

Pressure Reducer for Medical Applications

Product Information



A. u. K. Müller

Solenoid valves
Control valves
Special valves and systems

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Series 42.004.126



Description

The pressure regulator for medical applications converts the variable inlet pressure into a lower, constant outlet pressure.

The pressure reducer therefore decouples the piping system from a supply pressure that is too high or fluctuating. This is used to avoid hazardous operating conditions due to excessive pressure in the line system.

The devices in this series have been specially developed for use in haemodialysis machines and medical devices. Of course, the special requirements for medical devices have been taken into account.

To ensure operation and long reliability of the pressure regulator it is recommended that a dirt strainer is fitted to the inlet. Check valves or solenoid valves can be placed downstream of the regulator.

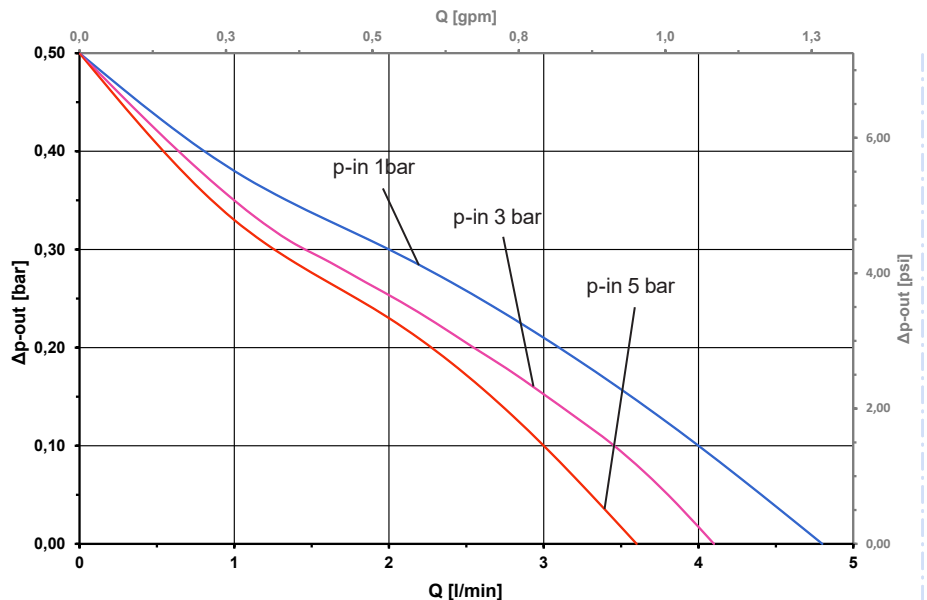
Applications

- Pressure reduction in medical applications e.g. haemodialysis machines
- Constant flow rate
- Protection against pressure caused damages of pipework downstream
- Medical engineering
- Water treatment
- Disinfection equipment

Characteristics

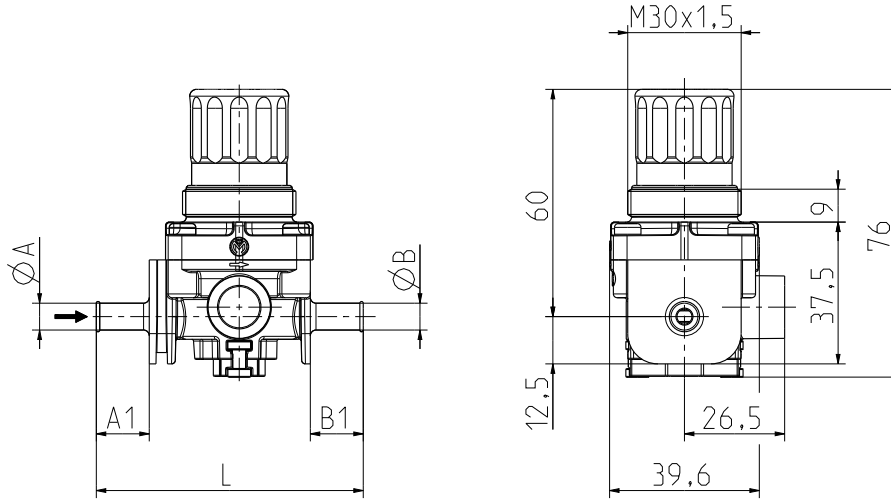
- Outlet pressure adjustable, factory presettable
- With snap-lock adjustment knob
- Balancing of inlet pressure
- Suitable for hot water up to 80 °C
- Reduced noise of flow
- Compact design
- Hydraulic functionality follows EN 1567
- Long term performance capability by the use of high quality materials

Typical flow rates at an example pressure p-in 1,3 or 5 bar, back pressure p-out set to 0.5 bar, for example





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Technical Data

Type	pressure reducer	
Construction	single chamber straight	
Fitting Position	any, direction of flow marked by arrow	
Media	cold and heated potable water and physically and chemically similar media	
T-Medium	5 - 80	°C
DN	4	mm

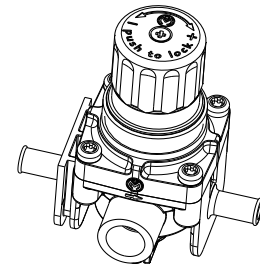
Materials

Valve body	PEI	
Spring and metallic parts	stainless steel	
Membrane and sealings	EPDM	

Options

ID	Material	Inlet		Outlet		Length	p-inlet bar	p-outlet bar
		$\varnothing A$	A1	$\varnothing B$	B1			
096450	PEI	Nozzle 7,1 mm	14,0	Nozzle 7,1 mm	14	70,6	5	0,2 - max. 1,0

Other connection and pressure variants on request.



⚠️ Outlet Pressure Adjustment ⚠️

- Release screw in middle of the cap
- Unlock the cap by pulling
- Set the desired output pressure by turning the cap
(The direction of rotation is indicated by + or -.)
- Press the cap into the locking position
- Tighten again the screw in the cap middle slightly

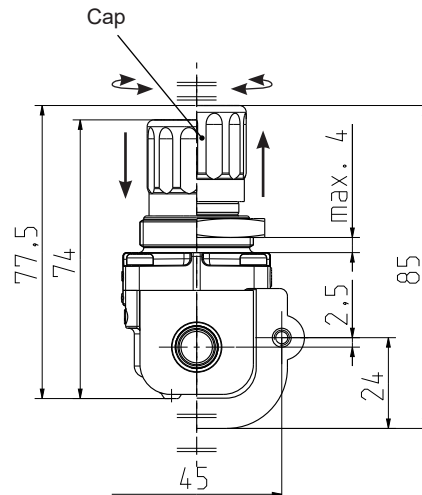
The setting is carried out at steady-state pressure (exit side with e.g. ball valve locked).

Upon delivery, the outlet pressure is factory set at 0,3 bar. Custom presets are available on request.

⚠️ Important Notes for Assembly ⚠️

Please make sure that the pressure regulator is not bended during installation!

- Please support connecting pipes properly.
- Please align connecting pipes properly.





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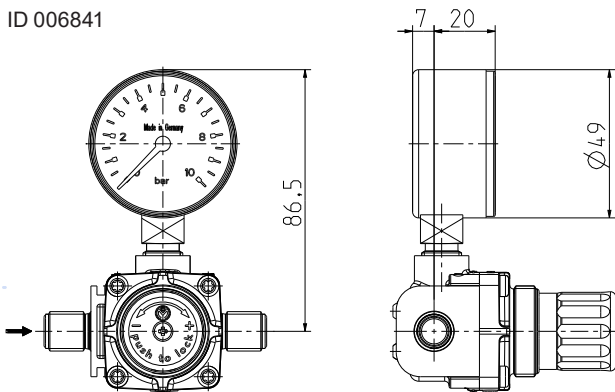
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Connection Options for Manometers

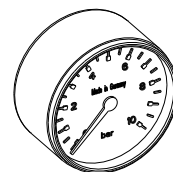
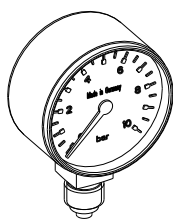
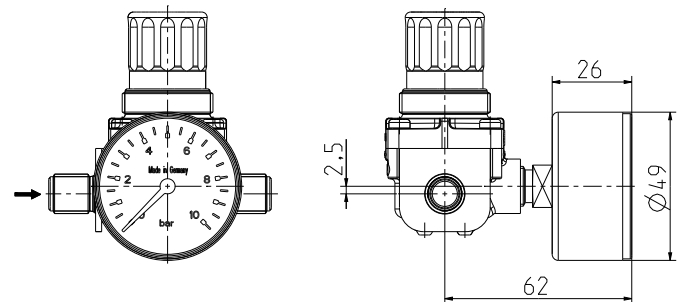
On request, we offer the pressure reducer with a connection for an optional manometer, so the user can monitor the outlet pressure. Also the according manometers are available on request.

Manometer (optional)			
ID	NG	Pressure Range	Connection Types
006841	50 mm	0 - 10 bar	G 1/4 radial on bottom
010047			G 1/4 center back

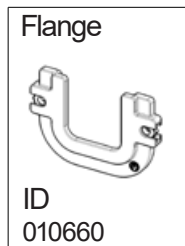
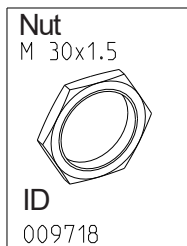
ID 006841



ID 010047



Additional Accessory



The hydraulic functionality according to DIN EN 1567 is not defined for this pressure range. Therefore there exists no possibility for an accredited test house to test or certify the function for compliance with a standard.



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