

Compact hydraulic power packs type HK, HKF, HKL

Because of the unique integrated fan configuration, the "ready for connection" hydraulic power packs are ideal for continuous operation. Another version for temperature sensitive applications features an auxiliary blower, thereby gaining improved cooling (approx. 25%). This type is available for single circuit operation (radial piston or gear pump), dual circuit operation (radial piston and/or gear pump) or triple circuit operation (radial piston pump only). Both single and dual circuit pumps are also available as a horizontal version (type HKL).

Complete hydraulic control systems can be created by directly mounting various combinations of connection blocks and valve banks to the hydraulic power pack. These hydraulic power packs are used for machine tools (lathes and milling machines), jigs or general machine applications, making a commonly used external radiator superfluous.



Nomenclature: Radial piston pump and/or gear pump with integrated motor (Version for 3-phase mains)

Design: Oil immersed compact hydraulic power pack for permanent and intermittent operation (S1/S6 service)

P_{max} : 700 bar (radial piston pump)
180 bar (gear pump)

Q_{max} : Radial piston pump
approx. 13 lpm (high press.)
($V_g = 9.15 \text{ cm}^3/\text{rev}$)
Gear pump
16 lpm (low pressure)
($V_g = 11.0 \text{ cm}^3/\text{rev}$)

$V_{usable \text{ max}}$: approx. 11.1 l

Basic types and general parameters

Basic type

and size

Standard version

Parameters: Delivery flow Q_{pu} (lpm), approximate reference

value and max. pressure P_{max} (bar) with S 6 operation ¹⁾

Radial piston pump

Gear pump

Single circuit pump:

HK 24	Q_{max}	H 0,46	H 0,70	H 1,08	H 1,77			
	P_{max}	700	570	380	220			
HK 33	Q_{max}	H 1,25	H 2,5	H 3,6	H 6,5	Z 2,7	Z 4,5	Z 6,9
	P_{max}	560	270	190	100	170	160	100
HK 34	Q_{max}	H 1,25	H 2,5	H 3,6	H 6,5	Z 2,7	Z 4,5	Z 6,9
	P_{max}	700	440	310	170	170	170	160
HK 43, HKF 43	Q_{max}	H 2,08	H 2,6	H 7,0	H 13,1	Z 4,5	Z 11,3	Z 16
	P_{max}	610	470	180	90	170	110	80
HK 44, HKF 44	Q_{max}	H 2,08	H 2,6	H 7,0	H 13,1	Z 4,5	Z 11,3	Z 16
	P_{max}	700	650	250	130	170	130	110

Dual circuit pump:

HK 44, HKF 44	Q_{max}	H 0,9	H 1,5	H 3,6	H 6,5	Z 2,7	Z 4,5	Z 16
HKF 48	P_{max}	700	700	350	190	170	170	90

Triple circuit pump:

HK 44, HKF 44	Q_{max}	H 0,83	H 1,6	H 2,4	H 4,4			
HKF 48	P_{max}	700	500	350	190			

Horizontal version:

HKL 34, HKLW 34	Q_{max}	H 1,65	H 3,35	H 4,80	H 8,70	Z 2,7	Z 4,5	Z 11,3
HKL 32, HKLW 32	P_{max}	700	560	390	220	170	170	130

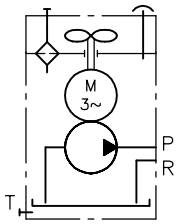
HKL 38

¹⁾ The parameter listed here represent only a choice from a variety of possibilities.

Symbols

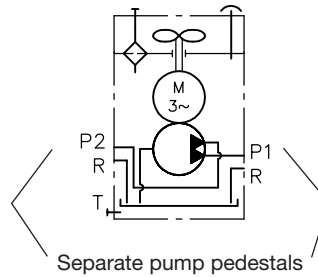
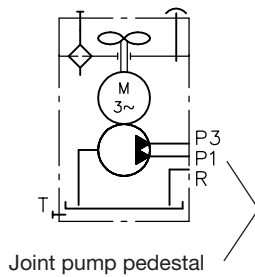
Single stage pump

(radial piston pump, gear pump)



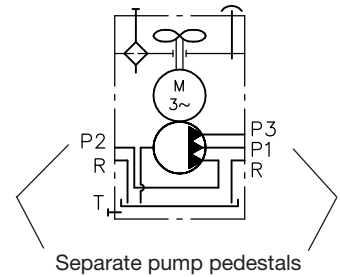
Dual stage pump

(radial piston/radial piston pump, gear pump/gear pump, radial piston pump/gear pump)



Triple circuit pump

(only radial piston pump)



Additional parameter

Basic type and size	Rev. rating n_N (rpm)	P_N (kW) ²⁾	$V_{usable\ max}$ (l)	Nom. voltage
HK 24	1400	0.55	0.85	3 ~ 230/400V ΔY 50 Hz ³⁾
HK 33, HK 338	1410	0.8	1.45/2.9	3 ~ 500V Y 50 Hz
HKL(W) 32(9), HKL(W) 328(9) ⁴⁾	2840	1.8	1.7/2.6 (8.2/9.1)	
HKL(W) 34(9), HKL(W) 348(9) ⁴⁾	1410	1.8	1.7/2.6 (8.2/9.1)	
HK 34, HK 348	1400	1.1	1.45/2.9	
HK 36, HK 368	2750	2.2	1.45/2.9	
HK(F) 43, (438, 435, 439)	1425	1.5	2.4/4.6/1.8/5.5	
HK(F) 44, (448, 445, 449)	1410	2.2	2.4/4.6/1.8/5.5	
HK(F) 485, (489, 482)	1460	3	1.8/5.5/11.1	
HKL 38(9), HKL 388(9)	1450	2.2	1.7/2.6 (8.2/9.1)	

2) The actual power input is depends on the respective operation pressure and can be up to $1.5 \times P_N$
 3) Also suitable for mains 3 ~ 265/460V ΔY 60 Hz
 4) The motors of the single phase version (type HKLW) are available for 1 ~ 230V / 50 Hz and 1 ~ 115V / 60 Hz

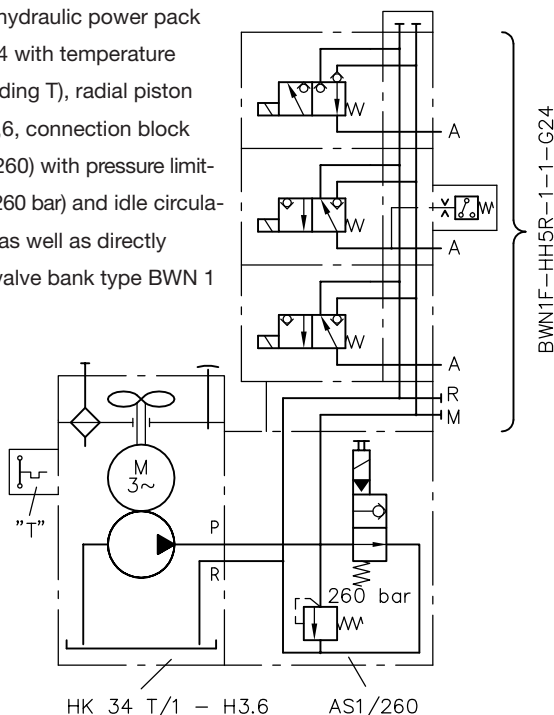
Additional versions

- Temperature and fluid level switches
- Version with plug Co. HARTING
- Version with additional leakage port (type HK 4.L)
- Version with internal gear pump
- Version with moulded motor
- Various oil filler neck designs
- Completion with connection block and valve banks (see also "Additional information")

Order examples

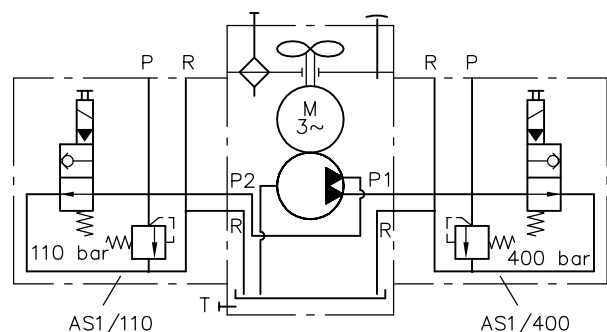
HK 34 T/1 - H 3,6 - AS1/260 - BWN1F - H H5 R - 1 - 1 - G24

Compact hydraulic power pack type HK 34 with temperature switch (coding T), radial piston pump H 3,6, connection block (type A 1/260) with pressure limiting valve (260 bar) and idle circulation valve as well as directly mounted valve bank type BWN 1



HK 44 /1 - H 2,5 - Z 6,9 - AS1/400 - AS1/110 - G24

Compact hydraulic power pack type HK 44 with radial piston pump H 2,5 and gear pump Z 6,9, pressure outlet on separate pump pedestals, two connection blocks (type AS1/..) with pressure limiting valve (400 bar and 110 bar) and idle circulation valve (direct connection of valve banks possible)

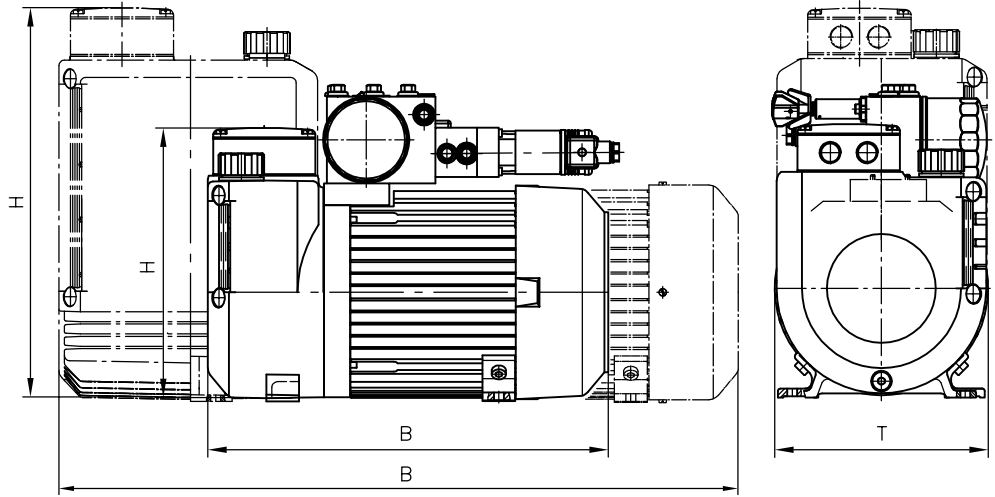
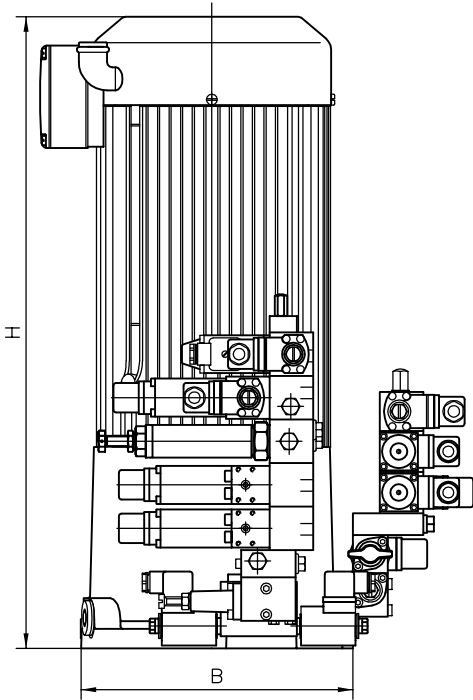


Dimensions

Type HK..

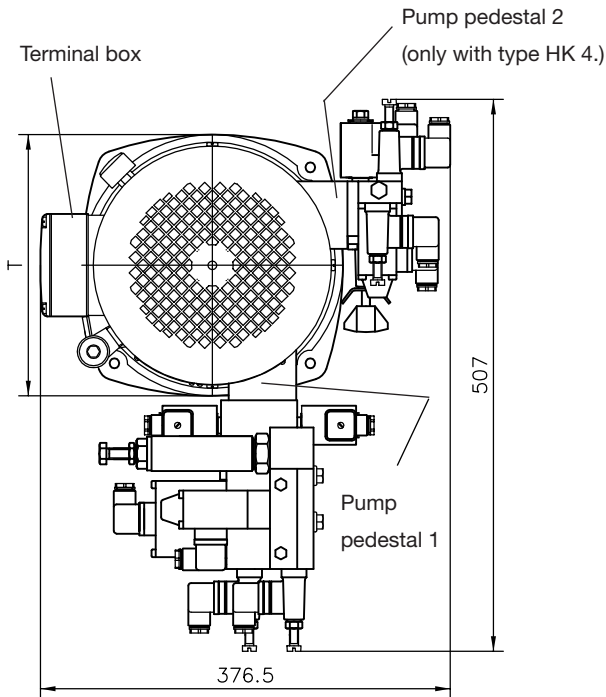
(illustrated version acc. to the example circuit on next page)

Type HKL..



All dimensions in mm, subject to change without notice!

Basic type	H _{max}	B	T	m (kg)
HK 24	340	196	196	13
HK 33, HK 34	405	212	212	20.5
HK 3.8	495	212	212	22.2
HKL(W) 32, HKL(W) 34	251	368	196	19.2
HKL(W) 3.8	251	486	196	20.5
HKL(W) 3.9	358	503	196	22
HKL(W) 3.89	358	621	196	23.3
HK(F) 43, HK(F) 44	460	240	240	29
HK(F) 4.8	580	240	240	34
HK(F) 4.9	630	240	240	36
HK(F) 4.5	513	240	240	30
HKF 482	833	240	240	40



Additional information

- Compact-hydraulic power packs type HK(F) 43 (44) D 7600-4
 type HK 33 (34) D 7600-3
 type HK 24 D 7600-2
 type HKL(W) D 7600-3L
- Connection blocks type A D 6905 A/1
 type B D 6905 B
 type C D 6905 C
- Directly mountable valve banks type VB D 7302
 type BWH(N) D 7470 B/1
 type BVZP 1 D 7785 B
 type SWR, SWS D 7450, D 7451, D 7951
 type BA D 7788
- see also "Turn-key solutions from our modular system"
- see also section "Devices for special applications"
 (Hydraulics for clamping, Devices for up to 700 bar)

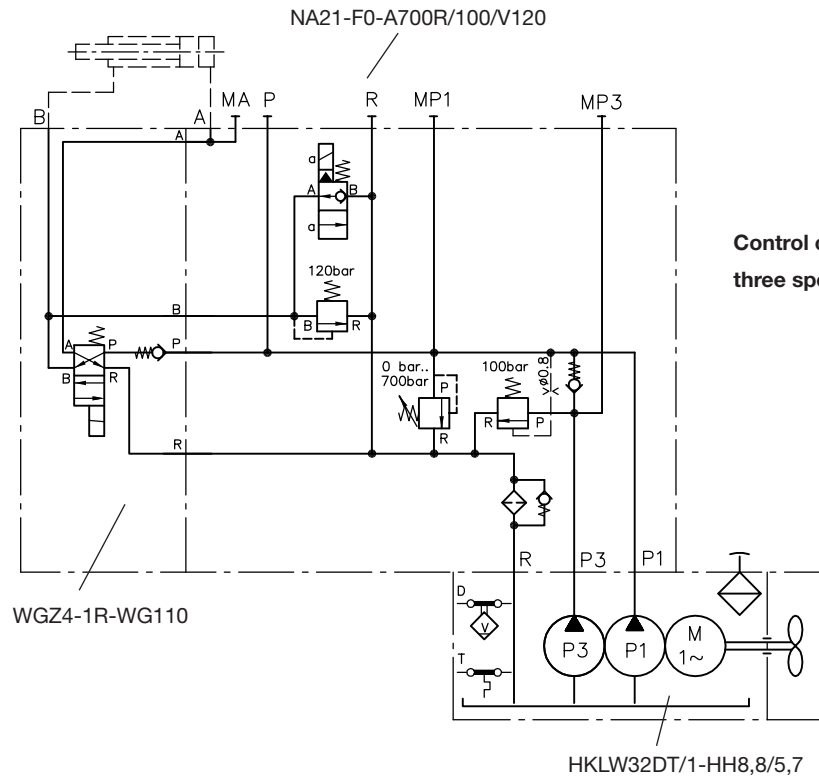
For section and page of the additionally listed devices, see type index

Circuit example

HKLW 32 DT/1 - HZ0,57/2,0

- NA21F0-A700R/100/V120-WGZ4-1R-WG110

Motor voltage 1 ~ 110V 60 Hz



HK 448/1 - HH1,0/2,8 - H4,4 -

- SS - A1/250 - BVZP1F - G22/0

- D22/0

- CZ2/180/5R

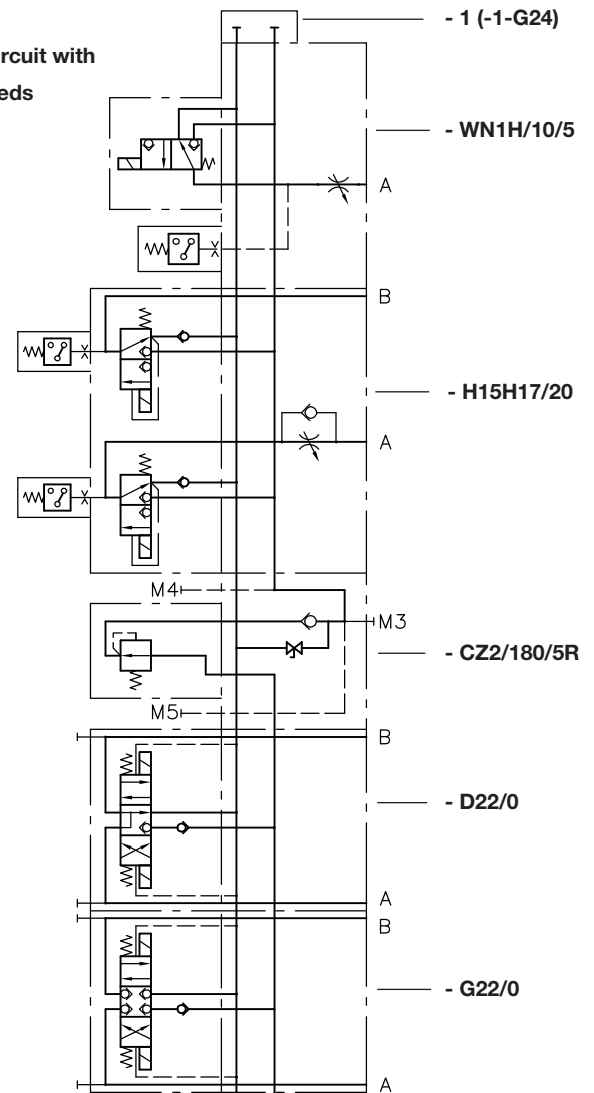
- H15H17/20

- WN1H/10/5 - 1 - 1

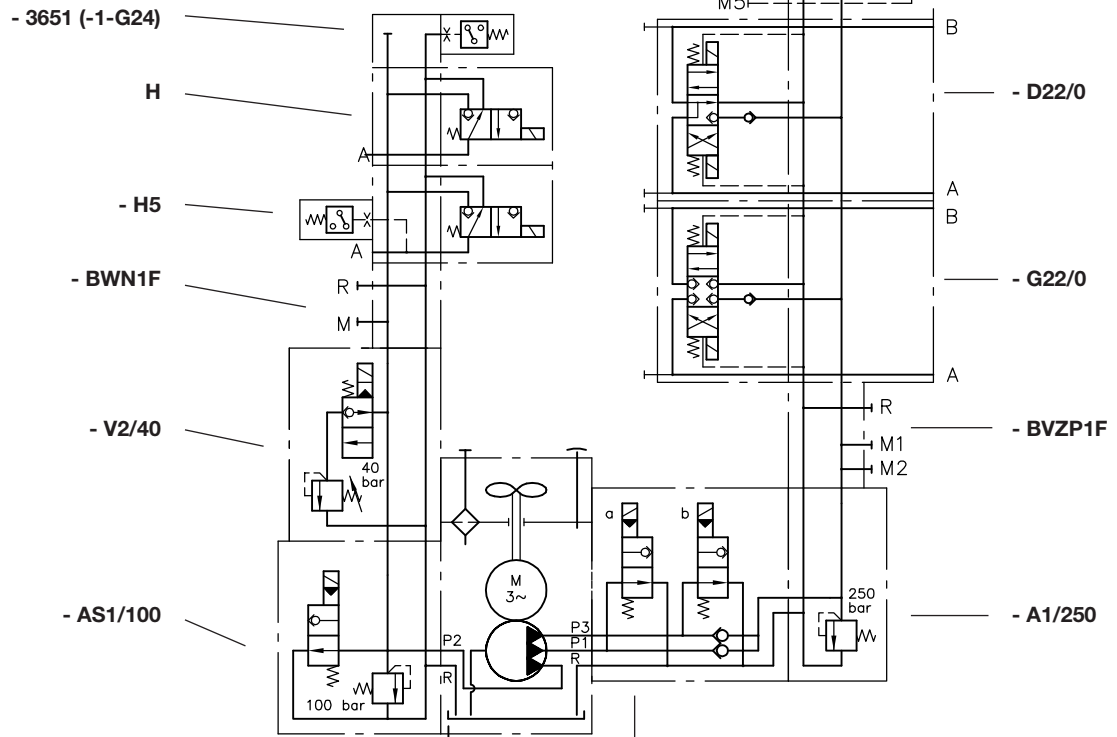
- AS1/100 - V2/40 - BWN1F - H5H - 3651 - 1 - G24

Motor voltage 3 ~ 400/230V 50 Hz Υ Δ

Control circuit with three speeds



Control circuit with two pressure ratings



HK448/1 - HH1,0/2,8 - H4,4 - SS