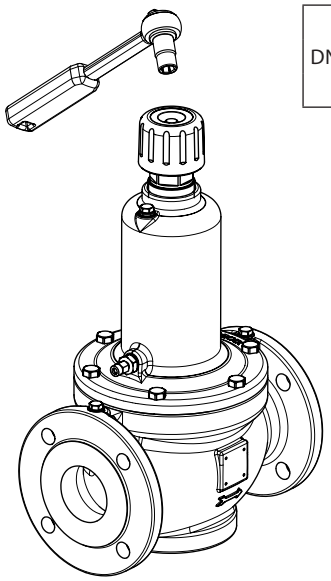
# Instructions
## ASV-PV (DN 65-100)



| | | |
|---|---|---|
| DN | 65 | 13 |
| | 80 | 13 |
| | 100 | 13 |

*Fig. 1*

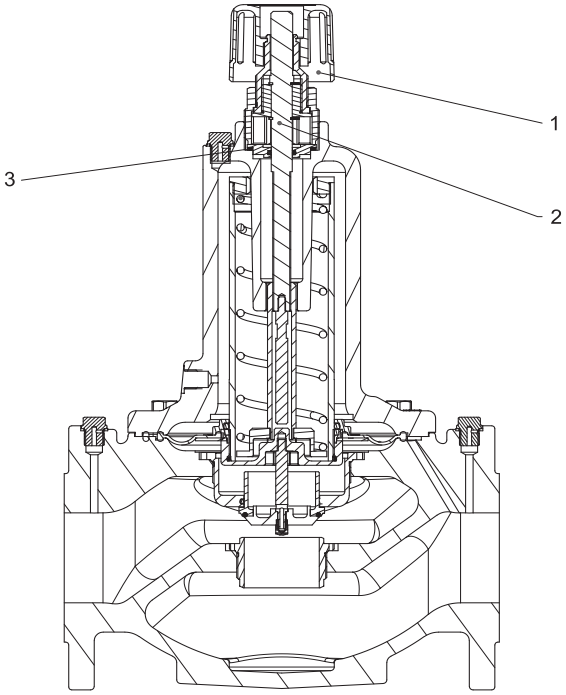



*Fig. 2*

| n | ASV-PV DN 65 - 100 | | |
|---|---|---|---|
| | 0.2-0.4 (bar) | 0.35-0.75 (bar) | 0.6-1.0 (bar) |
| 0 | 0.40 | 0.75 | 1.00 |
| 1 | 0.39 | 0.74 | 0.99 |
| 2 | 0.38 | 0.73 | 0.98 |
| 3 | 0.37 | 0.72 | 0.97 |
| 4 | 0.36 | 0.71 | 0.96 |
| 5 | 0.35 | 0.70 | 0.95 |
| 6 | 0.34 | 0.69 | 0.94 |
| 7 | 0.33 | 0.68 | 0.93 |
| 8 | 0.32 | 0.67 | 0.92 |
| 9 | 0.31 | 0.66 | 0.91 |
| 10 | 0.30 | 0.65 | 0.90 |
| 11 | 0.29 | 0.64 | 0.89 |
| 12 | 0.28 | 0.63 | 0.88 |
| 13 | 0.27 | 0.62 | 0.87 |
| 14 | 0.26 | 0.61 | 0.86 |
| 15 | 0.25 | 0.60 | 0.85 |
| 16 | 0.24 | 0.59 | 0.84 |
| 17 | 0.23 | 0.58 | 0.83 |
| 18 | 0.22 | 0.57 | 0.82 |
| 19 | 0.21 | 0.56 | 0.81 |
| 20 | 0.20 | 0.55 | 0.80 |

| n | ASV-PV DN 65 - 100 | | |
|---|---|---|---|
| | 0.2-0.4 (bar) | 0.35-0.75 (bar) | 0.6-1.0 (bar) |
| 21 | | 0.54 | 0.79 |
| 22 | | 0.53 | 0.78 |
| 23 | | 0.52 | 0.77 |
| 24 | | 0.51 | 0.76 |
| 25 | | 0.50 | 0.75 |
| 26 | | 0.49 | 0.74 |
| 27 | | 0.48 | 0.73 |
| 28 | | 0.47 | 0.72 |
| 29 | | 0.46 | 0.71 |
| 30 | | 0.45 | 0.70 |
| 31 | | 0.44 | 0.69 |
| 32 | | 0.43 | 0.68 |
| 33 | | 0.42 | 0.67 |
| 34 | | 0.41 | 0.66 |
| 35 | | 0.40 | 0.65 |
| 36 | | 0.39 | 0.64 |
| 37 | | 0.38 | 0.63 |
| 38 | | 0.37 | 0.62 |
| 39 | | 0.36 | 0.61 |
| 40 | | 0.35 | 0.60 |

***Factory presetting***

| **Δp setting range (bar)** | **bar** |
|---|---|
| 0.2 - 0.4 | 0.30 |
| 0.35 - 0.75 | 0.60 |
| 0.6 - 1.0 | 0.80 |

*Fig. 3*

**ENGLISH**

Automatic balancing valves ASV-PV is used together with shut-off and measuring valve MSV-F2 to control the differential pressure in risers where the radiator valves have presetting facilities.

ASV-PV maintain constant differential pressure across the riser.

Max. working pressure ..... 16 bar
Differential pressure
across valve ..... 0.1 - 2.5 bar (10-250 kPa)
Max. flow temperature ..... 120 °C

**Installation**
ASV-PV must be installed in the return pipe. The flow must be in the direction of the cast-in arrow.
It is recommended that an FV filter be installed in the system supply pipe. The impulse tube must be fitted on the flow pipe, e.g. via an MSV-F2 valve.
The tube must be flushed through before being fitted on the + connection of the ASV-PV automatic balancing valves.
ASV-PV must in addition be installed as determined by installation conditions.

**Air vent**
Release the knob to deair the valve (3, Fig. 2) to ensure proper function.

**Shut-off**
Turning the ASV-PV knob fully clockwise will shut off the riser (1, Fig. 2).

**Pressure testing**
Max. test pressure ..... 25 bar

**Setting/adjustment**
The ASV-PV valves are sold in four different Δp setting ranges. The valves are factory–set to a defined value as described on Factory presseting table on Fig. 3. Use the following procedure to set the desired differential presure:
the setting on ASV-PV can be changed by turning the setting spindle (2, Fig.2).
Turning the spindle clockwise increases the setting; turning it counter clockwise reduces the setting.
If the setting is not known, turn the spindle fully clockwise. With this the setting on ASV-PV is at maximum value within setting range. Now turn the spindle a number of times (n) as described in Fig. 3 until the required differential pressure setting is obtained.

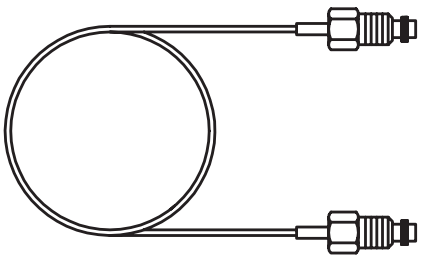
**Note:** *Do not turn the spindle more than 20/40 turns as it will become disengaged.*

**Starting**
The system shall be ventilated at the highest point.

**Note!** *If this procedure is not followed, ASV-PV may become locked in closed position even if the valve is fully opened.*

**Fault location**
Check the following if the riser valve does not function correctly:

1. Is the flow direction through the valve correct?
2. Is the impulse tube fitted correctly and are any needle valves open?
3. Is the valve shut-off open?



Impulse tube 2.5 m

Nipple for connecting impulse tube on other valve, pipeline G 1/16 - R 1/4

Adapter large ASV
(for use with MSV-F2, connected to measuring hole, it allows connection of impulse tube from ASV while measuring the pressure drop or flow)