

Product Information

Push-Fit fitting system



A. u. K. Müller

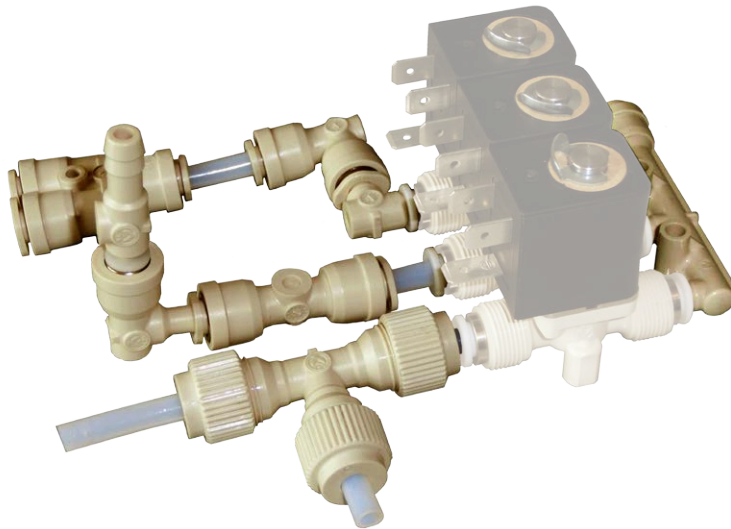
Solenoid valves
Control valves
Special valves and systems

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Series FitSys 18



Characteristics

- Easy to assemble
- Compact design, for space optimisation
- Can easily be disassembled
- 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))

Applications

- Variable media management
- Distribution systems in vending machines
- Connecting valves of the series 18.00x
- Espresso machines
- Medical equipment
- Industrial applications

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 FitSys 18 Push Fit fitting 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-connectors).

Materials

Fitting body / connection type	PPSU
O-ring	EPDM FKM 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.

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)

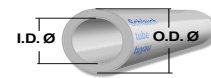
⚠ Please be aware of the maximum allowable pressure of the used tube / hose.



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)	S	 Plug for connection type F
G		Push-Fit Ø 4 mm (0.158 inch) (Counterpart of type b)	Metal tubes	4 x 1 (0.158 x 0.04 inch) 4 x 0,5 (0.158 x 0.02 inch)	S	 Plug for connection type G



All drawings in mm units

With possible base bodies

Type		
Gx		Straight through Ø 4 mm (0.158 inch)
		Straight through with reduced orifice Ø 0,5 - 4 mm (Ø 0.02 - 0.158 inch) possible
Lx		L-Fitting body Ø 4 mm (0.158 inch)
		L-Fitting body with reduced orifice possible Ø 1,5 - 4 mm (Ø 0.06 - 0.158 inch)
T		T-Fitting body Ø 4 mm (0.158 inch)

All drawings in mm units

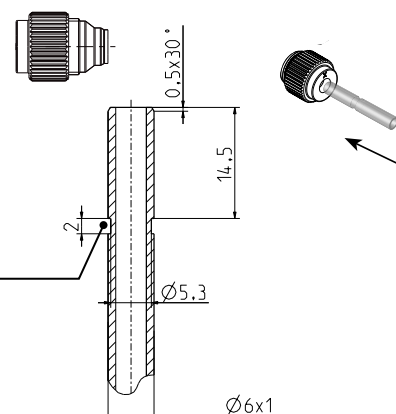
Y-Distributor

Type		
Y		Y-Fitting for connection type F, G

All drawings in mm units

Type E) when using a metal tube
O.D. Ø 6 x 1
(0.236 x 0.04 inch)

To be equipped with special groove, cut in by customer





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Combination matrix

Straight through connector

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

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

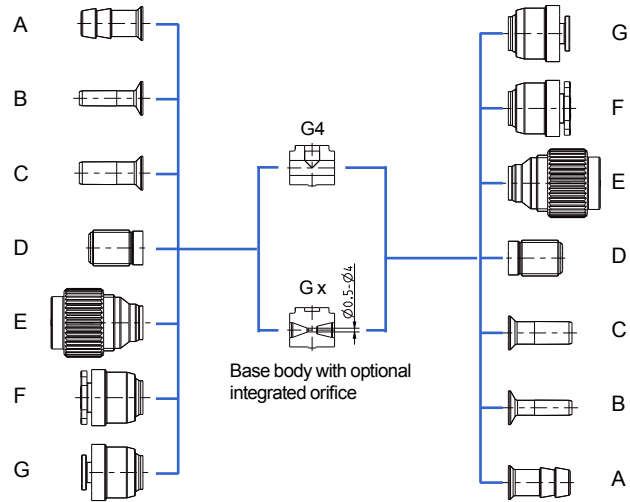
Selection

G a-X.Y

Connection type right (A - G)

Connection type left (A - G)

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



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



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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

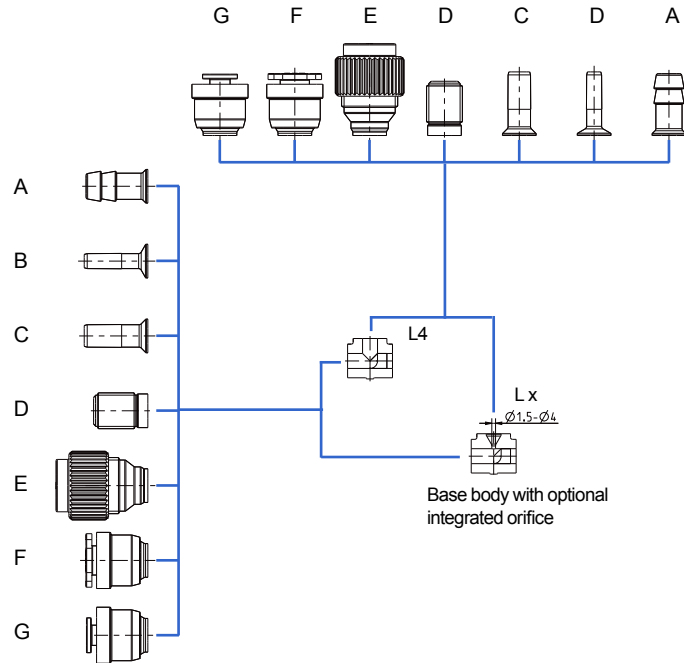
L a-X.Y

Connection type top (A-G)

Connection type left (A-G)

Inner diameter of orifice [mm] (1,5 - 4)

Combination matrix



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

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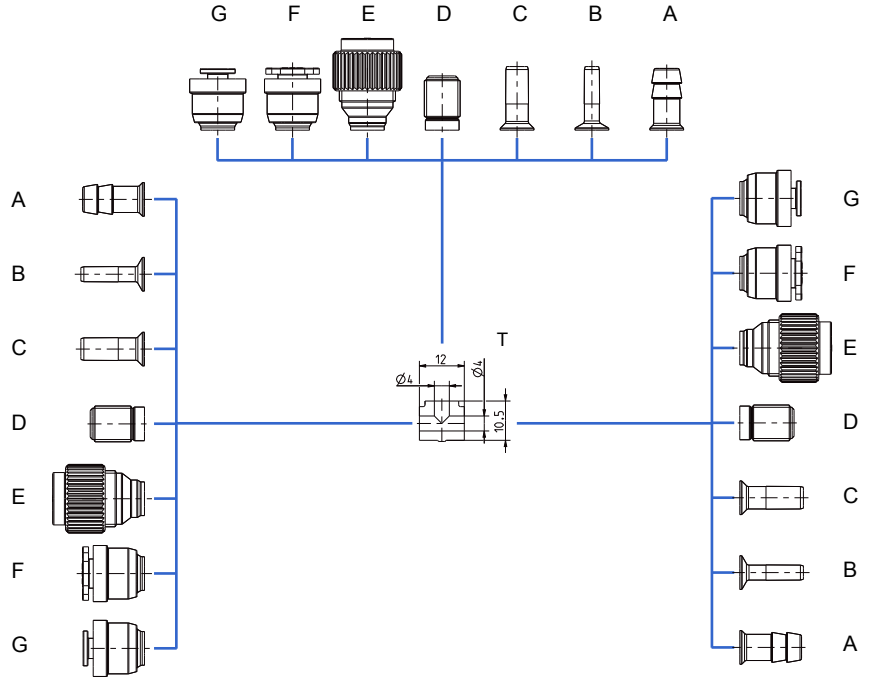
T-connector

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

Selection
T-X.Y.Z

- Connection type right (A - G)
- Connection type top (A - G)
- Connection type left (A - G)

Combination matrix



Type	Dimensions	Image	ID
T-G.G.G			009439
T-F.F.F			009432
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



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Y-connector

The connection types F 6 mm and G 4 mm can be manufactured arbitrarily combined.

(Counterparts: Connection types B and C)

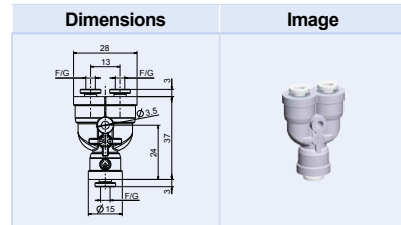
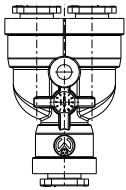
Selection

Y-X.Y.Z

Connection type below (ØDx: F oder G)

Connection type top left (ØDx: F oder G)

Connection type top right (ØDx: F oder G)



Type	Configuration	ID
Y-G.G.G		009437
Y-F.F.F		009436
Y-F.G.G		009474

S-Plug

For connection types F (4 mm) and G (6 mm)

Selection

S-X

Connection type B or C

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

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Manifold components for Push-fit connection 6 mm Ø

M-connector

Type	Figures	Flow direction (→) also reversed possible.	ID
MC-F.C.C	<p>* Area of o-ring seal</p>		008948
MC-F.C.C.C			008949
MO-F.C.C.C			008946
MO-F.C.C.C.C			008947