

Features

- Compact in design with disc valving and Geroler.
- High pressure capacity shaft seal.
- Design and manufacture of the spline and drives give the motor durability.
- Wide variety of mounting flanges, shafts, ports and speed provides design flexibility .
- Direction of shaft rotation and speed can be controlled easily and smoothly.
- Best combination of high efficiency and economy in medium duty applications.



Specification Data

(ml/r) Displacement		195	245	310	390	490	625	800	985
(LPM) Flow	Cont.	150	150	150	150	150	150	150	150
	Int..	170	210	225	225	225	225	225	225
(RPM) Speed	Cont.	775	615	485	387	300	340	184	150
	Int..	866	834	698	570	450	350	278	220
(Mpa) Pressure	Cont.	17	17	17	17	17	17	12	12
	Int..	27.5	27.5	27.5	27.5	24	24	14	14
(N*m) Torque	Cont.	475	615	775	965	1125	1215	1380	1500
	Int..	770	980	1225	1330	1455	1650	1685	1750

- Max. pressure is the allowed pressure at the inlet port.
- A simultaneous maximum RPM and maximum pressure NOT recommended
Maximum pressure or maximum RPM operation: 10% of every minute.
- Recommended fluids: Anti-wear type of hydraulic oil. Viscosity recommended 37-73 cSt. Recommended filtration ISO18/13.
- Maximum operating temperature recommended 80°C.
- Special high pressure capacity shaft seal ensures back pressure up to 10 Mpa. Recommended preferable back pressure 5 Mpa. Case drain line is recommended when back pressure higher than 5 Mpa.. The motor life is benefited from a case drain line.
- It is highly recommended that the motor runs at 30% of rated pressure for at least one hour before application of full load. Be sure the motor is filled with fluid prior to any load applications.

BMT Performance Data

□ Continuous
■ Intermittent

		195cc/r								245cc/r							
		Δ Pressure Bar								Δ Pressure Bar							
		35	70	105	140	170	205	240	275	35	70	105	140	170	205	240	275
Flow LPM	1.9	75 7	165 5	260 2						95 4	215 1						
	7.5	75 37	170 35	265 34	350 30	440 26	470 18			100 29	220 26	340 24	445 21	555 17	570 11	670 6	
	15	80 76	175 74	270 72	365 66	455 62	520 46	590 32	655 18	105 60	225 56	345 54	460 48	575 42	640 39	750 30	855 12
	30	85 153	180 148	275 144	370 131	465 119	545 116	625 99	705 83	110 120	235 116	355 113	475 104	595 95	700 81	800 67	905 53
	45	85 230	180 225	280 221	375 212	475 203	565 186	655 167	750 148	110 182	235 178	360 174	480 165	605 157	720 141	840 125	955 109
	61	80 307	180 303	280 300	375 291	475 283	575 258	665 236	760 214	110 244	235 240	360 236	485 228	610 221	730 202	845 184	960 165
	76	80 384	180 379	280 374	380 365	480 356	575 332	670 306	770 280	105 306	230 301	355 297	485 287	615 277	735 257	855 238	980 218
	91	80 462	175 456	275 450	375 440	475 429	575 413	670 388	770 363	105 365	230 361	355 358	480 348	610 338	735 316	860 294	980 271
	106	75 539	175 532	270 526	375 514	475 502	570 476	670 448	770 421	100 426	225 421	350 416	480 404	610 376	730 358	855 340	980 322
	121	70 617	170 609	270 602	370 589	470 576	570 542	670 511	765 480	90 489	215 481	345 475	470 461	600 448	725 423	850 398	975 373
	136	70 692	165 683	265 674	365 659	465 645	565 601	665 564	765 527	80 549	210 543	335 537	460 524	580 509	710 482	840 456	
	151	70 770	165 759	260 746	365 733	465 718	560 666	660 624		80 612	200 606	330 599	455 585	580 570	700 540	800 510	
	170	65 866	160 854	260 843	360 825	460 808	555 749	655 702		65 688	200 682	325 674	445 685	575 641	685 608	755 574	
			195 758	315 749	440 731	555 712	670 676				190 834	310 824	430 804	550 783	665 744		

460 Torque Nm
808 Speed RPM

BMT Performance Data

☐ Continuous
 ☐ Intermittent

310cc/r

		Δ Pressure Bar							
		35	70	105	140	170	205	240	275
Flow LPM	1.9	60 6	125 4	275 1					
	7.5	130 23	280 22	410 20	540 17	645 14	755 10	880 4	
	15	135 47	290 45	430 42	570 38	685 32	800 24	935 17	1025 10
	30	140 95	300 91	450 87	595 81	730 73	870 64	985 55	1105 46
	45	140 143	305 140	460 135	610 129	760 121	910 111	1045 99	1185 88
	61	140 192	300 188	460 184	615 178	770 167	920 156	1060 141	1205 126
	76	135 241	295 236	455 232	615 226	770 216	925 201	1075 184	1225 167
	91	130 289	295 282	455 279	615 273	775 260	930 248	1080 232	1230 215
	106	130 336	290 333	450 328	610 320	770 308	930 295	1075 276	1225 257
	121	125 384	285 381	445 375	600 368	765 354	920 341	1065 320	
	136	120 430	275 421	435 416	590 410	750 396	915 383	1055 360	
	151	115 478	270 466	425 461	580 456	745 441	905 427	1040 403	
	189	110 597	245 582	385 576	525 570	685 551	840 534		
	227		220 698	365 691	515 684	650 661	800 641		

650 Torque Nm
 661 Speed RPM

390cc/r

		Δ Pressure Bar							
		35	70	105	140	170	205	240	275
Flow LPM	3.8	175 2	365 1						
	7.5	180 18	370 17	555 16	730 14	875 12	1025 9	1195 4	
	15	185 38	375 37	560 35	740 33	920 29	1080 22	1275 14	1370 5
	30	185 76	380 74	575 72	760 68	950 65	1135 55	1315 45	1455 33
	45	185 115	385 112	580 109	770 105	965 100	1150 91	1340 81	1540 79
	61	180 154	380 151	580 147	770 143	965 132	1155 126	1345 116	
	76	180 193	380 189	580 187	775 182	970 175	1160 162	1355 152	
	91	170 230	370 229	570 225	765 220	965 212	1155 204		
	106	165 268	365 266	565 261	760 256	960 248	1150 236		
	121	160 306	355 304	555 299	750 292	945 282	1145 269		
	136	155 346	340 340	545 336	730 329	930 317	1130 301		
	151	150 386	325 380	535 375	730 368	915 359			
	189	130 482	300 475	515 469	730 460	910 449			
	227		280 570	500 562	720 552	890 538			

BMT Performance Data

☐ Continuous
 ☐ Intermittent

490cc/r

		Δ Pressure Bar						
		35	70	105	140	170	205	240
Flow LPM	3.8	235 7	480 5	695 3				
	7.5	240 14	480 13	710 12	945 11	1175 8	1370 3	
	15	235 30	485 29	725 28	960 27	1195 25	1410 21	1645 17
	30	235 60	485 59	735 57	975 54	1215 51	1445 45	1685 38
	45	235 91	485 89	735 87	975 84	1220 79	1455 71	
	61	235 122	480 121	730 118	975 114	1220 109	1460 100	
	76	225 152	470 150	725 147	975 144	1220 139		
	91	220 184	470 181	720 180	970 176	1215 171		
	106	210 214	460 211	710 208	960 204	1210 198		
	121	195 244	450 241	700 237	950 232	1205 226		
	136	175 275	435 272	685 265	940 260	1175 255		
	151	160 306	425 303	675 295	920 290	1150 284		
	189	130 382	365 379	590 369	860 362			
	227		325 454	550 442	805 435			

805 Torque Nm
 435 Speed RPM

625cc/r

		Δ Pressure Bar							
		35	50	70	85	105	120	140	
Flow LPM	3.8	250 5	380 4	510 4	640 3	755 2			
	7.5	260 12	395 13	535 13	670 10	795 10	925 8	1060 6	
	15	275 24	425 24	570 24	710 22	850 21	955 18	1065 16	
	30	295 45	450 44	605 44	755 43	925 42	1095 39	1270 37	
	45	295 72	450 71	610 71	765 70	920 68	1125 66	1330 64	
	61	285 94	445 93	605 92	760 91	915 89	1120 87	1325 85	
	76	280 119	440 118	595 117	755 116	915 115	1120 112	1325 110	
	91	265 143	430 142	585 140	745 139	905 138	1110 135	1320 132	
	106	255 168	415 166	575 165	735 164	895 162	1105 159	1315 156	
	121	240 192	400 190	560 188	720 187	880 185	1090 182	1300 179	
	136	220 216	380 214	540 213	700 212	855 210	1050 207		
	151	200 240	360 239	520 238	680 237	835 236	1015 233		
	189		310 298	470 296	630 294	790 290			
	227		255 355	430 353	590 350	745 345			

BMT Performance Data

☐ Continuous
 ☐ Intermittent

800cc/r

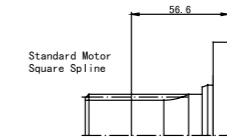
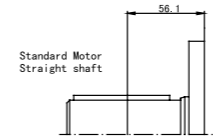
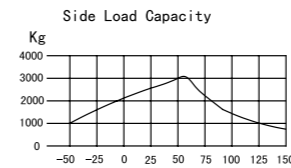
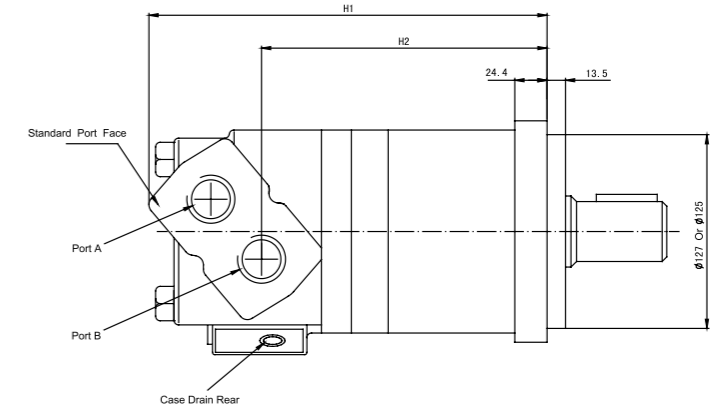
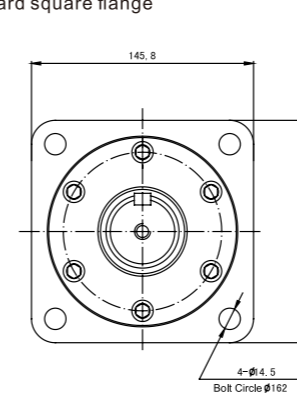
Flow LPM	Pressure Bar						
	35	50	70	85	105	120	140
3.8	420 4	590 4	776 3	960 2			
7.5	420 4	594 8	790 8	972 7	1176 6	1344 5	1568 4
15	435 18	608 17	840 17	1020 16	1204 15	1308 14	1650 13
30	420 36	396 35	830 35	1005 34	1204 33	1415 31	1610 29
45	380 55	565 55	795 54	972 54	1190 53	1362 51	
61	340 75	520 74	760 72	940 71	1172 70		
76	325 93	500 92	730 90	900 89	1140 87		
91	315 111	470 110	700 109	860 108	1080 105		
106	310 129	450 128	650 127	800 125	1020 123		
121	280 148	420 146	610 145	750 143			
136	270 166	400 165	550 165	700 164			
151	250 184	350 183	500 182	635 180			
189		300 230	400 228	580 225			
227			380 276	520 273			

985cc/r

Flow LPM	Pressure Bar							
	15	35	50	70	85	105	120	140
3.8	215 3	465 3	645 2	865 2	1080 1			
7.5	215 8	470 8	710 7	940 7	1175 6	1410 5	1565 4	1685 3
15	225 15	485 15	775 15	965 14	1205 14	1445 13	1570 13	1790 13
30	230 30	495 30	750 30	995 29	1235 28	1480 27	1640 26	1875 25
45	230 45	495 45	750 45	1000 44	1250 43	1495 42	1700 41	
61	225 61	490 61	740 61	995 60	1245 59	1500 58		
76	215 77	475 77	730 76	985 76	1235 75	1485 74		
91	205 92	460 92	705 92	960 91	1220 90	1470 89		
106	185 107	445 107	700 107	950 106	1200 105	1450 103		
121	165 123	425 123	675 122	925 121	1160 120			
136	130 138	395 138	645 138	895 137	1125 135			
151	95 153	365 153	610 152	865 151	1085 150			
189		325 191	585 190	830 189	1050 188			
227			525 230	810 229	1025 226			

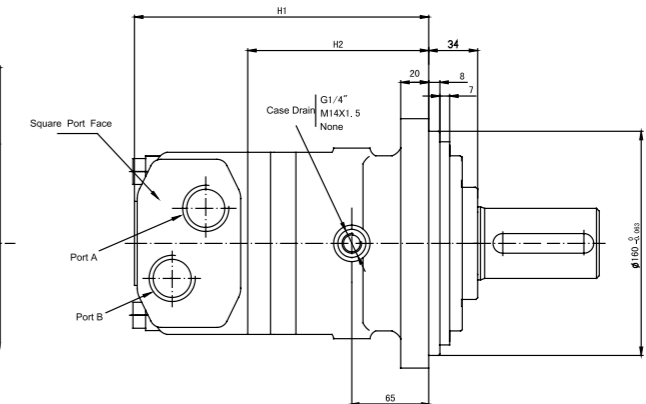
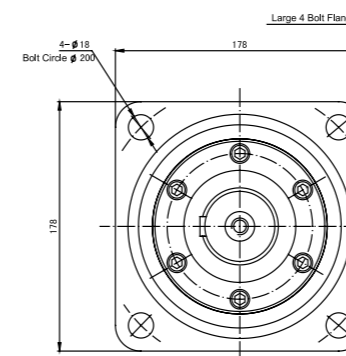
BMT Standard Motor — Dimension and Mounting data

standard square flange



Displacement	H2	H1
195	188	270
245	193	276
310	200	283
390	210	292
490	221	303
625	235	318
800	256	333
985	275	358

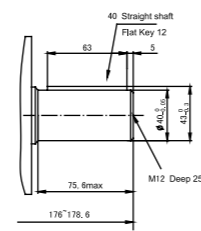
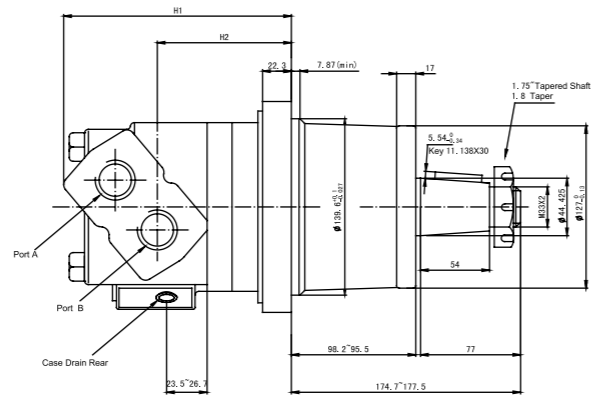
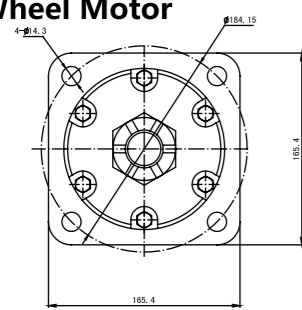
BMT Large 4 Bolt Flange — Dimension and Mounting data



Displacement	H2	H1
195	135.1	229.7
245	140.7	235.3
310	148.1	245.5
390	156.7	251.3
490	167.9	262.5
625	182.5	277
800	198.5	292.9
985	222.3	

Standard Direction of The Motor Rotation:
 CW—When A Port pressurized, Viewed From the Shaft End.

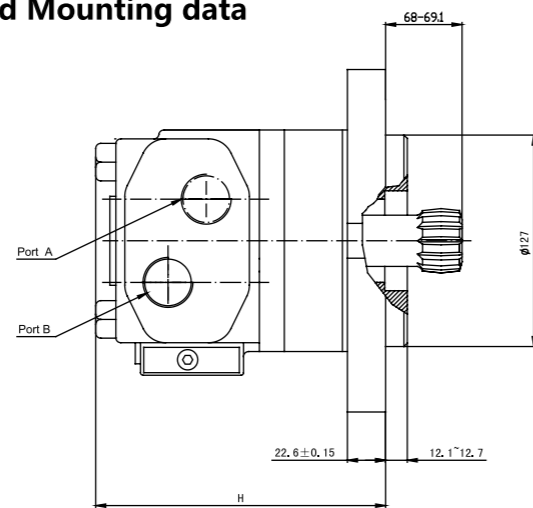
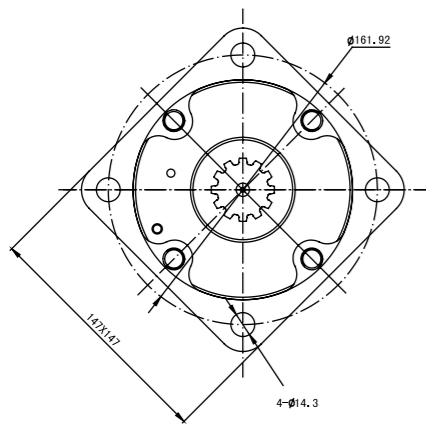
BMT Wheel Motor



Standard Rotation :CW when Port A pressurized

Displacement cc/r	H2	H1
195	130	185
245	108	191
310	116	198
390	124	207
490	136	218
625	150	233
800	128	249
985	190	273

BMT Bearingless Motor—Dimension and Mounting data



Diametral Pitch	8.5/17
Pressure Angle	30°
Number of Teeth	12
Major Dia.	38.4
Minor Dia.	31.5
Space width	5.7

Displcement cc/r	195	245	310	390	490	625	800	985
H mm	178	183	191	200	211	226	251	265

BMT Wheel Motor Ordering Information

Dimensions			Displacements							
Flange	Shaft	Port Size	195	245	310	390	490	625	985	800
standard square flange spigot ø 125	straight ø 40 keyed12X63	port M24X1.5 Outlet drain port M14X1.5	261-0011	0012	0013	0014	0015	0016	0017	0018
4holes large four flange spigot ø 125	straight50 keyed14X70	port M33X2 Outlet drain port M14X1.5	261-0101	0102	0103	0104	0105	0106	0107	0108
4holes large four flange spigot ø 160	straight50 keyed14X70	port G1" Outlet drain port G1/4	261-0271	0272	0273	0274	0275	0276	0277	0278
4holes large four flange spigot ø 160	straight50 keyed14X70	port M33X2 Outlet drain port G1/4	261-0371	0372	0373	0374	0375	0376	0377	0378
4holes large four flange spigot ø 160	involute splined 17tooth m=2.5	port G1 Outlet drain port G1/4	261-2101	2102	2103	2104	2105	2106	2107	2108
4holes large four flange spigot ø 160	involute splined 17tooth m=2.5	port M22X1.5 Outlet drain port M14X1.5	261-2151	2152	2153	2154	2155	2156	2157	2158
4holes large four flange spigot ø 160	involute splined 17tooth m=2.5	port G3/4 Outlet drain port G1/4	261-2201	2202	2203	2204	2205	2206	2207	2208
standard square flange spigot ø 127	straight ø 40 keyed12X63	port M33X2 Outlet drain port M14X1.5	263-0011	0012	0013	0014	0015	0016	0017	0018
standard square flange spigot ø 127	straight ø 40 keyed12X63	port G3/4" Outlet drain port G1/4	263-0031	0032	0033	0034	0035	0036	0037	0038
standard square flange spigot ø 125	straight ø 40 keyed12X45	port G3/4" Outlet drain port G1/4	263-0041	0042	0043	0044	0045	0046	0047	0048
standard square flange spigot ø 127	straight ø 40 keyed12X63	port G1" Outlet drain port G1/4	263-0081	0082	0083	0084	0085	0086	0087	0088
standard square flange spigot ø 125	straight ø 40 keyed12X63	port M33X2 Outlet drain port M14X1.5	263-0151	0152	0153	0154	0155	0156	0157	0158
standard square flange spigot ø 127	splined shaft 8D-42X36X7	port M33X2 Outlet drain port M14X1.5	263-1021	1022	1023	1024	1025	1026	1027	1028
standard square flange spigot ø 127	splined shaft 6D-40X35X10	port M33X2 Outlet drain port M14X1.5	263-1031	1032	1033	1034	1035	1036	1037	1038
4holes large four flange spigot ø 160	splined shaft 6D-40X35X10	port G1" Outlet drain port G1/4	263-1041	1042	1043	1044	1045	1046	1047	1048
standard square flange spigot ø 125	splined shaft 6D-40X35X10	port G1" Outlet drain port G1/4	263-1061	1062	1063	1064	1065	1066	1067	1608

BMT Wheel Motor Ordering Information

Dimensions			Displacements							
Flange	Shaft	Port Size	195	245	310	390	490	625	800	985
4 holes flange spigot ϕ 127	ϕ 1.75" Cone Shaft 11.38 Quadrate Keyed	port 1-5/16-12UNF Cone Opening Outlet drain port 7/16-20UNF	264-1071	1072	1073	1074	1075	1076	1078	1077
4 holes flange spigot ϕ 127	ϕ 40 straight keyed 12	port R1" BSP Outlet drain port 7/16-20UNF	264-1081	1082	1083	1084	1085	1086	1088	1087
4 holes flange spigot ϕ 127	ϕ 1.75" Cone Shaft 11.38 Quadrate Keyed	port M33X2 Outlet drain port 7/16-20UNF	264-4121	4122	4123	4124	4125	4126	4128	4127

