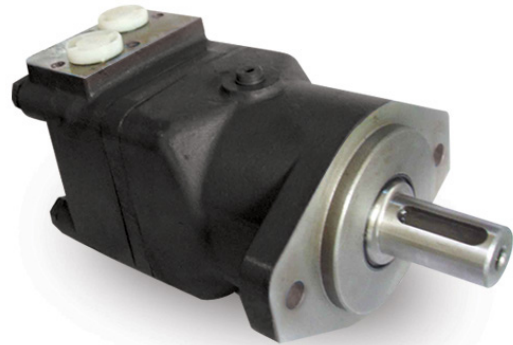


The **BMT** is a large volume disc valve, high pressure motor, with radial ball-bearings design, and can bear greater load.

CHARACTERISTIC FEATURES

- The motor can be used in high pressure and high torque
- Advanced design in disc distribution flow, which can provide improved performance at low speed.
- The valve can automatically compensate for the wear, so the volumetric efficiency is high.
- Double taper roller bearings permit high radial loads. The motors can be used on heavier vehicles in traction drive applications.



Main Specifications

Displacement per revolution	cm3 (cc)	250	315	400	500	630	800
	in3	15.2	19.2	24.3	30.4	38.4	48.7
Flow (GPM)	Cont.	33	33	33	33	33	33
	Int.	40	40	40	40	40	40
Speed (RPM)	Cont.	495	380	302	237	196	154
	Int.	592	458	364	284	233	185
Pressure (PSI)	Cont.	2900	2900	2600	2320	2030	1812
	Int.	3480	3480	3045	2610	2320	1885
Torque (in-lbs)	Cont.	6435	8515	9691	11020	11665	12958
	Int.	7860	10214	11231	12471	13258	13453

- Notes**
1. Continuous: Motor can run continuously at these ratings.
 2. Intermittent: Intermittent operation, 10% of every minute.
 3. A simultaneous maximum rpm and pressure is not recommended.
 4. Conversion factors available on page 3.
 5. The optimum operating situation should be at the 1/3 - 2/3 of the continuous operating situation.

BMT-250 (cc)

		ΔP (PSI)						
		580	1160	1450	1740	2610	2900	3480
Flow (GPM)	3	1221	2531	3142	3708	4948	6098	7293
		38	38	37	36	34	32	31
	5	1265	2620	3222	3824	5133	6266	7550
		76	75	74	72	70	67	62
	11	1230	2664	3292	3894	5249	6399	7824
		156	154	152	149	146	142	134
	16	1168	2602	3292	3903	5240	6434	7859
		237	236	233	229	224	219	207
	21	1133	2505	3222	3832	5195	6381	7851
		317	316	314	308	303	299	284
	26	1115	2496	3142	3779	5151	6337	7780
		396	394	391	387	381	373	359
	33	1027	2301	3009	3664	5027	6222	7647
		495	492	488	483	476	469	454
40	779	2142	2832	3514	4885	6072	7497	
	592	589	585	580	572	565	545	

BMT-315 (cc)

		ΔP (PSI)						
		580	1160	1450	1740	2610	2900	3480
Flow (GPM)	3	1629	3213	4009	4824	6496	7886	9399
		30	29	28	27	26	25	23
	5	1673	3363	4178	4974	6700	8116	9815
		60	59	58	56	54	52	50
	11	1690	3372	4284	5045	6850	8444	10170
		121	120	118	115	112	109	104
	16	1673	3328	4363	5071	6833	8514	10214
		183	181	179	175	172	168	158
	21	1584	3266	4240	5001	6797	8444	10205
		244	242	239	236	231	227	217
	26	1496	3160	4133	4974	6709	8337	10116
		305	304	301	298	294	289	276
	33	1301	2974	3956	4815	6594	8143	9975
		380	378	375	371	367	362	349
40	1053	2815	3824	4655	6311	7913	9709	
	458	456	453	449	444	431	425	

Torque 6311 In-lbs
Speed 444 rpm

BMT-400

		ΔP (PSI)						
		435	870	1305	1740	2175	2610	3045
Flow (GPM)	3	1558	3248	4956	6328	7833	9293	10701
		24	23	22	21	20	19	18
	5	1584	3275	5001	6426	7957	9479	10931
		49	48	47	44	42	40	38
	11	1558	3275	5018	6488	8125	9656	11178
		96	95	93	90	87	83	79
	16	1540	3195	4983	6452	8143	9700	11232
		145	143	139	135	131	127	121
	21	1469	3124	4894	6364	8072	9594	11178
		193	191	188	184	180	176	170
	26	1328	3000	4762	6266	7930	9444	11081
		242	240	238	234	228	224	218
	33	1195	2735	4638	6089	7718	9249	10807
		302	300	298	294	289	285	278
40	1115	2584	4496	5895	7532	9028	10594	
	364	362	358	354	350	346	339	

BMT-500

		ΔP (PSI)						
		435	870	1305	1740	2030	2610	2935
Flow (GPM)	3	1965	3992	6134	7895	9293	10559	11860
		18	18	18	17	16	15	13
	5	2045	4107	6319	8125	9470	10798	12187
		37	36	35	34	33	32	30
	11	2036	4124	6434	8329	9683	11010	12586
		75	74	73	72	70	68	64
	16	1991	4045	6319	8329	9630	11019	12471
		113	112	111	109	107	105	64
21	1885	3815	6160	8205	9523	11010	12400	
	151	150	149	147	145	143	138	
26	1717	3717	6019	7975	9408	10833	12241	
	189	188	187	185	183	181	177	
33	1611	3523	5673	7762	9063	10612	11966	
	237	236	235	233	231	229	225	
40	1301	3266	5470	7550	8886	10329	11727	
	284	283	282	280	278	276	272	

CONT.

INT.

All the datas were tested at 50°C with anti-wear hydraulic oil.
Actual data may vary slightly from different units in production.

BMT-630

		ΔP (PSI)						
		435	870	1305	1520	1740	2030	2610
Flow (GPM)	3	2062	4602	7036	7983	9506	10568	12064
		14	14	13	13	13	11	11
	5	2098	4903	7408	8435	9886	10966	12453
		28	27	27	26	26	24	22
	11	2115	4894	7612	8736	10364	11577	13126
		62	62	61	60	59	56	54
	16	1974	4815	7629	8656	10373	11665	13258
		94	94	92	91	90	86	82
21	1947	4753	7559	8541	10373	11630	13250	
	123	122	121	119	118	114	110	
26	1841	4620	7364	8364	10231	11533	13170	
	156	155	153	152	150	147	142	
33	1779	4417	7169	8240	10063	11435	13028	
	196	196	194	192	191	187	183	
40	1540	4355	6948	8152	9922	11302	12869	
	233	232	231	230	227	223	217	

CONT.

INT.

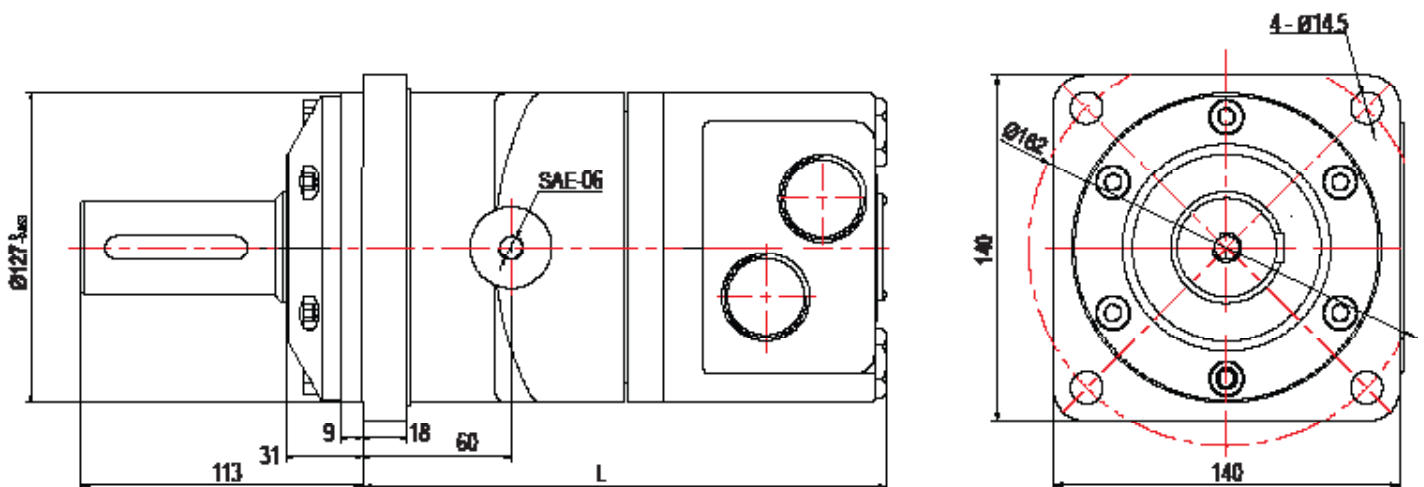
All the datas were tested at 50°C with anti-wear hydraulic oil.
Actual data may vary slightly from different units in production.

BMT-800

		ΔP (PSI)					
		435	870	1305	1520	1815	1885
Flow (GPM)	3	3062 12	5992 12	8877 11	10258 11	12081 11	12303 10
	5	3151 24	6125 24	9152 24	10470 23	12426 22	12904 18
	11	3231 50	6222 50	9435 49	10940 48	12913 46	13418 40
	16	3133 74	6222 73	9382 71	10948 71	12957 68	13453 63
	21	2938 99	6072 98	9293 98	10851 96	12940 93	13400 86
	26	2699 125	5788 123	9072 123	10683 121	12789 118	13329 11
	33	2478 154	5505 153	8753 153	10453 150	12586 149	13161 140
	40	2186 185	5222 184	8435 183	10231 181	12444 179	13064 172

Torque 12444 In-lbs
Speed 179 rpm

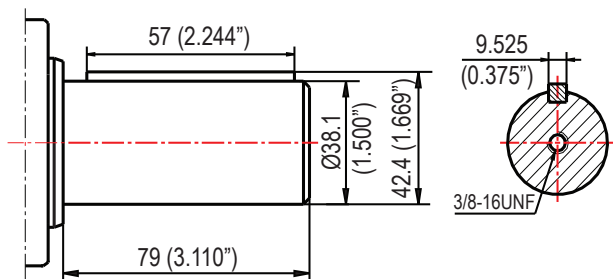
CONFIGURATION - MOUNTING FLANGE



Displacement	250		315		400		500		630		800	
L	227.5	8.956	233.5	9.192	240.5	9.458	248.5	9.783	259.5	10.216	275	10.826
L1	178	7.007	183.5	7.224	191	7.519	199	7.834	209.5	8.248	225	8.858
L2	14.7	0.578	20.3	0.799	27.5	1.082	35.5	1.397	47.4	1.866	62	2.440

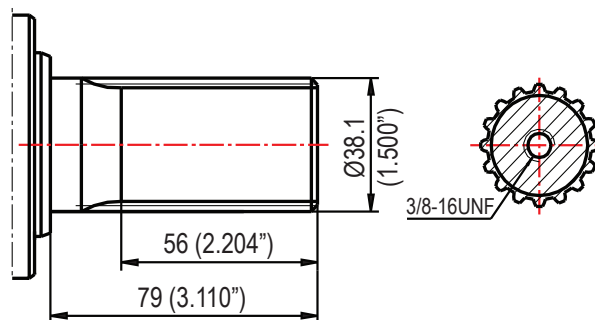
OUTPUT SHAFT

SHAFT A



Straight, $\varnothing 1\frac{1}{2}$ "
Parallel key: 3/8" x 57mm
Link thread: 3/8-16UNC

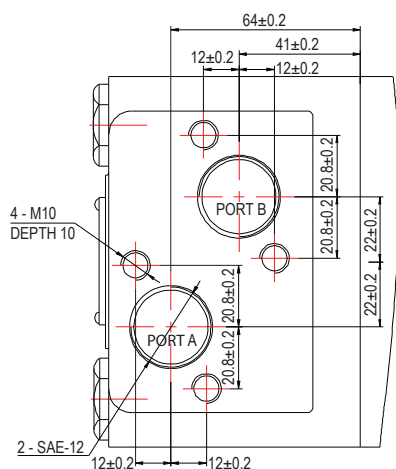
SHAFT B



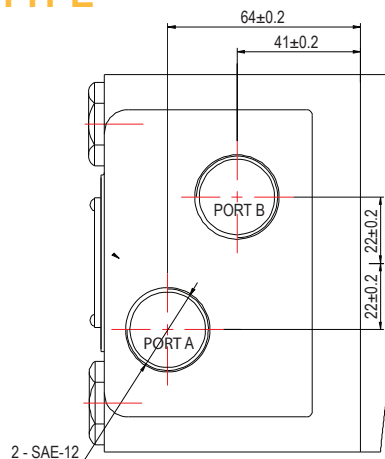
Spline: $\varnothing 1\frac{1}{2}$ "
17 tooth, DP12/21
Link thread: 3/8-16UNC

BACK HOUSING

A TYPE



B TYPE



Choose an option for each category

BMT

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CONFIGURATION

A - Standard Type

DISPLACEMENT (CC)

A - 250 B - 315 C - 400

D - 500 E - 630 F - 800

MOUNTING FLANGE

E - Square, SAE-C 4 bolt (ø5.000" pilot),
ø0.570" holes (4), 6.375" bolt center

OUTPUT SHAFT

A - Straight, ø1 1/2", Parallel key, 3/8-16UNC Link thread

B - Spline, ø1 1/2", 17 tooth, 3/8-16UNC Link thread

BACK HOUSING

A - Link thread (M10)

B - No Link thread

PORTS

D - SAE-12

LINK THREAD ON PORT SURFACE

A - NONE D - M10

DRAIN PORT

E - SAE-06

Order example: BMTAABCBAAB

Other configuration and/or mounting types are available upon request.