lubricant and coolant lines, and applications with other gases and liquids. For use with soft metal tubing and nylon thermoplastic tubing, use brass sleeve and nut assembly 61PB.

### Working Pressure and Temperature Ranges

Up to 150 PSI from 0° to +150°F with thermoplastic tubing. Up to 300 PSI from 0° to +175°F with soft metal tubing.

### Assembly Instructions

#### Polyethylene, polypropylene and vinyl tubing:

1. Cut tubing squarely—maximum of 15° angle allowable.
2. Check that port or mating part is clean and free of debris.
3. Insert tube end until it bottoms in the Poly-Tite fitting and tighten knurl/hex nut finger-tight — plus one wrench turn.

#### Copper, aluminum and nylon tubing:

Brass sleeves are recommended. Insert tube until it bottoms in the Poly-Tite fitting and tighten one wrench turn past finger-tight.

#### Maximum allowable metal tube wall thickness for use with

##### Poly-Tite fittings:

1/8", 3/16" O.D. — no limitation, 1/4" O.D. — .035  
5/16", 3/8", 1/2" O.D. — .049

### Order

By part number and name.

### Nomenclature

Part numbers are constructed from symbols that identify the style and size of the fitting. The first series of numbers and letters identifies the style and type fitting. The second series of numbers describes the size.

#### Example:

66 P -4 -2  
 Female Connector —  
 (Tube to female pipe)  
 Poly-Tite —  
 1/4" (4/16) Tube O.D. —  
 1/8" (2/16) Pipe Thread —

### Sizes

Tube sizes are determined by the number of sixteenths of an inch in the tube O.D.

### Special Fittings

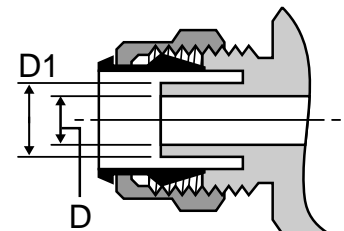
Fitting configurations and/or sizes other than those shown in the catalog can be furnished. It is suggested that a print or sketch be submitted with the inquiry.

### Pricing

Only items priced in current supplementary price list PL3501 are carried in stock. Price and delivery for nonstock items furnished on request for specified quantity.

### Tube Support O.D.

Tube Size Inches	* D1 Tube Support O.D.
1/4	.168
5/16	.185
3/8	.248
1/2	.373

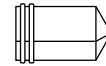
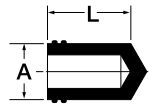


\* Note: No tube support for sizes 1/8" and 3/16"

# Poly-Tite® Fittings

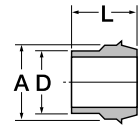
## Plastic cap 59P

PART NO.	TUBE SIZE	A	L
59P-4	1/4	.247	.50
59P-5	5/16	.307	.53
59P-6	3/8	.372	.56
59P-8	1/2	.497	.63



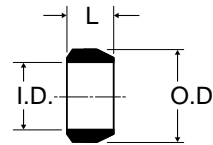
## Acetal plastic sleeve 60P

PART NO.	TUBE SIZE	A	D	L
60P-4	1/4	.336	.258	.35
60P-5	5/16	.400	.320	.34
60P-6	3/8	.460	.382	.37
60P-8	1/2	.627	.508	.42



## Sleeve 60PB

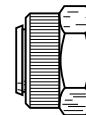
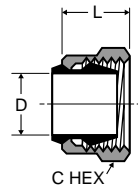
PART NO.	L	O.D.	I.D.
60PB-2	.187	.256	.130
60PB-3	.187	.322	.192
60PB-4	.187	.336	.255
60PB-5	.187	.400	.318
60PB-6	.218	.460	.382
60PB-8	.250	.620	.507



## Nut and plastic sleeve assembly 61P

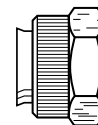
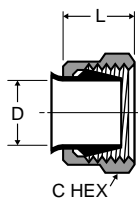
PART NO.	TUBE SIZE	STRAIGHT THREAD	C HEX	D	L
61P-2*	1/8	5/16-24	3/8	.130	.34
61P-3*	3/16	3/8-24	7/16	.194	.37
61P-4	1/4	3/8-24	7/16	.258	.38
61P-5	5/16	7/16-24	1/2	.320	.34
61P-6	3/8	1/2-24	9/16	.382	.38
61P-8	1/2	11/16-20	3/4	.508	.44

\* Brass Sleeve



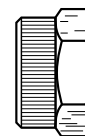
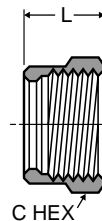
## Nut and brass sleeve assembly 61PB

PART NO.	TUBE SIZE	STRAIGHT THREAD	C HEX	D	L
61PB-4	1/4	3/8-24	7/16	.258	.38
61PB-5	5/16	7/16-24	1/2	.320	.34
61PB-6	3/8	1/2-24	9/16	.382	.38
61PB-8	1/2	11/16-20	3/4	.508	.44



## Nut 61PN

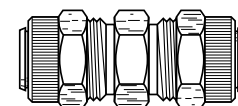
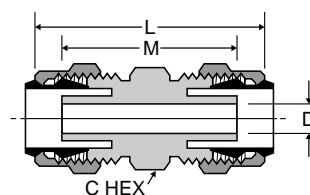
PART NO.	TUBE SIZE	STRAIGHT THREAD	C HEX	L
61PN-2	1/8	5/16-24	3/8	.34
61PN-3	3/16	3/8-24	7/16	.37
61PN-4	1/4	3/8-24	7/16	.38
61PN-5	5/16	7/16-24	1/2	.34
61PN-6	3/8	1/2-24	9/16	.38
61PN-8	1/2	11/16-20	3/4	.44



## Union 62P

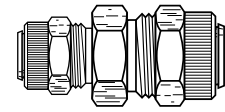
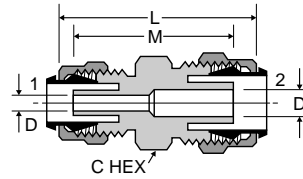
PART NO.	TUBE SIZE	STRAIGHT THREAD	C HEX	L	M	FLOW DIA. D
62P-2*	1/8	5/16-24	5/16	1.08	.64	.094
62P-3*	3/16	3/8-24	3/8	1.17	.72	.125
62P-4	1/4	3/8-24	3/8	1.17	.96	.125
62P-5	5/16	7/16-24	7/16	1.17	.96	.144
62P-6	3/8	1/2-24	1/2	1.23	.99	.204
62P-8	1/2	11/16-20	11/16	1.39	1.24	.323

\* Brass Sleeve, No Tube Support



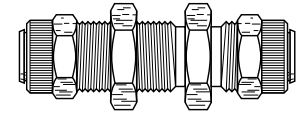
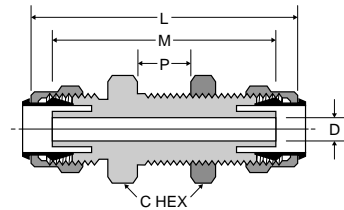
**Union Reducer 62P**

PART NO.	1 TUBE SIZE	2 TUBE SIZE	1 STRAIGHT THREAD	2 STRAIGHT THREAD	C HEX	L	M	FLOW DIA. D
62P-6-4	1/4	3/8	3/8-24	1/2-24	1/2	1.21	.99	.125



**Bulkhead union 62PBH**

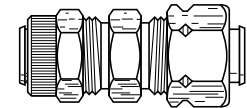
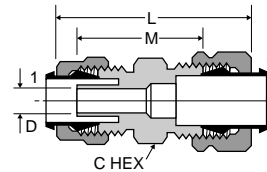
PART NO.	TUBE SIZE	STRAIGHT THREAD	C HEX	P MAX.	L	M	FLOW DIA. D
62PBH-4	1/4	3/8-24	9/16	.38	1.74	1.52	.125
62PBH-5	5/16	7/16-24	5/8	.38	1.70	1.52	.144
62PBH-6	3/8	1/2-24	11/16	.47	1.89	1.65	.204
62PBH-8	1/2	11/16-20	7/8	.63	2.20	2.05	.323



**Union 62PCA**

(Tube to Compress-Align)

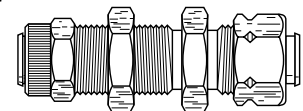
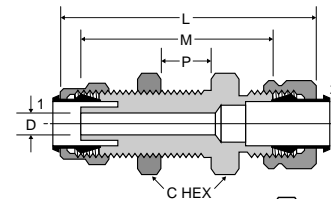
PART NO.	TUBE SIZE	1 STRAIGHT THREAD	2 STRAIGHT THREAD	C HEX	L	M	FLOW DIA. D
62PCA-4	1/4	3/8-24	7/16-24	7/16	1.24	.89	.125
62PCA-5	5/16	7/16-24	1/2-24	1/2	1.32	.98	.144
62PCA-6	3/8	1/2-24	9/16-24	9/16	1.32	.98	.204



**Bulkhead union 62PCABH**

(Tube to Compress-Align)

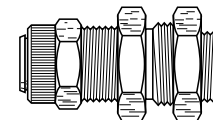
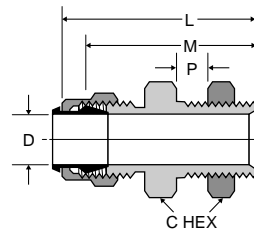
PART NO.	TUBE SIZE	1 STRAIGHT THREAD	2 STRAIGHT THREAD	C HEX	P MAX.	L	M	FLOW DIA. D
62PCABH-4	1/4	3/8-24	7/16-24	9/16	.38	1.80	1.45	.125
62PCABH-6	3/8	1/2-24	9/16-24	11/16	.47	1.98	1.64	.204



**Bulkhead union 62PTBH**

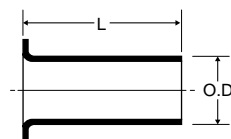
(Straight Through)

PART NO.	TUBE SIZE	STRAIGHT THREAD	C HEX	P MAX.	L	M	FLOW DIA. D
62PTBH-4	1/4	3/8-24	9/16	.31	1.19	.93	.260
62PTBH-5	5/16	7/16-24	5/8	.31	1.19	.93	.323
62PTBH-6	3/8	1/2-24	11/16	.34	1.26	.99	.387



**Brass insert 63PT**

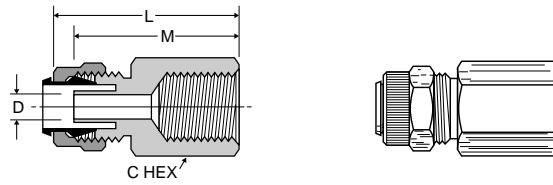
PART NO.	TUBE SIZE	L	O.D.
63PT-2-16	1/8	.46	.080
63PT-2-32	1/8	.31	.061
63PT-3-25	3/16	.45	.135
63PT-3-40	3/16	.52	.095



**Female connector 66P**

PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	C HEX	L	M	FLOW DIA. D
66P-2-2*	1/8	1/8	5/16-24	9/16	.97	.75	.094
66P-3-2*	3/16	1/8	3/8-24	9/16	1.00	.78	.125
66P-3-4*	3/16	1/4	3/8-24	11/16	1.18	.96	.125
66P-4-2	1/4	1/8	3/8-24	1/2	.97	.86	.125
66P-4-4	1/4	1/4	3/8-24	5/8	1.18	1.07	.125
66P-5-2	5/16	1/8	7/16-24	1/2	.97	.86	.144
66P-6-4	3/8	1/4	1/2-24	5/8	1.18	1.07	.204
66P-8-6	1/2	3/8	11/16-20	13/16	1.31	1.20	.323

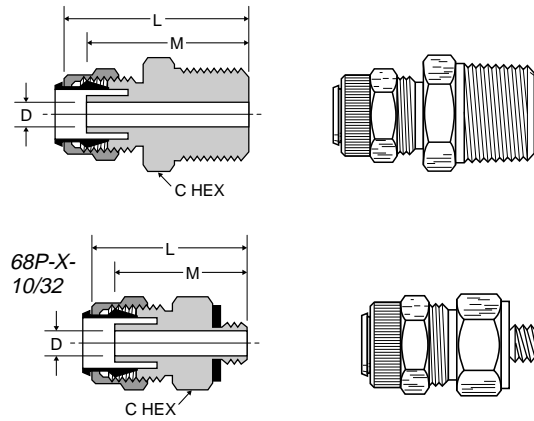
\*Brass Sleeve, No Tube Support



**Male connector 68P**

PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	C HEX	L	M	FLOW DIA. D
68P-2-1*	1/8	1/16	5/16-24	11/32	1.00	.78	.094
68P-2-10X32*	1/8	10-32	5/16-24	3/8	.86	.64	.094
68P-2-2*	1/8	1/8	5/16-24	7/16	.99	.77	.094
68P-3-2*	3/16	1/8	3/8-24	7/16	1.06	.84	.125
68P-3-4*	3/16	1/4	3/8-24	9/16	1.25	1.03	.125
68P-4-1	1/4	1/16	3/8-24	3/8	1.06	.95	.125
68P-4-10X32	1/4	10-32	3/8-24	3/8	.86	.75	.094
68P-4-2	1/4	1/8	3/8-24	7/16	1.06	.95	.125
68P-4-4	1/4	1/4	3/8-24	9/16	1.25	1.14	.125
68P-4-6	1/4	3/8	3/8-24	11/16	1.28	1.17	.125
68P-5-2	5/16	1/8	7/16-24	7/16	1.05	.95	.144
68P-5-4	5/16	1/4	7/16-24	9/16	1.24	1.14	.144
68P-6-2	3/8	1/8	1/2-24	1/2	1.10	.98	.204
68P-6-4	3/8	1/4	1/2-24	9/16	1.29	1.17	.204
68P-6-6	3/8	3/8	1/2-24	11/16	1.29	1.17	.204
68P-8-6	1/2	3/8	11/16-20	11/16	1.37	1.29	.323

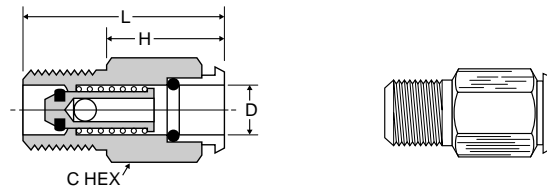
\*Brass Sleeve, No Tube Support



**Pipe coupler body 391P**

(Chrome Plated)

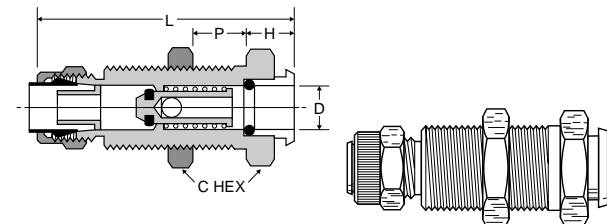
PART NO.	D-INSERT DIA.	PIPE THREAD	C HEX	H	L
391P-4-2	1/4	1/8	1/2	.91	1.29
391P-4-4	1/4	1/4	9/16	.73	1.29
391P-6-4	3/8	1/4	5/8	.85	1.41



**Bulkhead coupler body 392P**

(Chrome Plated)

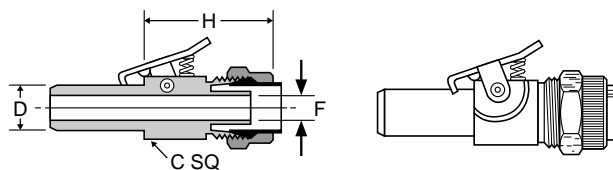
PART NO.	TUBE SIZE	D-INSERT DIA.	STRAIGHT THREAD	C HEX	P MAX.	H	L
392P-4-4	1/4	1/4	1/2-24	5/8	.84	.39	2.13
392P-6-6	3/8	3/8	11/16-24	13/16	.93	.37	2.01



**Through type insert 393P**

(Chrome Plated)

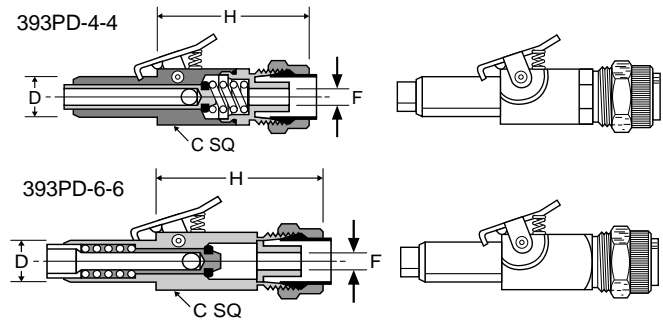
PART NO.	TUBE SIZE	D-INSERT DIA.	STRAIGHT THREAD	C SQUARE	H	FLOW DIA. F
393P-4-4	1/4	1/4	3/8-24	7/16	.96	.125
393P-6-6	3/8	3/8	1/2-24	1/2	1.26	.203



**Shutoff type insert 393PD**

(Chrome Plated)

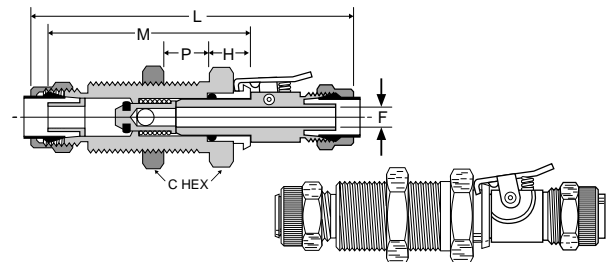
PART NO.	TUBE SIZE	D-INSERT DIA.	STRAIGHT THREAD	C SQUARE	H	FLOW DIA.F
393PD-4-4	1/4	1/4	3/8-24	7/16	1.61	.125
393PD-6-6	3/8	3/8	1/2-24	1/2	1.45	.204



**Single end shutoff bulkhead quick coupler 394P**

(Chrome Plated)

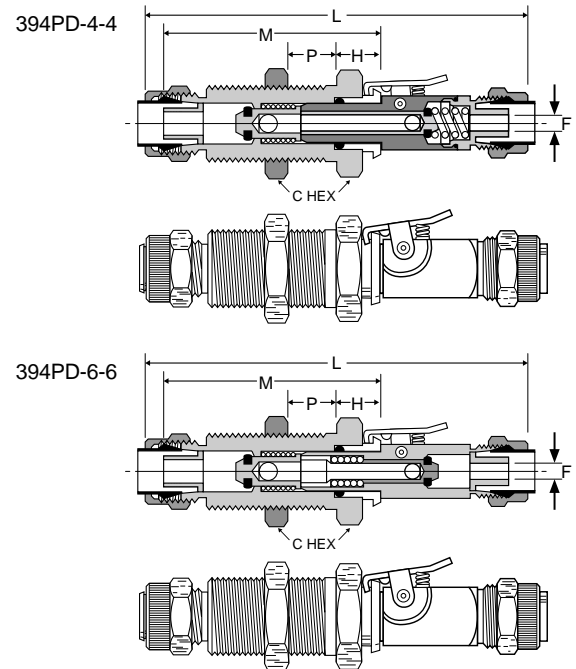
PART NO.	TUBE SIZE	STRAIGHT THREAD	C HEX	P MAX.	H	L	M	FLOW DIA.F
394P-4-4	1/4	1/2-24	5/8	.84	.39	3.13	2.13	.125
394P-6-6	3/8	11/16-24	13/16	.93	.37	3.30	2.01	.203



**Double end shutoff bulkhead quick coupler 394PD**

(Chrome Plated)

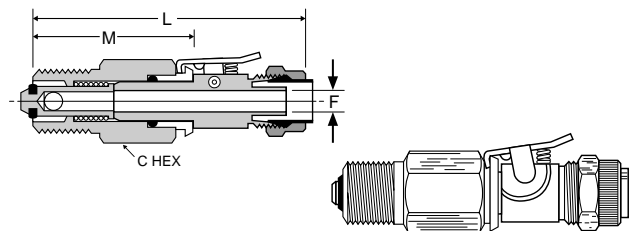
PART NO.	TUBE SIZE	STRAIGHT THREAD	C HEX	P MAX.	H	L	M	FLOW DIA.F
394PD-4-4	1/4	1/2-24	5/8	.84	.39	3.77	2.13	.125
394PD-6-6	3/8	11/16-24	13/16	.93	.37	3.40	2.01	.204



**Single end shutoff pipe connector quick coupler 398P**

(Chrome Plated)

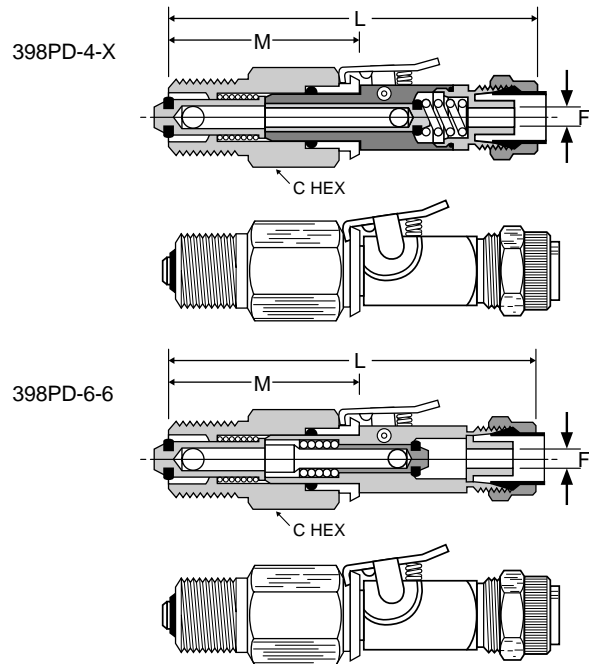
PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	C HEX	L	M	FLOW DIA.F
398P-4-2	1/4	1/8	3/8-24	1/2	2.28	1.29	.125
398P-4-4	1/4	1/4	3/8-24	9/16	2.28	1.29	.125
398P-6-4	3/8	1/4	1/2-24	5/8	2.69	1.41	.203



**Double end shutoff pipe connector quick coupler 398PD**

(Chrome Plated)

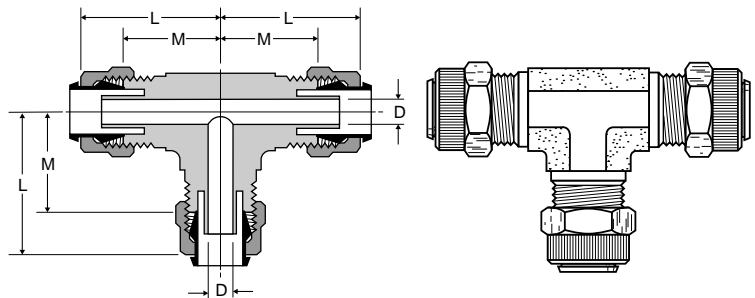
PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	C HEX	L	M	FLOW DIA.F
398PD-4-2	1/4	1/8	3/8-24	1/2	2.93	1.29	.125
398PD-4-4	1/4	1/4	3/8-24	9/16	2.93	1.29	.125
398PD-6-4	3/8	1/4	1/2-24	5/8	2.80	1.41	.204



**Union tee 164P**

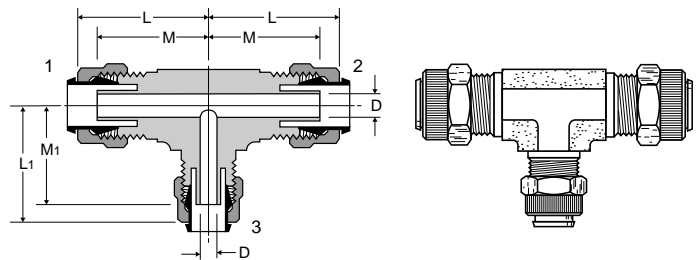
PART NO.	TUBE SIZE	STRAIGHT THREAD	L	M	FLOW DIA.D
164P-2*	1/8	5/16-24	.83	.61	.094
264P-3*	3/16	3/8-24	.83	.61	.125
164P-4	1/4	3/8-24	.84	.73	.125
164P-5	5/16	7/16-24	.83	.73	.144
164P-6	3/8	1/2-24	.98	.86	.203
164P-8	1/2	11/16-20	1.12	1.04	.323

\*Brass Sleeve, No Tube Support



**Union tee 164P combination size**

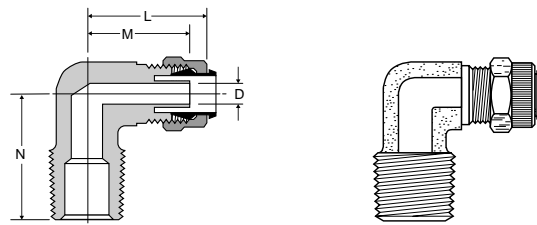
PART NO.	1 TUBE SIZE	2 TUBE SIZE	3 TUBE SIZE	L	L1	M	M1	FLOW DIA.D
164P-6-4	3/8	3/8	1/4	.98	.90	.86	.79	.125



**Male elbow 169P/269P**

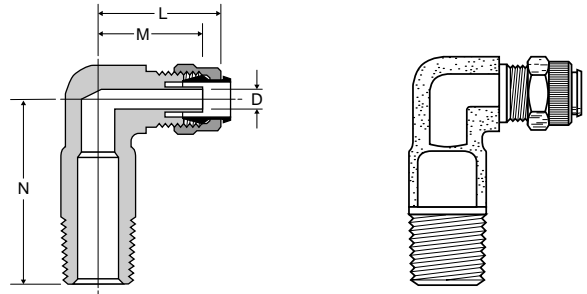
PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	L	M	N	FLOW DIA.D
269P-2-2*	1/8	1/8	5/16-24	.83	.61	.67	.094
169P-3-2*	3/16	1/8	3/8-24	.83	.61	.69	.125
169P-3-4*	3/16	1/4	3/8-24	.85	.63	.94	.125
169P-4-2	1/4	1/8	3/8-24	.84	.73	.75	.125
169P-4-4	1/4	1/4	3/8-24	.90	.79	.92	.125
169P-4-6	1/4	3/8	3/8-24	.93	.82	1.08	.125
169P-5-2	5/16	1/8	7/16-24	.87	.77	.72	.144
169P-6-2	3/8	1/8	1/2-24	.91	.79	.73	.203
169P-6-4	3/8	1/4	1/2-24	.98	.86	1.05	.203
169P-6-6	3/8	3/8	1/2-24	.98	.86	1.08	.203
169P-8-6	1/2	3/8	11/16-20	1.12	1.04	1.13	.323

\*Brass Sleeve, No Tube Support



**Long male elbow 169LP**

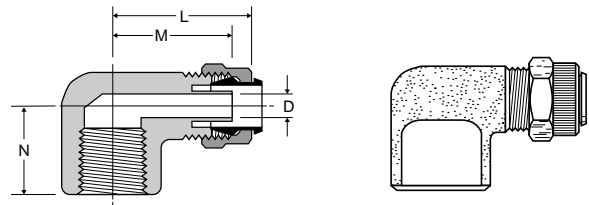
PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	L	M	N	FLOW DIA.D
169LP-4-4	1/4	1/4	3/8-24	.90	.79	1.38	.125



**Female elbow 170P**

PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	L	M	N	FLOW DIA.D
170P-2-2*	1/8	1/8	5/16-24	.91	.69	.56	.094
170P-3-2*	3/16	1/8	3/8-24	.91	.69	.56	.125
170P-4-2	1/4	1/8	3/8-24	.90	.79	.56	.125
170P-4-4	1/4	1/4	3/8-24	1.00	.89	.69	.125
170P-6-4	3/8	1/4	1/2-24	1.01	.89	.69	.204
170P-8-6	1/2	3/8	11/16-20	1.19	1.11	1.13	.323

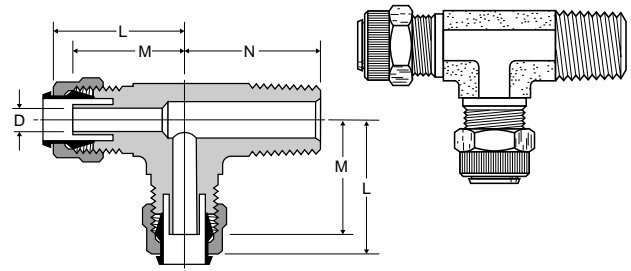
\*Brass Sleeve, No Tube Support



**Male run tee 171P**

PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	L	M	N	FLOW DIA.D
171P-2-2*	1/8	1/8	5/16-24	.83	.61	.71	.094
171P-3-2*	3/16	1/8	3/8-24	.83	.61	.71	.125
171P-4-2	1/4	1/8	3/8-24	.84	.73	.72	.125
171P-4-4	1/4	1/4	3/8-24	.92	.81	.92	.125
171P-5-2	5/16	1/8	7/16-24	.83	.73	.72	.144
171P-6-4	3/8	1/4	1/2-24	.98	.86	1.03	.203
171P-8-6	1/2	3/8	11/16-20	1.12	1.04	1.13	.323

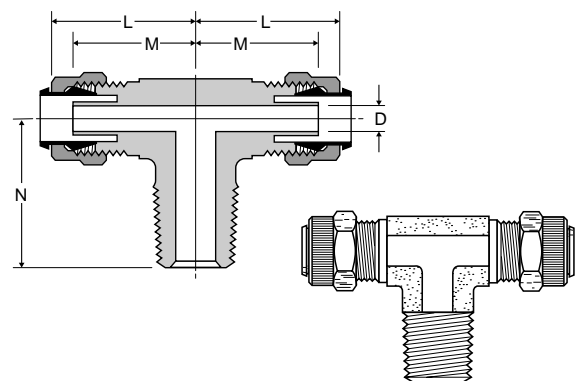
\*Brass Sleeve, No Tube Support



**Male branch tee 172P**

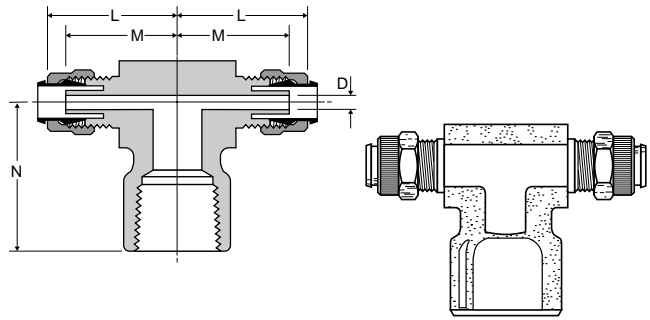
PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	L	M	N	FLOW DIA.D
172P-2-2*	1/8	1/8	5/16-24	.83	.61	.71	.094
172P-3-2*	3/16	1/8	3/8-24	.83	.61	.71	.125
172P-4-2	1/4	1/8	3/8-24	.84	.73	.72	.125
172P-4-4	1/4	1/4	3/8-24	.92	.81	.92	.125
172P-5-2	5/16	1/8	7/16-24	.83	.73	.72	.144
172P-6-4	3/8	1/4	1/2-24	.98	.86	1.03	.203
172P-8-6	1/2	3/8	11/16-20	1.12	1.04	1.13	.323

\*Brass Sleeve, No Tube Support



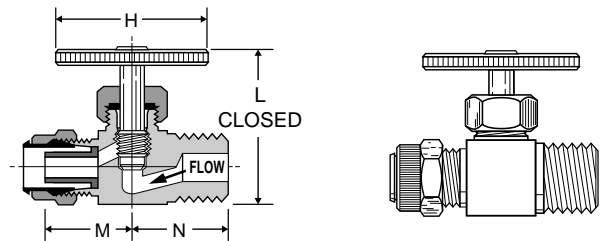
**Female branch tee 177P**

PART NO.	TUBE SIZE	PIPE THREAD	STRAIGHT THREAD	L	M	N	FLOW DIA.D
177P-4-2	1/4	1/8	3/8-24	.92	.81	.88	.125
177P-4-4	1/4	1/4	3/8-24	.90	.79	1.03	.125
177P-4-6	1/4	3/8	3/8-24	1.03	.92	1.13	.125



**Needle valve NV311P**

PART NO.	TUBE SIZE	PIPE THREAD	H	L OPEN	L CLOSED	M	N
NV311P-4-2	1/4	1/8	1.06	1.36	1.16	.64	.63
NV311P-4-4	1/4	1/4	1.06	1.38	1.18	.64	.72
NV311P-6-4	3/8	1/4	1.06	1.38	1.18	.64	.72



**Angle needle valve NV312P**

PART NO.	TUBE SIZE	PIPE THREAD	H	L OPEN	L CLOSED	M	N
NV312P-4-2	1/4	1/8	1.06	1.70	1.50	.63	.68
NV312P-4-4	1/4	1/4	1.06	2.07	1.82	.71	.86
NV312P-6-4	3/8	1/4	1.06	2.00	1.75	.79	.86

