

Single Displacement Radial Piston Motor *Solution Providers*

North American Hydraulics, (NAHI, LLC), partnering with Italgroup offering Single Displacement Radial Piston Motors (Low Speed High Torque Motors).

Features and Options:

- High Volumetric and Mechanical Efficiencies
- Smooth Running at Low Speeds
- High Starting and Constant Torque
- Wide Speed Range
- Compact Design
- Low Maintenance and High Reliability
- Bi-directional
- High Radial and Axial Force
- Speed Sensor Available
- Built-in Valves Available

Proven Solutions for:

- Marine and Offshore Equipment
- Winches / Conveyors
- Steel Bending Machines
- Fork Lift Trucks
- Skid Steer Loaders
- Dumpers
- Agricultural and Forestry Machines
- Municipal Vehicles
- Injection Moulding Machines

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.

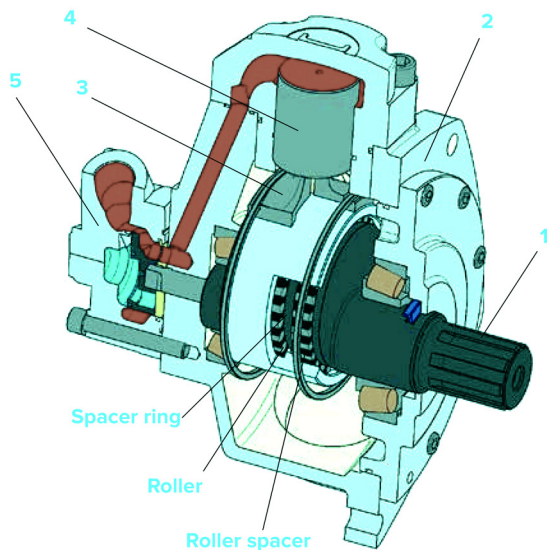


R8M Series - Single Displacement Radial Piston Motors							
Models		Displacement		Max Speed	Continuous Pressure	Peak Pressure	Torque
		in³	cc	rpm	psi	psi	ft-lbs
R8M H1	80	4.9	80	1050	3625	5075	1.0
	100	6.1	100	1050			1.2
	150	9.6	157	1050			1.8
	175	10.7	176	900			2.1
	195	11.9	195	900			2.3
	200	12.6	207	850			2.4
	250	15.7	257	850			3.0
R8M H2	300	18.7	307	850	3625	5075	3.6
	200	12.1	198	900			2.4
	250	15.4	253	850			3.0
	300	19.2	314	850			3.7
	350	22.1	362	750			4.3
	400	25.9	424	700			5.0
	500	30.0	492	600			5.7
R8M H3	600	35.6	584	600	3625	5075	6.9
	350	21.3	349	700			4.1
	300	24.2	397	680			4.6
	450	27.6	452	680			5.3
	500	30.0	491	680			5.8
	600	36.2	594	630			6.9
	650	40.1	660	580			7.7
R8M H4	700	43.1	707	500	3625	5075	8.3
	800	48.3	791	450			9.3
	700	43.6	714	580			8.4
	800	48.3	792	530			9.3
	850	51.7	847	530			10.0
	900	55.2	904	530			10.6
	1000	60.5	992	400			11.7
R8M H45	1100	68.1	1116	400	3625	5075	13.1
	1200	72.7	1192	350			14.0
	1250	76.1	1247	300			14.6
	1400	81.3	1332	280			15.6
	1100	72.2	1183	400			13.9
	1400	84.0	1376	350			16.2
	1600	100.6	1648	325			19.3
R8M H5	1800	110.8	1815	300	3625	5075	21.3
	1000	66.8	1094	400			12.8
	1200	75.1	1231	350			14.5
	1400	84.0	1376	350			16.2
	1500	93.2	1528	350			17.9
	1600	100.6	1648	340			19.3
	1800	110.8	1815	300			21.3
R8M H55	2000	124.2	2035	260	3625	5075	23.9
	2200	135.5	2220	240			26.0
	2200	130.1	2126	280			24.9
	2500	154.1	2525				29.6
2800	171.3	2807	33.0				
	3000	184.8	3028		35.6		



MOTOR DESCRIPTION

R8M series motors are radial piston hydraulic motors (generally indicated as LSHT motors, low speed high torque motors) with a rotating shaft (1) and a stationary housing (2). The pistons (4) are located radially and the working fluid provide the mechanical force that push the pistons against the eccentric shaft, providing the shaft output torque. The inlet and outlet flow to and from the pistons is regulated by a distributor (5) that provides the oil distribution correct timing. The pistons transfer the forces to the eccentric shaft through a connecting rod (3). Acting in the adequate way (increasing or reducing the oil flow coming from the pump) the motor rotational speed can be increased or reduced. The motor design guarantee extremely high starting torque and high mechanical working efficiency. Respecting the limitation of working parameters (indicated in the technical datasheets) and all recommendations (including fluid recommendations), high motor lifetimes are obtained and very low maintenance requirements are needed.



TECHNICAL INNOVATION ON R8M H45, H5, H55, H6 and H7 SERIES

Special bearing construction to prevent from seizure of the connecting rod with the external bushing. This could happen in high speed and high pressure working conditions and could lead to motor breakdown.

The new bearing design consists of:

- roller spacers, with function of keeping rollers axis parallel creating space between rollers to hold more oil
- spacer rings, with function of keeping rollers lined up absorbing axial forces coming from connection rod

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R8M H6	2200	134.6	2206	260	3625	5075	25.9
	2500	154.1	2525	260			29.6
	2800	171.3	2807	260			33.0
	3000	182.0	2983	250			35.0
	3200	200.7	3289	240			38.6
	3500	212.3	3479	240			40.9
R8M H7	3900	238.4	3907	200	3625	5075	45.9
	4300	265.0	4343	190			51.0
	4600	281.7	4616	190			54.2
	5000	310.5	5088	180			59.7
	5400	328.6	5384	170			63.2
R8M H8	6000	364.1	5966	140	3625	5075	70.1
	6500	401.6	6581	140	3625		77.2
	6800	424.8	6962	140	3625		81.7
	7600	465.0	7620	100	2755		89.5
	8000	492.0	8062	90	2610		94.6
R8M H9	7000	430.2	7050	190	3915	5075	82.6
	8000	508.4	8332	160	3915		97.8
	9000	534.4	8757	155	3770		102.8
	10000	623.3	10214	135	3625		119.9
	11000	672.2	11016	120	3625		129.3
	12000	736.7	12073	110	3625		141.8
	13000	794.5	13020	105	3625		152.9

