



MOMM SERIES HYDRAULIC MOTOR

MOMM Series compact design providing high torque capacity from a small package giving a high power to weight ratio.

Characteristic Features:

- Advanced manufacturing design of the Gerotor gear set, which provide hydraulic circuits, high efficiency and long life
- High pressure shaft seals allow for use in both Parallel & Series circuits
- Advanced design giving both high power and low weight

Main Specifications

Type		MOMM					
		8	12	20	32	40	50
Geometric Displacement (cm ³ /rev.)		8.2	12.9	19.9	31.6	39.8	50.3
Max. Speed (rpm)	Rated.	1537	1256	814	513	452	358
	Cont.	1950	1550	1000	630	500	400
	Int.	2450	1940	1250	800	630	500
Max. Torque (Nm)	Rated.	8	13	19	31	37	33
	Cont.	11	16	25	40	45	46
	Int.	15	23	35	57	70	88
	Peak	21	33	51	64	82	100
Max. Output (kW)	Rated.	1.3	1.7	1.7	1.7	1.7	1.2
	Cont.	1.8	2.4	2.4	2.4	2.2	1.8
	Int.	2.6	3.2	3.2	3.2	3.2	3.2
Max. Pressure Drop (Bar)	Rated.	90	90	90	90	8.5	60
	Cont.	100	100	100	100	90	70
	Int.	140	140	140	140	140	140
	Peak	200	200	200	160	160	160
Max. Flow (L/min)	Rated.	14	18	18	18	20	20
	Cont.	16	20	20	20	20	20
	Int.	20	25	25	25	25	25
Weight (kg)		1.9	2	2.1	2.2	2.3	2.4

Type		Max. Inlet Pressure
MOMM 8-50	Cont.	175
	Int.	225

- Rated Speed and Rated Torque: Output value of speed and torque under rated flow and rated pressure
- Continuous Pressure: Max. value of operating motor continuously
- Intermittent Pressure: Max. value of operating motor in 6 seconds per minute
- Peak Pressure: Max. value of operating motor in 0.6 seconds per minute



PERFORMANCE DATA

MOMM8 [8.2cm³/rev.]

Pressure (Bar)	Max.Cont				Max.Int.	
	35	50	70	100	120	140

Flow (L/min)	2	3 228	5 218	8 206	10 156	12 111	14 58
	4	3 474	5 471	7 463	11 426	13 391	15 331
	8	3 953	5 946	7 926	11 884	13 855	15 816
	12	2 1444	5 1426	7 1402	10 1360	13 1324	15 1288
Max. Cont.	15		4 1912	7 1900	10 1861	12 1833	14 1780
Max. Int.	20		0 2432	6 2395	10 2350	11 2328	14 2281

MOMM12.5 [12.9cm³/rev.]

Pressure (Bar)	Max. Cont.				Max.Int.	
	35	50	70	100	120	140

Flow (L/min)	2	6 140	8 136	11 119	16 68	19 35	
	4	6 296	8 289	12 274	17 229	19 200	23 145
	8	5 605	8 596	12 583	17 543	20 514	24 469
	12	5 912	8 905	11 895	16 859	20 834	24 784
Max. Cont.	15	5 1152	7 1144	11 1136	16 1102	19 1078	23 1036
	20	3 1542	7 1532	10 1521	15 1500	19 1482	22 1437
	25	2 1910	6 1891	9 1878	14 1848	18 1828	22 1788

MOMM20 [19.9cm³/rev.]

Pressure (Bar)	Max.Cont				Max.Int.	
	17	35	50	70	100	120 140

Flow (L/min)	2	3 99	9 96	14 89	19 74	26 42	30 21	
	4	4 197	9 191	14 182	19 178	26 134	31 112	36 74
	8	4 398	9 395	13 391	19 377	27 340	31 319	36 288
	12	3 596	8 594	13 588	18 579	26 545	31 523	37 493
Max. Cont.	15	3 745	8 741	12 738	17 728	25 695	30 684	36 660
	20	1 998	6 995	11 991	19 985	24 962	29 1916	35 1885
	25		4 1247	9 1245	14 1242	23 1189	28 1180	33 1176

MOMM32 [31.6cm³/rev.]

Pressure (Bar)	Max. Cont.				Max.Int.	
	17	35	50	70	100	120 140

Flow (L/min)	2	7 61	24 57	34 52	45 46	63 16		
	4	7 125	24 240	34 227	46 211	65 162	77 133	91 97
	8	7 248	23 242	33 238	46 229	65 205	78 193	92 166
	12	6 376	21 372	31 366	45 360	65 336	77 320	92 295
Max. Cont.	15	4 472	20 469	30 465	43 459	63 438	76 426	91 403
	20	3 629	16 626	27 623	40 615	60 597	73 582	87 563
	25	1 786	13 784	24 782	37 778	57 761	69 748	83 727

Cont
Int.



PERFORMANCE DATA

MOMM40 [39.8cm³/rev.]

Pressure (Bar)	Max.Cont				Max.Int.	
	35	50	70	85	100	120

Flow (L/min)	2	16	27	36	44	51	
		45	40	34	28	17	
	4	16	27	37	44	52	62
		96	93	85	79	65	52
	8	15	26	36	44	52	63
Max. Cont.		197	195	182	176	166	154
	12	14	25	35	43	51	62
		293	287	282	277	268	257
	15	13	24	34	42	50	62
		371	365	360	355	347	338
Max. Int.	20	10	21	31	39	48	59
		497	492	487	480	472	1463
Max. Int.	25	7	19	29	37	44	56
		622	617	612	607	600	591

MOMM50 [50.3cm³/rev.]

Pressure (Bar)	Max. Cont.				Max.Int.	
	15	30	50	70	100	

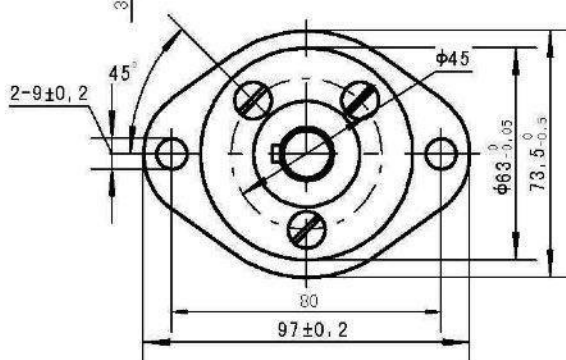
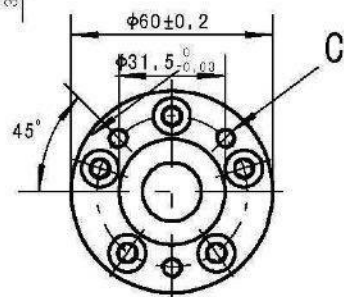
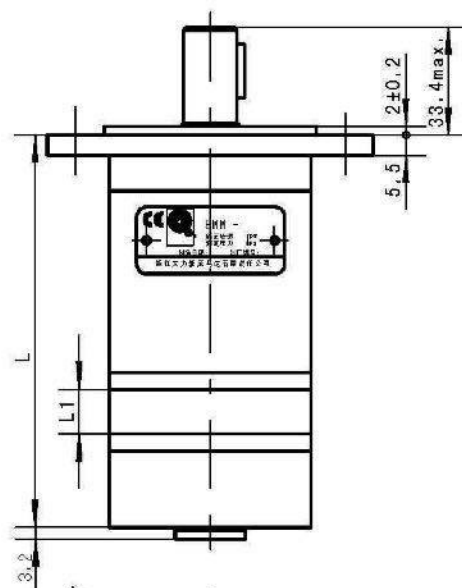
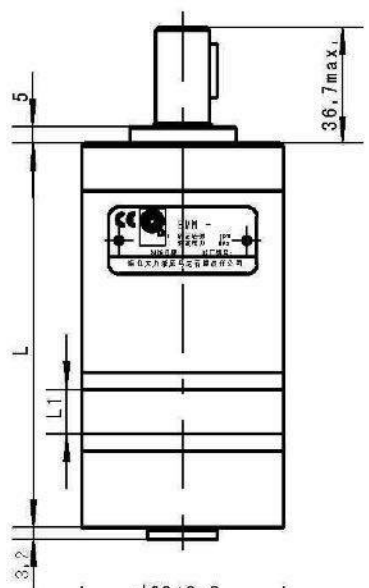
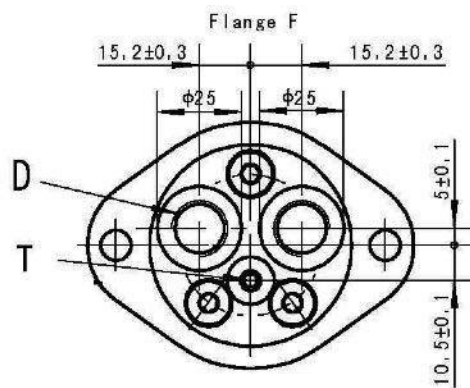
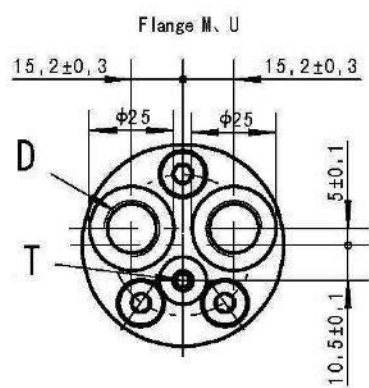
Flow (L/min)	2	11	23	36	50	
		37	33	27	22	
	4	11	22	36	50	70
		76	73	68	63	55
	8	11	21	35	50	71
Max. Cont.		157	154	149	145	137
	12	11	20	33	49	71
		237	234	231	226	218
	15	10	18	32	47	69
		296	295	294	288	282
Max. Int.	20	8	14	29	44	64
		395	395	393	390	381
Max. Int.	25	4	10	25	40	59
		498	496	494	490	484

Cont
Int.

Torque (Nm) 37
Speed (rpm) 607



MOMM END PORT DIMENSIONS & MOUNTING DATA

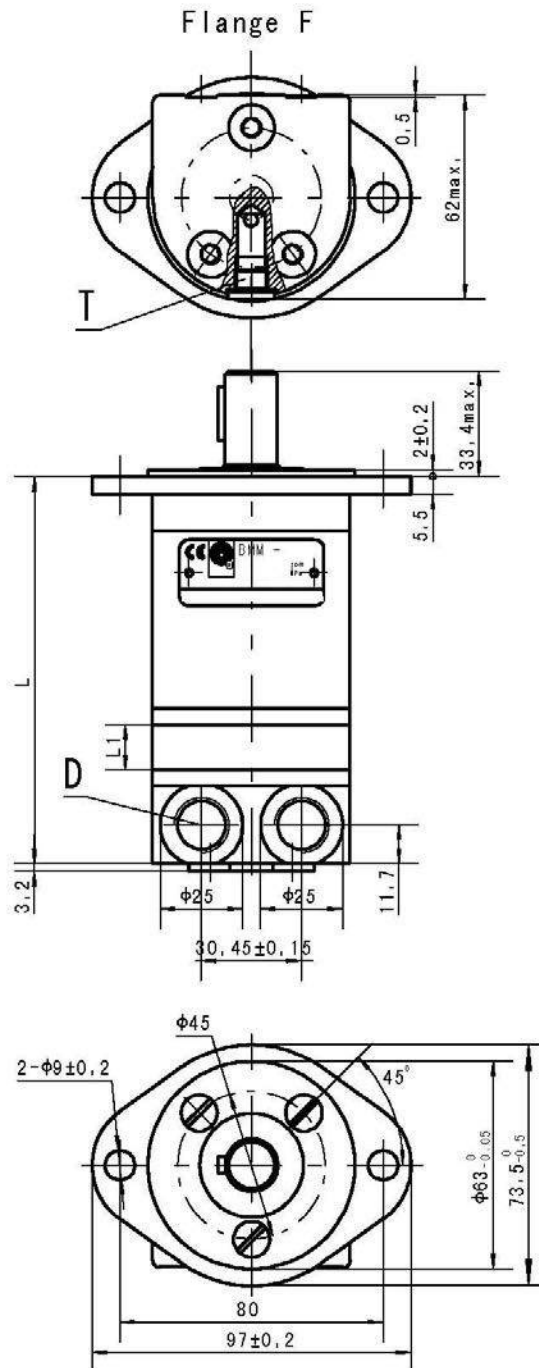
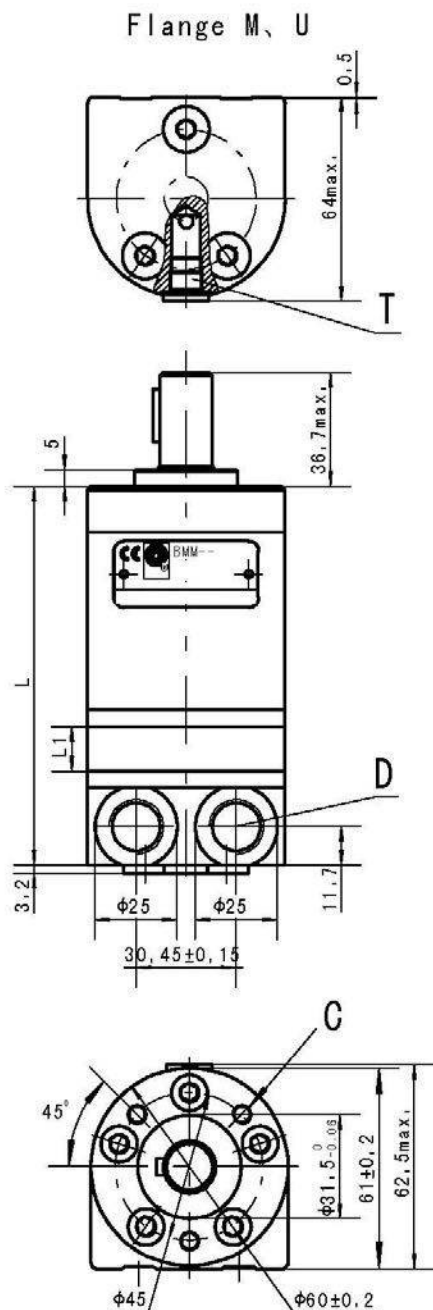


	M, U		F	
MODEL	L	L1	L	L1
MOMM8	104	3.5	107	3.5
MOMM12.5	106	5.5	109	5.5
MOMM20	109	8.5	112	8.5
MOMM32	114	13.5	117	13.5
MOMM40	118	17	118	17
MOMM50	122	21.5	125	21.5

Mounting Code	M, U				F			
	1E	(Depth)	1U	(Depth)	1E	(Depth)	1U	(Depth)
C	M6	(10)	1/4-28UNF-2B	(10)	-	-	-	-
D	G3/8	(12)	9/16-18UNF	(12)	G3/8	(12)	9/16-18UNF	(12)
T	G1/8	(8)	3/8-24UNF	(8)	G1/8	(8)	3/8-24UNF	(8)



MOMM SIDE PORT DIMENSIONS & MOUNTING DATA



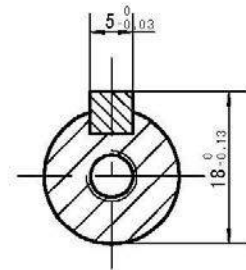
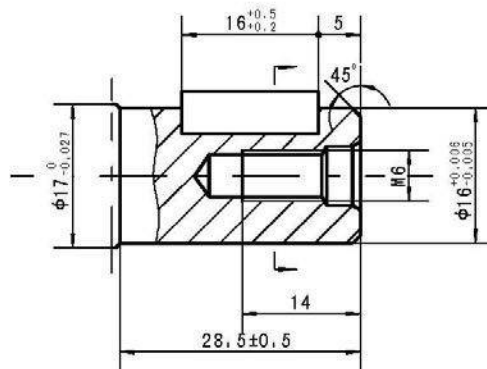
	M, U		F	
MODEL	L	L1	L	L1
MOMM8	105	3.5	109	3.5
MOMM12.5	107	5.5	111	5.5
MOMM20	110	8.5	114	8.5
MOMM32	115	13.5	119	13.5
MOMM40	118	17	118	17
MOMM50	123	21.5	127	21.5

Mounting Code	M, U		F	
	E (Depth)	U (Depth)	E (Depth)	U (Depth)
C	M6 (10)	1/4-28UNF-2B (10)	-	-
D	G3/8 (12)	9/16-18UNF (12)	G3/8 (12)	9/16-18UNF (12)
T	G1/8 (8)	3/8-24UNF (8)	G1/8 (8)	3/8-24UNF (8)

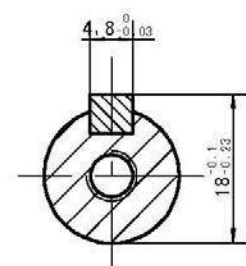
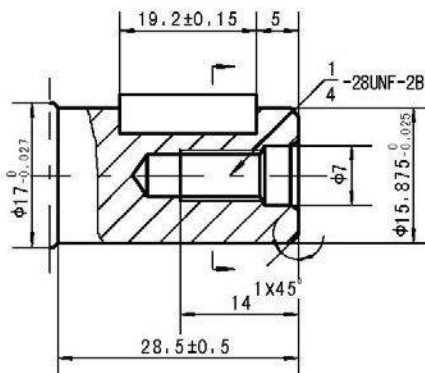


SHAFT EXTENSIONS FOR MOMM MOTORS

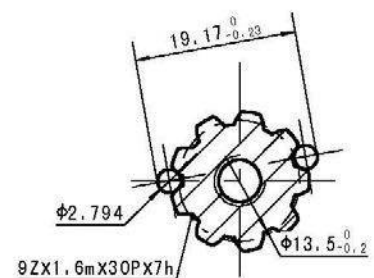
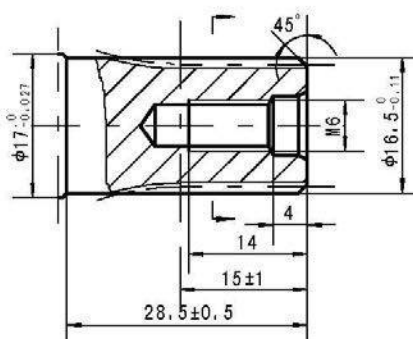
Shaft A: Cylindrical shaft $\phi 16$
Parallel key 5x5x16



Shaft B: Cylindrical shaft $\phi 15.875$
Parallel key 4,8x4,8x19,35



Shaft C: Involute splined shaft
B17x14



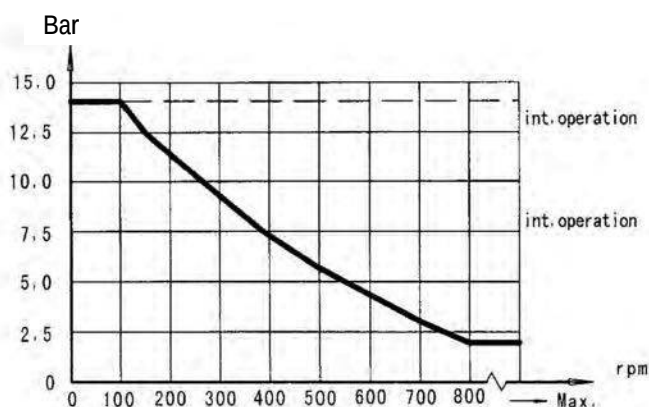
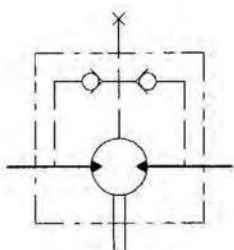
▷ Motor Mounting Surface



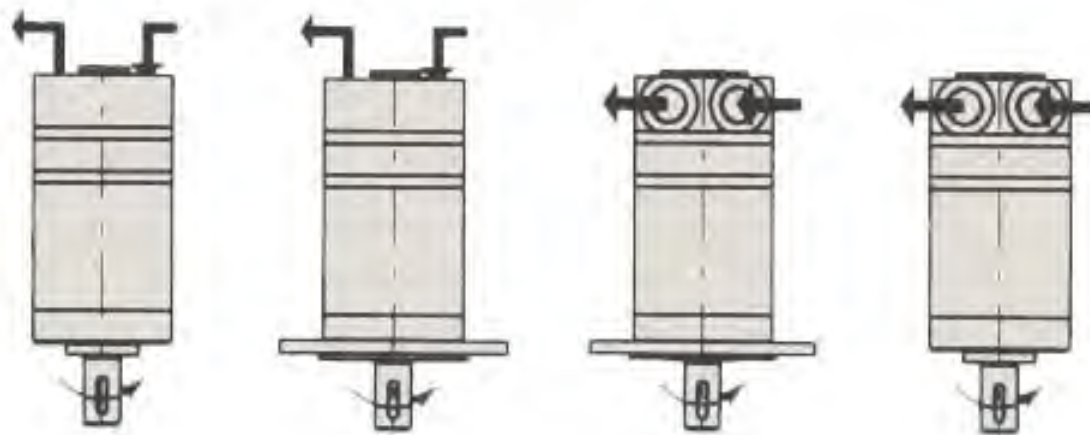
MOMM SERIES HYDRAULIC MOTOR

PERMISSIBLE SHAFT SEAL PRESSURE

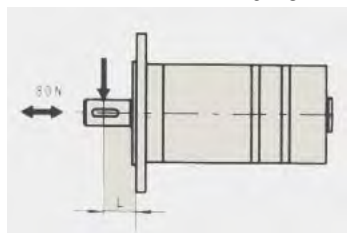
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line.
When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.



DIRECTION OF SHAFT ROTATION



STATUS OF THE SHAFT'S RADIAL FORCE $F_r = \frac{130400}{61.5+L}$ N



F_r = Radial Force (N)
 L = Distance (mm)
 N = Speed (rpm)
 Rhomb-Flange $L = 15\text{mm}$
 Square-Flange $L = 20\text{mm}$

1		2		3		4	
Code	Displacement	Code	Output Flange	Code	Shaft	Code	Port
8	8	M U F	3-M6 Circle-Flange, Pilot 31.5x5 3-1/4-28UNF Circle Flange, Pilot 31.5x5 2-9 Rhomb-Flange, Pilot 63x2	A B C	Shaft Ø16, Parallel Key 5x5x16 Shaft Ø15.875, Parallel Key 4.8x4.8x19.35 3/8" Shaft Ø16.5, Involute B17x14, DIN5482	E U 1E 1U	G 3/8, G 1/8 9/16-18UNF, 3/8-24UNF Rear Port G 3/8, G 1/8 Rear Port 9/16-18UNF, 3/8-24UNF
12.5	12.5						
16	16						
20	20						
32	32						
40	40						
50	50						