

## SPOOL VALVE HYDRAULIC MOTORS

**SPOOL VALVE** - The distributor valve has been integrated with the output shaft. The valve has hydrodynamic bearings, and has infinite life when load ratings are not exceeded.

**GEAR SET** - There are two forms of stator, hence and of gear set:

**MM** and **MP** have plain teeth. These types motors are suitable for *long operating periods at moderate pressures or short operating periods at high pressures.*

**MR** and **MH** have teeth fitted with rollers. The rollers reduce local stress and the tangential reaction forces on the rotor reducing friction to a minimum. This gives *long operating life and better efficiency even at continuous high pressures.*

Roller Gear Sets are recommended for operation with thin oil and for applications having continually reversing loads.

### Hydraulic motor type MM



Code	Displacement [cm <sup>3</sup> /rev]	Max. Speed [RPM]	Max. Torque [daNm]		Max. Output [kW]		Max. Pressure Drop [bar]		Max. Oil Flow [lpm]
		cont.	cont.	int*	cont.	int*	cont.	int*	cont.
MM 8	8,2	1950	1,1	1,5	1,8	2,6	100	140	16
MM 12,5	12,9	1550	1,6	2,3	2,4	3,2	100	140	20
MM 20	20	1000	2,5	3,5	2,4	3,2	100	140	20
MM 32	31,8	630	4	5,7	2,4	3,2	100	140	20
MM 40	40	500	4,1	5,7	1,8	3,0	80	110	20
MM 50	50	400	4,5	5,8	1,7	2,1	70	90	20

### Hydraulic motor type MR



Code	Displacement [cm <sup>3</sup> /rev]	Max. Speed [RPM]	Max. Torque [daNm]		Max. Output [kW]		Max. Pressure Drop [bar]		Max. Oil Flow [lpm]
		cont.	cont.	int*	cont.	int*	cont.	int*	cont.
MR 50	51,5	775	10,1	13	7	8,5	140	175	40
MR 80	80,3	750	19,5	22	12,5	15	175	200	60
MR 100	99,8	600	24	28	13	15	175	200	60
MR 125	125,7	475	30	34	12,5	14,5	175	200	60
MR 160	159,6	375	39	43	11,5	14	175	200	60
MR 200	199,8	300	38,5	46	9	11,5	140	175	60
MR 250	250,1	240	39	58	6,5	10,5	110	175	60
MR 315	315,7	190	39	57	6	9,6	90	140	60
MR 400	397	150	38	60	4,8	8,8	70	115	60

"M+S Hydraulic" was established as a state company in 1963, servicing the construction industry, excavating machines, bulldozers and auto cranes. 1981 is the initial point for production of low speed, high torque planetary hydromotors – the license for which is bought from "Danfoss" – Denmark.