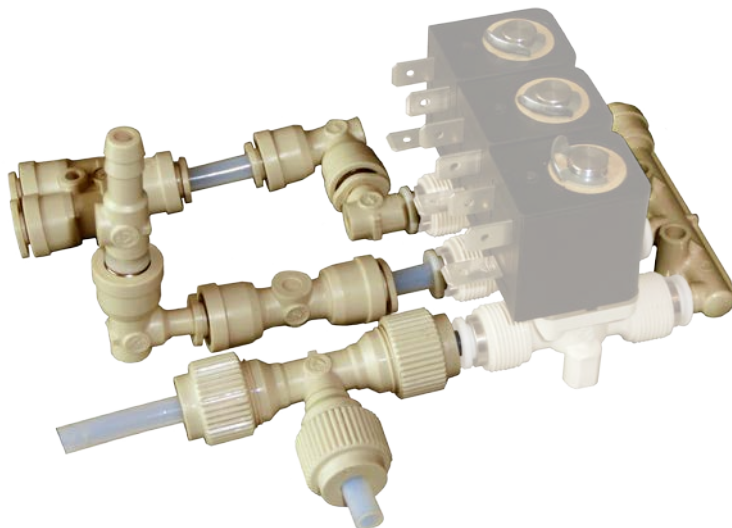


Series FitSys 18



Description

The FitSys 18 Push-Fit fitting system is used with a variety of liquid and gaseous media. It can also be used for food, hot water, steam and aggressive media

The flexible push-fit system is of modular design and allows the combination of different connector types (male thread, tube clamp, nozzle, push-fit) in straight, L-, T- or Y-Connector).

Functional components such as control and pressure relief valves increase the benefit of the system.

Applications

- Variable media management
- Connecting valves of the series 18.00x
- Distribution systems in vending machines and espresso machines
- Pharmaceutical technology
- Laboratory and analytical equipment
- Medical technology
- Diagnostics
- Industrial appliances
- Environmental engineering

Materials

Fitting body / connection type	PPSU
O-ring	FKM EPDM on request
Spring	stainless steel

⚠ PPSU valve bodies must not come in contact with:
acetone, ethers, ketones, aromatic hydrocarbons, chlorinated hydrocarbons, acids and oxidizing anaerobic adhesives.



A. u. K. Müller

Solenoid valves
Control valves
Special valves and systems

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Fax: +49(0)211-7391-281

e-mail: info@akmueller.de
Internet: www.akmueller.de

Characteristics

- Easy to assemble
- Compact design, for space optimisation
- Can easily be disassembled without tools, reduced assembly time
- Hose guide prevents misalignment of tubing
- Tactile feedback when inserting the hose
- Minimal axial clearance on dynamic pressure loads
- No damage to the hose
- Connection types for most fittings in a wide variety of combinations
- Base body of fitting can be moulded with reduced orifice
- High temperature resistance
(Saturated steam 143° C at 3 bar
(290° F at 43.5 psi))
- UL and NSF/ANSI 169 certified versions available

Technical Data

Type	Fitting system	
Construction	Push-Fit without tools	
Media	Neutral gases, cold and heated potable water and physically and chemically similar media	
T-Medium	98	°C max.
Saturated steam	143 (3bar)	°C max.
T-Ambient	60	°C max.
DN	4 (0.158)	mm inch)
	2 (0.079)	mm for type B inch for type B))
p-Operating	0 - 16 (0 - 232)	bar psi)

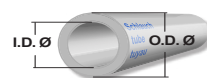
⚠ Please be aware of the maximum allowable pressure of the used tube / hose.



Series FitSys I8

Possible connection types of the fitting system

Type			Hose / tube material	Hose dimensions O.D. Ø x wall thickness
A*		Hose stem connection ID tube Ø 6 mm (0.236 inch)	Flexible plastic tubes Silicone	8 x 1 (0.315 x 0.04 inch)
B*		Push-Fit stem Ø 4 mm (0.158 inch) (Counterpart of type G)	-	-
C*		Push-Fit stem Ø 6 mm (0.236 inch) (Counterpart of type F)	-	-
D*		Thread connection G 1/8	-	-
E*		Clamp connection Ø 6 mm (0.236 inch)	Flexible plastic tubes PFA, PTFE	6 x 1 (0.236 x 0.04 inch)
			Metal tubes	6 x 1 (0.236 x 0.04 inch)
F*		Push-Fit Ø 6 mm (0.236 inch) (Counterpart of type C)	Flexible plastic tubes PFA, PTFE	6 x 1 (0.236 x 0.04 inch) 6 x 0.75 (0.236 x 0.03 inch) 6 x 0.5 (0.236 x 0.02 inch)
G*		Push-Fit Ø 4 mm (0.158 inch) (Counterpart of type C)		4 x 1 (0.158 x 0.04 inch) 4 x 0.5 (0.158 x 0.02 inch)
H		Thread connection G 1/8 (Thread insert made of stainless steel)	-	-
I		Thread connection G 1/4 (Thread insert made of stainless steel)	-	-
CV		Control valve (for use with base body T)	-	-



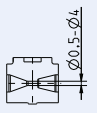
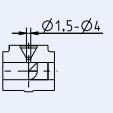
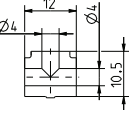
S*		Plug for connection type F
S*		Plug for connection type G

All drawings in mm units

* UL and NSF/ANSI 169 certified versions available

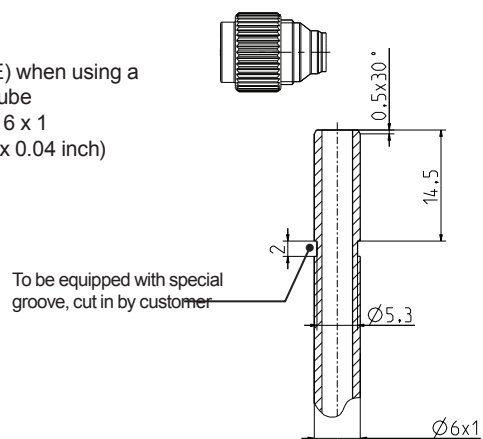
Series FitSys I8

With possible base bodies

Type		
G x*		 Straight through $\varnothing 4 \text{ mm}$ (0.158 inch)
		 Straight through with reduced orifice possible $\varnothing 0,5 - 4 \text{ mm}$ ($\varnothing 0.02 - 0.158 \text{ inch}$)
L x*		 L-Fitting body $\varnothing 4 \text{ mm}$ (0.158 inch)
		 L-Fitting body with reduced orifice possible $\varnothing 1,5 - 4 \text{ mm}$ ($\varnothing 0.06 - 0.158 \text{ inch}$)
T*		 T-Fitting body $\varnothing 4 \text{ mm}$ (0.158 inch)
S*		 S-Closure stop
Y*		 Y-Fitting for connection type F, G

All drawings in mm units

Type E) when using a
metal tube
O.D. $\varnothing 6 \times 1$
(0.236 x 0.04 inch)



* UL and NSF/ANSI 169 certified versions available

Series FitSys I8

Straight through connector

All connection types are feasible, see table for all currently available versions.

An internal orifice in the range $\varnothing 0.5 - 4$ mm is also possible as an option.

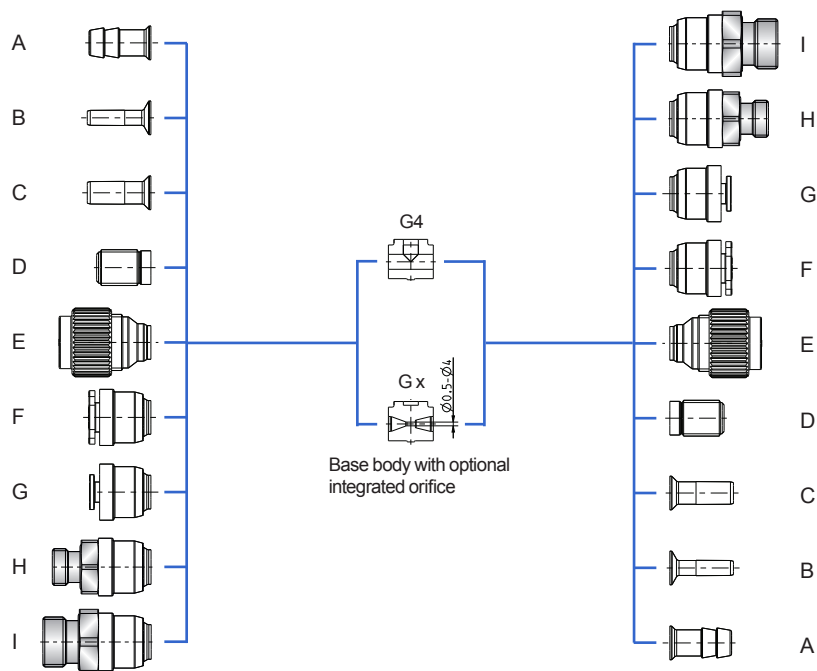
Selection
G a-X.Y

Connection type right (A - I)

Connection type left (A - I)

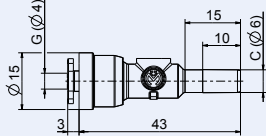
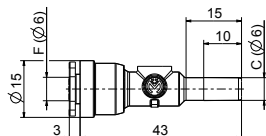
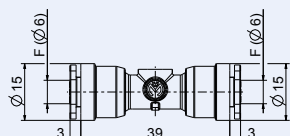
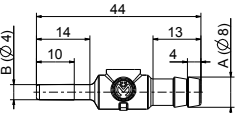
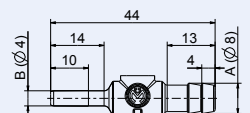
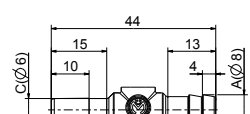
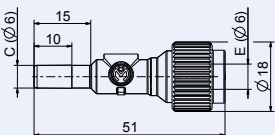
Inner diameter of orifice [mm] (0,5 - 4)

Combination matrix



Series FitSys I8

Available standard components

Type	Dimensions	Image	ID
G4-G.C			009440
G4-F.C			009435
G4-F.F			009431
G4-B.A			009422
G0,8-B.A			009423
G4-C.A			009740
G4-C.E			009570

All drawings in mm units

Other combinations on request



Series FitSys I8

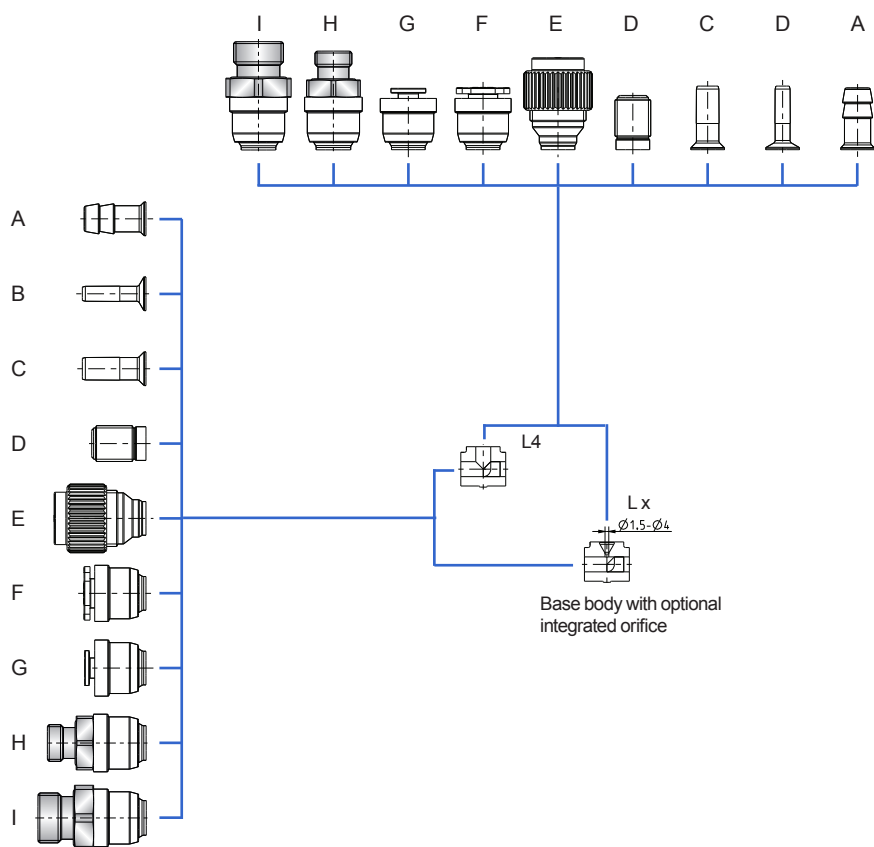
L-Connector

All connection types are feasible, see table for all currently available versions.

An internal orifice in the range $\varnothing 1.5 - 4$ mm is also possible as an option.

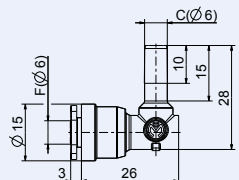
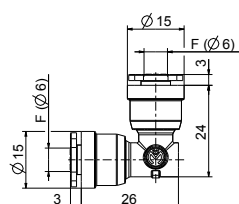
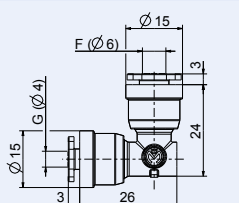
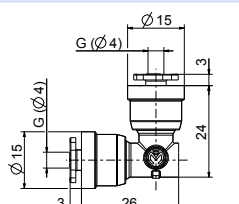
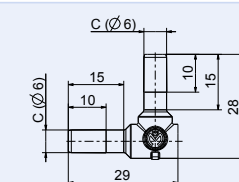
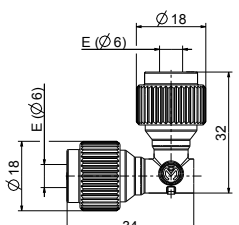
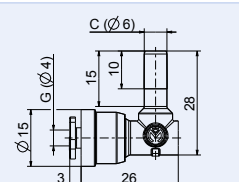
Selection
L a-X.Y
 Connection type top (A - I)
 Connection type left (A - I)
 Inner diameter of orifice [mm] (1,5 - 4)

Combination matrix



Series FitSys I8

Available standard components

Type	Dimensions	Image	ID
L4-F.C			009434
L4-F.F			009429
L4-G.F			009760
L4-G.G			009475
L4-C.C			009392
L4-E.E			009430
L4-G.C			009506

All drawings in mm units

Other combinations on request

T-Connector

Selection
T-X.Y.Z

T-X.Y.Z

Connection type right (A - I)

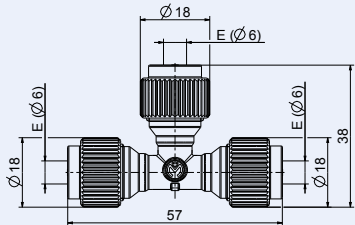
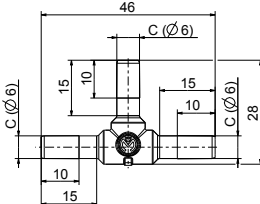
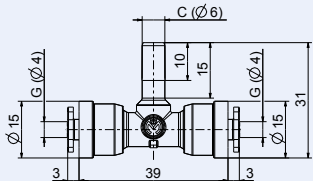
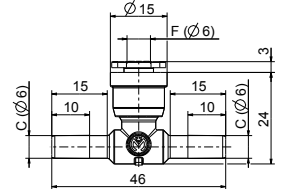
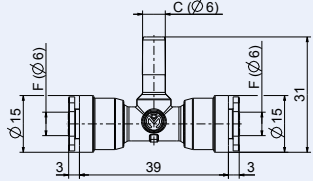
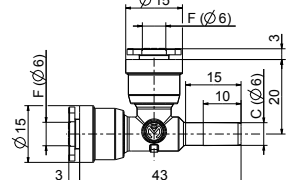
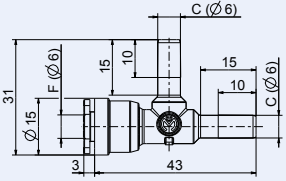
Connection type top (A - I)

Connection type left (A - I)

Type	Dimensions	Image	ID
T-G.G.G	Technical drawing of the T-G.G.G fitting. It shows a central vertical port with a diameter of $\varnothing 15$ and a horizontal port with a diameter of $\varnothing 15$. The vertical port has a G $(\varnothing 4)$ thread. The horizontal port has a G $(\varnothing 4)$ thread. The overall height is 27, and the overall width is 39. The distance from the center of the vertical port to the center of the horizontal port is 3. The distance from the center of the vertical port to the center of the horizontal port is 3. The distance from the center of the vertical port to the center of the horizontal port is 3.		009439
T-F.F.F	Technical drawing of the T-F.F.F fitting. It shows a central vertical port with a diameter of $\varnothing 15$ and a horizontal port with a diameter of $\varnothing 15$. The vertical port has an F $(\varnothing 6)$ thread. The horizontal port has an F $(\varnothing 6)$ thread. The overall height is 27, and the overall width is 39. The distance from the center of the vertical port to the center of the horizontal port is 3. The distance from the center of the vertical port to the center of the horizontal port is 3. The distance from the center of the vertical port to the center of the horizontal port is 3.		009432

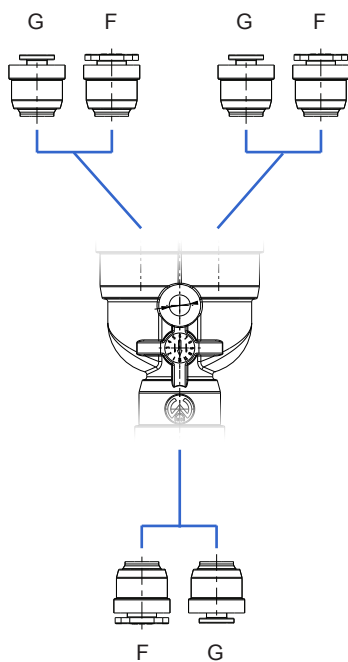
Series FitSys 18

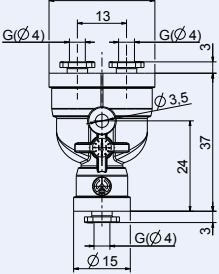
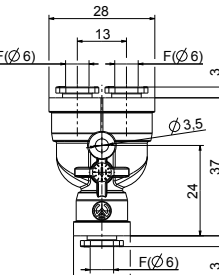
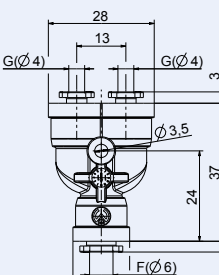
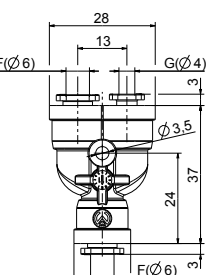
Available standard components

Type	Dimensions	Image	ID
T-E.E.E			009433
T-C.C.C			009396
T-G.C.G			009507
T-C.F.C			009514
T-F.C.F			009523
T-F.F.C			009571
T-F.C.C			009741

All drawings in mm units

Other combinations on request



Type	Dimensions	Image	ID
Y-G.G.G	 Technical drawing of the Y-G.G.G valve. It shows a cross-section with a total width of 28 and a central opening of 13. The top has two G(Ø4) ports. The bottom has a G(Ø4) port. The central body has a diameter of Ø3.5. The overall height is 37, with a 24mm section for the main body and a 3mm section for the base. The base has a diameter of Ø15.		009437
Y-F.F.F	 Technical drawing of the Y-F.F.F valve. It shows a cross-section with a total width of 28 and a central opening of 13. The top has two F(Ø6) ports. The bottom has an F(Ø6) port. The central body has a diameter of Ø3.5. The overall height is 37, with a 24mm section for the main body and a 3mm section for the base. The base has a diameter of Ø15.		009436
Y-F.G.G	 Technical drawing of the Y-F.G.G valve. It shows a cross-section with a total width of 28 and a central opening of 13. The top has two G(Ø4) ports. The bottom has an F(Ø6) port. The central body has a diameter of Ø3.5. The overall height is 37, with a 24mm section for the main body and a 3mm section for the base. The base has a diameter of Ø15.		009474
Y-F.F.G.	 Technical drawing of the Y-F.F.G. valve. It shows a cross-section with a total width of 28 and a central opening of 13. The top has two F(Ø6) ports. The bottom has an F(Ø6) port. The central body has a diameter of Ø3.5. The overall height is 37, with a 24mm section for the main body and a 3mm section for the base. The base has a diameter of Ø15.		009569

Other combinations on request

Series FitSys I8

Combination matrix

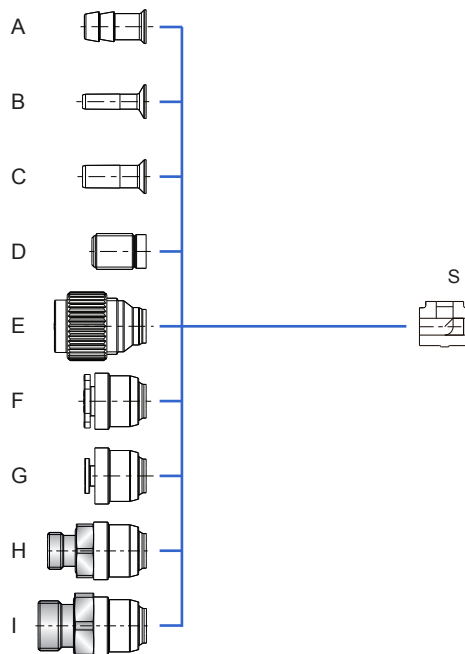
S-Plug

For connection types

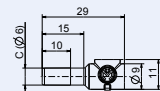
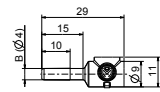
Selection

S-X

Connection type A - I



Available standard components

Type	Dimensions	Image	ID	
S-C			009462	Plug for connection F
S-B			009463	Plug for connection G

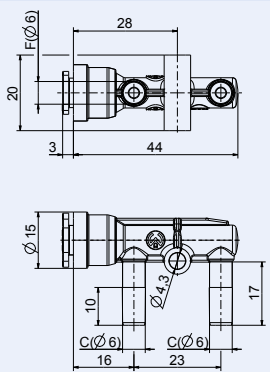
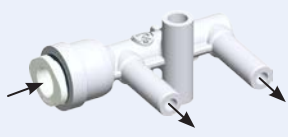
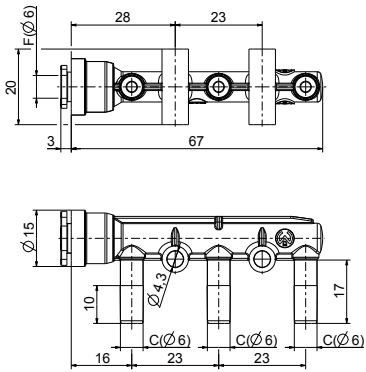
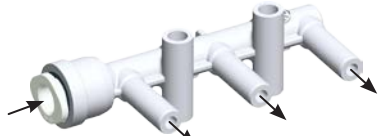
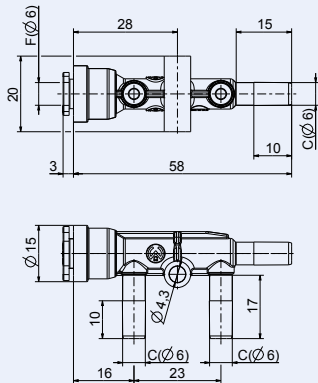
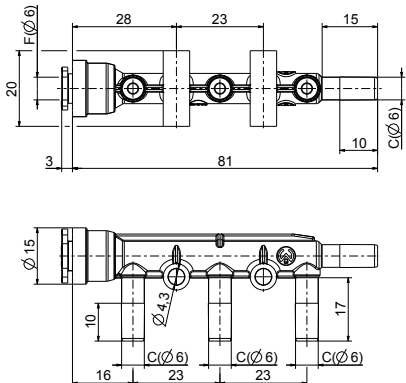
All drawings in mm units

Other combinations on request

Series FitSys I8

Manifold components for Push-fit connection 6 mm Ø

M-connector

Type	Figures		ID
	* Area of o-ring seal	Flow direction (→) can also be reversed.	
MC-F.C.C			008948
MC-F.C.C.C			008949
MO-F.C.C.C			008946
MO-F.C.C.C.C			008947

All drawings in mm units

Series FitSys I8

CV-control valve

The control element is made of stainless steel.

All connection types are feasible, see table for all currently available versions.

Selection
T-X.Y.Z

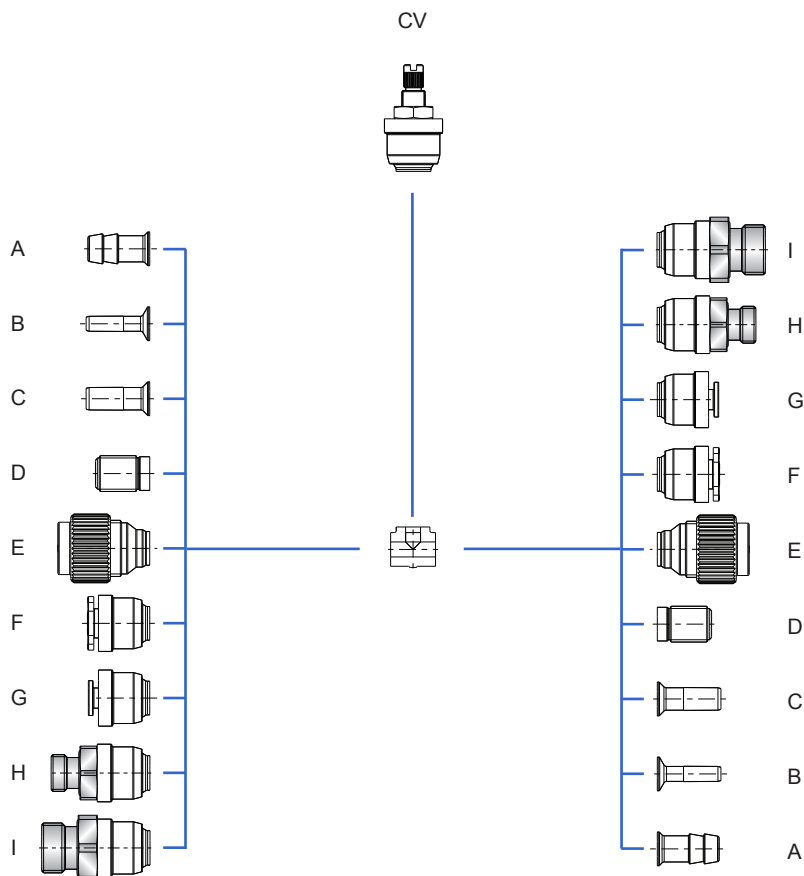
Connection type right (A - I)

Connection type top (CV)

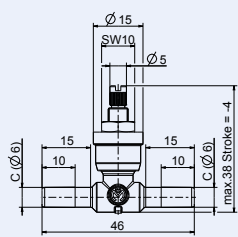
Connection type left (A - I)

The control valve may be located to the right or left on demand.

Combination matrix



Available standard components

Type	Dimensions	Image	ID
T-C.CV.C			009877

All drawings in mm units

Other combinations on request



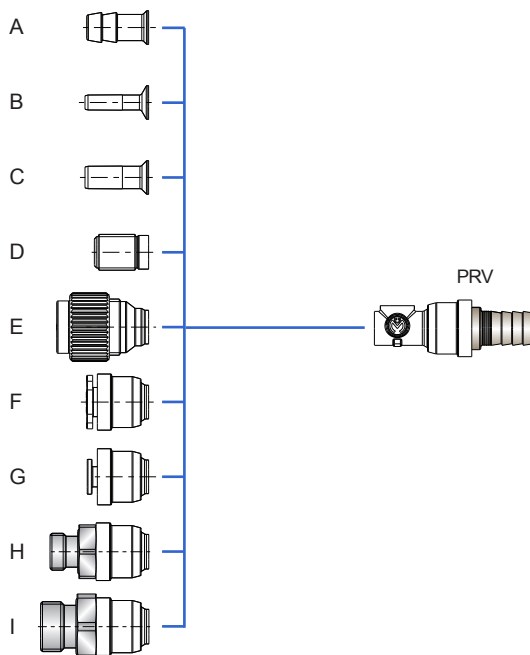
Series FitSys I8

Pressure Relief Valve

All connection types are feasible, see table for all currently available versions.

Selection
PRV-X

Connection type left (A - I)



Available standard components on request

Type	Dimensions	Image	max. pressure [bar]	ID
PRV4-F.4			4	009603
PRV4-F.10			10	009604
PRV4-F.12			12	009605

All drawings in mm units

Other combinations on request