

# STOP 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

<i>Characteristics</i>			Pressures are gauge pressure	
Port size			G3/8	G1/2
Installation			in any position - direct assembly to air preparation units and/or soft start valve recommended	
Actuation			pneumatic (-P) or electrical (-E)	
Medium and ambient temperature range	$\vartheta_{\min}$	°C	0 (other temperatures on request)	
	$\vartheta_{\max}$	°C	+60	
Weight (mass) P/E		kg	0,7 / 0,8	0,7 / 0,8
Nominal voltage	$U_N$	V	24 DC or 230/50Hz	
<i>Pneumatic Characteristics</i>				
Operating pressure range inlet	$p_{1\min}$	bar	2	
	$p_{1\max}$		16	
Recommended flow rate ①	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b>	<b>1900</b> <b>114</b>
Maximum flow rate ②	$Q_{\max}$	l/min m <sup>3</sup> /h	2500 150	3000 180

① at  $p_2 = 6,3$  bar and 25 m/s

② at  $p_1 = 6,3$  bar and  $\Delta p = 1$  bar

<i>Venting Time (s) of volume to be vented</i>	
Pressure Drop	Venting time (s) ③
from 8 → 0,1 bar	$0,7 \times V (l) = t (s)$
from 6 → 0,1 bar	$0,6 \times V (l) = t (s)$
from 4 → 0,1 bar	$0,5 \times V (l) = t (s)$

③ Note: This calculation applies only to short NW8 mm connections directly after the stop valve

## 2. INSTALLATION INSTRUCTIONS

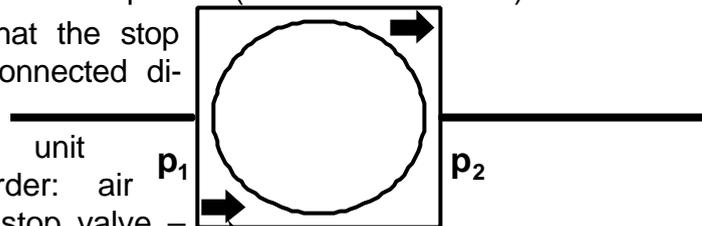
**Warning:** The unit must only be used in industrial applications for compressed air.

To avoid danger of injuries, the compressed air system must be fully depressurized while pneumatic components are being installed.

The electrical connection must be carried out by a qualified electrician.

1. Carefully clean rust particles or other dirt out of the air line.
2. Fit a mounting bracket, if applicable.
3. Connect the air line to the stop valve (check flow direction).

We recommend that the stop valve should be connected directly to the air preparation unit (recommended order: air preparation unit – stop valve – soft start valve).



Check the flow direction arrows on top of the unit

4. Connect the connector ③ to the power supply (electrically actuated valve) or connect the compressed air control line to the valve (pneumatically actuated valve).
5. Turn on the compressed air supply.

## 3. MAINTENANCE

The stop valve itself is maintenance-free. However the complete compressed air system must be correctly maintained (air filtered and dewatered).

## 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. Remove screw from connector ③ and pull connector off solenoid ⑤ (electrically actuated valve)

Disconnect compressed air control line from valve (pneumatically actuated valve).

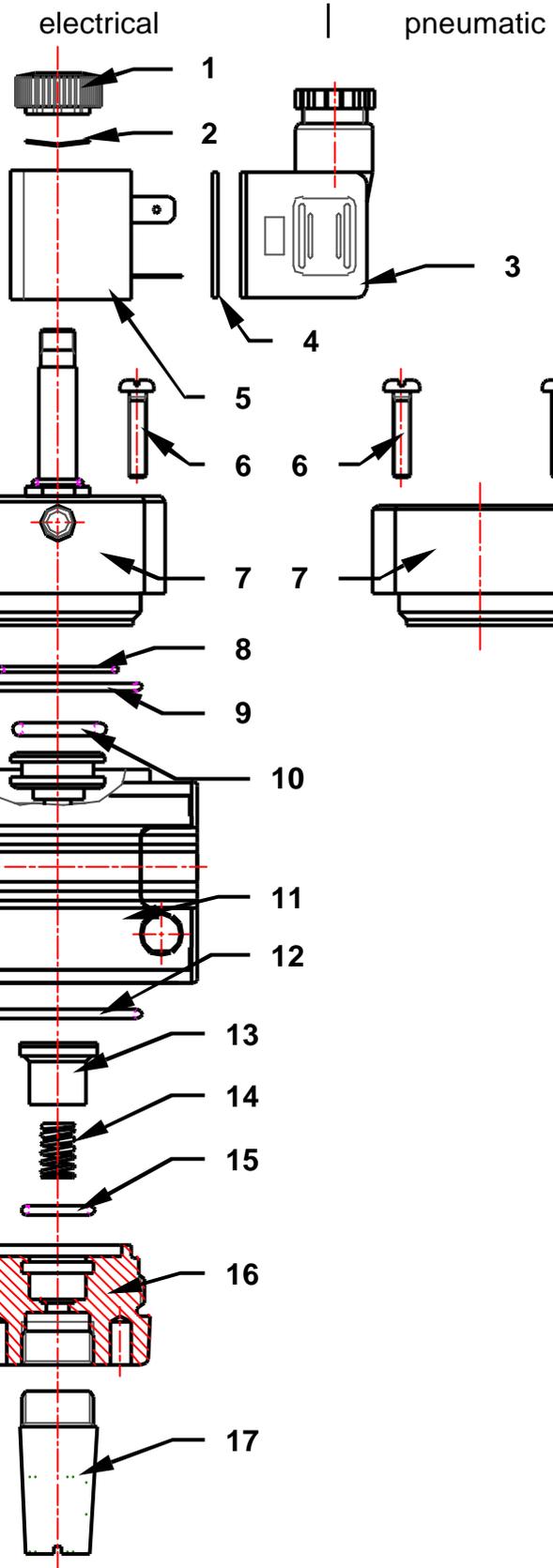
2. Remove knurled nut ① from solenoid ⑤, remove spring washer ② from recess and remove solenoid (electrically actuated valve).

3. Remove screws ⑥ from cap ⑦ and remove cap.

4. Remove O-ring  $\varnothing 35 \times 2$  ⑨ from housing ⑩.

5. Remove O-ring  $\varnothing 25 \times 1,5$  ⑧ from cap ⑦.

6. Remove O-Ring  $\varnothing 16 \times 3$  ⑩ from piston.



### 4.2. Dismantling the Lower Part

1. Unscrew sintered silencer ⑰.
2. Loosen cap ⑱ with pin spanner and unscrew it.
3. Remove spring ⑲ and piston ⑳ from housing ⑰.

4. Remove O-ring  $\varnothing 13 \times 2$  ⑤ from cap ⑩.
5. Remove O-ring  $\varnothing 35 \times 2$  ⑫ from housing ⑪.

## 5. REASSEMBLY

Reassembly of the unit is carried out in the reverse order to dismantling.

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



### 5.1. Reassembly of Upper Part

1. Place O-ring  $\varnothing 35 \times 2$  ⑨ in housing ⑪.
2. Place O-ring  $\varnothing 25 \times 1,5$  ⑧ in cap ⑦.
3. Put cap on (holes in cap and housing must line up) and secure it tightly with screws ⑥.
4. Place solenoid ⑤ on cap ⑦ with recess on top, place spring washer ② in recess and secure with knurled nut ①.
5. Push on connector ③ and secure it with screw. Make sure that rubber gasket ④ is in position between connector and solenoid.

### 5.2. Reassembly of Lower Part

1. Place spring ⑭ and piston ⑬ in housing ⑪ and centre them on valve plunger.
2. Screw on cap ⑩, making sure that piston ⑬ remains centred, and tighten with pin spanner.
3. Screw on sintered silencer ⑰.

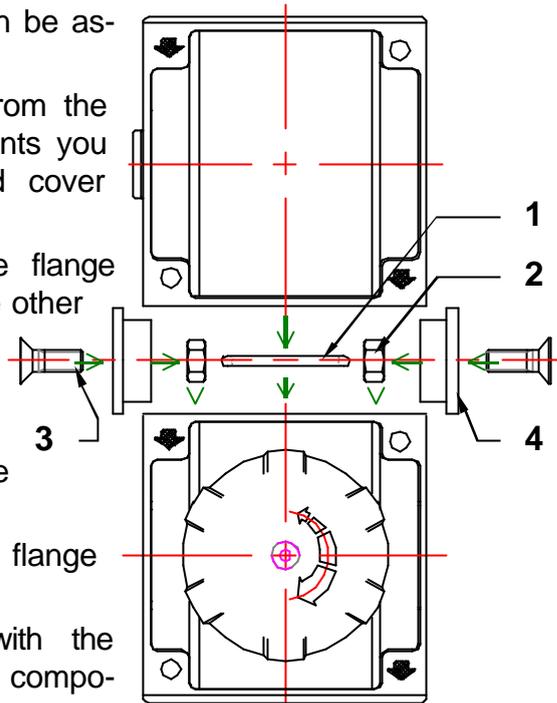
## 6. DISPOSAL

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. FITTING THE MOUNTING BRACKET

1. Remove the prestamped parts which cover the through-holes on both sides of the unit.
2. Fit the mounting bracket and secure it with the screws provided. Tighten them with a screwdriver.

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

