

Valve bank type BVH

The valve bank type BVH allows multiple combinations via the connection blocks type A. The individual section sections are mounted via a banjo bolt at port P. Many optional functions for ports P and R can be integrated in the valve section e.g. check valve, orifice at port P, filter, pressure switch for port A. Main advantage of this design is simplified stocking, as options can be retrofitted to cope with the requirements of the respective application. Main applications are hydraulic clamping systems and the machine tool industry.



Nomenclature:	Valve sections Directional seated valve zero leakage
Version:	Valve sections for pipe connection
Actuation:	Solenoid
p_{max}:	400 bar
Q_{max}:	20 lpm

Basic types and general parameters

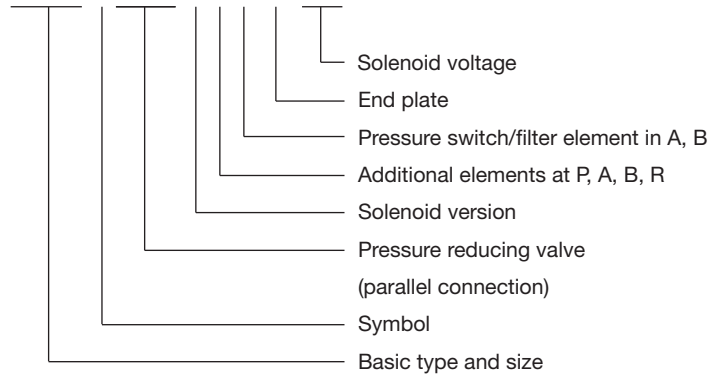
Basic type and size	Delivery flow Q_{max} (lpm)	Pressure p_{max} (bar)	Ports A, B, P, R, M (BSPP)	Nomenclature
BVH	20	400	G 1/4	Valve sections

Order coding example

BVH 11 H/M/R/2

BVH 11 M/M/R B2,5/3

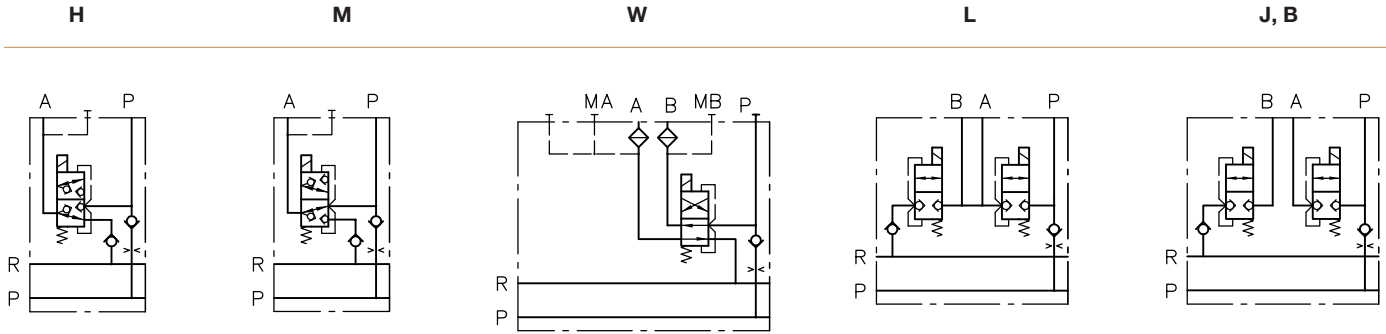
BVH 11 M/CZ/35/M/R/2 - 8 - G24



Connection blocks/adaptor plates

Basic type	Brief description	Symbol
BVH	Direct mounting onto connection blocks type A, AF etc. at compact hydraulic power packs type KA, MP, MPN, HC, HK(F), HKL	without

Symbols



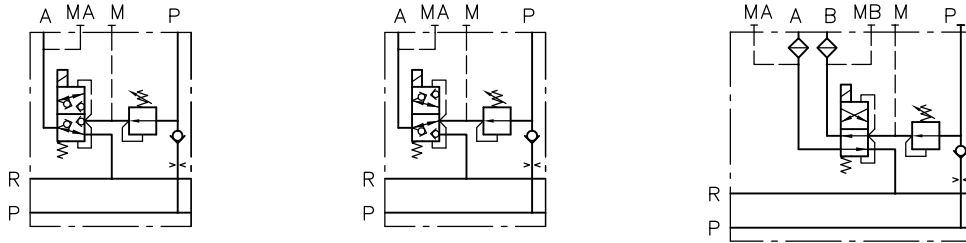
Additional options for valve sections

Individual pressure reduction (parallel connection)

BVH 11 H/CZ...

BVH 11 M/CZ...

BVH 11 W/CZ...



Additional versions (valve sections)

- Orifice and/or check valve at port P
- Orifice or restrictor check valve at port A

- Return pressure stop at port R

Actuation

M: Solenoid actuation ($p_{max} = 400$ bar)

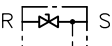
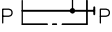
GM: Solenoid actuation ($p_{max} = 250$ bar)

Solenoid voltage

- 12V DC, 24V DC, 230V AC 50/60 Hz
- Further voltages on inquiry

- Plug with LEDs for improving the EMC or with economy circuit (see also "Further information")

End plates

Basic type	Brief description	Symbol
without	Tapped plugs at ports P, R -8	R  S
with accumulator port and drain valve		P  P

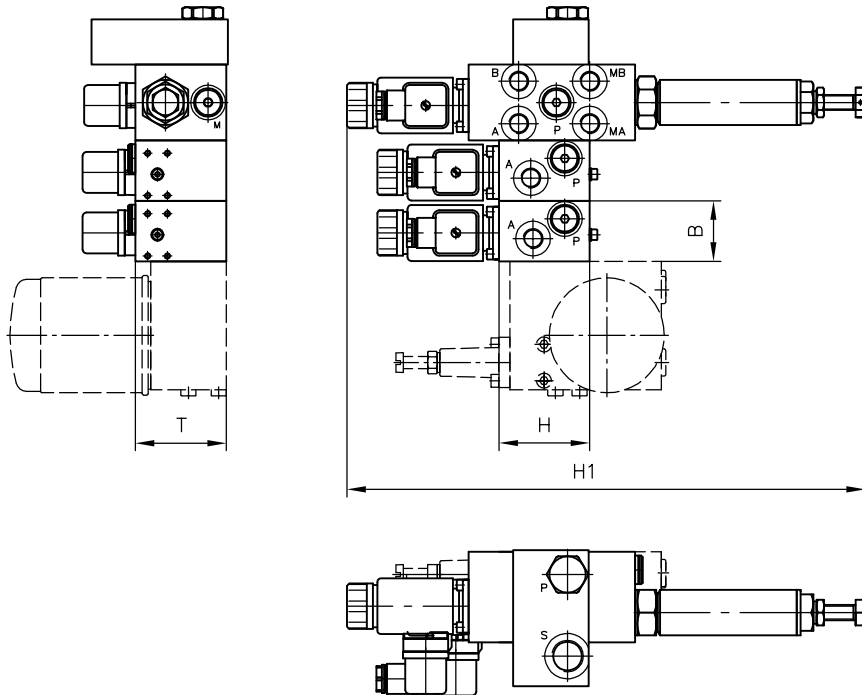
Order example

(A1F1/310)

- BVH 11 H/M/R/2
- BVH 11 M/M/R B2,5/3
- BVH 11 W/CZ 5/35/M/R/2 - 8 - G24

Valve bank type BVH for direct mounting at connection block type A. 1. valve section with 3/2-way function (coding H), check valve at port P (coding R) no pressure switch (coding 2)
 2. valve section with 3/2-way function (coding M), check valve and orifice at port P (coding R, B2,5), pressure switch for port A (coding /3)

3. valve section with 4/2-way function (coding W), indiv. pressure reduction set for 35 bar (coding CZ5/35), check valve at port P (coding R), no pressure switch (coding 2), end plate with accumulator port (coding 8), solenoid voltage 24 VDC (coding G24)



Dimensions

Basic type	H 1)	H1	B	T	Mass (kg) 1)
BVH	60	343	40/50	60	0.8

1) Depending on the mounted valve type and function

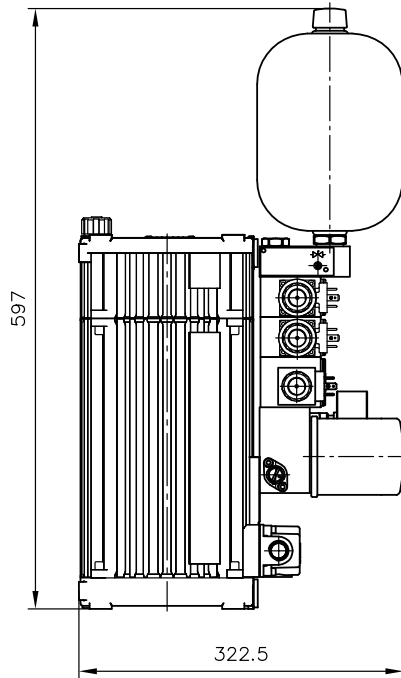
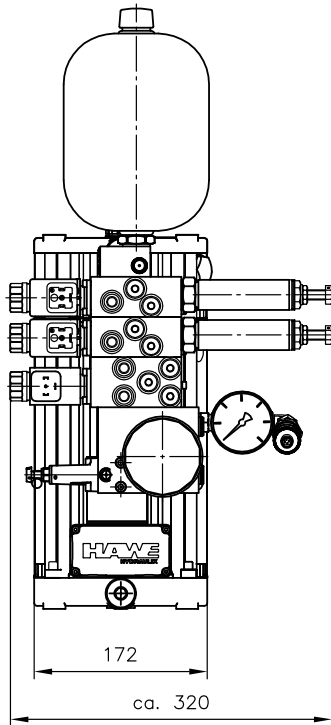
Circuit example

KA 281 SKT/Z 9,8 - AX 3 F 1 E/120

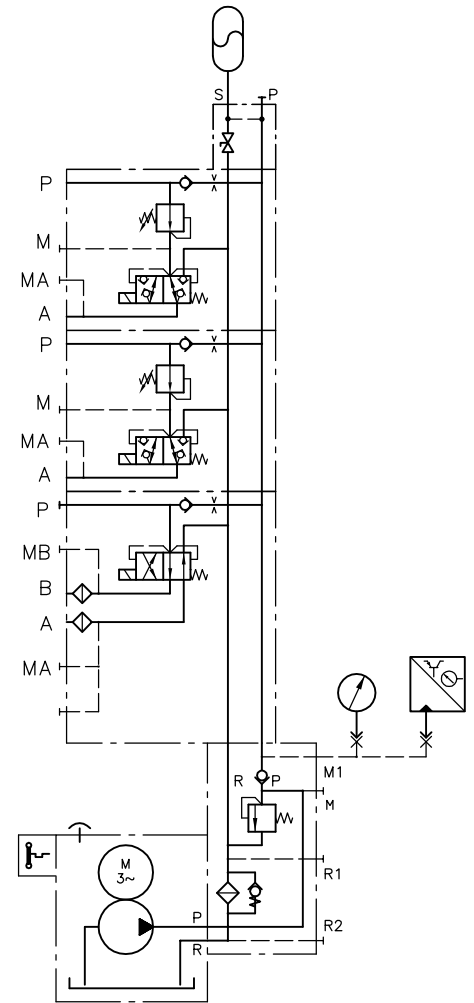
- BVH 11 W/M/RH/2
- BVH 11 M/CZ5/35/M/RHB 2,5
- BVH 11 M/CZ5/35/M/RHB 2,5
- 8-X 24
- AC 2001/60/3/A 3x400 V 50 Hz

Compact hydraulic power pack type KA, nom. power 1 kW; Connection block with return filter and safety valve with unit approval (TÜV) set to 120 bar.

Valve bank type BVH with three valve sections, two clamping functions for work piece clamping with indiv. adjustable clamping pressure.



All dimensions in mm, subject to change without notice!



Main parameter of the example circuit

- Q_{pu} = 9.8 lpm (at 1450 rpm)
- $P_{max pu}$ = 170 bar
- P_{system} = 120 bar
- $P_{shutt-off}$ = 50 bar
- V_{consum} = approx. 3 l

Additional information

- Compact hydraulic power packs type FP D 7310
- type HC D 7900
- type MP, MPN D 7200, D 7200 H, D 7207
- type HK, HKL D 7600 ++
- type KA, KAW D 8010
- Connection blocks type A D 6905 A/1
- Valve banks type BA D 7788
- type BVH D 7788 BV
- Intermediate plates type NZP D 7788 Z
- Clamping module type NSMD D 7787
- Directional spool valve type NSWP D 7451 N
- Directional seated valve type NBVP D 7765 N
- Valve banks type BVZP D 7785 B
- Directional seated valve type VZP1 D 7785 A
- Valve banks type BWN1, BWH D 7470 B/1
- type VB01, VB11 D 7302
- Pressure switches type DG 3.., DG 5E D 5440, D 5440 E/1
- Pressure reducing valves type CDK D 7745
- type DK D 7941
- Slot-type throttle type Q, QR, QV D 7730
- Plug with LED etc. D 7163
- Diaphragm accumulator D 7969
- see also "Complete solutions in the modular system"

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