

Norgren Pneufit® C fittings are ready to use, offering fast assembly with no need for tools providing optimum flow.

Pneufit® C offers a broad range of over 1,000 composite push-in pneumatic fittings to complement our established all brass Pneufit® series.

Releasable stainless-steel grab-ring to grip nylon or polyurethane tube (85 or 95 durometer).

Nickel plated brass components provide corrosion and contamination resistance and an extended life.

Pre applied thread sealant on all taper threads and recessed captive O-ring on parallel threads provides optimum rapid sealing.

Internal and external hexagons on straight fittings.

Immediate quality sealing using silicone free U-packing.

Mounting holes on all union fittings.

Also introducing Miniature Pneufit® M an ultra compact alternative where space is at a premium.



### Technical data

Operating pressure:  
750mm Hg vacuum, up to 10 bar

Temperature:  
0 to 60°C

Medium:  
compressed air

Tube sizes  
Standard sizes:  
4, 6, 8, 10, 12, 16 mm

Miniature sizes:  
3, 4, and 6 mm

Thread sizes  
Standard sizes:  
M5, M6, 1/8, 1/4, 3/8 and 1/2 inch  
ISO G and ISO R

Miniature sizes:  
M3, M5 and 1/8 inch ISO R

Tube types  
Nylon 11 or 12  
Polyurethane 85, 95 or 98 durometer

### Materials

Body: PBT  
Seals: NBR (silicone free) u-packing and O-rings  
Threaded bodies: nickel plated brass  
Release sleeve and backing ring: POM  
Grab-ring: stainless steel  
Collar: nickel plated brass  
Thread sealant: threebond 2350B

### Ordering Examples Information 2





### Method of assembly



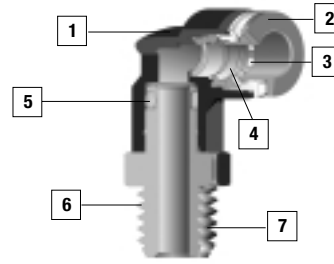
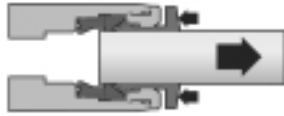
1. Ensure that the end tube is cut square and is free from burrs.

2. Push the tube through the release ring button and grab ring into the fitting.



3. Push the tube firmly through the 'O' ring until it bottoms on the tube stop, then pull back.

4. To disconnect, push the tube into the fitting, hold down the release button and withdraw the tube.

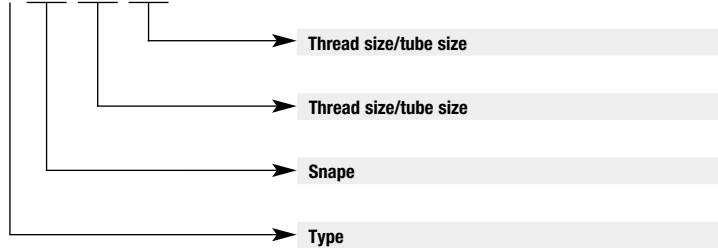


- 1 Impact resistant PBT body in black for Pneufit® C and light gray for Pneufit® M.
- 2 Release buttons are red for metric, grey for inch, and light grey oval for Pneufit® M.
- 3 Stainless steel grab ring with special design to retain softer tube and provide easy releasability.
- 4 Silicon free U-packing provides leak tight tube seal under side loading.
- 5 Stem seal provides leak tight 360° swivel connection.
- 6 Nickel plated brass threads and notches on hex to signify NPT.
- 7 Pre-applied thread sealant on tapered threads and recessed captive O-ring on parallel threads.

### Options selector

Series	Substitute
Pneufit C Standard	C
Pneufit M Miniature	M

★0★ ★★ ★★ ★★ ★★ ★★



### Pneufit M

#### Straight Adaptors and Connectors

<b>Straight Union</b> M0020  Page 16	<b>Straight Union (unequal)</b> M0020  Page 16	<b>Straight Adaptor (external + internal hex)</b> M0225  Page 16	<b>Straight Adaptor (internal hex only)</b> M022A  Page 16	<b>Straight Adaptor (female thread)</b> M0226  Page 16
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#### Elbow-and Tee connectors and Adaptors

<b>Union Elbow</b> M0040  Page 16	<b>90° Swivel Elbow Adaptor</b> M0247  Page 16	<b>Union Tee</b> M0060  Page 17	<b>Swivel Tee Adaptor</b> M0267  Page 17	<b>Swivel Side Tee Adaptor</b> M0268  Page 17
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## Pneufit C










### Straight Adaptors and Connectors

<b>Straight Union</b> C0020  Page 05	<b>Straight Union (unequal)</b> C0020  Page 05	<b>Straight Adaptor (external + internal hex)</b> C0125  Page 05	<b>Straight Adaptor (external + internal hex)</b> C0225  Page 05	<b>Straight Adaptor (internal hex only)</b> C012A C022A  Page 05	<b>Straight Adaptor (female thread)</b> C0226  Page 06	<b>Stem Reducer (stem/tube)</b> C0023  Page 06
<b>Stem Expander (stem/tube)</b> C0023  Page 06	<b>Bulkhead Union</b> C0029  Page 06	<b>Straight Adaptor (female bulkhead)</b> C0232  Page 06	<b>Stem Union (equal + unequal)</b> C0022  Page 06	<b>Plug</b> C0004  Page 07	<b>Cap (female plug)</b> C0012  Page 07	





### Elbow Connectors and Adaptors

<b>Union Elbow</b> C0040  Page 07	<b>90° Swivel Elbow Adaptor</b> C0147  Page 07	<b>90° Swivel Elbow Adaptor</b> C0247  Page 07	<b>Stem Elbow</b> C0043  Page 08	<b>90° Swivel Elbow Adaptor (extended)</b> C0154 C0254  Page 08	<b>90° Swivel Elbow Adaptor (female)</b> C0148/C0248  Page 08	
<b>Banjo</b> C0A51  Page 9	<b>Banjo with top port</b> C0D51 C0E51 C0F51 C0G51  Page 9	<b>Banjo Flow Control (out)</b> C0TA0  Page 9	<b>Banjo Flow Control (out)</b> C0K51  Page 9	<b>Banjo Flow Control (in)</b> C0SA0  Page 10	<b>Banjo Flow Control (in)</b> C0L51  Page 10	<b>In line flow control</b> C00GE  Page 10





### Tee Connectors and Adaptors

<b>Union Tee</b> C0060  Page 10	<b>Swivel Tee Adaptor</b> C0167  Page 11	<b>Swivel Tee Adaptor</b> C0267  Page 11	<b>Swivel Side Tee Adaptor</b> C0168  Page 11	<b>Swivel Side Tee Adaptor</b> C0268  Page 11	<b>Union Tee (unequal)</b> C006A  Page 10	<b>Stem Side Tee (unequal)</b> C0063  Page 12
<b>Stem Tee (unequal)</b> C0064  Page 12	<b>Swivel Tee Adaptor (female)</b> C016C/C026C  Page 12					

### Y Connectors

<b>Union Y (equal + unequal)</b> C0082  Page 13	<b>Swivel Y Adaptor</b> C0188  Page 13	<b>Swivel Y Adaptor</b> C0288  Page 14	<b>Stem Y (equal + unequal)</b> C0084  Page 14
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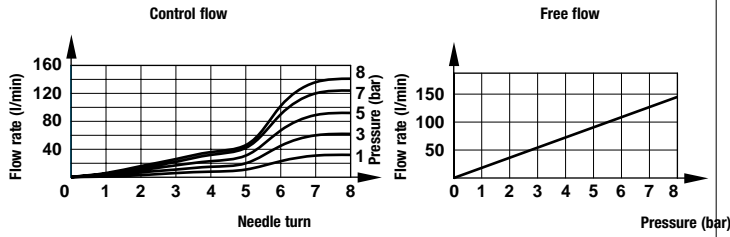
### Cross and Manifolds

<b>Union Cross</b> C0090  Page 14	<b>Manifold Union</b> C00D3  Page 15	<b>Male Manifold</b> C01D3  Page 15	<b>Stem Manifold</b> C00J3  Page 15
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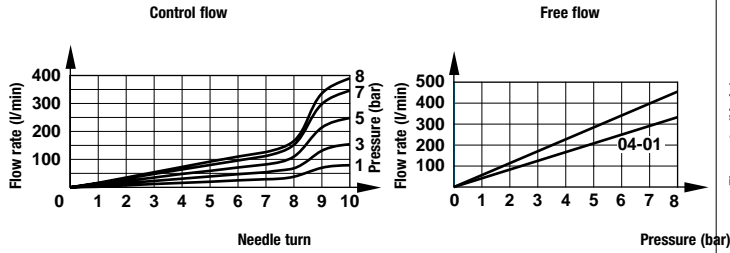


Speed controllers flowrate for C0K51, C0TA0, C0L51 and C0SA0 banjo types

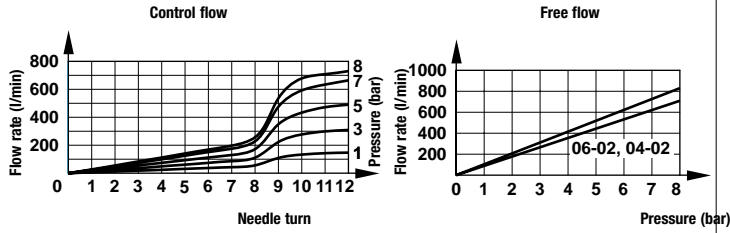
3, 4 and 6 mm  
M5



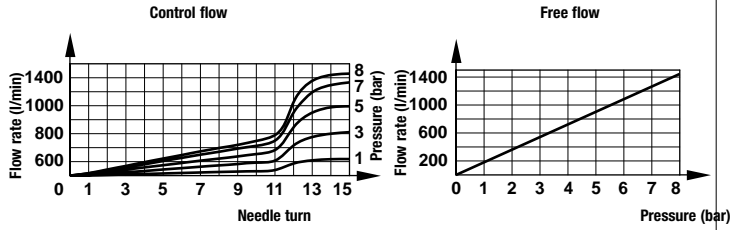
4, 6 and 8 mm  
1/8



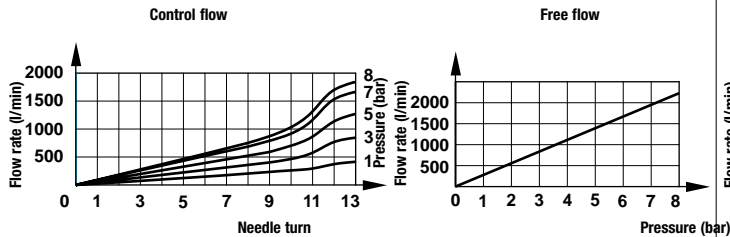
4, 6, 8, 10 and 12 mm  
1/4



6, 8, 10 and 12 mm  
3/8

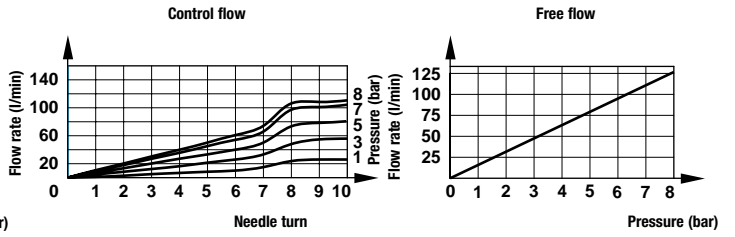


8, 10 and 12 mm  
1/2

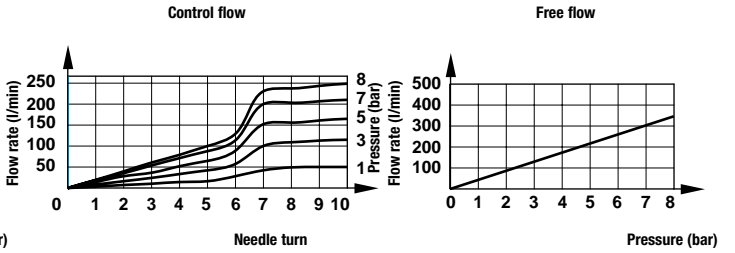


Speed controllers flowrate for C00GE banjo types

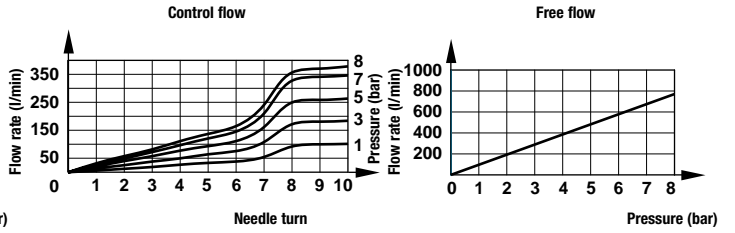
C00GE0400



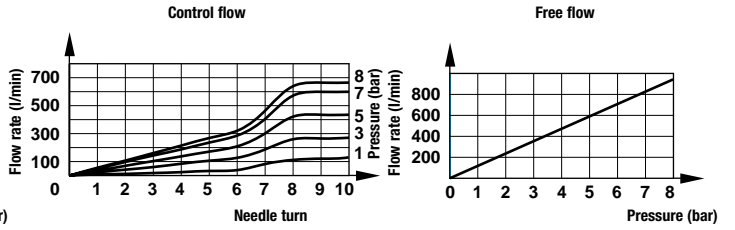
C00GE0600



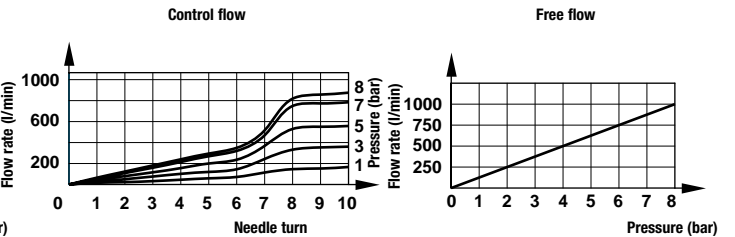
C00GE0800



C00GE1000

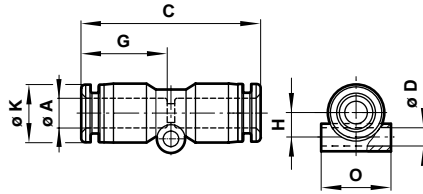


C00GE1200





**C0020**

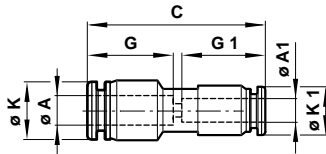


**Straight Union**

Ø A	C	Ø D	G	H	Ø K	O	Typ
4	34,5	3,3	16,5	4,5	9,5	10,5	C00200400
6	37,0	3,3	17,5	5,5	12,0	12,5	C00200600
8	39,5	4,3	18,5	7,0	14,0	14,5	C00200800
10	43,0	4,3	19,5	8,0	16,5	17,5	C00201000
12	48,0	4,3	22,0	9,5	19,0	20,5	C00201200
16	51,0	-*	24,0	-*	25,0	-*	C00201600

\* no nail hole in 16 mm

**C0020**

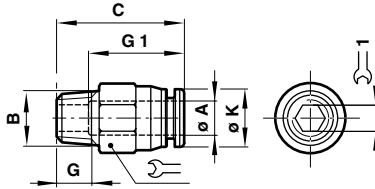


**Straight Union**

(Unequal)

Ø A	Ø A1	C	G	G1	Ø K	Ø K1	Typ
6	4	36,5	17,5	16,5	12,0	9,5	C00200604
8	6	37,5	18,5	17,5	14,0	12,0	C00200806
10	8	41,0	19,5	18,5	16,5	14,0	C00201008
12	10	44,0	22,0	19,5	19,0	16,5	C00201210
16	12	49,5	24,0	22,0	25,0	19,0	C00201612

**C0125**

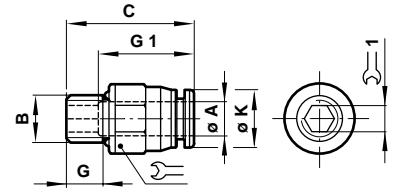


**Straight Adaptor**

(External + internal hex)

Ø A	B	C	G	G1	Ø K	1	Typ	
4	R1/8	21,5	8,0	16,0	9,5	10	3	C01250418
4	R1/4	20,5	10,0	16,0	9,5	14	3	C01250428
4	R3/8	22,0	11,0	16,0	9,5	17	3	C01250438
6	R1/8	22,0	8,0	16,5	12,0	12	4	C01250618
6	R1/4	21,0	10,0	16,5	12,0	14	5	C01250628
6	R3/8	22,0	11,0	16,5	12,0	17	5	C01250638
6	R1/2	29,5	14,0	16,5	12,0	19	5	C01250648
8	R1/8	27,5	8,0	17,5	14,0	14	5	C01250818
8	R1/4	25,5	10,0	17,5	14,0	14	6	C01250828
8	R3/8	23,0	11,0	17,5	14,0	17	6	C01250838
8	R1/2	29,5	14,0	17,5	14,0	19	6	C01250848
10	R1/8	28,5	8,0	18,5	16,5	17	5	C01251018
10	R1/4	30,5	10,0	18,5	16,5	17	6	C01251028
10	R3/8	24,5	11,0	18,5	16,5	17	8	C01251038
10	R1/2	29,5	14,0	18,5	16,5	19	8	C01251048
12	R1/8	31,5	8,0	21,0	19,0	19	5	C01251218
12	R1/4	33,0	10,0	21,0	19,0	19	6	C01251228
12	R3/8	30,0	11,0	21,0	19,0	19	8	C01251238
12	R1/2	30,0	14,0	21,0	19,0	19	8	C01251248
16	R3/8	37,5	11,0	25,0	25,0	24	8	C01251638
16	R1/2	40,5	14,0	25,0	25,0	24	10	C01251648

**C0225**

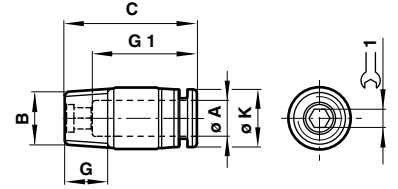


**Straight Adaptor**

(External + internal hex)

Ø A	B	C	G	G1	Ø K	1	Typ	
4	M5	22,0	4,0	16,0	9,5	10	2	C02250405
4	M6	22,0	8,0	16,0	9,5	10	2	C02250406
4	G1/8	21,5	6,0	16,0	9,5	13	3	C02250418
4	G1/4	23,5	8,0	16,0	9,5	15	3	C02250428
4	G3/8	22,0	8,0	16,0	9,5	17	3	C02250438
6	M5	23,5	5,0	16,5	12,0	10	2	C02250605
6	M6	23,0	4,0	16,5	12,0	12	2	C02250606
6	G1/8	26,5	6,0	17,5	12,0	15	5	C02250618
6	G1/4	24,5	8,0	16,5	12,0	15	5	C02250628
6	G3/8	25,5	8,0	16,5	12,0	17	5	C02250638
8	G1/8	26,5	6,0	17,5	14,0	15	5	C02250818
8	G1/4	26,5	8,0	17,5	14,0	15	6	C02250828
8	G3/8	25,0	8,0	17,5	14,0	17	6	C02250838
8	G1/2	26,0	9,0	17,5	14,0	21	6	C02250848
10	G1/8	29,5	6,0	18,5	16,5	17	5	C02251018
10	G1/4	30,0	8,0	18,5	16,5	17	8	C02251028
10	G3/8	27,0	8,0	18,5	16,5	17	8	C02251038
10	G1/2	28,5	9,0	18,5	16,5	21	8	C02251048
12	G1/4	32,0	8,0	21,0	19,0	19	8	C02251228
12	G3/8	31,5	8,0	21,0	19,0	19	8	C02251238
12	G1/2	31,5	9,0	21,0	19,0	21	8	C02251248
16	G3/8	36,5	8,0	25,0	25,0	24	8	C02251638
16	G1/2	36,5	9,0	25,0	25,0	24	10	C02251648

**C012A, C022A**



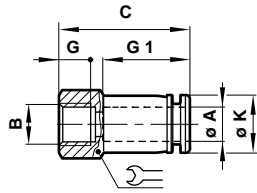
**Straight Adaptor**

(Internal hex only)

Ø A	B	C	G	G1	Ø K	1	Typ
4	M5	22,0	4,5	16,0	9,5	2	C022A0405
4	M6	22,0	4,0	16,0	9,5	2	C022A0406
4	R1/8	20,5	8,0	16,0	9,5	3	C012A0418
4	R1/4	20,5	10,0	16,0	9,5	3	C012A0428
4	R3/8	20,5	11,0	16,0	9,5	3	C012A0438
6	M5	22,5	5,0	16,5	12,0	2	C022A0605
6	M6	22,5	4,0	16,5	12,0	2	C022A0606
6	R1/8	22,0	8,0	16,5	12,0	4	C012A0618
6	R1/4	22,5	10,0	16,5	12,0	4	C012A0628
6	R3/8	22,5	11,0	16,5	12,0	4	C012A0638
8	R1/8	27,0	8,0	17,5	14,0	4	C012A0818
8	R1/4	25,0	10,0	17,5	14,0	6	C012A0828
8	R3/8	25,0	11,0	17,5	14,0	6	C012A0838
8	R1/2	25,0	14,0	17,5	14,0	6	C012A0848
10	R1/8	28,0	8,0	18,5	16,5	5	C012A1018
10	R1/4	29,0	10,0	18,5	16,5	6	C012A1028
10	R3/8	29,0	11,0	18,5	16,5	6	C012A1038
10	R1/2	29,0	14,0	18,5	16,5	6	C012A1048
12	R1/8	35,0	8,0	21,0	19,0	5	C012A1218
12	R1/4	32,5	10,0	21,0	19,0	6	C012A1228
12	R3/8	32,5	11,0	21,0	19,0	8	C012A1238
12	R1/2	32,5	14,0	21,0	19,0	8	C012A1248



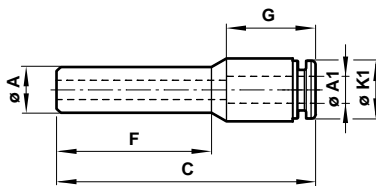
**C0226**



**Straight Adaptor**  
(Female thread)

Ø A	B	C	G	G1	Ø K	⌀	Typ
4	G1/8	26,5	9,0	16,0	9,5	14	C02260418
4	G1/4	28,5	11,0	16,0	9,5	17	C02260428
4	G3/8	30,0	12,0	16,0	9,5	22	C02260438
6	G1/8	27,5	9,0	16,5	12,0	14	C02260618
6	G1/4	29,5	11,0	16,5	12,0	17	C02260628
6	G3/8	30,0	12,0	16,5	12,0	22	C02260638
8	G1/8	28,5	9,0	17,5	14,0	14	C02260818
8	G1/4	30,5	11,0	17,5	14,0	17	C02260828
8	G3/8	31,5	12,0	17,5	14,0	22	C02260838
8	G1/2	34,5	14,0	17,5	14,0	24	C02260848
10	G1/8	31,5	9,0	18,5	16,5	17	C02261018
10	G1/4	31,5	11,0	18,5	16,5	17	C02261028
10	G3/8	32,5	12,0	18,5	16,5	22	C02261038
10	G1/2	34,5	14,0	18,5	16,5	24	C02261048
12	G1/4	34,5	11,0	21,0	19,0	22	C02261228
12	G3/8	34,5	12,0	21,0	19,0	22	C02261238
12	G1/2	36,5	14,0	21,0	19,0	24	C02261248

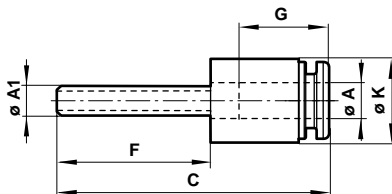
**C0023**



**Stem Reducer**  
(Stem/tube)

Ø A	Ø A1	C	F	G	Ø K1	Typ
6	4	41,0	21,5	13,0	9,5	C00230604
8	4	42,0	22,5	13,0	9,5	C00230804
8	6	44,5	23,5	13,5	12,0	C00230806
10	6	47,5	26,5	13,5	12,0	C00231006
10	8	49,5	27,5	14,0	14,0	C00231008
12	6	52,0	29,5	13,5	12,0	C00231206
12	8	52,5	30,5	14,0	14,0	C00231208
12	10	56,5	31,0	15,0	16,5	C00231210
16	12	57,5	33,0	18,5	19,0	C00231612

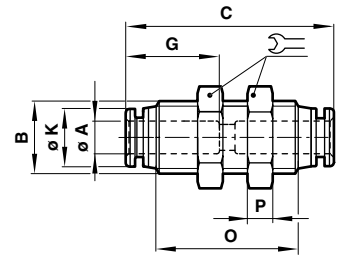
**C0023**



**Stem Expander**  
(Stem/tube)

Ø A	Ø A1	C	F	G	Ø K	Typ
6	4	41,0	24,0	13,5	12,0	C00230406
8	6	44,0	26,5	14,0	14,0	C00230608

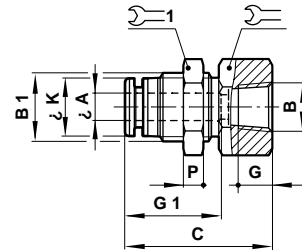
**C0029**



**Bulkhead Union**

Ø A	B	C	G	Ø K	O	P	⌀	Typ
4	M12x1	35,5	16,5	9,5	24,5	4	14	C00290400
6	M14x1	40,0	17,5	12,0	27,5	4	17	C00290600
8	M16x1	42,0	18,5	14,0	29,5	5	19	C00290800
10	M20x1	45,0	19,5	16,5	31,5	5	24	C00291000
12	M22x1	50,5	22,0	19,0	36,0	5	26	C00291200

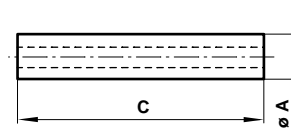
**C0232**



**Straight Adaptor**  
(Female bulkhead)

Ø A	B	B1	C	G	G1	Ø K	P	⌀	⌀ 1	Typ
4	G1/8	M12x1	26,5	9,0	17,0	9,5	4	14	14	C02320418
4	G1/4	M12x1	29,0	11,0	17,0	9,5	4	17	17	C02320428
4	G3/8	M12x1	30,0	12,0	17,0	9,5	4	17	19	C02320438
6	G1/8	M14x1	28,5	9,0	17,5	12,0	4	17	17	C02320618
6	G1/4	M14x1	30,5	11,0	17,5	12,0	4	17	17	C02320628
6	G3/8	M14x1	31,5	12,0	17,5	12,0	4	17	22	C02320638
8	G1/8	M16x1	29,5	9,0	18,5	14,0	5	19	19	C02320818
8	G1/4	M16x1	31,5	11,0	18,5	14,0	5	19	19	C02320828
8	G3/8	M16x1	32,5	12,0	18,5	14,0	5	19	22	C02320838
10	G1/4	M20x1	32,5	11,0	19,5	16,5	5	24	24	C02321028
10	G3/8	M20x1	33,5	12,0	19,5	16,5	5	24	24	C02321038
10	G1/2	M20x1	36,0	14,0	19,5	16,5	5	24	24	C02321048
12	G1/4	M22x1	38,0	11,0	22,0	19,0	5	28	24	C02321228
12	G3/8	M22x1	38,0	12,0	22,0	19,0	5	26	24	C02321238
12	G1/2	M22x1	40,0	14,0	22,0	19,0	5	26	24	C02321248

**C0022**

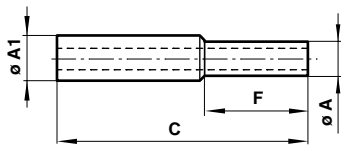


**Stem Union**  
(Unequal)

Ø A	C	Typ
4	37,0	C00220400
6	38,0	C00220600
8	41,0	C00220800
10	44,0	C00221000
12	49,0	C00221200
16	53,0	C00221600



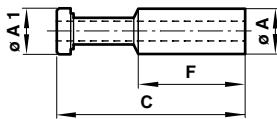
**C0022**



**Stem Union**  
(Unequal)

Ø A	Ø A1	C	F	Typ
4	6	38,0	18,0	C00220604
6	8	41,5	20,5	C00220806
8	10	43,5	21,5	C00221008
10	12	46,5	22,5	C00221210
12	16	52,0	25,0	C00221612

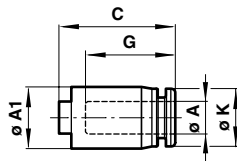
**C0004**



**Plug**

Ø A	Ø A1	C	F	Typ
4	4	30,0	17,5	C00040400
6	6	34,0	18,5	C00040600
8	8	38,0	21,0	C00040800
10	10	42,0	24,0	C00041000
12	12	46,0	29,5	C00041200
16	16	50,0	30,0	C00041600

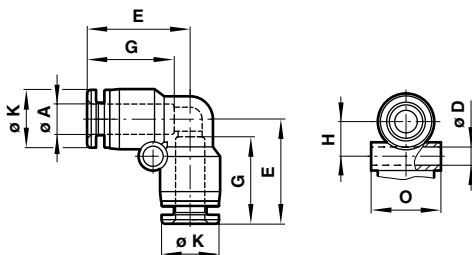
**C0012**



**Cap**  
(Female plug)

Ø A	Ø A1	C	G	Ø K	Typ
4	10,5	18,0	17,0	9,5	C00120400
6	12,5	19,0	17,5	12,0	C00120600
8	14,5	21,0	18,5	14,0	C00120800
10	17,5	23,0	19,5	16,5	C00121000
12	19,5	25,0	22,0	19,0	C00121200
16	24,0	25,0	18,0	25,0	C00121600

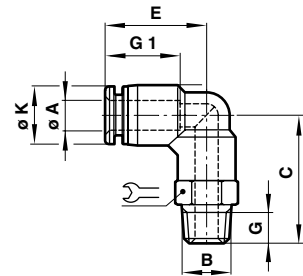
**C0040**



**Union Elbow**

Ø A	Ø D	E	G	H	Ø K	O	Typ
4	3,3	19,0	15,5	8,5	9,5	10,5	C00400400
6	3,3	21,0	17,5	7,5	12,0	12,5	C00400600
8	4,3	22,5	18,5	9,0	14,0	14,5	C00400800
10	4,3	26,0	20,0	12,0	16,5	18,0	C00401000
12	4,3	30,0	23,0	13,5	19,0	21,0	C00401200
16	4,3	34,0	24,0	16,0	25,0	25,5	C00401600

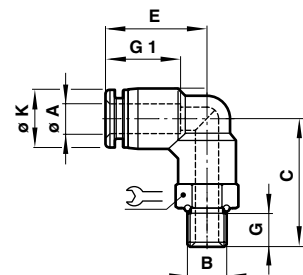
**C0147**



**90° Swivel Elbow Adaptor**

Ø A	B	C	E	G	G1	Ø K	Typ	
4	R1/8	24,5	18,5	8,0	17,0	9,5	10	C01470418
4	R1/4	26,5	18,5	10,0	17,0	9,5	14	C01470428
4	R3/8	27,5	18,5	11,0	17,0	9,5	17	C01470438
6	R1/8	26,5	20,5	8,0	17,5	12,0	12	C01470618
6	R1/4	29,5	20,5	10,0	17,5	12,0	14	C01470628
6	R3/8	30,5	20,5	11,0	17,5	12,0	17	C01470638
6	R1/2	33,5	20,5	14,0	17,5	12,0	22	C01470648
8	R1/8	28,0	23,0	8,0	18,5	14,0	14	C01470818
8	R1/4	31,0	23,0	10,0	18,5	14,0	14	C01470828
8	R3/8	32,0	23,0	11,0	18,5	14,0	17	C01470838
8	R1/2	35,0	23,0	14,0	18,5	14,0	22	C01470848
10	R1/8	28,5	23,5	8,0	19,5	16,5	17	C01471018
10	R1/4	31,5	23,5	10,0	19,5	16,5	17	C01471028
10	R3/8	32,5	23,5	11,0	19,5	16,5	17	C01471038
10	R1/2	35,5	23,5	14,0	19,5	16,5	22	C01471048
12	R1/8	32,5	27,5	8,0	22,0	19,0	19	C01471218
12	R1/4	34,5	27,5	10,0	22,0	19,0	19	C01471228
12	R3/8	35,5	27,5	11,0	22,0	19,0	19	C01471238
12	R1/2	38,5	27,5	14,0	22,0	19,0	22	C01471248
16	R3/8	43,0	32,5	11,0	24,0	25,0	24	C01471638
16	R1/2	46,0	32,5	14,0	24,0	25,0	24	C01471648

**C0247**

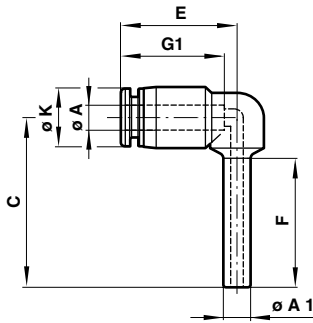


**90° Swivel Elbow Adaptor**

Ø A	B	C	E	G	G1	Ø K	Typ	
4	M5	22,0	18,5	4,5	17,0	9,5	10	C02470405
4	M6	22,0	18,5	4,5	17,0	9,5	10	C02470406
4	G1/8	22,5	18,5	6,0	17,0	9,5	14	C02470418
4	G1/4	24,5	18,5	8,0	17,0	9,5	17	C02470428
4	G3/8	24,5	18,5	8,0	17,0	9,5	20	C02470438
6	M5	24,0	20,5	4,5	17,0	12,0	12	C02470605
6	M6	24,0	20,5	4,5	17,5	12,0	12	C02470606
6	G1/8	24,5	20,5	6,0	17,5	12,0	14	C02470618
6	G1/4	26,5	20,5	8,0	17,5	12,0	17	C02470628
6	G3/8	26,5	20,5	9,0	17,5	12,0	20	C02470638
8	G1/8	26,0	23,0	8,0	18,5	14,0	14	C02470818
8	G1/4	28,0	23,0	8,0	18,5	14,0	21	C02470828
8	G3/8	28,0	23,0	9,0	18,5	14,0	20	C02470838
8	G1/2	29,0	23,0	10,0	18,5	14,0	24	C02470848
10	G1/8	26,5	23,5	6,0	19,5	16,5	17	C02471018
10	G1/4	28,5	23,5	8,0	19,5	16,5	17	C02471028
10	G3/8	28,5	23,5	9,0	19,5	16,5	20	C02471038
10	G1/2	29,5	23,5	10,0	19,5	16,5	24	C02471048
12	G1/4	32,5	27,5	8,0	22,0	19,0	19	C02471228
12	G3/8	32,5	27,5	9,0	22,0	19,0	20	C02471238
12	G1/2	32,5	27,5	10,0	22,0	19,0	24	C02471248
16	G3/8	41,0	32,5	9,0	24,0	25,0	24	C02471638
16	G1/2	42,0	32,5	10,0	24,0	25,0	24	C02471648



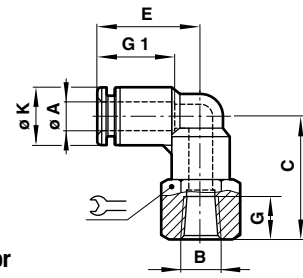
C0043



Stem Elbow

Ø A	Ø A1	C	E	G1	F	Ø K	Typ
4	4	28,5	19,0	17,0	22,0	9,5	C00430400
6	6	31,5	20,5	17,5	24,0	12,0	C00430600
8	8	34,5	23,0	19,0	26,0	14,0	C00430800
10	10	38,0	24,0	19,5	28,0	16,5	C00431000
12	12	41,0	28,0	22,0	30,0	19,0	C00431200
16	16	48,5	32,0	24,0	35,0	25,0	C00431600

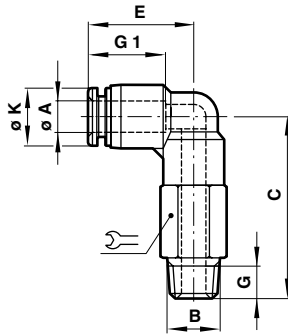
C0148/C0248



90° Swivel Elbow Adaptor (Female)

Ø A	B	C	E	G	G1	Ø K	Typ	
4	M5	21,5	18,5	4,5	17,0	9,5	10	C02480405
4	M6	21,5	18,5	4,5	17,0	9,5	10	C02480406
4	R1/8	22,5	18,5	9,0	17,0	9,5	14	C01480418
4	R1/4	24,5	18,5	11,0	17,0	9,5	17	C01480428
6	M5	23,5	20,5	4,5	17,5	12,0	12	C02480605
6	M6	23,5	20,5	4,5	17,5	12,0	12	C02480606
6	R1/8	24,5	20,5	9,0	17,5	12,0	14	C01480618
6	R1/4	26,5	20,5	11,0	17,5	12,0	17	C01480628
6	R3/8	27,5	20,5	12,0	17,5	12,0	21	C01480638
8	R1/8	26,0	23,0	9,0	18,5	14,0	14	C01480818
8	R1/4	28,0	23,0	11,0	18,5	14,0	17	C01480828
8	R3/8	29,0	23,0	12,0	18,5	14,0	22	C01480838
10	R1/4	28,5	23,5	11,0	19,5	16,5	17	C01481028
10	R3/8	29,5	23,5	12,0	19,5	16,5	22	C01481038
10	R1/2	31,5	23,5	14,0	19,5	16,5	24	C01481048
12	R1/4	31,5	27,5	11,0	22,0	19,0	19	C01481228
12	R3/8	32,5	27,5	12,0	22,0	19,0	22	C01481238
12	R1/2	34,5	27,5	14,0	22,0	19,0	24	C01481248

C0154, C0254



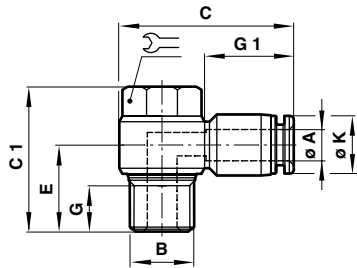
90° Swivel Elbow Adaptor (Extended)

Ø A	B	C	E	G	G1	Ø K	Typ	
4	M5	33,5	18,5	4,6	17,0	9,5	10	C02540405
4	M6	33,0	18,5	4,6	17,0	9,5	10	C02540406
4	R1/8	35,5	18,5	8,0	17,0	9,5	10	C01540418
4	R1/4	37,5	18,5	10,0	17,0	9,5	14	C01540428
4	R3/8	38,5	18,5	11,0	17,0	9,5	17	C01540438
6	M5	38,0	20,5	4,5	17,5	12,0	12	C02540605
6	M6	37,5	20,5	4,5	17,5	12,0	12	C02540606
6	R1/8	40,0	20,5	8,0	17,5	12,0	12	C01540618
6	R1/4	42,0	20,5	10,0	17,5	12,0	14	C01540628
6	R3/8	43,0	20,5	11,0	17,5	12,0	17	C01540638
6	R1/2	46,0	20,5	14,0	17,5	12,0	22	C01540648
8	R1/8	44,0	23,0	8,0	18,5	14,0	14	C01540818
8	R1/4	46,0	23,0	10,0	18,5	14,0	14	C01540828
8	R3/8	47,0	23,0	11,0	18,5	14,0	17	C01540838
8	R1/2	50,0	23,0	14,0	18,5	14,0	22	C01540848
10	R1/8	47,5	23,5	8,0	19,5	16,5	17	C01541018
10	R1/4	49,5	23,5	10,0	19,5	16,5	17	C01541028
10	R3/8	50,5	23,5	11,0	19,5	16,5	17	C01541038
10	R1/2	53,5	23,5	14,0	19,5	16,5	22	C01541048
12	R1/8	54,0	27,5	8,0	22,0	19,0	19	C01541218
12	R1/4	56,0	27,5	10,0	22,0	19,0	19	C01541228
12	R3/8	57,0	27,5	11,0	22,0	19,0	19	C01541238
12	R1/2	60,0	27,5	14,0	22,0	19,0	22	C01541248
16	R3/8	69,0	32,5	11,0	24,0	25,0	24	C01541638
16	R1/2	72,0	32,5	14,0	24,0	25,0	24	C01541648





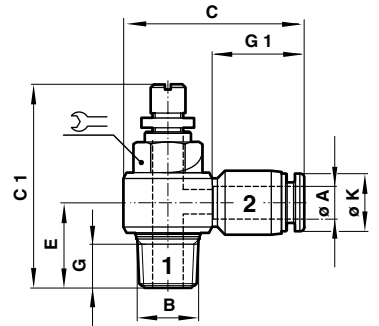
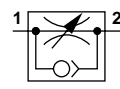
**C0A51**



**Banjo**

Ø A	B	C	C1	E	G	G1	Ø K	Typ	
4	M5	25,0	18,0	10,0	3,5	16,5	9,5	8	C0A510405
4	G1/8	30,5	25,0	14,5	11,0	16,5	9,5	8	C0A510418
4	G1/4	34,5	29,0	16,5	10,0	16,5	9,5	15	C0A510428
6	M5	18,0	28,0	11,0	3,5	17,5	12,0	8	C0A510605
6	G1/8	31,0	25,0	14,5	8,0	17,5	12,0	11	C0A510618
6	G1/4	35,0	29,0	16,5	10,0	17,5	12,0	15	C0A510628
6	G3/8	38,5	32,5	20,5	11,0	17,5	12,0	19	C0A510638
8	G1/8	33,0	25,0	13,5	8,0	18,5	14,0	11	C0A510818
8	G1/4	37,0	29,0	16,0	10,0	18,5	14,0	15	C0A510828
8	G3/8	40,0	32,5	20,5	11,0	18,5	14,0	19	C0A510838
8	G1/2	46,0	39,5	23,0	14,0	18,5	14,0	24	C0A510848
10	G1/4	39,0	29,0	15,5	10,0	19,5	16,5	15	C0A511028
10	G3/8	42,0	32,5	19,5	11,0	19,5	16,5	19	C0A511038
10	G1/2	47,5	39,5	23,0	14,0	19,5	16,5	24	C0A511048
12	G3/8	46,0	32,5	18,5	11,0	22,0	19,0	19	C0A511238
12	G1/2	50,0	39,5	21,5	14,0	22,0	19,0	24	C0A511248

**C0TA0**



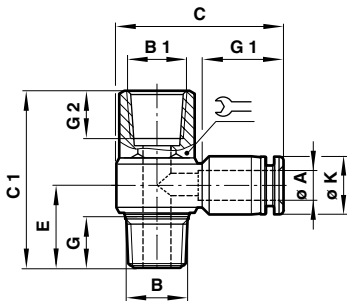
**Banjo Flow Control**

(out)

Ø A	B	C	C1	E	G	G1	Ø K	Typ		
			min.	max.						
4	R1/8	30,5	35,0	40,0	14,5	8,0	16,5	9,5	11	C0TA00418
4	R1/4	34,5	40,0	45,5	18,0	10,0	16,5	9,5	15	C0TA00428
6	R1/8	31,0	35,0	31,0	14,5	8,0	17,5	12,0	11	C0TA00618
6	R1/4	35,0	40,0	45,5	18,0	10,0	17,5	12,0	15	C0TA00628
6	R3/8	38,5	46,5	55,0	21,0	11,0	17,5	12,0	19	C0TA00638
8	R1/8	33,0	35,0	40,0	15,5	8,0	18,5	14,0	11	C0TA00818
8	R1/4	37,0	40,0	45,5	19,0	10,0	18,5	14,0	15	C0TA00828
8	R3/8	40,0	46,5	55,0	21,0	11,0	18,5	14,0	19	C0TA00838
8	R1/2	46,0	53,0	60,0	25,0	14,0	18,5	14,0	24	C0TA00848
10	R1/4	39,0	40,0	45,5	20,0	10,0	19,5	16,5	15	C0TA01028
10	R3/8	42,0	46,5	55,0	22,5	11,0	19,5	16,5	19	C0TA01038
10	R1/2	47,5	53,0	60,0	25,0	14,0	19,5	16,5	24	C0TA01048
12	R1/4	41,0	40,0	45,5	22,0	10,0	22,0	19,0	15	C0TA01228
12	R3/8	46,0	46,5	55,0	23,0	11,0	22,0	19,0	19	C0TA01238
12	R1/2	50,0	53,0	60,0	27,0	14,0	22,0	19,0	24	C0TA01248

Control flow, see Page 4

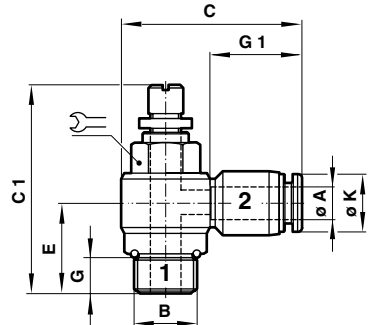
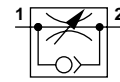
**C0D51  
C0E51  
C0F51  
C0G51**



**Banjo with Top Port**

Ø A	B/B1	C	C1	E	G	G1	G2	Ø K	Typ	
4	M5	25,0	20,0	10,0	3,5	16,5	6,0	9,5	8	C0D510405
4	R1/8	30,5	30,0	14,5	9,0	16,5	8,0	9,5	17	C0E510418
4	R1/4	34,5	35,5	18,0	11,0	16,5	10,0	9,5	17	C0F510428
6	M5	28,0	20,0	11,0	3,5	17,5	6,0	12,0	8	C0D510605
6	R1/8	31,0	30,0	14,5	9,0	17,5	8,0	12,0	14	C0E510618
6	R1/4	35,0	35,5	18,0	11,0	17,5	10,0	12,0	17	C0F510628
6	R3/8	38,5	41,0	21,0	12,0	17,5	11,0	12,0	21	C0G510638
8	R1/8	33,0	30,0	15,5	9,0	18,5	8,0	14,0	14	C0E510818
8	R1/4	38,0	35,5	19,0	11,0	18,5	10,0	14,0	17	C0F510828
8	R3/8	40,0	41,0	21,0	12,0	18,5	11,0	14,0	21	C0G510838
10	R1/4	39,0	35,5	20,0	11,0	19,5	10,0	16,5	17	C0F511028
10	R3/8	42,0	41,0	22,5	12,0	19,5	11,0	16,5	21	C0G511038
12	R3/8	46,0	41,0	23,0	12,0	22,0	11,0	19,0	21	C0G511238

**C0K51**



**Banjo Flow Control**

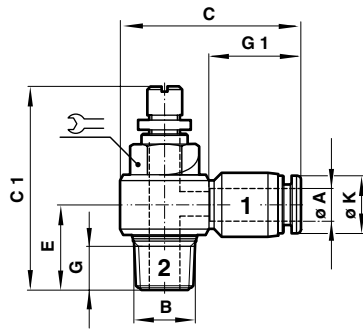
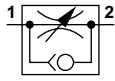
(out)

Ø A	B	C	C1	E	G	G1	Ø K	Typ		
			min.	max.						
3	M5	21,5	27,0	30,0	9,5	3,5	11,0	7,5	8	C0K510305
4	M5	25,0	27,0	30,0	10,0	3,5	16,5	9,5	15	C0K510405
4	G1/8	30,5	35,0	40,0	15,0	6,0	16,5	9,5	8	C0K510418
4	G1/4	34,5	40,0	45,5	17,0	8,0	16,5	9,5	12	C0K510428
6	M5	28,0	27,0	30,0	11,0	3,5	17,5	12,0	8	C0K510605
6	G1/8	31,0	35,0	40,0	15,0	6,0	17,5	12,0	8	C0K510618
6	G1/4	35,0	40,0	45,5	17,0	8,0	17,5	12,0	12	C0K510628
6	G3/8	38,5	46,5	55,0	21,0	8,0	17,5	12,0	14	C0K510638
8	G1/8	33,0	35,0	40,0	14,0	6,0	18,5	14,0	8	C0K510818
8	G1/4	37,0	40,0	45,5	16,0	8,0	18,5	14,0	12	C0K510828
8	G3/8	40,0	46,5	55,0	21,0	8,0	18,5	14,0	14	C0K510838
8	G1/2	46,0	53,0	60,0	22,5	9,0	18,5	14,0	19	C0K510848
10	G1/4	39,0	40,0	45,5	18,0	8,0	19,5	16,5	12	C0K511028
10	G3/8	42,0	46,5	55,0	19,5	8,0	19,5	16,5	14	C0K511038
10	G1/2	47,5	53,0	60,0	22,5	9,0	19,5	16,5	19	C0K511048
12	G1/4	41,0	40,0	45,5	20,0	8,0	22,0	19,0	12	C0K511228
12	G3/8	46,0	46,5	55,0	19,0	8,0	22,0	19,0	14	C0K511238
12	G1/2	50,0	53,0	60,0	21,0	9,0	22,0	19,0	19	C0K511248

Control flow, see Page 4



**C0SA0**



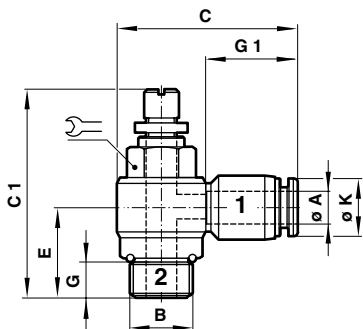
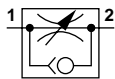
**Banjo Flow Control**

(in)

Ø A	B	C	C1		E	G	G1	Ø K	Typ	
			min.	max.						
4	R1/8	30,5	35,0	40,0	14,5	8,0	16,5	9,5	11	C0SA00418
4	R1/4	34,5	40,0	45,5	18,0	10,0	16,5	9,5	15	C0SA00428
6	R1/8	31,0	35,0	40,0	14,5	8,0	17,5	12,0	11	C0SA00618
6	R1/4	35,0	40,0	45,5	18,0	10,0	17,5	12,0	15	C0SA00628
6	R3/8	39,0	46,5	55,0	21,0	11,0	17,5	12,0	19	C0SA00638
8	R1/8	33,0	35,0	40,0	15,5	8,0	18,5	14,0	11	C0SA00818
8	R1/4	37,0	40,0	45,5	19,0	10,0	18,5	14,0	15	C0SA00828
8	R3/8	40,0	46,5	55,0	21,0	11,0	18,5	14,0	19	C0SA00838
8	R1/2	46,0	53,0	60,0	25,0	14,0	18,5	14,0	24	C0SA00848
10	R1/4	39,0	40,0	45,5	20,0	10,0	19,5	16,5	15	C0SA01028
10	R3/8	42,0	46,5	55,0	22,5	11,0	19,5	16,5	19	C0SA01038
10	R1/2	47,5	53,0	60,0	25,0	14,0	19,5	16,5	24	C0SA01048
12	R1/4	41,0	40,0	45,5	22,0	10,0	22	19,0	15	C0SA01228
12	R3/8	46,0	46,5	55,0	23,0	11,0	22	19,0	19	C0SA01238
12	R1/2	50,0	53,0	60,0	27,0	14,0	22	19,0	24	C0SA01248

Please see Speed Controllers Flowrate on page 4

**C0L51**



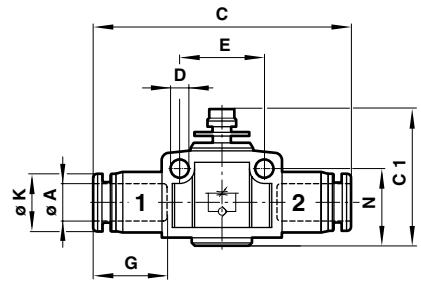
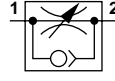
**Banjo Flow Control**

(in)

Ø A	B	C	C1		E	G	G1	Ø K	Typ	
			min.	max.						
3	M5	21,5	27,0	30,0	9,5	3,5	11,0	7,5	8	COL510305
4	M5	25,0	27,0	30,0	10,0	3,5	16,0	9,5	15	COL510405
4	G1/8	30,5	35,0	40,0	15,0	6,0	16,0	9,5	8	COL510418
4	G1/4	34,5	40,0	45,5	17,0	8,0	16,0	9,5	12	COL510428
6	M5	28,0	27,0	30,0	11,0	3,5	17,5	12,0	8	COL510605
6	G1/8	31,0	35,0	40,0	15,0	6,0	17,5	12,0	8	COL510618
6	G1/4	35,0	40,0	45,5	17,0	8,0	17,5	12,0	12	COL510628
6	G3/8	39,0	46,5	55,0	21,0	8,0	17,5	12,0	14	COL510638
8	G1/8	33,0	35,0	40,0	14,0	6,0	18,5	14,0	8	COL510818
8	G1/4	37,0	40,0	45,5	16,0	8,0	18,5	14,0	12	COL510828
8	G3/8	40,0	46,5	55,0	21,0	8,0	18,5	14,0	14	COL510838
8	G1/2	46,0	53,0	60,0	22,5	9,0	18,5	14,0	19	COL510848
10	G1/4	39,0	40,0	45,5	18,0	8,0	19,5	16,5	12	COL511028
10	G3/8	42,0	46,5	55,0	19,5	8,0	19,5	16,5	14	COL511038
10	G1/2	47,5	53,0	60,0	22,5	9,0	19,5	16,5	19	COL511048
12	G1/4	41,0	40,0	45,5	20,0	8,0	22,0	19,0	12	COL511228
12	G3/8	46,0	46,5	55,0	19,0	8,0	22,0	19,0	14	COL511238
12	G1/2	50,0	53,0	60,0	21,0	9,0	22,0	19,0	19	COL511248

Please see Speed Controllers Flowrate on page 4

**C00GE**

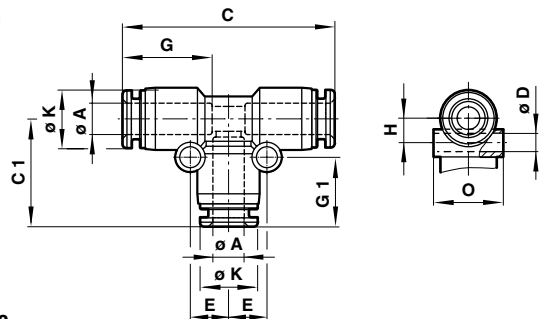


**In-Line Flow Control**

Ø A	C	C1		D	E	G	Ø K	N	Typ
		min.	max.						
4	45,0	30,0	33,0	3,3	15,0	16,5	9,5	13,5	C00GE0400
6	50,0	35,0	39,5	4,4	20,5	17,5	12,0	17,5	C00GE0600
8	55,5	37,5	42,0	4,4	23,0	18,5	14,0	20,0	C00GE0800
10	61,0	44,0	49,0	4,4	28,0	19,5	16,5	23,0	C00GE1000
12	70,0	47,5	53,5	4,4	32,0	22,0	19,0	25,5	C00GE1200

Please see Speed Controllers Flowrate on page 4

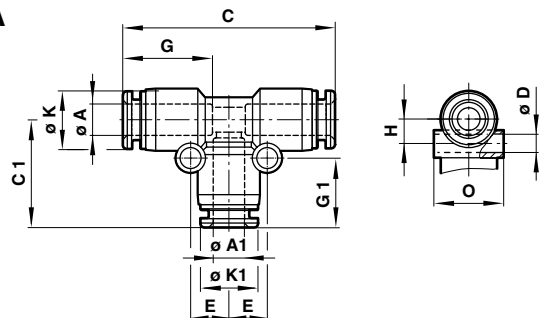
**C0060**



**Union Tee**

Ø A	C	C1	Ø D	E	G	G1	H	Ø K	O	Typ
4	36,5	19,0	3,3	6,5	16,5	12,5	8,5	9,5	10,5	C00600400
6	42,0	21,5	3,3	7,5	17,5	13,5	7,5	12,0	12,5	C00600600
8	45,0	23,5	4,3	9,0	18,5	15,0	9,0	14,0	14,5	C00600800
10	48,0	25,5	4,3	10,0	20,0	15,5	11,0	16,5	17,5	C00601000
12	57,0	29,5	4,3	13,0	22,0	16,5	12,5	19,0	20,5	C00601200
16	68,0	34,5	4,3	16,0	24,0	18,0	16,0	25,0	25,5	C00601600

**C006A**



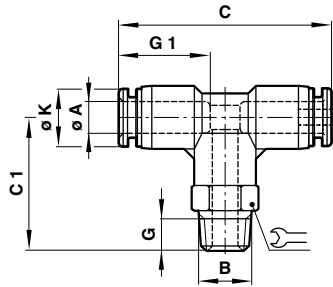
**Union Tee**

(Unequal)

Ø A	Ø A1	C	C1	Ø D	E	G	G1	H	Ø K	Ø K1	O	Typ
6	4	41,5	19,0	3,3	7,0	17,5	12,5	8,0	12,0	9,5	12,5	C006A0604
8	6	45,0	22,0	4,3	8,5	18,5	13,5	9,5	14,0	12,0	15,0	C006A0806
10	6	49,0	23,0	4,3	8,5	19,5	13,5	11,0	16,5	12,0	17,5	C006A1006
10	8	49,0	25,0	4,3	9,5	19,5	15,0	11,0	16,5	14,0	17,5	C006A1008
12	8	56,0	25,5	4,3	9,5	22,0	15,0	12,5	19,0	14,0	20,5	C006A1208
12	10	56,0	27,5	4,3	11,0	22,0	15,5	12,5	19,0	16,5	20,5	C006A1210
16	10	61,0	30,5	4,3	11,5	24,0	15,5	16,0	25,0	16,5	25,5	C006A1610
16	12	63,5	33,0	4,3	13,0	24,0	16,5	16,0	25,0	19,0	25,5	C006A1612



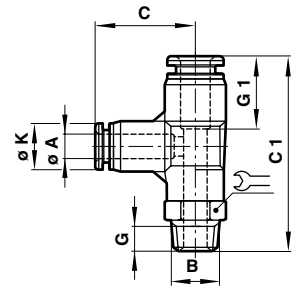
**C0167**



**Swivel Tee Adaptor**

Ø A	B	C	C1	G	G1	Ø K	±	Typ
4	R1/8	37,5	24,5	8,0	17,0	9,5	10	C01670418
4	R1/4	37,5	26,5	10,0	17,0	9,5	14	C01670428
4	R3/8	37,5	27,5	11,0	17,0	9,5	17	C01670438
6	R1/8	41,0	26,5	8,0	17,5	12,0	12	C01670618
6	R1/4	41,0	29,5	10,0	17,5	12,0	14	C01670628
6	R3/8	41,0	30,5	11,0	17,5	12,0	17	C01670638
6	R1/2	41,0	33,5	14,0	17,5	12,0	22	C01670648
8	R1/8	44,0	28,0	8,0	18,5	14,0	14	C01670818
8	R1/4	44,0	31,0	10,0	18,5	14,0	14	C01670828
8	R3/8	44,0	32,0	11,0	18,5	14,0	17	C01670838
8	R1/2	44,0	35,0	14,0	18,5	14,0	22	C01670848
10	R1/8	47,0	28,5	8,0	19,5	16,5	17	C01671018
10	R1/4	47,0	32,0	10,0	19,5	16,5	17	C01671028
10	R3/8	47,0	32,5	11,0	19,5	16,5	17	C01671038
10	R1/2	47,0	35,5	14,0	19,5	16,5	22	C01671048
12	R1/8	55,0	32,5	8,0	22,0	19,0	19	C01671218
12	R1/4	55,0	34,5	10,0	22,0	19,0	19	C01671228
12	R3/8	55,0	35,5	11,0	22,0	19,0	19	C01671238
12	R1/2	55,0	38,5	14,0	22,0	19,0	22	C01671248
16	R3/8	64,5	43,0	11,0	24,0	25,0	24	C01671638
16	R1/2	64,5	46,0	14,0	24,0	25,0	24	C01671648

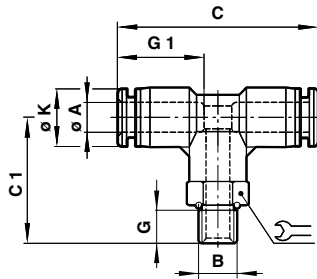
**C0168**



**Swivel Side Tee Adaptor**

Ø A	B	C	C1	G	G1	Ø K	±	Typ
4	R1/8	20,0	45,0	8,0	17,0	9,5	10	C01680418
4	R1/4	20,0	48,0	10,0	17,0	9,5	14	C01680428
4	R3/8	20,0	49,0	11,0	17,0	9,5	17	C01680438
6	R1/8	21,5	48,5	8,0	17,5	12,0	12	C01680618
6	R1/4	21,5	51,0	10,0	17,5	12,0	14	C01680628
6	R3/8	21,5	52,0	11,0	17,5	12,0	17	C01680638
6	R1/2	21,5	55,0	14,0	17,5	12,0	22	C01680648
8	R1/8	23,5	52,0	8,0	18,5	14,0	14	C01680818
8	R1/4	23,5	55,0	10,0	18,5	14,0	14	C01680828
8	R3/8	23,5	56,0	11,0	18,5	14,0	17	C01680838
8	R1/2	23,5	59,0	14,0	18,5	14,0	22	C01680848
10	R1/8	25,5	55,5	8,0	19,5	16,5	17	C01681018
10	R1/4	25,5	58,5	10,0	19,5	16,5	17	C01681028
10	R3/8	25,5	59,5	11,0	19,5	16,5	17	C01681038
10	R1/2	25,5	62,5	14,0	19,5	16,5	22	C01681048
12	R1/8	30,0	63,0	8,0	22,0	19,0	19	C01681218
12	R1/4	30,0	65,0	10,0	22,0	19,0	19	C01681228
12	R3/8	30,0	66,0	11,0	22,0	19,0	19	C01681238
12	R1/2	30,0	69,0	14,0	22,0	19,0	22	C01681248

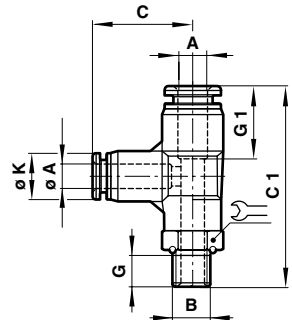
**C0267**



**Swivel Tee Adaptor**

Ø A	B	C	C1	G	G1	Ø K	±	Typ
4	M5	37,5	22,0	4,5	17,0	9,5	10	C02670405
4	M6	37,5	22,0	4,5	17,0	9,5	10	C02670406
4	G1/8	37,5	22,0	6,0	17,0	9,5	14	C02670418
4	G1/4	37,5	24,0	8,0	17,0	9,5	17	C02670428
4	G3/8	37,5	24,0	8,0	17,0	9,5	20	C02670438
6	M5	41,0	24,0	4,5	17,5	12,0	12	C02670605
6	M6	41,0	24,0	4,5	17,5	12,0	12	C02670606
6	G1/8	41,0	24,5	6,0	17,5	12,0	14	C02670618
6	G1/4	41,0	26,5	8,0	17,5	12,0	17	C02670628
6	G3/8	41,0	27,5	9,0	17,5	12,0	20	C02670638
6	G1/2	41,0	28,5	9,0	17,5	12,0	24	C02670648
8	G1/8	44,5	26,0	6,0	18,5	14,0	14	C02670818
8	G1/4	44,5	28,0	8,0	18,5	14,0	17	C02670828
8	G3/8	44,5	29,0	9,0	18,5	14,0	20	C02670838
8	G1/2	44,5	30,0	10,0	18,5	14,0	24	C02670848
10	G1/8	47,0	26,5	6,0	19,5	16,5	17	C02671018
10	G1/4	47,0	28,5	8,0	19,5	16,5	17	C02671028
10	G3/8	47,0	29,5	9,0	19,5	16,5	20	C02671038
10	G1/2	47,0	30,5	10,0	19,5	16,5	24	C02671048
12	G1/4	55,0	31,5	8,0	22,0	19,0	19	C02671228
12	G3/8	55,0	32,5	9,0	22,0	19,0	20	C02671238
12	G1/2	55,0	33,5	10,0	22,0	19,0	24	C02671248
16	G3/8	64,5	40,0	9,0	24,0	25,0	24	C02671638
16	G1/2	64,5	41,0	10,0	24,0	25,0	24	C02671648

**C0268**

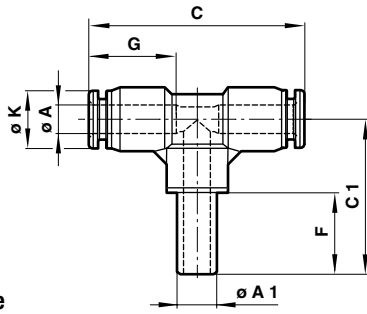


**Swivel Side Tee Adaptor**

Ø A	B	C	C1	G	G1	Ø K	±	Typ
4	M5	20,0	42,0	4,5	17,0	9,5	10	C02680405
4	M6	20,0	42,0	4,5	17,0	9,5	10	C02680406
4	G1/8	20,0	43,0	6,0	17,0	9,5	14	C02680418
4	G1/4	20,0	45,0	8,0	17,0	9,5	17	C02680428
4	G3/8	20,0	45,0	8,0	17,0	9,5	20	C02680438
6	M5	21,5	46,0	4,5	17,5	12,0	12	C02680605
6	M6	21,5	46,0	4,5	17,5	12,0	12	C02680606
6	G1/8	21,5	47,0	6,0	17,5	12,0	14	C02680618
6	G1/4	21,5	49,0	8,0	17,5	12,0	17	C02680628
6	G3/8	21,5	50,0	9,0	17,5	12,0	20	C02680638
8	G1/8	23,5	50,0	6,0	18,5	14,0	14	C02680818
8	G1/4	23,5	52,0	8,0	18,5	14,0	17	C02680828
8	G3/8	23,5	56,0	9,0	18,5	14,0	20	C02680838
8	G1/2	23,5	54,0	10,0	18,5	14,0	24	C02680848
10	G1/8	25,5	54,0	6,0	19,5	16,5	17	C02681018
10	G1/4	25,5	56,0	8,0	19,5	16,5	17	C02681028
10	G3/8	25,5	57,0	9,0	19,5	16,5	20	C02681038
10	G1/2	25,5	58,0	10,0	19,5	16,5	24	C02681048
12	G1/4	30,0	62,0	8,0	22,0	19,0	19	C02681228
12	G3/8	30,0	63,0	9,0	22,0	19,0	20	C02681238
12	G1/2	30,0	64,0	10,0	22,0	19,0	24	C02681248



**C0063**



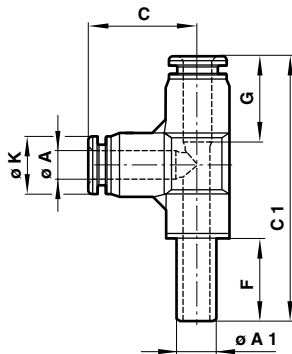
**Stem Side Tee**  
(Equal)

Ø A	Ø A1	C	C1	F	G	Ø K	Typ
4	4	37,5	32,5	24,0	16,5	9,5	C00630400
6	6	41,0	34,5	25,0	18,0	12,0	C00630600
8	8	44,5	36,0	26,0	16,5	14,0	C00630800
10	10	47,0	37,5	28,0	19,5	16,5	C00631000
12	12	55,0	39,0	30,0	22,0	19,0	C00631200

(Unequal)

Ø A	Ø A1	C	C1	F	G	Ø K	Typ
4	6	37,5	33,5	25,0	17,0	9,5	C00630604
6	8	41,0	35,5	28,0	17,5	12,0	C00630806
8	10	44,5	38,5	28,0	18,5	14,0	C00631008
10	12	47,0	39,5	30,0	19,5	16,5	C00631210

**C0064**



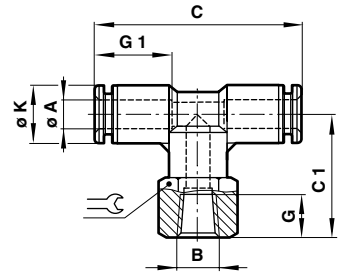
**Stem Tee**  
(Equal)

Ø A	Ø A1	C	C1	F	G	Ø K	Typ
4	4	20,5	58,0	17,0	24,0	9,5	C00640400
6	6	21,5	52,5	17,5	25,0	12,0	C00640600
8	8	23,5	67,0	18,5	26,0	14,0	C00640800
10	10	25,5	73,0	19,5	28,0	16,5	C00641000
12	12	30,0	82,0	22,0	30,0	19,5	C00641200

(Unequal)

Ø A	Ø A1	C	C1	F	G	Ø K	Typ
4	6	20,0	59,0	17,0	25,0	9,5	C00640604
6	8	21,5	63,5	17,5	26,0	12,0	C00640806
8	10	23,5	69,5	18,5	28,0	14,0	C00641008
10	12	25,5	75,0	19,5	30,0	16,5	C00641210

**C016C/C026C**

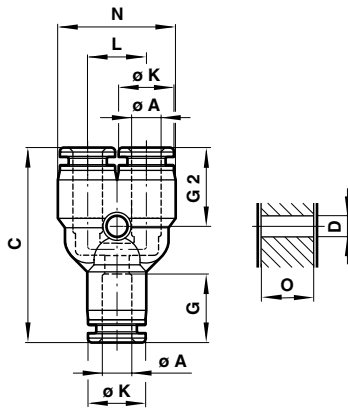


**Swivel Tee Adaptor**  
(Female)

Ø A	B	C	G	G1	C1	Ø K	Typ
4	M5	37,5	16,5	8,0	17,0	9,5	C026C0405
4	M6	37,5	16,5	8,0	17,0	9,5	C026C0406
4	R1/8	38,0	17,5	9,0	17,0	9,5	C016C0418
4	R1/4	38,0	19,5	11,0	17,0	9,5	C016C0428
6	M5	41,0	17,5	8,0	17,5	12,0	C026C0605
6	M6	41,0	17,5	8,0	17,5	12,0	C026C0606
6	R1/8	41,0	18,5	9,0	17,5	12,0	C016C0618
6	R1/4	41,0	20,5	11,0	17,5	12,0	C016C0628
6	R3/8	41,0	21,5	12,0	17,5	12,0	C016C0638
8	R1/8	44,5	21,0	9,0	18,5	14,0	C016C0818
8	R1/4	44,5	21,0	11,0	18,5	14,0	C016C0828
8	R3/8	44,5	22,0	12,0	18,5	14,0	C016C0838
8	R1/2	44,5	24,0	14,0	18,5	14,0	C016C0848
10	R1/8	47,0	20,0	9,0	19,5	16,5	C016C1018
10	R1/4	47,0	20,0	11,0	19,5	16,5	C016C1028
10	R3/8	47,0	21,0	12,0	19,5	16,5	C016C1038
10	R1/2	47,0	23,0	14,0	19,5	16,5	C016C1048
12	R1/4	55,0	21,0	11,0	22,0	19,0	C016C1228
12	R3/8	55,0	22,0	12,0	22,0	19,0	C016C1238
12	R1/2	55,0	24,0	14,0	22,0	19,0	C016C1248



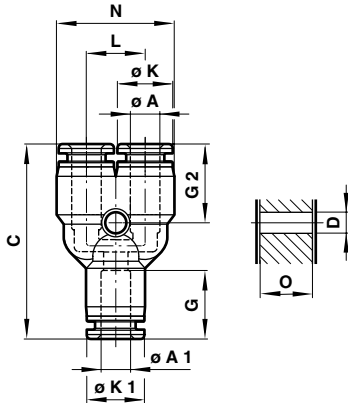
**C0082**



**Union Y**  
(Equal)

Ø A	C	D	G	G2	Ø K	L	N	O	Typ
4	37,0	3,3	17,0	15	9,5	10,5	21,0	10,5	C00820400
6	40,0	3,3	17,5	16	12,0	12,5	25,0	12,5	C00820600
8	43,0	4,3	18,5	17	14,0	14,5	29,0	14,5	C00820800
10	47,5	4,3	19,5	18,5	16,5	17,5	35,0	17,5	C00821000
12	53,0	4,3	22,0	21,5	19,0	20,5	41,0	20,5	C00821200

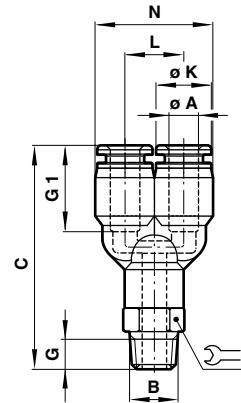
**C0082**



**Union Y**  
(Unequal)

Ø A	Ø A1	C	D	G	G2	Ø K	Ø K1	L	N	O	Type
4	6	38,0	3,3	17,5	15,0	10,5	12,5	10,5	21,0	10,5	C00820604
6	8	41,0	4,3	18,5	16,0	12,5	14,5	12,5	25,0	13,0	C00820806
8	10	43,0	4,3	19,5	17,0	14,5	17,5	14,5	29,0	15,0	C00821008
10	12	46,5	4,3	22,0	18,5	17,5	20,5	17,5	35,0	18,0	C00821210

**C0188**

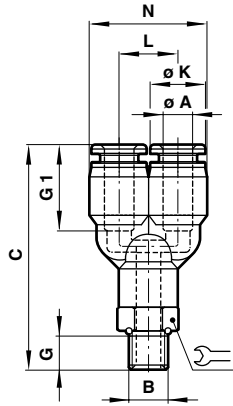


**Swivel Y Adaptor**

Ø A	B	C	G	G1	Ø K	L	N	≈	Typ
4	R1/8	41,5	8,0	17,0	9,5	10,5	21,0	10	C01880418
4	R1/4	42,5	10,0	17,0	9,5	10,5	21,0	14	C01880428
4	R3/8	43,5	11,0	17,0	9,5	10,5	21,0	17	C01880438
6	R1/8	44,0	8,0	17,5	12,0	12,5	25,0	12	C01880618
6	R1/4	47,0	10,0	17,5	12,0	12,5	25,0	14	C01880628
6	R3/8	48,0	11,0	17,5	12,0	12,5	25,0	17	C01880638
6	R1/2	51,0	14,0	17,5	12,0	12,5	25,0	22	C01880648
8	R1/8	45,5	8,0	18,5	14,0	14,5	29,0	14	C01880818
8	R1/4	48,5	10,0	18,5	14,0	14,5	29,0	14	C01880828
8	R3/8	48,5	11,0	18,5	14,0	14,5	29,0	17	C01880838
8	R1/2	52,5	14,0	18,5	14,0	14,5	29,0	22	C01880848
10	R1/8	49,0	8,0	19,5	16,5	17,5	35,0	17	C01881018
10	R1/4	52,0	10,0	19,5	16,5	17,5	35,0	17	C01881028
10	R3/8	53,0	11,0	19,5	16,5	17,5	35,0	17	C01881038
10	R1/2	56,2	14,0	19,5	16,5	17,5	35,0	22	C01881048
12	R1/8	52,5	3,0	22,0	19,0	20,5	41,0	19	C01881218
12	R1/4	54,5	8,0	22,0	19,0	20,5	41,0	19	C01881228
12	R3/8	55,5	11,0	22,0	19,0	20,5	41,0	19	C01881238
12	R1/2	58,5	14,0	22,0	19,0	20,5	41,0	22	C01881248



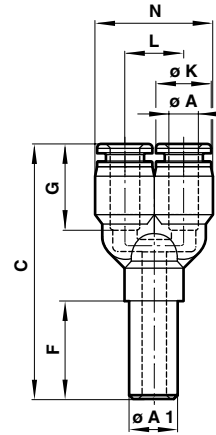
C0288



Swivel Y Adaptor

Ø A	B	C	G	G1	Ø K	L	N	≅	Typ
4	M5	35,0	4,5	17,0	9,5	10,5	21,0	10	C02880405
4	M6	35,0	4,5	17,0	9,5	10,5	21,0	10	C02880406
4	G1/8	41,0	6,0	17,0	9,5	10,5	21,0	14	C02880418
4	G1/4	43,0	8,0	17,0	9,5	10,5	21,0	17	C02880428
4	G3/8	43,0	8,0	17,0	9,5	10,5	21,0	20	C02880438
6	M5	41,5	4,5	17,5	12,0	12,5	25,0	12	C02880605
6	M6	41,5	4,5	17,5	12,0	12,5	25,0	12	C02880606
6	G1/8	42,5	6,0	17,5	12,0	12,5	25,0	14	C02880618
6	G1/4	44,5	8,0	17,5	12,0	12,5	25,0	17	C02880628
6	G3/8	45,5	9,0	17,5	12,0	12,5	25,0	20	C02880638
6	G1/2	46,5	10,0	17,5	12,0	12,5	25,0	24	C02880648
8	G1/8	43,5	6,0	18,5	14,0	14,5	29,0	14	C02880818
8	G1/4	45,5	8,0	18,5	14,0	14,5	29,0	17	C02880828
8	G3/8	46,5	9,0	18,5	14,0	14,5	29,0	20	C02880838
8	G1/2	47,5	10,0	18,5	14,0	14,5	29,0	24	C02880848
10	G1/8	49,5	6,0	19,5	16,5	17,5	35,0	17	C02881018
10	G1/4	51,5	8,0	19,5	16,5	17,5	35,0	17	C02881028
10	G3/8	52,5	9,0	19,5	16,5	17,5	35,0	20	C02881038
10	G1/2	53,5	10,0	19,5	16,5	17,5	35,0	24	C02881048
12	G1/4	55,0	8,0	22,0	19,0	20,5	41,0	19	C02881228
12	G3/8	56,0	9,0	22,0	19,0	20,5	41,0	20	C02881238
12	G1/2	57,0	10,0	22,0	19,0	20,5	41,0	24	C02881248

C0084

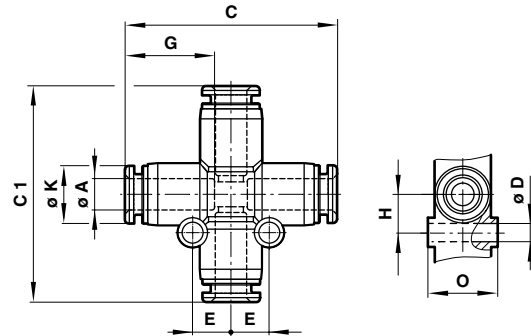


Stem Y

(Unequal)

Ø A	Ø A1	C	F	G	Ø K	L	N	Typ
4	6	51,5	24,0	17,5	9,5	10,5	21,0	C00840604
6	8	56,5	26,0	18,5	12,0	12,5	25,0	C00840806
8	10	62,0	28,0	20,0	14,0	14,5	29,0	C00841008
10	12	68,0	30,0	22,0	16,5	17,5	35,0	C00841210

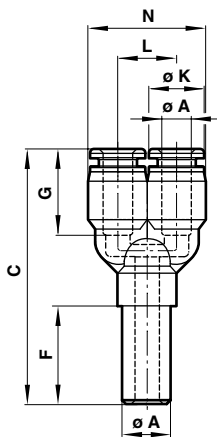
C0090



Union Cross

Ø A	C	C1	Ø D	E	G	H	Ø K	Typ
4	36,5	38,0	3,3	6,5	17,0	6,5	9,5	C00900400
6	42,0	42,5	4,3	7,5	17,5	7,5	12,0	C00900600
8	45,0	47,0	4,3	9,0	18,5	9,0	14,0	C00900800
10	48,0	50,5	4,3	10,0	19,5	10,0	16,5	C00901000
12	55,0	57,0	4,3	12,0	22,0	12,0	19,0	C00901200

C0084



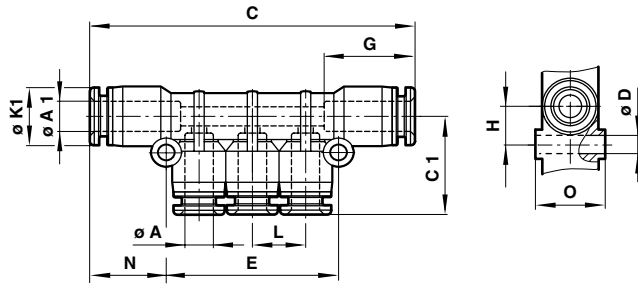
Stem Y

(Equal)

Ø A	Ø A	C	F	G	Ø K	L	N	Typ
4	4	49,5	22,0	17,0	9,5	10,5	21,0	C00840400
6	6	54,5	24,0	17,5	12,0	12,5	25,0	C00840600
8	8	60,0	26,0	18,5	14,0	14,5	29,0	C00840800
10	10	66,0	28,0	20,0	16,5	17,5	35,0	C00841000
12	12	71,5	30,0	22,0	19,0	20,5	41,0	C00841200



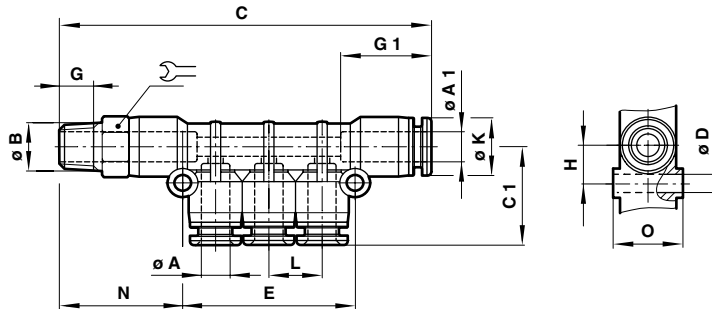
**C00D3**



**Manifold Union**

Ø A	Ø A1	C	C1	D	E	G	H	Ø K1	L	N	O	Typ
4	6	63,5	18,0	3,3	34,0	17,5	7,5	12,0	10,5	14,5	12,5	C00D30604
4	8	65,5	21,5	4,3	35,0	18,5	9,0	14,0	10,5	15,5	14,5	C00D30804
6	8	71,5	22,5	4,3	41,0	18,5	9,5	14,0	12,5	15,0	14,5	C00D30806
6	10	78,0	23,5	4,3	42,0	19,5	9,5	16,5	12,5	18,5	17,5	C00D31006
8	10	83,5	26,0	4,3	47,0	19,5	9,5	16,5	14,5	18,5	17,5	C00D31008

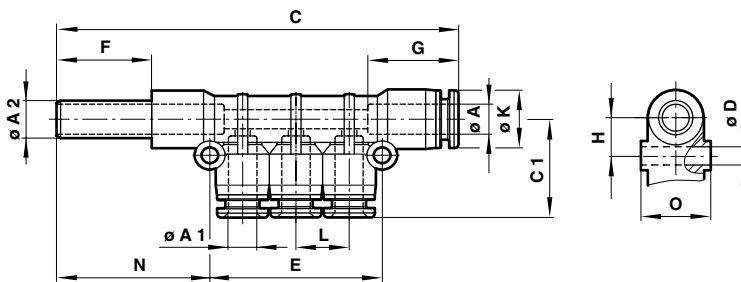
**C01D3**



**Male Manifold**

Ø A	Ø A1	B	C	C1	Ø D	E	G	G1	H	Ø K1	L	N	O	Typ
4	6	R1/8	72,0	24,0	3,3	34,0	8,0	17,5	7,5	12,0	10,5	23,5	12,5	12
4	8	R1/8	74,0	28,5	4,3	35,0	8,0	18,5	9,0	14,0	10,5	23,5	14,5	14
6	8	R1/4	82,5	34,0	4,3	41,0	10,0	18,5	9,5	14,0	12,5	26,5	14,5	14
8	10	R3/8	95,0	34,5	4,3	47,0	10,0	19,5	9,5	16,5	14,5	30,0	17,5	17

**C00J3**

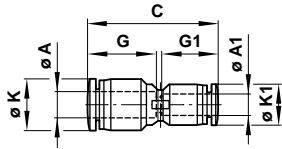


**Stem Manifold**

Ø A	Ø A1	Ø A2	C	C1	Ø D	E	F	G	H	Ø K1	L	N	O	Typ
6	4	6	84,5	24,0	3,3	34,0	25,0	17,5	7,5	12,0	10,5	35,5	12,5	C00J30604
8	4	8	89,5	28,5	4,3	35,0	28,5	18,5	9,0	14,0	10,5	39,5	14,5	C00J30804
8	6	8	95,5	34,0	4,3	41,0	28,5	18,5	9,5	14,0	12,5	39,5	14,5	C00J30806
10	8	10	109,5	34,5	4,3	47,0	31,0	19,5	9,5	16,5	14,5	44,5	17,5	C00J31008



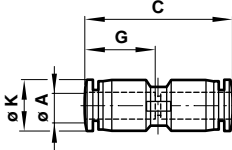
**M0020**



**Straight Union**  
(Unequal)

Ø A	Ø A1	C	G	G1	Ø K	Ø K1	Typ
4	3	24,0	11,5	11,0	8	7	M00200403
6	3	24,0	13,0	11,0	10	7	M00200603
6	4	26,5	13,0	11,5	10	8	M00200604

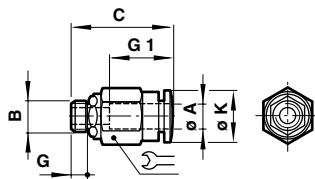
**M0020**



**Straight Union**

Ø A	C	G	Ø K	Typ
3	23,5	11,0	7	M00200300
4	26,0	11,5	8	M00200400
6	26,5	13,0	10	M00200600

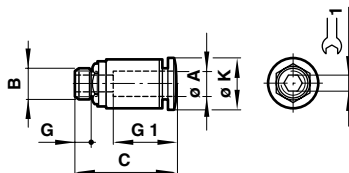
**M0125, M0225**



**Straight Adaptor**  
(External + internal hex)

Ø A	B	C	G	G1	Ø K	Typ
3	M3	17,0	4,0	11,0	7,0	M02250303
3	M5	17,5	4,5	11,0	7,0	M02250305
3	M6	18,0	5,0	11,0	7,0	M02250306
4	M3	17,5	4,0	11,5	8,0	M02250403
4	M5	18,0	4,5	11,5	8,0	M02250405
4	M6	19,0	5,0	11,5	8,0	M02250406
4	R1/8	19,0	6,0	11,5	8,0	M01250418
6	M5	19,5	4,5	13,0	10,0	M02250605
6	M6	20,0	5,0	13,0	10,0	M02250606
6	R1/8	19,5	8,0	13,0	10,0	M01250618

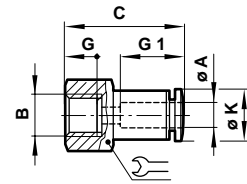
**M012A, M022A**



**Straight Adaptor**  
(Internal hex only)

Ø A	B	C	G	G1	Ø K	1	Typ
3	M3	17,0	4,0	11,0	7,0	1,5	M022A0303
3	M5	17,5	4,5	11,0	7,0	2,0	M022A0305
3	M6	18,0	5,0	11,0	8,0	2,0	M022A0306
4	M3	17,5	4,0	11,5	8,0	1,5	M022A0403
4	M5	19,0	4,5	11,5	8,0	2,5	M022A0405
4	M6	19,0	5,0	11,5	8,0	3,0	M022A0406
4	R1/8	17,5	8,0	11,5	8,0	3,0	M012A0418
6	M5	19,5	4,5	13,0	10,0	2,5	M022A0605
6	M6	20,0	5,0	13,0	10,0	3,0	M022A0606
6	R1/8	19,5	8,0	13,0	10,0	2,5	M012A0618

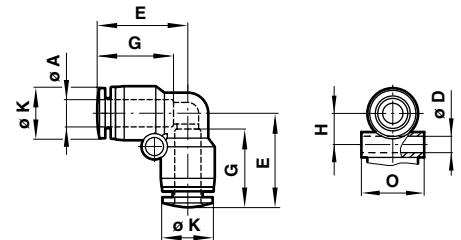
**M0126, M0226**



**Straight Adaptor**  
(Female thread)

Ø A	B	C	G	G1	Ø K	Typ	
3	M3	17,5	4,0	11,0	7,0	8	M02260303
3	M5	19,0	6,0	11,0	7,0	8	M02260305
3	M6	19,0	6,0	11,0	7,0	8	M02260306
4	M3	18,0	4,0	11,5	8,0	8	M02260403
4	M5	19,5	6,0	11,5	8,0	8	M02260405
4	M6	19,5	6,0	11,5	8,0	8	M02260406
4	R1/8	23,0	8,5	11,5	8,0	12	M01260418
6	M5	21,5	6,0	13,0	10,0	10	M02260605
6	M6	21,5	6,0	13,0	10,0	10	M02260606
6	R1/8	25,5	8,5	13,0	10,0	12	M01260618

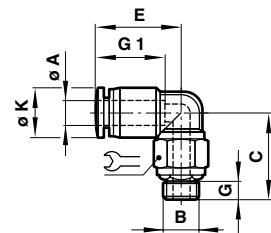
**M0040**



**Union Elbow**

Ø A	Ø D	E	G	H	Ø K	O	Typ
3	3,2	13,5	11,0	5,5	7,0	7,5	M00400300
4	3,2	14,5	11,5	6,0	8,0	8,5	M00400400
6	3,2	16,5	13,0	7,0	10,0	10,5	M00400600

**M0147, M0247**



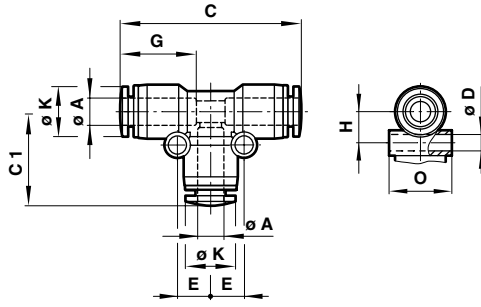
**90° Swivel Elbow Adaptor**

Ø A	B	C	E	G	G1	Ø K	Typ	
3	M3	16,0	13,5	3,0	11,0	7,0	8	M02470303
3	M5	17,0	13,5	4,0	11,0	7,0	8	M02470305
3	M6	17,0	13,5	4,0	11,0	7,0	8	M02470306
4	M3	16,0	14,5	3,0	11,5	8,0	8	M02470403
4	M5	17,0	14,5	4,0	11,5	8,0	8	M02470405
4	M6	17,0	14,5	4,0	11,5	8,0	8	M02470406
4	R1/8	18,0	14,5	6,0	11,5	8,0	14	M01470418
6	M5	17,0	15,5	3,5	13,0	10,0	8	M02470605
6	M6	17,0	15,5	4,0	13,0	10,0	8	M02470606
6	R1/8	18,0	15,5	5,0	12,0	10,0	14	M01470618





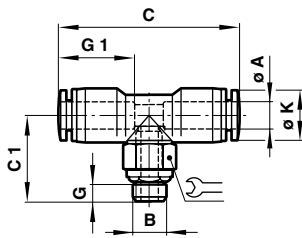
**M0060**



**Union Tee**

Ø A	C	C1	Ø D	E	G	H	Ø K	O	Typ
3	26,5	13,5	3,2	5,5	11,0	5,5	7,0	7,5	M00600300
4	28,5	14,5	3,2	6,0	12,0	6,0	8,0	8,5	M00600400
6	33,0	16,5	3,2	7,0	13,0	7,0	10,0	10,5	M00600600

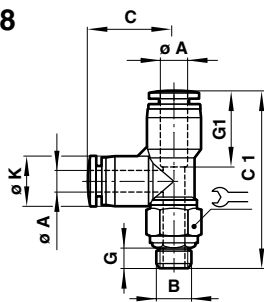
**M0167, M0267**



**Swivel Tee Adaptor**

Ø A	B	C	C1	G	G1	Ø K	⌀	Typ
3	M3	25,5	16,0	3,0	11,0	7,0	8	M02670303
3	M5	29,0	17,0	4,0	11,0	7,0	8	M02670305
3	M6	27,0	17,0	4,0	11,0	7,0	8	M02670306
4	M3	28,5	16,0	3,0	11,5	8,0	8	M02670403
4	M5	28,5	17,0	3,5	11,5	8,0	8	M02670405
4	M6	29,0	17,0	4,0	11,5	8,0	8	M02670406
4	R1/8	29,0	18,0	6,0	11,5	8,0	14	M01670418
6	M5	31,0	17,0	3,5	13,0	10,0	8	M02670605
6	M6	31,0	17,0	4,0	13,0	10,0	8	M02670606
6	R1/8	31,0	18,0	6,0	13,0	10,0	14	M01670618

**M0168, M0268**



**Swivel Side Tee Adaptor**

Ø A	B	C	C1	G	G1	Ø K	⌀	Typ
3	M3	13,5	29,5	3,0	11,0	7,0	8	M02680303
3	M5	13,5	30,0	4,0	11,0	7,0	8	M02680305
3	M6	13,5	30,5	4,0	11,0	7,0	8	M02680306
4	M3	14,0	30,5	3,0	11,5	8,0	8	M02680403
4	M5	14,0	31,0	3,5	11,5	8,0	8	M02680405
4	M6	14,0	31,5	4,0	12,0	8,0	8	M02680406
4	R1/8	14,0	31,5	6,0	11,5	8,0	14	M01680418
6	M5	16,5	33,5	3,5	13,0	10,0	8	M02680605
6	M6	16,5	34,0	4,0	13,0	10,0	8	M02680606
6	R1/8	16,5	33,5	6,0	13,0	10,0	14	M01680618