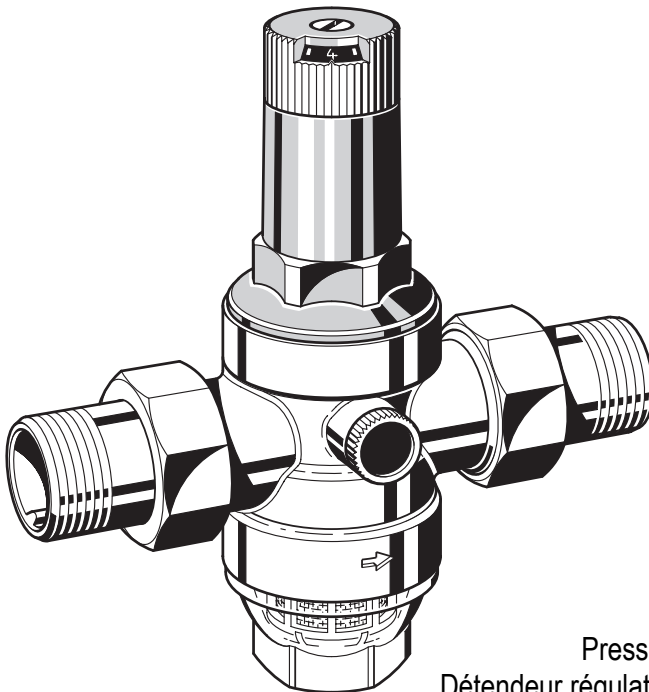


**D06F**

Einbauanleitung • Installation instructions • Notice de montage • Installatie-  
handleiding • Istruzioni di montaggio • Instrucciones de montaje • Asennusohje  
Инструкция по монтажу • Instruções de montagem • Instrukcja montażu



Druckminderer  
Pressure reducing valve  
Détendeur régulateur manométrique  
Druckreduceerklep  
Riduttore di pressione  
Estrangulador de presión  
Paineenalennusventtiili  
Редуктор давления  
Redutor de pressão  
Reduktor ciśnienia

## 1. Safety guidelines

- Follow the installation instructions.
- Use the appliance
  - according to its intended use
  - in good condition
  - with due regard to safety and risk of danger
- Note that the appliance is exclusively for use in the applications detailed in these installation instructions. Any other use will not be considered to comply with requirements.
- All assembly operations should be carried out by competent and authorised personnel.
- Immediately rectify any malfunctions which may influence safety.

## 2. Functional description

The pressure reducing valve reduces the pressure on the inlet side (admission pressure) to the level of the desired pressure on the outlet side (outlet pressure) in individual cases.

The pressure reducing valve functions on a force equalisation principle. The force of a diaphragm operates against the spring force of the regulating valve. If the outlet pressure and therefore diaphragm force fall because water is drawn, the then greater force of the spring causes the valve to open. The outlet pressure then increases until the forces between the diaphragm and the spring are equal again.

The inlet pressure (admission pressure) has no influence on the regulating valve of the pressure reducing valve. Inlet pressure fluctuation does not influence the outlet pressure, thus providing inlet pressure balancing.

## 3. Application

Medium            Water and other non-aggressive fluids, compressed air\* and nitrogen\*

Admission pressure    max. 16 bar/40°C  
                                  max. 25 bar/70°C

Outlet pressure    1,5-6 bar

\*For a PED appliance approval, this product, as a part of the appliance, must also be certified.




- WARNING!**  
In applications where UV radiation and solvent vapours are present, use the SM06T brass filter bowl!

## 4. Technical data

Operating temperature	With clear filter bowl, max. 40°C With brass filter bowl, max. 70°C
Minimum pressure drop	1 bar
Connection sizes	1/2" to 2"

## 5. Scope of delivery

The pressure reducing valve consists of:

- Housing with manometer connection on both sides (manometer  accessories)
- Screw connections
- Valve insert incl. diaphragm and valve seat
- Spring hood with adjuster knob and adjustment scale
- Adjustment spring
- Filter bowl
- Fine filter with mesh size approx. 0.16 mm
- Venturi nozzle (only 1 1/4" and 2")

## 6. Assembly

### 6.1 Installation

It is necessary during installation to follow the installation instructions, to comply with local requirements and to follow the codes of good practice.

The installation location should be protected against frost and be easily accessible.


Isolating valves should be fitted on each side of the pressure reducing valve.

The device downstream should be protected by means of a safety valve (installed downstream of the pressure reducing valve).

### 6.2 Assembly instructions




- CAUTION!**  
When using soldering connections, do not solder the connections together with the pressure reducing valve!  
High temperature will irreparably damage important internal working components!


- Thoroughly flush pipework.
- Install pressure reducing valve.
  - Fit venturi nozzle (1 1/4" and 2" only)
  - Install in horizontal pipework with filter bowl directed downwards
  - Note flow direction (indicated by arrow, fig. 1)
  - Install without tension or bending stresses
  - provide a straight section of pipework of at least five times the nominal valve size after the filter combination
- Setting outlet pressure ( chapter 7).

## 7. Commissioning

### 7.1 Setting outlet pressure (fig. 1)


-  • Admission pressure should be approx. 1 bar higher than the outlet pressure that has been set
1. Close shut off valves on inlet.
  2. Release pressure on outlet side (e.g. through water tap).
  3. Loosen slotted screw.  
Do not remove slotted screw.
  4. Slacken tension in compression spring.  
Turn adjuster knob to the left (-).
  5. Close shut off valves on outlet.
  6. Slowly open shut off valves on inlet..
  7. Setting outlet pressure.  
Turn adjuster knob until the adjustment scale shows the desired value.
  8. Retighten slotted screw.
  9. Slowly open shut off valves on outlet.
  10. Pressure reducing valve is now ready for use.

## 8. Maintenance


-  • We recommend a planned maintenance contract with an installation company

In accordance with DIN 1988, part 8, the following measures must be taken:


### 8.1 Inspection




-  • Frequency: once annually
  - To be carried out by an installation company
  - To be carried out by the operator
1. Close shut off valves on outlet.
  2. Check outlet pressure with a manometer when no flow is occurring.




- CAUTION!  
If pressure is slowly rises, then proceed as described under  Maintenance!
3. Slowly open shut off valves on outlet.

### 8.2 Maintenance (fig. 2)

-  • Frequency: every 1-3 years (depending on local operating conditions)
  - To be carried out by an installation company
1. Close shut off valves on inlet.
  2. Release pressure on outlet side (e.g. through water tap).
  3. Loosen slotted screw.  
Do not remove slotted screw.
  4. Slacken tension in compression spring.


- Turn adjuster knob to the left (-).
5. Close shut off valves on outlet.
6. Unscrew spring hood.  
Use double ring spanner ZR06K ( Accessories).
7. Remove slip ring.
8. Remove valve insert with a pair of pliers.
9. Unscrew filter bowl.  
Use double ring spanner ZR06K ( Accessories).
10. Remove filter, clean and place back in position.
11. Lightly coat O-ring with silicone grease and place onto filter bowl.
12. Check that sealing ring, edge of nozzle and slotted ring are in good condition, and if necessary replace the entire valve insert.
13. Reassemble in reverse order.
14. Press in diaphragm with finger before inserting slip ring.
15. Setting outlet pressure ( chapter 7).

### 8.3 Setting adjustment scale (fig. 3)


If the adjustment knob is removed, this setting is lost. A new setting can be achieved using a manometer ( Accessories).


1. Close shut off valves on inlet.
2. Release pressure on outlet side (e.g. through water tap).
3. Loosen slotted screw.
4. Close shut off valves on outlet.
5. Fit manometer.
6. Slowly open shut off valves on inlet.
7. Set desired outlet pressure (f.e. 4 bar).
8. Align scale in middle of viewing window.
9. Retighten slotted screw.
10. Slowly open shut off valves on outlet.
11. Pressure reducing valve is now ready for use.

### 8.4 Cleaning (fig. 4)

-  • To be carried out by an installation company
- To be carried out by the operator

Filter bowl and filter can be cleaned when necessary.

-  • **CAUTION!**  
To clean parts made of synthetic material do not use detergents containing solvents!

-  • Detergents must not be allowed to enter the environment or the sewerage system!


1. Close shut off valves on inlet and outlet.
2. Release pressure on outlet side (e.g. through water tap).
3. Unscrew filter bowl.  
Use double ring spanner ZR06K (☞ Accessories).
4. Remove filter, clean and place back in position.

5. Lightly coat O-ring with silicone grease and place onto filter bowl.
6. Screw filter bowl in place.
7. Slowly open shut off valves on inlet and inlet..

### 9. Disposal

The pressure reducing valve consists of:

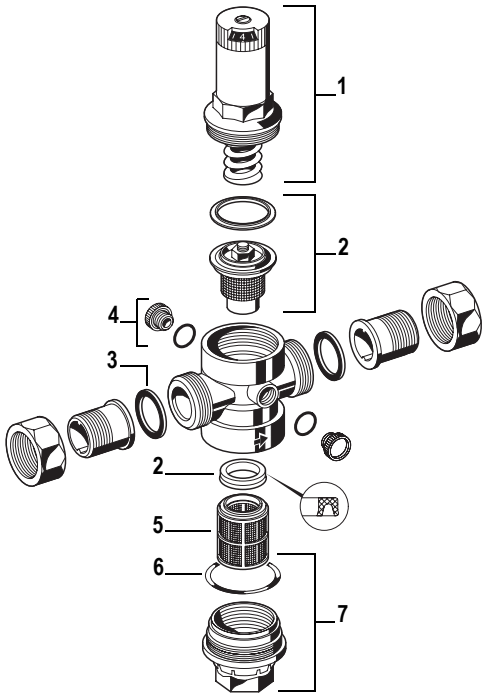
- Brass
- Steel
- Plastic

-  • Observe the local requirements regarding correct waste recycling/disposal!

### 10. Troubleshooting

Disturbance	Cause	Remedy
Beating sounds	Pressure reducing valve is too large	Call our Technical Customer Services on +49 (0) 18 01 46 63 00
Water is escaping from the spring hood	Diaphragm in valve insert is faulty	Replace valve insert
Too little or no water pressure	Isolating valves up- or downstream of the pressure reducing valve are not fully open	Open the isolating valves fully
	Pressure reducing valve is not set to the desired outlet pressure	Set outlet pressure (☞ chapter 7)
	Filter in pressure reducing valve is contaminated	Clean or replace filter (☞ chapter 9)
	Pressure reducing valve is not fitted in flow direction	Fit pressure reducing valve in flow direction (note direction of arrow on housing)
The outlet pressure set does not remain constant but rises continuously	Filter in pressure reducing valve is contaminated or worn	Clean or replace filter (☞ chapter 9)
	Valve insert, sealing ring or edge of nozzle is contaminated or worn - Unwanted rise above set pressure	Replace valve insert
	Rising pressure on outlet (e.g. in boiler)	Check non-return valve, safety group etc.

## 11. Replacement parts



- |   |             |
|---|-------------|
| <b>1 Spring hood, complete</b>                              |             |
| 1/2"+3/4"   | 0901515     |
| 1"+1 1/4"   | 0901516     |
| 1 1/2"+2"   | 0901518     |
| <b>2 Replacement valve set, complete (not incl. filter)</b> |             |
| 1/2"+3/4"   | D06FA-1/2   |
| 1"+1 1/4"   | D06FA-1B    |
| 1 1/2"+2"   | D06FA-11/2  |
| <b>3 Sealing ring set (10 pieces)</b>                       |             |
| 1/2"  | 0901443     |
| 3/4"  | 0901444     |
| 1"  | 0901445     |
| 1 1/4"  | 0901446     |
| 1 1/2"  | 0901447     |
| 2"  | 0901448     |
| <b>4 Blanking plug set with O-ring R1/4" (5 pieces)</b>     |             |
| 1/2"-2"   | S06K-1/4    |
| <b>5 Spare filter</b>                                       |             |
| 1/2"+3/4"   | ES06F-1/2A  |
| 1"+1 1/4"   | ES06F-1B    |
| 1 1/2" + 2"   | ES06F-11/2A |
| <b>6 O-ring set (10 pieces)</b>                             |             |
| 1/2"+3/4"   | 0901246     |
| 1"+1 1/4"   | 0901499     |
| 1 1/2"+2"   | 0901248     |
| <b>7 Clear filter bowl with O-ring</b>                      |             |
| 1/2"+3/4"   | SK06T-1/2   |
| 1"+1 1/4"   | SK06T-1B    |
| 1 1/2"+2"   | SK06T-11/2  |
| <b>8 Brass filter bowl with O-ring</b>                      |             |
| 1/2"+3/4"   | SM06T-1/2   |
| 1"+1 1/4"   | SM06T-1B    |
| 1 1/2"+2"   | SM06T-11/2  |

## 12. Accessories

### FN09S

#### HABEDO® retrofit filter

Reverse-rinsing fine filter for the retro-conversion to a filter combination unit

### M07M

#### Manometer

Housing 63 mm, rear connection thread G1/4"  
Indicate upper value of pressure range when ordering

### ZR06K

#### Double ring spanner

For removal of spring hood and filter bowl

### RV277

#### Inlet non-return valve

All connection sizes

### VST06A

#### Connection set

with threaded connection

### VST06B

#### Connection set

with soldering connection



- For further information consider the "Product specification sheet"

