

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

Pressure valves influence 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.

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



Directly controlled valves feature a dampening device to ensure quiet operation, but they are also available without it if necessary for an application. There are also pressure limiting valve versions available with unit approval (TÜV) and CE-stamping – type MV X.

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)

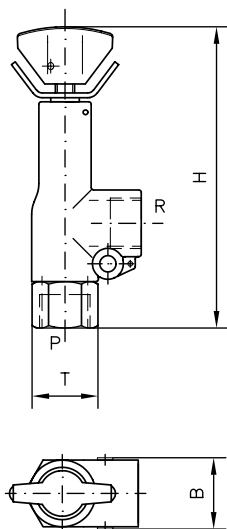
MVP 13 HR

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

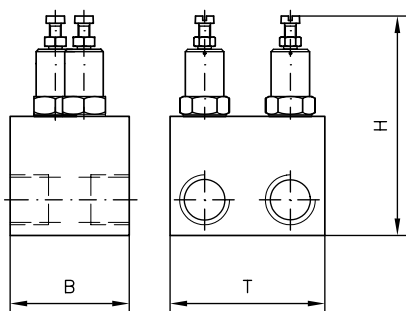
Dimensions (examples)

Type MV, MVS

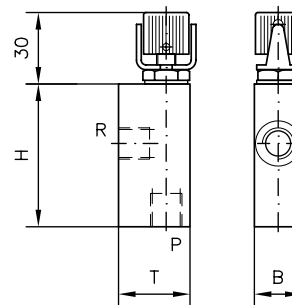
(see order example)



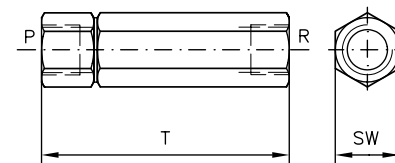
Type DMV



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