

Directly controlled pressure limiting and sequence valves type MV, SV etc.

Pressure valves govern the pressure within a hydraulic system.

The types 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:**
Generates a constant pressure difference between inlet and outlet of the flow.



Directly controlled valves feature a dampening device to ensure quiet operation, but they are also available without it if necessary for an application. There is also a version of the pressure limiting valve (Type MV.X), conforming the Pressure Equipment Directive 97/23 EC, which features a type approval and a CE-stamping, usually necessary when used as safety valves for accumulators.

Nomenclature: Pressure limiting valve, sequence valves (directly controlled)

Design: Individual valve for pipe connection
Screw-in valve
Individual manifold mounting valve
Assembly kit

Adjustability: Tool adjustable
Manually adjustable

P_{max}: 700 bar

Q_{max}: 5 ... 160 lpm

Basic types and general parameters

Basic type	MV ^{1) 5)}	MVS ^{1) 5)} MVG ³⁾	MVE ⁵⁾	SV ¹⁾	MVP ⁵⁾	DMV ¹⁾	MVCS ²⁾ MVGC ³⁾	SVC ¹⁾	MVB ^{1) 4)}
Symbol									
Function	Pressure limiting valve	Pressure limiting valve and differential pressure regulators			Pressure limiting valve		Pressure limiting valve with free turn R → P via a bypass check valve		Pressure limiting valve and differential pressure regulators
Brief description	Corner valve for pipe connection	Corner valve for pipe connection	Screw-in valve	Straight-way valve for straight pipe installation	Manifold mounting valve	Twin valve as shock valve for hydraulic motors	Corner valve for pipe connection	Straight-way valve for straight pipe installation	Assembly kit ⁴⁾
P_{perm R} (bar)	20	500	500	500	500	350	500	500	200
Size		13	14	4	5	6	8		
Pressure range:		H: 700/5	N: 50/8	F: 80/20	F: 80/40	F: 80/75	E: 160/160		
Pressure p_{max} (bar) /			M: 200/8	E: 160/20	E: 160/40	E: 160/75	C: 315/160		
Flow Q_{max} (lpm)			H: 400/8	C: 315/20	C: 315/40	C: 315/75			
				B: 500/20	B: 500/40	B: 500/75			
				A: 700/12	A: 700/20	A: 700/40			
Tapped ports (BSPP) ⁶⁾		G 1/4	G 1/4	G 1/4	G 3/8	G 1/2	G 3/4		
				G 3/8	G 1/2	G 3/4	G 1		

¹⁾ Only size 4, 5, 6, and 8
²⁾ Only size 4, 5, and 6
³⁾ Only size 13 and 14
⁴⁾ For other types of assembly kits see also "Additional information"
⁵⁾ Also version with type approval (TÜV) available (size 4, 5, and 6)
⁶⁾ Version for pipe connection

Additional versions

- Multiple pressure limiting valves (2, 3, 4, 5 valves in parallel)
- Twin pressure limiting valves with suction valve
- Pressure limiting valves with type approval (TÜV)
- Actuation option of the piloting valve with ball head actuation e.g. for cam, lever or other curve controlled systems (only type MVG13(14) and MVP13(14))
- Adjustment via self-locking turn knob or turn knob with lock

Order examples

MVS 52 BR

Pressure limiting valve and sequence valve as corner valve for pipe connection, size 5, tapped ports G 3/8 (BSPP) (coding 2), pressure range up to 500 bar (coding B), pressure manually adjustable (coding R)

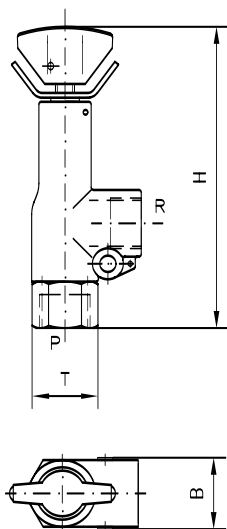
MVP 13 HR

Manifold mounting valve, size 13, pressure range H (20 ... 700 bar)

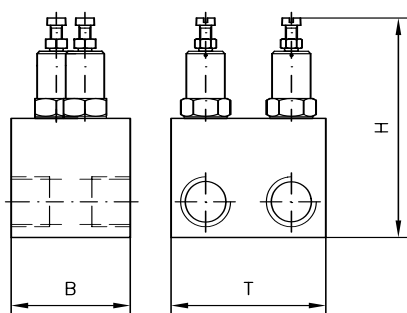
Dimensions (examples)

Type MV, MVS

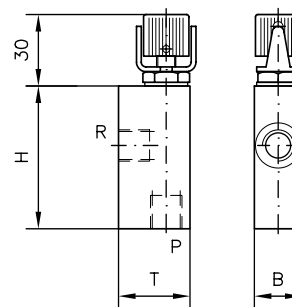
(see order example)



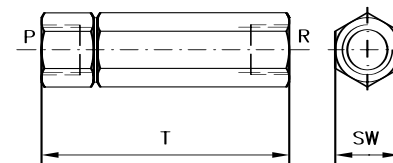
Type DMV



Type MVG



Type SV, SVC



All dimensions in mm, subject to change without notice!

Basic type	Size	H _{max}	B	T _{max}	m _{max} (kg)
MV,	4	126	24	48	0.3
MVS,	5	142	29	60	0.4
MVCS,	6	164	36	70	0.7
MVE	8	208	40	60	2.0
DMV	4	107	40	52	0.7
	5	123	50	65	1.3
	6	142.5	60	75	1.8
	8	192	80	96	4.5
MVP	4	102	28	35	0.3
	5	113	32	40	0.5
	6	133	35	50	0.8
	8	172	50	60	1.6

Basic type	Size	H _{max}	B/SW	T _{max}	m _{max} (kg)
	4	-	a/f 22	87	0.2
SV, SVC	5	-	a/f 27	108	0.4
	6	-	a/f 32	132	0.9
SV	8	-	a/f 41	157	0.9
MVP	13, 14	82	29	50	0.3
MVG(C)	13, 14	94	20	42	0.3
MVE	13, 14	75	a/f 27	-	0.1

Additional information

- Pressure limiting valves type MV etc. D 7000/1
- Miniature pressure limiting valves D 3726
- Pressure limiting valves (assembly kits) D 7000 E/1
- Multiple pressure limiting valves type MV. D 7000 M
- Pressure limiting valves D 7000 TÜV
- with type approval (TÜV) type MVX etc.
- Screw-in pressure valves type CMV, CSV D 7710 MV

- Piloted pressure valves type DV D 4350
- type A D 6170

• See also section "Devices for special applications" (Devices for up to 700 bar)

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