

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97

Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

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Технические характеристики на классические клапаны, обратные клапаны Martonair, Pneufit C, C00GL компании **IMI NORGREN**

Виды товаров: тарельчатые клапаны с механическим приводом, тарельчатые клапаны для тяжелых условий эксплуатации с механическим приводом, линейные обратные клапаны, push-in фитинги метрические, pif обратные клапаны и др.

- > **Port size: M5**
 - > **Extremely compact trip and detector valves**
 - > **Very light operating forces**
 - > **Substantially non-corrodible construction**
- > **Manual versions also available on request**



Technical features

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Poppet valves, directly actuated

Operating pressure:

2 ... 10 bar (29 ... 145 psi)

Port size:

M5

Ambient/Media temperature:

-20°C ... +80°C (-4 ... +176°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F)

Materials:

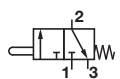
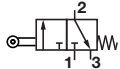
Body: plastic

Roller operator: plastic

Plunger: brass

Seals: NBR

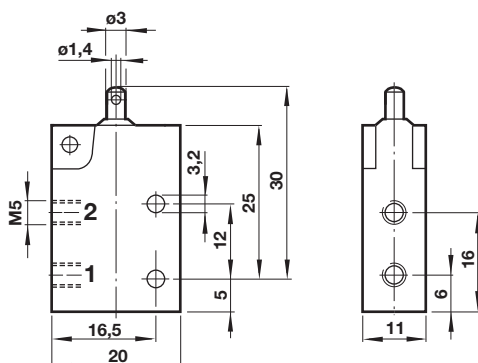
Technical data

Symbol	Port size	Function	Operator/return	Operating pressure (bar)	Operating force at 6 bar (N)	Flow (l/min)	Cv	Weight (kg)	Drawing No.	Model
	M5	3/2	Plunger/spring	2 ... 10	5	59	0,06	0,010	1	M/1553/14
	M5	3/2	Roller/spring	2 ... 10	14	59	0,06	0,014	2	M/1553/8

Dimensions

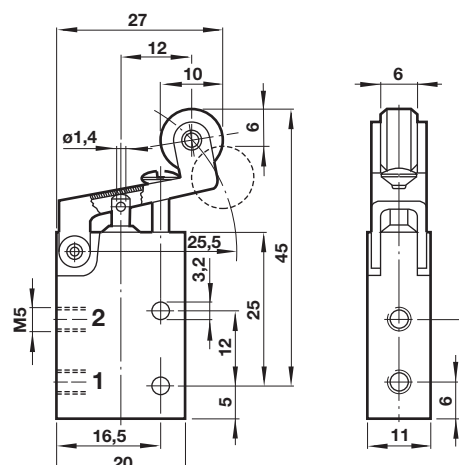
Dimensions in mm
Projection/First angle

1



Pre-travel: 1,0 mm; Operating Travel: 1,0 mm; Over-travel: 1,0 mm

2



Pre-travel: 2,5 mm; Operating Travel: 2,5 mm; Over-travel: 2,5 mm

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under

»Technical features/data«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

- > Port size: G1/8
- > Long established and well-proven valves
- > Compact size
- > Normally closed and normally open models

- > May also be used as 2/2 valves



Technical features

Medium:

Compressed air, filtered, lubricated and non-lubricated or hydraulic fluid

Operation:

Poppet valves, directly actuated

Mounting:

Through-holes in valve body

Operating pressure:

2 ... 10 bar (29 ... 145 psi)

Port size:

G1/8

Ambient/Media temperature:

-20 ... +80°C max. (-4 ... +176 °F)

Air supply must be dry enough

to avoid ice formation at

temperatures below +2°C (+35°F).

Flow (to CETOP RP50P):

l/min Cv

S/666/.. 174 0,20

S/667/.. 156 0,18

Others:

For use as a 2/2 valve the main supply must be connected to port '1' and the exhaust port 3' should be plugged.

Materials:

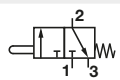
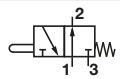
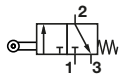
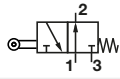
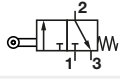
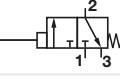
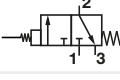
Body: Diecast zinc alloy

Piston: aluminium

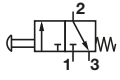
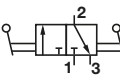
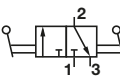
Seals: NBR

Technical data

3/2 mechanical valves

Symbol	Port size	Function	Operator/Return	Operating pressure (bar)	Operating force or torque at 6,3 bar	Weight (kg)	Spares Kit	Dimension No.	Model
	G1/8	NC	Plunger/Spring	2 ...10	35 N	0,20	QS/666/1/00	1	S/666/14
	G1/8	NO	Plunger/Spring	2 ...10	72 N	0,20	QS/667/1/00	1	S/667/14
	G1/8	NC	Roller/Spring	2 ...10	20 N	0,30	QS/666/1/00	2	S/666/8
	G1/8	NO	Roller/Spring	2 ...10	40 N	0,30	QS/667/1/00	2	S/667/8
	G1/8	NC	Roller/Spring	2 ...10	0,25 Nm	0,30	QS/666/1/00	3	S/666/108
	G1/8	NC	Rod/Spring	2 ...10	0,25 Nm	0,30	QS/666/1/00	4	S/666/106
	G1/8	NC	Antenna/Spring	2 ...10	0,25 Nm	0,30	QS/666/1/00	5	S/666/116

3/2 manual valves

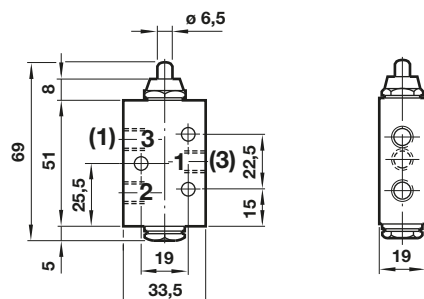
Symbol	Port size	Function	Knob colour	Operator/Return	Operating pressure (bar)	Operating force or torque at 6,3 bar	Weight (kg)	Spares Kit	Dimension No.	Model
	G1/8	NC	Silver	Knob/spring	2 ...10	35	0,20	QS/666/1/00	7	S/666/1
	G1/8	NC	Black	Knob/spring	2 ...10	35	0,20	QS/666/1/00	7	S/666/1N
	G1/8	NC	Red	Knob/spring	2 ...10	35	0,20	QS/666/1/00	7	S/666/1R
	G1/8	NC	Green	Knob/spring	2 ...10	35	0,20	QS/666/1/00	7	S/666/1G
	G1/8	NC	—	Lever/lever (Panel mounting)	2 ...10	14	0,30	QS/666/1/00	8	S/666/7
	G1/8	NC	—	Lever (long)/lever (Panel mounting)	2 ...10	10	0,30	QS/666/1/00	6	S/666/117

Dimensions

Dimensions in mm
Projection/First angle

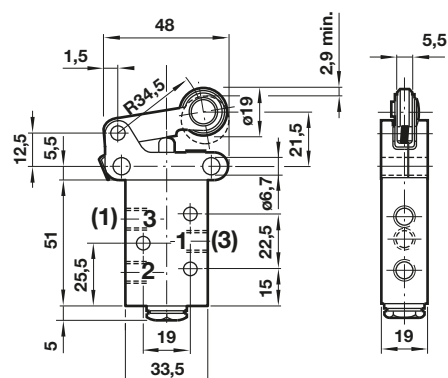


1



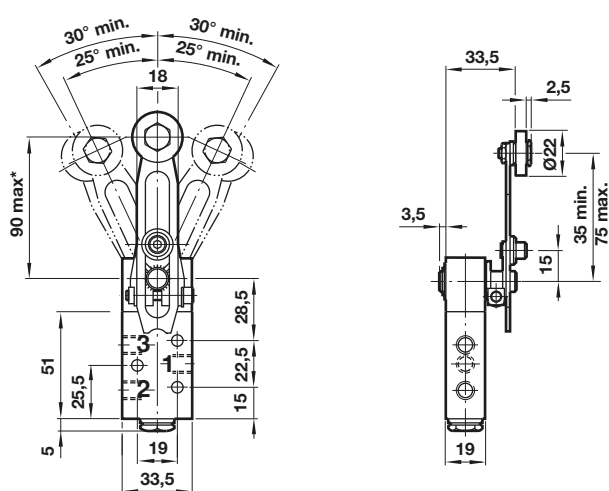
Pre-travel: 0,8 mm closed top seat
Operating Travel: 0,8 mm open bottom seat
Over-travel: 1,5 mm
Model number S/667/14 type 3/2 normally open numbers are shown in brackets.

2



Pre-travel: 1,4 mm closed top seat
Operating Travel: 1,4 mm open bottom seat
Over-travel: 2,2 mm
Model number S/667/8 type 3/2 normally open numbers are shown in brackets.

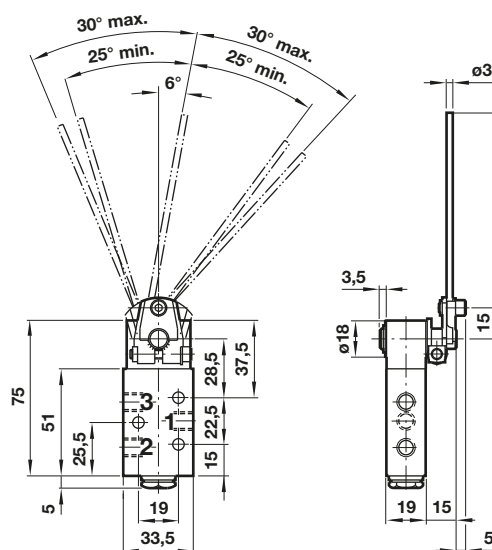
3



Mechanism may be operated either side of centre line.
When the valve is mounted horizontally, the roller is recommended to be positioned on the upper face of the arm.

*Alternative position

4



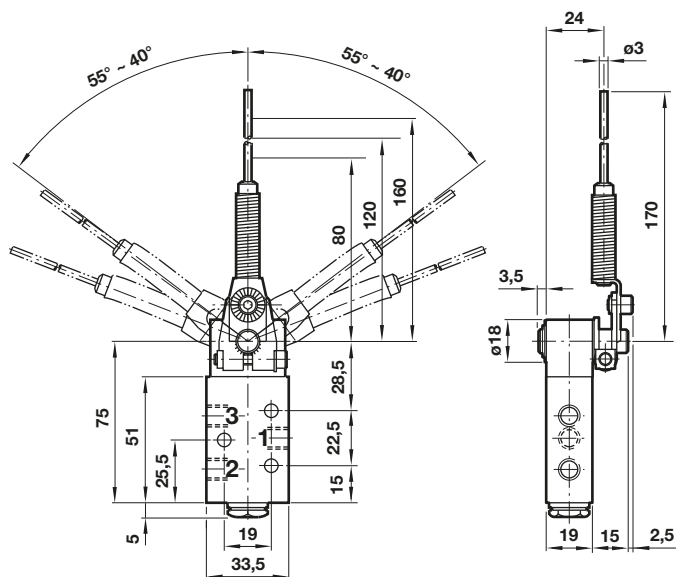
Mechanism may be operated either side of centre line.

*Recommended

Dimensions in mm
 Projection/First angle

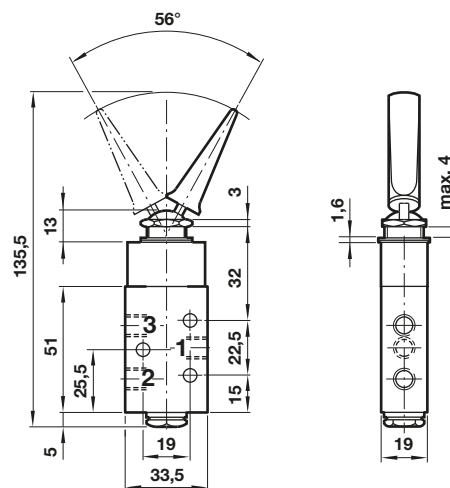


5



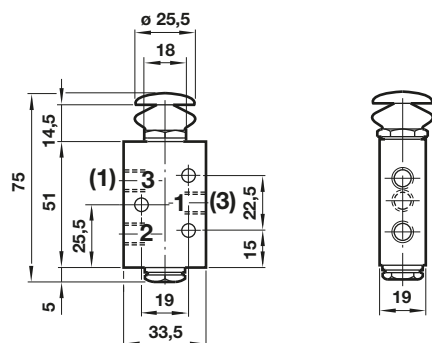
*Rotation at Point of Application: 40° minimum @ 80 mm
 50° minimum @ 120 mm
 55° minimum @ 160 mm
 Mechanism may be operated either side of centre line.

6



Panel hole: $\varnothing$ 16 mm
 Panel thickness: 4 mm maximum

7



Warning

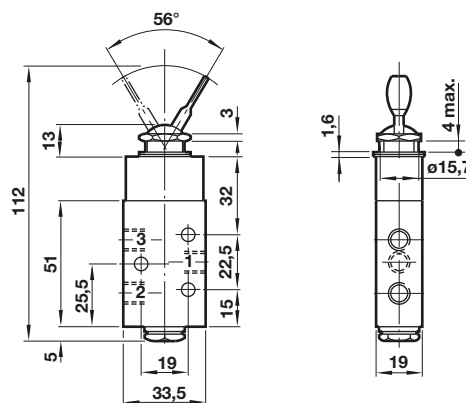
These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under

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Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

8



Panel hole: $\varnothing$ 16 mm
 Panel thickness: 4 mm maximum

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

- > Port size: G1/8
- > Light compact body
- > Air bleed principle
- > Exhaust port protected by filter disc
- > Low operation force - highly sensitive



Technical features

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Poppet valves, bleed actuated

Operating pressure:

4 ... 10 bar (58 ... 145 psi)

Mounting:

Trough-holes in valve body

Port size:

G1/8

Ambient/Media temperature:

+5°C ... +80°C (+41 ... +176°F)

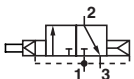
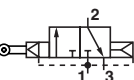
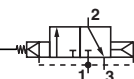
Materials:

Body : die-cast zinc alloy

Piston: steel

Seals: NBR

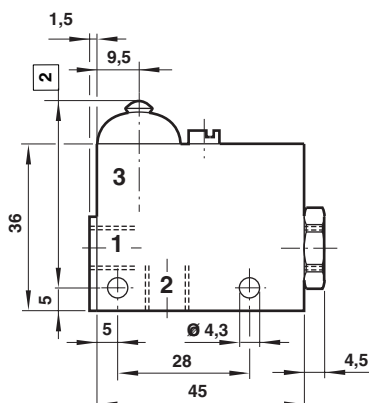
Technical data

Symbol	Port size	Function	Operator/return	Operating pressure (bar)	Operating force at 6 bar (N)	Flow (l/min)	Cv	Weight (kg)	Drawing No.	Model
	G 1/8	3/2	Plunger/air (internal supply)	4 ... 10	1	128	0,13	0,23	1	M/21/41
	G 1/8	3/2	Roller/air (internal supply)	4 ... 10	1	128	0,13	0,23	2	M/21/11
	G 1/8	3/2	Antenna/air (internal supply)	4 ... 10	0,15	128	0,13	0,23	3	M/21/70

Dimensions

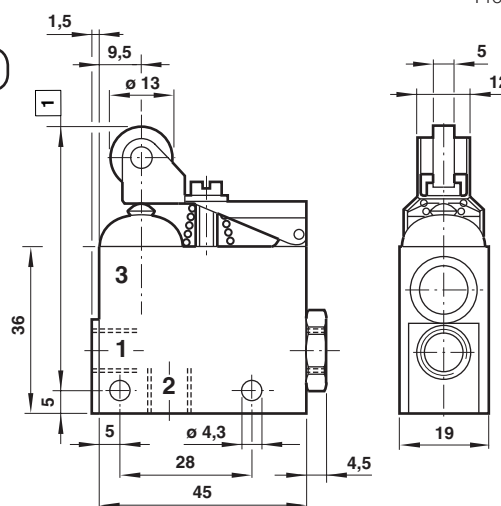
Dimensions in mm
Projection/First angle

①



Pre-travel: 0,6 ... 3,3 mm
Operating Travel: 0,3 mm
Over-travel: 2,2 ... 3,9 mm

②



Pre-travel: 0,3 ... 1,0 mm
Operating Travel: 0,3 mm
Over-travel: 2,2 ... 3,9 mm



- > **Port size: 1/4"**
(ISOG/NPT)
- > **Robust corrosion resistant construction**
- > **Dustproof**
- > **Position of levers may be adjusted**



Technical features

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Poppet valve, directly actuated

Mounting:

Through-holes in valve body

Port size:

G1/4 or 1/4 NPT

Operating pressure:

NC 0,7 ... 10 bar (10 ... 145 psi)

NO 0,7 ... 7 bar (10 ... 101 psi)

Flow characteristics

'1' » '2':

Cv	Kv	l/min
1,28	1,11	1258

'2' » '3':

Cv	Kv	l/min
0,86	0,74	844

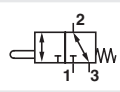
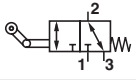
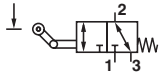
Ambient/Media temperature:

+5 ... 75°C (+41 ... 167°F)

Materials:

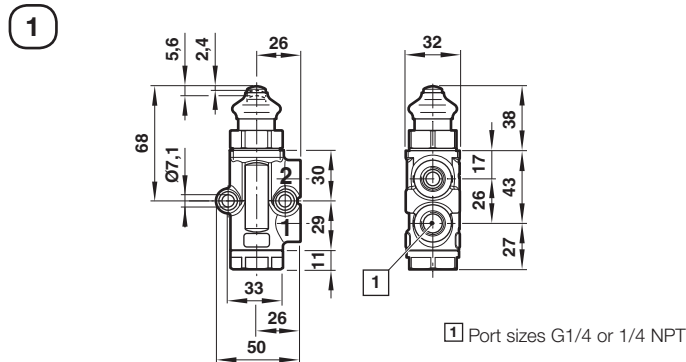
Body, poppet and lever: brass
Screws and roller: stainless steel
Seals: NBR

Technical data

Symbol	Port size	Operator/return	Operating pressure (bar)	Operating force	at 0,7 bar	at 10 bar	Weight (kg)	Spares kit	Dimension No.	Model
	G1/4	Plunger/spring	0,7 ... 10	25 N			0,81	QS/1340/6/00	1	S/1340/14
	1/4 NPT	Plunger/spring	0,7 ... 10	25 N			0,81	QS/1340/6/00	1	C/1340/14
	G1/4	Roller/spring	0,7 ... 10		1,5 Nm	1,8 Nm	0,77	QS/1340/6/00	2	S/1340/8
	1/4 NPT	Roller/spring	0,7 ... 10		1,5 Nm	1,8 Nm	0,77	QS/1340/6/00	2	C/1340/8
	G1/4	One-way trip/spring	0,7 ... 10		1,5 Nm	1,8 Nm	0,77	QS/1340/6/00	3	S/1340/48
	1/4 NPT	One-way trip/spring	0,7 ... 10		1,5 Nm	1,8 Nm	0,77	QS/1340/6/00	3	C/1340/48

Dimensions

Dimensions in mm
 Projection/First angle

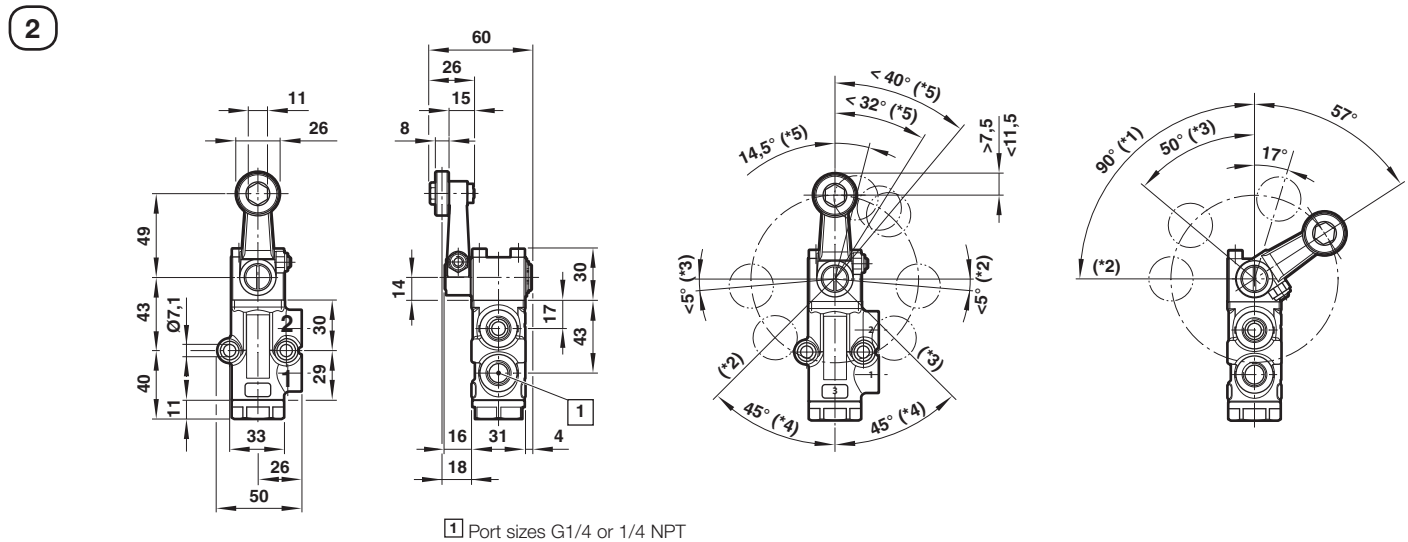


S/1340/14, C/1340/14

Pre-travel: 2,4 mm exhaust seat closes

Operating Travel: 1,6 mm

Total movement of valve including over-travel: 5,6 mm



S/1340/8, C/1340/8

Pre-travel: 14° maximum, exhaust seat closes

Operating Travel: 32°/7,5 mm minimum,
 including pre-travel

Total movement of valve including over-travel:

40°/11,5 mm maximum

* Notes

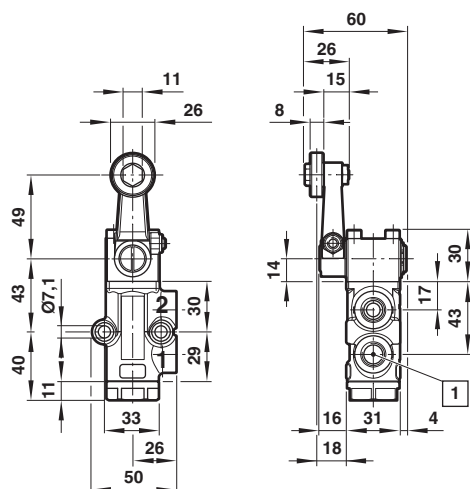
1. Operating lever must not be set to exceed this position at any time during operation.
2. Maximum rest position of operating lever for valve operating clockwise.
3. Maximum rest position of operating lever for valve operating anti-clockwise.
4. Operating lever must not enter this arc at any time during operation.
5. Valve may be operated either clockwise or anti-clockwise.
6. Operating lever may be positioned at any angle on the operating spindle providing the conditions of operation in notes 1 ... 5 are maintained.

Operating mechanism may be rotated through 360° at 90° intervals.

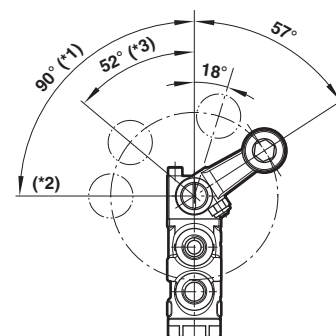
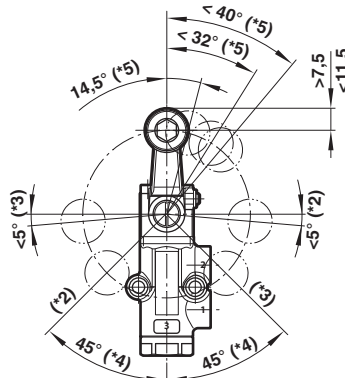
Dimensions in mm
 Projection/First angle



3



1 Port sizes G1/4 or 1/4 NPT



S/1340/48, C/1340/48

Pre-travel: 19° maximum, exhaust seat closes

Operating Travel: 36°/9,5 mm minimum, including pre-travel

Total movement of valve including over-travel:

40°/10,5 mm maximum

Minimum movement anti-clockwise to trip valve:

38° (valve does not operate)

* Notes

1. Operating lever must not be set to exceed this position at any time during movement to operate or to trip valve.
2. Maximum rest position of operating lever if full amount of over-travel is required.
3. Operating lever must not enter this arc at any time during movement to trip valve.
4. Operating lever must not enter this arc at any time during operation.
5. Valve may be operated clockwise, but does not operate anti-clockwise.
6. Operating lever may be positioned at any angle on the operating spindle providing the conditions of operation in notes 1 ... 5 are maintained

Operating mechanism may be rotated through 360° at 90° intervals.

Warning

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System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

T50P

PIF Non-return valves



- > Port size:
O/D tube 4 ... 12 mm
- > Allow free flow in one direction only
- > Simple reliable design
- > Low weight
- > Low cracking pressure
- > High operating pressure



Technical features

Medium:

Compressed air, filtered, lubricated or non-lubricated, vacuum

Operation:

Non-return valve

Operating pressure:

-0,9 ... 16 bar (-13 ... 232 psi)

Cracking pressure:

0,03 ... 0,05 bar (0,4 ... 0,7 psi)

O/D tube:

ø 4, 6, 8, 10, 12 mm

Ambient/Media temperature:

-20 ... +80°C max. (-4 ... +176°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Tubing types:

PA 11 or 12, PUR and other plasticised or unplasticised tubing which conforms to the tolerances specified in BS 5409, Part 1, 1976, light and normal duty, DIN 73378, DIN 74234, NFE 49-100

Materials:

Body: Aluminium

Grab ring: Nickel plated brass

'O'-ring: NBR

Technical data

Symbol	Ø Tube (mm)	Flow factor		Cv	Kv *2)	Flow at 6 » 5 bar (l/min)	Weight (kg)	Model
		C *1)	b *3)					
	4	0,4	0,23	0,1	0,09	96	0,010	T50P0004
	6	1,45	0,36	0,36	0,31	349	0,016	T50P0006
	8	2,9	0,3	0,7	0,62	699	0,022	T50P0008
	10	5,1	0,35	1,25	1,09	1229	0,048	T50P0010
	12	8,4	0,42	2,1	1,79	2024	0,064	T50P0012

*1) Measured in dm³/(s.bar)

*2) Measured in m³/h

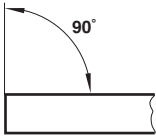
*3) b = critical pressure ratio

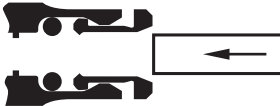
Option selector

T50P00★★

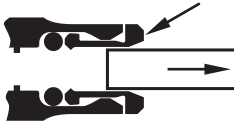
Tube size (mm)	Substitute
4	04
6	06
8	08
10	10
12	12

Method of assembly

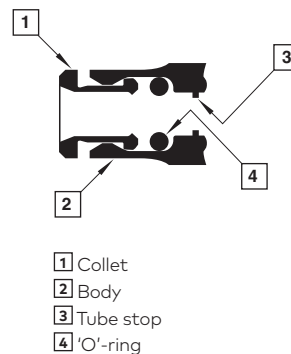
- 

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

2. Push the tube through the collet into the fitting.
- 

3. Continue pushing the tube 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 collet and withdraw the tube.

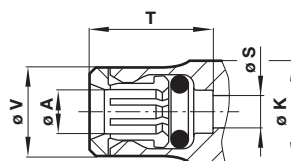


Technical data

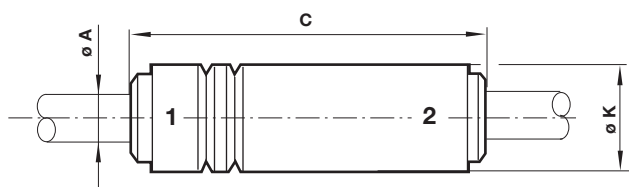
ø A O/D tube	ø S	ø T *1)	V	ø K
4	2,8	14	7,5	10
5	3,4	15	10	11
6	4,4	15,5	11	12
8	6	16,5	13	14
10	7,6	21	14,5	17
12	9,6	24,5	18	20,5

*1) Dimensions here and in the individual tables refer to the collet being in the 'IN' position.

Dimensions in mm
Projection/First angle



Dimensions



ø A	C	ø K	Model
4	49	11	T50P0004
6	56,5	13	T50P0006
8	61	15	T50P0008
10	77,5	20	T50P0010
12	88,5	22	T50P0012

Warning

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COOGL

In-line non-return valve



- > Onç rhyd: ÷ 4 — Ø | |
- > Glf g 9hv odqnd `nbd



Technical features

Medium:

Compressed air

Operating pressure:

0,2 ... 10 bar (2 ... 145 psi)

Tube sizes:

4 ... 12 mm

Tubing types:

PA 11 or 12

PU 85, 95 or 98 durometer

Ambient/Media temperature:

0 ... +60°C (+32 ... 140°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:

Body: PBT

Tube ø 10 & 12 mm: Aluminium

Seals: NBR

u-packing and O-rings

Release sleeve and backing ring:

POM

Grab-ring: Stainless steel

Collar: ZNDC

Option selector

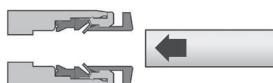
COOGL★00

O/D tube size	Substitute
4	4
6	6
8	8
10	10
12	12

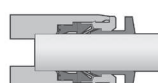
Method of assembly



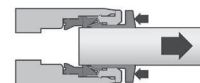
1. Ensure that the end of the tube is cut square and is free from burrs.



2. Push the tube through the collet into the fitting.

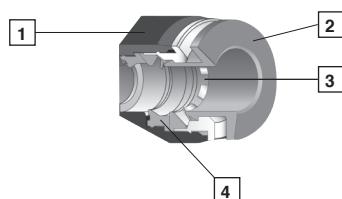


3. Continue pushing the tube through the 'O'-ring until it bottoms on the tube stop then pull back.



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

Components



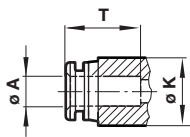
1 Impact resistant PBT body in black

2 Release buttons are red for metric, grey for inch

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.

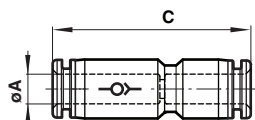
Technical data



ø A	ø K	T *1)
4	10,5	15
6	12,5	16,5
8	14,5	18,5
10	17,5	20
12	20,5	23

*1) Dimensions here and in the individual tables refer to the collet being in the 'IN' position.

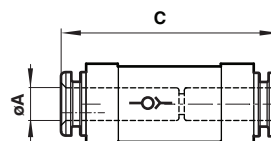
In-line non-return valve (PBT) C00GL



ø A	C	Model
4	42	C00GL0400
6	47,5	C00GL0600
8	55,5	C00GL0800

In-line non-return valve (Aluminium) C00GL

Dimensions in mm
Projection/First angle



ø A	C	Model
10	65	C00GL1000
12	73	C00GL1200

V`qrlnf

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Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult Norgren.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

- > **Port size: G1/8 ... G1/2**
- > **Permit free flow of air in one direction only**
- > **Simple, reliable design**
- > **Light weight**
- > **Silicone free**
- > **Low cracking pressure**



Technical features

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Non-return valve

Operating pressure:

0,1 ... 10 bar (1,4 ... 145 psi)

Cracking pressure:

0,05 bar (0,7 psi)

Port size:

G1/8, G1/4, G3/8 & G1/2

Mounting:

Line mounted

Ambient/Media temperature:

-20 ... +80°C max. (-4 ... 176°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:

Body: aluminium

'O' ring: NBR (VMQ free)

Valve: POM

Spring: stainless steel

Technical data, standard models

Symbol	Port size	Flow factor C *1)	Cv	Kv *2)	Weight (kg)	Model
	G1/8	2,4	0,59	0,51	0,015	T55C1800
	G1/4	5,5	1,35	1,17	0,025	T55C2800
	G3/8	9,0	2,20	1,92	0,060	T55C3800
	G1/2	15,0	3,70	3,2	0,080	T55C4800

*1) Measured in dm³/(s.bar)

*2) Measured in m³/h

Options selector

T55★★★00

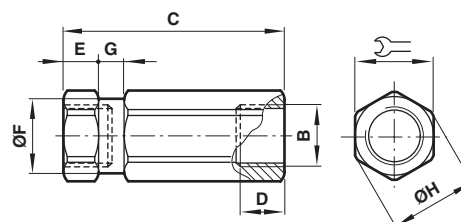
Thread	Substitute
ISO G, parallel	C
NPT	A

Port size	Substitute
1/8"	18
1/4"	28
3/8"	38
1/2"	48

Dimensions

B	C	D	E	Ø F	G	Ø H		Model
G1/8	42,5	7	7	13,5	4	15	14	T55C1800
G1/4	54	10	8	16,5	5	18,5	17	T55C2800
G3/8	63	13,5	9	23,5	7	26	24	T55C3800
G1/2	77	13,5	12	26,5	10	30	27	T55C4800

Dimensions in mm
Projection/First angle



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- > **Port size: G1/8 ... G1**
- > **Permit free flow of air in one direction only**
- > **Simple, reliable design**
- > **High operating pressure**



Technical features

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Heavy duty non-return valves

Operating pressure:

0,3 ... 16 bar (4 ... 232 psi)

Cracking pressure:

< 0,1 bar (1 psi)

Port sizes:

G1/8 ... G1, 1/8 ... 1 NPT

Mounting:

Line mounted

Ambient/Media temperature:

Standard

-20 ... +80°C max. (-4 ... 176°F)

For high temperature applications

+150°C (+302°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:

Body: brass

Valve: aluminium

Seals: NBR

Note: FPM Seals for high temperature version

Technical data, standard models

Symbol	Port size	Flow factor C *1)	Cv	Kv *2)	Weight (kg)	Service kit	Model
	G1/8	2,4	0,6	0,51	0,04	QS/520/00	S/520
	G1/4	4,3	1	0,92	0,09	QS/521/00	S/521
	G3/8	10,5	2,6	2,24	0,14	QS/532/00	S/532
	G1/2	17	4,2	3,62	0,21	QS/522/00	S/522
	G3/4	42	10,3	8,95	0,55	QS/523/00	S/523
	G1	55,5	13,6	11,8	1,10	QS/524/00	S/524

*1) Measured in dm³/(s.bar); *2) Measured in m³/h

Options selector

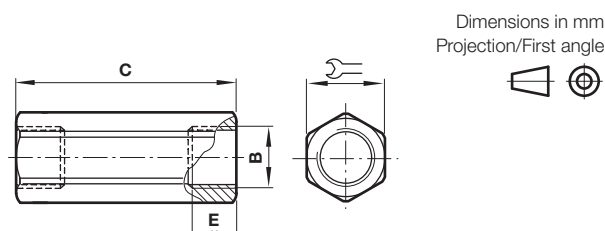
Design	Substitute
Standard	None
High temperature (150 °C)	T
Thread form	Substitute
NPT	C
ISO G, parallel	S

★★/5★★

Port size	Substitute
1/8"	20
1/4"	21
3/8"	32
1/2"	22
3/4"	23
1"	24

Dimensions

B	C	B	E		Model
G1/8	43	1/8	10	14	S/520
G1/4	48	1/4	11	19	S/521
G3/8	62	3/8	13	22	S/532
G1/2	76	1/2	17	27	S/522
G3/4	92	3/4	18	36	S/523
G1	124	1	25	49	S/524



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Inline Valves - Pilot

[Overview](#)

[Technical Details](#)



- Steel reinforced spool seals – for stability and reliability
- In-line ports – allows pipework to be kept neat and tidy
- Manual override fitted as standard

Medium:	Compressed Air
Operation:	3/2

Technical Details

Medium	Compressed Air
Operating Temperature	5 ... 50 °C
Operating Pressure	1.3 ... 10 bar
Operation	3/2
Materials - Body	Aluminium
Materials - Seals	Nitrile rubber
Range	M/20000
Series	Martonair
Brand	Norgren

- > Port size: Ø 4 ... 16 mm
O/D tube, BSP threads
- > 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.

Technical features

Medium:

Compressed air

Operating pressure:

10 bar (145 psi) max.

Vacuum:

750 mm of Hg

Thread sizes:

M5, M6, 1/8, 1/4, 3/8 and 1/2
ISO G, ISO Rc and ISO R

Releasable stainless steel grab-ring to grip PA or PUR 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.



Ambient/Media temperature:

-20°C ... +60°C (-4 ... 140°F)

Tube sizes:

4, 6, 8, 10, 12, 16 mm

Tubing types:

PA 11 or 12

PUR 85, 95 or 98 durometer

Warning:

The Norgren Pneufit® C range must not be used in vehicle air braking or ancillary systems. For push in fittings suitable for these applications, please refer to the Fleetfit range.

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: chemitech G-175L

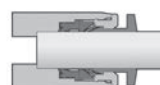
Method of assembly



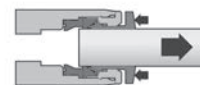
1. Ensure that the end of the tube is cut square and is free from burrs.



2. Push the tube through the collet into the fitting.

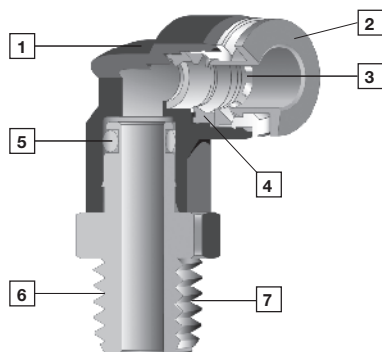


3. Continue pushing the tube through the 'O'-ring until it bottoms on the tube stop then pull back.



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

Components



- [1] Impact resistant PBT body in black
- [2] Release buttons are red for metric, grey for inch
- [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.

Option selector



Straight adaptors and connectors

Straight adaptor, BSPT thread (external + internal hex) C0125  Page 7	Straight adaptor, BSPP thread (external + internal hex) C0225  Page 7	Straight adaptor, metric or BSPT thread (internal hex only) C012A/C022A  Page 7	Female adaptor, metric or BSPP thread C0226  Page 7	Straight union C0020  Page 8	Straight union (unequal) C0020  Page 8	Stem reducer C0023  Page 8
Stem expander (stem/tube) C0023  Page 8	Bulkhead union C0029  Page 8	Straight adaptor, BSPP thread (female bulkhead) C0232  Page 8	Stem union (equal) C0022  Page 8	Stem union (unequal) C0022  Page 9	Plug C0004  Page 9	Cap (female plug) C0012  Page 9

Elbow adaptors and connectors

Union elbow C0040  Page 9	90° Swivel elbow adaptor, BSPT thread C0147  Page 9	90° Swivel elbow adaptor, BSPP thread C0247  Page 9	Stem elbow C0043  Page 10	90° Swivel elbow adaptor (extended), metric or BSPT thread C0154/C0254  Page 10	90° Swivel elbow adaptor (female), metric or BSPT thread C0148/C0248  Page 10	Bulkhead union elbow C0049  Page 10
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Y and quadruple connectors

Union Y (equal + unequal) C0082  Page 11	Swivel Y adaptor, BSPT thread C0188  Page 11	Swivel Y adaptor, BSPP thread C0288  Page 11	Stem Y (equal + unequal) C0084  Page 11	Quadruple stem reducer C0096  Page 12	Quadruple Y union, BSPT thread C0195  Page 12	Quadruple Y union, BSPP thread C0295  Page 12	Quadruple reducer C0097  Page 12
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Tee connectors and adaptors

Union tee (equal) C0060  Page 12	Union tee (unequal) C006A  Page 12	Swivel tee adaptor, BSPT thread C0167  Page 13	Swivel tee adaptor, BSPP thread C0267  Page 13	Swivel side tee adaptor (female), metric or BSPT thread C016C/C026C  Page 13	Stem tee (equal) C0063  Page 13
Stem tee (unequal) C0063  Page 13	Stem side tee (equal) C0064  Page 14	Stem side tee (unequal) C0064  Page 14	Swivel side tee adaptor, BSPT thread C0168  Page 14	Swivel side tee adaptor, BSPP thread C0268  Page 14	

Banjo flow controller

Banjo flow control (out),
BSPT thread
C0TA0



Page 20

Banjo flow control (out),
metric or BSPP thread
COK51



Page 20

Banjo flow control (in),
BSPT thread
COSA0



Page 21

Banjo flow control (in),
metric or BSPP thread
COL51



Page 21

Shrouded banjo (out),
BSPT thread
COTB0



Page 21

Shrouded banjo (out),
metric or BSPP thread
COKB0



Page 21

Swivel speed control
(out),
BSPT thread
COT56



Page 22

Swivel speed control
(out),
metric or BSPP thread
COK56



Page 22

Speed control and pilot
check,
metric or BSPT thread
C01GN



Page 23

Speed control and pilot
check,
metric or BSPT thread
C02GN



Page 23

In-line flow control
COOGE



Page 24

In-line flow control
C00GP



Page 24

Cross and manifolds

Union cross
C0090



Page 14

Manifold union
C00D3



Page 15

Male manifold, BSPT
thread
C01D3



Page 15

Stem manifold
C00J3



Page 15

Banjo, metric or BSPP
thread
C0A51



Page 15

Banjo (with top port),
metric or BSPT thread
COD51, COE51, COF51,
COG51



Page 15

2x Swivel elbow
adaptor,
BSPT thread
C0Q51



Page 16

2x Swivel elbow adap-
tor,
BSPP thread
C0B51



Page 16

3x Swivel elbow adap-
tor,
BSPT thread
COH51



Page 16

3x Swivel elbow adap-
tor,
BSPP thread
C0C51



Page 16

Single universal tee,
BSPT thread
C0N71



Page 17

Single universal tee,
BSPP thread
C0A71



Page 17

Double universal tee,
BSPT thread
COQ71



Page 17

Double universal tee,
BSPP thread
C0B71



Page 17

Triple universal tee,
BSPT thread
C0H71



Page 18

Triple universal tee,
BSPP thread
C0C71



Page 18

Branch adaptor,
BSPT thread
CON70



Page 18

Branch adaptor, metric
or BSPP thread
COA70



Page 18

Female branch adaptor,
BSPT thread
C0*7K



Page 19

Female branch adaptor,
metric or BSPP thread
C0*7J



Page 19

Double branch adaptor,
BSPT thread
C0Q70



Page 19

Double branch adaptor,
BSPP thread
C0B70



Page 19

Triple branch adaptor,
BSPT thread
COH70



Page 20

Triple branch adaptor,
BSPP thread
C0C70



Page 20

In-line non-return valve

In-line non-return valve
C00GL



Page 25

In-line non-return valve
(in), BSPT thread
C01G2



Page 25

In-line non-return valve
(in), metric or BSPP
thread
C02G2



Page 25

In-line non-return valve
(out), BSPT thread
C01G3



Page 25

In-line non-return valve
(out), metric or BSPP
thread
C02G3



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Self sealing adaptors

Straight adaptor,
BSPT thread
C0124



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Straight adaptor,
BSPP thread
C0224



Page 26

Straight union
C002J



Page 26

Swivel elbow,
BSPT thread
C014J



Page 26

Swivel elbow,
BSPP thread
C024J



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Hand valves

3/2 Shut-off valves,
BSPT thread C01GG



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3/2 Shut-off valves,
BSPT thread C01GH



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3/2 Shut-off valves,
BSPT thread C01GJ

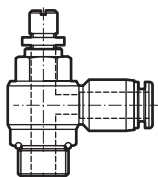
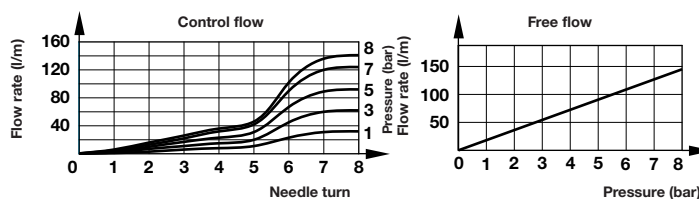
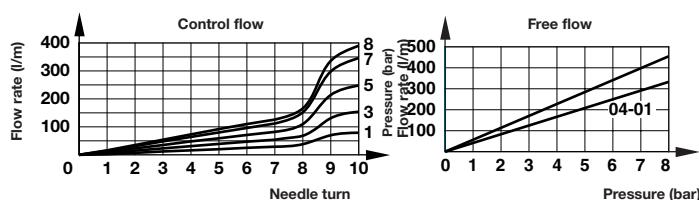
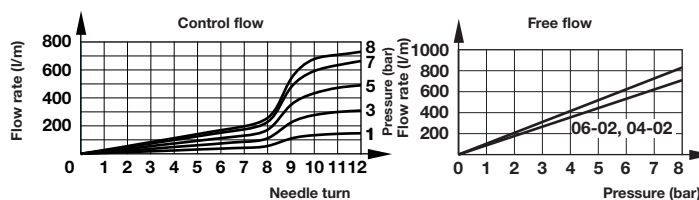
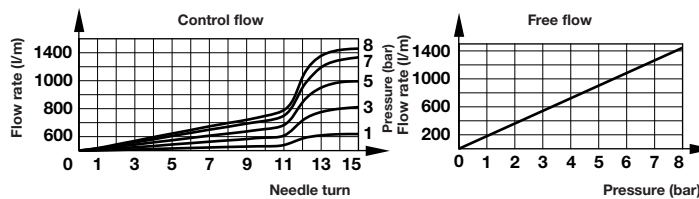
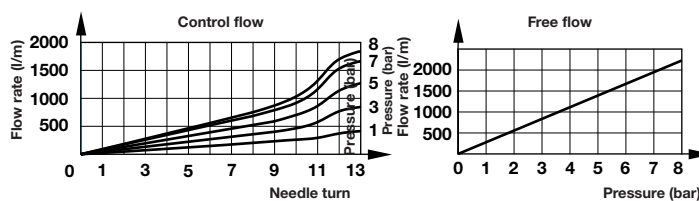
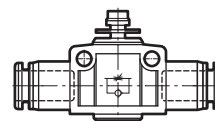
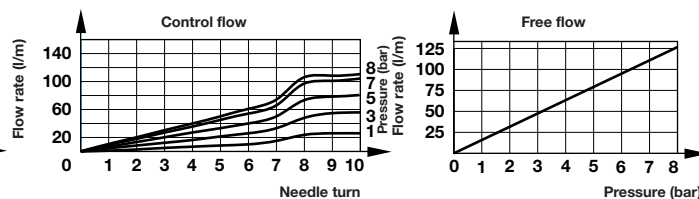
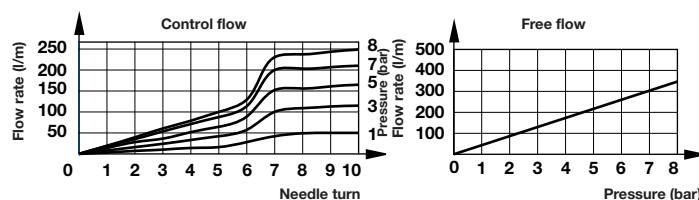
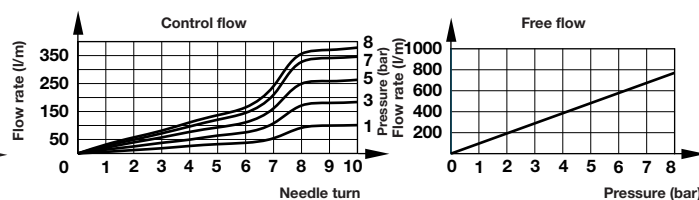
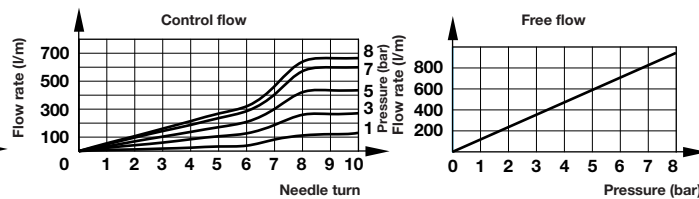
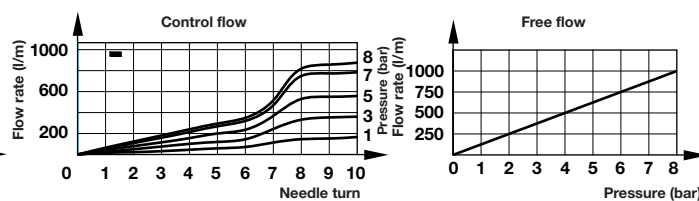


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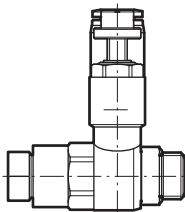
3/2 Shut-off valves
C01GF



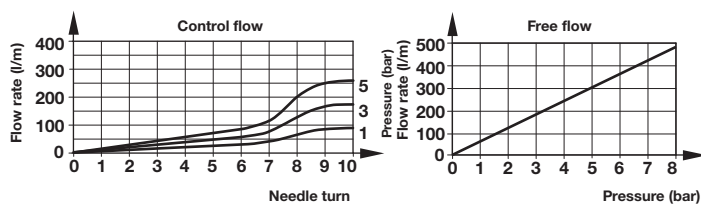
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**Speed controllers flowrate for C0K51, C0TA0,
C0L51, C0K56, C0T56 and C0SA0 banjo types**

**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, C00GP

C00G*0400

C00G*0600

C00G*0800

C00G*1000

C00G*1200


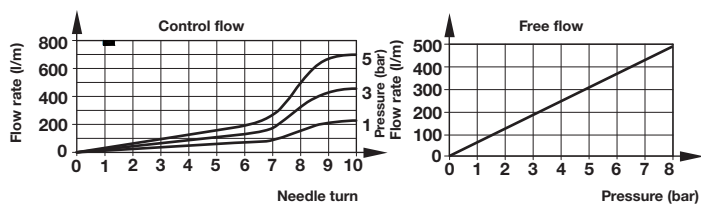
Speed controllers flowrate for C01GN and C02GN banjo types



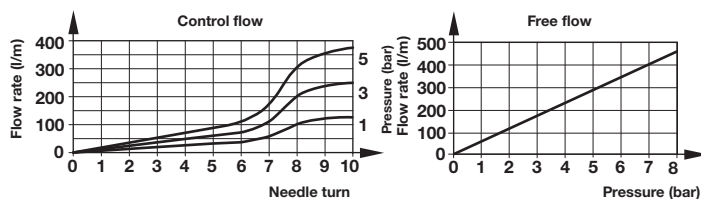
6 and 8 mm 1/8



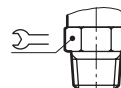
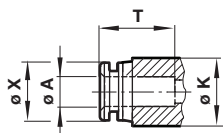
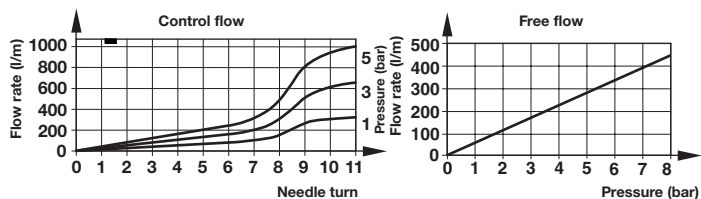
8, 10 and 12 mm 3/8



6 and 8 mm 1/4



10 and 12 mm 1/2

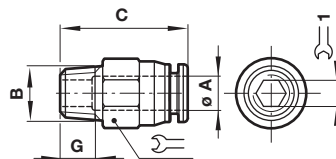


Technical data

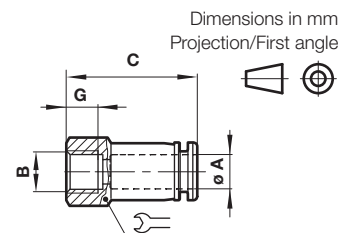
Ø A	Ø K	T*1)	Ø X
4	10,5	15	9,5
6	12,5	16,5	12
8	14,5	18,5	14
10	17,5	20	16,5
12	20,5	23	19
16	27	23,5	25

*1) Dimensions here and in the individual tables refer to the collet being in the 'IN' position.

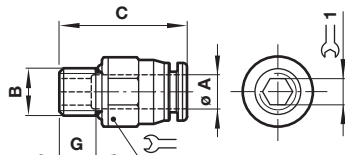
Thread	Recommended torque	Thread	Recommended torque
M5	1,5 Nm		
M6	2,3 Nm		
G1/8	10 Nm	R1/8	7 Nm
G1/4	15 Nm	R1/4	12 Nm
G3/8	25 Nm	R3/8	22 Nm
G1/2	40 Nm	R1/2	28 Nm

**Straight adaptor (external + internal hex)
C0125**


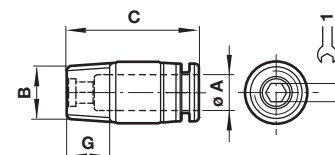
Ø A	B	C	G		1	Model
4	R1/8	21,5	8	10	3	C01250418
4	R1/4	20,5	10	14	3	C01250428
4	R3/8	22	11	17	3	C01250438
6	R1/8	22	8	12	4	C01250618
6	R1/4	21	10	14	5	C01250628
6	R3/8	22	11	17	5	C01250638
6	R1/2	29,5	14	19	5	C01250648
8	R1/8	27,5	8	14	5	C01250818
8	R1/4	25,5	10	14	6	C01250828
8	R3/8	23	11	17	6	C01250838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

**Female adaptor
C0226**


Ø A	B	C	G		Model
4	M5	26	7	12	C02260405
4	G1/8	26,5	9	14	C02260418
4	G1/4	28,5	11	17	C02260428
4	G3/8	30	12	22	C02260438
6	G1/8	27,5	9	14	C02260618
6	G1/4	29,5	11	17	C02260628
6	G3/8	30	12	22	C02260638
8	G1/8	28,5	9	14	C02260818
8	G1/4	30,5	11	17	C02260828
8	G3/8	31,5	12	22	C02260838
8	G1/2	34,5	14	24	C02260848
10	G1/8	31,5	9	17	C02261018
10	G1/4	31,5	11	17	C02261028
10	G3/8	32,5	12	22	C02261038
10	G1/2	34,5	14	24	C02261048
12	G1/4	34,5	11	22	C02261228
12	G3/8	34,5	12	22	C02261238
12	G1/2	36,5	14	24	C02261248

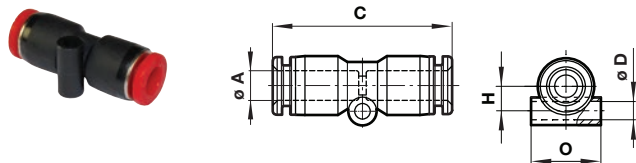
**Straight adaptor (external + internal hex)
C0225**


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

**Straight adaptor (internal hex only)
C012A, C022A**


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

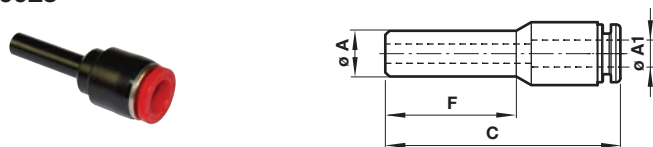
Straight union C0020



Ø A	C	Ø D	H	O	Model
4	34,5	3,3	4,5	10,5	C00200400
6	37	3,3	5,5	12,5	C00200600
8	39,5	4,3	7	14,5	C00200800
10	43	4,3	8	17,5	C00201000
12	48	4,3	9,5	20,5	C00201200
16	51	-	-	-	C00201600*

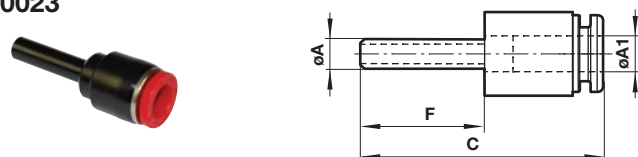
*No nail hole in 16 mm

Stem reducer C0023



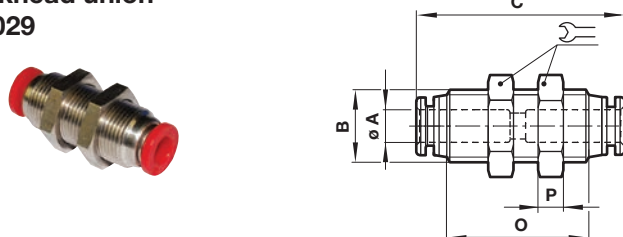
Ø A	Ø A1	C	F	Model
6	4	41	21,5	C00230604
8	4	42	22,5	C00230804
8	6	44,5	23,5	C00230806
10	6	47,5	26,5	C00231006
10	8	49,5	27,5	C00231008
12	6	52	29,5	C00231206
12	8	52,5	30,5	C00231208
12	10	56,5	31	C00231210
16	12	57,5	33	C00231612

Stem expander (stem/tube) C0023



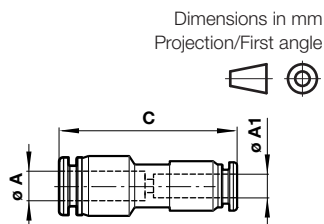
Ø A	Ø A1	C	F	Model
4	6	41	24	C00230406
6	8	44	26,5	C00230608

Bulkhead union C0029



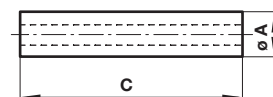
Ø A	B	C	O	P	Model
4	M12x1	35,5	24,5	4	C00290400
6	M14x1	40	27,5	4	C00290600
8	M16x1	42	29,5	5	C00290800
10	M20x1	45	31,5	5	C00291000
12	M22x1	50,5	36	5	C00291200

Straight union (unequal) C0020



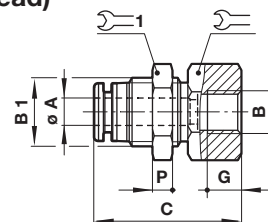
Ø A	Ø A1	C	Model
6	4	36,5	C00200604
8	4	38,5	C00200804
8	6	37,5	C00200806
10	6	40	C00201006
10	8	41	C00201008
12	8	46	C00201208
12	10	44	C00201210
16	12	49,5	C00201612

Stem union (equal) C0022

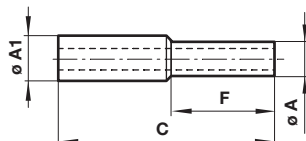


Ø A	C	Model
4	37	C00220400
6	38	C00220600
8	41	C00220800
10	44	C00221000
12	49	C00221200
16	53	C00221600

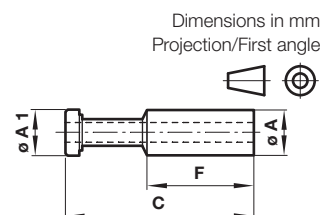
Straight adaptor (female bulkhead) C0232



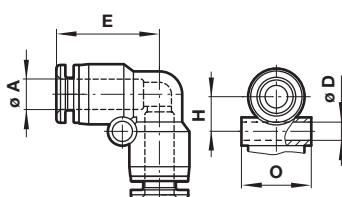
Ø A	B	B1	C	G	P	1	Model
4	G1/8	M12x1	26,5	9	4	14	C02320418
4	G1/4	M12x1	29	11	4	14	C02320428
4	G3/8	M12x1	30	12	4	14	C02320438
6	G1/8	M14x1	28,5	9	4	17	C02320618
6	G1/4	M14x1	30,5	11	4	17	C02320628
6	G3/8	M14x1	31,5	12	4	17	C02320638
8	G1/8	M16x1	29,5	9	5	19	C02320818
8	G1/4	M16x1	31,5	11	5	19	C02320828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

**Stem union (unequal)
C0022**


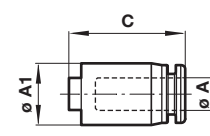
Ø A	Ø A1	C	F	Model
4	6	38	18	C00220604
6	8	41,5	20,5	C00220806
8	10	43,5	21,5	C00221008
10	12	46,5	22,5	C00221210
12	16	52	25	C00221612

**Plug
C0004**


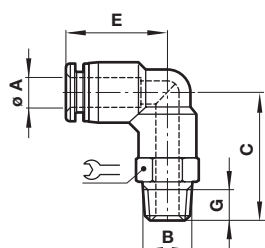
Ø A	Ø A1	C	F	Model
4	4	30	17,5	C00040400
6	6	34	18,5	C00040600
8	8	38	21	C00040800
10	10	42	24	C00041000
12	12	46	29,5	C00041200
16	16	50	30	C00041600

**Union elbow
C0040**


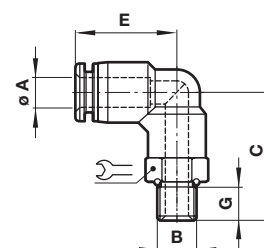
Ø A	Ø D	E	H	O	Model
4	3,3	19	8,5	10,5	C00400400
6	3,3	21	7,5	12,5	C00400600
8	4,3	22,5	9	14,5	C00400800
10	4,3	26	12	18	C00401000
12	4,3	30	13,5	21	C00401200
16	4,3	34	16	25,5	C00401600

**Cap (female plug)
C0012**


Ø A	Ø A1	C	Model
4	10,5	18	C00120400
6	12,5	19	C00120600
8	14,5	21	C00120800
10	17,5	23	C00121000
12	19,5	25	C00121200
16	24	25	C00121600

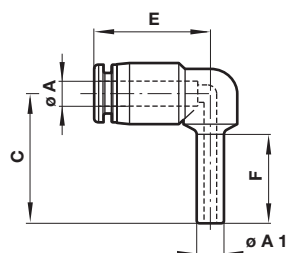
**90° Swivel elbow adaptor
C0147**


Ø A	B	C	E	G	Symbol	Model
4	R1/8	24,5	18,5	8	10	C01470418
4	R1/4	26,5	18,5	10	14	C01470428
4	R3/8	27,5	18,5	11	17	C01470438
6	R1/8	26,5	20,5	8	12	C01470618
6	R1/4	29,5	20,5	10	14	C01470628
6	R3/8	30,5	20,5	11	17	C01470638
6	R1/2	33,5	20,5	14	21	C01470648
8	R1/8	28	23	8	14	C01470818
8	R1/4	31	23	10	14	C01470828
8	R3/8	32	23	11	17	C01470838
8	R1/2	35	23	14	21	C01470848
10	R1/8	28,5	23,5	8	17	C01471018
10	R1/4	31,5	23,5	10	17	C01471028
10	R3/8	32,5	23,5	11	17	C01471038
10	R1/2	35,5	23,5	14	21	C01471048
12	R1/8	32,5	27,5	8	19	C01471218
12	R1/4	34,5	27,5	10	19	C01471228
12	R3/8	35,5	27,5	11	19	C01471238
12	R1/2	38,5	27,5	14	21	C01471248
16	R3/8	43	32,5	11	24	C01471638
16	R1/2	46	32,5	14	24	C01471648

**90° Swivel elbow adaptor
C0247**


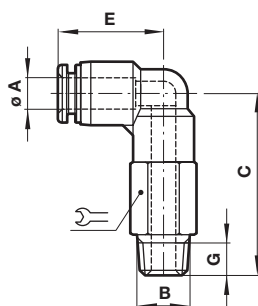
Ø A	B	C	E	G	Symbol	Model
4	M5	22	18,5	4,5	10	C02470405
4	M6	22	18,5	4,5	10	C02470406
4	G1/8	22,5	18,5	6	14	C02470418
4	G1/4	24,5	18,5	8	17	C02470428
4	G3/8	24,5	18,5	8	20	C02470438
6	M5	24	20,5	4,5	12	C02470605
6	M6	24	20,5	4,5	12	C02470606
6	G1/8	24,5	20,5	6	14	C02470618
6	G1/4	26,5	20,5	8	17	C02470628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

Stem elbow
C0043



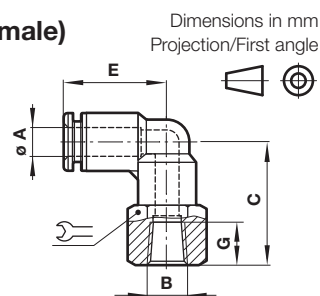
Ø A	Ø A1	C	E	F	Model
4	4	28,5	19	22	C00430400
6	6	31,5	20,5	24	C00430600
8	8	34,5	23	26	C00430800
10	10	38	24	28	C00431000
12	12	41	28	30	C00431200
16	16	48,5	32	35	C00431600

90° Swivel elbow adaptor (extended)
C0154/C0254



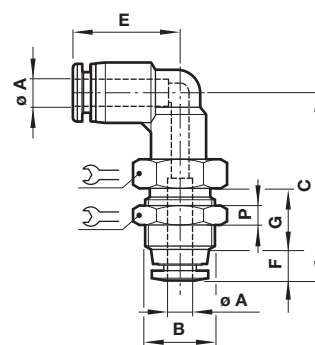
Ø A	B	C	E	G		Model
4	M5	33,5	18,5	4,6	10	C02540405
4	M6	33	18,5	4,6	10	C02540406
4	R1/8	35,5	18,5	8	10	C01540418
4	R1/4	37,5	18,5	10	14	C01540428
4	R3/8	38,5	18,5	11	17	C01540438
6	M5	38	20,5	4,5	12	C02540605
6	M6	37,5	20,5	4,5	12	C02540606
6	R1/8	40	20,5	8	12	C01540618
6	R1/4	42	20,5	10	14	C01540628
6	R3/8	43	20,5	11	17	C01540638
6	R1/2	46	20,5	14	21	C01540648
8	R1/8	44	23	8	14	C01540818
8	R1/4	46	23	10	14	C01540828
8	R3/8	47	23	11	17	C01540838
8	R1/2	50	23	14	21	C01540848
10	R1/8	47,5	23,5	8	17	C01541018
10	R1/4	49,5	23,5	10	17	C01541028
10	R3/8	50,5	23,5	11	17	C01541038
10	R1/2	53,5	23,5	14	21	C01541048
12	R1/8	54	27,5	8	19	C01541218
12	R1/4	56	27,5	10	19	C01541228
12	R3/8	57	27,5	11	19	C01541238
12	R1/2	60	27,5	14	21	C01541248
16	R3/8	69	32,5	11	24	C01541638
16	R1/2	72	32,5	14	24	C01541648

90° Swivel elbow adaptor (female)
C0148/C0248

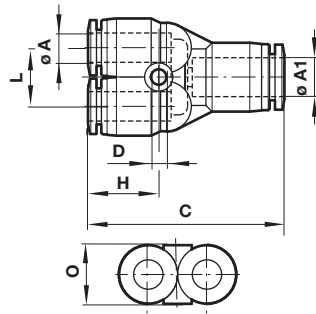


Ø A	B	C	E	G		Model
4	M5	21,5	18,5	4,5	10	C02480405
4	M6	21,5	18,5	4,5	10	C02480406
4	R1/8	22,5	18,5	9	14	C01480418
4	R1/4	24,5	18,5	11	17	C01480428
6	M5	23,5	20,5	4,5	12	C02480605
6	M6	23,5	20,5	4,5	12	C02480606
6	R1/8	24,5	20,5	9	14	C01480618
6	R1/4	26,5	20,5	11	17	C01480628
6	R3/8	27,5	20,5	12	21	C01480638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

Bulkhead union elbow
C0049



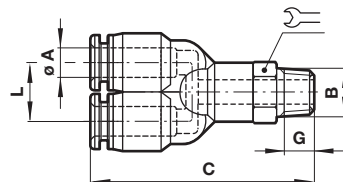
Ø A	B	C	E	F	G	P		Model
4	M12x1	32,5	18,5	5,5	9	4	14	C00490400
6	M14x1	38	20,5	6	11	4	17	C00490600
8	M16x1	40,5	23	6,5	11,5	5	19	C00490800
10	M20x1	42,5	23,5	7	12	5	24	C00491000
12	M22x1	48	27,5	7,5	15	5	26	C00491200

**Union Y
C0082**

Equal

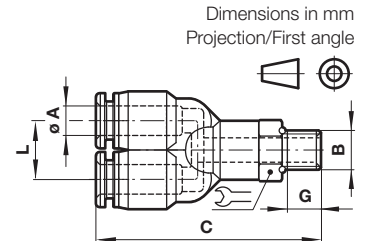
Ø A	Ø A1	C	D	H	L	O	Model
4	4	37	3,3	14,5	10,5	10,5	C00820400
6	6	40	3,3	16,5	12,5	12,5	C00820600
8	8	43	4,3	18,5	14,5	14,5	C00820800
10	10	47,5	4,3	19	17,5	17,5	C00821000
12	12	53	4,3	22	20,5	20,5	C00821200

Unequal

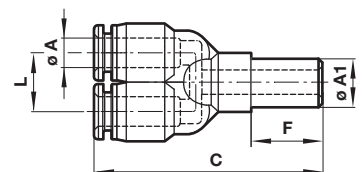
Ø A	Ø A1	C	D	H	L	O	Model
4	6	38	3,3	15	10,5	10,5	C00820604
4	8	39,5	3,3	15	10,5	15	C00820804
6	8	41	4,3	16	12,5	13	C00820806
6	10	43	3,3	16,5	13	17,5	C00821006
8	10	43	4,3	17	14,5	15	C00821008
8	12	48	3,3	17,5	15	21	C00821208
10	12	46,5	4,3	18,5	17,5	18	C00821210

**Swivel Y adaptor
C0188**


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

**Swivel Y adaptor
C0288**


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

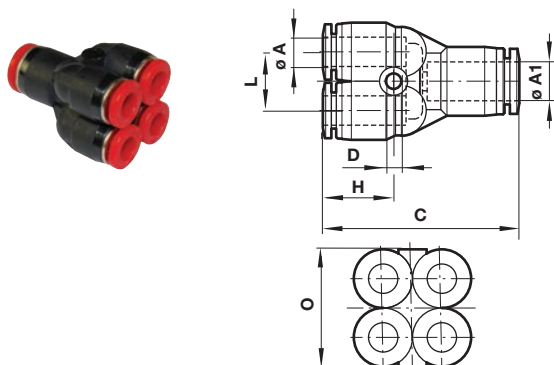
**Stem Y
C0084**

Equal

Ø A	Ø A1	C	F	L	Model
4	4	49,5	22	10,5	C00840400
6	6	54,5	24	12,5	C00840600
8	8	60	26	14,5	C00840800
10	10	66	28	17,5	C00841000
12	12	71,5	30	20,5	C00841200

Unequal

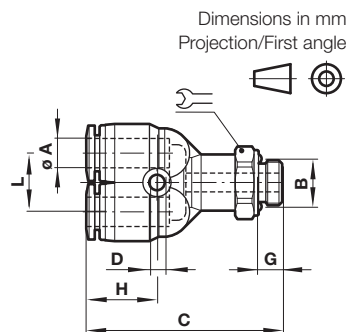
Ø A	Ø A1	C	F	L	Model
4	6	51,5	24	10,5	C00840604
6	8	56,5	26	12,5	C00840806
8	10	62	28	14,5	C00841008
10	12	68	30	17,5	C00841210

Quadruple stem reducer C0096



Ø A	Ø A1	C	Ø D	H	L	O	Model
4	6	37	3,3	14	10,5	21	C00960604
6	8	40,5	3,3	15,5	12,5	25,5	C00960806

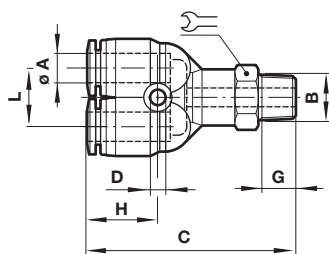
Quadruple Y union C0295



Ø A	B	C	Ø D	G	H	L	O *	Model
4	G1/8	46	3,3	5	14	10,5	21	C02950418
4	G1/4	49	3,3	6,5	14	10,5	21	C02950428
6	G1/8	49	3,3	6,5	15,5	12,5	25,5	C02950618
6	G1/4	52	3,3	8	15,5	12,5	25,5	C02950628

* see drawing C0096 series

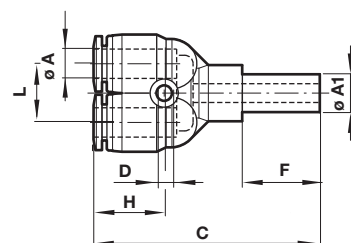
Quadruple Y union C0195



Ø A	B	C	Ø D	G	H	L	O	Model
4	R1/8	44	3,3	8	14	10,5	21	C01950418
4	R1/4	48	3,3	10	14	10,5	21	C01950428
6	R1/8	48	3,3	8	15,5	12,5	25,5	C01950618
6	R1/4	51	3,3	10	15,5	12,5	25,5	C01950628

* see drawing C0096 series

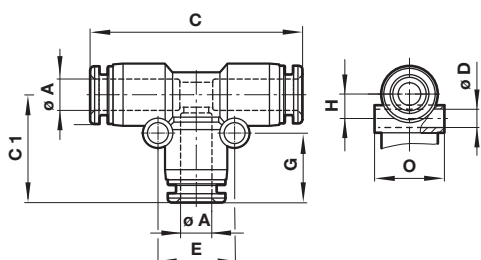
Quadruple reducer C0097



Ø A	Ø A1	C	Ø D	F	H	L	O *	Model
4	6	43,5	3,3	17	14	12,5	21	C00970604
6	8	48	3,3	19	15,5	14,5	25,5	C00970806

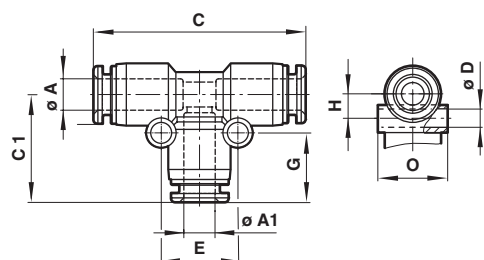
* see drawing C0096 series

Union T (equal) C0060

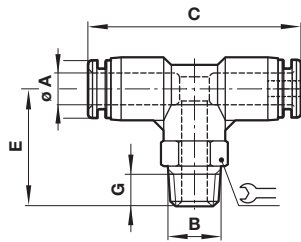


Ø A	C	C1	Ø D	E	G	H	O	Model
4	36,5	19	3,3	13	12,5	8,5	10,5	C00600400
6	42	21,5	3,3	15	13,5	7,5	12,5	C00600600
8	45	23,5	4,3	18	15	9	14,5	C00600800
10	48	25,5	4,3	20	15,5	11	17,5	C00601000
12	57	29,5	4,3	26	16,5	12,5	20,5	C00601200
16	68	34,5	4,3	32	18	16	25,5	C00601600

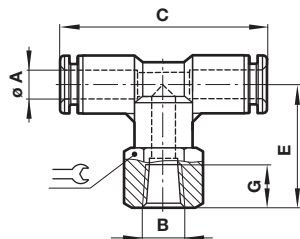
Union T (unequal) C006A



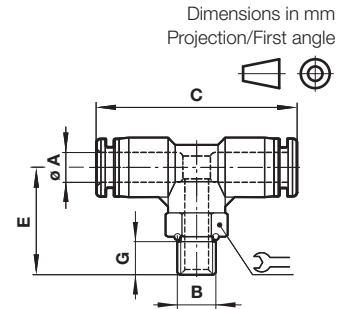
Ø A	Ø A1	C	C1	Ø D	E	G	H	O	Model
6	4	41,5	19	3,3	14	12,5	8	12,5	C006A0604
8	6	45	22	4,3	17	13,5	9,5	15	C006A0806
10	6	49	23	4,3	17	13,5	11	17,5	C006A1006
10	8	49	25	4,3	19	15	11	17,5	C006A1008
12	8	56	25,5	4,3	19	15	12,5	20,5	C006A1208
12	10	56	27,5	4,3	22	15,5	12,5	20,5	C006A1210
16	10	61	30,5	4,3	23	15,5	16	25,5	C006A1610
16	12	63,5	33	4,3	26	16,5	16	25,5	C006A1612

**Swivel tee adaptor
C0167**


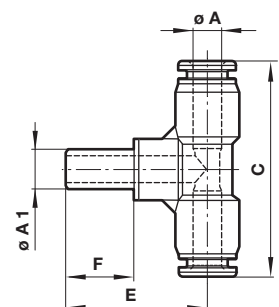
Ø A	B	C	E	G		Model
4	R1/8	37,5	24,5	8	10	C01670418
4	R1/4	37,5	26,5	10	14	C01670428
4	R3/8	37,5	27,5	11	17	C01670438
6	R1/8	41	26,5	8	12	C01670618
6	R1/4	41	29,5	10	14	C01670628
6	R3/8	41	30,5	11	17	C01670638
6	R1/2	41	33,5	14	21	C01670648
8	R1/8	44	28	8	14	C01670818
8	R1/4	44	31	10	14	C01670828
8	R3/8	44	32	11	17	C01670838
8	R1/2	44	35	14	21	C01670848
10	R1/8	47	28,5	8	17	C01671018
10	R1/4	47	32	10	17	C01671028
10	R3/8	47	32,5	11	17	C01671038
10	R1/2	47	35,5	14	21	C01671048
12	R1/8	55	32,5	8	19	C01671218
12	R1/4	55	34,5	10	19	C01671228
12	R3/8	55	35,5	11	19	C01671238
12	R1/2	55	38,5	14	21	C01671248
16	R3/8	64,5	43	11	24	C01671638
16	R1/2	64,5	46	14	24	C01671648

**Swivel tee adaptor (female)
C016C/C026C**


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

**Swivel tee adaptor
C0267**


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

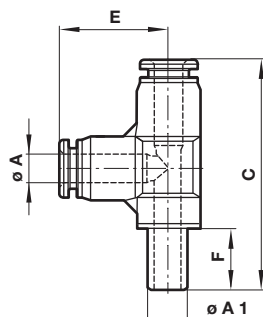
**Stem tee
C0063**

Equal

Ø A	Ø A1	C	E	F	Model
4	4	37,5	32,5	24	C00630400
6	6	41	34,5	25	C00630600
8	8	44,5	36	26	C00630800
10	10	47	37,5	28	C00631000
12	12	55	39	30	C00631200

Unequal

Ø A	Ø A1	C	E	F	Model
4	6	37,5	33,5	25	C00630604
6	8	41	35,5	28	C00630806
8	10	44,5	38,5	28	C00631008
10	12	47	39,5	30	C00631210

Stem side tee C0064



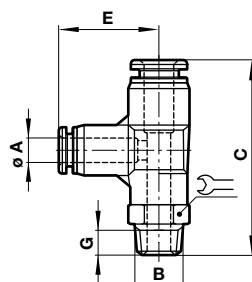
Equal

Ø A	Ø A1	C	E	F	Model
4	4	58	20,5	17	C00640400
6	6	52,5	21,5	17,5	C00640600
8	8	67	23,5	18,5	C00640800
10	10	73	25,5	19,5	C00641000
12	12	82	30	22	C00641200

Unequal

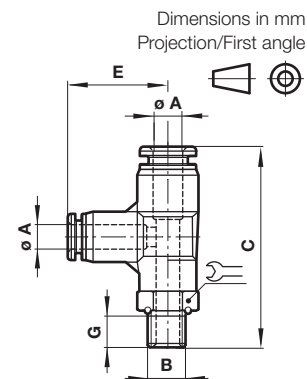
Ø A	Ø A1	C	E	F	Model
4	6	59	20	17	C00640604
6	8	63,5	21,5	17,5	C00640806
8	10	69,5	23,5	18,5	C00641008
10	12	75	25,5	19,5	C00641210

Swivel side tee adaptor C0168



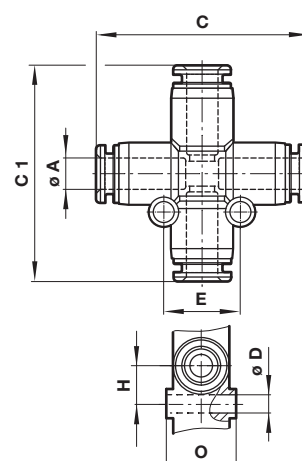
Ø A	B	C	E	G	Model
4	R1/8	45	20	8	C01680418
4	R1/4	48	20	10	C01680428
4	R3/8	49	20	11	C01680438
6	R1/8	48,5	21,5	8	C01680618
6	R1/4	51	21,5	10	C01680628
6	R3/8	52	21,5	11	C01680638
6	R1/2	55	21,5	14	C01680648
8	R1/8	52	23,5	8	C01680818
8	R1/4	55	23,5	10	C01680828
8	R3/8	56	23,5	11	C01680838
8	R1/2	59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

Swivel side tee adaptor C0268

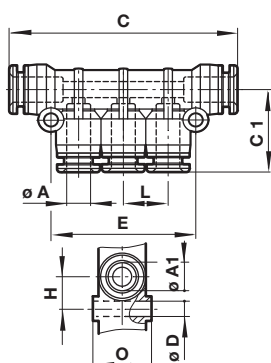


Ø A	B	C	E	G	Model
4	M5	42	20	4,5	C02680405
4	M6	42	20	4,5	C02680406
4	G1/8	43	20	6	C02680418
4	G1/4	45	20	8	C02680428
4	G3/8	45	20	8	C02680438
6	M5	46	21,5	4,5	C02680605
6	M6	46	21,5	4,5	C02680606
6	G1/8	47	21,5	6	C02680618
6	G1/4	49	21,5	8	C02680628
6	G3/8	50	21,5	9	C02680638
8	G1/8	50	23,5	6	C02680818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

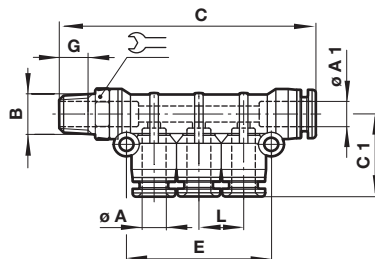
Union cross C0090



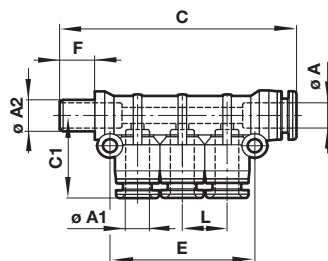
Ø A	C	C1	Ø D	E	H	O	Model
4	36,5	38	3,3	13	6,5	10,5	C00900400
6	42	42,5	4,3	15	7,5	12,5	C00900600
8	45	47	4,3	18	9	14,5	C00900800
10	48	50,5	4,3	20	10	17,5	C00901000
12	55	57	4,3	24	12	20,5	C00901200

**Manifold union
C00D3**


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

**Male manifold
C01D3**


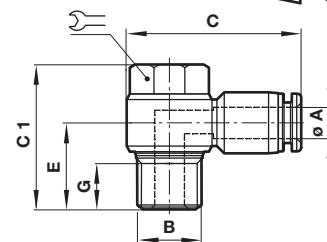
Ø A	Ø A1	B	C	C1	E	G	L	Model
4	6	R1/8	72	24	34	8	10,5	C01D30418
4	8	R1/8	74	28,5	35	8	10,5	C01D30428
6	8	R1/4	82,5	34	41	10	12,5	C01D30628
8	10	R3/8	95	34,5	47	10	14,5	C01D30838

**Stem manifold
C00J3**


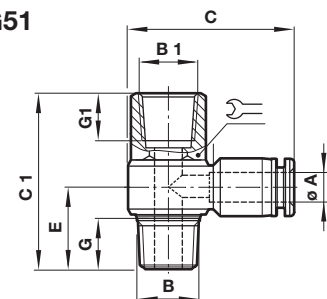
Ø A	Ø A1	Ø A2	C	C1	E	F	L	Model
4	6	6	84,5	24	34	25	10,5	C00J30604
4	8	8	89,5	28,5	35	28,5	10,5	C00J30804
6	8	8	95,5	34	41	28,5	12,5	C00J30806
8	10	10	109,5	34,5	47	31	14,5	C00J31008

**Banjo
C0A51**


Dimensions in mm
Projection/First angle

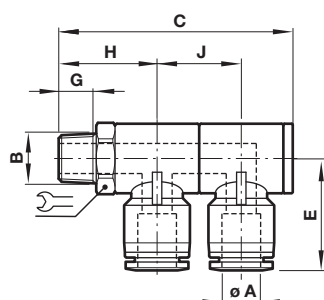


Ø A	B	C	C1	E	G	Model
4	M5	25	18	10	3,5	C0A510405
4	G1/8	30,5	25	14,5	11	C0A510418
4	G1/4	34,5	29	16,5	10	C0A510428
6	M5	18	28	11	3,5	C0A510605
6	G1/8	31	25	14,5	8	C0A510618
6	G1/4	35	29	16,5	10	C0A510628
6	G3/8	38,5	32,5	20,5	11	C0A510638
8	G1/8	33	25	13,5	8	C0A510818
8	G1/4	37	29	16	10	C0A510828
8	G3/8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

**Banjo (with top port)
C0D51/C0E51/C0F51/C0G51**


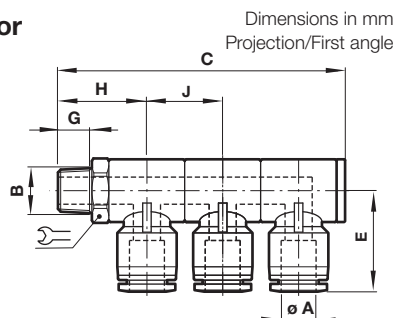
Ø A	B & B1	C	C1	E	G	G1	Model
4	M5	25	20	10	3,5	6	C0D510405
4	R1/8	30,5	30	14,5	9	8	C0E510418
4	R1/4	34,5	35,5	18	11	10	C0F510428
6	M5	28	20	11	3,5	6	C0D510605
6	R1/8	31	30	14,5	9	8	C0E510618
6	R1/4	35	35,5	18	11	10	C0F510628
6	R3/8	38,5	41	21	12	11	C0G510638
8	R1/8	33	30	15,5	9	8	C0E510818
8	R1/4	38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

2x Swivel elbow adaptor C0Q51



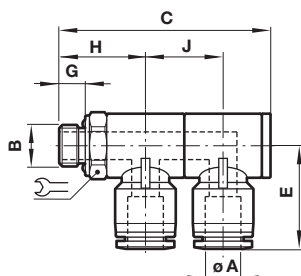
Ø A	B	C	E	G	H	J		Model
4	R1/8	52	24	8	22,5	18	14	C0Q510418
4	R1/4	63	26	10	27,5	22	17	C0Q510428
4	R3/8	65	28	11	29	22	21	C0Q510438
4	R1/2	74	30	14	34	24	24	C0Q510448
6	R1/8	52	25	8	22,5	18	14	C0Q510618
6	R1/4	63	27	10	27,5	22	17	C0Q510628
6	R3/8	65	28,5	11	29	22	21	C0Q510638
6	R1/2	74	30	14	34	24	24	C0Q510648
8	R1/8	52	27	8	22,5	18	14	C0Q510818
8	R1/4	63	28,5	10	27,5	22	17	C0Q510828
8	R3/8	65	30,5	11	29	22	21	C0Q510838
8	R1/2	74	32	14	34	24	24	C0Q510848
10	R1/8	52	28,5	8	22,5	18	14	C0Q511018
10	R1/4	63	30,5	10	27,5	22	17	C0Q511028
10	R3/8	65	32,5	11	29	22	21	C0Q511038
10	R1/2	74	34,5	14	34	24	24	C0Q511048
12	R1/4	63	36	10	27,5	22	17	C0Q511228
12	R3/8	65	36	11	29	22	21	C0Q511238
12	R1/2	74	38	14	34	24	24	C0Q511248

3x Swivel elbow adaptor C0H51



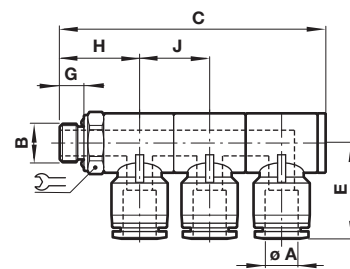
Ø A	B	C	E	G	H	J		Model
4	R1/8	70	24	8	22,5	18	14	C0H510418
4	R1/4	85	26	10	27,5	22	17	C0H510428
4	R3/8	87	28	11	29	22	21	C0H510438
4	R1/2	97,5	30	14	34	24	24	C0H510448
6	R1/8	70	25	8	22,5	18	14	C0H510618
6	R1/4	85	27	10	27,5	22	17	C0H510628
6	R3/8	87	28,5	11	29	22	21	C0H510638
6	R1/2	97,5	30	14	34	24	24	C0H510648
8	R1/8	70	27	8	22,5	18	14	C0H510818
8	R1/4	85	28,5	10	27,5	22	17	C0H510828
8	R3/8	87	30,5	11	29	22	21	C0H510838
8	R1/2	97,5	32	14	34	24	24	C0H510848
10	R1/8	70	28,5	8	22,5	18	14	C0H511018
10	R1/4	85	30,5	10	27,5	22	17	C0H511028
10	R3/8	87	32,5	11	29	22	21	C0H511038
10	R1/2	97,5	34,5	14	34	24	24	C0H511048
12	R1/4	85	36	10	27,5	22	17	C0H511228
12	R3/8	87	36	11	29	22	21	C0H511238
12	R1/2	87,5	38	14	34	24	24	C0H511248

2x Swivel elbow adaptor C0B51

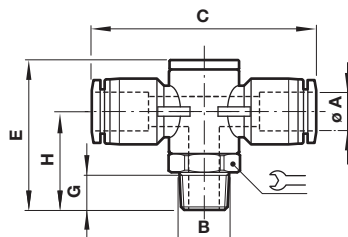


Ø A	B	C	E	G	H	J		Model
4	G1/8	50	24	5	20,5	18	14	C0B510418
4	G1/4	61	26	6,5	25,5	22	17	C0B510428
4	G3/8	62	28	6,5	26	22	21	C0B510438
4	G1/2	70	30	8	29,5	24	24	C0B510448
6	G1/8	50	25	5	20,5	18	14	C0B510618
6	G1/4	61	27	6,5	25,5	22	17	C0B510628
6	G3/8	62	28,5	6,5	26	22	21	C0B510638
6	G1/2	70	30	8	29,5	24	24	C0B510648
8	G1/8	50	27	5	20,5	18	14	C0B510818
8	G1/4	61	28,5	6,5	25,5	22	17	C0B510828
8	G3/8	62	30,5	6,5	26	22	21	C0B510838
8	G1/2	70	32	8	29,5	24	24	C0B510848
10	G1/8	50	28,5	5	20,5	18	14	C0B511018
10	G1/4	61	30,5	6,5	25,5	22	17	C0B511028
10	G3/8	62	32,5	6,5	26	22	21	C0B511038
10	G1/2	70	34,5	8	29,5	24	24	C0B511048
12	G1/4	61	36	6,5	25,5	22	17	C0B511228
12	G3/8	62	36	6,5	26	22	21	C0B511238
12	G1/2	70	38	8	29,5	24	24	C0B511248

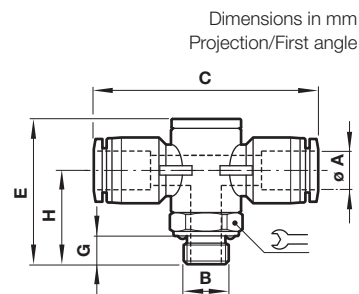
3x Swivel elbow adaptor C0C51



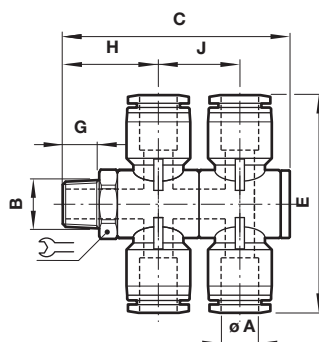
Ø A	B	C	E	G	H	J		Model
4	G1/8	68	24	5	20,5	18	14	C0C510418
4	G1/4	83	26	6,5	25,5	22	17	C0C510428
4	G3/8	84	28	6,5	26	22	21	C0C510438
4	G1/2	93	30	8	29,5	24	24	C0C510448
6	G1/8	68	25	5	20,5	18	14	C0C510618
6	G1/4	83	27	6,5	25,5	22	17	C0C510628
6	G3/8	84	28,5	6,5	26	22	21	C0C510638
6	G1/2	93	30	8	29,5	24	24	C0C510648
8	G1/8	68	27	5	20,5	18	14	C0C510818
8	G1/4	83	28,5	6,5	25,5	22	17	C0C510828
8	G3/8	84	30,5	6,5	26	22	21	C0C510838
8	G1/2	93	32	8	29,5	24	24	C0C510848
10	G1/8	68	28,5	5	20,5	18	14	C0C511018
10	G1/4	83	30,5	6,5	25,5	22	17	C0C511028
10	G3/8	84	32,5	6,5	26	22	21	C0C511038
10	G1/2	83	34,5	8	29,5	24	24	C0C511048
12	G1/4	83	34	6,5	25,5	22	17	C0C511228
12	G3/8	84	35	6,5	26	22	21	C0C511238
12	G1/2	93	38	8	29,5	24	24	C0C511248

**Single universal tee
C0N71**


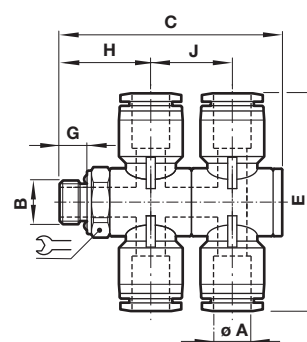
Ø A	B	C	E	G	H	90°	Model
4	R1/8	47	34	8	25,5	14	C0N710418
4	R1/4	50,5	41	10	27,5	17	C0N710428
4	R3/8	54,5	43	11	29	21	C0N710438
4	R1/2	58,5	50	14	34	24	C0N710448
6	R1/8	48,5	34	8	22,5	14	C0N710618
6	R1/4	52	41	10	27,5	17	C0N710628
6	R3/8	56	43	11	29	21	C0N710638
6	R1/2	58,5	50	14	34	24	C0N710648
8	R1/8	52	34	8	22,5	14	C0N710818
8	R1/4	55,5	41	10	27,5	17	C0N710828
8	R3/8	59,5	43	11	29	21	C0N710838
8	R1/2	63,5	50	14	34	24	C0N710848
10	R1/8	56	34	8	22,5	14	C0N711018
10	R1/4	59,5	41	10	27,5	17	C0N711028
10	R3/8	63,5	43	11	29	21	C0N711038
10	R1/2	67	50	14	34	24	C0N711048
12	R1/4	66	41	10	27,5	17	C0N711228
12	R3/8	70	43	11	29	21	C0N711238
12	R1/2	74,5	50	14	34	24	C0N711248

**Single universal tee
C0A71**


Ø A	B	C	E	G	H	90°	Model
4	G1/8	47	32	5	20,5	14	C0A710418
4	G1/4	50,5	39	6,5	25,5	17	C0A710428
4	G3/8	54,5	40	6,5	26	21	C0A710438
4	G1/2	58,5	45,5	8	29,5	24	C0A710448
6	G1/8	48,5	32	5	20,5	14	C0A710618
6	G1/4	52	39	6,5	25,5	17	C0A710628
6	G3/8	56	40	6,5	26	21	C0A710638
6	G1/2	58,5	45,5	8	29,5	24	C0A710648
8	G1/8	52	32	5	20,5	14	C0A710818
8	G1/4	55,5	39	6,5	25,5	17	C0A710828
8	G3/8	59,5	40	6,5	26	21	C0A710838
8	G1/2	62,5	45,5	8	29,5	24	C0A710848
10	G1/8	56	32	5	20,5	14	C0A711018
10	G1/4	59,5	39	6,5	25,5	17	C0A711028
10	G3/8	63,5	40	6,5	26	21	C0A711038
10	G1/2	67	45,5	8	29,5	24	C0A711048
12	G1/4	66	39	6,5	25,5	17	C0A711228
12	G3/8	70	40	6,5	26	21	C0A711238
12	G 1/2	74,5	45,5	8	29,5	24	C0A711248

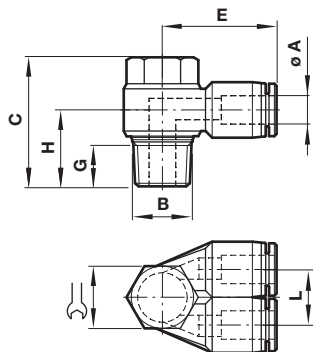
**Double universal tee
C0Q71**


Ø A	B	C	E	G	H	J	90°	Model
4	R1/8	52	47	8	22,5	18	14	C0Q710418
4	R1/4	63	50,5	10	27,5	22	17	C0Q710428
4	R3/8	65	54,5	11	29	22	21	C0Q710438
4	R1/2	74	58,5	14	34	24	24	C0Q710448
6	R1/8	52	48,5	8	22,5	18	14	C0Q710618
6	R1/4	63	52	10	27,5	22	17	C0Q710628
6	R3/8	65	56	11	29	22	21	C0Q710638
6	R1/2	74	58,5	14	34	24	24	C0Q710648
8	R1/8	52	52	8	22,5	18	14	C0Q710818
8	R1/4	63	55,5	10	27,5	22	17	C0Q710828
8	R3/8	65	59,5	11	29	22	21	C0Q710838
8	R1/2	74	62,5	14	34	24	24	C0Q710848
10	R1/8	52	56	8	22,5	18	14	C0Q711018
10	R1/4	63	59,5	10	27,5	22	17	C0Q711028
10	R3/8	65	63,5	11	29	22	21	C0Q711038
10	R1/2	74	67	14	34	24	24	C0Q711048
12	R1/4	63	66	10	27,5	21	17	C0Q711228
12	R3/8	65	70	11	29	21	21	C0Q711238
12	R1/2	74	74,5	14	34	24	24	C0Q711248

**Double universal tee
C0B71**


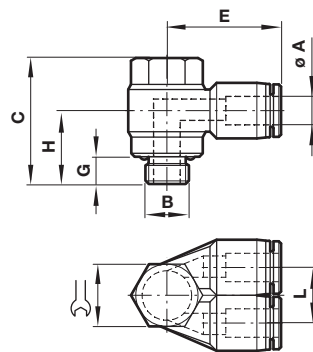
Ø A	B	C	E	G	H	J	90°	Model
4	G1/8	50	47	5	20,5	18	14	C0B710418
4	G1/4	61	50,5	6,5	25,5	22	17	C0B710428
4	G3/8	62	54,5	6,5	26	22	21	C0B710438
4	G1/2	69,5	58,5	8	29,5	24	24	C0B710448
6	G1/8	50	48,5	5	20,5	18	14	C0B710618
6	G1/4	61	52	6,5	25,5	22	17	C0B710628
6	G3/8	62	56	6,5	26	22	21	C0B710638
6	G1/2	69,5	58,5	8	29,5	24	24	C0B710648
8	G1/8	50	52	5	20,5	18	14	C0B710818
8	G1/4	61	55,5	6,5	25,5	22	17	C0B710828
8	G3/8	62	59,5	6,5	26	22	21	C0B710838
8	G1/2	69,5	62,5	8	29,5	24	24	C0B710848
10	G1/8	50	56	5	20,5	18	14	C0B711018
10	G1/4	61	59,5	6,5	25,5	22	17	C0B711028
10	G3/8	62	63,5	6,6	26	22	21	C0B711038
10	G1/2	69,5	67	8	29,5	24	24	C0B711048
12	G1/4	61	66	6,5	25,5	21	17	C0B711228
12	G3/8	62	70	6,5	26	21	21	C0B711238
12	G 1/2	69,5	74,5	8	29,5	24	24	C0B711248

Branch adaptor C0N70



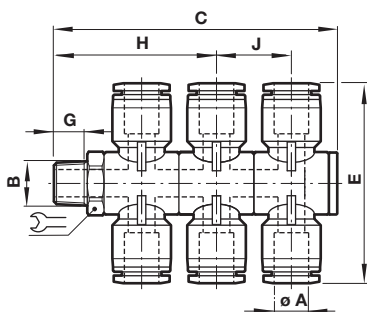
Ø A	B	C	E	G	H	L		Model
6	R1/8	25	23	8	14,5	12,5	11	C0N700618
8	R1/4	29	28,5	10	18,5	15	15	C0N700828
10	R1/4	29	31	10	19,5	17,5	15	C0N701028
10	R3/8	32,5	31	11	20,5	17,5	19	C0N701038
12	R3/8	32,5	36	11	22	20,5	19	C0N701238
12	R1/2	39,5	36,5	14	25,5	20,5	24	C0N701248

Branch adaptor C0A70



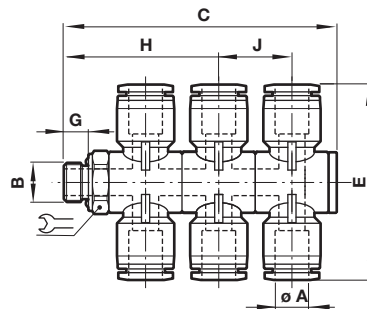
Ø A	B	C	E	G	H	L		Model
4	M5	18	19,5	3,6	10	10,5	8	C0A700405
6	G1/8	23,5	23	4,5	14	12,5	8	C0A700618
8	G1/4	28	28,5	6	17,5	15	12	C0A700828
10	G1/4	28	31	6	19	17,5	12	C0A701028
10	G3/8	32,5	31	6	21	17,5	14	C0A701038
12	G3/8	32,5	36	6	22,5	20,5	14	C0A701238
12	G1/2	34	36,5	7,5	23	20,5	17	C0A701248

Triple universal tee C0H71

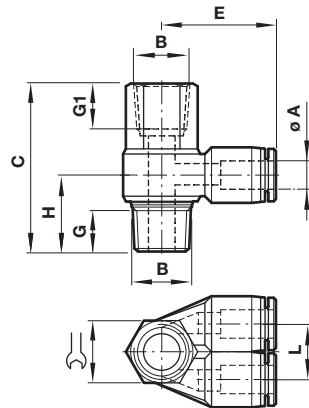


Ø A	B	C	E	G	H	J		Model
4	R1/8	70	47	8	22,5	18	14	C0H710418
4	R1/4	85	50,5	10	27,5	22	17	C0H710428
4	R3/8	87	54,5	11	29	22	21	C0H710438
4	R1/2	97,5	58,5	14	34	24	24	C0H710448
6	R1/8	70	48,5	8	22,5	18	14	C0H710618
6	R1/4	85	52	10	27,5	22	17	C0H710628
6	R3/8	87	56	11	29	22	21	C0H710638
6	R1/2	97,5	58,5	14	34	24	24	C0H710648
8	R1/8	70	52	8	22,5	18	14	C0H710818
8	R1/4	85	55,5	10	27,5	22	17	C0H710828
8	R3/8	87	59,5	11	29	22	21	C0H710838
8	R1/2	97,5	62,5	14	34	24	24	C0H710848
10	R1/8	70	56	8	22,5	18	14	C0H711018
10	R1/4	85	59,5	10	27,5	22	17	C0H711028
10	R3/8	87	63,5	11	29	22	21	C0H711038
10	R1/2	97,5	67	14	34	24	24	C0H711048
12	R1/4	85	66	10	27,5	21	17	C0H711228
12	R3/8	87	70	11	29	21	21	C0H711238
12	R1/2	97,5	74,5	14	34	24	24	C0H711248

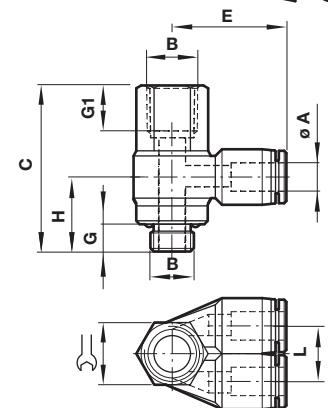
Triple universal tee C0C71



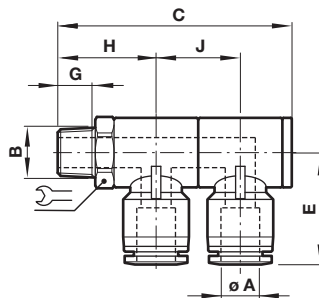
Ø A	B	C	E	G	H	J		Model
4	G1/8	68	47	5	20,5	18	14	C0C710418
4	G1/4	83	50,5	6,5	25,5	22	17	C0C710428
4	G3/8	84	54,5	6,5	26	22	21	C0C710438
4	G1/2	93	58,5	8	29,5	24	24	C0C710448
6	G1/8	68	48,5	5	20,5	18	14	C0C710618
6	G1/4	83	52	6,5	25,5	22	17	C0C710628
6	G3/8	84	56	6,5	26	22	21	C0C710638
6	G1/2	93	58,5	8	29,5	24	24	C0C710648
8	G1/8	68	52	5	20,5	18	14	C0C710818
8	G1/4	83	55,5	6,5	25,5	22	17	C0C710828
8	G3/8	84	59,5	6,5	26	22	21	C0C710838
8	G1/2	93	62,5	8	29,5	24	24	C0C710848
10	G1/8	68	56	5	20,5	18	14	C0C711018
10	G1/4	83	59,5	6,5	25,5	22	17	C0C711028
10	G3/8	84	63,5	6,6	26	22	21	C0C711038
10	G1/2	93	67	8	29,5	24	24	C0C711048
12	G1/4	83	66	6,5	25,5	21	17	C0C711228
12	G3/8	84	70	6,5	26	21	21	C0C711238
12	G1/2	93	74,5	8	29,5	24	24	C0C711248

**Branch adaptor (female)
C0*7J**


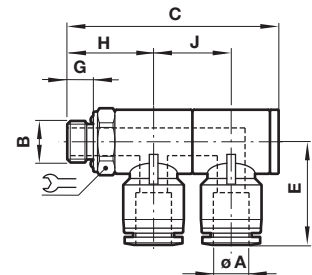
Ø A	B	C	E	G / G1	H	L		Model
6	R1/8	30	23	8	14,5	12,5	14	C0E7J0618
8	R1/4	35,5	28,5	10	18,5	15	17	C0F7J0828
10	R1/4	35,5	31	10	19,5	17,5	17	C0F7J1028
10	R3/8	41	31	11	20,5	17,5	21	C0G7J1038
12	R3/8	41	36	11	22	20,5	21	C0G7J1238
12	R1/2	50	36,5	14	25,5	20,5	24	C0H7J1248

**Branch adaptor (female)
C0*7K**


Ø A	B	C	E	G / G1	H	L		Model
4	M5	20	19,5	3,5 / 7	10	10,5	8	C0D7K0405
6	G1/8	30	23	8	14	12,5	14	C0E7K0618
8	G1/4	35,5	27	10	17,5	14,5	17	C0F7K0828
10	G1/4	35,5	28	10	17,5	17,5	17	C0F7K1028
10	G3/8	41	30	11	17,5	17,5	21	C0G7K1038
12	G3/8	41	33	11	17,5	20,5	21	C0G7K1238
12	G1/2	50	35	14	20	20,5	24	C0H7K1248

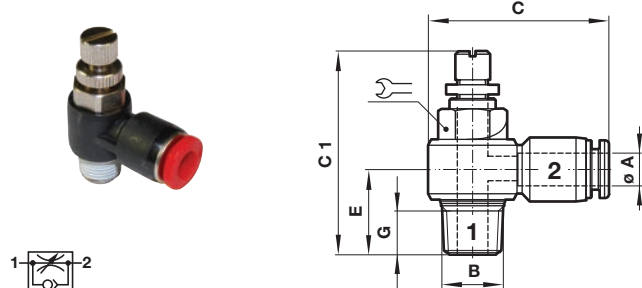
**Double branch adaptor
C0Q70**


Ø A	B	C	E	G	H	J		Model
4	R1/8	52	24	8	22,5	18	14	C0Q700418
4	R1/4	63	26	10	27,5	22	17	C0Q700428
4	R3/8	65	28	11	29	22	21	C0Q700438
4	R1/2	74	30,5	14	34	24	24	C0Q700448
6	R1/8	52	25	8	22,5	18	14	C0Q700618
6	R1/4	63	27	10	27,5	22	17	C0Q700628
6	R3/8	65	28,5	11	29	22	21	C0Q700638
6	R1/2	74	31	14	34	24	24	C0Q700648
8	R1/8	52	27	8	22,5	18	14	C0Q700818
8	R1/4	63	30,5	10	27,5	22	17	C0Q700828
8	R3/8	65	30,5	11	29	22	21	C0Q700838
8	R1/2	74	32,5	14	34	24	24	C0Q700848
10	R1/8	52	28,5	8	22,5	18	14	C0Q701018
10	R1/4	63	30,5	10	27,5	22	17	C0Q701028
10	R3/8	65	32,5	11	29	22	21	C0Q701038
10	R1/2	74	35	14	34	24	24	C0Q701048
12	R1/4	63	34	10	27,5	22	17	C0Q701228
12	R3/8	65	35	11	29	22	21	C0Q701238
12	R1/2	74	39	14	34	24	24	C0Q701248

**Double branch adaptor
C0B70**


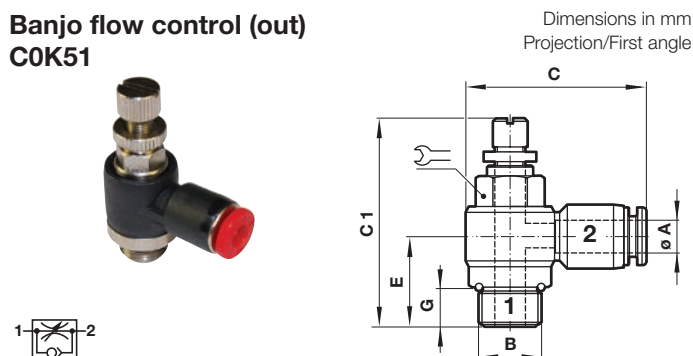
Ø A	B	C	E	G	H	J		Model
4	G1/8	50	24	5	20,5	18	14	C0B700418
4	G1/4	61	26	6,5	25,5	22	17	C0B700428
4	G3/8	62	28	6,5	26	22	21	C0B700438
4	G1/2	69,5	30,5	8	29,5	24	24	C0B700448
6	G1/8	50	25	5	20,5	18	14	C0B700618
6	G1/4	61	27	6,5	25,5	22	17	C0B700628
6	G3/8	62	28,5	6,5	26	22	21	C0B700638
6	G1/2	69,5	31	8	29,5	24	24	C0B700648
8	G1/8	50	27	5	20,5	18	14	C0B700818
8	G1/4	61	30,5	6,5	25,5	22	17	C0B700828
8	G3/8	62	30,5	6,5	26	22	21	C0B700838
8	G1/2	69,5	32,5	8	29,5	24	24	C0B700848
10	G1/8	50	28,5	5	20,5	18	14	C0B701018
10	G1/4	61	30,5	6,5	25,5	22	17	C0B701028
10	G3/8	62	32,5	6,5	26	22	21	C0B701038
10	G1/2	69,5	35	8	29,5	24	24	C0B701048
12	G1/4	61	34	6,5	25,5	22	17	C0B701228
12	G3/8	62	35	6,5	26	22	21	C0B701238
12	G 1/2	69,5	39	8	29,5	24	24	C0B701248

Banjo flow control (out) C0TA0



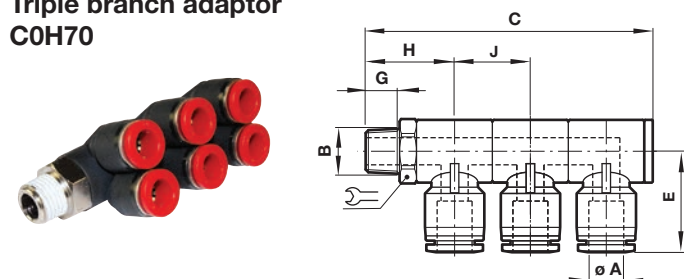
Ø A	B	C	> C1	< C1	E	G	Flow Symbol	Model
4	R1/8	30,5	35	40	14,5	8	11	C0TA00418
4	R1/4	34,5	40	45,5	18	10	15	C0TA00428
6	R1/8	31	35	31	14,5	8	11	C0TA00618
6	R1/4	35	40	45,5	18	10	15	C0TA00628
6	R3/8	38,5	46,5	55	21	11	19	C0TA00638
8	R1/8	33	35	40	15,5	8	11	C0TA00818
8	R1/4	37	40	45,5	19	10	15	C0TA00828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

Banjo flow control (out) C0K51



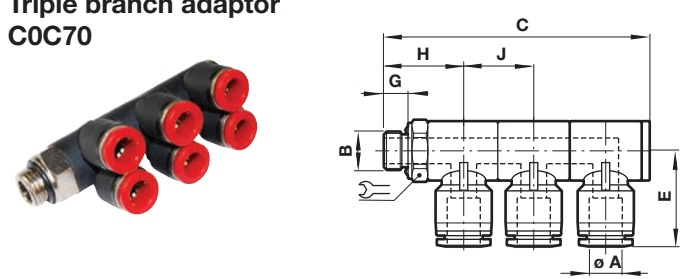
Ø A	B	C	> C1	< C1	E	G	Flow Symbol	Model
3	M5	21,5	27	30	9,5	3,5	8	C0K510305
4	M5	25	27	30	10	3,5	8	C0K510405
4	G1/8	30,5	35	40	15	6	8	C0K510418
4	G1/4	34,5	40	45,5	17	8	12	C0K510428
6	M5	28	27	30	11	3,5	8	C0K510605
6	G1/8	31	35	40	15	6	8	C0K510618
6	G1/4	35	40	45,5	17	8	12	C0K510628
6	G3/8	38,5	46,5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

Triple branch adaptor C0H70

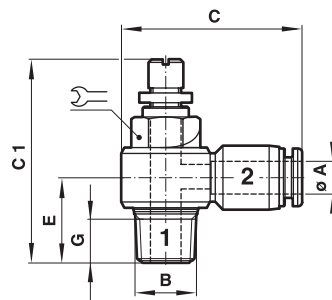


Ø A	B	C	E	G	H	J	Flow Symbol	Model
4	R1/8	52	24	8	22,5	18	14	C0H700418
4	R1/4	63	26	10	27,5	22	17	C0H700428
4	R3/8	65	28	11	29	22	21	C0H700438
4	R1/2	74	30,5	14	34	24	24	C0H700448
6	R1/8	52	25	8	22,5	18	14	C0H700618
6	R1/4	63	27	10	27,5	22	17	C0H700628
6	R3/8	65	28,5	11	29	22	21	C0H700638
6	R1/2	74	31	14	34	24	24	C0H700648
8	R1/8	52	27	8	22,5	18	14	C0H700818
8	R1/4	63	30,5	10	27,5	22	17	C0H700828
8	R3/8	65	30,5	11	29	22	21	C0H700838
8	R1/2	74	32,5	14	34	24	24	C0H700848
10	R1/8	52	28,5	8	22,5	18	14	C0H701018
10	R1/4	63	30,5	10	27,5	22	17	C0H701028
10	R3/8	65	32,5	11	29	22	21	C0H701038
10	R1/2	74	35	14	34	24	24	C0H701048
12	R1/4	63	34	10	27,5	22	17	C0H701228
12	R3/8	65	35	11	29	22	21	C0H701238
12	R1/2	74	39	14	34	24	24	C0H701248

Triple branch adaptor C0C70



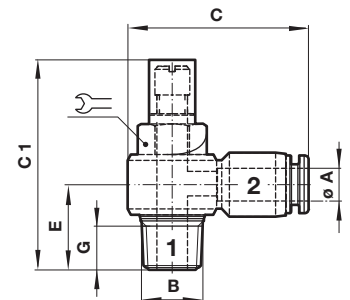
Ø A	B	C	E	G	H	J	Flow Symbol	Model
4	G1/8	68	24	5	20,5	18	14	C0C700418
4	G1/4	83	26	6,5	25,5	22	17	C0C700428
4	G3/8	84	28	6,5	26	22	21	C0C700438
4	G1/2	93	30,5	8	29,5	24	24	C0C700448
6	G1/8	68	25	5	20,5	18	14	C0C700618
6	G1/4	83	27	6,5	25,5	22	17	C0C700628
6	G3/8	84	28,5	6,5	26	22	21	C0C700638
6	G1/2	93	31	8	29,5	24	24	C0C700648
8	G1/8	68	27	5	20,5	18	14	C0C700818
8	G1/4	83	30,5	6,5	25,5	22	17	C0C700828
8	G3/8	84	30,5	6,5	26	22	21	C0C700838
8	G1/2	93	32,5	8	29,5	24	24	C0C700848
10	G1/8	68	28,5	5	20,5	18	14	C0C701018
10	G1/4	83	30,5	6,5	25,5	22	17	C0C701028
10	G3/8	84	32,5	6,5	26	22	21	C0C701038
10	G1/2	93	35	8	29,5	24	24	C0C701048
12	G1/4	83	34	6,5	25,5	22	17	C0C701228
12	G3/8	84	35	6,5	26	22	21	C0C701238
12	G1/2	93	39	8	29,5	24	24	C0C701248

Banjo flow control (in)
C0SA0


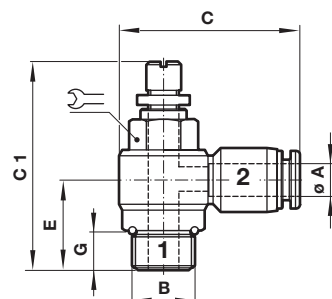
Ø A	B	C	C1 min.	C1 max.	E	G		Model
4	R1/8	30,5	35	40	14,5	8	11	C0SA00418
4	R1/4	34,5	40	45,5	18	10	15	C0SA00428
6	R1/8	31	35	40	14,5	8	11	C0SA00618
6	R1/4	35	40	45,5	18	10	15	C0SA00628
6	R3/8	39	46,5	55	21	11	19	C0SA00638
8	R1/8	33	35	40	15,5	8	11	C0SA00818
8	R1/4	37	40	45,5	19	10	15	C0SA00828
8	R3/8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

Shrouded banjo (out)
C0TB0

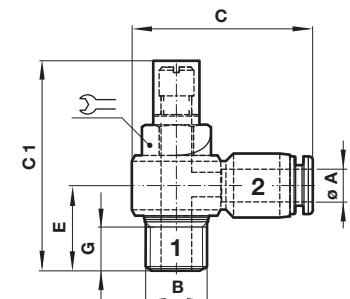

Dimensions in mm
Projection/First angle



Ø A	B	C	C1	E	G		Model
4	R1/8	30,5	31,5	15	8	11	C0TB00418
4	R1/4	34,5	37	18,5	10	15	C0TB00428
6	R1/8	31	31,5	15	8	11	C0TB00618
6	R1/4	35	37	18,5	10	15	C0TB00628
6	R3/8	38,5	43,5	22	11	19	C0TB00638
8	R1/8	33	31,5	16,5	8	11	C0TB00818
8	R1/4	37	37	19,5	10	15	C0TB00828
8	R3/8	40	43,5	22	11	19	C0TB00838
8	R1/2	46	50	26,5	14	24	C0TB00848
10	R1/4	39	37	21	10	15	C0TB01028
10	R3/8	42	43,5	23,5	11	19	C0TB01038
10	R1/2	47,5	50	26,5	14	24	C0TB01048
12	R1/4	41	37	22,5	10	15	C0TB01228
12	R3/8	46	43,5	24	11	19	C0TB01238
12	R1/2	50	50	28	14	24	C0TB01248

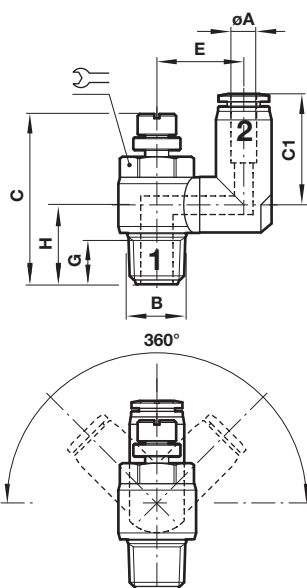
Banjo flow control (in)
C0L51


Ø A	B	C	> C1	< C1	E	G		Model
3	M5	21,5	27	30	9,5	3,5	8	C0L510305
4	M5	25	27	30	10	3,5	8	C0L510405
4	G1/8	30,5	35	40	15	6	8	C0L510418
4	G1/4	34,5	40	45,5	17	8	12	C0L510428
6	M5	28	27	30	11	3,5	8	C0L510605
6	G1/8	31	35	40	15	6	8	C0L510618
6	G1/4	35	40	45,5	17	8	12	C0L510628
6	G3/8	39	46,5	55	21	8	14	C0L510638
8	G1/8	33	35	40	14	6	8	C0L510818
8	G1/4	37	40	45,5	16	8	12	C0L510828
8	G3/8	40	46,5	55	21	8	14	C0L510838
8	G1/2	46	53	60	22,5	9	17	C0L510848
10	G1/4	39	40	45,5	18	8	12	C0L511028
10	G3/8	42	46,5	55	19,5	8	14	C0L511038
10	G1/2	47,5	53	60	22,5	9	17	C0L511048
12	G1/4	41	40	45,5	20	8	12	C0L511228
12	G3/8	46	46,5	55	19	8	14	C0L511238
12	G1/2	50	53	60	21	9	17	C0L511248

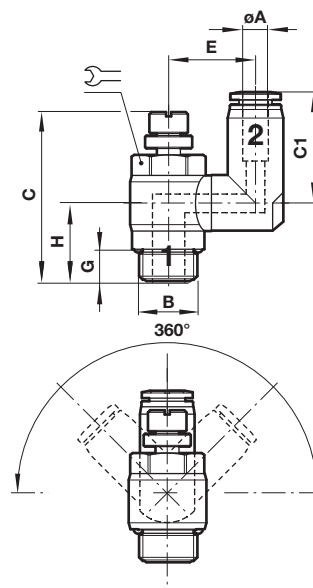
Shrouded banjo (out)
C0KB0


Ø A	B	C	C1	E	G		Model
4	M5	25	23	10,5	3,5	8	C0KB00405
4	G1/8	30,5	31,5	15	6	8	C0KB00418
4	G1/4	34,5	37	17,5	8	12	C0KB00428
6	M5	28	23	11,5	3,5	8	C0KB00605
6	G1/8	31	31,5	15	6	8	C0KB00618
6	G1/4	35	37	17,5	8	12	C0KB00628
6	G3/8	38,5	43,5	21	8	14	C0KB00638
8	G1/8	33	31,5	14	6	8	C0KB00818
8	G1/4	37	37	17	8	12	C0KB00828
8	G3/8	40	43,5	21	8	14	C0KB00838
8	G1/2	46	50	23	9	17	C0KB00848
10	G1/4	39	37	19	8	12	C0KB01028
10	G3/8	42	43,5	20	8	14	C0KB01038
10	G1/2	47,5	50	23	9	17	C0KB01048
12	G1/4	41	37	20,5	8	12	C0KB01228
12	G3/8	46	43,5	19	8	14	C0KB01238
12	G1/2	50	50	21,5	9	17	C0KB01248

Swivel speed control (out) C0T56



Swivel speed control (out) C0K56



Dimensions in mm
Projection/First angle

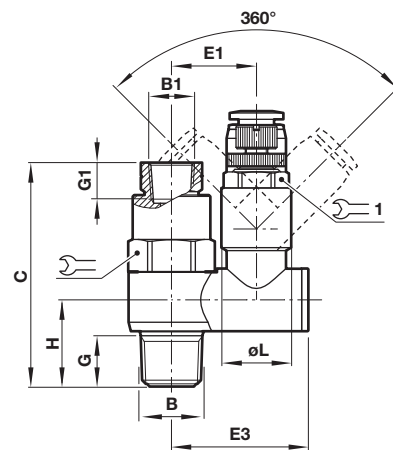
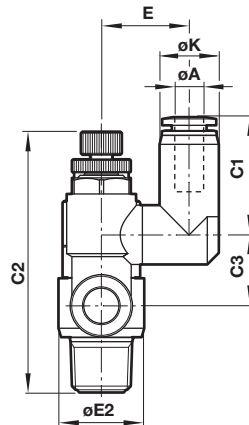
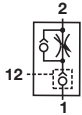


Ø A	B	C*1)	C1	E	G	H		Model
4	R1/8	35/40	20,5	14,5	8	15	11	C0T560418
4	R1/4	40/45,5	20,5	18	10	18,5	15	C0T560428
6	R1/8	35/40	24	15,5	8	15	11	C0T560618
6	R1/4	40/45,5	26	20,5	10	18,5	15	C0T560628
6	R3/8	47/55	26	23,5	11	21,5	19	C0T560638
8	R1/8	35/40	25,5	16	8	15,5	11	C0T560818
8	R1/4	40/45,5	29	19,5	10	18,5	15	C0T560828
8	R3/8	47/55	30	24,5	11	22	19	C0T560838
8	R1/2	53/60	30	26,5	14	26	24	C0T560848
10	R1/4	40/45,5	31	20,5	10	18,5	15	C0T561028
10	R3/8	47/55	32	24,5	11	22	19	C0T561038
10	R1/2	53/60	33	26,5	14	26,5	24	C0T561048
12	R1/4	40/45,5	33,5	22	10	18,5	15	C0T561228
12	R3/8	47/55	34,5	24,5	11	22	19	C0T561238
12	R1/2	53/60	36	26,5	14	26,5	24	C0T561248

* min/max

Ø A	B	C*1)	C1	E	G	H		Model
4	M5	27/30	20,5	12,5	3,6	9,5	8	C0K560405
4	G1/8	35/40	20,5	14,5	8	15,5	8	C0K560418
4	G1/4	40/45,5	20,5	18	12	17,5	12	C0K560428
6	M5	27/30	22,5	13,5	3,6	9,5	8	C0K560605
6	G1/8	35/40	24	15,5	8	15,5	8	C0K560618
6	G1/4	40/45,5	26	20,5	12	17,5	12	C0K560628
6	G3/8	47/55	26	23,5	14	21,5	14	C0K560638
8	G1/8	35/40	25,5	16	8	14,5	8	C0K560818
8	G1/4	40/45,5	29	19,5	12	17,5	12	C0K560828
8	G3/8	47/55	30	24,5	14	21	14	C0K560838
8	G1/2	53/60	30	26,5	17	23	17	C0K560848
10	G1/4	40/45,5	31	20,5	12	17,5	12	C0K561028
10	G3/8	47/55	32	24,5	14	21	14	C0K561038
10	G1/2	53/60	33	26,5	17	23	17	C0K561048
12	G1/4	40/45,5	33,5	22	12	17,5	12	C0K561228
12	G3/8	47/55	34,5	24,5	14	21	14	C0K561238
12	G1/2	53/60	36	26,5	17	23	17	C0K561248

* min/max

**Speed control and pilot check
C01GN**


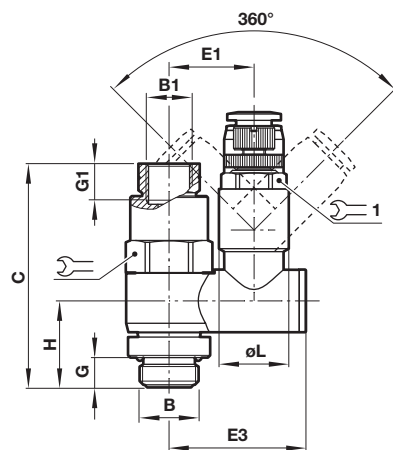
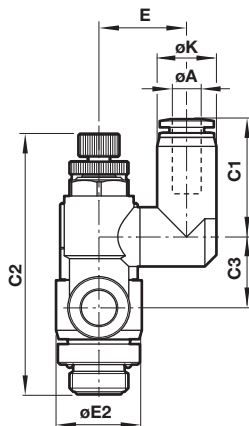
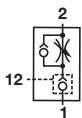
Dimensions in mm
Projection/First angle



Note:
Pilot check is not suitable for extreme high cycling applications.

Ø A	B	B1	C	C1	C2*1)	C3	E	E1	Ø E2	E3	G	G1	H	Ø K	Ø L			Model
6	R1/8	M5	41	24	50,6/55,4	12,9	14,2	14,3	15	24,2	16	8,5	16	12,5	12	12	10	C01GN0618
6	R1/4	R1/8	49,1	25,9	57,1/61,9	15,6	19,3	18,7	18,8	30,1	11	10	19	13	15,3	17	13	C01GN0628
8	R1/8	M5	41	24,9	50,6/55,4	12,6	15,4	14,3	15	24,2	8,5	8,5	16	14,8	12	12	10	C01GN0818
8	R1/4	R1/8	49,1	28,3	57,1/61,9	15,9	18,3	18,7	18,8	30,1	11	10	19	14,8	15,3	17	13	C01GN0828
8	R3/8	R1/8	56,9	29,3	67,2/72,2	19,1	23,3	22,8	23	37,1	12	10	22,5	15	20,2	19	17	C01GN0838
10	R3/8	R1/8	56,9	31,7	67,2/72,2	19,1	23,3	22,8	23	37,1	12	10	22,5	17,5	20,2	19	17	C01GN1038
10	R1/2	R1/4	70,8	33,1	81,3/87	25,6	26,3	29,1	28,7	47,4	15	13,5	28	17,5	27,2	24	23	C01GN1048
12	R3/8	R1/8	56,9	34,4	67,2/72,2	19,1	23,3	22,8	23	37,1	12	10	22,5	20,5	20,2	19	17	C01GN1238
12	R1/2	R1/4	70,8	35,8	81,3/87	25,6	26,3	29,1	28,7	47,4	15	13,5	28	20,5	27,2	24	23	C01GN1248

*1) min./max. control flow see page 5

**Speed control and pilot check
C02GN**


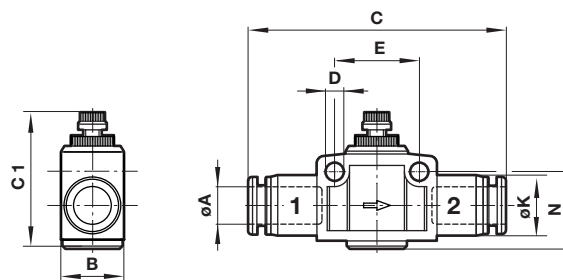
Note:
Pilot check is not suitable for extreme high cycling applications.

Ø A	B	B1	C	C1	C2*1)	C3	E	E1	Ø E2	E3	G	G1	H	Ø K	Ø L			Model
6	G1/8	M5	41	24	50,6/55,4	12,9	14,2	14,3	15	24,2	5	8,5	16	12,5	12	12	10	C02GN0618
6	G1/4	G1/8	49,1	25,9	57,1/61,9	15,6	19,3	18,7	18,8	30,1	6,5	9,5	19	13	15,3	17	13	C02GN0628
8	G1/8	M5	41	24,9	50,6/55,4	12,6	15,4	14,3	15	24,2	5	8,5	16	14,8	12	12	10	C02GN0818
8	G1/4	G1/8	49,1	28,3	57,1/61,9	15,9	18,3	18,7	18,8	30,1	6,5	9,5	19	14,8	15,3	17	13	C02GN0828
8	G3/8	G1/8	56,9	29,3	67,2/72,2	19,1	23,3	22,8	23	37,1	7	9,5	22,5	15	20,2	19	17	C02GN0838
10	G3/8	G1/8	56,9	31,7	67,2/72,2	19,1	23,3	22,8	23	37,1	7	9,5	22,5	17,5	20,2	19	17	C02GN1038
10	G1/2	G1/4	70,8	33,1	81,3/78,5	25,6	26,3	29,1	28,7	47,4	8,5	13	28	17,5	27,2	24	23	C02GN1048
12	G3/8	G1/8	56,9	34,4	67,2/72,2	19,1	23,3	22,8	23	37,1	7	9,5	22,5	20,5	20,2	19	17	C02GN1238
12	G1/2	G1/4	70,8	35,8	81,3/78,5	25,6	26,3	29,1	28,7	47,4	8,5	13	28	20,5	27,2	24	23	C02GN1248

*1) min./max. control flow see page 5

In-line flow control
C00GE

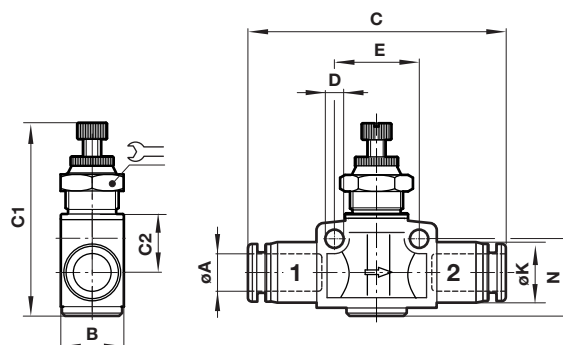
Dimensions in mm
 Projection/First angle



Ø A	B	C	> C1	< C1	D	E	Ø K	N	Model
4	12	45	30	33	3,3	15	11	13,5	C00GE0400
6	16	50	35	39,5	4,4	20,5	13	17,5	C00GE0600
8	19	55,5	37,5	42	4,4	23	15	20	C00GE0800
10	23	61	44	49	4,4	28	17,5	23	C00GE1000
12	26,5	70	47,5	53,5	4,4	32	20,5	25,5	C00GE1200

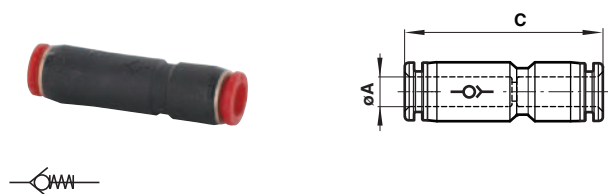
Control flow see page 4

In-line and panel mounting flow control
C00GP



Ø A	B	C	> C1	< C1	C2	D	E	Ø K	N		Panel hole	Panel thickness	Model
4	12	42	35,5	38	5,5	3,2	15,5	11	13,5	12	11	5	C00GP0400
6	16	49,5	43	48,5	8	4,3	20,5	13	17,5	17	15	6	C00GP0600
8	19	56,5	47,5	53	8,5	4,3	23	15	20	19	17	6	C00GP0800
10	23	63	53,5	61,5	10,5	4,3	27,5	17,5	23	22	17	7	C00GP1000
12	26,5	73,5	57,5	64,5	12	4,4	32,5	20,5	25,5	24	21	7	C00GP1200

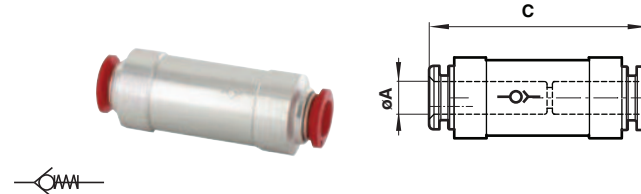
Control flow see page 4

**In-line non-return valve (PBT)
C00GL**


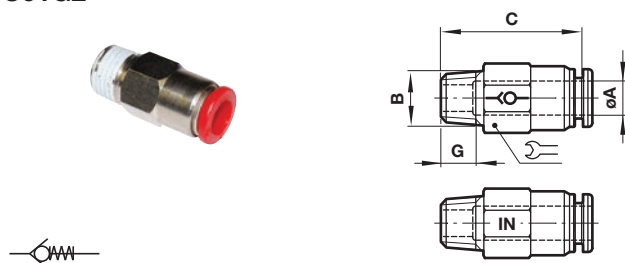
Ø A	C	Model
4	42	C00GL0400
6	47,5	C00GL0600
8	55,5	C00GL0800

**In-line non-return valve (Aluminium)
C00GL**

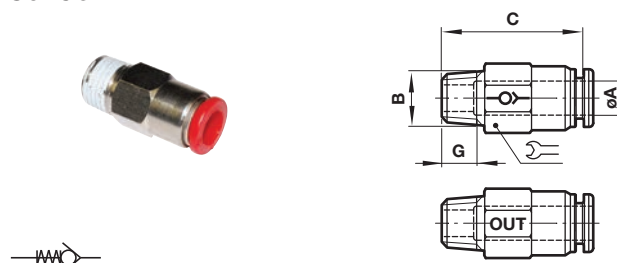
Dimensions in mm
Projection/First angle



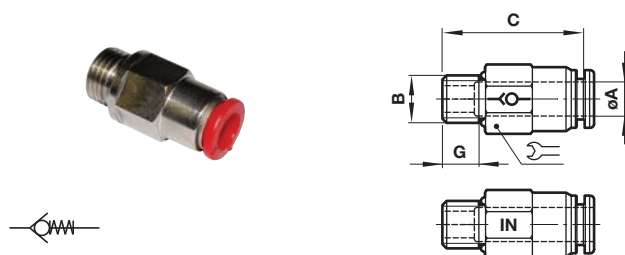
Ø A	C	Model
10	65	C00GL1000
12	73	C00GL1200

**In-line non-return valve (in), taper thread
C01G2**


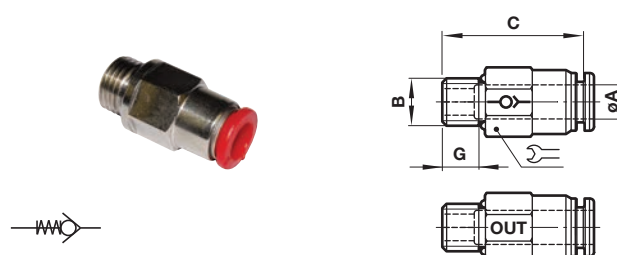
Ø A	B	C	G	Symbol	Model
4	R1/8	27,5	8	10	C01G20418
6	R1/8	32,5	8	12	C01G20618
8	R1/4	37,5	10	14	C01G20828

**In-line non-return valve (out), taper thread
C01G3**


Ø A	B	C	G	Symbol	Weight (g)	Model
4	R1/8	27,5	8	10	11	C01G30418
6	R1/8	32,5	8	12	16	C01G30618
8	R1/4	37,5	10	14	24	C01G30828

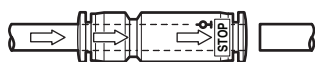
**In-line non-return valve (in), ISO G thread
C02G2**


Ø A	B	C	G	Symbol	Model
4	M5	31,5	3,5	10	C02G20405
4	G1/8	27,5	6	10	C02G20418
6	G1/8	32,5	6	12	C02G20618
8	G1/4	37	7	15	C02G20828
10	G3/8	54	8	22	C02G21038
12	G1/2	60,5	9	24	C02G21248

**In-line non-return valve (out), ISO G thread
C02G3**


Ø A	B	C	G	Symbol	Model
4	M5	31,5	3,5	10	C02G30405
4	G1/8	27,5	6	10	C02G30418
6	G1/8	32,5	6	12	C02G30618
8	G1/4	37	7	15	C02G30828
10	G3/8	54	8	22	C02G31038
12	G1/2	60,5	9	24	C02G31248

Self sealing fittings

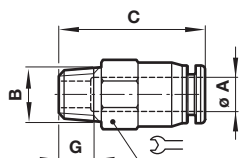


Dimensions in mm
Projection/First angle

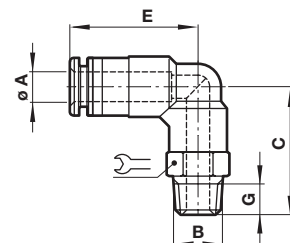


No air flow when tubing is removed - air flow is restored when tubing is inserted

Straight adaptor C0124



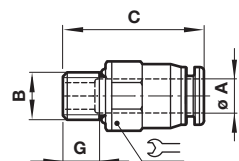
Swivel elbow C014J



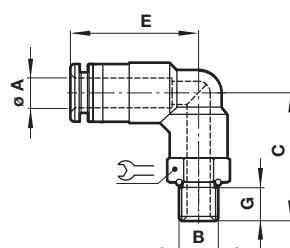
Ø A	B	C	G		Model
4	R1/8	26	8	10	C01240418
6	R1/8	29	8	12	C01240618
6	R1/4	29	10	14	C01240628
8	R1/4	33,5	10	14	C01240828
8	R3/8	33,5	11	17	C01240838
10	R1/4	35,5	10	17	C01241028
10	R3/8	35,5	11	17	C01241038
10	R1/2	35,5	14	21	C01241048
12	R1/4	42	10	19	C01241228
12	R3/8	42	11	19	C01241238
12	R1/2	42	14	21	C01241248

Ø A	B	C	E	G		Model
4	R1/8	27	27,5	5	10	C014J0418
6	R1/8	30	32	5	12	C014J0618
6	R1/4	32	30,5	6,5	14	C014J0628
8	R1/8	34,5	41,5	6,5	14	C014J0818
8	R1/4	34	40	6,5	17	C014J0828
10	R1/4	32	26,5	6,5	17	C014J1028
10	R3/8	36	45	6,5	17	C014J1038
10	R1/2	37,5	43	8	21	C014J1048
12	R3/8	40	53,5	6,5	19	C014J1238
12	R1/2	41,5	51,5	8	21	C014J1248

Straight adaptor C0224



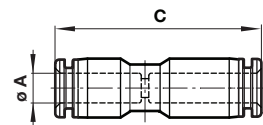
Swivel elbow C024J



Ø A	B	C	G		Model
4	G1/8	25,5	5	12	C02240418
6	G1/8	28	5	12	C02240618
6	G1/4	27	6,5	15	C02240628
8	G1/4	32	6,5	15	C02240828
8	G3/8	32	6,5	17	C02240838
10	G1/4	35	6,5	17	C02241028
10	G3/8	36,5	6,5	17	C02241038
10	G1/2	37,5	8	21	C02241048
12	G1/4	43,5	6,5	19	C02241228
12	G3/8	43,5	6,5	21	C02241238
12	G1/2	44	8	21	C02241248

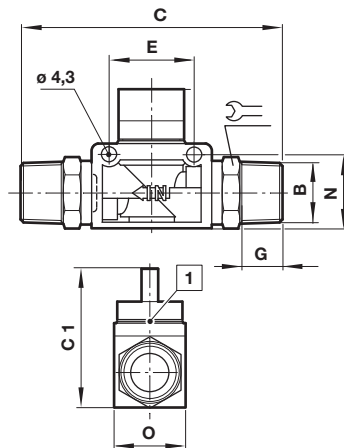
Ø A	B	C	E	G		Model
4	M5	20,5	29,5	4	10	C024J0405
4	G1/8	27	27,5	5	14	C024J0418
6	M5	22,5	33	4	12	C024J0605
6	G1/8	30	32	5	14	C024J0618
6	G1/4	32	30,5	6,5	14	C024J0628
8	G1/4	34,5	41,5	6,5	17	C024J0828
8	G3/8	34	40	6,5	20	C024J0838
10	G1/4	32	26,5	6,5	17	C024J1028
10	G3/8	36	45	6,5	20	C024J1038
10	G1/2	37,5	43	8	24	C024J1048
12	G3/8	40	53,5	6,5	20	C024J1238
12	G1/2	41,5	51,5	8	24	C024J1248

Straight union C002J



Ø A	C	Model
4	42	C002J0400
6	46	C002J0600
8	53,5	C002J0800
10	58	C002J1000
12	67	C002J1200

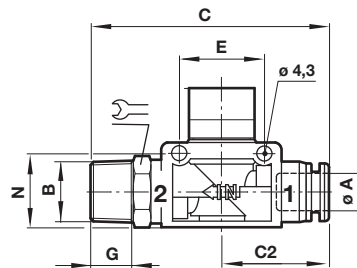
3/2 Shut-off valves C01GG



1 Exhaust bore hole

B	C	C1	E	G	N	O		Model
R1/8	71	40,5	19	8	18,5	18	14	C01GG1818
R1/4	77	40,5	19	10	18,5	18	14	C01GG2828
R3/8	81	41	24	11	21,5	21	17	C01GG3838
R1/2	90	41	24	14	21,5	21	21	C01GG4848

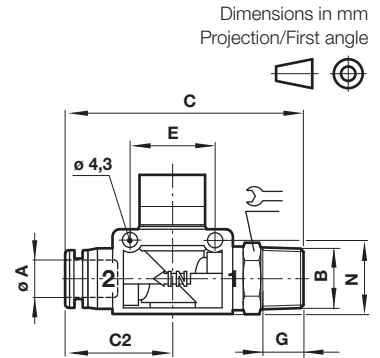
3/2 Shut-off valves C01GH



ØA	B	C	C1 *	C2	E	G	N	O *		Model
6	R1/8	62	40,5	26	19	8	18,5	18	14	C01GH0618
6	R1/4	65	40,5	26	19	10	18,5	18	14	C01GH0628
6	R3/8	66	40,5	26	19	11	18,5	21	17	C01GH0638
8	R1/8	63	40,5	27,5	19	8	18,5	18	14	C01GH0818
8	R1/4	66	40,5	27,5	19	10	18,5	18	14	C01GH0828
8	R3/8	67	40,5	27,5	19	11	18,5	21	17	C01GH0838
10	R1/4	67	41	31	24	10	21,5	18	17	C01GH1028
10	R3/8	71,5	41	31	24	11	21,5	21	17	C01GH1038
10	R1/2	74,5	41	31	24	14	21,5	21	21	C01GH1048
12	R1/4	75,5	41	34	24	10	21,5	18	19	C01GH1228
12	R3/8	76,5	41	34	24	11	21,5	21	19	C01GH1238
12	R1/2	79,5	41	34	24	14	21,5	21	21	C01GH1248

* see drawing C01GG series

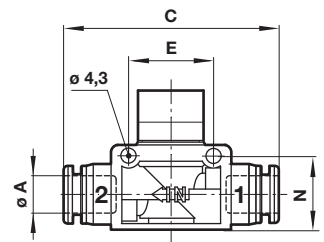
3/2 Shut-off valves C01GJ



ØA	B	C	C1 *	C2	E	G	N	O *		Model
6	R1/8	62	40,5	26	19	8	18,5	18	14	C01GJ0618
6	R1/4	65	40,5	26	19	10	18,5	18	14	C01GJ0628
6	R3/8	66	40,5	26	19	11	18,5	21	17	C01GJ0638
8	R1/8	65	40,5	27,5	19	8	18,5	18	14	C01GJ0818
8	R1/4	66	40,5	27,5	19	10	18,5	18	14	C01GJ0828
8	R3/8	67	40,5	27,5	19	11	18,5	21	17	C01GJ0838
10	R1/4	70,5	41	31	24	10	21,5	18	17	C01GJ1028
10	R3/8	71,5	41	31	24	11	21,5	21	17	C01GJ1038
10	R1/2	74,5	41	31	24	14	21,5	21	21	C01GJ1048
12	R1/4	75,5	41	34	24	10	21,5	18	19	C01GJ1228
12	R3/8	76,5	41	34	24	11	21,5	21	19	C01GJ1238
12	R1/2	79,5	41	34	24	14	21,5	21	21	C01GJ1248

* see drawing C01GG series

3/2 Shut-off valves C01GF



ØA	C	C1 *	E	N	O *	Model
6	52,5	40,5	19	18,5	18	C00GF0600
8	53	40,5	19	18,5	18	C00GF0800
10	62	41	24	21,5	21	C00GF1000
12	68,5	41	24	21,5	21	C00GF1200

* see drawing C01GG series

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under

»Technical features/data«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

Inline Valves - Pilot

[Overview](#) [Technical Details](#)



- Steel reinforced spool seals – for stability and reliability
- In-line ports – allows pipework to be kept neat and tidy
- Manual override fitted as standard

Medium:	Compressed Air
Operation:	3/2

Technical Details

Medium	Compressed Air
Operating Temperature	5 ... 50 °C
Operating Pressure	2 ... 10 bar
Operation	3/2
Materials - Body	Aluminium
Materials - Seals	Nitrile rubber
Range	M/20000
Series	Martonair
Brand	Norgren

Inline Valves - Solenoid

[Overview](#)

[Technical Details](#)



- Steel reinforced spool seals – for stability and reliability
- In-line ports – allows pipework to be kept neat and tidy
- Manual override fitted as standard

Medium:	Compressed Air
Operation:	3/2

Technical Details

Medium	Compressed Air
Operating Temperature	5 ... 50 °C
Operating Pressure	2.5 ... 10 bar
Operation	3/2
Materials - Body	Aluminium
Materials - Seals	Nitrile rubber
Range	M/20000
Series	Martonair
Brand	Norgren

Inline Valves - Pilot

[Overview](#) [Technical Details](#)



- Steel reinforced spool seals – for stability and reliability
- In-line ports – allows pipework to be kept neat and tidy
- Manual override fitted as standard

Medium:	Compressed Air
Operation:	5/2

Technical Details

Medium	Compressed Air
Operating Temperature	5 ... 50 °C
Operating Pressure	1.7 ... 10 bar
Operation	5/2
Materials - Body	Aluminium
Materials - Seals	Nitrile rubber
Range	M/20000
Series	Martonair
Brand	Norgren

Inline Valves - Pilot

[Overview](#)

[Technical Details](#)



- Steel reinforced spool seals – for stability and reliability
- In-line ports – allows pipework to be kept neat and tidy
- Manual override fitted as standard

Medium:	Compressed Air
Operation:	5/2

Technical Details

Medium	Compressed Air
Operating Temperature	5 ... 50 °C
Operating Pressure	2 ... 10 bar
Operation	5/2
Materials - Body	Aluminium
Materials - Seals	Nitrile rubber
Range	M/20000
Series	Martonair
Brand	Norgren



Steel reinforced spool seals – for stability and reliability
In-line ports – allows pipework to be kept neat and tidy
Manual override fitted as standard

Medium: Compressed Air
Operation: 5/2

Technical Details

Medium	Compressed Air
Operating Temperature	5 ... 50 °C
Operating Pressure	2.5 ... 10 bar
Operation	5/2
Materials - Body	Aluminium
Materials - Seals	Nitrile rubber
Certification - WEEE	WEEE
Classification - eClass 11	51030100
Range	M/20000
Series	Martonair
Brand	Norgren

Inline Valves - Pilot

[Overview](#) [Technical Details](#)



- Steel reinforced spool seals – for stability and reliability
- In-line ports – allows pipework to be kept neat and tidy
- Manual override fitted as standard

Medium:	Compressed Air
Operation:	5/3

Technical Details

Medium	Compressed Air
Operating Temperature	5 ... 50 °C
Operating Pressure	2.8 ... 10 bar
Operation	5/3
Materials - Body	Aluminium
Materials - Seals	Nitrile rubber
Range	M/20000
Series	Martonair
Brand	Norgren

Inline Valves - Solenoid

[Overview](#)

[Technical Details](#)



- Steel reinforced spool seals – for stability and reliability
- In-line ports – allows pipework to be kept neat and tidy
- Manual override fitted as standard

Medium:	Compressed Air
Operation:	5/3

Technical Details

Medium	Compressed Air
Operating Temperature	5 ... 50 °C
Operating Pressure	2.8 ... 10 bar
Operation	5/3
Materials - Body	Aluminium
Materials - Seals	Nitrile rubber
Range	M/20000
Series	Martonair
Brand	Norgren

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