

# MODELS BMPH/BMP



The BMP and BMPH ROTORTORC™ gear set, shaft distribution flow, hydraulic motors are a compact, highly efficient, low speed-high torque design which can be used in either parallel or series systems.

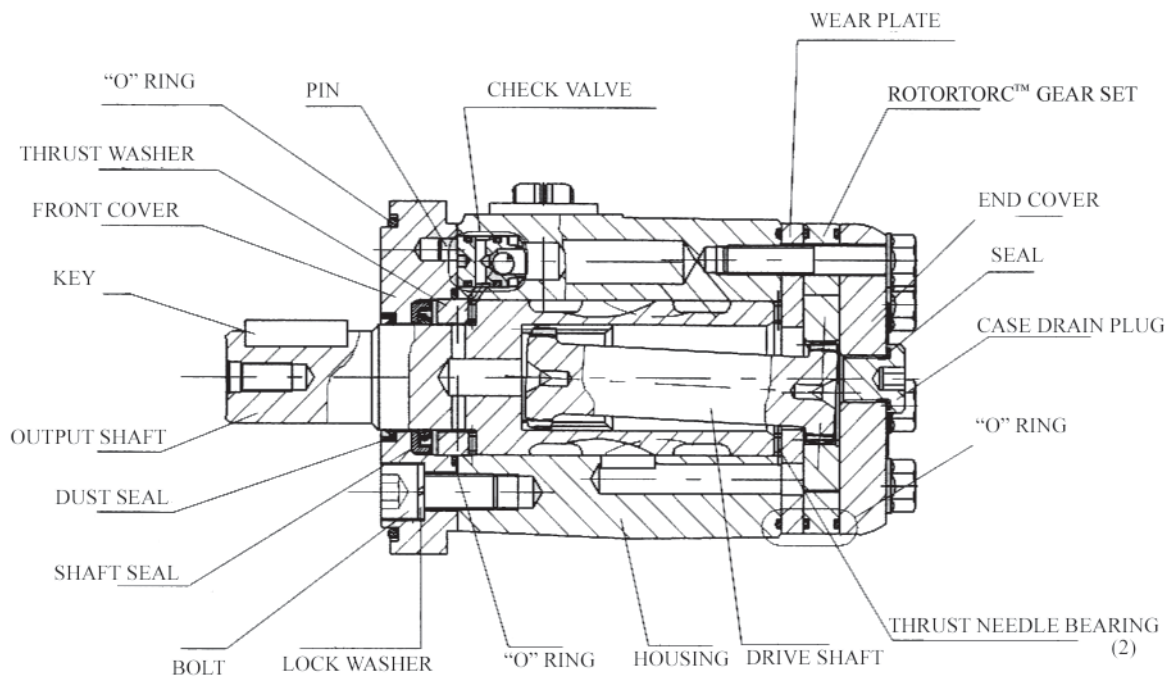
These low weight advanced construction design motors are manufactured in accordance with the requirements of the ISO 9000-2000 quality system.

## Technical Specifications - BMPH/BMP

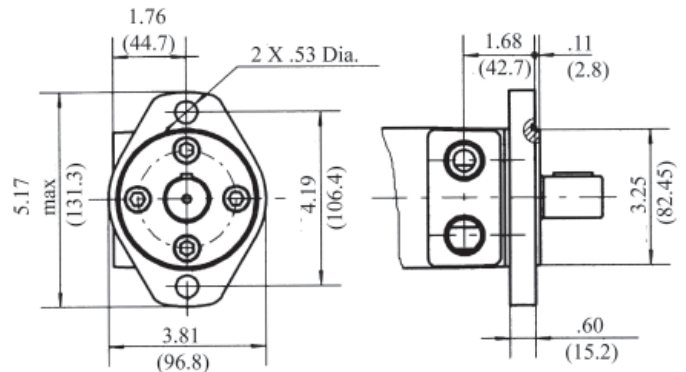
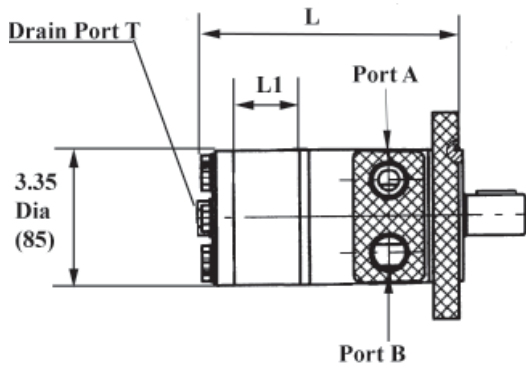
MODEL	BMPH36	BMPH50	BMPH80	BMPH100	BMPH125	BMPH160	BMPH200	BMPH250	BMPH315	BMPH400	
	BMP36	BMP50	BMP80	BMP100	BMP125	BMP160	BMP200	BMP250	BMP315	BMP400	
<b>Displacement</b> $\text{Cm}^3/\text{Rev}$ ( $\text{In}^3/\text{Rev}$ )	36.0 (2.20)	51.7 (3.15)	77.7 (4.74)	96.2 (5.87)	118 (7.20)	156 (9.51)	190 (11.59)	231 (14.09)	312 (19.03)	387 (23.61)	
<b>Maximum Speed</b> <b>RPM</b>	Cont	1050	880	740	590	475	370	295	240	190	150
	Int.	1270	975	825	675	595	465	370	295	235	185
<b>Max Torque</b> <b>NM / (in.lbs)</b>	Cont	58 (512)	81 (717)	129 (1140)	161 (1425)	202 (1790)	245 (2170)	286 (2530)	360 (3185)	406 (3575)	435 (3850)
	Int.	76 (670)	108 (956)	171 (1514)	213 (1885)	268 (2372)	342 (3026)	390 (3450)	456 (4035)	505 (4470)	533 (4717)
<b>Max Differential</b> <b>Mpa / (PSI)</b>	Cont	12.5 (1840)	12.5 (1840)	12.5 (1840)	12.5 (1840)	12.5 (1840)	12.5 (1840)	11 (1625)	11 (1625)	11 (1625)	10 (1450)
	Int.	16.5 (2425)	16.5 (2425)	16.5 (2425)	16.5 (2425)	16.5 (2425)	16.5 (2425)	16.5 (2425)	14 (2060)	14 (2060)	14 (2060)
<b>Max Flow</b> <b>L/min / (gpm)</b>	Cont	38 (10)	45 (11.85)	60 (15.8)	60 (15.8)	60 (15.8)	60 (15.8)	60 (15.8)	60 (15.8)	60 (15.8)	60 (15.8)
	Int.	45 (12)	50 (13.15)	75 (19.75)	75 (19.75)	75 (19.75)	75 (19.75)	75 (19.75)	75 (19.75)	75 (19.75)	75 (19.75)
<b>Weight Kg / (lbs)</b>		5.5 (12.1)	5.6 (12.3)	5.7 (12.54)	5.9 (13)	6 (13.2)	6.2 (13.65)	6.4 (14.1)	6.6 (14.5)	6.9 (15.2)	7.4 (16.3)

Continuous = maximum of continuous operation

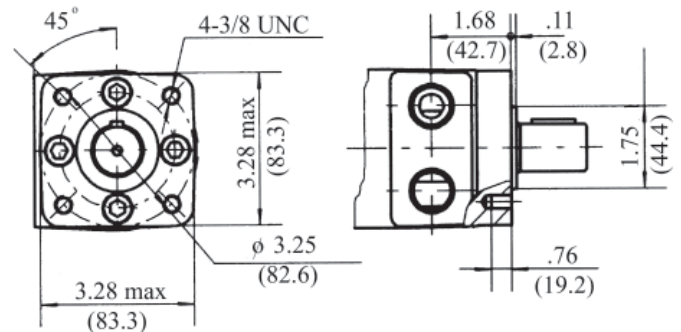
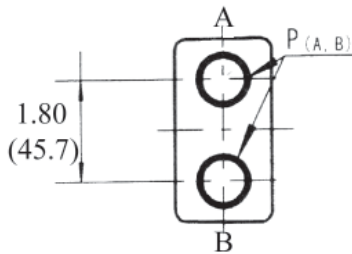
Intermittent = maximum operating range for 6 seconds per minute



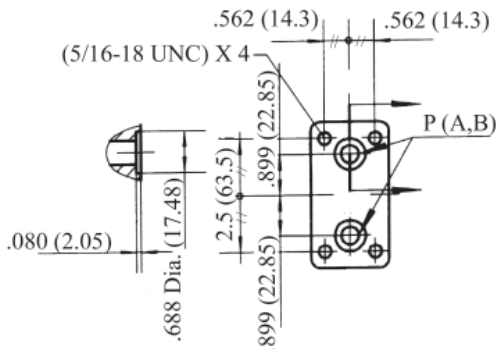
# BMPH INSTALLATION DATA



H2 - SAE -"A" 2 BOLT

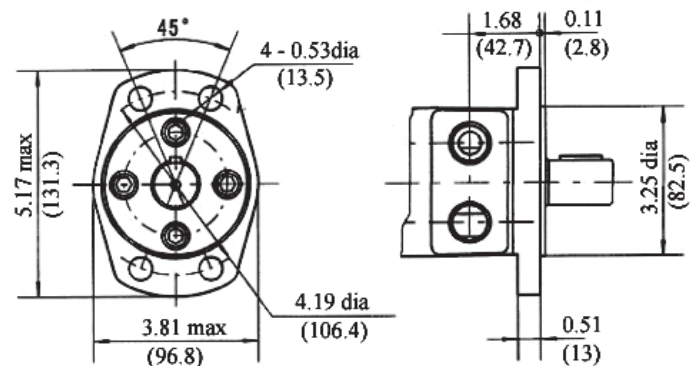


H4 - SAE -"A" 4 BOLT



Manifold Mount

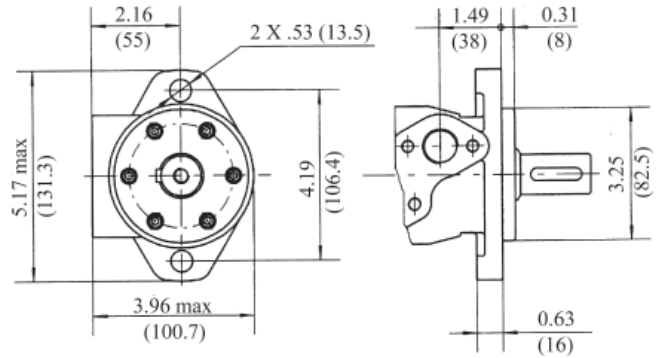
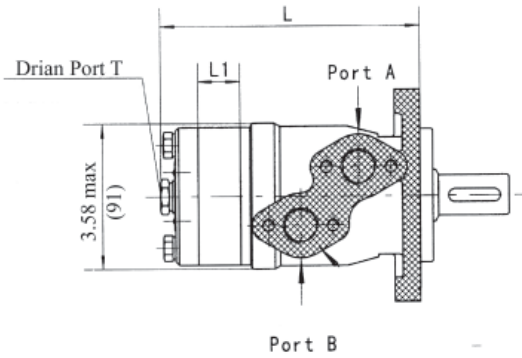
MODEL BMPH	L		L1	
	inches	mm	inches	mm
BMPH 36	5.51	140	0.27	6.8
BMPH 50	5.55	141	0.28	7
BMPH 80	5.69	144.5	0.41	10.5
BMPH 100	5.79	147	0.51	13
BMPH 125	5.91	150	0.63	16
BMPH 160	6.10	155	0.83	21
BMPH 200	6.30	160	1.02	26
BMPH 250	6.54	166	1.26	32
BMPH 315	7.72	176	1.65	42
BMPH 400	7.32	186	2.04	52



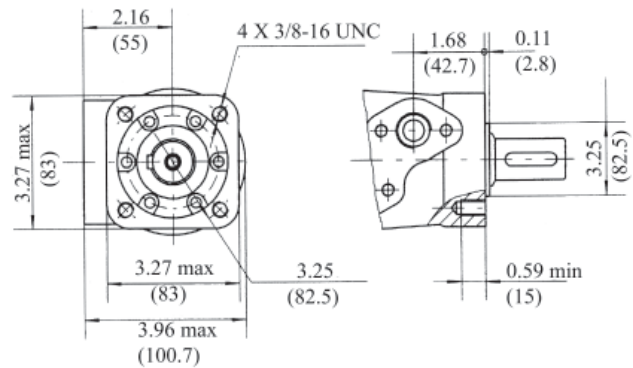
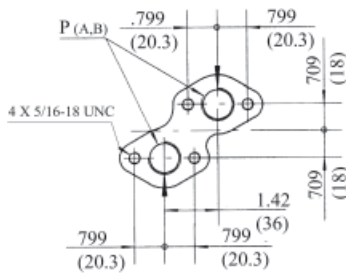
H6 - Magneto

PORT SIZES	SAE	NPT
P (A,B)	7/8-14 SAE	1/2-14 NPTF
T	7/16-20 SAE	7/16-20 SAE

# BMP INSTALLATION DATA



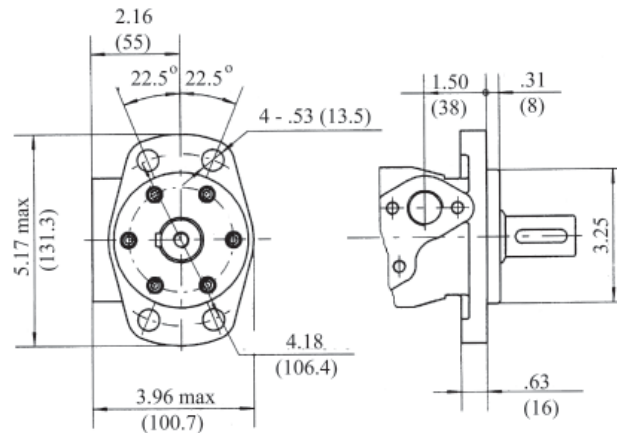
H2 - SAE -"A" 2 BOLT



H4 - SAE -"A" 4 BOLT

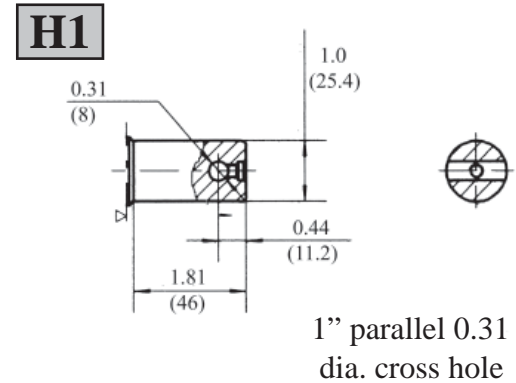
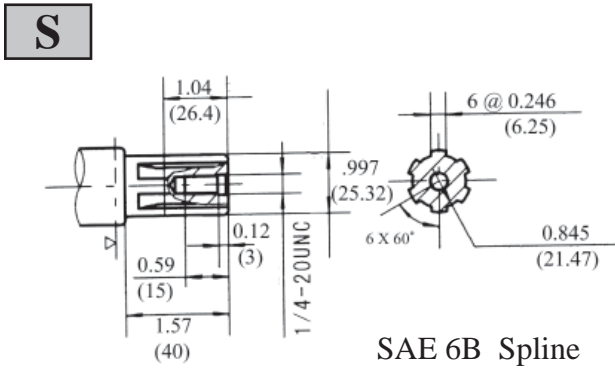
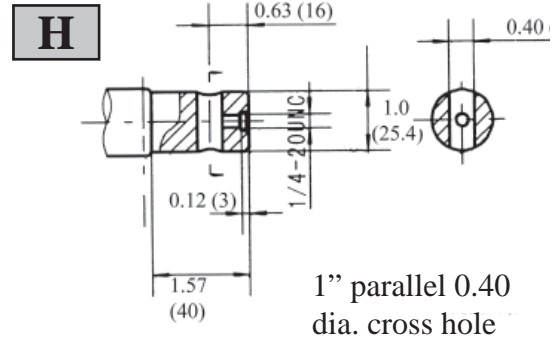
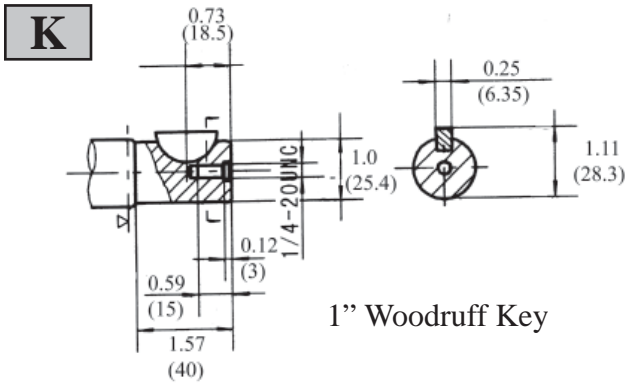
PORT SIZES	SAE	NPT
P (A,B)	7/8-14 SAE	1/2-14 NPTF
T	7/16-20 SAE	7/16-20 SAE

MODEL BMP	L		L1	
	inches	mm	inches	mm
BMP 36	5.36	136	0.27	6.8
BMP 50	5.40	137	0.28	7
BMP 80	5.53	140.5	0.41	10.5
BMP 100	5.63	143	0.51	13
BMP 125	5.75	146	0.63	16
BMP 160	5.94	151	0.83	21
BMP 200	6.18	157	1.02	26
BMP 250	6.34	162	1.26	32
BMP 315	6.77	172	1.65	42
BMP 400	7.16	182	2.04	52

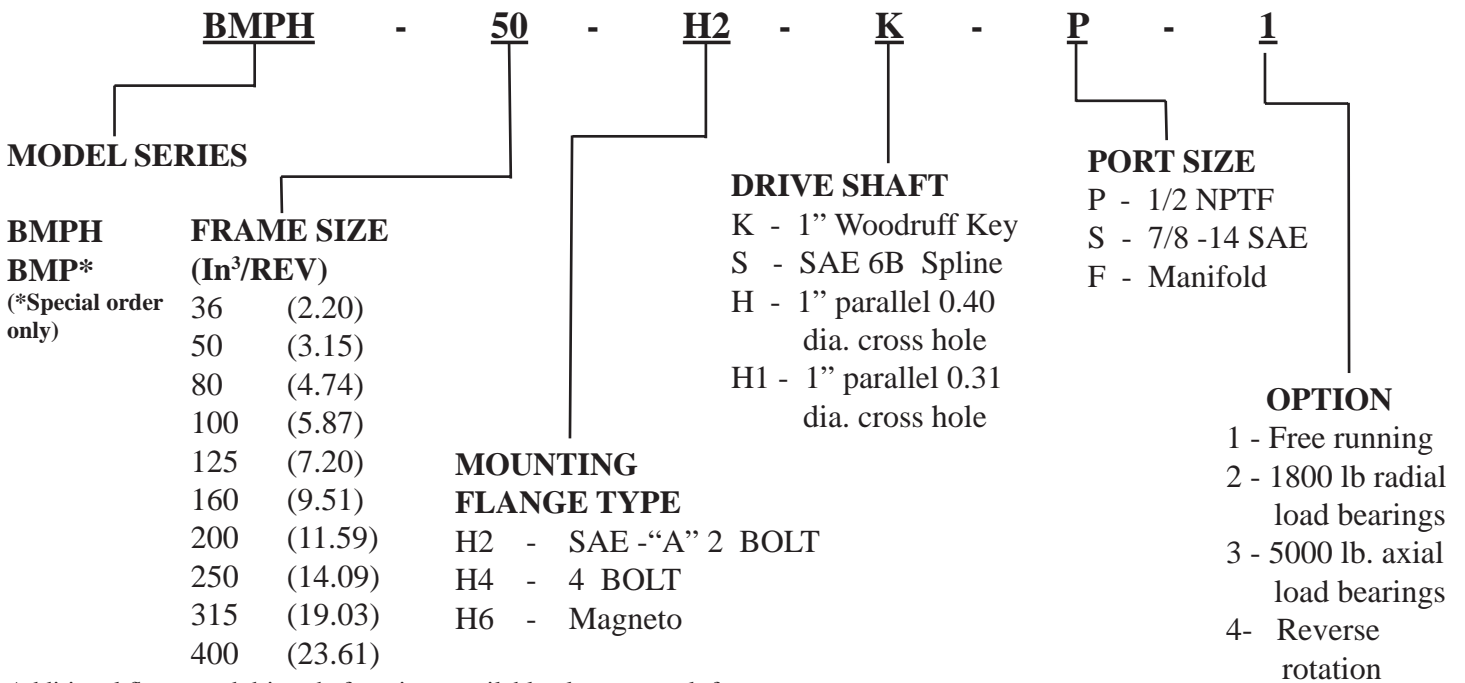


H6 - Magneto

# MODEL BMP & BMPH DRIVE SHAFT DATA



## BMPH & BMP MODEL NUMBER DATA



Additional flange and drive shaft options available please consult factory

<b>BMP/BMPH 36</b>		<b>36 Cm<sup>3</sup>/Rev 2.20 in<sup>3</sup>/Rev</b>					<b>Max Cont.</b>	<b>Max Int.</b>	
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>10 (1470)</b>	<b>11 (1620)</b>	<b>12.5 (1840)</b>	<b>16.5 (2429)</b>
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Nm (in.Lbs) Speed Specification</b>							
	<b>8 (2.10)</b>	13 (115)	24 (212)	29 (256)	34 (300)	43 (380)	48 (424)	55 (486)	74 (654)
		214 rpm	205 rpm	200 rpm	194 rpm	187 rpm	179 rpm	168 rpm	138
	<b>15 (3.95)</b>	13 (115)	25 (221)	29 (256)	34 (300)	43 (380)	48 (424)	56 (495)	75 (663)
		406 rpm	398 rpm	391 rpm	383 rpm	374 rpm	366 rpm	353 rpm	324
	<b>20 (5.25)</b>	13 (115)	24 (212)	29 (256)	34 (300)	43 (380)	48 (424)	56 (495)	76 (672)
		541 rpm	534 rpm	528 rpm	521 rpm	513 rpm	500 rpm	486 rpm	458
	<b>30 (7.90)</b>	12 (106)	24 (212)	29 (256)	34 (300)	43 (380)	48 (424)	56 (495)	76 (672)
		814 rpm	804 rpm	792 rpm	778 rpm	763 rpm	749 rpm	726 rpm	701
<b>Max Cont.</b>	<b>40 (10.50)</b>	12 (106)	23 (203)	28 (247)	32 (283)	41 (362)	47 (415)	55 (486)	75 (663)
		1090 rpm	1078 rpm	1064 rpm	1048 rpm	1024 rpm	998 rpm	977 rpm	943
<b>Max Int.</b>	<b>45 (11.90)</b>	11 (97)	22 (194)	26 (230)	32 (283)	41 (362)	46 (407)	54 (477)	
		1232 rpm	1218 rpm	1196 rpm	1175 rpm	1149 rpm	1118 rpm	1080 rpm	

<b>BMP/BMPH 50</b>		<b>51.7 Cm<sup>3</sup>/Rev 3.15 in<sup>3</sup>/Rev</b>					<b>Max Cont.</b>	<b>Max Int.</b>	
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>10 (1470)</b>	<b>11 (1620)</b>	<b>12.5 (1840)</b>	<b>16.5 (2429)</b>
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Nm (in.Lbs) Speed Specification</b>							
	<b>8 (2.10)</b>	17 (150)	38 (336)	44 (390)	50 (443)	63 (558)	70 (620)	79 (700)	104 (920)
		154 rpm	149 rpm	144 rpm	141 rpm	135 rpm	129 rpm	123 rpm	92 rpm
	<b>15 (3.95)</b>	19 (168)	38 (336)	44 (389)	50 (443)	64 (566)	71 (628)	80 (708)	105 (930)
		292 rpm	286 rpm	238 rpm	277 rpm	273 rpm	267 rpm	262 rpm	231 rpm
	<b>20 (5.25)</b>	17 (150)	38 (336)	44 (389)	51 (451)	64 (566)	71 (628)	80 (708)	107 (947)
		390 rpm	385 rpm	328 rpm	326 rpm	374 rpm	367 rpm	360 rpm	332 rpm
	<b>30 (7.90)</b>	16 (142)	37 (328)	44 (389)	50 (443)	64 (566)	71 (628)	80 (708)	108 (956)
		586 rpm	579 rpm	572 rpm	568 rpm	562 rpm	556 rpm	546 rpm	516 rpm
<b>Max Cont.</b>	<b>45 (11.90)</b>	14 (126)	34 (304)	42 (374)	49 (435)	63 (558)	70 (620)	80 (708)	107 (947)
		879 rpm	868 rpm	862 rpm	855 rpm	849 rpm	840 rpm	833 rpm	799 rpm
<b>Max Int.</b>	<b>50 (13.20)</b>	13 (118)	33 (296)	41 (368)	48 (427)	62 (550)	68 (605)	79 (700)	
		975 rpm	962 rpm	955 rpm	949 rpm	943 rpm	937 rpm	927 rpm	

<b>BMP/BMPH 80</b>		<b>77.7 Cm<sup>3</sup>/Rev 4.74 in<sup>3</sup>/Rev</b>					<b>Max Cont.</b>	<b>Max Int.</b>	
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>10 (1470)</b>	<b>11 (1620)</b>	<b>12.5 (1840)</b>	<b>16.5 (2429)</b>
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Nm (in.Lbs) Speed Specification</b>							
	<b>8 (2.10)</b>	29 (256)	60 (531)	70 (620)	80 (708)	101 (894)	111 (982)	128 (1133)	168 (1487)
		97 rpm	94 rpm	91 rpm	88 rpm	84 rpm	79 rpm	74 rpm	50 rpm
	<b>15 (3.95)</b>	29 (256)	61 (539)	71 (628)	81 (717)	101 (894)	114 (1009)	129 (1142)	170 (1505)
		184 rpm	181 rpm	178 rpm	175 rpm	171 rpm	167 rpm	162 rpm	140 rpm
	<b>20 (5.25)</b>	28 (248)	60 (531)	71 (628)	81 (717)	101 (894)	112 (991)	129 (1142)	170 (1505)
		247 rpm	243 rpm	241 rpm	238 rpm	235 rpm	231 rpm	225 rpm	205 rpm
	<b>30 (7.90)</b>	25 (221)	58 (513)	69 (610)	79 (699)	100 (855)	111 (982)	128 (1133)	171 (1513)
		370 rpm	366 rpm	363 rpm	360 rpm	356 rpm	351 rpm	346 rpm	323 rpm
	<b>35 (9.20)</b>	24 (212)	57 (504)	68 (602)	78 (690)	99 (876)	110 (974)	126 (1115)	171 (1513)
		432 rpm	427 rpm	424 rpm	421 rpm	416 rpm	412 rpm	407 rpm	387 rpm
	<b>45 (11.90)</b>	22 (195)	54 (478)	66 (584)	77 (681)	97 (858)	109 (965)	124 (1097)	169 (1496)
		555 rpm	550 rpm	546 rpm	542 rpm	538 rpm	532 rpm	528 rpm	503 rpm
	<b>50 (13.20)</b>	20 (177)	53 (469)	54 (566)	75 (664)	96 (850)	107 (947)	123 (1089)	168 (1487)
		616 rpm	609 rpm	606 rpm	603 rpm	599 rpm	594 rpm	588 rpm	561 rpm
<b>Max Cont.</b>	<b>60 (15.85)</b>	19 (168)	52 (460)	63 (558)	74 (655)	95 (841)	107 (947)	123 (1089)	168 (1487)
		740 rpm	732 rpm	727 rpm	723 rpm	718 rpm	713 rpm	707 rpm	675 rpm
<b>Max Int.</b>	<b>75 (19.75)</b>	16 (142)	47 (416)	59 (522)	72 (637)	91 (805)	105 (929)	121 (1071)	
		827 rpm	820 rpm	817 rpm	813 rpm	808 rpm	804 rpm	796 rpm	

<b>BMP/BMPH 100</b>		<b>96.2 Cm<sup>3</sup>/Rev 5.87 in<sup>3</sup>/Rev</b>					<b>Max Cont.</b>	<b>Max Int.</b>	
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>10 (1470)</b>	<b>11 (1620)</b>	<b>12.5 (1840)</b>	<b>16.5 (2429)</b>
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Nm (in.Lbs) Speed Specification</b>							
	<b>8 (2.10)</b>	36 (319)	75 (664)	88 (779)	101 (984)	126 (1115)	141 (1248)	160 (1460)	210 (1859)
		78 rpm	75 rpm	73 rpm	70 rpm	67 rpm	63 rpm	56 rpm	34 rpm
	<b>15 (3.95)</b>	35 (310)	75 (664)	89 (788)	101 (894)	128 (1133)	141 (1248)	160 (1416)	213 (1885)
		149 rpm	145 rpm	143 rpm	141 rpm	137 rpm	134 rpm	129 rpm	109 rpm
	<b>20 (5.25)</b>	33 (292)	74 (665)	88 (779)	101 (984)	126 (1115)	140 (1239)	161 (1451)	212 (1876)
		199 rpm	196 rpm	195 rpm	191 rpm	189 rpm	185 rpm	179 rpm	161 rpm
	<b>30 (7.90)</b>	31 (274)	72 (637)	85 (752)	98 (867)	123 (1089)	137 (1212)	157 (1389)	213 (1885)
		299 rpm	296 rpm	293 rpm	291 rpm	288 rpm	284 rpm	280 rpm	259 rpm
	<b>35 (9.20)</b>	29 (257)	69 (611)	83 (735)	96 (850)	121 (1070)	135 (1195)	155 (1372)	212 (1876)
		349 rpm	345 rpm	344 rpm	341 rpm	337 rpm	335 rpm	330 rpm	310 rpm
	<b>45 (11.90)</b>	28 (248)	66 (584)	81 (717)	94 (832)	119 (1053)	133 (1177)	153 (1354)	208 (1841)
	449 rpm	445 rpm	442 rpm	439 rpm	435 rpm	432 rpm	428 rpm	405 rpm	
<b>50 (13.20)</b>	24 (217)	65 (575)	78 (690)	93 (823)	117 (1035)	132 (1168)	152 (1345)	207 (1832)	
	498 rpm	493 rpm	491 rpm	490 rpm	486 rpm	481 rpm	477 rpm	457 rpm	
<b>Max Cont.</b>	<b>60 (15.85)</b>	23 (204)	63 (558)	77 (681)	92 (814)	116 (1027)	131 (1159)	151 (1336)	207 (1832)
		598 rpm	593 rpm	589 rpm	587 rpm	583 rpm	578 rpm	573 rpm	549 rpm
<b>Max Int.</b>	<b>75 (19.75)</b>	20 (117)	57 (504)	74 (655)	88 (779)	113 (1000)	129 (1142)	150 (1328)	
		673 rpm	667 rpm	664 rpm	661 rpm	657 rpm	654 rpm	648 rpm	

<b>BMP/BMPH 125</b>		<b>117.9 Cm<sup>3</sup>/Rev 7.20 in<sup>3</sup>/Rev</b>					<b>Max Cont.</b>	<b>Max Int.</b>	
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>10 (1470)</b>	<b>11 (1620)</b>	<b>12.5 (1840)</b>	<b>16.5 (2429)</b>
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Nm (in.Lbs) Speed Specification</b>							
	<b>8 (2.10)</b>	45 (398)	94 (832)	111 (982)	127 (1124)	158 (1398)	176 (1558)	201 (1719)	263 (2328)
		62 rpm	60 rpm	59 rpm	56 rpm	54 rpm	50 rpm	46 rpm	26 rpm
	<b>15 (3.95)</b>	44 (389)	94 (832)	111 (982)	127 (1124)	160 (1416)	177 (1566)	202 (1788)	267 (2363)
		118 rpm	115 rpm	114 rpm	113 rpm	110 rpm	108 rpm	105 rpm	86 rpm
	<b>20 (5.25)</b>	42 (372)	93 (823)	110 (974)	127 (1124)	159 (1407)	176 (1558)	202 (1788)	268 (2372)
		158 rpm	156 rpm	155 rpm	152 rpm	150 rpm	148 rpm	144 rpm	129 rpm
	<b>30 (7.90)</b>	40 (354)	91 (805)	108 (956)	124 (1097)	156 (1381)	174 (1540)	198 (1752)	268 (378)
		238 rpm	235 rpm	233 rpm	231 rpm	229 rpm	225 rpm	222 rpm	205 rpm
	<b>35 (9.20)</b>	38 (356)	89 (788)	106 (938)	122 (1080)	154 (1363)	172 (1522)	196 (1735)	267 (2363)
		227 rpm	274 rpm	273 rpm	272 rpm	268 rpm	266 rpm	263 rpm	247 rpm
	<b>45 (11.90)</b>	37 (327)	85 (752)	103 (912)	120 (1062)	151 (1336)	170 (1505)	194 (1717)	263 (2328)
	356 rpm	353 rpm	352 rpm	349 rpm	347 rpm	343 rpm	341 rpm	321 rpm	
<b>50 (13.20)</b>	33 (292)	84 (743)	100 (885)	118 (1044)	149 (1319)	167 (1478)	192 (1699)	260 (2301)	
	396 rpm	392 rpm	390 rpm	390 rpm	387 rpm	383 rpm	380 rpm	363 rpm	
<b>Max Cont.</b>	<b>60 (15.85)</b>	32 (283)	81 (717)	99 (876)	116 (1027)	147 (1301)	166 (1469)	191 (1690)	259 (2292)
		421 rpm	471 rpm	469 rpm	467 rpm	465 rpm	461 rpm	457 rpm	436 rpm
<b>Max Int.</b>	<b>75 (20.8)</b>	26 (230)	75 (664)	93 (823)	110 (974)	142 (1257)	159 (1407)	185 (1837)	
		594 rpm	588 rpm	587 rpm	581 rpm	576 rpm	584 rpm	579 rpm	

<b>BMP/BMPH 160</b>		<b>156 Cm<sup>3</sup>/Rev 9.51 in<sup>3</sup>/Rev</b>					<b>Max Cont.</b>	<b>Max Int.</b>	
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>10 (1470)</b>	<b>11 (1620)</b>	<b>14 (2060)</b>	<b>16.5 (2429)</b>
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Nm (in.Lbs) Speed Specification</b>							
	<b>8 (2.10)</b>	57 (505)	121(1070)	142 (1260)	162 (1435)	202 (1790)	225 (1990)	243 (2150)	334 (2955)
		48 rpm	47 rpm	46 rpm	44 rpm	42 rpm	40 rpm	39 rpm	24 rpm
	<b>15 (3.95)</b>	56 (496)	121 (1071)	142 (1260)	162 (1435)	204 (1805)	227 (2010)	245 (2170)	341 (3020)
		93 rpm	90 rpm	90 rpm	89 rpm	88 rpm	86 rpm	86 rpm	75 rpm
	<b>20 (5.25)</b>	55 (487)	120 (1060)	140 (1240)	162 (1435)	203 (1795)	226 (2000)	244 (2160)	342 (3025)
		123 rpm	122 rpm	121 rpm	119 rpm	117 rpm	116 rpm	116 rpm	104 rpm
	<b>30 (7.90)</b>	54 (478)	117 (1035)	139 (1230)	160 (1415)	201 (1780)	224 (1980)	242 (2140)	340 (3010)
		185 rpm	183 rpm	182 rpm	180 rpm	178 rpm	176 rpm	175 rpm	163 rpm
	<b>35 (9.20)</b>	52 (460)	115 (1020)	137 (1215)	159 (1410)	199 (1760)	220 (1950)	242 (2140)	337 (2980)
		215 rpm	213 rpm	213 rpm	211 rpm	210 rpm	208 rpm	207 rpm	196 rpm
	<b>45 (11.90)</b>	50 (442)	112 (995)	134 (1185)	156 (1380)	196 (1735)	220 (1950)	238 (2105)	335 (2965)
	277 rpm	275 rpm	275 rpm	273 rpm	271 rpm	269 rpm	268 rpm	256 rpm	
<b>50 (13.20)</b>	45 (398)	110 (975)	132 (1170)	153 (1355)	194 (1720)	216 (1975)	233 (1975)	330 (2920)	
	308 rpm	307 rpm	305 rpm	303 rpm	302 rpm	299 rpm	299 rpm	287 rpm	
<b>Max Cont.</b>	<b>60 (15.85)</b>	44 (390)	106 (940)	130 (1150)	151 (1340)	192 (1670)	214 (1895)	231 (2045)	328 (2905)
		370 rpm	368 rpm	368 rpm	364 rpm	362 rpm	360 rpm	359 rpm	347 rpm
<b>Max Int.</b>	<b>75 (19.75)</b>	32 (283)	96 (850)	119 (1055)	142 (1260)	182 (1610)	205 (1815)	222 (19650)	
		458 rpm	463 rpm	457 rpm	456 rpm	453 rpm	451 rpm	451 rpm	



<b>BMP/BMPH 200</b>		<b>190 Cm<sup>3</sup>/Rev 11.59 in<sup>3</sup>/Rev</b>				<b>Max Cont</b>	<b>Max Int.</b>		
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>10 (1470)</b>	<b>11 (1620)</b>	<b>15 (2208)</b>	
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Mn (in.Lbs) Speed Specification</b>							
	<b>8 (2.10)</b>	73 (646)	153 (1354)	179 (1584)	204 (1805)	256 (2266)	283 (2505)	385 (3407)	
		39 rpm	37 rpm	36 rpm	35 rpm	32 rpm	28 rpm	12 rpm	
	<b>15 (3.95)</b>	73 (646)	152 (1345)	180 (1593)	205 (1814)	259 (2292)	266 (2354)	390 (3407)	
		74 rpm	72 rpm	71 rpm	71 rpm	70 rpm	68 rpm	58 rpm	
	<b>20 (5.25)</b>	71 (628)	151 (1336)	178 (1575)	204 (1805)	256 (2266)	285 (2522)	390 (3452)	
		99 rpm	98 rpm	97 rpm	95 rpm	94 rpm	91 rpm	81 rpm	
	<b>30 (7.90)</b>	68 (602)	149 (1319)	175 (1549)	202 (1788)	254 (2248)	283 (2505)	388 (3434)	
		148 rpm	147 rpm	146 rpm	144 rpm	142 rpm	139 rpm	128 rpm	
	<b>35 (9.20)</b>	65 (575)	146 (1292)	173 (1531)	200 (1770)	252 (2230)	281 (2487)	386 (3416)	
		173 rpm	172 rpm	171 rpm	169 rpm	168 rpm	165 rpm	155 rpm	
	<b>45 (11.9)</b>	63 (558)	142 (1237)	170 (1505)	196 (1735)	247 (2186)	277 (2451)	382 (3380)	
		222 rpm	221 rpm	220 rpm	218 rpm	216 rpm	214 rpm	203 rpm	
	<b>50 (13.2)</b>	58 (513)	138 (1221)	166 (1469)	193 (1708)	244 (2159)	272 (2407)	378 (3345)	
	247 rpm	245 rpm	244 rpm	244 rpm	242 rpm	239 rpm	229 rpm		
<b>Max Cont.</b>	<b>60 (15.85)</b>	56 (496)	136 (1204)	163 (1443)	191 (1690)	241 (2133)	269 (2381)	375 (3319)	
		296 rpm	294 rpm	293 rpm	292 rpm	290 rpm	287 rpm	277 rpm	
<b>Max Int.</b>	<b>75 (19.75)</b>	42 (372)	121 (1070)	150 (1328)	177 (1566)	226 (2000)			
		370 rpm	367 rpm	367 rpm	365 rpm	364 rpm			

<b>BMP/BMPH 250</b>		<b>231 Cm<sup>3</sup>/Rev 14.09 in<sup>3</sup>/Rev</b>				<b>Max Cont</b>	<b>Max Int.</b>		
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>10 (1470)</b>	<b>11 (1620)</b>	<b>14 (2060)</b>	
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Nm (in.Lbs) Speed Specification</b>							
	<b>8 (2.10)</b>	93 (823)	195 (1726)	226 (2000)	259 (2292)	325 (2876)	357 (3159)		
		31 rpm	29 rpm	29 rpm	27 rpm	25 rpm	24 rpm		
	<b>15 (3.95)</b>	92 (814)	192 (1699)	226 (2000)	260 (2301)	325 (2876)	360 (3186)	456 (4036)	
		60 rpm	58 rpm	57 rpm	57 rpm	55 rpm	55 rpm		
	<b>20 (5.25)</b>	90 (797)	191 (1690)	225 (1991)	258 (2283)	322 (2850)	356 (3151)	455 (4027)	
		79 rpm	78 rpm	77 rpm	76 rpm	75 rpm	75 rpm	65 rpm	
	<b>30 (7.90)</b>	86 (761)	188 (1664)	221 (1956)	255 (2257)	319 (2823)	354 (3153)	452 (4000)	
		119 rpm	118 rpm	117 rpm	116 rpm	114 rpm	114 rpm	103 rpm	
	<b>35 (9.20)</b>	82 (726)	184 (1628)	217 (1920)	251 (2221)	317 (2805)	350 (3098)	448 (3965)	
		138 rpm	137 rpm	135 rpm	133 rpm	133 rpm	124 rpm		
	<b>45 (11.9)</b>	79 (699)	179 (1584)	214 (1894)	246 (2177)	312 (2761)	345 (3053)	442 (3912)	
		179 rpm	178 rpm	177 rpm	176 rpm	173 rpm	173 rpm	163 rpm	
	<b>50 (13.2)</b>	74 (655)	174 (1540)	209 (1850)	243 (2151)	306 (2708)	339 (3000)	438 (3876)	
	198 rpm	197 rpm	197 rpm	195 rpm	194 rpm	193 rpm	185 rpm		
<b>Max Cont.</b>	<b>60 (15.85)</b>	71 (628)	171 (1513)	206 (1823)	239 (2115)	303 (2682)	336 (2974)	433 (3832)	
		237 rpm	236 rpm	236 rpm	234 rpm	232 rpm	232 rpm	224 rpm	
<b>Max Int.</b>	<b>75 (19.75)</b>	53 (469)	153 (1353)	189 (1673)	221 (1956)	280 (2478)	312 (2761)		
		297 rpm	295 rpm	295 rpm	293 rpm	292 rpm	291 rpm		

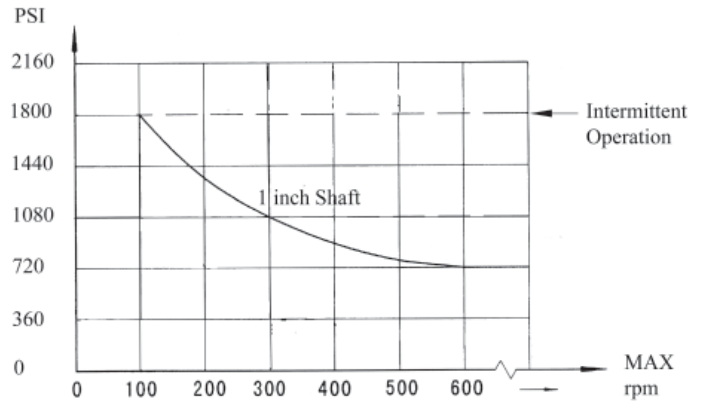
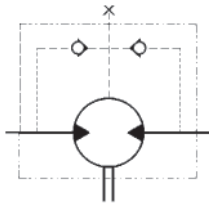
<b>BMP/BMPH 315</b>		<b>312 Cm<sup>3</sup>/Rev 19.03 in<sup>3</sup>/Rev</b>				<b>Max Cont</b>	<b>Max Int.</b>	
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>10 (1470)</b>	<b>12.5 (1840)</b>	
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Nm (in.Lbs) Speed Specification</b>						
	<b>8 (2.10)</b>	116 (1027)	243 (2151)	282 (2496)	313 (2770)	388 (3434)		
		25 rpm	24 rpm	22 rpm	16 rpm	13 rpm		
	<b>15 (3.95)</b>	115 (1018)	243 (2151)	284 (2513)	324 (2867)	406 (3593)	503 (4452)	
		47 rpm	46 rpm	45 rpm	43 rpm	41 rpm	20 rpm	
	<b>20 (5.25)</b>	114 (1009)	242 (2142)	282 (2496)	323 (2859)	405 (3584)	505 (4469)	
		63 rpm	62 rpm	61 rpm	58 rpm	56 rpm	44 rpm	
	<b>30 (7.90)</b>	109 (956)	237 (2097)	277 (2451)	319 (2823)	401 (3549)	501 (4433)	
		94 rpm	93 rpm	92 rpm	90 rpm	88 rpm	77 rpm	
	<b>35 (9.20)</b>	105 (929)	232 (2053)	273 (2416)	314 (2779)	397 (3513)	497 (4398)	
		110 rpm	109 rpm	108 rpm	106 rpm	103 rpm	93 rpm	
	<b>45 (11.9)</b>	99 (876)	226 (2000)	268 (2372)	309 (2735)	391 (3460)	491 (4345)	
		141 rpm	141 rpm	139 rpm	137 rpm	135 rpm	124 rpm	
	<b>50 (13.2)</b>	92 (814)	218 (1929)	262 (2319)	304 (3960)	384 (3398)	486 (4301)	
	157 rpm	157 rpm	155 rpm	154 rpm	151 rpm	141 rpm		
<b>Max Cont.</b>	<b>60 (15.85)</b>	89 (788)	215 (1903)	258 (2283)	299 (2646)	379 (3554)	479 (4239)	
		189 rpm	188 rpm	187 rpm	185 rpm	182 rpm	171 rpm	
<b>Max Int.</b>	<b>75 (19.75)</b>	69 (611)	194 (1717)	237 (2097)	278 (2460)	355 (3141)		
		236 rpm	235 rpm	234 rpm	232 rpm	229 rpm		

<b>BMP/BMPH 400</b>		<b>387 Cm<sup>3</sup>/Rev 23.61 in<sup>3</sup>/Rev</b>				<b>Max Cont</b>	<b>Max Int.</b>	
<b>Pressure Mpa (psi)</b>		<b>3 (440)</b>	<b>6 (880)</b>	<b>7 (1030)</b>	<b>8 (1175)</b>	<b>8.5 (1251)</b>	<b>12.5 (1840)</b>	
<b>F L O W</b>	<b>LPM (GPM)</b>	<b>Torque Nm (in.Lbs) Speed Specification</b>						
	<b>8 (2.10)</b>	147 (140)	304 (2690)	354 (3133)				
		20 rpm	19 rpm	16 rpm				
	<b>15 (3.95)</b>	147 (1301)	308 (2726)	359 (3177)	408 (3611)	435 (3850)	532 (4708)	
		37 rpm	36 rpm	35 rpm	33 rpm	32 rpm	25 rpm	
	<b>20 (5.25)</b>	144 (1274)	305 (2699)	358 (3168)	406 (3602)	435 (34850)	533 (4717)	
		50 rpm	49 rpm	47 rpm	45 rpm	43 rpm	38 rpm	
	<b>30 (7.90)</b>	139 (1230)	302 (2664)	352 (3115)	402 (3558)	430 (3806)	530 (4691)	
		74 rpm	73 rpm	72 rpm	70 rpm	68 rpm	62 rpm	
	<b>35 (9.20)</b>	133 (1177)	294 (2602)	345 (3053)	396 (3505)	423 (3744)	525 (4646)	
		86 rpm	86 rpm	85 rpm	82 rpm	80 rpm	75 rpm	
	<b>45 (11.9)</b>	125 (1106)	287 (2540)	339 (3000)	389 (3443)	416 (3682)	517 (4575)	
		111 rpm	111 rpm	109 rpm	106 rpm	105 rpm	100 rpm	
	<b>50 (13.2)</b>	117 (1035)	278 (2460)	330 (2920)	282 (3381)	409 (3620)	509 (4505)	
	124 rpm	124 rpm	122 rpm	120 rpm	119 rpm	113 rpm		
<b>Max Cont.</b>	<b>60 (15.85)</b>	112 (991)	274 (2425)	326 (2177)	377 (3337)	404 (3575)	505 (4469)	
		149 rpm	149 rpm	147 rpm	145 rpm	144 rpm	137 rpm	
<b>Max Int.</b>	<b>75 (19.75)</b>	88 (779)	246 (2177)	298 (2637)	351 (3106)	376 (3328)		
		185 rpm	185 rpm	185 rpm	182 rpm	181 rpm		



# MODEL BMPH/BMP TECHNICAL DATA

## SHAFT SEAL RATED PRESSURE



## CASE DRAIN

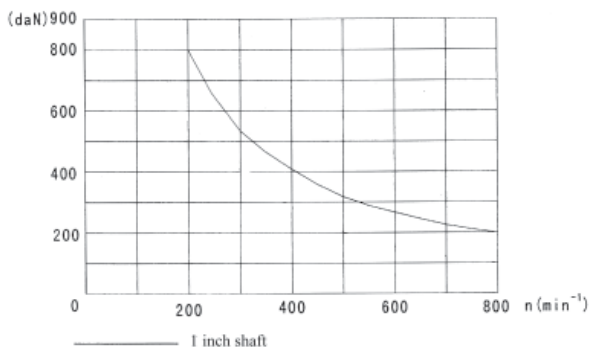
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the drain line is used the pressure exerted on the shaft seal is equal to the return line pressure.

## SHAFT ROTATION DIRECTION

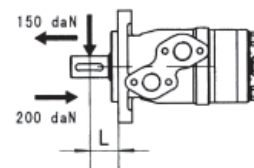


## RADIAL FORCES

Status of the shaft's radial force



$$F_r = \frac{800}{n} \cdot \frac{2500}{95+1} \text{ daN}$$



$F_r$  = Radial Force (daN)  
 $L$  = Distance (mm)  
 $n$  = Speed (rpm)

Rhomb-flange  $L=30\text{mm}$   
 Square-flange  $L=24\text{mm}$

# BMPH CROSS REFERENCE DATA

DISPLACEMENT FOR CHIEF MOTOR Cm <sup>3</sup> /Rev (In <sup>3</sup> /Rev)													
MOUNT	SHAFT	PORTS	BRAND	51.7 (3.15)	77.7 (4.74)	96.2 (5.87)	117.9 (7.2)	155.5 (9.5)	189.9 (11.6)	231 (14.1)	312 (19)	387 (23.6)	
4 BOLT FLANGE	Woodruff Keyed	1/2" NPT	CHIEF PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H4-K-P	BMPH-80-H4-K-P	BMPH-100-H4-K-P	BMPH-125-H4-K-P	BMPH-160-H4-K-P	BMPH-200-H4-K-P	BMPH-250-H4-K-P	BMPH-315-H4-K-P	BMPH-400-H4-K-P	
				ADM50-4RP	ADM75-4RP	ADM100-4RP	N/A	ADM150-4RP	ADM250-4RP	ADM300-4RP	ADM400-4RP		
				101-1001	101-1002	101-1003	101-1755	101-1004	101-1006	101-1007	101-1008		
				151-2121	151-2122	151-2123	151-2124	151-2125	151-2127	151-2128	151-2129		
				BMPH-50-H4-K-S	BMPH-80-H4-K-S	BMPH-100-H4-K-S	N/A	BMPH-160-H4-K-S	BMPH-250-H4-K-S	BMPH-315-H4-K-S	BMPH-400-H4-K-S		
				ADM50-4RO	ADM75-4RO	ADM100-4RO	101-1011	ADM150-4RO	ADM250-4RO	ADM300-4RO	ADM400-4RO		
	101-1009	101-1010	101-1011	101-1751	101-1012	101-1014	101-1015	101-1016					
	151-2041	151-2042	151-2043	151-2044	151-2045	151-2047	151-2048	151-2049					
	4 BOLT FLANGE	Woodruff Keyed	Manifold	CHIEF PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H4-K-F	BMPH-80-H4-K-F	BMPH-100-H4-K-F	BMPH-125-H4-K-F	BMPH-160-H4-K-F	BMPH-200-H4-K-F	BMPH-250-H4-K-F	BMPH-315-H4-K-F	BMPH-400-H4-K-F
					ADM50-4RT	ADM75-4RT	ADM100-4RT	N/A	ADM150-4RT	ADM250-4RT	ADM300-4RT	ADM400-4RT	
					101-1017	101-1018	101-1019	101-1759	101-1020	101-1022	101-1023	101-1024	
					151-2201	151-2202	151-2203	151-2201	151-2205	151-2207	151-2208	151-2209	
BMPH-50-H4-S-P					BMPH-80-H4-S-P	BMPH-100-H4-S-P	BMPH-125-H4-S-P	BMPH-160-H4-S-P	BMPH-250-H4-S-P	BMPH-315-H4-S-P	BMPH-400-H4-S-P		
ADM50-4SP					ADM75-4SP	ADM100-4SP	N/A	ADM150-4SP	ADM250-4SP	ADM300-4SP	ADM400-4SP		
101-1049	101-1050	101-1051	101-1766	101-1052	101-1054	101-1055	101-1056						
151-2131	151-2132	151-2133	151-2134	151-2135	151-2137	151-2138	151-2139						
2 BOLT FLANGE	Woodruff Keyed	#10 SAE	CHIEF PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H4-S-S	BMPH-80-H4-S-S	BMPH-100-H4-S-S	BMPH-125-H4-S-S	BMPH-160-H4-S-S	BMPH-200-H4-S-S	BMPH-250-H4-S-S	BMPH-315-H4-S-S	BMPH-400-H4-S-S	
				ADM50-4SO	ADM75-4SO	ADM100-4SO	N/A	ADM150-4SO	ADM250-4SO	ADM300-4SO	ADM400-4SO		
				101-1057	101-1058	101-1059	101-1872	101-1060	101-1062	101-1063	101-1064		
				151-2051	151-2052	151-2053	151-2054	151-2055	151-2057	151-2058	151-2059		
				BMPH-50-H4-S-F	BMPH-80-H4-S-F	BMPH-100-H4-S-F	BMPH-125-H4-S-F	BMPH-160-H4-S-F	BMPH-250-H4-S-F	BMPH-315-H4-S-F	BMPH-400-H4-S-F		
				ADM50-4ST	ADM75-4ST	ADM100-4ST	N/A	ADM150-4ST	ADM250-4ST	ADM300-4ST	ADM400-4ST		
	101-1065	101-1066	101-1067	101-1770	101-1068	101-1070	101-1071	101-1072					
	151-2211	151-2212	151-2213	151-2214	151-2215	151-2217	151-2218	151-2219					
	2 BOLT FLANGE	Woodruff Keyed	1/2" NPT	CHIEF PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H2-K-P	BMPH-80-H2-K-P	BMPH-100-H2-K-P	BMPH-125-H2-K-P	BMPH-160-H2-K-P	BMPH-200-H2-K-P	BMPH-250-H2-K-P	BMPH-315-H2-K-P	BMPH-400-H2-K-P
					ADM50-2RP	ADM75-2RP	ADM100-2RP	N/A	ADM150-2RP	ADM250-2RP	ADM300-2RP	ADM400-2RP	
					101-1025	101-1026	101-1027	101-1706	101-1028	101-1030	101-1031	101-1032	
					151-2081	151-2082	151-2083	151-2084	151-2085	151-2087	151-2088	151-2089	
BMPH-50-H2-K-S					BMPH-80-H2-K-S	BMPH-100-H2-K-S	BMPH-125-H2-K-S	BMPH-160-H2-K-S	BMPH-250-H2-K-S	BMPH-315-H2-K-S	BMPH-400-H2-K-S		
ADM50-2RO					ADM75-2RO	ADM100-2RO	N/A	ADM150-2RO	ADM250-2RO	ADM300-2RO	ADM400-2RO		
101-1033	101-1034	101-1035	101-1702	101-1036	101-1038	101-1039	101-1040						
151-2001	151-2002	151-2003	151-2004	151-2005	151-2007	151-2008	151-2009						
2 BOLT FLANGE	Woodruff Keyed	Manifold	CHIEF PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H2-K-F	BMPH-80-H2-K-F	BMPH-100-H2-K-F	BMPH-125-H2-K-F	BMPH-160-H2-K-F	BMPH-200-H2-K-F	BMPH-250-H2-K-F	BMPH-315-H2-K-F	BMPH-400-H2-K-F	
				ADM50-4RT	ADM75-4RT	ADM100-4RT	N/A	ADM150-4RT	ADM250-4RT	ADM300-4RT	ADM400-4RT		
				101-1041	101-1042	101-1043	101-11710	101-1044	101-1046	101-1047	101-1048		
				151-2161	151-2162	151-2163	151-2164	151-2165	151-2167	151-2168	151-2169		
				BMPH-50-H2-S-P	BMPH-80-H2-S-P	BMPH-100-H2-S-P	BMPH-125-H2-S-P	BMPH-160-H2-S-P	BMPH-250-H2-S-P	BMPH-315-H2-S-P	BMPH-400-H2-S-P		
				ADM50-2SP	ADM75-2SP	ADM100-2SP	N/A	ADM150-2SP	ADM250-2SP	ADM300-2SP	ADM400-2SP		
	101-1073	101-1074	101-1075	101-1727	101-1076	101-1078	101-1079	101-1080					
	151-2091	151-2092	151-2093	151-2094	151-2095	151-2097	151-2098	151-2099					
	2 BOLT FLANGE	Woodruff Keyed	#10 SAE	CHIEF PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H2-S-S	BMPH-80-H2-S-S	BMPH-100-H2-S-S	BMPH-125-H2-S-S	BMPH-160-H2-S-S	BMPH-200-H2-S-S	BMPH-250-H2-S-S	BMPH-315-H2-S-S	BMPH-400-H2-S-S
					ADM50-2SO	ADM75-2SO	ADM100-2SO	N/A	ADM150-2SO	ADM250-2SO	ADM300-2SO	ADM400-2SO	
					101-1081	101-1082	101-1083	101-1723	101-1084	101-1086	101-1087	101-1088	
					151-2011	151-2012	151-2013	151-2014	151-2015	151-2017	151-2018	151-2019	
BMPH-50-H2-S-F					BMPH-80-H2-S-F	BMPH-100-H2-S-F	BMPH-125-H2-S-F	BMPH-160-H2-S-F	BMPH-250-H2-S-F	BMPH-300-H2-S-F	BMPH-400-H2-S-F		
ADM50-2ST					ADM75-2ST	ADM100-2ST	N/A	ADM150-2ST	ADM250-2ST	ADM300-2ST	ADM400-2ST		
101-1089	101-1090	101-1091	101-1731	101-1092	101-1094	101-1095	101-1096						
151-2171	151-2172	151-2173	151-2174	151-2175	151-2177	151-2178	151-2179						

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Note: The cross reference information in this chart is to be used only as a reference for guideline purposes only. After selecting a model from above, review motor specifications to determine compatibility with specific application.