

Orbital Motors

Low Speed, High Torque (LSHT) Motors

BMP / BMPH / BMPW

Series



Strength in Products,
Strength in Service

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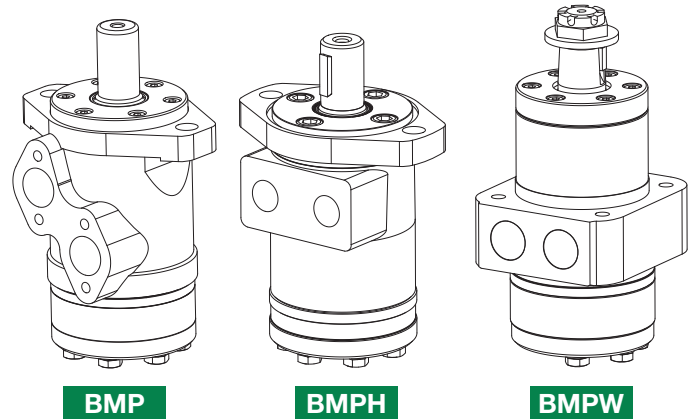
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DESCRIPTION

Anfield BMP series motors offer an economical alternative to more complex roller gerotor designs and still provide high efficiency across a wide performance range.

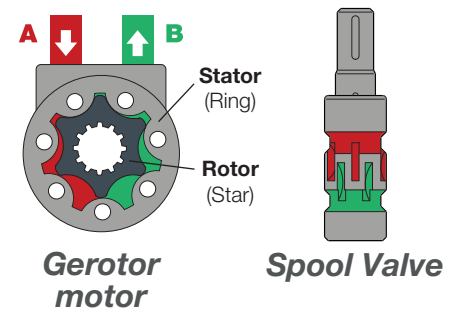
BMP series motors have a compact, highly efficient design and come with a variety of displacements, mounts, shafts and port options, providing design flexibility. They are an ideal choice for light duty applications in either parallel or series systems.

These low weight and advanced construction motors have three moving components (gerotor-star, drive, and shaft) making them an efficient and powerful motor in a compact package.



FEATURES

- Efficient, powerful and compact. Designed for light duty applications
- Variety of displacements, mounts and shafts provide flexibility in application design.
- Built-in check valves offer versatility and increased seal life.
- Standard high pressure shaft seals offer superior seal life and performance.



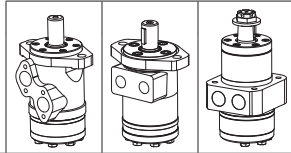
TYPICAL APPLICATIONS



Agricultural equipment, food processing equipment, augers, car wash brushes, conveyors, grain augers, machine tools, sweepers, spreaders, skid steer attachments, feed rollers, brush drives and more.

BMP, BMPH, BMPW MOTOR CROSS REFERENCE GUIDE

Brand	Series
Eaton Char-Lynn®	H (101-)
Danfoss®	DH, OMP, OMPW
Parker®	TB, TC, TE
White®	WD (145/146), WP (155/156), RS (200/201)
M+S®	MLHP, MP, MLHPW
ROSS-TRW®	MG, M
BREVINI - SAM®	BG, BH

TECHNICAL SPECIFICATIONS - BMP, BMPH, BMPW SERIES



			1	2	3	4	5	6	7	8	9	10	11	
	BMP	BMPH	BMPW	36	50	80	100	125	160	200	250	315	400	500
Geometric Displacement	in ³ /r		2.20	3.15	4.74	5.87	7.34	9.59	11.87	14.66	19.19	23.77	29.69	
	cm ³ /r		36	51.7	77.7	96.2	120.2	157.2	194.5	240.3	314.5	389.5	486.5	
Max. Speed	rpm	Cont.	1500	1150	770	615	490	383	310	250	192	155	120	
		Inter.	1650	1450	960	770	615	475	385	310	240	190	150	
Flow	gpm	Cont.	14.5	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	
			l/min	55	60	60	60	60	60	60	60	60	60	60
		Inter.	15.9	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	
			60	75	75	75	75	75	75	75	75	75	75	
Torque Shaft extensions with diameters: Ø 7/8", 1" Ø 25 mm, 28.5 mm 	lbf-ft	Cont.	40.6	73.8	107.7	134.2	174.1	222.7	265.5	280.3	276.6	265.5	284.0	
			Nm	55	100	146	182	236	302	360	380	375	360	385
		Inter.	56.1	94.4	137.2	167.4	213.9	272.9	324.5	339.3	409.3	387.2	413.0	
			76	128	186	227	290	370	440	460	555	525	560	
		Peak	70.8	109.2	160.8	194.7	265.5	320.1	398.3	405.7	479.4	501.5	501.5	
			96	148	218	264	360	434	540	550	650	680	680	
	Shaft extensions with diameters: Ø 1 1/4" Ø 32 mm, 35 mm 	lbf-ft	Cont.	40.6	73.8	107.7	134.2	174.1	222.7	265.5	339.3	350.3	361.4	317.2
				Nm	55	100	146	182	236	302	360	460	475	490
			Inter.	56.1	94.4	137.2	167.4	213.9	272.9	324.5	420.4	409.3	427.8	413.0
				76	128	186	227	290	370	440	570	555	580	560
		Peak	70.8	109.2	160.8	194.7	265.5	320.1	398.3	494.2	619.6	619.6	575.3	
			96	148	218	264	360	434	540	670	840	840	780	
Pressure	Δ psi	Cont.	1813	2031	2031	2031	2031	2031	2031	2031	1595	1305	1015	870
			Δ bar	125	140	140	140	140	140	140	140	110	90	70
		Inter.	2393	2538	2538	2538	2538	2538	2538	2538	2031	2031	1523	1305
			165	175	175	175	175	175	175	175	140	140	105	90
			Peak	3263	3263	3263	3263	3263	3263	3263	3263	2611	2321	2031
		225	225	225	225	225	225	225	225	180	160	140	120	
Weight	lbs		13.2	13.2	13.4	13.9	14.1	14.6	15.0	15.7	16.1	17.2	18.5	
	kg		6	6	6.1	6.3	6.4	6.6	6.8	7.1	7.3	7.8	8.4	

Notes:

1. Continuous rating (Cont.): motor may be run continuously at these ratings.
2. Intermittent operation (Inter.): 10% of every minute. (6 sec.)
3. Peak: 1% of every minute. (0.6 sec.)
4. Δ Pressure: Δ psi [Δ bar] True pressure difference between inlet port and outlet port.
5. Motor Power (HP) = (Torque Output (In. lbs.) x RPM) / 63025
6. Simultaneous maximum torque & maximum speed NOT recommended and may damage the motor.

PERFORMANCE DATA - BMP, BMPH, BMPW SERIES

BMP 36 2.2 in³/rev. (36 cm³/rev.)

Performance data is based on the gerotor displacement and applies to all models. BMP, BMPH, BMPW



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →						Max. Cont.	Max. Inter.
		435 (30)	870 (60)	1015 (70)	1160 (80)	1450 (100)	1595 (110)		
Flow gpm (l/min) ↓	2 (8)	9.6 (13) 214	18.4 (25) 205	21.4 (29) 200	25.1 (34) 194	31.7 (43) 187	35.4 (48) 179		
	4 (15)	9.6 (13) 406	18.4 (25) 398	21.4 (29) 391	25.1 (34) 383	31.7 (43) 374	35.4 (48) 366	41.3 (56) 353	55.3 (75) 324
	5.3 (20)	9.6 (13) 541	17.7 (24) 534	21.4 (29) 528	25.1 (34) 521	31.7 (43) 513	35.4 (48) 500	41.3 (56) 486	56.1 (76) 458
	7.9 (30)	8.9 (12) 814	17.7 (24) 804	21.4 (29) 792	25.1 (34) 778	31.7 (43) 763	35.4 (48) 749	41.3 (56) 726	56.1 (76) 701
	9.2 (35)	8.9 (12) 952	17 (23) 944	20.7 (28) 930	25.1 (34) 913	31.7 (43) 897	35.4 (48) 879	41.3 (56) 858	56.1 (76) 833
	10.5 (40)	8.9 (12) 1090	17 (23) 1078	20.7 (28) 1064	23.6 (32) 1048	30.2 (41) 1024	34.7 (47) 998	40.6 (55) 977	55.3 (75) 943
	11.9 (45)	8.1 (11) 1232	16.2 (22) 1218	19.2 (26) 1196	23.6 (32) 1175	30.2 (41) 1149	33.9 (46) 1118	39.8 (54) 1080	54.6 (74) 1044
Max. Cont.	14.5 (55)	4.4 (6) 1505	11.1 (15) 1494	16.2 (22) 1480	20.7 (28) 1466	27.3 (37) 1438	32.4 (44) 1406	38.4 (52) 1367	54.4 (71) 1309
Max. Inter.	15.8 (60)	2.2 (3) 1650	8.1 (11) 1640	13.3 (18) 1626	14.8 (20) 1603	22.1 (30) 1571	28 (38) 1536	36.1 (49) 1502	49.4 (67) 1446

BMP 50 3.2 in³/rev. (51.7 cm³/rev.)



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →						Max. Cont.	Max. Inter.
		435 (30)	870 (60)	1160 (80)	1450 (100)	1813 (125)	2030 (140)		
Flow gpm (l/min) ↓	2 (8)	14.8 (20) 151	30.2 (41) 134	41.3 (56) 115	50.9 (69) 90	65.6 (89) 56	70.1 (95) 42		
	4 (15)	14 (19) 286	29.5 (40) 274	41.3 (56) 261	52.4 (71) 243	67.1 (91) 204	73.8 (100) 182	82.6 (112) 139	88.5 (120) 102
	5.3 (20)	13.3 (18) 382	28.8 (39) 373	40.6 (55) 361	52.4 (71) 348	67.9 (92) 318	74.5 (101) 309	86.3 (117) 287	94.4 (128) 251
	7.9 (30)	12.5 (17) 573	28 (38) 568	40.6 (55) 558	52.4 (71) 535	67.1 (91) 503	72.3 (98) 488	85.6 (116) 462	91.5 (124) 440
	9.2 (35)	12.5 (17) 670	28 (38) 661	39.8 (54) 652	50.9 (69) 640	65.6 (89) 606	72.3 (98) 589	86.3 (117) 562	91.5 (124) 548
	11.9 (45)	10.3 (14) 863	26.6 (36) 858	39.1 (53) 849	49.4 (67) 837	64.9 (88) 807	72.3 (98) 788	84.1 (114) 764	90.7 (123) 746
	14.5 (55)	8.9 (12) 1055	24.3 (33) 1042	36.9 (50) 1028	47.9 (65) 1010	67.2 (85) 979	70.8 (96) 963	81.9 (111) 947	89.2 (121) 920
Max. Cont.	15.8 (60)	7.4 (10) 1150	23.6 (32) 1143	34.7 (47) 1126	47.2 (64) 1111	61.2 (83) 1079	69.3 (94) 1065	79.7 (108) 1043	87.8 (119) 1015
Max. Inter.	19.8 (75)	4.4 (6) 1440	18.4 (25) 1430	31 (42) 1416	41.3 (56) 1395	56.1 (76) 1367	64.2 (87) 1351	74.5 (101) 1335	81.6 (112) 1312

Motors run with high efficiency in all areas designated with a number for torque and speed, however for best service life of the motor select a motor to run with a torque and speed range printed in the light shaded area.
Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.

PERFORMANCE DATA - BMP, BMPH, BMPW SERIES

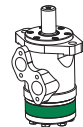
BMP 80 4.7 in³/rev. (77.7 cm³/rev.)

Performance data is based on the gerotor displacement and applies to all models. BMP, BMPH, BMPW



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →					Max. Cont.	Max. Inter.	
		435 (30)	870 (60)	1160 (80)	1450 (100)	1813 (125)			2030 (140)
Flow gpm (l/min) ↓	2 (8)	23.6 (32) 97	45.7 (62) 87	62.7 (85) 74	76.7 (104) 55	95.1 (129) 33	106.2 (144) 22		
	4 (15)	23.6 (32) 186	45.5 (63) 181	62 (84) 170	78.9 (107) 154	92.9 (126) 132	106.2 (144) 118	121.7 (165) 86	
	5.3 (20)	22.9 (31) 251	46.5 (63) 243	62 (84) 236	78.9 (107) 225	97.4 (132) 207	107.7 (146) 196	123.9 (168) 178	136.4 (185) 155
	7.9 (30)	22.9 (31) 381	45.7 (62) 379	61.2 (83) 368	78.2 (106) 355	96.6 (131) 332	107.7 (146) 316	123.9 (168) 285	137.2 (186) 263
	9.2 (35)	22.1 (30) 443	43.5 (59) 435	59.7 (81) 426	75.2 (102) 415	95.9 (130) 397	106.2 (144) 383	123.2 (167) 361	136.4 (185) 342
	11.9 (45)	18.4 (25) 570	42.8 (58) 564	58.3 (79) 554	73.8 (100) 543	92.9 (126) 526	104.7 (142) 509	121.7 (165) 483	134.2 (182) 458
	14.5 (55)	17 (23) 696	42.1 (57) 685	57.5 (78) 672	71.5 (97) 656	91.5 (124) 643	103.3 (140) 630	118.7 (161) 602	132 (179) 579
Max. Cont.	15.8 (60)	14.8 (20) 761	39.1 (53) 753	55.3 (75) 744	69.3 (94) 736	88.5 (120) 720	101 (137) 706	118 (160) 681	130.5 (177) 660
Max. Inter.	19.8 (75)	10.3 (14) 948	32.5 (44) 940	49.4 (67) 931	64.2 (87) 920	82.6 (112) 906	111.4 (151) 890	124.6 (169) 871	124.6 (169) 854

BMP 100 5.9 in³/rev. (96.2 cm³/rev.)



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →					Max. Cont.	Max. Inter.	
		435 (30)	870 (60)	1160 (80)	1450 (100)	1813 (125)			2030 (140)
Flow gpm (l/min) ↓	2 (8)	29.5 (40) 81	56.8 (77) 75	77.4 (105) 69	95.9 (130) 57	118.7 (161) 36	132.8 (180) 24		
	4 (15)	28.8 (39) 152	56.8 (77) 149	78.2 (106) 145	95.9 (130) 140	118 (160) 122	132.8 (180) 103	153.4 (208) 81	
	5.3 (20)	26.6 (36) 204	54.6 (74) 200	76.7 (104) 195	94.4 (128) 190	118.7 (161) 177	132 (179) 166	151.2 (205) 148	167.4 (227) 133
	7.9 (30)	24.3 (33) 308	53.1 (72) 304	76 (103) 298	92.2 (125) 290	118 (160) 280	130.5 (177) 268	149.7 (203) 255	166 (225) 231
	9.2 (35)	22.1 (30) 360	51.6 (70) 352	72.3 (98) 343	90 (122) 331	117.3 (159) 320	129.8 (176) 306	149 (202) 294	165.2 (224) 275
	11.9 (45)	21.4 (29) 462	49.4 (67) 458	70.1 (95) 451	87 (118) 443	114.3 (155) 433	128.3 (174) 419	147.5 (200) 402	162.3 (220) 383
	14.5 (55)	18.4 (25) 566	47.2 (64) 558	68.6 (93) 549	85.6 (116) 540	112.1 (152) 529	125.4 (170) 515	146 (198) 498	160.1 (217) 478
Max. Cont.	15.8 (60)	16.2 (22) 618	44.3 (60) 611	67.1 (91) 601	84.1 (114) 589	109.9 (149) 580	123.2 (167) 570	143.1 (194) 558	157.1 (213) 540
Max. Inter.	19.8 (75)	11.1 (15) 771	39.8 (54) 763	61.2 (83) 755	78.2 (106) 744	104 (141) 735	118 (160) 724	137.2 (186) 708	151.2 (205) 693

Motors run with high efficiency in all areas designated with a number for torque and speed, however for best service life of the motor select a motor to run with a torque and speed range printed in the light shaded area. Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.

PERFORMANCE DATA - BMP, BMPH, BMPW SERIES

BMP 125 7.3 in³/rev. (120.2 cm³/rev.)

Performance data is based on the gerotor displacement and applies to all models. BMP, BMPH, BMPW



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →					Max. Cont.	Max. Inter.	
		435 (30)	870 (60)	1160 (80)	1450 (100)	1813 (125)			2030 (140)
Flow gpm (l/min) ↓	2 (8)	37.6 (51) 63	72.3 (98) 60	101 (137) 55	123.9 (168) 47	153.4 (208) 28	174.1 (236) 15		
	4 (15)	37.6 (51) 121	74.5 (101) 116	101.8 (138) 110	123.9 (168) 102	154.2 (209) 89	174.1 (236) 73	196.9 (267) 48	
	5.3 (20)	35.4 (48) 162	72.3 (98) 158	99.6 (135) 153	123.2 (167) 148	155.6 (211) 137	174.8 (237) 128	198.4 (269) 109	213.9 (290) 94
	7.9 (30)	33.9 (46) 243	70.8 (96) 239	97.4 (132) 234	121 (164) 227	154.2 (209) 216	171.1 (232) 202	194.7 (264) 189	211.7 (287) 176
	9.2 (35)	31 (42) 284	67.9 (92) 279	95.9 (130) 274	118 (160) 269	151.9 (206) 259	168.9 (229) 247	191.8 (260) 231	209.5 (284) 222
	11.9 (45)	27.3 (37) 370	65.6 (89) 362	92.2 (125) 355	115.8 (157) 348	148.2 (201) 340	165.2 (224) 327	192.5 (261) 310	207.3 (281) 296
	14.5 (55)	24.3 (33) 452	62 (84) 446	90 (122) 438	112.1 (152) 431	144.6 (196) 420	160.8 (218) 412	185.9 (252) 402	202.8 (275) 384
Max. Cont.	15.8 (60)	21.4 (29) 490	57.5 (78) 482	86.3 (117) 475	107.7 (146) 468	140.9 (191) 459	158.6 (215) 448	182.9 (248) 439	200.6 (272) 427
Max. Inter.	19.8 (75)	13.3 (18) 615	48.7 (66) 606	78.9 (107) 598	98.1 (133) 586	132 (179) 575	149 (202) 563	174.1 (236) 549	191.8 (260) 528

BMP 160 9.6 in³/rev. (157.2 cm³/rev.)



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →					Max. Cont.	Max. Inter.	
		435 (30)	870 (60)	1160 (80)	1450 (100)	1813 (125)			2030 (140)
Flow gpm (l/min) ↓	2 (8)	45.7 (62) 49	88.5 (120) 48	125.4 (170) 46	156.4 (212) 42	194 (263) 26	213.9 (290) 14		
	4 (15)	44.3 (60) 93	90 (122) 91	126.9 (172) 88	158.6 (215) 85	194.7 (264) 76	216.8 (294) 68	250.8 (340) 48	
	5.3 (20)	42 (57) 125	88.5 (120) 123	125.4 (170) 120	157.8 (214) 117	193.2 (262) 110	213.9 (290) 106	250.8 (340) 92	273.6 (371) 81
	7.9 (30)	39.1 (53) 187	84.8 (115) 184	121 (164) 181	151.9 (206) 178	191 (259) 175	212.4 (288) 168	247.1 (335) 155	271.4 (368) 139
	9.2 (35)	36.1 (49) 220	81.1 (110) 216	118 (160) 213	149 (202) 209	188.1 (255) 205	209.5 (284) 202	241.9 (328) 192	267 (362) 176
	11.9 (45)	32.5 (44) 283	75.2 (102) 280	113.6 (154) 276	144.6 (196) 272	182.9 (248) 267	205 (278) 260	236.8 (321) 250	264 (358) 238
	14.5 (55)	29.5 (40) 345	73 (99) 342	109.2 (148) 340	140.9 (191) 336	179.2 (243) 331	200.6 (272) 328	233.1 (316) 320	258.9 (351) 303
Max. Cont.	15.8 (60)	24.3 (33) 377	69.3 (94) 374	106.2 (144) 371	138.7 (188) 367	174.1 (236) 363	196.9 (267) 359	277.2 (308) 353	254.5 (345) 342
Max. Inter.	19.8 (75)	14 (19) 473	59 (80) 469	91.5 (124) 465	125.4 (170) 459	159.3 (216) 453	185.9 (252) 447	218.3 (296) 440	239.7 (325) 424

Motors run with high efficiency in all areas designated with a number for torque and speed, however for best service life of the motor select a motor to run with a torque and speed range printed in the light shaded area. Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.

PERFORMANCE DATA - BMP, BMPH, BMPW SERIES

BMP 200 11.9 in³/rev. (194.5 cm³/rev.)

Performance data is based on the gerotor displacement and applies to all models. BMP, BMPH, BMPW



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →						Max. Cont.	Max. Inter.
		435 (30)	870 (60)	1160 (80)	1450 (100)	1813 (125)	2030 (140)		
Flow gpm (l/min) ↓	2 (8)	58.3 (79) 40	121 (164) 39	152.7 (207) 38	184.5 (250) 35	236.2 (320) 28	265.5 (360) 22		
	4 (15)	57.5 (78) 76	119.5 (162) 75	151.2 (205) 74	184.5 (250) 71	237.5 (322) 66	266.3 (361) 61	302.4 (410) 51	
	5.3 (20)	56.1 (76) 100	116.5 (158) 98	149.7 (203) 97	182.2 (247) 95	236 (320) 92	264 (358) 89	297.2 (403) 73	311.3 (422) 57
	7.9 (30)	51.6 (70) 151	112.8 (153) 149	147.5 (200) 147	180.7 (245) 145	232.3 (315) 142	258.1 (350) 139	293.5 (398) 131	307.6 (417) 120
	9.2 (35)	48.7 (66) 177	109.9 (149) 175	143.1 (194) 173	171.1 (232) 171	219.1 (297) 168	253 (343) 166	284.7 (386) 160	306.1 (415) 149
	11.9 (45)	46.5 (63) 228	107.7 (146) 226	140.1 (190) 224	169.6 (230) 221	216.8 (294) 218	250.8 (340) 215	282.5 (383) 210	302.4 (410) 198
	14.5 (55)	39.8 (54) 280	103.3 (140) 278	133.5 (181) 276	165.2 (224) 274	210.9 (286) 271	246.3 (334) 269	273.6 (371) 263	295 (400) 250
Max. Cont.	15.8 (60)	28 (38) 304	93.7 (127) 302	121 (164) 300	156.4 (212) 297	199.1 (270) 294	239.7 (325) 291	262.6 (356) 286	291.3 (395) 272
Max. Inter.	19.8 (75)	16.2 (22) 382	70.8 (96) 378	107 (145) 374	141.6 (192) 371	173.3 (235) 368	216.1 (293) 364	236.8 (321) 360	270.7 (367) 350

BMP 250 14.7 in³/rev. (240.3 cm³/rev.)



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →						Max. Cont.	Max. Inter.
		435 (30)	870 (60)	1160 (80)	1450 (100)	1813 (125)	2030 (140)		
Flow gpm (l/min) ↓	2 (8)	70.8 (96) 30	140.1 (190) 28	197.7 (268) 24	240.4 (326) 21	297.2 (403) 11			
	4 (15)	72.3 (98) 60	143.1 (194) 58	199.1 (270) 54	241.2 (327) 50	298.7 (405) 40	331.9 (450) 30	376.2 (510) 12	
	5.3 (20)	45.7 (62) 82	138.7 (188) 80	196.9 (267) 77	239.7 (325) 76	298.7 (405) 69	336.3 (456) 64	379.1 (514) 52	416.7 (565) 38
	7.9 (30)	62.7 (85) 123	132.8 (180) 120	191 (259) 118	236 (320) 114	295 (400) 106	330.4 (448) 98	378.4 (513) 87	413.7 (561) 76
	9.2 (35)	56.8 (77) 143	129.8 (176) 141	185.9 (252) 139	229 (311) 135	286.9 (389) 128	321.6 (436) 122	371.7 (504) 112	410.8 (557) 101
	11.9 (45)	51.6 (70) 185	123.9 (168) 182	179.2 (243) 178	221.3 (300) 174	278.1 (377) 168	315.7 (428) 161	365.1 (495) 152	400.5 (543) 139
	14.5 (55)	46.5 (63) 226	117.3 (159) 223	174.8 (237) 218	213.9 (290) 213	272.2 (369) 209	307.6 (417) 202	356.2 (483) 193	391.6 (531) 185
Max. Cont.	15.8 (60)	44.3 (60) 248	110.6 (150) 246	168.2 (228) 243	206.5 (280) 239	264 (358) 233	300.2 (407) 226	348.9 (473) 215	383.5 (520) 207
Max. Inter.	19.8 (75)	25.1 (34) 309	94.4 (128) 306	149 (202) 302	194.7 (264) 297	252.2 (342) 292	285.4 (387) 286	330.4 (448) 278	359.9 (488) 264

Motors run with high efficiency in all areas designated with a number for torque and speed, however for best service life of the motor select a motor to run with a torque and speed range printed in the light shaded area. Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.

PERFORMANCE DATA - BMP, BMPH, BMPW SERIES

BMP 315 19.2 in³/rev. (314.5 cm³/rev.)

Performance data is based on the gerotor displacement and applies to all models. BMP, BMPH, BMPW



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →					Max. Cont.	Max. Inter.
		435 (30)	725 (50)	1015 (70)	1305 (90)	1450 (100)		
Flow gpm (l/min) ↓	2 (8)	90.7 (123) 25	158.6 (215) 23	215.4 (292) 21	271.4 (368) 17	298.7 (405) 11		
	4 (15)	87 (118) 47	155.6 (211) 46	211.7 (287) 44	270.7 (367) 40	298 (404) 28	365.1 (495) 21	418.9 (568) 10
	5.3 (20)	81.1 (110) 62	151.2 (205) 61	205 (278) 60	265.5 (360) 57	291.3 (395) 46	364.4 (494) 40	417.5 (566) 36
	7.9 (30)	74.5 (101) 94	144.6 (196) 93	199.9 (271) 91	257.4 (349) 88	286.1 (388) 76	361.4 (490) 68	416.7 (565) 65
	9.2 (35)	70.8 (96) 109	138.7 (188) 107	194.7 (264) 106	251.5 (341) 104	281.7 (382) 96	352.6 (478) 89	410.8 (557) 84
	11.9 (45)	65.6 (89) 141	132.8 (180) 140	187.3 (254) 138	248.6 (337) 135	274.4 (372) 127	345.2 (468) 120	407.9 (553) 115
	14.5 (55)	56.1 (76) 173	122.4 (166) 172	176.3 (239) 170	239.7 (325) 167	267 (362) 160	337.1 (457) 152	404.2 (548) 143
Max. Cont.	15.8 (60)	47.9 (65) 188	113.6 (154) 186	167.4 (227) 184	227.2 (308) 182	256.7 (348) 178	326.7 (443) 172	390.2 (529) 163
Max. Inter.	19.8 (75)	29.5 (40) 236	88.5 (120) 234	148.2 (201) 232	205.8 (279) 228	238.2 (323) 226	308.3 (418) 223	366.6 (497) 214

BMP 400 23.8 in³/rev. (389.5 cm³/rev.)



Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →					Max. Cont.	Max. Inter.
		435 (30)	653 (45)	797 (55)	943 (65)	1160 (80)		
Flow gpm (l/min) ↓	2 (8)	122.4 (166) 20	171.1 (232) 19	211.7 (287) 18	250.8 (340) 16	308.3 (418) 12		
	4 (15)	121.7 (165) 38	168.2 (228) 36	204.3 (277) 35	248.6 (337) 33	307.6 (417) 31	365.8 (496) 27	451.4 (612) 21
	5.3 (20)	119.5 (162) 50	164.5 (223) 49	201.4 (273) 49	244.1 (331) 48	304.6 (413) 45	365.1 (495) 41	448.4 (608) 35
	7.9 (30)	113.6 (154) 76	159.3 (216) 75	196.2 (266) 74	234.5 (318) 73	298.7 (405) 71	358.5 (486) 67	442.5 (600) 60
	9.2 (35)	107.7 (146) 88	154.9 (210) 87	188.8 (256) 87	230.1 (312) 86	291.3 (395) 83	354 (480) 80	433.7 (588) 75
	11.9 (45)	97.4 (132) 114	145.3 (197) 113	179.2 (243) 112	221.3 (300) 110	282.5 (383) 108	342.2 (464) 106	424.8 (576) 99
	14.5 (55)	86.3 (117) 139	135.7 (184) 137	167.4 (227) 136	208.7 (283) 135	267.7 (363) 135	331.9 (450) 132	407.1 (552) 123
Max. Cont.	15.8 (60)	75.2 (102) 153	120.2 (163) 152	158.6 (215) 150	200.6 (272) 148	255.9 (347) 146	321.6 (436) 143	392.4 (532) 138
Max. Inter.	19.8 (75)	39.1 (53) 191	94.4 (128) 189	134.2 (182) 187	172.6 (234) 185	234.5 (318) 183	288.4 (391) 180	357 (484) 176

Motors run with high efficiency in all areas designated with a number for torque and speed, however for best service life of the motor select a motor to run with a torque and speed range printed in the light shaded area. Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.

PERFORMANCE DATA - BMP, BMPH, BMPW SERIES

BMP 500 29.7 in³/rev. (486.5 cm³/rev.)

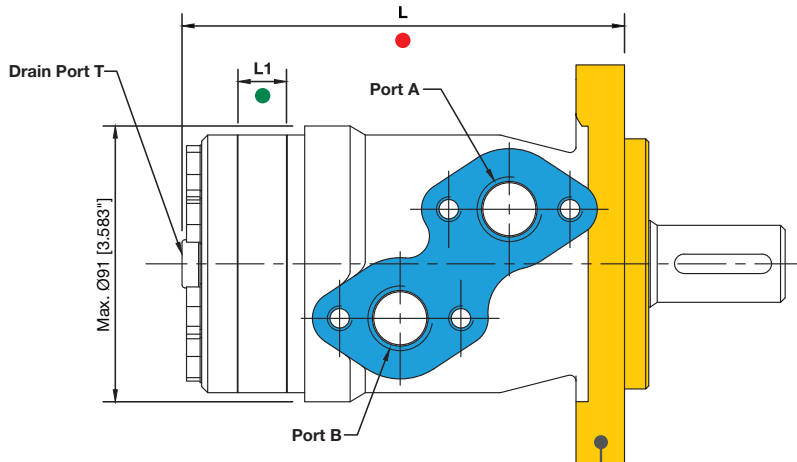
Performance data is based on the gerotor displacement and applies to all models. BMP, BMPH, BMPW



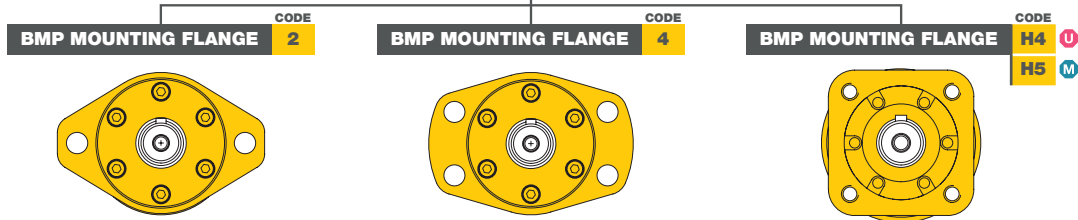
Torque lbf.ft (Nm) Speed rpm		Δ Pressure psi (bar) →					Max. Cont.	Max. Inter.
		218 (15)	435 (30)	653 (45)	870 (60)	1015 (70)		
Flow gpm (l/min) ↓	1 (4)	70.8 (96) 7	143.1 (194) 6	210.2 (285) 4				
	2 (8)	72.3 (98) 15	148.2 (201) 15	224.2 (304) 14	288.4 (391) 14	326.7 (443) 12	377.6 (512) 9	423.4 (574) 7
	4 (15)	70.8 (96) 30	141.6 (192) 30	209.5 (284) 29	280.3 (380) 28	310.5 (421) 26	365.8 (496) 23	405.7 (550) 22
	5.3 (20)	70.8 (96) 40	140.9 (191) 40	206.5 (280) 40	274.4 (372) 39	308.3 (418) 37	363.6 (493) 33	402.7 (546) 31
	7.9 (30)	67.1 (91) 61	136.4 (185) 60	200.6 (272) 60	265.5 (360) 58	303.9 (412) 56	358.5 (486) 53	399 (541) 50
	10.6 (40)	63.4 (86) 81	126.9 (172) 80	192.5 (261) 80	253 (343) 79	300.9 (408) 76	354 (480) 73	396.8 (538) 70
	13.2 (50)	57.5 (78) 102	118 (160) 101	177.8 (241) 100	244.9 (332) 98	288.4 (391) 96	343.7 (466) 93	389.4 (528) 90
	15.8 (60)	48.7 (66) 122	98.8 (134) 121	157.1 (213) 120	225 (305) 119	273.6 (371) 117	323.1 (438) 114	365.8 (496) 110
Max. Cont.	18.5 (70)	38.4 (52) 143	81.9 (111) 142	139.4 (189) 141	215.4 (292) 139	253.7 (344) 137	308.3 (418) 135	350.3 (475) 131
Max. Inter.	19.8 (75)	25.8 (35) 153	61.2 (83) 152	113.6 (154) 151	177.8 (241) 150	230.1 (312) 149	286.9 (389) 147	330.4 (448) 144

Motors run with high efficiency in all areas designated with a number for torque and speed, however for best service life of the motor select a motor to run with a torque and speed range printed in the light shaded area. Performance data is typical at 120 SUS. Actual data may vary slightly from unit to unit in production.

BMP DIMENSIONS, PORT & MOUNTING DETAILS

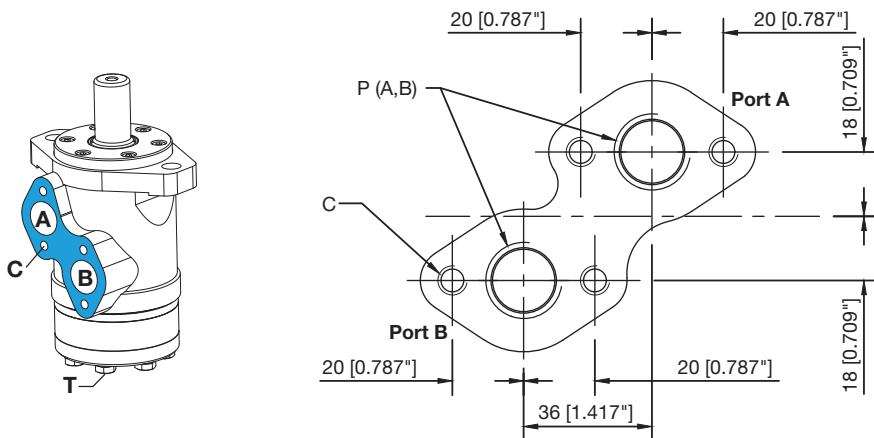


Model	GEROTOR WIDTH	
	L ●	L1 ●
BMP 36	137 [5.394"]	7 [0.276"]
BMP 50	137 [5.394"]	7 [0.276"]
BMP 80	140.5 [5.531"]	10.5 [0.413"]
BMP 100	143 [5.630"]	13 [0.512"]
BMP 125	146 [5.748"]	16 [0.630"]
BMP 160	151 [5.945"]	21 [0.827"]
BMP 200	157 [6.181"]	26 [1.024"]
BMP 250	162 [6.378"]	32 [1.260"]
BMP 315	172 [6.772"]	42 [1.654"]
BMP 400	182 [7.165"]	52 [2.047"]
BMP 500	195 [7.677"]	65 [2.559"]



BMP PORT DETAIL S P D R M

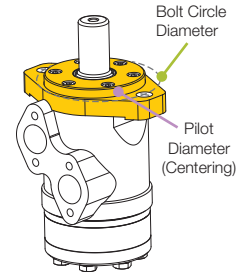
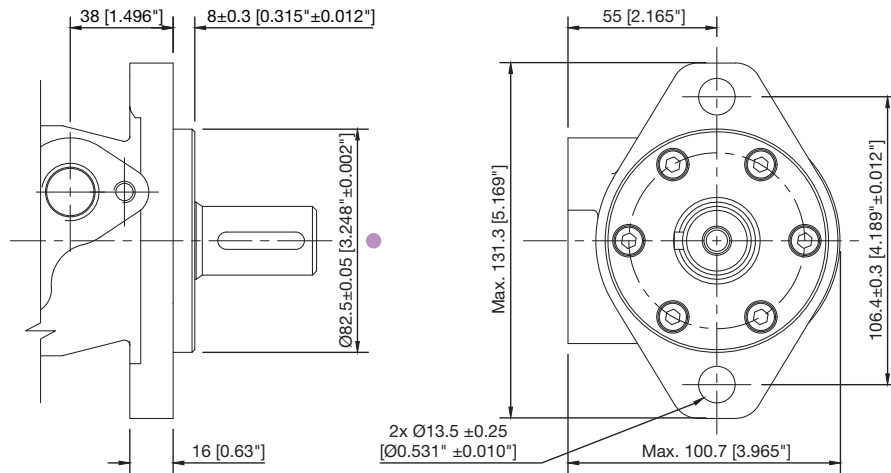
Line/Manifold Mount



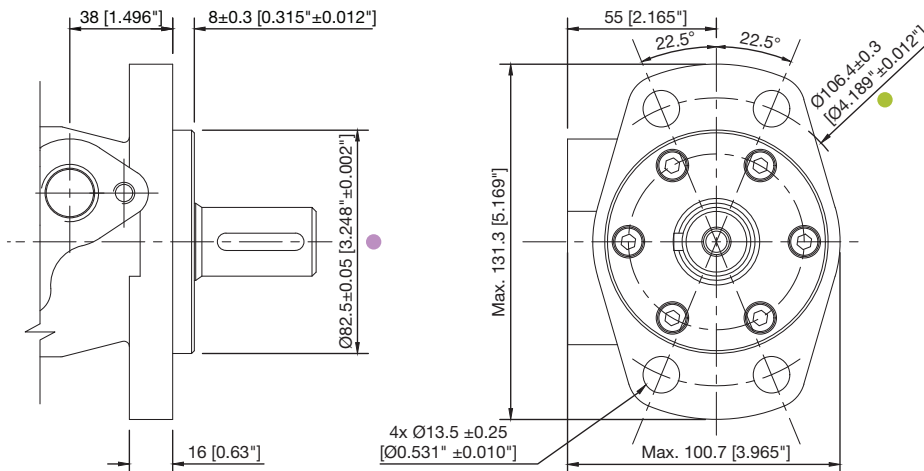
Connection	BMP PORT CODE				
	S	P	D	R	M
P (A,B)	7/8-14 UNF (17)	1/2-14 NPTF (15)	G 1/2" (15)	Rc 1/2" (15)	M22 x 1.5 (15) M
T	7/16-20 UNF (12)	7/16-20 UNF (12)	G 1/4" (12)	Rc 1/4" (9.7)	M14 x 1.5 (12) M
C (4x)	5/16-18 UNC (13) U	5/16-18 UNC (13) U	M8 (13) M	M8 (13) M	M8 (13) M

- S** : SAE straight thread (O-Ring Boss)
 - P** : NPTF (National Pipe Tapered Fuel)
 - D** : BSPP (British Standard Pipe Parallel) G thread
 - R** : BSPT (British Standard Pipe Taper) Rc thread
 - M** : Metric port
- (Depth in mm)

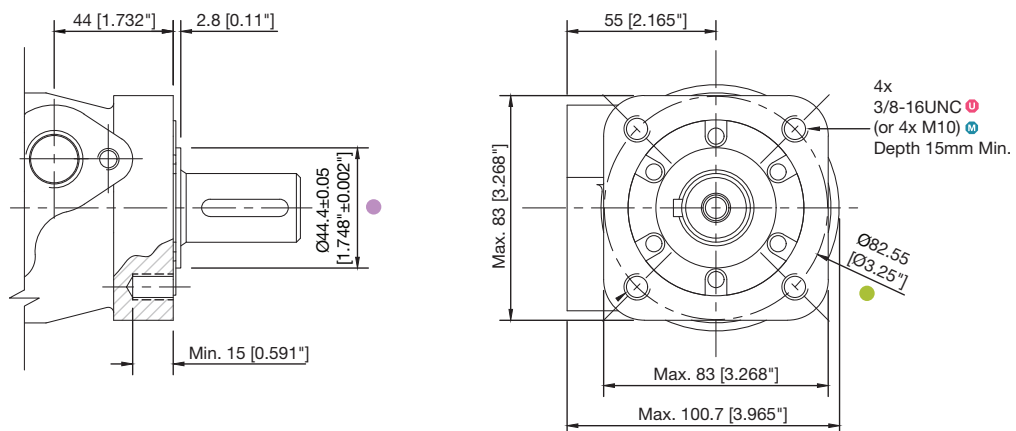
BMP MOUNTING FLANGE **2**
2-Hole, SAE A Mount



BMP MOUNTING FLANGE **4**
4-Hole, Magneto Mount

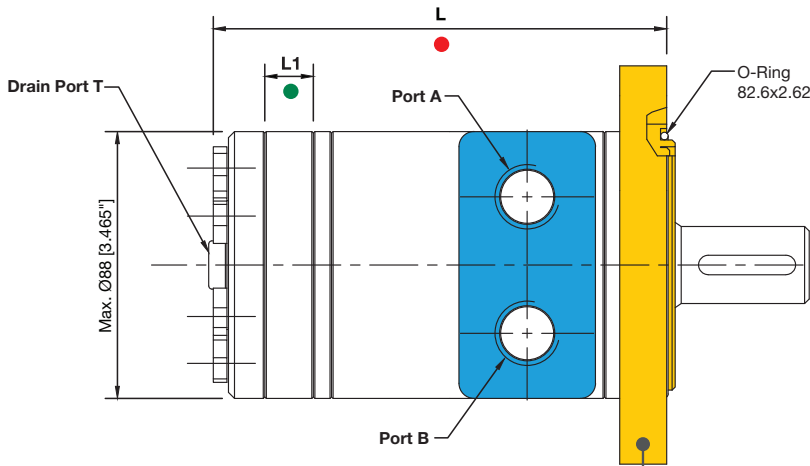


BMP MOUNTING FLANGE **H4** **H5**
4-Hole, Square Mount



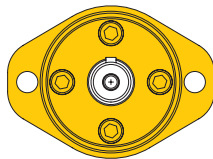
- Pilot Diameter
- Bolt Circle Diameter
- U Imperial M Metric

BMPH DIMENSIONS, PORT & MOUNTING DETAILS

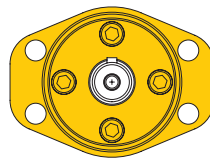


Model	GEROTOR WIDTH	
	L ●	L1 ●
BMPH 36	141 [5.551"]	7 [0.276"]
BMPH 50	141 [5.551"]	7 [0.276"]
BMPH 80	144.5 [5.689"]	10.5 [0.413"]
BMPH 100	147 [5.787"]	13 [0.512"]
BMPH 125	150 [5.609"]	16 [0.630"]
BMPH 160	155 [6.102"]	21 [0.827"]
BMPH 200	160 [6.299"]	26 [1.024"]
BMPH 250	166 [6.535"]	32 [1.260"]
BMPH 315	176 [6.929"]	42 [1.654"]
BMPH 400	186 [7.323"]	52 [2.047"]
BMPH 500	199 [7.835"]	65 [2.559"]

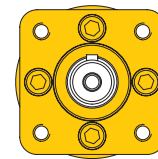
BMPH MOUNTING FLANGE CODE H2



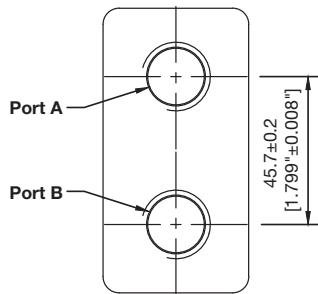
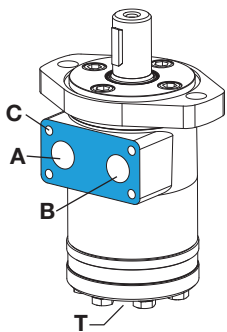
BMPH MOUNTING FLANGE CODE H6



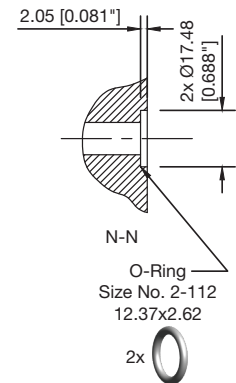
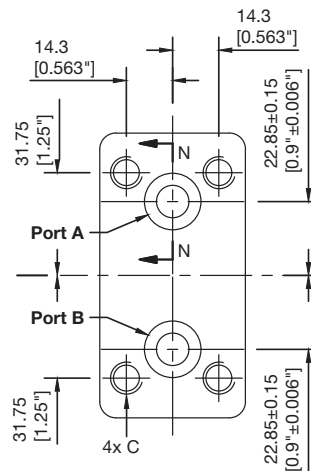
BMPH MOUNTING FLANGE CODE H4 U
H5 M



BMPH PORT CODE S T P G R
Line Mount



BMPH PORT CODE B4 U B5 M
Manifold Mount

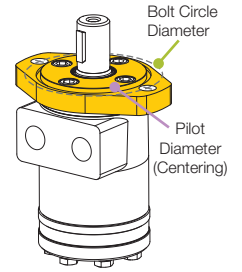
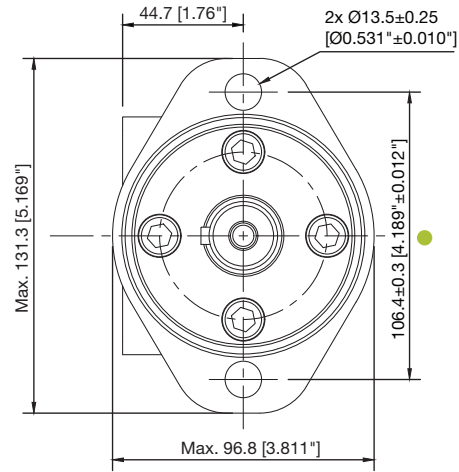
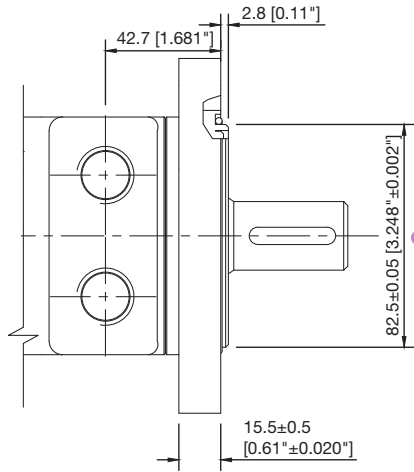


Connection	BMPH PORT CODE						
	S	T	P	G	R	B4	B5
P (A,B)	7/8-14 UNF (17)	3/4-16 O-Ring (15)	1/2-14 NPTF (15)	G 1/2 (15)	Rc 1/2" (15)	Ø10	Ø10
T	7/16-20 UNF (12)	7/16-20 UNF (12)	7/16-20 UNF (12)	G 1/4 (12)	Rc 1/4" (9.7)	7/16-20 UNF (12)	G 1/4 (12)
C (4x)	-	-	-	-	-	5/16-18 UNC (13) U	M8 (13) M

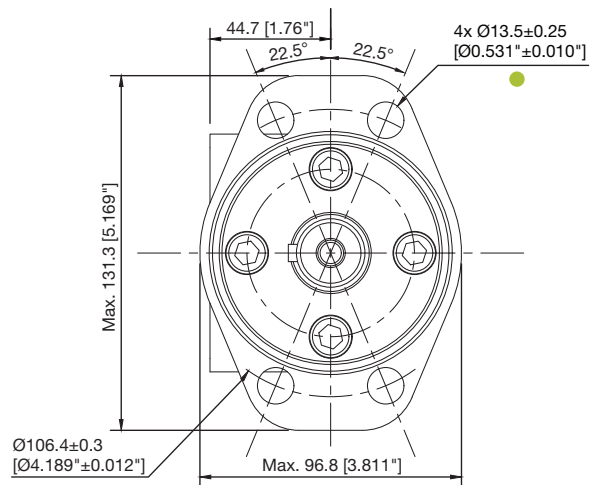
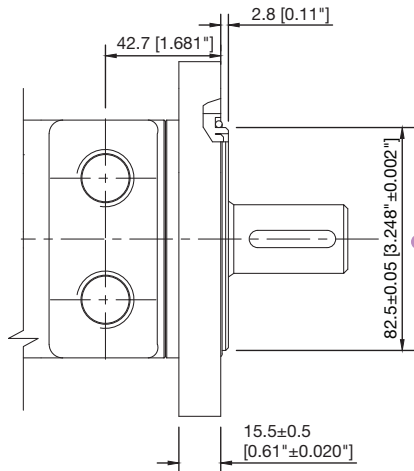
S, T : SAE straight thread (O-Ring Boss)
P : NPTF (National Pipe Tapered Fuel)
G : BSPP (British Standard Pipe Parallel) G thread
R : BSPT (British Standard Pipe Taper) Rc thread

(Depth in mm)

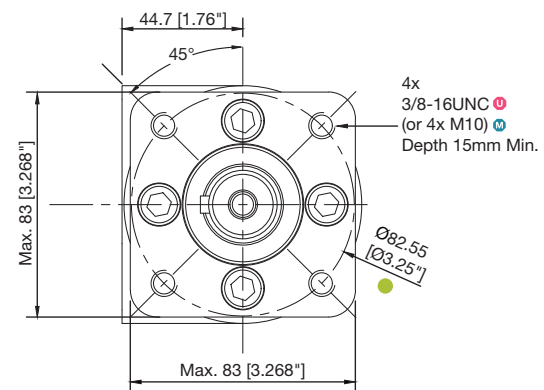
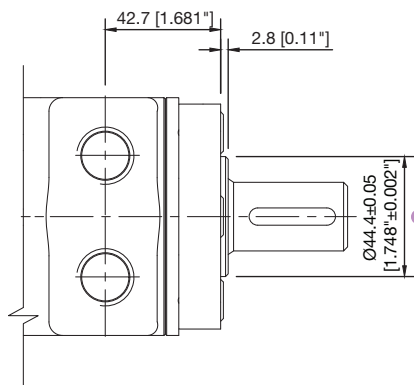
CODE
BMPH MOUNTING FLANGE H2
2-Hole, SAE A Mount



CODE
BMPH MOUNTING FLANGE H6
4-Hole, Magneto Mount



CODE **CODE**
BMPH MOUNTING FLANGE H4 U H5 M
4-Hole, Square Mount

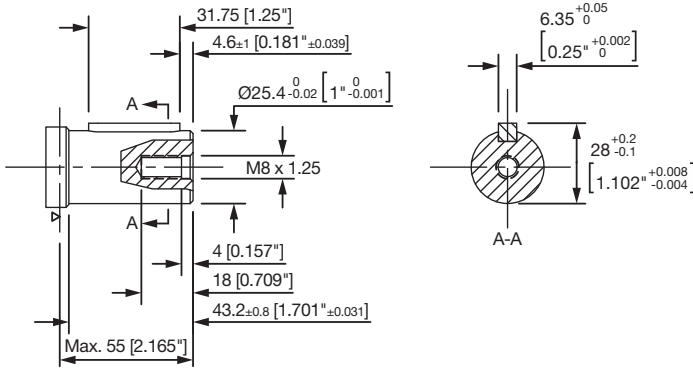


- Pilot Diameter
- Bolt Circle Diameter
- U Imperial M Metric

BMP SHAFT EXTENSIONS

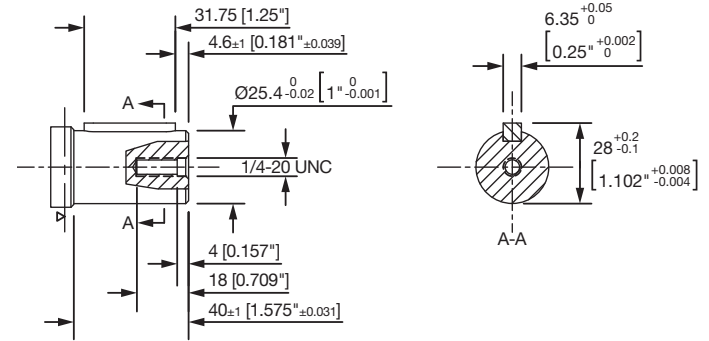
BMP SHAFT EXTENSION **C**

1 Inch Straight Keyed
 Parallel key 1/4"x1/4"x1 1/4"



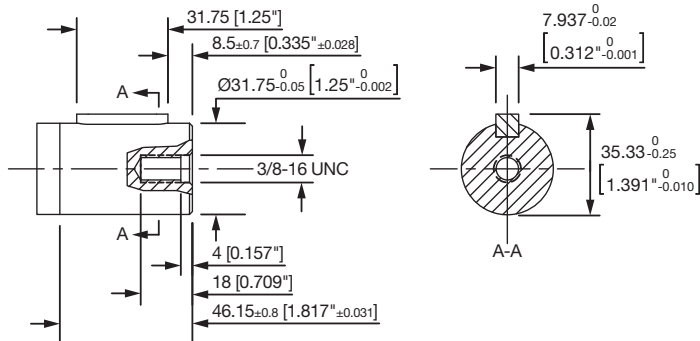
BMP SHAFT EXTENSION **R**

1 Inch Straight Keyed
 Parallel key 1/4"x1/4"x1 1/4"



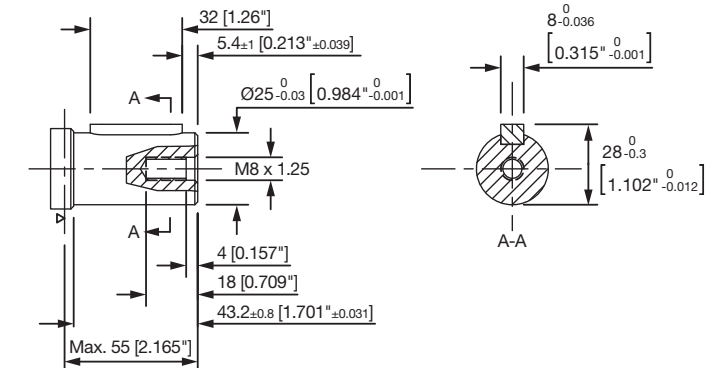
BMP SHAFT EXTENSION **G**

1 1/4 Inch Straight Keyed
 Parallel key 5/16"x5/16"x1 1/4"



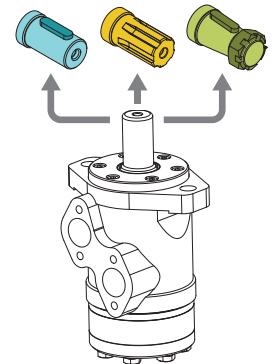
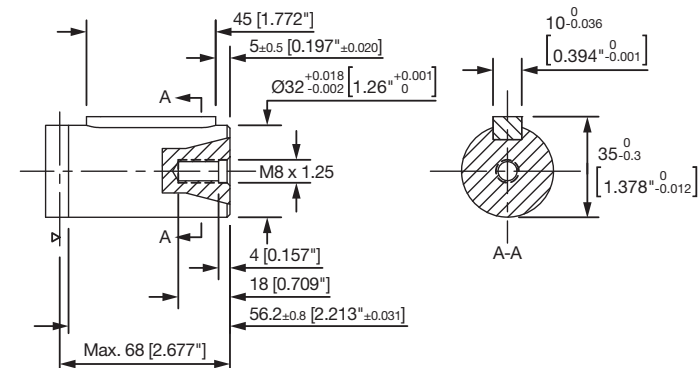
BMP SHAFT EXTENSION **A**

25 mm Straight Keyed
 Parallel key 8x7x32



BMP SHAFT EXTENSION **B**

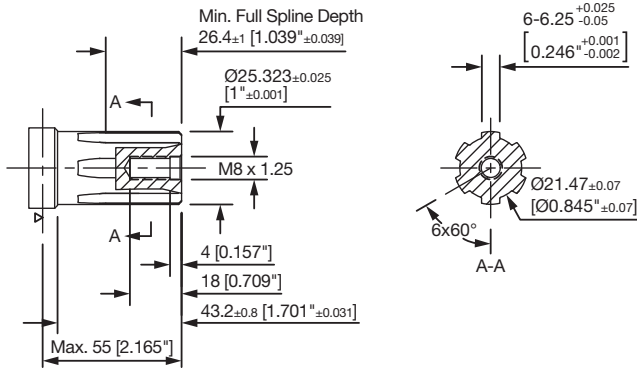
32 mm Straight Keyed
 Parallel key 10x8x45



BMP SHAFT EXTENSIONS (cont.)

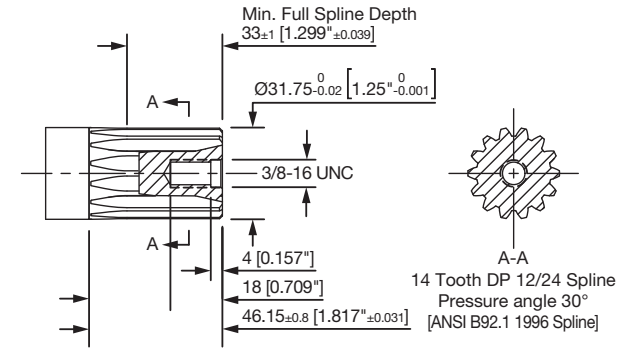
BMP SHAFT EXTENSION **E**

1 Inch SAE 6B Splined



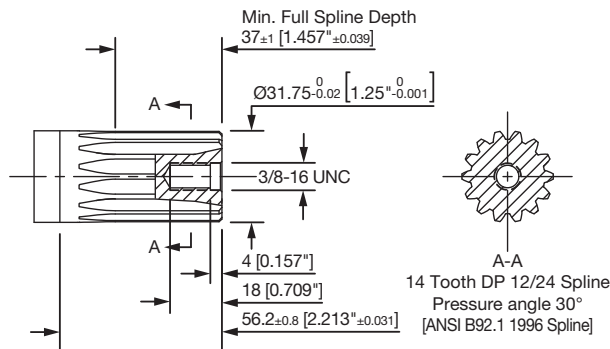
BMP SHAFT EXTENSION **F**

1¼ Inch 14 Tooth Splined



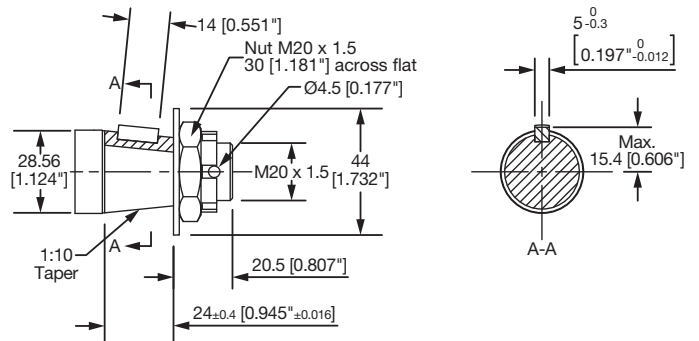
BMP SHAFT EXTENSION **FD**

1¼ Inch 14 Tooth Splined (Ext.)



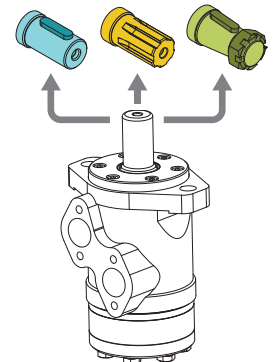
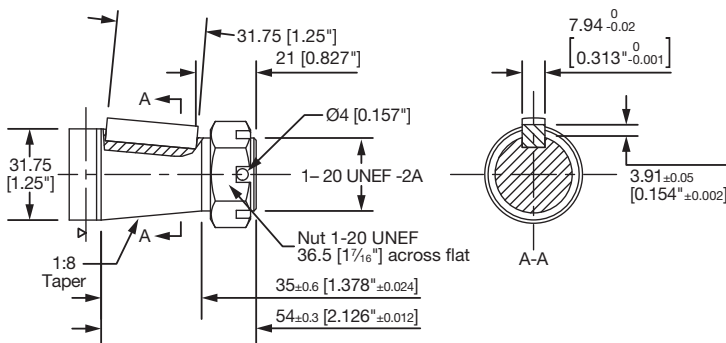
BMP SHAFT EXTENSION **T**

28.56 mm Tapered (1:10) w/ Nut
 Parallel Key B5x5x14
 Tightening Torque 100±10 Nm



BMP SHAFT EXTENSION **T3**

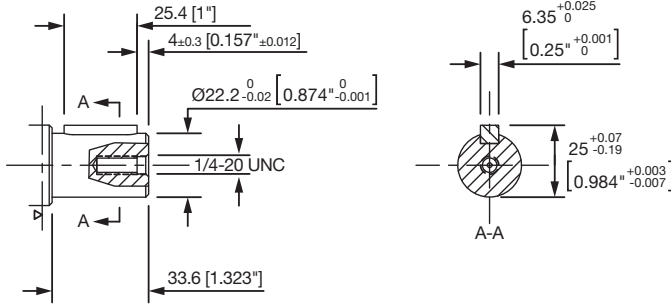
1¼ Inch Tapered (1:8) w/ Nut
 Parallel Key 5/16"x5/16"x1¼"
 Tightening Torque 200±10 Nm



BMPH SHAFT EXTENSIONS

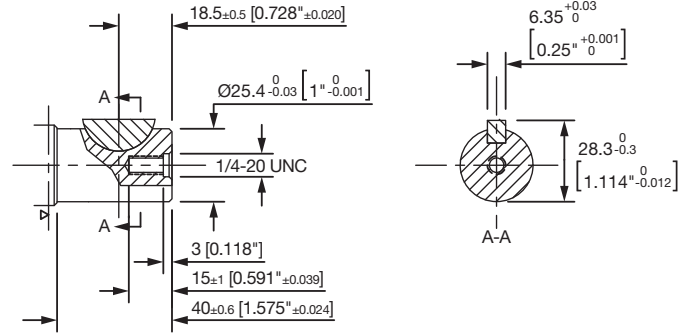
BMPH SHAFT EXTENSION **D**

7/8 Inch Straight Keyed
Parallel key 1/4"x1/4"x1"



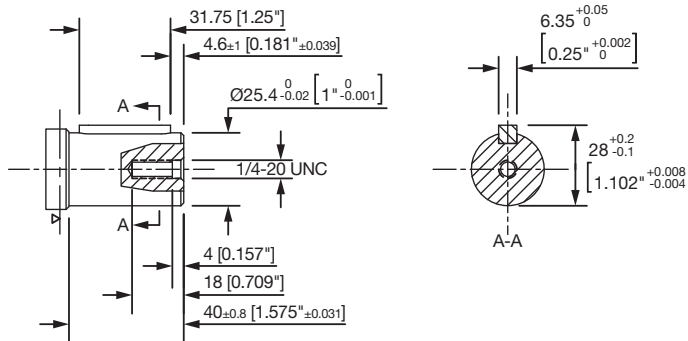
BMPH SHAFT EXTENSION **K**

1 Inch Straight Keyed
Woodruff key 1/4"x1"



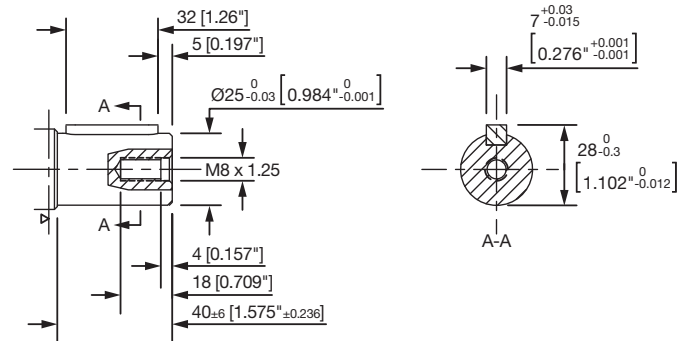
BMPH SHAFT EXTENSION **R**

1 Inch Straight Keyed
Parallel key 1/4"x1/4"x1 1/4"



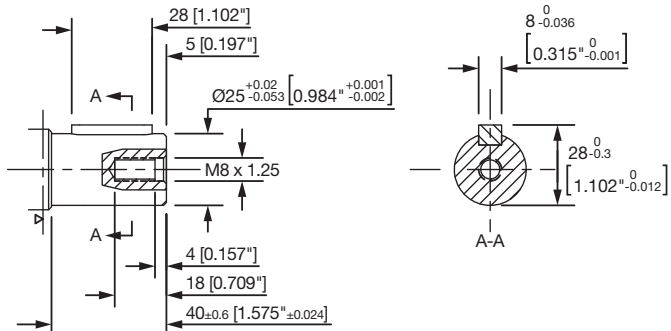
BMPH SHAFT EXTENSION **J**

25 mm Straight Keyed
Parallel key 7x7x32



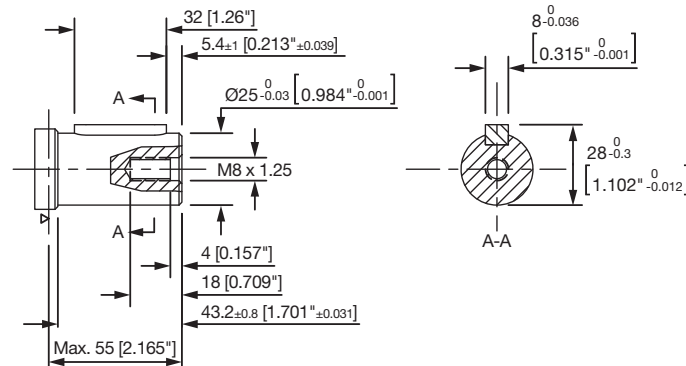
BMPH SHAFT EXTENSION **P**

25 mm Straight Keyed
Parallel key 8x7x28



BMPH SHAFT EXTENSION **A**

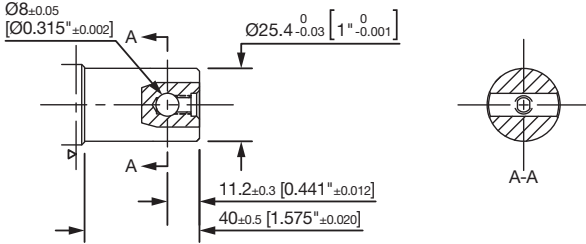
25 mm Straight Keyed
Parallel key 8x7x32



BMPH SHAFT EXTENSIONS (cont.)

BMPH SHAFT EXTENSION **H1**

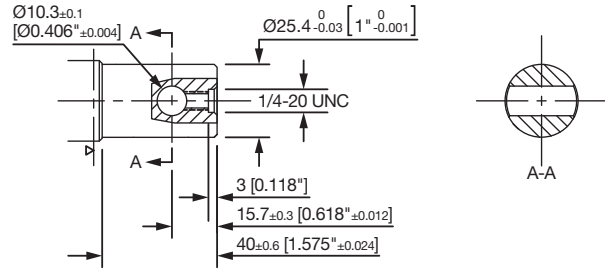
1 Inch Straight w/ .315 Crosshole



* H1 shaft can also be ordered on the BMP model.

BMPH SHAFT EXTENSION **H**

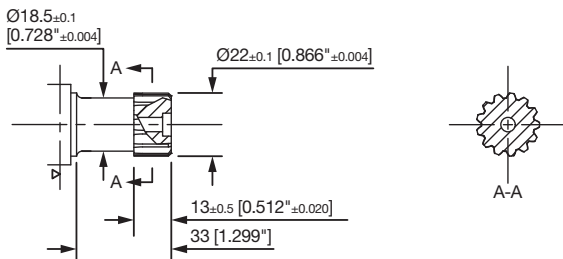
1 Inch Straight w/ .406 Crosshole



* H shaft can also be ordered on the BMP model.

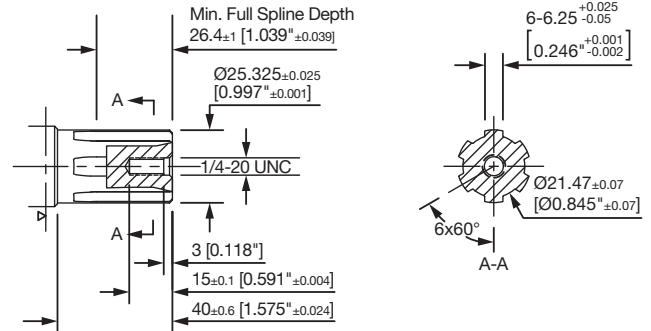
BMPH SHAFT EXTENSION **I**

7/8 Inch SAE B 13T Splined



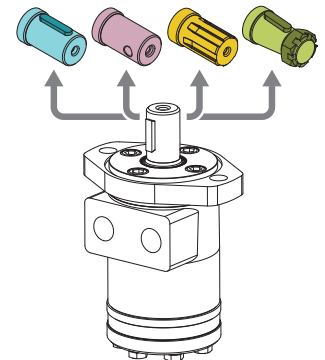
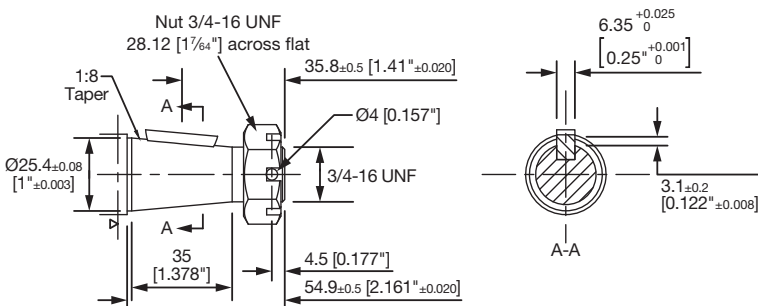
BMPH SHAFT EXTENSION **S**

1 Inch SAE 6B Splined

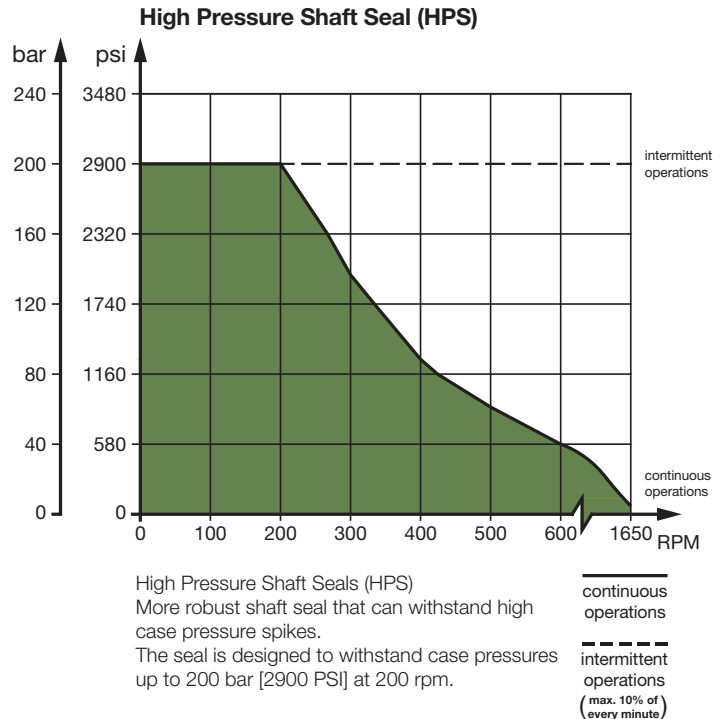
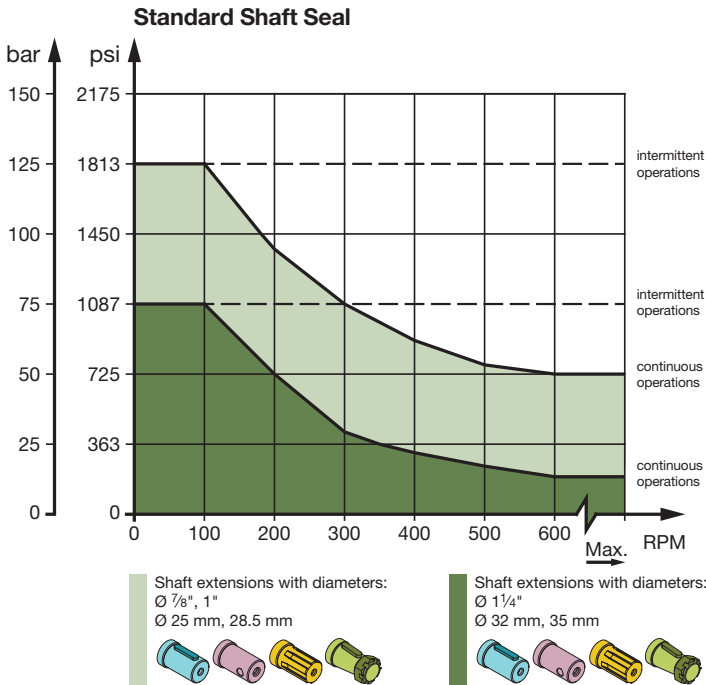


BMPH SHAFT EXTENSION **T2**

1 Inch Tapered (1:8) w/ Nut
 Woodruff Key 1/4"x1"
 Tightening Torque 200±10 Nm



PERMISSIBLE SHAFT SEAL PRESSURES - BMP, BMPH MODELS



Internal Drain, Permissible back pressure and case pressure:

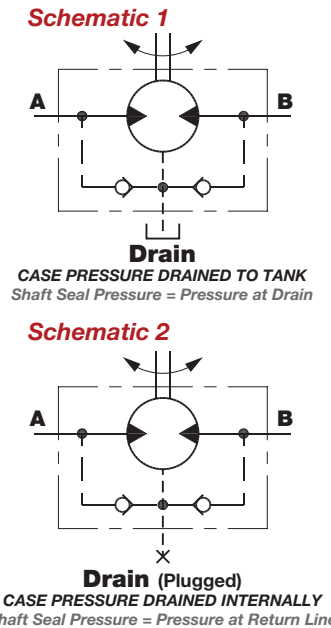
The internal drain option is standard on all BMP, BMPH, BMPW series motors. There are Built-In Check Valves integrated in the housing of the motor that connect the case area of the motor to each of the work ports (A and B). During normal operation, pressure in the input and return lines of the motor close the corresponding check valves. However, when the pressure in the motor case becomes greater than that of the return line, the check valve between the case and low pressure return line opens, allowing the case leakage to flow into the return line. Since the operation of the check valves is dependent upon a pressure differential, the internal drain option operates in either direction of motor rotation and whichever work port (A or B) has the lower pressure. This offers versatility and increased seal life as the drain line relieves the pressure on the shaft seal to tank.¹⁾

Schematic 1 - External Drain

With case drain port used, the shaft seal pressure = pressure at drain.

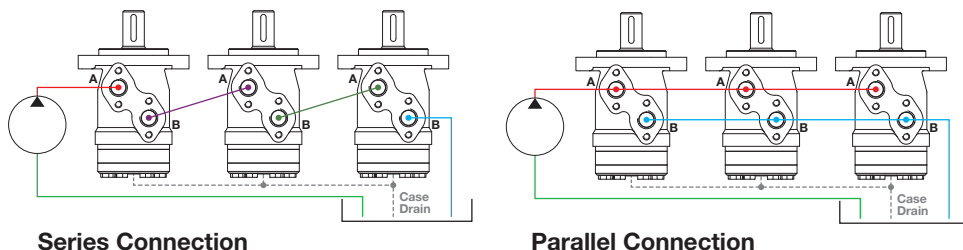
Schematic 2 - Internal Drain

With case drain port not in use, the shaft seal pressure = pressure at the return line.



Important:

1) Installing motors with "internal drainage" in series or when the motor operates in a meter-out circuit is not recommended unless overall pressure drop over all motors is below the maximum allowable backpressure.



Oil Flow In Drain Line

The table shows the Max. oil flow in the drain line at a return pressure less than 5-10 bar (72-145 psi)

Pressure Drop bar (psi)	Viscosity mm ² /s (in ² /s)	Oil Flow in the Drain Line l/min (gpm)
100 (1450)	20 (0.031)	2.5 (0.66)
	35 (0.054)	1.8 (0.48)
140 (2030)	20 (0.031)	3.5 (0.93)
	35 (0.054)	2.8 (0.75)

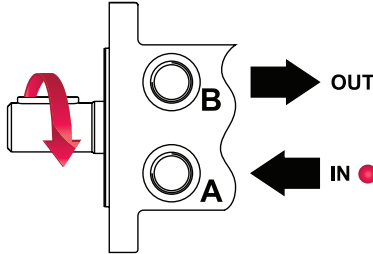
DIRECTION OF SHAFT ROTATION - BMP, BMPH, BMPW SERIES

Standard Rotation

(Viewed from Shaft End)

Port **A** Pressurized - **CW**

Port **B** Pressurized - **CCW**

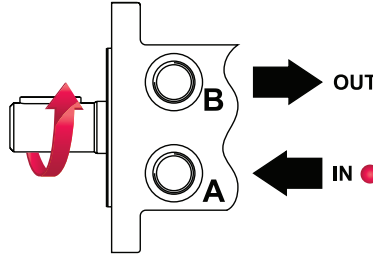


Reverse Rotation

(Viewed from Shaft End)

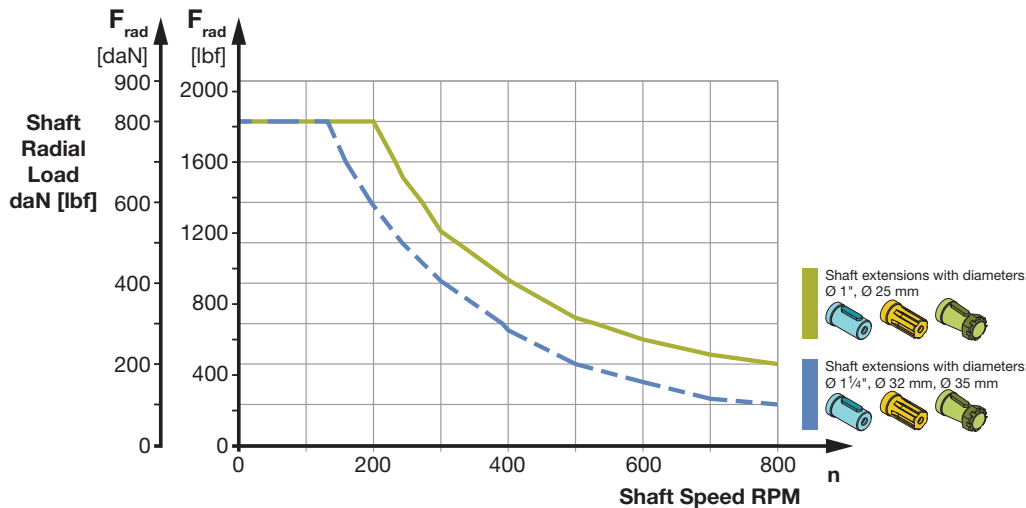
Port **A** Pressurized - **CCW**

Port **B** Pressurized - **CW**



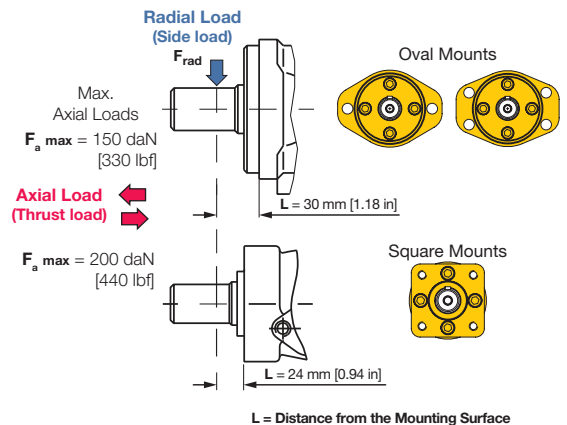
PERMISSIBLE SHAFT LOADS FOR BMP AND BMPH MOTORS

The permissible radial shaft load F_{rad} depends on the speed (rpm), distance from the point of load to the mounting flange and shaft version. The curve shows the relation between F_{rad} and speed (rpm) on the standard motor with journal bearing.



Mounting Flange	Oval Mounts		Square Mount
	L = 30 mm [1.18 in]		L = 24 mm [0.94 in]
Distance from Mounting Surface	L = 30 mm [1.18 in]		L = 24 mm [0.94 in]
Shaft Extension	Shaft extensions with diameters: $\varnothing 1"$, $\varnothing 25$ mm, $\varnothing 28.5$ mm	Shaft extensions with diameters: $\varnothing 1\frac{1}{4}"$, $\varnothing 32$ mm, $\varnothing 35$ mm	Shaft extensions with diameters: $\varnothing 1"$, $\varnothing 25$ mm, $\varnothing 28.5$ mm
Shaft Radial Load (side load) F_{rad}	lbf* 	$\frac{800}{n} \times \frac{2215}{3.74+L}$	$\frac{800}{n} \times \frac{1660}{3.74+L}$
	daN* 	$\frac{800}{n} \times \frac{25000}{95+L}$	$\frac{800}{n} \times \frac{25000}{101+L}$

* $n < 200$ RPM; max $F_{rad} = 1800$ lbs [800 daN]
 $n \geq 200$ RPM; $L < 2.2$ in [55 mm]
 1 Dekanewton [daN] = 2.248 Pound-force [lbf]



BMP DESIGNATION & ORDERING CODE

BMP-N1-250-H4-C-S-R-...-...-HPS

1 Series code
BMP Offset Ports

2 Bearing code
N1 Needle Bearing¹
**Contact Anfield for other options.*

3 Displacement

code	cm ³ /rev	in ³ /rev
36	36	2.20
50	51.7	3.15
80	77.7	4.74
100	96.2	5.87
125	120.2	7.34
160	157.2	9.59
200	194.5	11.87
250	240.3	14.66
315	314.5	19.19
400	389.5	23.77
500	486.5	29.69

4 Mounting Type

code	Description	Icon
2	2-Hole SAE A	
4	4-Hole Magneto	
H4	4-Hole Square (U)	
H5	4-Hole Square (M)	

5 Output Shaft

code	Description	Icon
C	1" Straight Keyed (Ext.) (1/4"x1/4"x1-1/4")	
R	1" Straight Keyed (1/4"x1/4"x1-1/4")	
G	1.25" Straight Keyed (5/16"x5/16"x1-1/4")	
A	25 mm Straight Keyed (8x7x32)	
B	32 mm Straight Keyed (10x8x45)	
E	1" SAE 6B Splined	
F	1.25" 14 Tooth Splined	
FD	1.25" 14 Tooth Splined (Ext.)	
T	28.56 mm Tapered (1:10)	
T3	1.25" Tapered (1:8)	

**Please go to pages 15-16 for shaft details before selecting the code.*

6 Ports

code	Description	Icon
S	SAE Ports	
P	NPTF Ports	
D	BSPP Ports (G)	
R	BSPT Ports (R)	
M	Metric	

7 Rotation

code	Description
Omit	Standard Rotation
R	Reverse Rotation

8 Options

code	Description
Omit	None
0	No Case Drain
F	Free Running Rotor Set ³
LS	Low Speed Valve ⁴

**Contact Anfield if option required is not listed.*

9 Shaft Seal Version

code	Description
HPS	High Pressure Shaft Seal ²

**Contact Anfield for other options.*

Anfield "standard" series motors are painted black and "J" series motors are painted industrial gray.

1. Needle Bearing:

BMP, BMPH and BMPW have an output shaft supported in needle bearing. These types of motors are suitable for operating conditions such as frequent start and stops, vibration on the shaft, high static and dynamic radial loads in short operating terms.

2. High Pressure Shaft Seal:

The high pressure shaft seals allow the motors to withstand high case pressures at high speeds without external drain line.

3. Free Running Rotors:

The Free Running Rotor Set, have increased clearance in all friction parts, allowing the shaft to rotate more freely with less mechanical drag. The increased clearance also improves lubrication of the wear surfaces of gear set and friction parts. Additional advantages of "F" version are prolonging of the life of the hydraulic motors at high speeds, as well as the possibility to use them in systems with wide variation of the loading. "F" version motors are designed to operate with high speed (typically over 300 rpm) and low pressure drop. Volumetric efficiency may be reduced slightly due to increased clearances.

4. Low Speed Motors:

Low speed valve feature optimizes the motor for low-speed performance. Motors with this valving provide very low speed while maintaining high torque. They are designed to run continuously at low speed (typically up to 200 rpm) and normal pressure drop and reduced flow. Optimal run is guaranteed at speeds of 20 to 50 rpm. Motors with this valving have an increased starting pressure and are not recommended for use at pressure drop less than 580 psi (40 bar).

BMPH DESIGNATION & ORDERING CODE

BMPH-N1-250-H2-K-S-R-...-...-HPS

1 Series
code
BMPH Aligned Ports

2 Bearing
code
N1 Needle Bearing¹
**Contact Anfield for other options.*

3 Displacement

code	cm ³ /rev	in ³ /rev
36	36	2.20
50	51.7	3.15
80	77.7	4.74
100	96.2	5.87
125	120.2	7.34
160	157.2	9.59
200	194.5	11.87
250	240.3	14.66
315	314.5	19.19
400	389.5	23.77
500	486.5	29.69

4 Mounting Type

code	
H2	2-Hole SAE A
H6	4-Hole Magneto
H4	4-Hole Square (U)
H5	4-Hole Square (M)

5 Output Shaft

code			
D	0.875" Straight Keyed (1/4"x1/4"x1")		
K	1" Straight Keyed (Woodruff) (1/4"x1")		
R	1" Straight Keyed (1/4"x1/4"x1-1/4")		
J	25 mm Straight Keyed (7x7x32)		
P	25 mm Straight Keyed (8x7x28)		
A	25 mm Straight Keyed (8x7x32)		
H1	1" Straight w/.315" Crosshole		
H	1" Straight w/.406" Crosshole		
I	0.875" SAE B 13T Splined		
S	1" SAE 6B Splined		
T2	1" Tapered (1:8)		

9 Shaft Seal Version
code
HPS High Pressure Shaft Seal²
**Contact Anfield for other options.*

8 Options
code

Omit	None
0	No Case Drain
F	Free Running Rotor Set ³
LS	Low Speed Valve ⁴

**Contact Anfield if option required is not listed.*

7 Rotation
code

Omit	Standard Rotation
R	Reverse Rotation

6 Ports
code

S	SAE Ports
T	SAE Ports
P	NPTF Ports
G	BSPP Ports (G)
R	BSPT Ports (R)
B4	Manifold Mount (U)
B5	Manifold Mount (M)

**Please go to pages 17-18 for shaft details before selecting the code.*

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1. Needle Bearing:

BMP, BMPH and BMPW have an output shaft supported in needle bearing. These types of motors are suitable for operating conditions such as frequent start and stops, vibration on the shaft, high static and dynamic radial loads in short operating terms.

2. High Pressure Shaft Seal:

The high pressure shaft seals allow the motors to withstand high case pressures at high speeds without external drain line.

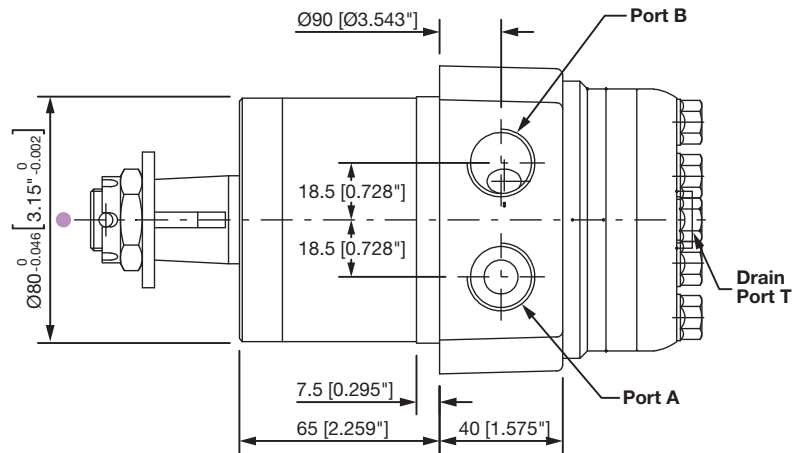
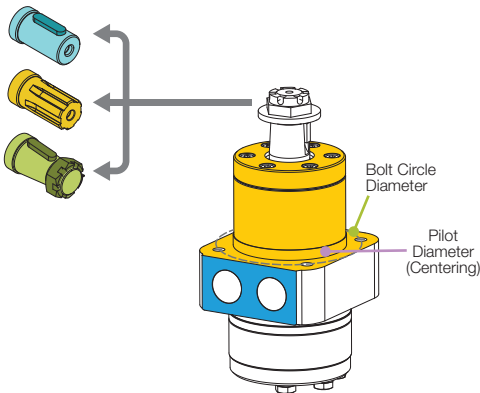
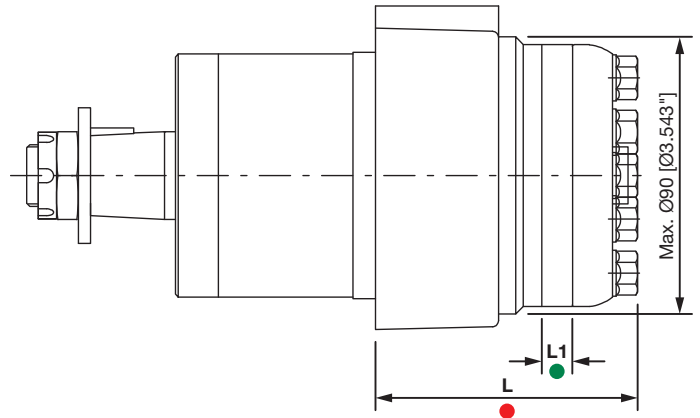
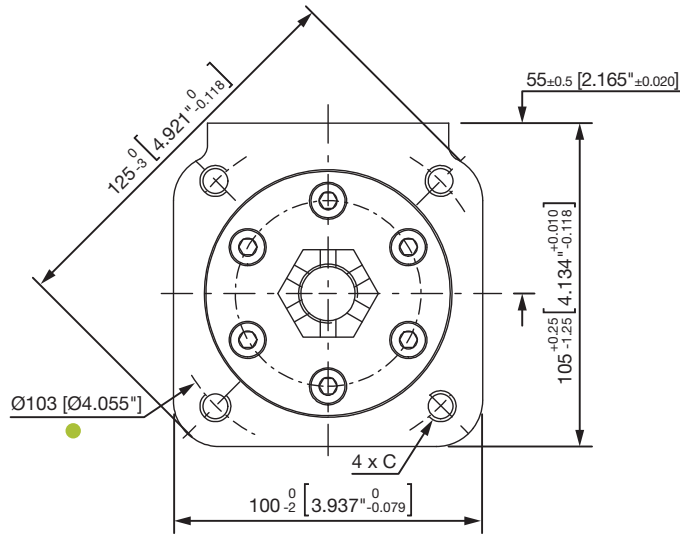
3. Free Running Rotors:

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4. Low Speed Motors:

Low speed valve feature optimizes the motor for low-speed performance. Motors with this valving provide very low speed while maintaining high torque. They are designed to run continuously at low speed (typically up to 200 rpm) and normal pressure drop and reduced flow. Optimal run is guaranteed at speeds of 20 to 50 rpm. Motors with this valving have an increased starting pressure and are not recommended for use at pressure drop less than 580 psi (40 bar).

BMPW DIMENSIONS, PORT & MOUNTING DETAILS



Connection	BMPW PORT CODE		
	S	G	M
P (A,B)	7/8-14 O-Ring (17)	G 1/2 (15)	M22 x 1.5 (15) M
T	7/16-20 UNF (12)	G 1/4 (12)	M14 x 1.5 (12) M
C (4x)	3/8-18 UNC (13) U	M10 (20) M	M8 (13) M

S: SAE straight thread (O-Ring Boss) (Depth in mm)
G: BSPP (British Standard Pipe Parallel) G thread
M: Metric port

Model	GEROTOR WIDTH	
	L ●	L1 ●
BMPW 50	81 [3.189"]	7 [0.276"]
BMPW 80	84.5 [3.327"]	10.5 [0.413"]
BMPW 100	87 [3.425"]	13 [0.512"]
BMPW 125	90 [3.543"]	16 [0.630"]
BMPW 160	95 [3.74"]	21 [0.827"]
BMPW 200	100 [3.937"]	26 [1.024"]
BMPW 250	106 [4.173"]	32 [1.260"]
BMPW 315	116 [4.567"]	42 [1.654"]
BMPW 400	126 [4.961"]	52 [2.047"]
BMPW 500	139 [5.472"]	65 [2.559"]

SHAFT EXTENSION **A** **M**
 25 mm Straight Keyed

SHAFT EXTENSION **C** **U**
 1 Inch Straight Keyed

SHAFT EXTENSION **E** **U**
 1 Inch SAE 6B Splined

SHAFT EXTENSION **T** **M**
 28.56 mm Tapered (1:10 w/ Nut)

*For shaft details go to BMP shaft extension pages.

U Imperial **M** Metric ● Pilot Diameter
 mm [Inch] ● Bolt Circle Diameter

BMPW DESIGNATION & ORDERING CODE

BMPW-N1-250- - T - S - R- ... - ... -HPS

1
BMPW

2
N1

3

4

5

6

7

8

9

9
HPS

1 Series
code
BMPW Wheel Motor

2 Bearing
code
N1 Needle Bearing¹
*Contact Anfield for other options.

3 Displacement

code	cm ³ /rev	in ³ /rev
50	51.7	3.15
80	77.7	4.74
100	96.2	5.87
125	120.2	7.34
160	157.2	9.59
200	194.5	11.87
250	240.3	14.66
315	314.5	19.19
400	389.5	23.77
500	486.5	29.69

5 Output Shaft
code

A	25 mm Straight Keyed
C	1" Straight Keyed
E	1" SAE 6B Splined
T	28.56 mm Tapered (1:10)

*Please go to pages 15-16 for shaft details before selecting the code.

6 Ports
code

S	SAE Ports
G	BSPP Ports (G)
M	Metric

7 Rotation
code

Omit	Standard Rotation
R	Reverse Rotation

8 Options
code

Omit	None
0	No Case Drain

*Contact Anfield if option required is not listed.

9 Shaft Seal Version
code
HPS High Pressure Shaft Seal²
*Contact Anfield for other options.

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2. High Pressure Shaft Seal:

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Strength in Products, Strength in Service

- Pressure Switches
- Temperature Switches
- Differential Switches
- Level Switches
- Vacuum Switches
- Transducers
- Gear Pumps
- Vane Pumps
- Dump Pumps
- Variable Piston Pumps
- Orbital Motors
- Vane Motors
- Gear Motors
- Monoblock Valves
- High Pressure Ball Valves
- Flow Controls & Needle Valves
- Drive Couplings
- Flanges
- Gauges
- Test Points

Drain



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