

## Piloted pressure limiting valves type DV, AS etc.

Pressure valves influence the pressure in hydraulic systems. Pressure-limiting valves (safety or overpressure valve) safeguard the system against excessive pressure or limit the operation pressure. Sequence valves generate a constant pressure difference between the inlet and outlet flow. Follow-up valves (release valves) block the flow until a set pressure value is reached (free flow once this value is exceeded). Compared with pressure valves of the type DV, the types AS and AE have an additional check valve in the consumer port.

### Features and benefits:

- Various adjustment options
- Various additional functions

### Intended applications:

- General hydraulic systems
- Test benches



|                         |  |
|-------------------------|--|
| <b>Nomenclature:</b>    | Pressure limiting valve<br>Sequence valve<br>Follow-up valve (piloted)     |
| <b>Design:</b>          | Individual valve for pipe connection<br>Individual valve manifold mounting |
| <b>Adjustment:</b>      | Tool adjustable<br>Manually adjustable                                     |
| <b>p<sub>max</sub>:</b> | 420 bar  |
| <b>Q<sub>max</sub>:</b> | 120 lpm  |

### Design and order coding example

DV3 G H R - WN 1F- 24 - 200

|   |  |
|---|--|
| <p><b>Basic type, size</b></p> <p>Type DV (internal control oil drain),<br/>Type DVE (external control oil drain),<br/>Type DF (valve for remote control), size 3 to 5<br/>Type AS (additional check valve), size 3 to 5<br/>Type AE (release valve), size 3 to 5</p> <p><b>Additional versions:</b></p> <ul style="list-style-type: none"> <li>■ Additional switching combinations with the types AS and AE</li> </ul> | <p><b>Line connection</b> Pipe connection or manifold mounting</p> <p><b>Pressure range</b></p> <ul style="list-style-type: none"> <li>■ N: 2 to 100 bar</li> <li>■ H: 5 to 420 bar</li> </ul> <p><b>Adjustability in operation</b> Tool adjustable or manually adjustable (R)</p> <ul style="list-style-type: none"> <li>■ Various actuations for the pilot valve: ball head for controls via cam, lever etc. (type DV, DVE)</li> </ul> <p><b>2/2-way directional seated valve</b> Optionally with mounted 2/2-way directional seated valve for arbitrary idle circulation</p> <p><b>Pressure setting [bar]</b></p> |
|---|--|

### Function

**DV**



Pressure limiting, sequence valve

**DVE**



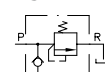
Follow-up valve

**DF**



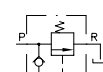
Pressure limiting, sequence valve, follow-up valve or 2/2-way directional valve (remote controlled, depending on the kind of valve connected to port X)

**AS**



Pressure limiting valve

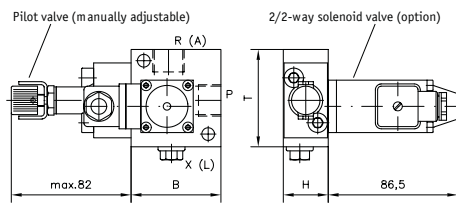
**AE**



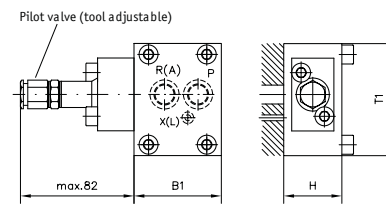
Release valve (remote controlled), combined function as pressure limiting valve possible (type ASE)

## General parameters and dimensions

### DV..G



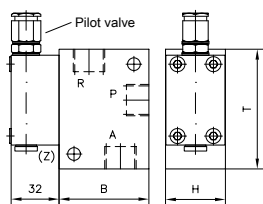
### DV...P



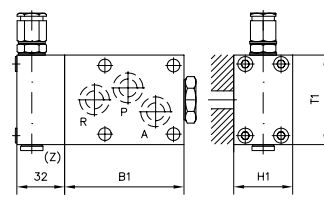
| Type, size  | Q <sub>max</sub><br>[lpm] | Pressure range:<br>p <sub>max</sub> [bar] | Ports<br>(BSPP) | Dimensions<br>[mm] |    |    |    |    | m<br>[kg] <sup>1)</sup> |
|-------------|---------------------------|---|-----------------|--------------------|----|----|----|----|-------------------------|
|             |                           |   |                 | H                  | B  | B1 | T  | T1 |                         |
| DV, DVE, DF |                           |   |                 | H                  | B  | B1 | T  | T1 |                         |
| 3           | 50                        | N: 100<br>H: 420                          | G 1/2           | 30                 | 60 | -  | 66 | -  | 1,1 / -                 |
| 4           | 80                        |   | G 3/4           | 40                 | 65 | 60 | 71 | 78 | 1,5 / 2,0               |
| 5           | 120                       |   | G 1             | 50                 | 80 | 88 | 73 | 81 | 2,0 / 2,5               |

1) Versions for pipe connection/manifold mounting (with installed solenoid valve + 0.6 kg)

### A..G



### A...P



| Type, size  | Q <sub>max</sub><br>[lpm] | Pressure range:<br>p <sub>max</sub> [bar] | Ports<br>(BSPP) | Dimensions<br>[mm] |    |     |    |    | m<br>[kg] <sup>1)</sup> |     |
|-------------|---------------------------|---|-----------------|--------------------|----|-----|----|----|-------------------------|-----|
|             |                           |   |                 | H                  | H1 | B   | B1 | T  |                         | T1  |
| AS, ASE, AE |                           |   |                 | H                  | H1 | B   | B1 | T  | T1                      |     |
| 3           | 50                        | M: 200<br>H: 350/300 (type AE)            | G 1/2           | 40                 | -  | 60  | -  | 80 | -                       | 1.8 |
| 4           | 80                        |   | G 3/4           | 40                 | 40 | 70  | 80 | 94 | 60                      | 2.2 |
| 5           | 120                       |   | G 1             | 6.3                | 40 | 100 | 94 | 85 | 80                      | 4.1 |

1) Versions for pipe connection/manifold mounting (with installed solenoid valve + 0.6 kg)

#### Associated technical data sheets:

- Piloted pressure valves type DV: [D 4350](#)
- Piloted pressure valves type AS, AE: [D 6170](#)

#### Similar products:

- Pressure limiting valves type MV, SV etc.: [D 7000/1](#), [D 7000 M](#)
- Miniature pressure limiting valves type MVG etc.: [D 3726](#)
- Pressure limiting valves type CMV(Z): [D 7710 MV](#)