

# Hydraulic power packs type MP(N) and MP(N)W

The ready for connection hydraulic power packs are intended for intermittent or load/no load operation and are used to supply pressurized fluid to hydraulic consumers.

This type is suitable for dual stage drives for presses or dual circuit systems, particularly by the possible combination of high and low pressure stage (radial piston and gear pump) or two low pressure stages.

The tank is available in different sizes enabling convenient customization. Complete hydraulic control systems can be created by directly mounting

various combinations of connection blocks and valve banks to the hydraulic power pack.



**Nomenclature:** Radial piston and/or gear pump with integrated motor  
single or dual circuit pump

**Design:** Oil immersed hydraulic power pack for intermittent or load/no load operation (S 3-/S 6-service)

**$p_{max}$ :** Radial piston pump  
700 bar (high pressure)  
Gear pump  
180 bar (low pressure)

**$Q_{max}$ :** 15 lpm (high pressure)  
( $V_g = 10.7 \text{ cm}^3/\text{rev}$ )  
87 lpm (low pressure)  
( $V_g = 60 \text{ cm}^3/\text{rev}$ )

**$V_{tank max}$ :** approx. 66 lpm

## Basic types and general parameters (selection)

Basic type  
and size

Parameter: Delivery flow  $Q_{pu}$  (lpm) approximate reference value and max. pressure  $p_{max}$  (bar) <sup>1)</sup>

Radial piston pump

Gear pump

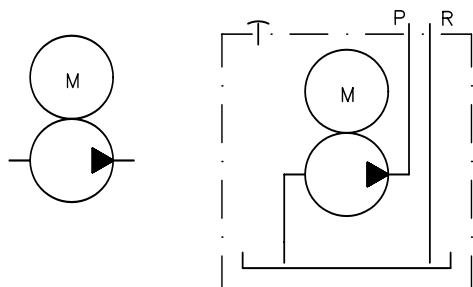
Basic type and size	Coding	Radial piston pump					Gear pump			
		H 0,27	H 0,42	H 0,64	H 0,81	H 1,1	Z 0,5	Z 1,8	Z 3,5	Z 6,9
MP 14	Coding	H 0,27	H 0,42	H 0,64	H 0,81	H 1,1	Z 0,5	Z 1,8	Z 3,5	Z 6,9
	$Q_{max}$	0,27	0,42	0,64	0,82	1,07	0,5	1,85	3,5	6,9
	$p_{max}$	700	570	370	280	220	150	75	40	15
MP 12	Coding	H 0,27	H 0,42	H 0,64	H 0,81	H 1,1	Z 1,0	Z 1,8	Z 2,7	Z 3,5
	$Q_{max}$	0,53	0,82	1,18	1,61	2,1	2,0	3,7	5,4	6,9
	$p_{max}$	700	650	420	320	250	150	110	75	60
MP 24	Coding	H 0,46	H 0,70	H 1,08	H 1,39	H 1,77	Z 2,0	Z 3,5	Z 5,2	Z 12,3
	$Q_{max}$	0,46	0,7	1,0	1,37	1,73	2,0	3,5	5,2	12,3
	$p_{max}$	700	650	520	400	310	150	120	80	35
MP 22	Coding	H 0,46	H 0,70	H 1,08	H 1,39	H 1,77	Z 2,0	Z 5,2	Z 9	Z 21
	$Q_{max}$	0,88	1,37	1,94	2,69	3,51	4	10,2	17,1	41,3
	$p_{max}$	700	650	430	320	260	150	75	45	18
MP 34	Coding	H 1,25	H 1,5	H 2,5	H 3,6	H 6,5	Z 3,5	Z 6,9	Z 12,3	Z 28
	$Q_{max}$	1,2	1,63	2,54	3,66	6,3	3,5	6,9	12,3	28
	$p_{max}$	700	530	340	240	135	150	100	65	30
MP 44	Coding	H 2,6/H 2,15	H 4,2/H 3,35	H 6,0/H 4,8	H 7,0/H 5,7	H 10,9/H 8,7	Z 3,5	Z 16	Z 24	Z 75
	$Q_{max}$	2,7/2,1	4,24/3,3	6,1/4,8	7,2/5,6	10,6/8,6	3,5	16	24	75
	$p_{max}$	700	540	370	315	190	150	130	90	25
MP 54	Coding	H 3,7/H 3,2	H 5,8/H 5,0	H 8,4/H 7,2	H 9,8/H 8,6	H 15,3/H 13,1	Z 12,3	Z 24	Z 37	Z 87
	$Q_{max}$	3,8/3,2	5,9/5,0	8,5/7,2	10,0/8,5	14,8/12,8	12,3	24	37	87
	$p_{max}$	700	550	420	360	210	150	120	100	40
MPN 34	Coding	H 1,25	H 1,5	H 2,5	H 3,6	H 6,5	Z 3,5	Z 6,9	Z 12,3	Z 28
	$Q_{max}$	1,2	1,63	2,54	3,66	6,3	3,5	6,9	12,3	28
	$p_{max}$	700	530	340	240	135	150	100	65	30
MPN 44	Coding	H 2,6/H 2,15	H 4,2/H 3,35	H 6,0/H 4,8	H 7,0/H 5,7	H 10,9/H 8,7	Z 3,5	Z 16	Z 24	Z 75
	$Q_{max}$	2,7/2,1	4,24/3,3	6,1/4,8	7,2/5,6	10,6/8,6	3,5	16	24	75
	$p_{max}$	700	540	370	315	190	150	130	90	25
MPN 54	Coding	H 3,7/H 3,2	H 5,8/H 5,0	H 8,4/H 7,2	H 9,8/H 8,6	H 15,3/H 13,1	Z 12,3	Z 24	Z 37	Z 87
	$Q_{max}$	3,8/3,2	5,9/5,0	8,5/7,2	10,0/8,5	14,8/12,8	12,3	24	37	87
	$p_{max}$	700	550	420	360	210	150	120	100	40

<sup>1)</sup> The parameter listed here represent only a choice from a variety of possibilities.

**Symbols**

**Single stage pump**

(radial piston pump, gear pump)

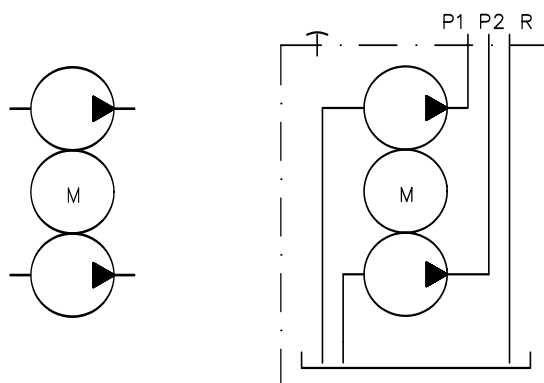


Installation pump

Hydraulic power pack (incl. tank)

**Dual stage pump**

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



Installation pump

Hydraulic power pack (incl. tank)

**Additional parameter**

Basic type and size	Rev. rating			Nom. voltage
	$n_N$ (rpm)	$P_N$ (kW) <sup>2)</sup>	$V_{usable\ max}$ (l) <sup>3)</sup>	
MP 14	1320	0.25	6.5	3 ~ 230/400V ΔΥ 50 Hz <sup>4)</sup>
MP 12	2810	0.37	6.5	3 ~ 500V Υ 50 Hz
MP 24	1390	0.75	13	
MP 22	2830	0.55	13	
MP 34 / MPN 34	1380	1.1 / 1.5	66	
MP 44 / MPN 44	1400	2.2 / 3	66	
MP 54 / MPN 54	1430	4	65	

2) The actual power input is dependent on the respective operation pressure and can be up to 1.5 x P<sub>N</sub>  
 3) Various tank sizes available  
 4) Also suitable for mains 3 ~ 265/460V ΔΥ 60 Hz

**Additional versions**

- Type MPW hydraulic power pack with 1-phase-motor (e.g. 1 ~ 230V 50 Hz), 30 ... 50% reduced performance depending on size
- Temperature switch

- Completion with connection blocks and valve banks (see also "Additional information")
- Cover plate version for customer furnished tank

**Order examples**

**MP 34 - H 1,25**

Installation pump type MP 34 with radial piston pump  $Q_{pu} = 1.25$  lpm;  $p_{max} = 700$  bar (motor and pump, retrofitting of with tank and valves by the customer)

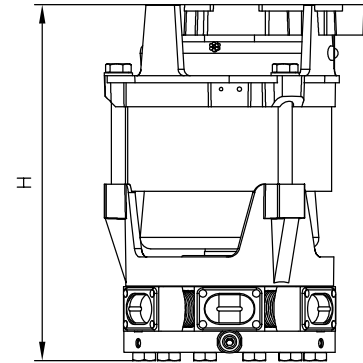
**MP 34 - H1,5 Z12,3/B 10 NE21 - 500/30 - VB 21 GM - RH - 3 -G24**

Dual stage pump type MP 24 with radial piston and gear pump  $Q_{pu} = 1.5/12.3$  lpm;  $p_{perm\ max} = 520/30$  bar, tank B 10 ( $V_{usable}$  approx. 9 l), two stage valve type NE 21 (high pressure 500 bar, low pressure 30 bar) with directly mounted valve bank type VB 21

## Dimensions

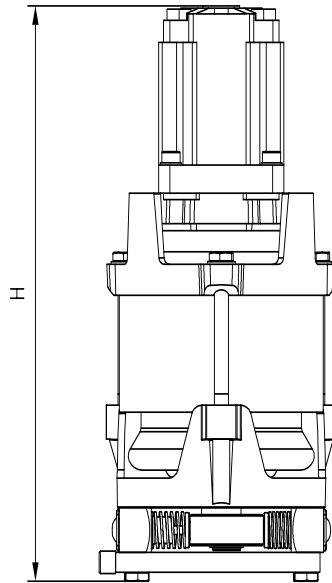
## Single stage pump

(see order example, without tank and valves)



## Dual stage pump

(see order example, without tank and valves)



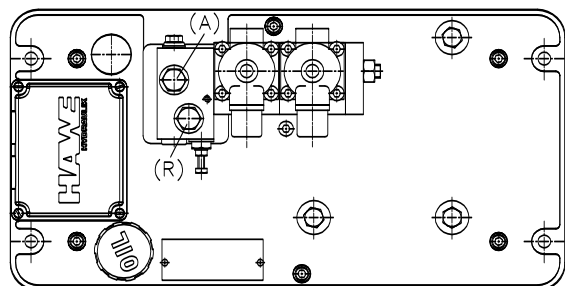
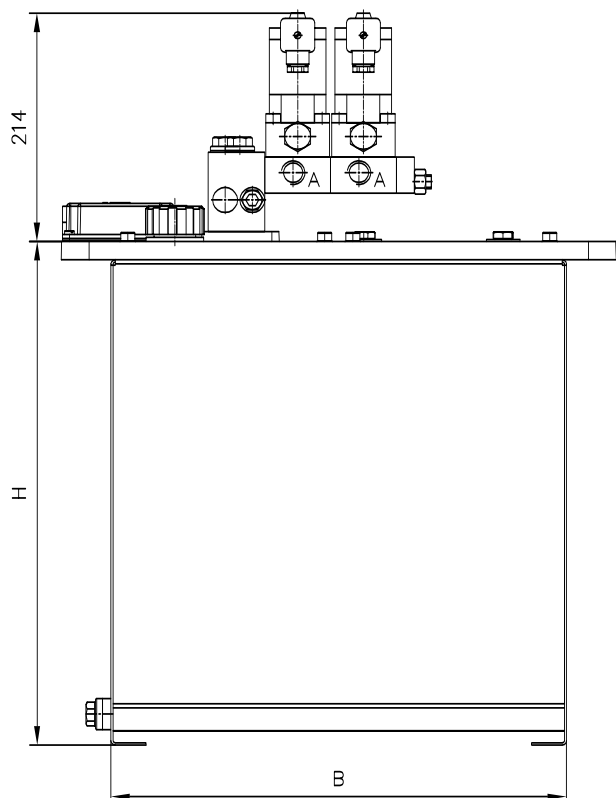
All dimensions in mm, subject to change without notice !

Basic type	H1 <sup>5)</sup>		H2 <sub>max</sub>	D	m <sub>max</sub> (kg) <sup>5)</sup>
MP 14, MP 12	183 / 228		249	124	5.2 / 5.0
MP 24, MP 22	195 / 291		322.5	140	9.1 / 7.7
MP 34 / MPN 34	237 / 315	253 / 332	358.5 / 385	158 / 165	12.3 / 12.9
MP 44 / MPN 44	265 / 377	275 / 401	424 / 453	178 / 165	18.0 / 18.5
MP 54 / MPN 54	298 / 410	348 / 473	461 / 525	197 / 165	27.5 / 26.4

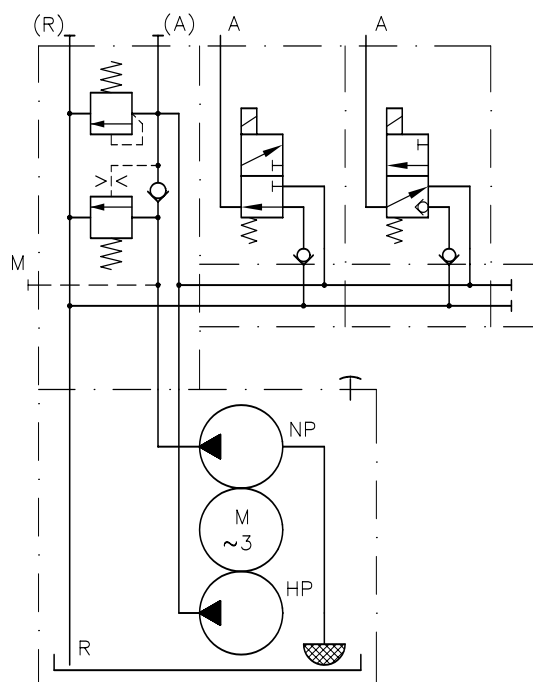
<sup>5)</sup> Figures apply to both radial piston pump and gear pump

**Compact hydraulic power pack**

(see order example, for tank with directly mounted valves)



**Symbol**



Size	Tank size	H	B	T
MP 1.	B 3	225	216	136
MP 1., MP 2.	B 5	265	258	160
MP 2., MP(N) 3., MP(N) 4.	B 10	332 / 363	324	200
MP(N) 3., MP(N) 4., MP(N) 5.	B 25	413 / 458	402	250
MP(N) 3., MP(N) 4., MP(N) 5.	B 55	413 / 458	560	350
MPN 3., MPN 4., MPN 5.	B 110	655	560	350

**Additional information**

- Hydraulic power packs type MP, MPW D 7200, D 7200 H  
type MPN, MPNW D 7207
- Connection blocks type A D 6905 A/1  
type B D 6905 B  
type C D 6905 C
- Directly mountable valves  
Two stage valve type NE D 7161

- Directly mountable valve banks  
type VB D 7302  
type BWH(N) D 7470 B/1  
type BVZP 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, Press controls, Devices for up to 700 bar)

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