

Compact hydraulic power packs type HC and HCW

The ready-for-connection compact hydraulic power pack can be used in applications where consumers with a low oil volume requirement have to be connected in intermittent operation (S 3), e.g. in machine tool and jig construction, or in general machine engineering. The power pack consists of the housing (tank) with integrated motor and pump. The filling gauge on HC(W) size 2, 3 and 4 types enables the fluid level to be controlled even during operation. The electrical connections are made via an integrated terminal box. Compact control systems can be created by mounting various combinations of connection blocks and valve banks. Float switches and temperature switches are optionally available for perfect monitoring.

Features and benefits:

- Wide range of application achieved with four sizes
- Direct current version for voltage supply with 12 V DC or 24 V DC
- Long service life and excellent reliability achieved by using radial piston pumps
- Low oil fill volumes make it environmentally sound thanks to the small amount of oil to be disposed of and the low costs for hydraulic fluid
- Co-ordinated range of valves and accessories from modular system
- Suitable for vertical and horizontal installation

Intended applications:

- Brake and rotor adjustment modules on wind turbines
- Tracking systems on solar panels and parabolic aerials
- Clamping systems on machine tools and jigs
- Rivets and clinching equipment
- Welding robots
- Lubrication systems



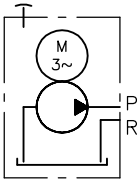
Nomenclature:	Radial piston pump with integrated electric motor (3-phase or 1-phase version)
Design:	Oil immersed hydraulic power pack for intermittent service (S3-service)
p_{max}:	Radial piston pump 700 bar Gear pump 180 bar
Q_{max}:	Radial piston pump approx. 4.4 lpm (V _g = 1.6 cm ³ /rev) Gear pump approx. 3.4 lpm (V _g = 1.3 cm ³ /rev)
V_{usable max}:	8 l

Design and order coding example

HC24	/0,6	- A1/400	- BWH1F-HH-1-1-G24	- 400V 50 Hz
<p>Motor voltage 3 ~ 400V 50 Hz, 3 ~ 460V 60 Hz 1 ~ 230V 50 Hz, 1 ~ 110V 60 Hz (3~phase motor)</p> <p>Optional directly mounted directional valve bank</p> <p>Connection block</p> <p>Pump version Single circuit pump</p> <ul style="list-style-type: none"> ■ Radial piston pump H (3-, 5- or 6-cylinders) or gear pump Z <p>Dual circuit pump</p> <ul style="list-style-type: none"> ■ Combinations: <ul style="list-style-type: none"> ■ Radial piston pump - gear pump ■ Radial piston pump - radial piston pump 				
Basic type, size	<p>Type HC (3-phase motor) and type HCW (1-phase motor, power reduction of 30 ... 50% depending on size), size 1 to 2, type HCG (direct current motor), size 1</p> <ul style="list-style-type: none"> ■ Horizontal version with low profile (type HC..L) or vertical version ■ Usable volume V_{usable} 0.5 l to 1.1 l ■ With/without fluid level gauge ■ With DC-motor (Type HCG) for short time operation 			

Function

Symbol:



Example circuit:

HC 24/0.64 -

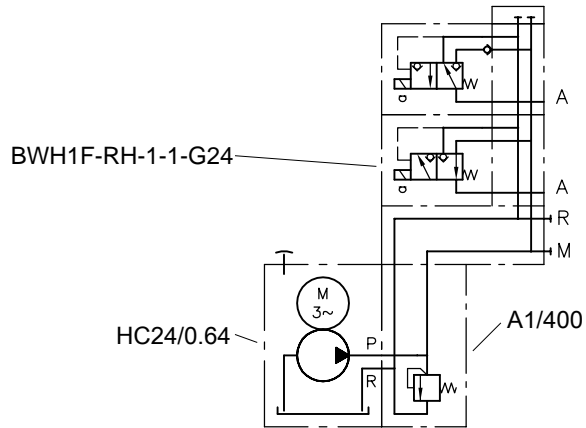
Hydraulic power pack type HC, size 24,
pump delivery flow approx. 0.64 lpm

- A1/400

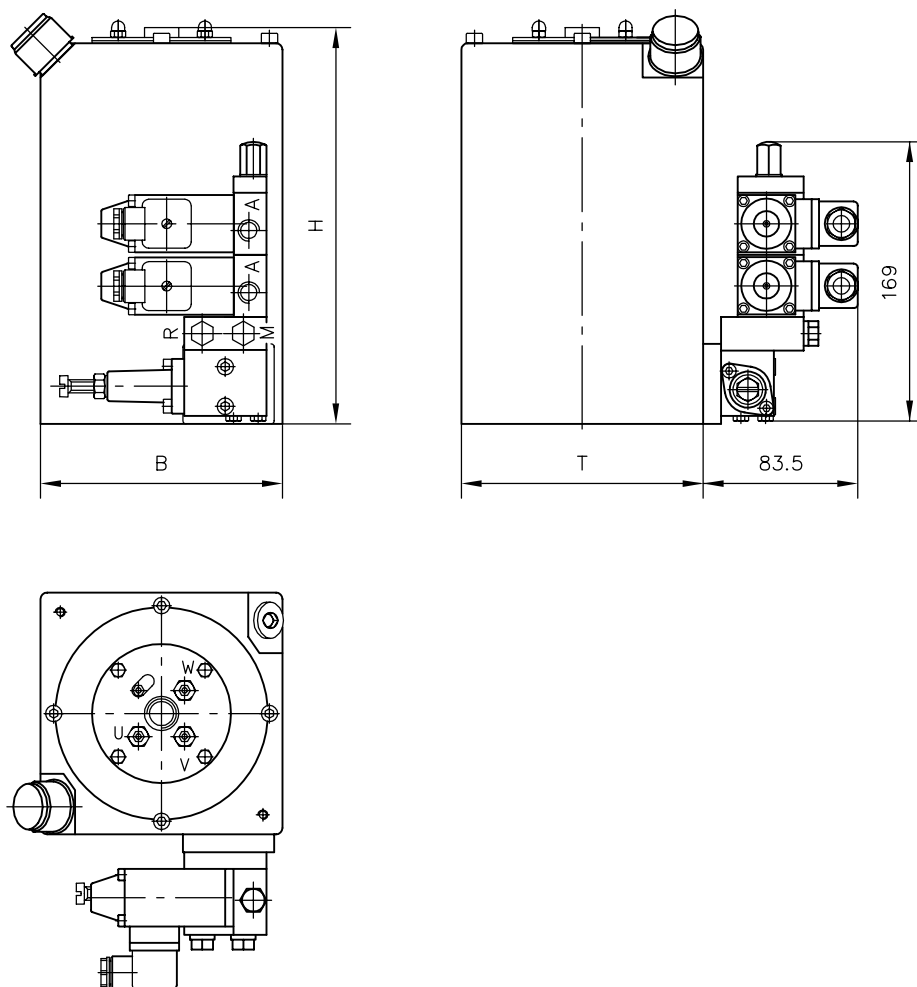
Connection block type A
and pressure-limiting valve
(400 bar)

- BWH1F - RH1 - 1 - 1 - G 24

Directly mounted valve bank
type BWH1



General parameters and dimensions



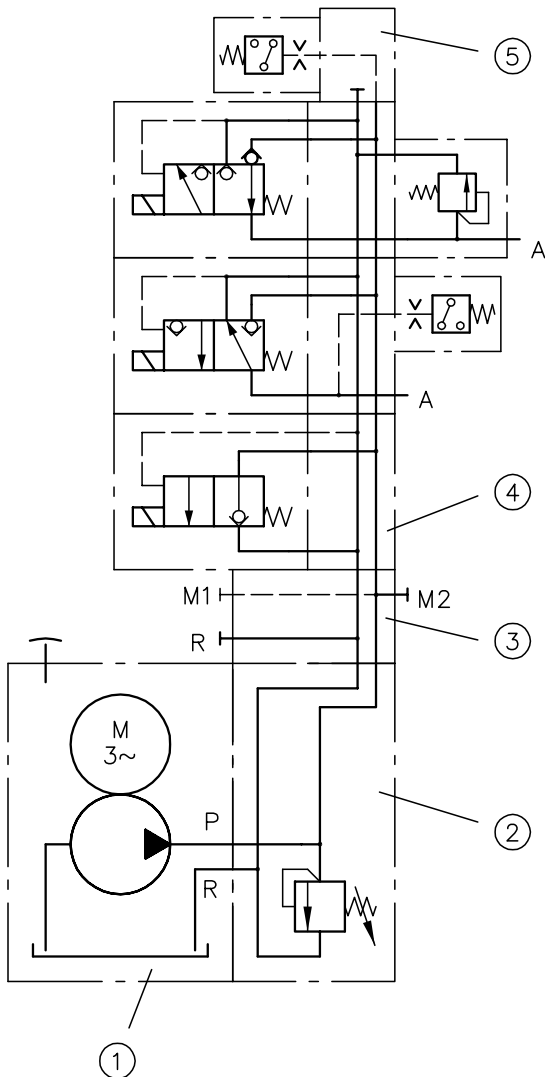
	Radial piston pump (3 cyl.)			Gear pump					Dimensions [mm]		
	Max. pressure	Delivery flow		Max. pressure	Delivery flow						
	p _{max} [bar]	Q _{pu} [lpm] 50 Hz	Q _{pu} [lpm] 60 Hz	p _{max} [bar]	Q _{pu} [lpm] 50 Hz	Q _{pu} [lpm] 60 Hz			P _N [kW] ¹⁾	m [kg] ²⁾	H
HC 14	700 - 160	0.2 - 1.05	0.2 - 1.2	-	-	-	0.18	6.3	197	120	120
HC 12	600 - 120	0.4 - 2.15	0.5 - 2.5	-	-	-	0.25				
HC 24	700 - 185	0.27 - 2.27	0.3 - 2.7	150	0.4 - 1.6	0.5 - 1.9	0.55	10.1	243	148	148
HC 22	700 - 140	0.52 - 4.41	0.6 - 5.3	150	0.9 - 3.4	1.1 - 4	0.55				

1) The actual power input depends on the respective operation pressure and can be up to $1.5 \times P_N$

2) Without oil filling

Example circuit:

HC 24/0.64 - A2/400
- BWH 1 F 1-DH3 R/230-33-G24
- 3x400V 50Hz



- 1 Compact hydraulic power pack
- 2 Connection block
- 3 Adapter plate
- 4 Valve section
- 5 End plate

Associated technical data sheets:

- Compact hydraulic power packs type HC: [D 7900](#)
- Compact hydraulic power packs type HCG: [D 7900 G](#)

Connection blocks:

- Types A, B and C: [D 6905 A/1](#), [D 6905 B](#), [D 6905 C](#)

Directly mountable valve banks:

- Type VB: [D 7302](#)
- Type BWH, BWN: [D 7470 B/1](#)

- Type BVZP: [D 7785 B](#)
- Type SWR, SWS: [D 7450](#), [D 7451](#), [D 7951](#)
- Type BA: [D 7788](#)
- Type BVH: [D 7788 BV](#)