

North American Hydraulics, (NAHI, LLC), partnering with Linde Hydraulics offering High Pressure Hydrostatic Pumps and Motors for Closed or Open Loop applications.

Product Advantages:

- Motors — High starting torque, high power density, steady slow speed, compact design, high reliability, long service life
- Model HMV-02 — Large conversion range, zero angle possible, dynamic response, PTO through-drive motor
- Model HMR-02 — Self-regulating motors option available
- Pumps — High power density, dynamic response, noise optimized, precise, compact design, high reliability, long service working life
- Model HPR-02 — Energy saving operation by “flow on demand” control, excellent suction up to rated speed

Control Options:

- Model HPV-02 — Power limiter, pressure cut-off

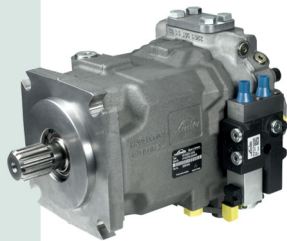
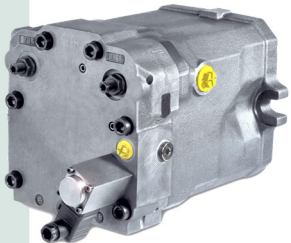
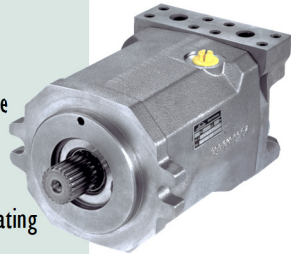
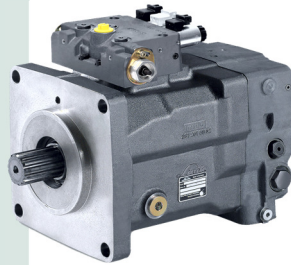
Proven Solutions for:

- Material Handling, Forestry
- Mining, Agriculture, Municipal
- Construction, Marine, Stationary

Please contact NAHI for additional information.

The above information should be used as a guide and is subject to change without notice.

Please contact NAHI for proper selection.



HPV-02 Closed Loop Pumps

Motor	Displacement		Max Speed rpm	Peak Speed rpm	Max Pressure psi	Peak Pressure psi	Max Power Hp	Peak Power Hp	Weight lbs
	in ³	cc							
55	3.3	54.7	3300	3700	6100	7250	100	164	93
75	4.6	75.9	3100	3500			131	213	104
105	6.4	105.0	2900	3200			170	276	128
135	8.3	135.7	2700	2900			205	331	159
165	10.1	165.6	2500	2700			232	374	209
210	12.8	210.1	2300	2500			270	437	291
280	17.2	281.9	2000	2200			315	511	348

HMF-02/HMA-02 Fixed Motors

Motor	Displacement		Max Speed rpm	Peak Speed rpm	Max Pressure psi	Peak Pressure psi	Max Power Hp	Peak Power Hp	Weight lbs
	in ³	cc							
28	1.7	28.6	4500	4800	6100	7250	73	121	35
35	2.2	35.6					90	150	35
55	3.3	54.7	4100	4400			125	211	42
63	3.8	63.0	3900	4200			137	231	51
75	4.6	75.9	3800	4100			161	271	57
105	6.4	105.0	3500	3800			205	345	73
135	8.2	135.6	3200	3500			243	408	86
*165	8.2-10.0	135-165	3100	3400			287	481	165
*210	10.1-12.8	166-210	2700	3000	316	532	243		
*280	12.8-17.1	211-280	2400	2700	378	636	322		

*HMA-02 Options

HMV-02 Variable Motors

Motor	Displacement		Max Speed rpm	Peak Speed rpm	Max Pressure psi	Peak Pressure psi	Max Power Hp	Peak Power Hp	Weight lbs
	in ³	cc							
55	3.3	54.7	4100	5300	6100	7250	125	211	62
75	4.6	75.9	3800	5000			161	271	71
105	6.4	105.0	3500	4700			205	345	93
135	8.2	135.6	3200	4000			243	408	123
165	10.1	165.6	3100	3900			287	481	168
210	12.8	210.0	2700	3500			316	532	223
280	17.2	281.9	2400	3200			378	636	322

HPR-02 Open Loop Pumps

Motor	Displacement		*Max Speed rpm	Max Pressure psi	Peak Pressure psi	*Max Oil Flow gpm	Max Power Hp	Peak Power Hp	Weight lbs
	in ³	cc							
55	3.4	55.0	2700	6100	7250	39.2	83	140	86
75	4.6	75.9	2500			50.1	106	178	86
105	6.4	105.0	2350			65.2	138	232	110
135	8.3	135.7	2300			82.4	174	293	143
165	10.1	165.6	2100			91.9	194	326	196
210	12.8	210.1	2000			111.0	235	394	256
105D	12.8	210.0	2350			130.4	276	411	212
280	17.2	281.9	1800			134.0	284	476	364
125D	15.4	252.0	2300	5100	6100	153.1	324	453	249
165D	20.2	331.2	2100	6100	7250	183.7	389	579	390

*Unloaded

Controls – Options				
	HPV-02	HMF-02/HMA-02*	HMV-02	HPR-02
CONTROLS				
LP – Load sensing with pressure cut-off				▪
HTL – Load sensing with hydraulic ΔpLS -override				▪
ETL – Load sensing with electrical ΔpLS -override				▪
LEP – Load sensing with electric stroke limiter and pressure cut-off				▪
ETP – Electro-proportional with hyperbolic power limiter and pressure cut-off				▪
TL2 – Load sensing with hyperbolic power limiter				▪
M1R – Mechanical-hydraulic	▪			
H1 – Hydraulic	▪			
E1 – Electro-hydraulic	▪			
E2 – Electro-hydraulic, with switch-off function	▪			
E5 – Electro-hydraulic, 3 position	▪			
CA – Speed related hydraulic mechanical with torque-/power limiter	▪			
H1+ – Hydraulic stepless			▪	
H2 – Hydraulic 2-position			▪	
H4 – Hydraulic stepless $V_{min} = 0$ cc/rev			▪	
E1+ – Electro-hydraulic stepless			▪	
E2+ – Electro Hydraulic 2-position			▪	
E4 – Electro hydraulic stepless $V_{min} = 0$ cc/rev			▪	
E6 – As E4 with inverted shifting			▪	
EH1P-CA – Hydraulic stepless with pressure override and electric pressure selection			▪	
DESIGN CHARACTERISTICS				
Axial piston pump in swashplate design for high pressure open circuit systems		▪		▪
Clockwise or counter clockwise rotation	▪			▪
Self-priming at high nominal speed				▪
Tank pressurization or swash angle reduction for high speed applications				▪
Adaptive noise optimization SPU				▪
Decompression fluid is discharged via pump housing to keep suction side calm				▪
Exact and robust load sensing controllers with or without swash plate position feedback				▪
Axial piston pump in swashplate design for high pressure closed circuit systems	▪			
Exact and rugged servo control device (mechanical, hydraulic, electro-hydraulic)	▪			
Integrated low pressure relief valves with charge function	▪			
Replaceable cartridge filter	▪			
SAE high pressure ports	▪			
Through shaft SAE A, B, B-B and C	▪			
Charge pressure pumps for internal and external suction, integrated cold start relief valve optional	▪			
Optional tandem and multiple pumps	▪			
Axial piston motor in swashplate design for high pressure closed and open circuit systems			▪	
Optimized starting and low speed behaviour		▪	▪	
Purge valves for circuit and case flushing optional		▪	▪	
Stepless or 2-position control			▪	
Electric or hydraulic controls			▪	
Superposed pressure control optional			▪	
Brake pressure shut off optional			▪	
Swivelling to 0 cc/rev			▪	
High pressure relief valves available			▪	
Through shaft with free shaft end or with coupling flange			▪	
SAE high pressure ports radial or axial			▪	
SAE mounting flange with ANSI or SAE spline shaft		▪	▪	
Plug-in version optional			▪	
Speed sensor optional			▪	
Double and tandem motor available			▪	
High pressure relief valves set fixed or variable optional		▪		
*Motor set to a fixed, customer specific displacement ex works		▪		

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Turning Power into Motion.