

Piloted pressure limiting valves type DV, AS etc.

Pressure valves govern the pressure within a hydraulic system. The types listed below are intended for the following purposes:

- **Pressure limiting valve (safety valve):**
Safeguarding the system against excessive pressure or for the limitation of working pressure.
- **Sequence valves:**
Generating a constant pressure difference between inlet and outlet of the flow.

- **Follow-up valve (release valve):**
They block the flow until a set pressure is achieved and ensure free flow beyond this level. Unlike the pressure valves type DV, the valves type AS and AE feature an additional check valve in the consumer port.



Nomenclature: Pressure limiting valve
Sequence valve
Follow-up valve (piloted)

Design: Individual valve for pipe connection
Individual valve,
Manifold mounting

Adjustability: Tool adjustable
Manually adjustable

p_{max} : 420 bar

Q_{max} : 120 lpm

Basic types and general parameters

Basic type	DV	DVE	DF	AS	AE
Symbol					
Function	Pressure limiting, sequence valve	Follow-up valve	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)	Pressure limiting valve	Release valve (remote controlled), combined function as pressure limiting valve possible (type ASE)
Add. function	Additional 2/2-way solenoid valve for arbitrary idle circulation				
Pressure range:	N: 100	N: 100	N: 100	M: 200	M: 200
Pressure p_{max} (bar)	H: 420	H: 420	H: 420	H: 350	H: 300

Size

Coding	Flow	Tapped ports (BSPP)
	Q_{max} (lpm)	(versions for pipe connection)
3	50	G 1/2
4	80	G 3/4
5	120	G 1

Additional versions

- Additional 2/2-way solenoid valve for electrically controlled idle circulation (type DV, AS, and AE)
- Orifice in the control circuit to limit the leakage flow (type DVE)
- Additional function combination between type AS and AE
- Actuation option of the piloting valve with ball head actuation e.g. for cam, lever or other curve controlled systems (only type DV, DVE)

Order examples

DV 3G HR - WH1F - G24 - 400

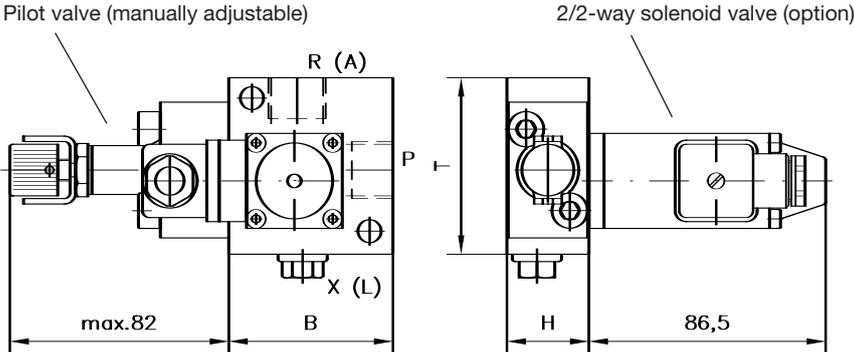
Pressure limiting valve type DV, size 3 for pipe connection (coding G), pressure range H (up to 420 bar), manually adjustable version, 2/2-way solenoid valve type WH1F (24V DC) for arbitrary idle circulation, pressure limiting valve set to 400 bar

AE 4 PM - 180

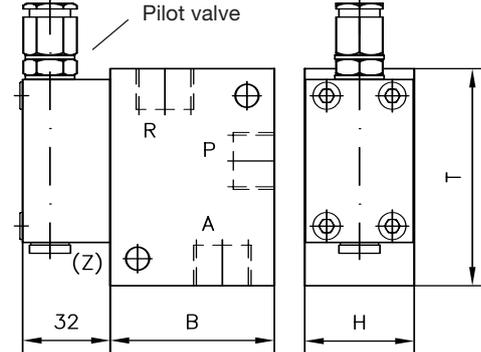
Externally pressure controlled relief valve type AE, size 4, manifold mounting (coding P), pressure range M (to 200 bar), pressure limiting valve set to 180 bar (no coding)

Dimensions

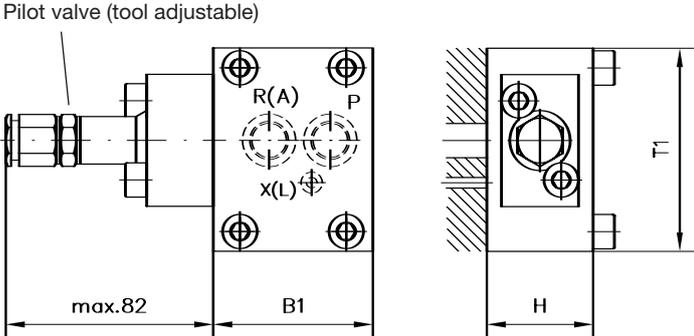
Type DV..G (see order example)



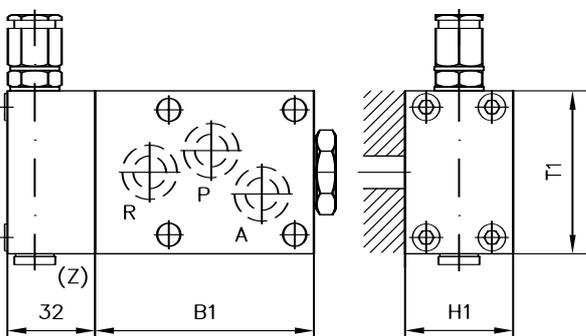
Type A...G



Type DV...P



Type A...P (see order example)



All dimensions in mm, subject to change without notice!

Basic type	H	B	B1	T	T1	m (kg) ¹⁾
DV(E) 3..	30	60	-	66	-	1.1 / -
DV(E) 4..	40	65	60	71	78	1.5 / 2.0
DV(E) 5..	50	80	88	73	81	2.0 / 2.5

Basic type	H	H1	B	B1	T	T1	m (kg) ¹⁾
AS (AE) 3..	40	-	60	-	80	-	1.8
AS (AE) 4..	40	40	70	80	94	60	2.2
AS (AE) 5..	63	40	100	94	85	80	4.1

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

Additional information

- Piloted pressure valves type DV D 4350
- Piloted pressure valves type A D 6170
- Pressure limiting valves type MV, SV etc. D 7000/1

- Miniature pressure limiting valves type MVG etc. D 3726
- Pressure limiting valves type CMV(Z) D 7710 MV

For page and section of the devices additionally listed, see type index