SOFT START VALVE

Dear Customer,

Thank you for your confidence in our product.
In the following pages you will find the technical data required for the trouble-free installation and maintenance of these pneumatic components. Please read the instructions fully to ensure that the product will give you long, trouble-free service.

Warning: **Servicing and repair work must only be carried out by a qualified technician.**

1. TECHNICAL DATA

Characteristics			Pressures quoted as gauge pressure	
Port size			G1/4	G3/8
Installation			In any position - direct assembly to airfit-swing air preparation units is recommended	
Medium and ambient temperature range	ϑ_{min} ϑ_{max}	°C °C	0 +60 (other temperatures on request)	
Weight (mass)		kg	0,35	
Pneumatic Characteristics				
Operating pressur range Inlet	p_{min} p_{max}	bar	2 16	
Recommended flow rate ①	Q_n	l/min m³/h	**550** **33**	**850** **51**
Maximum flow rate ②	Q_{max}	l/min m³/h	1500 90	1600 96

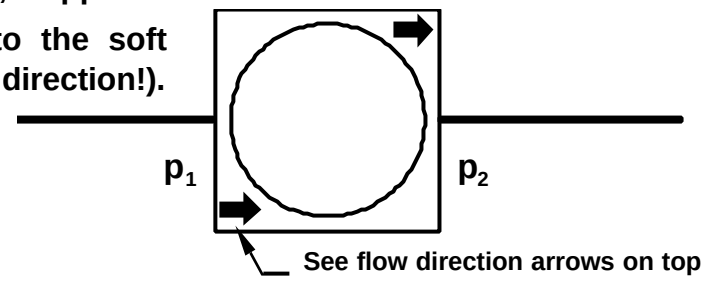
① at p2=6,3 bar and 25 m/s ② at p1=6,3 bar and Δp = 1 bar

2. INSTALLATION INSTRUCTIONS

Warning: **The unit must only be used in industrial applications for compressed air.**
To avoid danger of injuries, the compressed air system must be fully depressurized while pneumatic components are being installed.

Note: **The soft start valve only works in systems in which no compressed air is consumed during the start-up phase.**

1. **Clean any rust particles or other dirt out of the tubing.**
2. **Fit a mounting bracket, if applicable.**
3. **Connect the tubing to the soft start valve (check flow direction!).**
4. **Turn on the compressed air supply.**



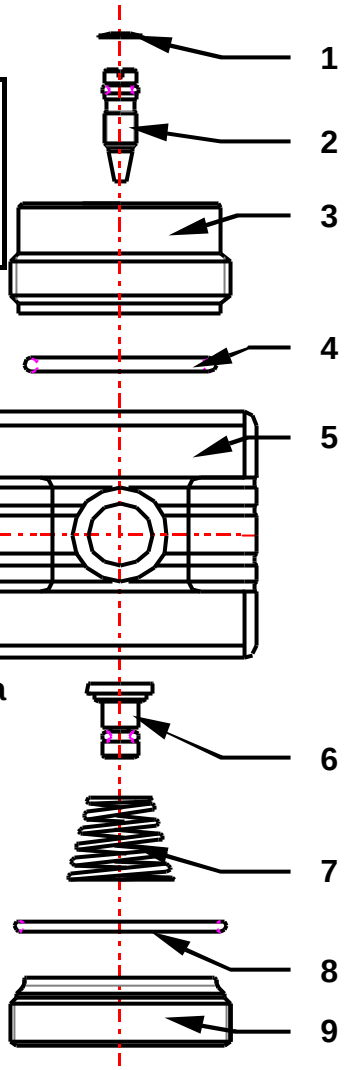
3. MAINTENANCE

The soft start valve itself is maintenance-free. The compressed air system as a whole must be correctly maintained (air filtered and dewatered).

3.1. Cleaning

The plastic parts should only be cleaned with warm water and normal washing-up liquid.

4. DISMANTLING



Warning: To avoid danger of injuries, the unit must only be dismantled with the pneumatic system completely depressurized!

4.1. Dismantling the Upper Part

1. Loosen upper part ①②③ with a pin spanner and screw it off.
2. Remove O-ring ∅30 × 2,5 ④ from cap ③.

4.1.1. Removing the Setting Screw

1. Lever toothed ring ① out of cap ③ with a small screwdriver.
2. Unscrew setting screw ②.

4.2. Dismantling the Lower Part

1. Loosen cap ⑨ with a pin spanner and screw it out.

Caution: The compression spring ⑦ comes out of the housing ⑤ with the lower part.

2. Pull differential piston ⑥ out of spring ⑦.
3. Remove O-ring ∅35 × 2 ⑧ from housing ⑤.

5. REASSEMBLY

Reassembly of the unit is carried out in reverse order.

Note: If new seals are fitted, grease them thoroughly before fitting.

5.1. Reassembling the Upper Part

1. Place O-ring ∅30 × 2,5 ④ in upper part ①②③.
2. Screw upper part ①②③④ into housing ⑤ and tighten it with a pin spanner.

5.1.1. Fitting the Setting Screw

1. Screw setting screw ② into cap ③.
2. Press toothed ring ① into recess with a small screwdriver.

5.2. Reassembling the Lower Part

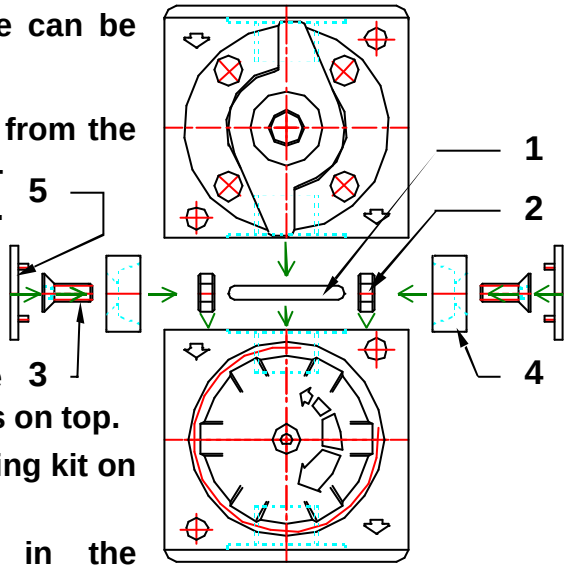
1. O Place O-ring ∅35 × 2 ⑧ in housing ⑤.
2. Push differential piston ⑥ into spring ⑦.
3. Place spring with differential piston (⑥⑦) in housing ⑤, making sure that it is centred.
4. Screw cap ⑨ into housing ⑤ and tighten it with a pin spanner.

6. DISPOSAL

The method of disposal of packaging and discarded parts must comply with local regulations.

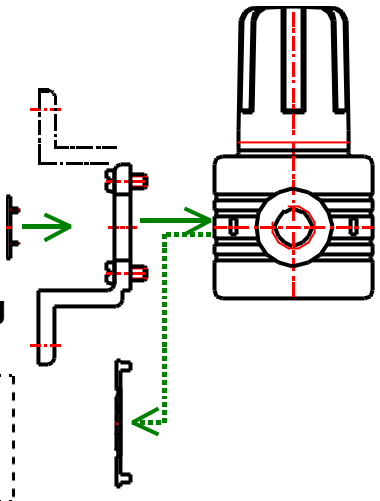
7. ASSEMBLY OF SEVERAL COMPONENTS

Only components of the same size can be assembled into combined units.



1. Remove the black cover plates from the inlets and outlets of the components you wish to assemble. The coloured cover plates remain in place.
2. Turn the component so that the flange surface which is to be joined to the other component is on top.
3. Lay the O-ring ① from the coupling kit on the flange surface.
4. Place the hexagon nuts ② in the recesses on the component.
5. Place the other component on the flange surface.
6. Place the clamping cones ④ with the screws ③ in the recesses on the components.
7. Tighten the clamping screws.
8. Push the small cover plates ⑤ from the coupling kit on to the clamping cones.

8. FITTING THE MOUNTING BRACKET



1. **Remove the coloured cover plate from the component.**
2. **Screw the mounting bracket to the component with the screws provided using a Phillips screwdriver.**

Note: **The mounting bracket can be fitted with the mounting strap either upwards or downwards.**