

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.



## HC Series - Single Displacement Hydraulic Motor

Models		Displacement		Max Speed	Continuous Pressure	Peak Pressure	Max Continuous Power
		in³	cc	rpm	psi	psi	hp
HC05	40	2.4	40	1200	3625	5075	21
	60	3.6	60	1200			34
	75	4.5	74	1200			43
	90	5.5	91	1100			43
	110	7.0	115	850			47
	130	7.8	129	850			47
	150	9.2	151	850			47
	175	10.1	166	750			47
	200	11.6	191	750			47
	250	13.7	226	600			47
HC1	100	5.9	98	1100			54
	150	9.4	154	700			54
	175	10.5	173	700			61
	200	12.2	200	600			61
	220	13.4	221	600			65
	250	14.8	243	600			68
	300	17.6	289	550			68
	330	19.2	315	450			68
HC2	200	11.7	193	1200			102
	250	15.3	251	950			
	300	18.6	305	800			
	350	21.2	348	650			
	400	25.8	424	600			
	500	30.0	493	520			
	600	34.5	566	480			
	650	38.0	624	440			
HC3	350	21.4	352	640			115
	400	25.9	426	600			
	500	29.6	486	500			
	600	36.3	595	450			
	700	42.0	689	420			
	800	48.3	792	400			
	900	53.2	872	360			
	1000	60.2	988	310			
HC5	800	49.3	808	350			136
	1000	63.4	1040	320			
	1200	72.6	1190	320			
	1300	81.7	1340	320			
	1500	89.3	1464	300			
	1600	99.7	1635	280			
	1800	110.8	1816	280			
	2000	122.6	2010	220			



## Motor description

HC 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 shaft, providing the shaft output torque. The inlet and outlet flow to and from the pistons is regulated by a distributor (4), that provides the oil distribution correct timing. The HC motor design is very compact because the piston and the connecting rod are realized in the same piece, to make this realizable an oscillating cylinder is present (5). 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 into the technical datasheets) and all recommendations (including fluid recommendations), high motor lifetimes are obtained and very low maintenance requirements are needed.

