

DM Series

Hydraulic Motors



DM1 thru DM8 Series



DM21 thru DM27 Series



“DM” series hydraulic motors are designed with performance in mind, including: high-strength cast iron bodies with precision machined filling and trapping grooves, hardened alloy gears and shafts to run smoothly, special Buna N and O-ring shaft seals to withstand up to 200 psi return line back pressure, anti-friction bearings for 60-70% starting torque, ball thrust bearings to withstand thrust and radial shaft loads and integral check valves to permit bi-directional rotation (to eliminate the need for external case drains). And, they will turn as slow as 300 rpm ... or lower on low-torque applications.

“DM” series motors are found in materials handling equipment, agricultural implements, snow removal equipment, marine gear and numerous industrial equipment and machine tools ... as drives for pumps, fans, compressors, mowers and other applications where moderate starting torque and moderate-to-high-speed efficiency is needed.

And, because of their design and manufacturing quality, they can be expected to add to the overall performance and life expectancy of the equipment.

Recommendations:

Oil: Clean oil means long life - 25 micron is generally a satisfactory goal, this is of prime importance on initial fill. Use industrial petroleum-based hydraulic oil from SAE 10 to 30 wear and oxidation inhibitors. Optimum performance is attained with operating viscosity around 200 SSU. Reservoir capacity should be sufficient to result in temperatures between 50°F to 150°F. Temperature should not exceed 200°F.

Installation: Hydraulic motor controls should be placed on the pressure side of the motor in order to preclude high seal or case pressures. Return line should be straight to tank.

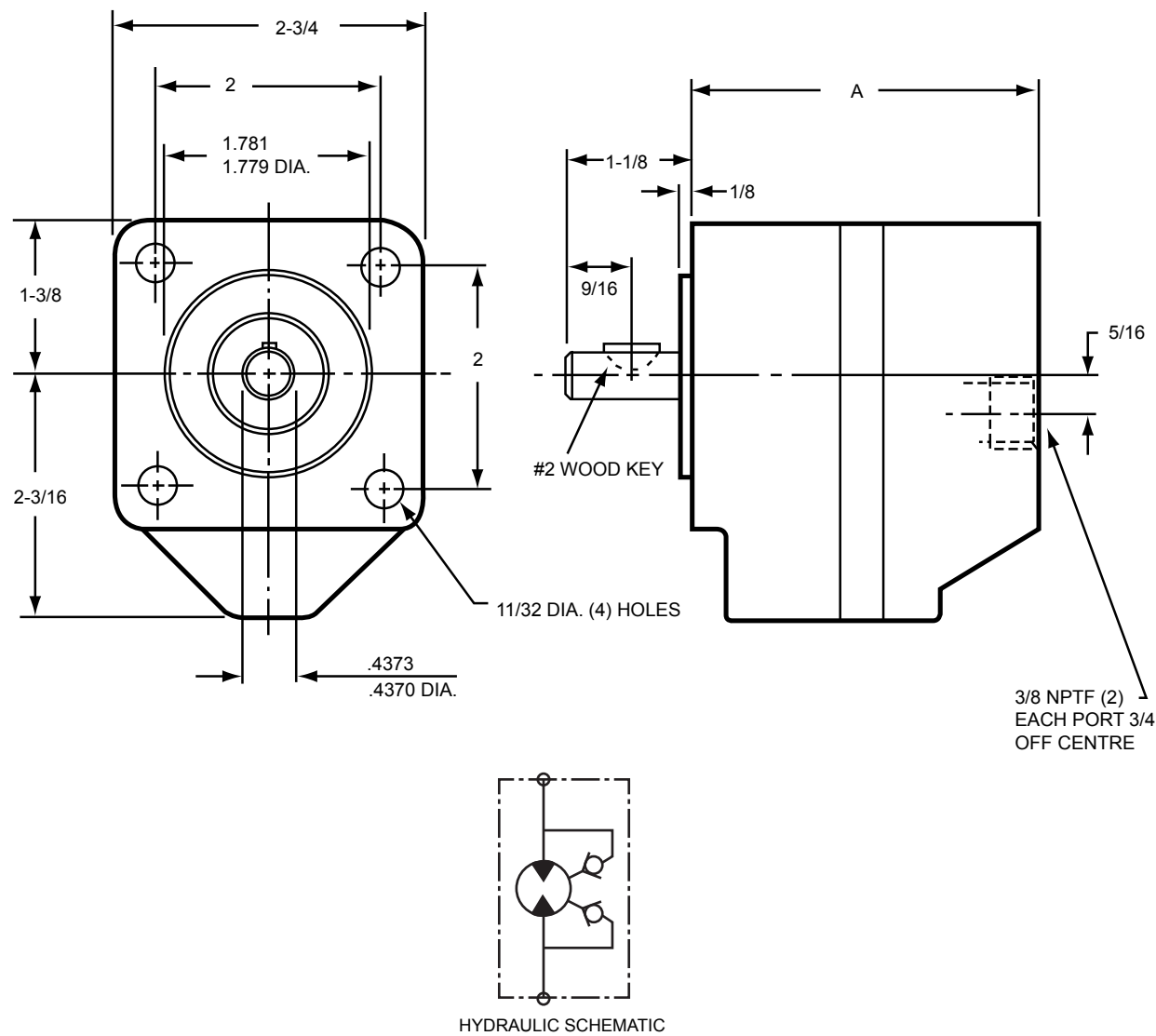
DM1 thru DM8: Be especially careful since these units require that the mounting bolts are installed to complete the assembly. The two shipping bolts are not sufficient to make the assembly intact and care should be exercised while handling in this condition.

Bolt Torque Requirement: 13 - 17 ft lbs.

Maintenance: Basically means keep the system clean.



DM1 - DM8 Hydraulic Motor, Bi-Directional



MODEL	0 PSI DISP. GAL./REV.	DISP. CU. IN./REV.	SLIP GPM PER 100 PSI	THEORETICAL TORQUE IN.LBS./100 PSI	APPROX. TORQUE LOSS IN.LBS./1000 RPM	MAX. CONT. PSI	MAX. SPEED RPM	A
DM1	0.00028	0.065	0.015	1.05	0.37	1500	4000	2.82
DM2	0.00047	0.108	0.017	1.75	0.61	1500	4000	2.91
DM4	0.00081	0.187	0.020	2.00	1.00	1500	4000	3.08
DM6	0.00137	0.316	0.025	5.10	1.80	950	3000	3.36
DM8	0.00202	0.468	0.030	7.50	2.60	650	3000	3.68