Product Information

Backflow Preventer

Series FitSys 18

A. u. K. Müller

Solenoid valves
Control valves
Special valves and systems

A. u. K. Müller GmbH & Co. KG
Dresdener Str. 162
D-40595 Düsseldorf/Germany

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

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



Characteristics

- Easy to install plug-in system
- Installation even in confined spaces
- Easy and safe release without tools, reduced assembly times
- Hose guide avoids misalignment of the hose
- Noticeable stop when inserting the hose
- Minimal axial clearance on dynamic pressure loads
- No hose damage
- High temperature resistance (Saturated steam 143° C at 3 bar (290° F at 43.5 psi))
- UL and NSF/ANSI 169 certified versions available

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 many aggressive media.

If the flow directions are changed due to pressure fluctuations in the pipe system, the backflow preventer blocks the pipe, triggered by the negative pressure on the inlet side. A backflow of the medium is thus prevented.

The backflow preventer helps to operate the entire system with secured parameters.

Applications

- Distribution systems in vending machines as well as coffee and espresso machines
- Pharmaceutical industry
- Laboratory and analytical equipment
- Medical equipment
- Diagnostics
- Industrial appliances
- Environmental technology

Technical Data

Type	Backflow Preventer	
Construction	Pluggable without tools	
Media	Neutral gases, cold and heated potable water and physically and chemically similar media	
T-Medium **Saturated steam**	98 143 (3 bar)	°C max. °C max.
T-Ambient	60	°C max.
p-Operating	0 - 16 (0 - 232 0 - 3 (0 - 44	bar (98 °C) psi (208° F)) bar (143 °C) psi (289° F))

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

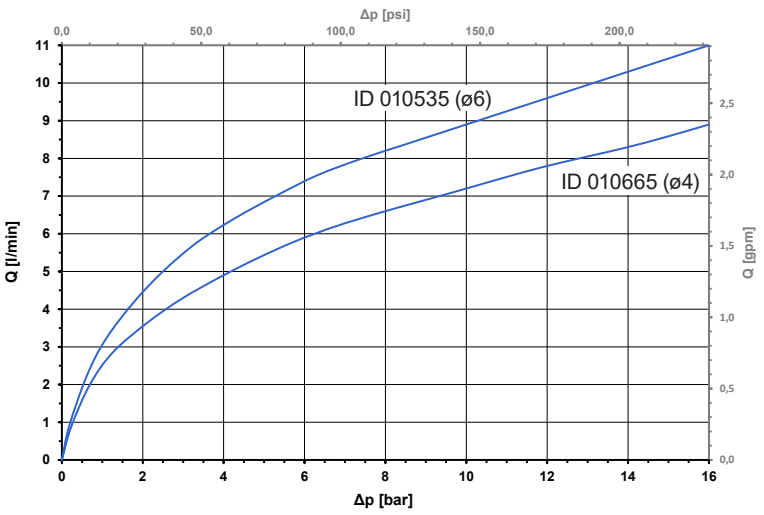
Materials

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.

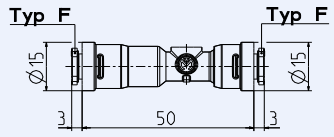
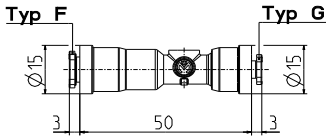
Typical Performance Curve



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Available Standard Components

Type	Dimensions		Opening pressure BP [bar]*	ID
BP-F.F			0,15	010535
BP-F.G			0,15	010665

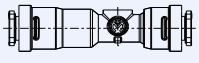
* Working pressure up to max. 16 bar. Other opening pressures on request. Depending on the application, an increased opening pressure can prevent the backflow preventer from sticking.

Connection types

Type	Dimensions		Hose / Tube material	Recommended Hose / Tube Dimensions Outer-Ø x Inner-Ø
F*		Push-Fit Ø 6 mm (0.236 inch)	Flexible plastic tubes PFA, PTFE Metal tubes	6 x 4 mm (0.236 x 0.158 inch) 6 x 4,5 mm (0.236 x 0,177 inch) 6 x 5 mm (0.236 x 0.197 inch)
G*		Push-Fit Ø 4 mm (0.158 inch)		4 x 2 mm (0.158 x 0.79 inch) 4 x 3 mm (0.158 x 0.118 inch)

* UL and NSF/ANSI 169 certified versions available

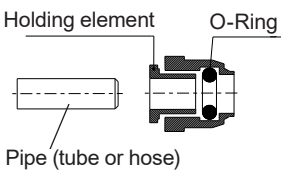
Designation Backflow Preventer

BP		→ BP-Backflow Preventer	Selection **BP-X.Y** Connection type right (F, G) Connection type left (F, G)

When using hoses, it is necessary to deburr the cutting site.

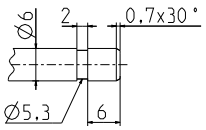
Installation note pipe in connection with Push-Fit connections (Type F and G)

- Cut pipe to length at right angles and deburr well
- When using metal pipes, additionally groove according to pipe diameter (see above)
- Push the pipe into the holding element to the limit stop
- To check the correct connection, pull the pipe in the opposite direction
- To release the pipe, press in the holding element and pull the pipe in the opposite direction

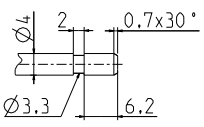


Installation notes reworking when using metal pipes (Type F and G)

Type F Push-Fit
when using a metal tube
Ø 6 x 4 mm (0.236 x 0.158 inch)



Type G Push-Fit
when using a metal tube
Ø 4 x 2 mm (0.158 x 0.79 inch)



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