

North American Hydraulics, (NAHI, LLC), partnering with Eaton Spool Valve Motors.

Features and Benefits:

- Compact, Powerful Package —
 Proven Orbit Motor Principle
- Infinite Bearing Life Hydrodynamic Journal Bearings
- High Efficiency —
 Constant Clearance Geroler
- Increased Shaft Seal & Bearing Life — Three-Zone Pressure Design
- Increased Drive Life —
 Reduced Drive Running Angle
- Reduced Leakage High-pressure Seals
- Modular Design

Proven Solutions for:

- Harvesters / Augers / Spreaders
- Machine Tools
- Conveyors / Winches
- Turf Care Equipment
- Food Processing
- · Aerial Work Platforms
- Anywhere a compact drive with high output torque is needed

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.

Low Speed High Torque Motors Solution Providers















Spool Valve Motors - Low Speed High Torque Motors					
Models	Displacement	Max Speed	Max Flow	Max Pressure	Torque
Piodels	in³ / cm³	rpm	gpm	psi	ft-lbs
	.50/8.2	1992	5.5	3190	193
	.79/12.9	1575	6.5	3190	321
J Series Motors	1.21/19.8	1043	6.5	3190	425
	1.93/31.6	650	6.5	2765	733
	3.00/50.0	393	6.5	2175	765
	3.6/59	963	18	2500	1271
	4.6/75	792	20	2500	1649
	5.7/97	607	20	2500	1992
	7.3/120	472	20	2500	2582
S Series Motors	8.8/144	394	20	2350	2870
5 Series Motors	10.1/166	343	20	2300	3191
	11.4/187	304	20	2250	3533
	13.7/225	253	20	2050	3843
	18.2/298	190	20	1800	4467
	22.7/372	153	20	1500	5200
	2.2/36	1021	10	2750	824
	3.0/49	906	15	2750	1131
	4.0/66	849	18	2750	1488
	4.9/80	694	20	2750	1872
	6.2/102	550	20	2750	2339
T Series Motors	8.0/131	426	20	2500	2718
	9.6/157	355	20	2500	3178
	11.9/195	287	20	2500	3864
	14.9/244	229	20	2250	4290
	18.7/306	183	20	1800	4275
	22.6/370	152	20	1500	4300
	4.9/80	267	6	2600	1676
	7.7/126	288	8	2600	2640
	9.4/154	214	9	2600	3301
W Series Motors	11.9/195	200	10	2600	3882
	15.3/251	200	14	2400	4849
	18.5/303	200	16.5	2000	4769
	22.8/374	200	20	1800	4970
	2.2/36	1021	10	2400	668
	2.8/46	969	14	2400	876
	3.6/59	953	17	2400	1076
	4.5/74	760	18	2400	1401
	5.9/97	585	18	2400	1829
	7.3/120	469	20	2400	2278
H Series Motors	8.9/146	385	20	2300	2653
505	9.7/159	353	20	2250	2824
	11.3/185	304	20	2150	3151
	14.1/231	243	20	2000	3671
	17.9/293	192	20	1800	4121
	22.6/370	152	20	1500	4283
	45.1/739	74	20	800	4600





Technical Details – Spool Valve Motors

Spool valve technology is typically used where compact, economical solutions are most needed. Spool valve motors use a spool valve to precisely time and control flow through the orbit gear set (Gerotor or Geroler). Inlet flow is directed into and out of the orbit set via slots in the spool and passages through the motor housing. The result is a very costeffective compact package suited to many application requirements. The three

primary components in the motor are the orbit star, drive and output shaft. H, S and T Series incorporate the spool valve and hydrodynamic bearings in the motor shaft. The W series is similar except a ball bearing is used for the front bearing for increased side-load capacity. Due to its compact size and high speed capability, the J Series is unique and utilizes a separate dedicated spool and spool valve drive. All motors utilize Eaton's

constant-clearance Geroler technology except the H Series, which continues to use the time-proven H motor gerotor set. These motors all use a three-zone pressure design consisting of three unique pressure areas: 1) inlet, 2) return, 3) case. This provides the capability to limit motor case pressure and allows the use of several case pressure options for extended shaft seal and thrust bearing life.









