

Dual Displacement Radial Piston Motor *Solution Providers*

North American Hydraulics, (NAHI, LLC), partnering with Italgroup offering Dual 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
- Dual Speed
- High Radial and Axial Force
- Freewheeling
- 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.



R8C Series - Dual Displacement Radial Piston Motors

Models		Displacement		Max Speed	Continuous Pressure	Peak Pressure	Torque
		in ³	cc	rpm	psi	psi	ft-lbs
R8C 195 H1	69	4.2	69	1250	3626	5075	0.8
	75	4.6	75	1250			0.9
	95	5.8	95	1200			1.1
	100	6.1	100	1200			1.2
	125	7.6	125	1150	3915	5075	1.5
	150	9.1	150	1150			1.8
	175	10.7	175	1050			2.1
R8C 250 H1	195	11.9	195	950	3625	5075	2.3
	95	5.8	95	1200			1.1
	100	6.1	100	1200			1.2
	125	7.6	125	1150			1.5
	150	9.2	150	1150			1.8
	175	10.7	175	1050			2.1
	195	11.9	195	950			2.3
R8C 500 H3	232	14.2	232	920	3915	5075	2.7
	257	15.7	257	920			3.0
	98	6.0	98	1000		3625	1.2
	147	9.0	147	900			1.7
	197	12.0	197	800			2.3
	255	15.6	255	750	3915	5075	3.0
	292	17.8	292	700			3.5
R8C 800 H4	344	21.0	344	700			4.1
	393	24.0	393	680		3625	4.6
	442	27.0	442	650		5075	5.2
	492	30.0	492	600			5.8
	165	10.1	165	900	3915	5075	1.9
	245	15.0	245	850			2.9
	273	16.7	273	850			3.2
R8C 1400 H5	328	20.0	328	800			3.8
	410	25.0	410	800	3915	5075	4.8
	493	30.1	493	750			5.8
	575	35.1	575	720			6.8
	660	40.3	660	700	3915	5075	7.7
	792	48.3	792	550			9.3
	0	0	0	1500	3915	5075	0
R8C 1400 H5	82	5.0	82	1200			1.0
	164	10.0	164	800			1.9
	246	15.0	246	800			2.9
	328	20.0	328	800			3.8
	410	25.0	410	800	3915	5075	4.8
	492	30.0	492	700			5.8
	574	35.0	574	700			6.7
R8C 1400 H5	655	40.0	655	700	3915	5075	7.7
	737	45.0	737	650			8.6
	820	50.0	820	600			9.6
	900	54.9	900	600			10.5
	980	59.8	980	600	3915	5075	11.5
	1070	65.3	1070	575			12.5
	1150	70.2	1150	550			13.5
R8C 1400 H5	1235	75.4	1235	550			14.5
	1313	80.1	1313	500	3915	5075	15.4
	1393	85.0	1393	500			16.4
	1499	91.5	1499	500			17.6
	1600	97.6	1600	450			18.1



R8C Series - Dual Displacement Radial Piston Motors

Models		Displacement		Max Speed rpm	Continuous Pressure psi	Peak Pressure psi	Torque ft-lbs
		in³	cc				
R8C 2200 H55	0	0	0	1500	3625	5075	0
	82	5.0	82	1200			1.0
	160	9.8	160	800			1.8
	330	20.1	330	800			3.9
	490	30.0	490	720			5.8
	655	40.0	655	720			7.7
	820	50.0	820	700			9.7
	980	59.8	980	700	3915	5075	11.5
	1150	70.2	1150	540			13.5
	1310	80.0	1310	500			15.4
	1470	89.7	1470	470			17.3
	1640	100.1	1640	430			19.3
	1800	110.0	1800	400			21.1
	1970	120.2	1970	360			23.1
	2049	125.0	2049	340			24.0
	2200	134.3	2200	320			25.8
R8C 3000 H6	0	0	0	1500	3625	5075	0
	82	5.0	82	1200			1.0
	160	9.8	160	800			1.8
	330	20.1	330	800			3.8
	490	30.0	490	700			5.8
	670	41.0	670	700			7.9
	820	50.0	820	580			9.7
	980	60.0	980	540			11.5
	1150	70.2	1150	500			13.5
	1310	80.0	1310	475			15.4
	1470	90.0	1470	450	3915	5075	17.3
	1640	100.1	1640	420			19.3
	1800	110.0	1800	400			21.2
	1970	120.2	1970	350			23.2
	2130	130.0	2130	340			25.0
	2290	140.0	2290	320			27.0
	2460	150.1	2460	300			29.0
	2620	160.0	2620	300			30.8
	2790	170.3	2790	300			32.7
	2950	180.0	2950	280			34.7
	3085	188.3	3085	280			36.2
R8C 4600 H7	0	0	0	1500	3625	5075	0
	82	5.0	82	1200			0
	164	10.0	164	700			1.9
	328	20.0	328	650			3.8
	492	30.0	492	600			5.8
	655	40.0	655	600			7.7
	980	60.0	980	550			11.5
	1310	80.0	1310	530			15.4
	1640	100.1	1640	470			19.3
	1970	120.2	1970	380			23.2
	2290	139.7	2290	330	3915	5075	27.0
	2620	159.9	2620	280			30.8
	2950	180.0	2950	255			34.7
	3280	200.2	3280	230			38.5
	3650	222.7	3650	210			42.9
	4177	254.9	4177	185			49.0
	4617	281.7	4617	170			54.2

R8C Series - Dual Displacement Radial Piston Motors

Models		Displacement		Max Speed rpm	Continuous Pressure psi	Peak Pressure psi	Torque ft-lbs
		in³	cc				
R8C 5400 H7	0	0	0	1500	3625	5075	0
	164	10.0	164	1200			1.2
	328	20.0	328	650			3.8
	492	30.0	492	600			5.8
	655	40.0	655	600			7.7
	980	60.0	980	550			11.5
	1311	80.0	1311	530			15.4
	1640	100.1	1640	450			19.3
	2295	140.0	2295	335			27.0
	2620	160.0	2620	290			30.8
	2950	180.0	2950	260			34.7
	3280	200.2	3280	235			38.5
	3650	222.7	3650	210			42.9
	4097	250.0	4097	185			48.1
	4588	280.0	4588	165			53.8
	4915	300.0	4915	155			58.0
	5080	310.0	5080	150			60.0
	5326	325.0	5326	145			62.5

MOTOR DESCRIPTION

R8C 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 (3) are located radially and the working fluid provide the mechanical force that push the pistons against the eccentric cam (4), 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 (6). Acting in the adequate way (increasing or reducing the oil flow coming from the pump) the motor rotational speed can be increased or reduced. In addition, there is a hydraulic mechanism (7) that controls the motor displacement.

