

Valve bank type BVH

Type BVH valve banks can be very flexibly combined with type A connection blocks. Segments are mounted using a hollow screw in the P gallery. In addition to the seated valve functions, the additional functions in the P and R gallery (e.g. check valve, orifice in P gallery, filter, pressure switch in A gallery) have been integrated into the valve segment. The benefits of this technical design are the flexible bearing and the expansion options that can be easily adapted to the corresponding application at the end user. The main areas of application are hydraulic clamping systems and the machine tool industry.

Features and benefits:

- Very flexible expansion options and maintenance of valve banks at end user
- Compact and lighter design

Intended applications:

- Clamping systems on machine tools and equipment
- Clamping systems on deforming machine tools
- Brake and rotor adjustment modules on wind turbines



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

Design and order coding example

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

Solenoid voltage 12V DC, 24V DC, 110V AC, 230V AC

- End plate**
- With tapped plugs at P, R
 - With accumulator port and drain valve

- Valve sections**
- With individual pressure reduction (parallel connection)
 - Additional elements:
 - Pressure-reducing valves
 - Orifice and/or check valve in P gallery
 - Orifice or restrictor check valve for A
 - Return pressure block in R gallery
 - Pressure switches for A

Basic type Type BVH 11 for direct mounting onto type A etc. connection blocks (for type KA, MP, MPN, HC, HK, HKF, HKL compact hydraulic power packs)

Function

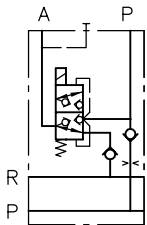
Connection blocks/adaptor plates:

BVH

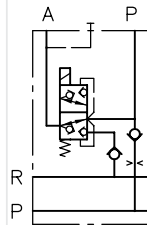
Direct mounting onto type A etc. connection blocks
for type KA, MP, MPN, HC, HK, HKF, HKL compact hydraulic power packs

Valve sections:

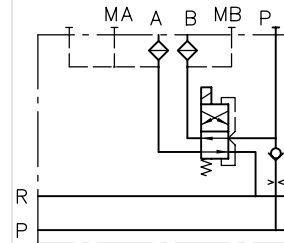
H



M



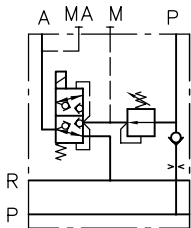
W



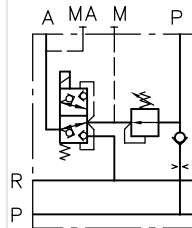
Additional options for the valve sections:

Individual pressure reduction (parallel connection)

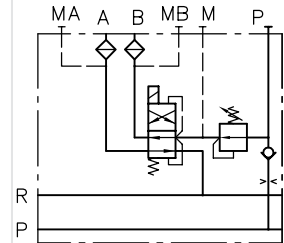
BVH 11 H/CZ...



BVH 11 M/CZ...



BVH 11 W/CZ...



Actuations:

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

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

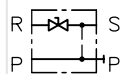
End plates:

without

Tapped plug at P, R

-8

with accumulator port and drain valve



General parameters and dimensions

(A1F1/310)

- BVH 11 H/M/R/2
- BVH 11 M/M/R B2.5/3
- BVH 11 W/CZ 5/35/M/R/22 - 8 - G 24

Type BVH valve bank for direct mounting at type A connection block

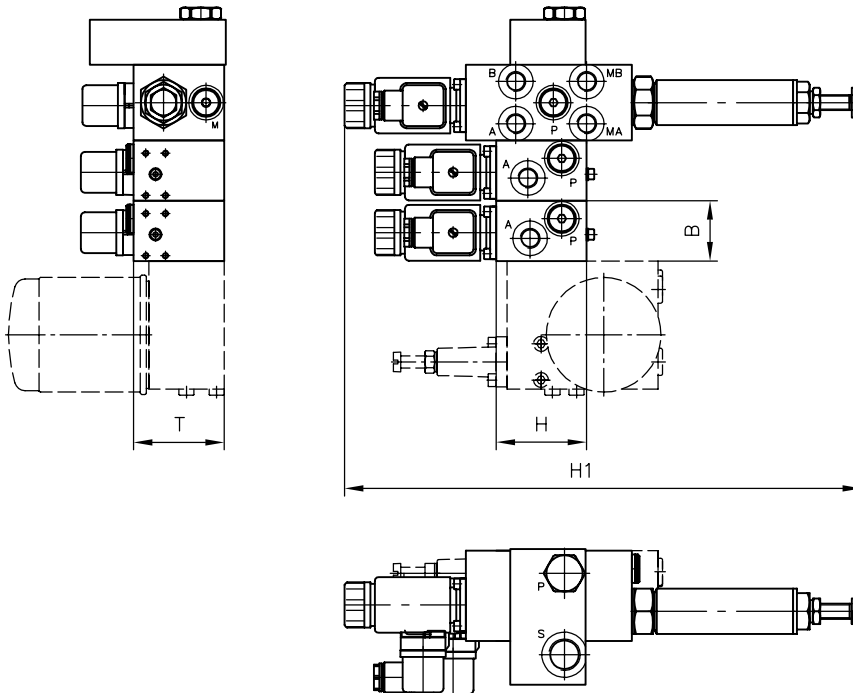
Valve section 1 with 3/2-way function switching symbol H, P check valve (coding R), no pressure switch (coding 2)

Valve section 2 with 3/2-way function switching symbol M, check valve and orifice in P gallery (coding R, B, 2, 5) and pressure switch for A (coding 3)

Valve section 3 with 4/2-way function switching symbol W, individual pressure-reducing valve set to 35 bar (coding CZ5/35) and check valve in P gallery (coding R), no pressure switch

End plate for accumulator port (coding 8) and 24V DC solenoid voltage

BVH



	Q_{max} [lpm]	p_{max} [bar]	Ports (BSPP)	Dimensions [mm]				m [kg]
				H	H1	B	T	
BVH	20	400	A, B, P, R, M G 1/4	60	343	40/50	60	0,8 Valve section

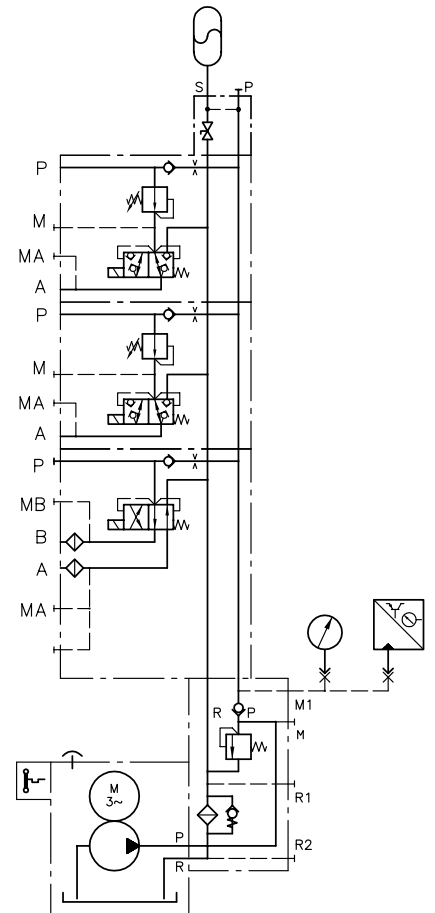
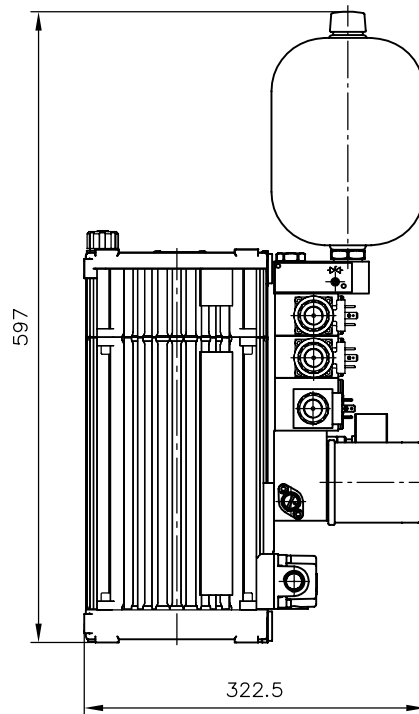
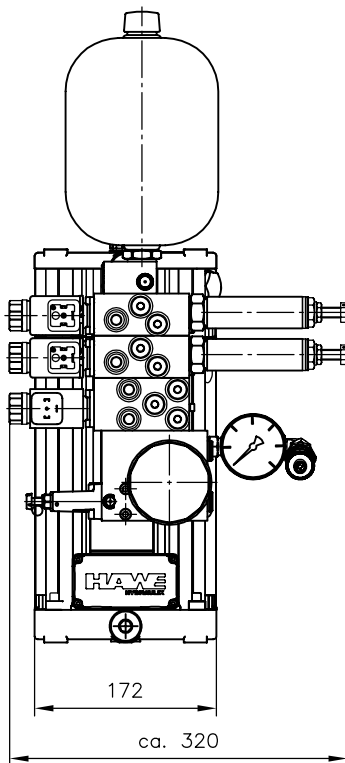
Example circuit:

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 3x400V 50 Hz

Type KA compact hydraulic power pack
1 kW motor output;
Connection block with return filter
and TÜV-approved safety valve
set to 120 bar

Type BVH valve bank with three valve segments,
two clamping functions with individually adjustable
clamping pressure



Parameters of the example circuit:

- $Q_{Pu} = 9.8$ lpm (at 1450 rpm)
- $p_{max Pu} = 170$ bar
- $p_{System} = 120$ bar
- $p_{switch-off feature} = 50$ bar
- $V_{load} =$ approximately 3 l

Associated technical data sheets:

- Type BVH directional valve banks:
[D 7788 BV](#)

Connection blocks:

- Type A: [D 6905 A/1](#)

Combinable products:

- Directional seated valves type NBVP:
[D 7765 N](#)
- Pressure-reducing valves type CDK, DK:
[D 7745](#), [D 7941](#)

Accessories:

- Type DG pressure switches: [D 5440](#)
- Type AC diaphragm accumulators: [D 7969](#)

Plug:

- with LEDs including: [D 7163](#)