



BMT SERIES HYDRAULIC MOTOR

BMT series motor adapt the advanced Geroler gear set design with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- * The output shaft adapts in tapered roller bearings that permit high axial and radial forces. Can offer capacities of high pressure and high torque in the wide of applications.
- * Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life, provide smooth and reliable operation.

Main Specification

Type		BMT 160	BMT 200	BMT 230	BMT 250	BMT 315	BMT 400	BMT 500	BMT 630	BMT 800
Geometric displacement (cm ³ /rev.)		161.1	201.4	232.5	251.8	326.3	410.9	523.6	629.1	801.8
Max. speed (rpm)	cont.	625	625	536	500	380	305	240	196	154
	int.	780	750	643	600	460	365	285	233	185
Max. torque (N•m)	cont.	470	590	670	730	950	1080	1220	1318	1464
	int.	560	710	821	880	1140	1260	1370	1498	1520
	peak	669	838	958	1036	1346.3	1450.3	1643.8	1618.8	1665
Max. output (kW)	cont.	27.7	34.9	34.7	34.5	34.9	31.2	28.8	25.3	22.2
	int.	32	40	40	40	40	35	35	27.5	26.8
Max. pressure drop (MPa)	cont.	20	20	20	20	20	18	16	14	12.5
	int.	24	24	24	24	24	21	18	16	13
	peak	28	28	28	28	28	24	21	19	16
Max. flow (L/min)	cont.	100	125	125	125	125	125	125	125	125
	int.	125	150	150	150	150	150	150	150	150
Max. inlet pressure (MPa)	cont.	21	21	21	21	21	21	21	21	21
	int.	25	25	25	25	25	25	25	25	25
	peak	30	30	30	30	30	30	30	30	30
Weight (kg)		19.5	20	20.4	20.5	21	22	23	24	25

* 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 second per minute.



Performance Data

BMT 160 [161.1cm³/rev.]

Pressure (MPa)

		Max.cont.				Max.int.		
		4	8	10	12	16	20	24
10		88	176	228	275	361	447	535
		60	59	58	56	54	50	44
20		89	181	234	277	372	459	557
		121	120	117	114	109	103	95
40		91	180	235	277	381	471	573
		249	246	243	236	230	223	212
60		82	178	235	277	381	470	572
		371	367	362	356	349	340	330
80		78	173	229	276	379	466	567
		492	489	485	478	470	462	447
100	Max.cont.	70	160	218	269	370	455	558
		614	611	606	598	590	582	570
125	Max.int.	58	148	211	261	359	448	552
		770	764	758	750	741	731	715

BMT 200 [201.4cm³/rev.]

Pressure (MPa)

		Max.cont.				Max.int.		
		4	8	10	12	16	20	24
10		124	233	289	340	454	560	669
		47	46	45	42	39	37	33
20		125	239	298	347	468	576	696
		95	94	92	90	87	84	75
40		120	241	296	352	475	589	716
		195	193	191	187	183	178	167
60		116	237	295	352	478	589	718
		297	295	292	287	282	276	263
80		108	231	289	350	474	586	716
		395	393	389	384	377	370	359
100	Max.cont.	99	227	286	344	471	580	712
		493	490	486	482	475	467	460
125	Max.cont.	84	208	276	333	459	566	697
		615	611	607	602	595	588	572
150	Max.int.	70	194	260	324	447	554	682
		743	740	735	727	717	706	682

BMT 250 [251.8cm³/rev.]

Pressure (MPa)

		Max.cont.				Max.int.		
		4	8	10	12	16	20	24
10		138	286	355	419	559	689	824
		38	38	37	36	34	32	31
20		143	296	364	432	580	708	853
		76	75	74	72	70	67	62
40		139	301	372	440	593	723	884
		156	154	152	149	146	142	134
60		132	294	372	441	592	727	888
		237	236	233	229	224	219	207
80		128	283	364	433	587	721	887
		317	316	314	308	303	299	284
100		126	282	355	427	582	716	879
		396	394	391	387	381	373	359
125	Max.cont.	116	260	340	414	568	703	864
		495	492	488	483	476	469	454
150	Max.int.	88	242	320	397	552	686	847
		592	589	585	580	572	565	545

BMT 315 [326.3cm³/rev.]

Pressure (MPa)

		Max.cont.				Max.int.		
		4	8	10	12	16	20	24
10		184	363	453	545	734	891	1062
		30	29	28	27	26	25	23
20		189	380	472	562	757	917	1109
		60	59	58	56	54	52	50
40		191	381	484	570	774	954	1149
		121	120	118	115	112	109	104
60		189	376	493	573	772	962	1154
		183	181	179	175	172	168	158
80		179	369	479	565	768	954	1153
		244	242	239	236	231	227	217
100		169	357	467	562	758	942	1143
		305	304	301	298	294	289	276
125	Max.cont.	147	336	447	544	745	920	1127
		380	378	375	371	367	362	349
150	Max.int.	119	318	432	526	713	894	1097
		458	456	453	449	444	431	425

Torque (N•m) **552**
Speed (rpm) **572**



Performance Data

BMT 400 [410.9cm³/rev.]

Pressure (MPa)

				Max.cont.			Max.int.	
		3	6	9	12	15	18	21
10		176	367	560	715	885	1050	1209
		24	23	22	21	20	19	18
20		179	370	565	726	899	1071	1236
		49	48	47	44	42	40	38
40		176	370	567	733	919	1091	1263
		96	95	93	90	87	83	79
60		174	361	563	729	920	1095	1269
		145	143	139	135	131	127	121
80		166	353	553	719	912	1084	1263
		193	191	188	184	180	176	170
100		150	339	538	708	896	1067	1252
		242	240	238	234	228	224	218
Max.cont. 125		135	309	524	688	873	1045	1221
		302	300	298	294	289	285	278
Max.int. 150		126	292	508	666	852	1020	1197
		364	362	358	354	350	346	339

BMT 500 [523.6cm³/rev.]

Pressure (MPa)

				Max.cont.			Max.int.	
		3	6	9	12	14	16	18
10		222	451	692	892	1050	1193	1340
		18	18	18	17	16	15	13
20		231	464	714	918	1070	1220	1377
		37	36	35	34	33	32	30
40		230	466	727	941	1094	1244	1422
		75	74	73	72	70	68	64
60		225	457	714	941	1088	1245	1409
		113	112	111	109	107	105	101
80		213	431	696	927	1076	1244	1401
		151	150	149	147	145	143	138
100		194	420	680	901	1063	1224	1383
		189	188	187	185	183	181	177
Max.cont. 125		182	398	641	877	1024	1199	1352
		237	236	235	233	231	229	225
Max.int. 150		147	369	618	853	1004	1167	1325
		284	283	282	280	278	276	272

BMT 630 [629.1cm³/rev.]

Pressure (MPa)

				Max.cont.			Max.int.	
		3	6	9	10.5	12	14	16
10		233	520	795	902	1074	1194	1363
		14	14	13	13	13	11	11
20		237	554	837	953	1117	1239	1407
		28	27	27	26	26	24	22
40		239	553	860	987	1171	1308	1483
		62	62	61	60	59	56	54
60		223	544	863	978	1172	1318	1498
		94	94	92	91	90	86	82
80		220	537	854	965	1172	1314	1497
		123	122	121	119	118	114	110
100		208	522	832	945	1156	1303	1488
		156	155	153	152	150	147	142
Max.cont. 125		201	499	810	931	1137	1292	1472
		196	196	194	192	191	187	183
Max.int. 150		174	492	785	921	1121	1277	1454
		233	232	231	230	227	223	217

BMT 800 [801.8cm³/rev.]

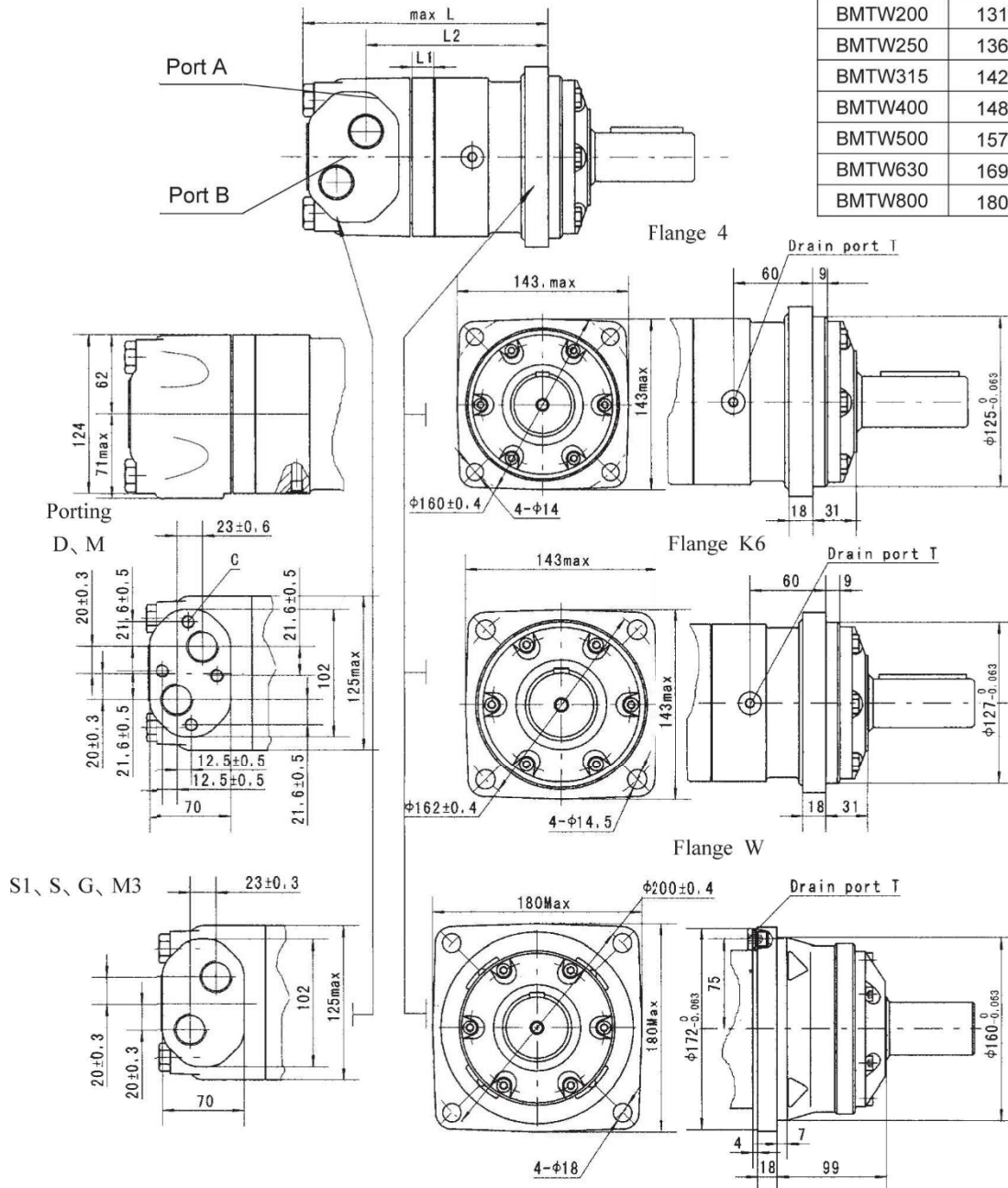
Pressure (MPa)

				Max.cont.			Max.int.
		3	6	9	10.5	12.5	13
10		346	677	1003	1159	1365	1390
		12	12	11	11	11	10
20		356	692	1034	1183	1404	1458
		24	24	24	23	22	18
40		365	703	1066	1236	1459	1516
		50	50	49	48	46	40
60		354	703	1060	1237	1464	1520
		74	73	71	71	68	63
80		332	686	1050	1226	1464	1514
		99	98	98	96	93	86
100		305	654	1025	1207	1445	1506
		125	123	123	121	118	110
Max.cont. 125		280	622	989	1181	1422	1487
		154	153	153	150	149	140
Max.int. 150		247	590	953	1156	1406	1476
		185	184	183	181	179	172

Torque (N*m) 1121
Speed (rpm) 227

BMT DIMENSIONS AND MOUNTING DATA

Model	L	L1	L2
BMTW160	127	17	77
BMTW200	131	21	81
BMTW250	136	14	86
BMTW315	142	20	91
BMTW400	148	27	98
BMTW500	157	35	106
BMTW630	169	47	118
BMTW800	180	58	129

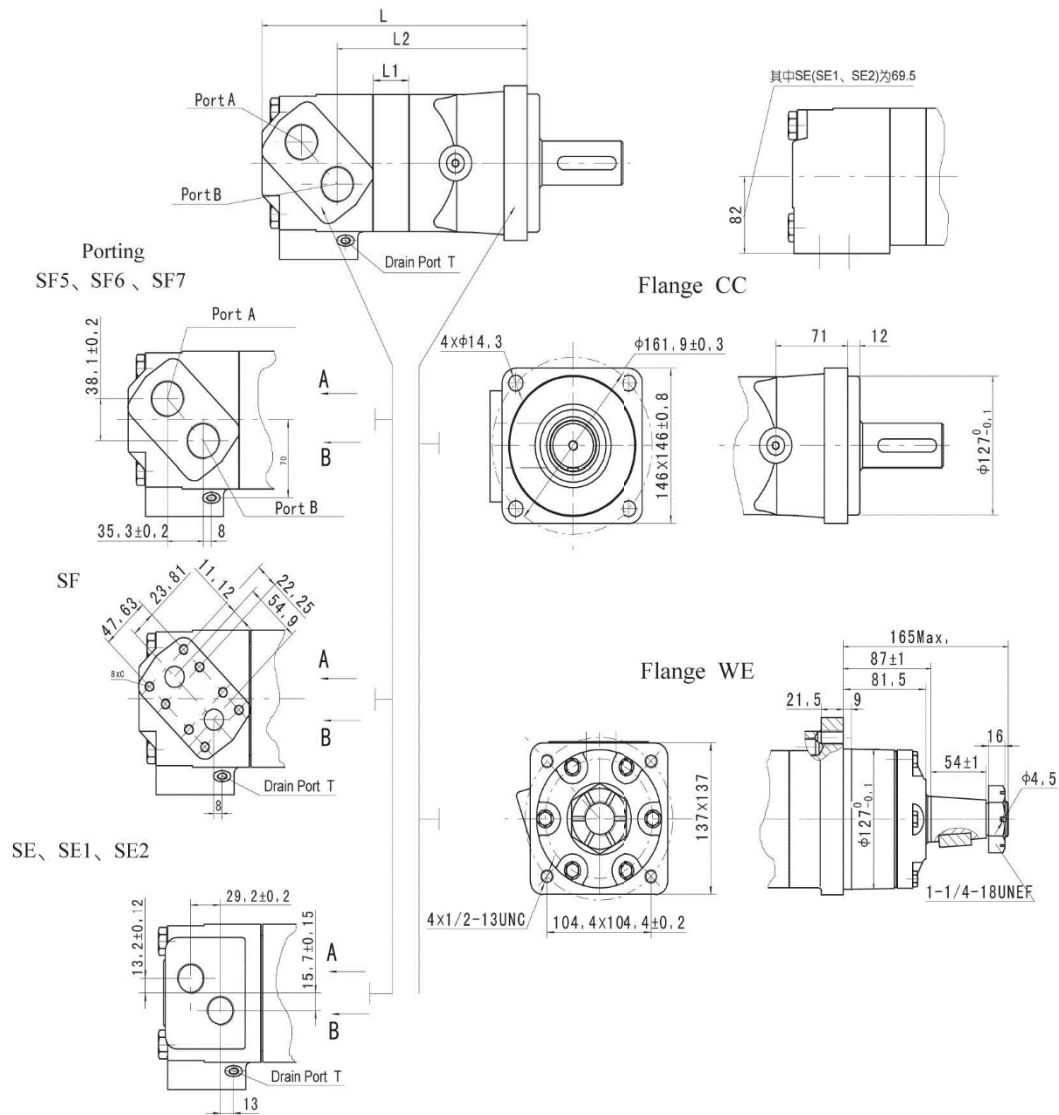


Model	L	L1	L2
BMT160	193	17	142.5
BMT200	197	21	146.5
BMT250	204	14	152.5
BMT315	210	20	158.5
BMT400	217	27	165.5
BMT500	225	35	173.5
BMT630	237	47	185.5
BMT800	248	58	196.5

Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M3 (depth)	S1 (depth)
P(A,B)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF (12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)
C	4-M10(10)	4-M10(10)	--	--	--	--

Note: 1)The thickness of the stator and rotor for disp. from 160 to 200 is the dimension of L1 adding on 3mm.
 2)The thickness of the stator and rotor for disp. from 250 to 800 is the dimension of L1 adding on 7mm.

BMTE DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
BMTE230	238.5	12	164.5
BMTE250	240.5	14	166.5
BMTE315	246.5	20	172.5
BMTE400	253.5	27	179.5
BMTE500	261.5	35	187.5
BMTE630	273.5	47	199.5
BMTE800	284.5	58	210.5

Note: 1) The data for the port of SF (SF5 and SF6 and SF7)
 2) The data for the port of SE (SE1 and SE2) and flange WE: L-70 and L2-59.
 3) The thickness of the stator and rotor for disp. from 315 to 800 is the dimension of L1 adding on 7mm.

Content	Code						
	SF5(depth)	SF6 (depth)	SF7 (depth)	SF (depth)	SE (depth)	SE1 (depth)	SE2(depth)
P(A,B)	1-5/16-12UN (18)	M33 x 2 (18)	G1 (18)	3/4" (18)	1-1/16-12UN (18)	1-1/16-12UN (18)	G3/4 (18)
T	7/16-20UNF (12)	M14 x 1.5 (12)	G1/4 (12)	7/16-20UNF (12)	9/16-18UNF (12)	7/16-20UNF (12)	G1/4 (12)
C	--	--	--	8 x 3/8-16UNC	--	--	--