



**ANFIELD**

**Orbital Motors**





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# Introduction



Anfield introduces their range of INTERCHANGEABLE Low Speed-High Torque Hydraulic Motors.

This extensive product range of Multi Displacement LSHT hydraulic motors are manufactured in accordance with ISO 9001-2008 quality standards and have been accepted world wide as a competitively priced, high quality gerotor type design product. These motors are interchangeable with other leading Domestic and European Manufacturers. Performance driven, these products are available from stock throughout the North American market from our extensive distributor network.

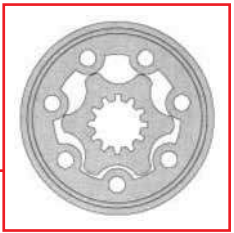
## USER GUIDE

For optimal utilization of these motors the following is recommended.

1. Normal oil operating temperature should be 70 to 150 degrees F (20 to 60 degrees C).
2. Maximum operating temperature should not exceed 190 degrees F. (90 degrees C).
3. Filtration level per ISO Cleanliness Code level 18/3.
4. Minimum oil viscosity should be 100 SUS.
5. Motors should be operated at less than 30% of rated performance for the first hour of operation.
6. Simultaneous maximum torque and maximum speed is NOT recommended.

## TECHNICAL DATA

Model	Distributor type	Displacement		Maximum Operating Pressure		Speed RPM
		in <sup>3</sup> /rev	cm <sup>3</sup> /rev	PSI	MPa	
<b>BMM</b>	Axial	0.5-3.05	8-50	2030	14	30-1950
<b>BMP/BMPH</b>	Axial	3-24	50-400	2400	16.3	30-880
<b>BMR/BMRS</b>	Axial	3-23	50-375	3000	20	30-970
<b>BMH</b>	Axial	12-30	200-500	3000	20	30-430
<b>BMSY</b>	Disc	5-23	80-375	3250	22.5	30-800
<b>BMT</b>	Disc	10-49	160-800	3400	24	30-705
<b>BMV</b>	Disc	19-49	315-800	4000	28	10-446
<b>BMER</b>	Axial	7.2-45.45	118-745	3481	24	30-490



The BMM GEROTOR 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 9001-2008 quality system.

## BMM TECHNICAL SPECIFICATIONS

DISTRIBUTION TYPE			BMM 8	BMM 12.5	BMM 20	BMM 32	BMM 40	BMM 50
GEOMETRIC DISPLACEMENT	[in <sup>3</sup> /rev.]		[.50]	[.79]	[1.21]	[1.93]	[2.43]	[3.07]
	cm <sup>3</sup> /rev.		<b>8.2</b>	<b>12.9</b>	<b>19.9</b>	<b>31.6</b>	<b>39.8</b>	<b>50.3</b>
MAX. SPEED RPM	RATED		1537	1256	814	513	452	358
	CONT.		1950	1550	1000	630	500	400
	<b>INT.</b>		<b>2450</b>	<b>1940</b>	<b>1250</b>	<b>800</b>	<b>630</b>	<b>500</b>
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[71]	[115]	[168]	[274]	[327]	[292]
		<b>N*M</b>	<b>8</b>	<b>13</b>	<b>19</b>	<b>31</b>	<b>37</b>	<b>33</b>
	CONT.	[LB. IN.]	[97]	[142]	[221]	[354]	[398]	[407]
		<b>N*M</b>	<b>11</b>	<b>16</b>	<b>25</b>	<b>40</b>	<b>45</b>	<b>46</b>
	INT.	[LB. IN.]	[133]	[203]	[310]	[504]	[619]	[778]
		<b>N*M</b>	<b>15</b>	<b>23</b>	<b>35</b>	<b>57</b>	<b>70</b>	<b>88</b>
	PEAK	[LB. IN.]	[186]	[292]	[451]	[566]	[725]	[884]
		<b>N*M</b>	<b>21</b>	<b>33</b>	<b>51</b>	<b>64</b>	<b>82</b>	<b>100</b>
MAX. OUTPUT [HP] KW	RATED	[HP]	[1.7]	[2.3]	[2.3]	[2.3]	[2.3]	[1.6]
		<b>KW</b>	<b>1.3</b>	<b>1.7</b>	<b>1.7</b>	<b>1.7</b>	<b>1.7</b>	<b>1.2</b>
	CONT.	[HP]	[2.4]	[3.2]	[3.2]	[3.2]	[2.9]	[2.4]
		<b>KW</b>	<b>1.8</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>2.2</b>	<b>1.8</b>
	INT.	[HP]	[3.4]	[4.3]	[4.3]	[4.3]	[4.3]	[4.3]
		<b>KW</b>	<b>2.6</b>	<b>3.2</b>	<b>3.2</b>	<b>3.2</b>	<b>3.2</b>	<b>3.2</b>
MAX. PRES- SURE DROP [PSI] MPa	RATED	[PSI]	[1305]	[1305]	[1305]	[1305]	[1232]	[870]
		<b>MPa</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>8.5</b>	<b>6</b>
	CONT.	[PSI]	[1450]	[1450]	[1450]	[1450]	[1305]	[1015]
		<b>MPa</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>7</b>
	INT.	[PSI]	[2030]	[2030]	[2030]	[2030]	[2030]	[2030]
		<b>MPa</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
	PEAK	[PSI]	[2900]	[2900]	[2900]	[2320]	[2320]	[2320]
		<b>MPa</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>16</b>	<b>16</b>	<b>16</b>
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[3.7]	[4.7]	[4.7]	[4.7]	[5.2]	[5.2]
		<b>L/MIN</b>	<b>14</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>20</b>	<b>20</b>
	CONT.	[GPM]	[4.2]	[5.2]	[5.2]	[5.2]	[5.2]	[5.2]
		<b>L/MIN</b>	<b>16</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>
	INT.	[GPM]	[5.2]	[6.6]	[6.6]	[6.6]	[6.6]	[6.6]
		<b>L/MIN</b>	<b>20</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>
WEIGHT [LB] KG	[LB]	[4.2]	[4.4]	[4.6]	[4.9]	[5.1]	[5.3]	
	<b>KG</b>	<b>1.9</b>	<b>2</b>	<b>2.1</b>	<b>2.2</b>	<b>2.3</b>	<b>2.4</b>	

- Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- Continuous pressure: Max. value of operating motor continuously.
- Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- Peak pressure: Max. value of operating motor in 0.6 second per minute.

# BMM PERFORMANCE DATA

**BMM 8** [0.50 in<sup>3</sup>/rev] 8.2 cm<sup>3</sup>/rev. Max cont. Max int.

		[507]	[725]	[1015]	[1450]	[1740]	[2030]	[PSI]
		3.5	5	7	10	12	14	MPa
GPM	[0.53]	[27]	[44]	[71]	[88]	[106]	[124]	
	2	<b>228</b>	<b>218</b>	<b>206</b>	<b>156</b>	<b>111</b>	<b>58</b>	
L/min	[1.1]	[27]	[44]	[62]	[97]	[115]	[133]	
	4	<b>474</b>	<b>471</b>	<b>463</b>	<b>426</b>	<b>391</b>	<b>331</b>	
Flow (L/min)	[2.1]	[27]	[44]	[62]	[97]	[115]	[133]	
	8	<b>953</b>	<b>946</b>	<b>926</b>	<b>884</b>	<b>855</b>	<b>816</b>	
Max cont.	[3.2]	[18]	[44]	[62]	[88]	[115]	[133]	
	12	<b>1444</b>	<b>1426</b>	<b>1402</b>	<b>1360</b>	<b>1324</b>	<b>1288</b>	
Max int.	[3.9]		[35]	[62]	[88]	[106]	[124]	
	15		<b>1912</b>	<b>1900</b>	<b>1861</b>	<b>1833</b>	<b>1780</b>	Max cont.
Max int.	[5.3]		[0.00]	[53]	[88]	[97]	[124]	
	20		<b>2432</b>	<b>2395</b>	<b>2350</b>	<b>2328</b>	<b>2281</b>	Max int.

TORQUE (LB-IN)  
TORQUE (N•M)  
SPEED (RPM)

**BMM 12.5** [0.79 in<sup>3</sup>/rev] 12.9 cm<sup>3</sup>/rev. Max cont. Max int.

		[507]	[725]	[1015]	[1450]	[1740]	[2030]	[PSI]
		3.5	5	7	10	12	14	MPa
GPM	[0.53]	[53]	[71]	[97]	[142]	[168]		
	2	<b>140</b>	<b>136</b>	<b>119</b>	<b>68</b>	<b>35</b>		
L/min	[1.1]	[53]	[71]	[106]	[150]	[168]	[203]	
	4	<b>296</b>	<b>289</b>	<b>274</b>	<b>229</b>	<b>200</b>	<b>145</b>	
Flow (L/min)	[2.1]	[44]	[71]	[106]	[150]	[177]	[212]	
	8	<b>605</b>	<b>596</b>	<b>583</b>	<b>543</b>	<b>514</b>	<b>469</b>	
Max cont.	[3.2]	[44]	[71]	[97]	[141]	[177]	[212]	
	12	<b>912</b>	<b>905</b>	<b>895</b>	<b>859</b>	<b>834</b>	<b>784</b>	
Max int.	[3.9]	[44]	[62]	[389]	[407]	[168]	[203]	
	15	<b>1152</b>	<b>1144</b>	<b>1136</b>	<b>1102</b>	<b>1078</b>	<b>1036</b>	
Max int.	[5.3]	[27]	[62]	[88]	[133]	[168]	[195]	
	20	<b>1542</b>	<b>1532</b>	<b>1521</b>	<b>1500</b>	<b>1482</b>	<b>1437</b>	Max cont.
Max int.	[6.6]	[18]	[53]	[80]	[124]	[159]	[195]	
	25	<b>1910</b>	<b>1891</b>	<b>1878</b>	<b>1848</b>	<b>1828</b>	<b>1788</b>	Max int.

TORQUE (LB-IN)  
TORQUE (N•M)  
SPEED (RPM)

**BMM 20** [1.21 in<sup>3</sup>/rev] 19.9 cm<sup>3</sup>/rev. Max cont. Max int.

		[246]	[507]	[725]	[1015]	[1450]	[1740]	[2030]	[PSI]
		1.7	3.5	5	7	10	12	14	MPa
GPM	[0.53]	[27]	[80]	[124]	[168]	[230]	[265]		
	2	<b>99</b>	<b>96</b>	<b>89</b>	<b>74</b>	<b>42</b>	<b>21</b>		
L/min	[1.1]	[35]	[80]	[124]	[168]	[230]	[274]	[318]	
	4	<b>197</b>	<b>191</b>	<b>182</b>	<b>178</b>	<b>134</b>	<b>112</b>	<b>74</b>	
Flow (L/min)	[2.1]	[35]	[80]	[115]	[168]	[239]	[274]	[318]	
	8	<b>398</b>	<b>395</b>	<b>391</b>	<b>377</b>	<b>340</b>	<b>319</b>	<b>288</b>	
Max cont.	[3.2]	[27]	[71]	[115]	[159]	[230]	[274]	[327]	
	12	<b>596</b>	<b>594</b>	<b>588</b>	<b>579</b>	<b>545</b>	<b>523</b>	<b>493</b>	
Max int.	[3.9]	[27]	[71]	[106]	[150]	[221]	[265]	[318]	
	15	<b>745</b>	<b>741</b>	<b>738</b>	<b>728</b>	<b>695</b>	<b>684</b>	<b>660</b>	
Max int.	[5.3]	[9]	[53]	[97]	[168]	[212]	[256]	[310]	
	20	<b>998</b>	<b>995</b>	<b>991</b>	<b>985</b>	<b>962</b>	<b>1916</b>	<b>1885</b>	Max cont.
Max int.	[6.6]		[35]	[80]	[124]	[203]	[248]	[292]	
	25		<b>1247</b>	<b>1245</b>	<b>1242</b>	<b>1189</b>	<b>1180</b>	<b>1176</b>	Max int.

TORQUE (LB-IN)  
TORQUE (N•M)  
SPEED (RPM)

**BMM 32** [1.93 in<sup>3</sup>/rev] 31.6 cm<sup>3</sup>/rev. Max cont. Max int.

		[246]	[507]	[725]	[1015]	[1450]	[1740]	[2030]	[PSI]
		2	3.5	5	7	10	12	14	MPa
GPM	[0.53]	[62]	[133]	[186]	[248]	[354]			
	2	<b>61</b>	<b>57</b>	<b>52</b>	<b>47</b>	<b>16</b>			
L/min	[1.1]	[62]	[133]	[186]	[256]	[363]	[424]	[504]	
	4	<b>126</b>	<b>121</b>	<b>114</b>	<b>106</b>	<b>82</b>	<b>67</b>	<b>49</b>	
Flow (L/min)	[2.1]	[62]	[133]	[186]	[256]	[363]	[433]	[513]	
	8	<b>250</b>	<b>244</b>	<b>239</b>	<b>231</b>	<b>207</b>	<b>194</b>	<b>167</b>	
Max cont.	[3.2]	[53]	[115]	[177]	[248]	[354]	[424]	[513]	
	12	<b>378</b>	<b>374</b>	<b>369</b>	<b>362</b>	<b>338</b>	<b>322</b>	<b>297</b>	
Max int.	[3.9]	[35]	[106]	[159]	[239]	[345]	[415]	[504]	
	15	<b>476</b>	<b>472</b>	<b>468</b>	<b>462</b>	<b>441</b>	<b>429</b>	<b>406</b>	
Max int.	[5.3]	[27]	[88]	[150]	[221]	[327]	[407]	[486]	
	20	<b>633</b>	<b>630</b>	<b>627</b>	<b>619</b>	<b>601</b>	<b>585</b>	<b>566</b>	Max cont.
Max int.	[6.6]	[9]	[70]	[133]	[203]	[309]	[380]	[460]	
	25	<b>791</b>	<b>789</b>	<b>787</b>	<b>783</b>	<b>766</b>	<b>753</b>	<b>732</b>	Max int.

TORQUE (LB-IN)  
TORQUE (N•M)  
SPEED (RPM)

**BMM 40** [2.43 in<sup>3</sup>/rev] 39.8 cm<sup>3</sup>/rev. Max cont. Max int.

	[435] 3	[725] 5	[1015] 7	[1232] 9	[1450] 10	[1740] 12	[PSI] MPa
GPM	[0.53]	[142]	[239]	[318]	[389]	[451]	
L/min	2	16	27	36	44	51	
		<b>45</b>	<b>40</b>	<b>34</b>	<b>28</b>	<b>17</b>	
	[1.1]	[142]	[239]	[327]	[389]	[460]	[548]
	4	16	27	37	44	52	62
		<b>96</b>	<b>93</b>	<b>85</b>	<b>79</b>	<b>65</b>	<b>52</b>
	[2.1]	[133]	[230]	[319]	[389]	[460]	[557]
	8	15	26	36	44	52	63
		<b>197</b>	<b>195</b>	<b>182</b>	<b>176</b>	<b>166</b>	<b>154</b>
	[3.2]	[124]	[221]	[310]	[380]	[451]	[548]
	12	14	25	35	43	51	62
		<b>293</b>	<b>287</b>	<b>282</b>	<b>277</b>	<b>268</b>	<b>257</b>
	[3.9]	[115]	[212]	[301]	[371]	[442]	[548]
	15	13	24	34	42	50	62
		<b>371</b>	<b>365</b>	<b>360</b>	<b>355</b>	<b>347</b>	<b>338</b>
	[5.3]	[88]	[186]	[274]	[345]	[425]	[522]
	20	10	21	31	39	48	59
		<b>497</b>	<b>492</b>	<b>487</b>	<b>480</b>	<b>472</b>	<b>463</b>
	[6.6]	[62]	[168]	[256]	[327]	[389]	[495]
	25	7	19	29	37	44	56
		<b>622</b>	<b>617</b>	<b>612</b>	<b>607</b>	<b>600</b>	<b>591</b>

TORQUE (LB-IN)  
TORQUE (N•M)  
SPEED (RPM)

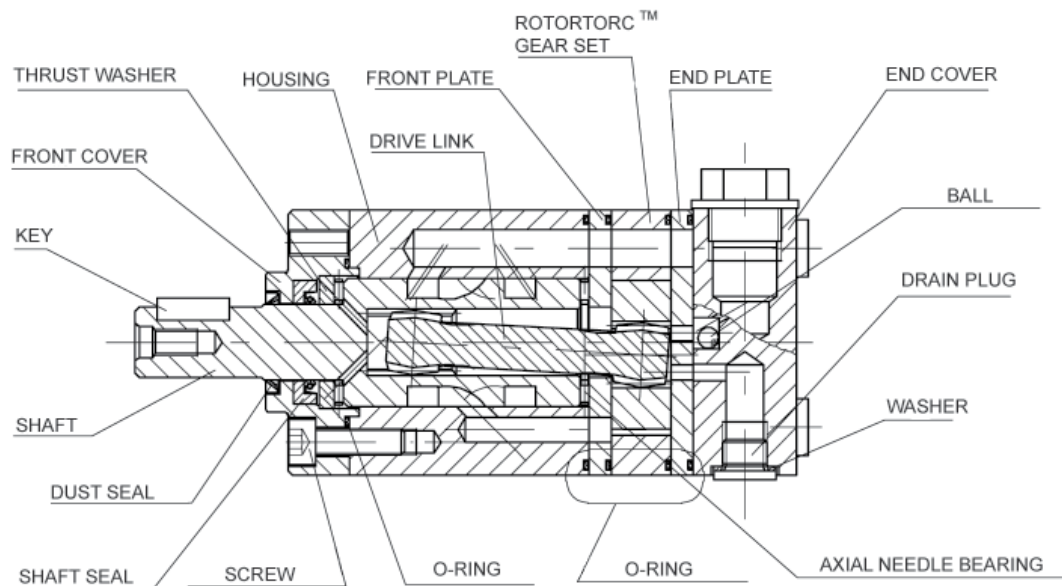
Max cont.  
Max int.

**BMM 50** [3.07 in<sup>3</sup>/rev] 50.3 cm<sup>3</sup>/rev. Max cont. Max int.

	[217] 1.5	[435] 3	[725] 5	[1015] 7	[1450] 10	[PSI] MPa
GPM	[0.53]	[97]	[203]	[318]	[442]	
L/min	2	11	23	36	50	
		<b>37</b>	<b>33</b>	<b>27</b>	<b>22</b>	
	[1.1]	[97]	[195]	[318]	[442]	[619]
	4	11	22	36	50	70
		<b>76</b>	<b>73</b>	<b>68</b>	<b>63</b>	<b>55</b>
	[2.1]	[97]	[186]	[310]	[442]	[628]
	8	11	21	35	50	71
		<b>157</b>	<b>154</b>	<b>149</b>	<b>145</b>	<b>137</b>
	[3.2]	[97]	[177]	[292]	[433]	[628]
	12	11	20	33	49	71
		<b>237</b>	<b>234</b>	<b>231</b>	<b>226</b>	<b>218</b>
	[3.9]	[88]	[159]	[283]	[416]	[610]
	15	10	18	32	47	69
		<b>296</b>	<b>295</b>	<b>294</b>	<b>288</b>	<b>282</b>
	[5.3]	[71]	[124]	[256]	[389]	[566]
	20	8	14	29	44	64
		<b>395</b>	<b>395</b>	<b>393</b>	<b>390</b>	<b>381</b>
	[6.6]	[35]	[88]	[221]	[354]	[522]
	25	4	10	25	40	59
		<b>498</b>	<b>496</b>	<b>494</b>	<b>490</b>	<b>484</b>

TORQUE (LB-IN)  
TORQUE (N•M)  
SPEED (RPM)

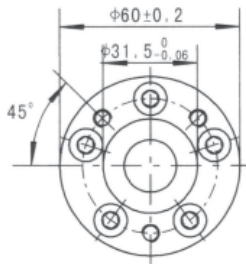
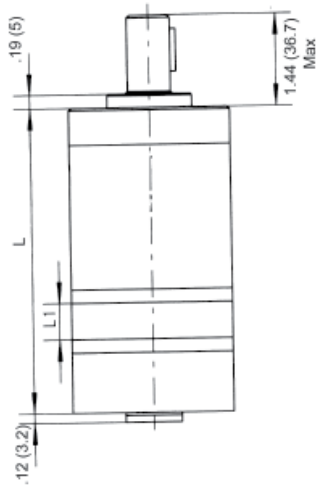
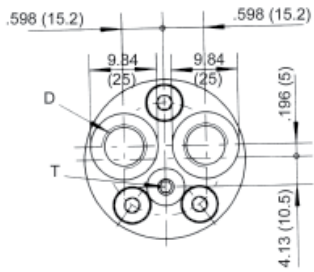
Max cont.  
Max int.



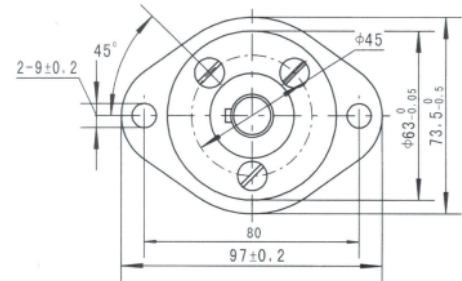
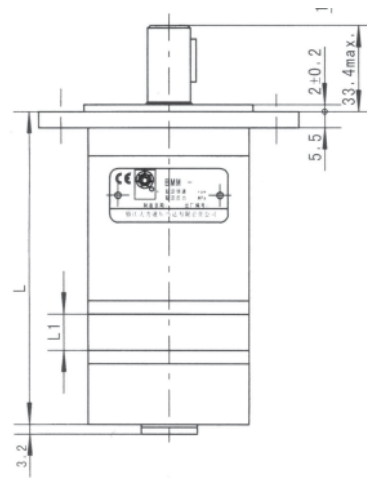
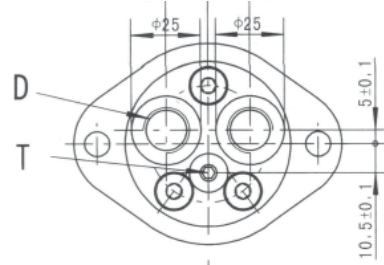
# BMM END PORT INSTALLATION DATA



## U Style



## F Style

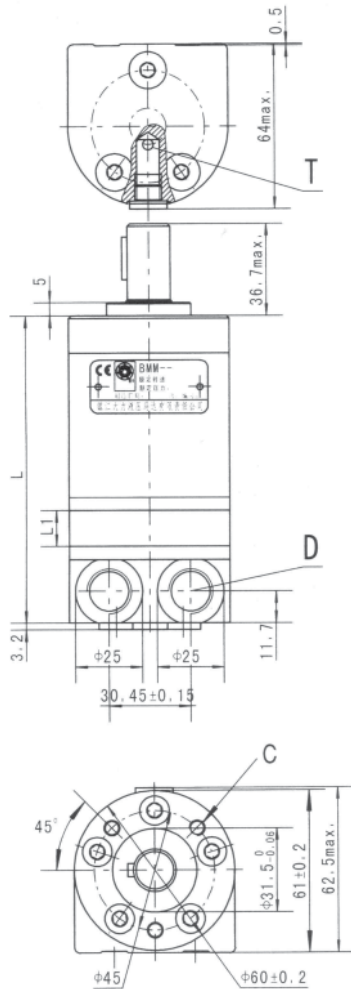


MODEL BMM	U				F			
	L		L1		L		L1	
	inches	mm	inches	mm	inches	mm	inches	mm
BMM 8	4.09	104	.13	3.5	4.21	107	.13	3.5
BMM 12.5	4.17	106	.21	5.5	4.29	109	.21	5.5
BMM 20	4.29	109	.33	8.5	4.40	112	.33	8.5
BMM 32	4.48	114	.53	13.5	4.60	117	.53	13.5
BMM 40	4.64	118	.67	17	4.64	118	.67	17
BMM 50	4.80	122	.84	21.5	4.92	125	.84	21.5

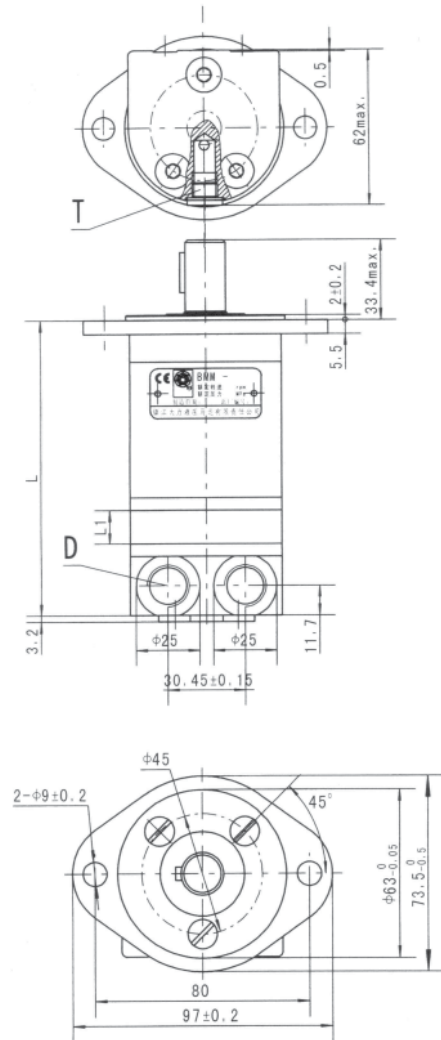
PORT SIZES	U	F
D	9/16-18 SAE	9/16-18 SAE
T	3/8-24 SAE	3/8-24 SAE



## U Style



## F Style



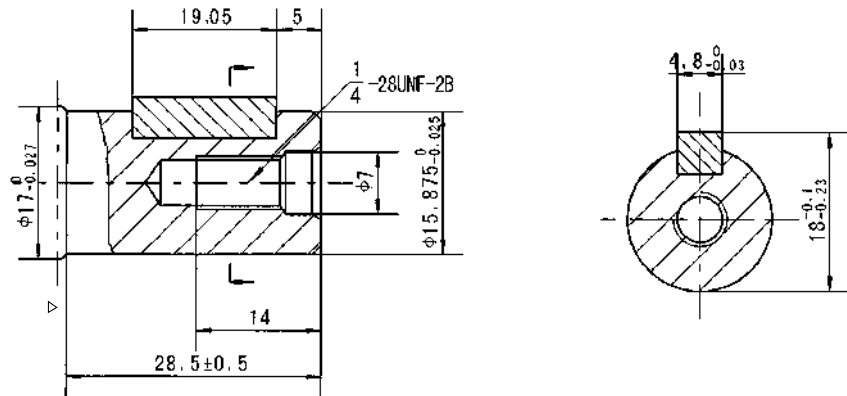
MODEL BMM	U				F			
	L		L1		L		L1	
	inches	mm	inches	mm	inches	mm	inches	mm
BMM 8	4.13	105	.13	3.5	4.29	109	.13	3.5
BMM 12.5	4.21	107	.21	5.5	4.37	111	.12	5.5
BMM 20	4.33	110	.33	8.5	4.48	114	.33	8.5
BMM 32	4.52	115	.53	13.5	4.68	119	.53	13.5
BMM 40	4.64	118	.67	17	4.64	118	.67	17
BMM 50	4.84	123	.84	21.5	5.00	127	.84	21.5

PORT SIZES	U	F
D	9/16-18 SAE	9/16-18 SAE
T	3/8-24 SAE	3/8-24 SAE

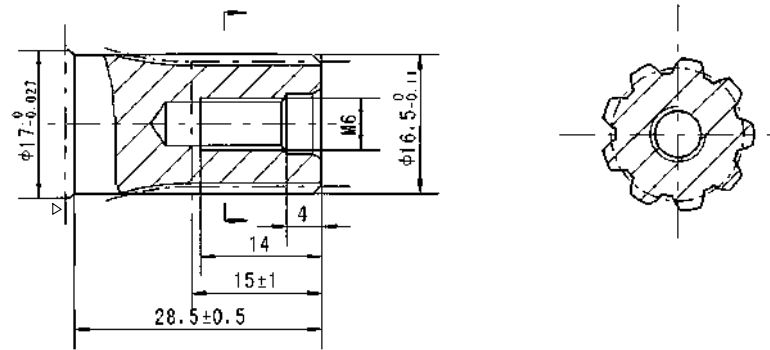
# BMM DRIVE SHAFT DATA



Shaft B: Cylindrical shaft  $\varnothing 15.875$   
Parallel Key 4.8x4.8x19.35



Shaft C: Involute spline shaft  
B17x14 DIN5482

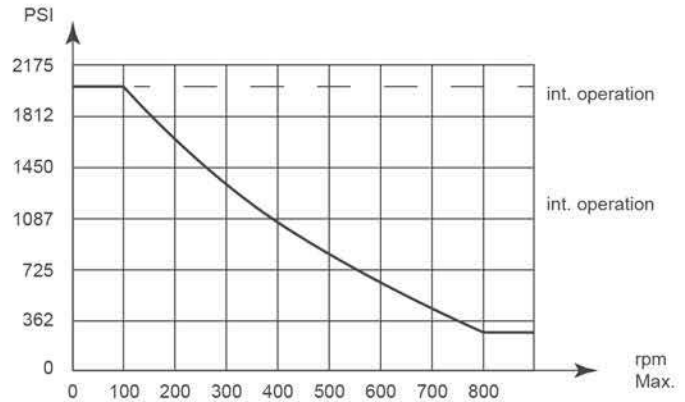
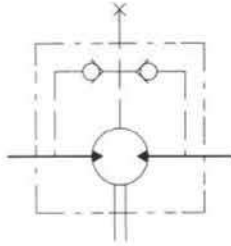


▷ Motor Mounting Surface

(Dimensions in mm)

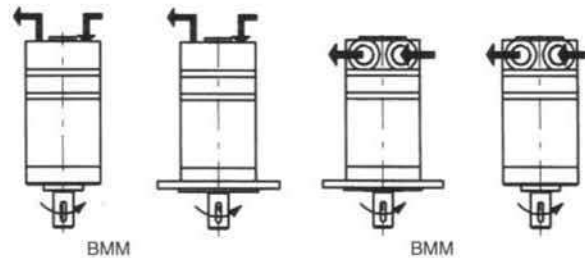
BMM Series Hydraulic Motor

Permissible shaft seal pressure



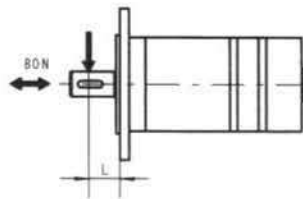
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Direction of shaft rotation



Status of the shaft's radial force

$$F_r = \frac{130400}{61.5+L} N$$



$F_r$  =Radial Force (N)  
 $L$  =Distance (mm)  
 $n$  =Speed (rpm)  
 Rhomb-flange  $L=15\text{mm}$   
 Square-flange  $L=20\text{mm}$

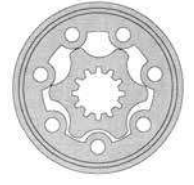
# BMM ORDERING INFORMATION



	1	2	3	4	5	6
<b>BMM</b>						

1	2		3		4		5		6	
DISP. cc (cu. in.)	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT	
8 (.5)	<b>U</b>	Circle Flange	<b>B</b>	5/8" Straight Key	<b>U</b>	Side Port 9/16 - 18 SAE Drain 3/8 -24 SAE	<b>NONE</b>	STANDARD	<b>00</b>	NO PAINT
12.5 (.79)	<b>F</b>	2-Bolt Flange	<b>C</b>	9 Tooth Spline	<b>1U</b>	Back Port 9/16 - 18 SAE Drain 3/8 -24 SAE	<b>R</b>	OPPOSITE	<b>NONE</b>	BLACK
20 (1.21)					<b>E</b>	Side Port G 3/8 Drain G 1/8			<b>B</b>	BLUE
32 (1.93)					<b>1E</b>	Back Port G 3/8 Drain G 1/8			<b>S</b>	SILVER GRAY
40 (2.43)										
50 (3.07)										

For options not listed here, please contact us.



The BMP and BMPH Gerotor 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 9001-2008 quality system.

## BMP/BMPH TECHNICAL SPECIFICATIONS

DISTRIBUTION TYPE		BMP 36	BMP 50	BMP 80	BMP 100	BMP 125	BMP 160	BMP 200	BMP 250	BMP 315	BMP 400	
GEOMETRIC DISPLACEMENT	[in <sup>3</sup> /rev.]	[2.20]	[3.15]	[4.74]	[5.87]	[7.19]	[9.49]	[11.59]	[14.10]	[19.01]	[23.57]	
	cm <sup>3</sup> /rev.	36	51.7	77.7	96.2	117.9	155.5	189.9	231	311.7	386.2	
MAX. SPEED RPM	RATED	1050	850	650	520	390	310	260	200	156	130	
	CONT.	1078	879	740	589	475	370	296	237	189	149	
	INT.	<b>1210</b>	<b>975</b>	<b>827</b>	<b>673</b>	<b>594</b>	<b>463</b>	<b>370</b>	<b>297</b>	<b>236</b>	<b>185</b>	
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[486]	[716]	[1141]	[1424]	[1786]	[1804]	[2291]	[2874]	[3051]	[3847]
		N*M	<b>55</b>	<b>81</b>	<b>129</b>	<b>161</b>	<b>202</b>	<b>204</b>	<b>259</b>	<b>325</b>	<b>345</b>	<b>435</b>
	CONT.	[LB. IN.]	[486]	[716]	[1141]	[1423]	[1786]	[2167]	[2529]	[3184]	[3591]	[4847]
		N*M	<b>55</b>	<b>81</b>	<b>129</b>	<b>161</b>	<b>202</b>	<b>245</b>	<b>286</b>	<b>360</b>	<b>406</b>	<b>435</b>
	INT.	[LB. IN.]	[672]	[955]	[1512]	[1884]	[2370]	[3025]	[3449]	[4033]	[4466]	[4714]
		N*M	<b>76</b>	<b>108</b>	<b>171</b>	<b>213</b>	<b>268</b>	<b>342</b>	<b>390</b>	<b>456</b>	<b>505</b>	<b>533</b>
MAX. OUTPUT [HP] KW	RATED	[HP]	[8]	[9]	[12]	[12]	[11]	[9]	[9]	[7]	[8]	
		KW	<b>6</b>	<b>7</b>	<b>8.6</b>	<b>8.6</b>	<b>8</b>	<b>6.5</b>	<b>6.9</b>	<b>6.6</b>	<b>5.5</b>	<b>5.8</b>
	CONT.	[HP]	[8]	[9]	[12]	[12]	[12]	[12]	[11]	[11]	[10]	[10]
		KW	<b>6</b>	<b>7</b>	<b>9.1</b>	<b>9</b>	<b>9.1</b>	<b>8.7</b>	<b>8.1</b>	<b>8.2</b>	<b>7.2</b>	<b>6.1</b>
	INT.	[HP]	[10]	[12]	[16]	[16]	[16]	[16]	[15]	[14]	[12]	[10]
		KW	<b>8</b>	<b>8.9</b>	<b>11.8</b>	<b>11.9</b>	<b>11.8</b>	<b>11.9</b>	<b>10.9</b>	<b>10.1</b>	<b>8.6</b>	<b>7.2</b>
MAX. PRESSURE DROP [PSI] MPa	RATED	[PSI]	[1812]	[1812]	[1812]	[1812]	[1812]	[1450]	[1450]	[1450]	[1232]	[1232]
		MPa	<b>12.5</b>	<b>12.5</b>	<b>12.5</b>	<b>12.5</b>	<b>12.5</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>8.5</b>	<b>8.5</b>
	CONT.	[PSI]	[1812]	[1812]	[1812]	[1812]	[1812]	[1812]	[1595]	[1595]	[1595]	[1450]
		MPa	<b>12.5</b>	<b>12.5</b>	<b>12.5</b>	<b>12.5</b>	<b>12.5</b>	<b>12.5</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>10</b>
	INT.	[PSI]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2030]	[1812]	[1522]
		MPa	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>14</b>	<b>12.5</b>	<b>10.5</b>
	PEAK	[PSI]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2030]	[1812]	[1522]
		MPa	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>16.5</b>	<b>14</b>	<b>12.5</b>	<b>10.5</b>
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[10.4]	[11.8]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	
		L/MIN	<b>40</b>	<b>45</b>	<b>55</b>	<b>55</b>	<b>55</b>	<b>55</b>	<b>55</b>	<b>55</b>	<b>55</b>	
	CONT.	[GPM]	[10.4]	[11.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]
		L/MIN	<b>40</b>	<b>45</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>
	INT.	[GPM]	[11.8]	[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	<b>45</b>	<b>50</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>
WEIGHT [LB] KG	[LB]	[12.3]	[12.3]	[12.6]	[13]	[13.2]	[13.7]	[14.1]	[14.6]	[15.2]	[16.3]	
	KG	<b>5.6</b>	<b>5.6</b>	<b>5.7</b>	<b>5.9</b>	<b>6</b>	<b>6.2</b>	<b>6.4</b>	<b>6.6</b>	<b>6.9</b>	<b>7.4</b>	

- \* Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- \* Continuous pressure: Max. value of operating motor continuously.
- \* Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- \* Peak pressure: Max. value of operating motor in 0.6 second per minute.

# BMP/BMPH PERFORMANCE DATA



BMP 36 [2.19 in<sup>3</sup>/rev] 36 cm<sup>3</sup>/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[1813]	[2493]	Max cont.	Max int.	[PSI]
		3	6	7	8	10	11	12	16.5			MPa
GPM	[2.1]	[115]	[212]	[256]	[301]	[380]	[424]	[486]	[654]			
	8	<b>214</b>	<b>205</b>	<b>200</b>	<b>194</b>	<b>187</b>	<b>179</b>	<b>168</b>	<b>138</b>			
L/min	[4.0]	[115]	[221]	[256]	[301]	[380]	[424]	[495]	[663]	TORQUE [LB-IN]		
	15	<b>406</b>	<b>398</b>	<b>391</b>	<b>383</b>	<b>374</b>	<b>353</b>	<b>353</b>	<b>324</b>	TORQUE (N•M)		
Flow (L/min)	[5.3]	[115]	[212]	[256]	[301]	[380]	[424]	[495]	[627]	SPEED (RPM)		
	20	<b>541</b>	<b>534</b>	<b>528</b>	<b>521</b>	<b>513</b>	<b>500</b>	<b>486</b>	<b>458</b>			
Max cont.	[7.9]	[106]	[212]	[256]	[301]	[380]	[424]	[495]	[672]			
	30	<b>814</b>	<b>804</b>	<b>792</b>	<b>778</b>	<b>763</b>	<b>749</b>	<b>726</b>	<b>701</b>			
Max int.	[9.2]	[106]	[203]	[248]	[301]	[380]	[424]	[495]	[672]			
	35	<b>952</b>	<b>944</b>	<b>930</b>	<b>913</b>	<b>897</b>	<b>879</b>	<b>858</b>	<b>833</b>			
Max cont.	[11.9]	[106]	[203]	[248]	[283]	[362]	[415]	[486]	[663]			
	45	<b>1090</b>	<b>1078</b>	<b>1064</b>	<b>1048</b>	<b>1024</b>	<b>998</b>	<b>977</b>	<b>943</b>	Max cont.		
Max int.	[13.2]	[97]	[194]	[230]	[283]	[362]	[407]	[477]	[654]			
	50	<b>1232</b>	<b>1218</b>	<b>1196</b>	<b>1175</b>	<b>1149</b>	<b>1118</b>	<b>1080</b>	<b>1044</b>	Max int.		

BMP 50 [3.15 in<sup>3</sup>/rev] 51.7 cm<sup>3</sup>/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[1813]	[2393]	Max cont.	Max int.	[PSI]
		3	6	7	8	10	11	12	16			MPa
GPM	[2.1]	[150]	[336]	[389]	[442]	[557]	[619]	[699]	[920]			
	8	<b>154</b>	<b>149</b>	<b>144</b>	<b>141</b>	<b>135</b>	<b>129</b>	<b>123</b>	<b>92</b>			
L/min	[4.0]	[168]	[336]	[389]	[442]	[566]	[628]	[708]	[929]	TORQUE [LB-IN]		
	15	<b>292</b>	<b>286</b>	<b>238</b>	<b>277</b>	<b>273</b>	<b>267</b>	<b>262</b>	<b>231</b>	TORQUE (N•M)		
Flow (L/min)	[5.3]	[150]	[336]	[389]	[451]	[566]	[628]	[708]	[946]	SPEED (RPM)		
	20	<b>390</b>	<b>385</b>	<b>382</b>	<b>376</b>	<b>374</b>	<b>367</b>	<b>360</b>	<b>332</b>			
Max cont.	[7.9]	[142]	[327]	[389]	[442]	[566]	[628]	[716]	[955]			
	30	<b>586</b>	<b>579</b>	<b>572</b>	<b>568</b>	<b>562</b>	<b>556</b>	<b>546</b>	<b>516</b>			
Max int.	[9.2]	[133]	[318]	[380]	[442]	[557]	[628]	[708]	[946]			
	35	<b>683</b>	<b>675</b>	<b>670</b>	<b>663</b>	<b>656</b>	<b>647</b>	<b>641</b>	<b>614</b>			
Max cont.	[11.9]	[124]	[301]	[371]	[433]	[557]	[619]	[708]	[946]			
	45	<b>879</b>	<b>868</b>	<b>862</b>	<b>855</b>	<b>849</b>	<b>840</b>	<b>833</b>	<b>799</b>	Max cont.		
Max int.	[13.2]	[115]	[292]	[363]	[425]	[548]	[601]	[699]				
	50	<b>975</b>	<b>962</b>	<b>955</b>	<b>949</b>	<b>943</b>	<b>937</b>	<b>927</b>		Max int.		

BMP 80 [4.74 in<sup>3</sup>/rev] 77.7 cm<sup>3</sup>/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[1814]	[2394]	Max cont.	Max int.	[PSI]
		3	6	7	8	10	11	12	16			MPa
GPM	[2.1]	[256]	[531]	[619]	[708]	[893]	[982]	[1132]	[1486]			
	8	<b>97</b>	<b>94</b>	<b>91</b>	<b>88</b>	<b>84</b>	<b>79</b>	<b>74</b>	<b>50</b>			
L/min	[4.0]	[256]	[539]	[628]	[716]	[893]	[1008]	[1141]	[1503]	TORQUE [LB-IN]		
	15	<b>184</b>	<b>181</b>	<b>178</b>	<b>175</b>	<b>171</b>	<b>167</b>	<b>162</b>	<b>140</b>	TORQUE (N•M)		
Flow (L/min)	[5.3]	[248]	[531]	[628]	[716]	[893]	[931]	[1141]	[1503]	SPEED (RPM)		
	20	<b>247</b>	<b>243</b>	<b>241</b>	<b>238</b>	<b>235</b>	<b>231</b>	<b>225</b>	<b>205</b>			
Max cont.	[7.9]	[221]	[515]	[610]	[699]	[884]	[982]	[1132]	[1512]			
	30	<b>370</b>	<b>366</b>	<b>363</b>	<b>360</b>	<b>356</b>	<b>351</b>	<b>346</b>	<b>323</b>			
Max int.	[9.2]	[212]	[504]	[601]	[690]	[876]	[973]	[1114]	[1512]			
	35	<b>432</b>	<b>427</b>	<b>424</b>	<b>421</b>	<b>416</b>	<b>412</b>	<b>407</b>	<b>371</b>			
Max cont.	[11.9]	[195]	[478]	[584]	[681]	[858]	[964]	[1097]	[1495]			
	45	<b>555</b>	<b>550</b>	<b>546</b>	<b>542</b>	<b>538</b>	<b>532</b>	<b>528</b>	<b>503</b>			
Max int.	[13.2]	[177]	[469]	[566]	[633]	[849]	[946]	[1088]	[1486]			
	50	<b>616</b>	<b>609</b>	<b>606</b>	<b>603</b>	<b>599</b>	<b>594</b>	<b>588</b>	<b>561</b>			
Max cont.	[15.8]	[168]	[460]	[557]	[654]	[840]	[946]	[1088]	[1486]			
	60	<b>740</b>	<b>732</b>	<b>727</b>	<b>723</b>	<b>718</b>	<b>713</b>	<b>707</b>	<b>675</b>	Max cont.		
Max int.	[19.8]	[142]	[416]	[522]	[637]	[805]	[929]	[1070]				
	75	<b>827</b>	<b>820</b>	<b>817</b>	<b>813</b>	<b>808</b>	<b>804</b>	<b>796</b>		Max int.		

BMP 100 [5.87 in<sup>3</sup>/rev] 96.2 cm<sup>3</sup>/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[1813]	[2393]	Max cont.	Max int.	[PSI]
		3	6	7	8	10	11	12	16			MPa
GPM	[2.1]	[318]	[663]	[778]	[893]	[1114]	[1247]	[1415]	[1857]			
	8	<b>78</b>	<b>75</b>	<b>73</b>	<b>70</b>	<b>63</b>	<b>67</b>	<b>56</b>	<b>34</b>			
L/min	[4.0]	[310]	[663]	[787]	[893]	[1132]	[1247]	[1415]	[1884]	TORQUE [LB-IN]		
	15	<b>149</b>	<b>145</b>	<b>143</b>	<b>141</b>	<b>137</b>	<b>134</b>	<b>129</b>	<b>109</b>	TORQUE (N•M)		
Flow (L/min)	[5.3]	[292]	[654]	[778]	[893]	[1114]	[1238]	[1424]	[1875]	SPEED (RPM)		
	20	<b>199</b>	<b>196</b>	<b>195</b>	<b>191</b>	<b>189</b>	<b>185</b>	<b>179</b>	<b>161</b>			
Max cont.	[7.9]	[274]	[637]	[752]	[867]	[1088]	[1212]	[1386]	[1884]			
	30	<b>299</b>	<b>296</b>	<b>293</b>	<b>291</b>	<b>288</b>	<b>284</b>	<b>280</b>	<b>259</b>			
Max int.	[9.2]	[256]	[610]	[734]	[849]	[1070]	[1194]	[1371]	[1875]			
	35	<b>349</b>	<b>349</b>	<b>344</b>	<b>341</b>	<b>337</b>	<b>335</b>	<b>330</b>	<b>310</b>			
Max cont.	[11.9]	[248]	[584]	[716]	[831]	[1052]	[1176]	[1353]	[1840]			
	45	<b>449</b>	<b>445</b>	<b>442</b>	<b>439</b>	<b>435</b>	<b>432</b>	<b>428</b>	<b>405</b>			
Max int.	[13.2]	[212]	[575]	[690]	[822]	[1565]	[1167]	[1344]	[1831]			
	50	<b>498</b>	<b>493</b>	<b>491</b>	<b>490</b>	<b>486</b>	<b>481</b>	<b>477</b>	<b>457</b>			
Max cont.	[15.8]	[203]	[557]	[681]	[814]	[1026]	[1158]	[1335]	[1831]			
	60	<b>598</b>	<b>593</b>	<b>589</b>	<b>587</b>	<b>583</b>	<b>578</b>	<b>573</b>	<b>549</b>	Max cont.		
Max int.	[19.8]	[177]	[504]	[654]	[778]	[999]	[1141]	[1327]				
	75	<b>673</b>	<b>667</b>	<b>664</b>	<b>661</b>	<b>657</b>	<b>654</b>	<b>648</b>		Max int.		

BMP 125 [7.19 in<sup>3</sup>/rev] 117.9 cm<sup>3</sup>/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[1813]	[2393]	[PSI]
		3	6	7	8	10	11	12	16	MPa
GPM	[2.1]	[398]	[831]	[982]	[1123]	[1397]	[1557]	[1778]	[2326]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	8	45	94	111	127	158	176	201	263	
L/min	[4.0]	[389]	[831]	[982]	[1123]	[1415]	[1565]	[1786]	[2361]	
	15	44	94	111	127	160	177	202	267	
Flow (L/min)	[5.3]	[371]	[822]	[973]	[1123]	[1406]	[1557]	[1786]	[2370]	
	20	42	93	110	127	159	176	202	268	
[7.9]	[354]	[808]	[955]	[1097]	[1380]	[1539]	[1751]	[2370]		
	30	40	91	108	124	156	174	198	268	
[9.2]	[336]	[787]	[937]	[1079]	[1362]	[1521]	[1733]	[2361]		
	35	38	89	106	122	154	172	196	267	
[11.9]	[327]	[752]	[911]	[1061]	[1335]	[1503]	[1716]	[2326]		
	45	37	85	103	120	151	170	194	263	
[13.2]	[292]	[743]	[884]	[1044]	[1318]	[1477]	[1698]	[2299]		
	50	33	84	100	118	149	167	192	260	
Max cont.	[15.8]	[283]	[716]	[876]	[1026]	[1300]	[1468]	[1689]	[2291]	Max cont.
	60	32	81	99	116	147	166	191	259	
Max int.	[19.8]	[230]	[663]	[822]	[973]	[1256]	[1406]	[1636]		Max int.
	75	26	75	93	110	142	159	185		

BMP 160 [9.49 in<sup>3</sup>/rev] 155.5 cm<sup>3</sup>/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[2030]	[2393]	[PSI]
		3	6	7	8	10	11	14	16	MPa
GPM	[2.1]	[504]	[1070]	[1256]	[1433]	[1786]	[1990]	[2419]	[2954]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	8	57	121	142	162	202	225	243	334	
L/min	[4.0]	[495]	[1070]	[1256]	[1433]	[1804]	[2008]	[2167]	[3016]	
	15	56	121	142	162	204	227	245	341	
Flow (L/min)	[5.3]	[486]	[1061]	[1238]	[1433]	[1795]	[1999]	[2158]	[3025]	
	20	55	120	140	162	203	226	244	342	
[7.9]	[478]	[1035]	[1229]	[1415]	[1778]	[1981]	[2140]	[3007]		
	30	54	117	139	160	201	224	242	340	
[9.2]	[460]	[1017]	[1212]	[1406]	[1760]	[1946]	[2140]	[2980]		
	35	52	115	137	159	199	220	242	337	
[11.9]	[442]	[991]	[1185]	[1380]	[1733]	[1946]	[2105]	[2963]		
	45	50	112	134	156	196	220	238	335	
[13.2]	[398]	[973]	[1167]	[1353]	[1716]	[1910]	[2061]	[2919]		
	50	45	110	132	153	194	216	233	330	
Max cont.	[15.8]	[389]	[937]	[1150]	[1335]	[1698]	[1893]	[2043]	[2901]	Max cont.
	60	44	106	130	151	192	214	231	328	
Max int.	[19.8]	[283]	[849]	[1052]	[1256]	[1610]	[1813]	[1963]		Max int.
	75	32	96	119	142	182	205	222		

BMP 200 [11.59 in<sup>3</sup>/rev] 189.9 cm<sup>3</sup>/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[2175]	[PSI]
		3	6	7	8	10	11	15	MPa
GPM	[2.1]	[646]	[1353]	[1583]	[1804]	[2264]	[2503]	[3405]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	8	73	153	179	204	256	283	385	
L/min	[4.0]	[646]	[1344]	[1592]	[1813]	[2291]	[2353]	[3449]	
	15	73	152	180	205	259	266	390	
Flow (L/min)	[5.3]	[628]	[1335]	[1574]	[1804]	[2264]	[2521]	[3449]	
	20	71	151	178	204	256	285	390	
[7.9]	[601]	[1318]	[1548]	[1786]	[2246]	[2503]	[3431]		
	30	68	149	175	202	254	283	388	
[9.2]	[575]	[1291]	[1530]	[1769]	[2229]	[2485]	[3414]		
	35	65	146	173	200	252	281	386	
[11.9]	[557]	[1256]	[1503]	[1733]	[2184]	[2450]	[3378]		
	45	63	142	170	196	247	259	382	
[13.2]	[513]	[1220]	[1468]	[1707]	[2158]	[2406]	[3343]		
	50	58	138	166	193	244	272	378	
Max cont.	[15.8]	[495]	[1203]	[1442]	[1689]	[2131]	[2379]	[3317]	Max cont.
	60	56	136	163	191	241	269	375	
Max int.	[19.8]	[371]	[1070]	[1327]	[1565]	[1999]			Max int.
	75	42	121	150	177	226			

BMP 250 [14.10 in<sup>3</sup>/rev] 231 cm<sup>3</sup>/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[2030]	[PSI]
		3	6	7	8	10	11	14	MPa
GPM	[2.1]	[822]	[1725]	[1999]	[2291]	[2874]	[3157]		TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	8	93	195	226	259	325	357		
L/min	[4.0]	[814]	[1698]	[1999]	[2299]	[2874]	[3184]	[4033]	
	15	92	192	226	260	325	360	456	
Flow (L/min)	[5.3]	[796]	[1689]	[1990]	[2282]	[2848]	[3148]	[4024]	
	20	90	191	225	258	322	356	455	
[7.9]	[761]	[1663]	[1955]	[2255]	[2821]	[3131]	[3997]		
	30	86	188	221	255	319	354	452	
[9.2]	[725]	[1627]	[1919]	[2220]	[2804]	[3095]	[3962]		
	35	82	184	217	251	317	350	448	
[11.9]	[699]	[1583]	[1893]	[2176]	[2759]	[3051]	[3909]		
	45	79	179	214	246	312	345	442	
[13.2]	[654]	[1539]	[1848]	[2149]	[2706]	[2998]	[3874]		
	50	74	174	209	243	306	339	438	
Max cont.	[15.8]	[628]	[1512]	[1822]	[2113]	[2680]	[2972]	[3829]	Max cont.
	60	71	171	206	239	303	336	433	
Max int.	[19.8]	[469]	[1353]	[1672]	[1955]	[2582]	[2759]		Max int.
	75	53	153	189	221	292	312		



# BMP/BMPH PERFORMANCE DATA



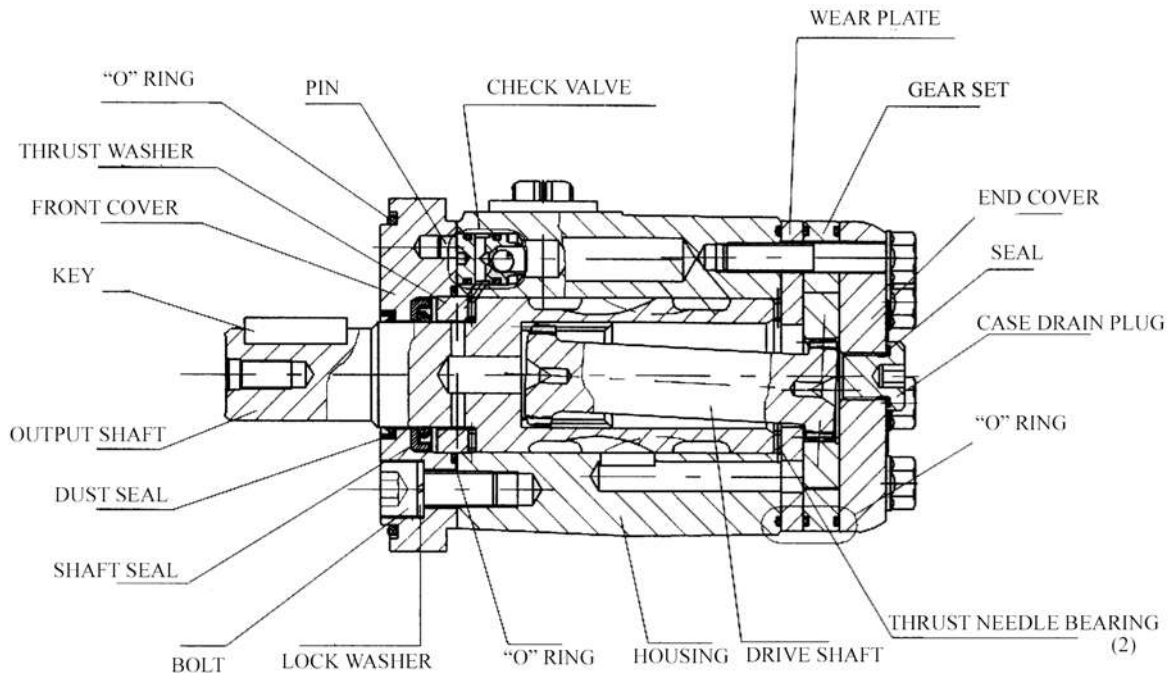
BMP 315 [19.02 in<sup>3</sup>/rev] 311.7 cm<sup>3</sup>/rev. Max cont. Max int.

	[435] 3	[870] 6	[1015] 7	[1160] 8	[1450] 10	[1813] 12	[PSI] MPa
GPM [2.1] L/min	[1026] 116	[2149] 243	[2494] 282	[2768] 313	[3431] 388		
8	<b>25</b>	<b>24</b>	<b>22</b>	<b>16</b>	<b>13</b>		
[4.0] 15	[1017] 115	[2149] 243	[2512] 284	[2865] 324	[3591] 406	[4449] 503	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
15	<b>47</b>	<b>46</b>	<b>45</b>	<b>43</b>	<b>41</b>	<b>20</b>	
[5.3] 20	[1008] 114	[2140] 242	[2494] 282	[2857] 323	[3582] 405	[4466] 505	
20	<b>63</b>	<b>62</b>	<b>61</b>	<b>58</b>	<b>56</b>	<b>54</b>	
[7.9] 30	[964] 109	[2096] 237	[2450] 277	[2821] 319	[3546] 401	[4431] 501	
30	<b>94</b>	<b>93</b>	<b>92</b>	<b>90</b>	<b>88</b>	<b>77</b>	
[9.2] 35	[929] 105	[2052] 232	[2414] 273	[2777] 314	[3511] 397	[4395] 497	
35	<b>110</b>	<b>109</b>	<b>108</b>	<b>106</b>	<b>103</b>	<b>93</b>	
[11.9] 45	[876] 99	[1999] 226	[2370] 268	[2733] 309	[3458] 391	[4342] 491	
45	<b>141</b>	<b>141</b>	<b>139</b>	<b>137</b>	<b>135</b>	<b>124</b>	
[13.2] 50	[814] 92	[1928] 218	[2317] 262	[2689] 304	[3396] 384	[4298] 486	
50	<b>157</b>	<b>157</b>	<b>155</b>	<b>154</b>	<b>151</b>	<b>141</b>	
[15.8] 60	[787] 89	[1901] 215	[2282] 258	[2644] 299	[3352] 379	[4236] 479	
60	<b>189</b>	<b>188</b>	<b>187</b>	<b>185</b>	<b>182</b>	<b>171</b>	Max cont.
[19.8] 75	[610] 69	[1716] 194	[2097] 237	[2459] 278	[3140] 355		
75	<b>236</b>	<b>235</b>	<b>234</b>	<b>232</b>	<b>229</b>		Max int.

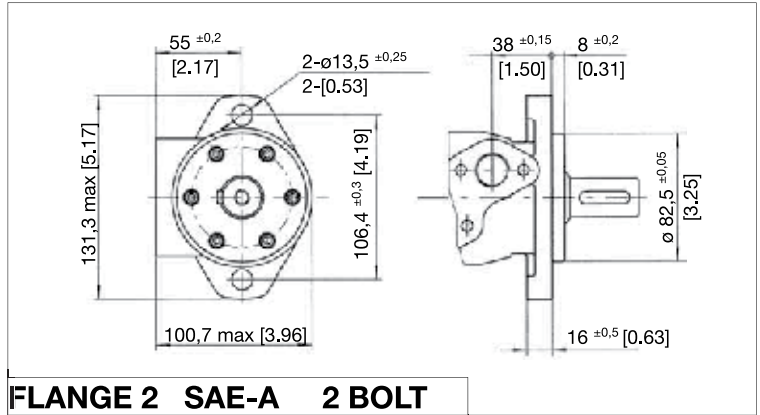
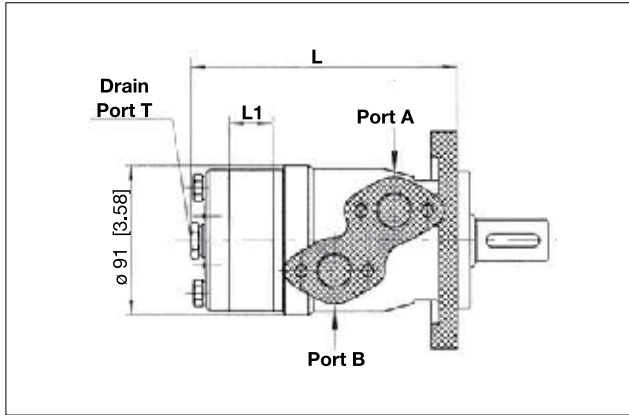
BMP 400 [23.57 in<sup>3</sup>/rev] 386.2 cm<sup>3</sup>/rev. Max cont. Max int.

	[435] 3	[870] 6	[1015] 7	[1160] 8	[1232,50] 8	[1812,50] 12	[PSI] MPa
GPM [2.1] L/min	[1300] 147	[2688] 304	[3131] 354				
8	<b>20</b>	<b>19</b>	<b>16</b>				
[4.0] 15	[1300] 147	[2724] 308	[3175] 359	[3608] 408	[3847] 435	[4705] 532	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
15	<b>37</b>	<b>36</b>	<b>35</b>	<b>33</b>	<b>32</b>	<b>25</b>	
[5.3] 20	[1273] 144	[2697] 305	[3166] 358	[3599] 407	[3847] 435	[4714] 533	
20	<b>50</b>	<b>49</b>	<b>47</b>	<b>45</b>	<b>43</b>	<b>38</b>	
[7.9] 30	[1229] 139	[2662] 301	[3113] 352	[3555] 402	[3803] 430	[4687] 530	
30	<b>74</b>	<b>73</b>	<b>72</b>	<b>70</b>	<b>68</b>	<b>62</b>	
[9.2] 35	[1176] 133	[2600] 294	[3051] 345	[3502] 396	[3741] 423	[4643] 525	
35	<b>86</b>	<b>86</b>	<b>85</b>	<b>82</b>	<b>80</b>	<b>75</b>	
[11.9] 45	[1105] 125	[2538] 287	[2998] 339	[3440] 389	[3679] 416	[4572] 517	
45	<b>111</b>	<b>111</b>	<b>109</b>	<b>106</b>	<b>105</b>	<b>100</b>	
[13.2] 50	[1035] 117	[2459] 278	[2918] 330	[3378] 382	[3591] 406	[4502] 509	
50	<b>124</b>	<b>124</b>	<b>122</b>	<b>120</b>	<b>119</b>	<b>113</b>	
[15.8] 60	[990] 112	[2423] 274	[2883] 326	[3334] 377	[3573] 404	[4466] 505	
60	<b>149</b>	<b>149</b>	<b>147</b>	<b>145</b>	<b>144</b>	<b>137</b>	Max cont.
[19.8] 75	[778] 88	[2146] 246	[2635] 298	[3104] 351	[3325] 376		
75	<b>185</b>	<b>185</b>	<b>185</b>	<b>182</b>	<b>181</b>		Max int.

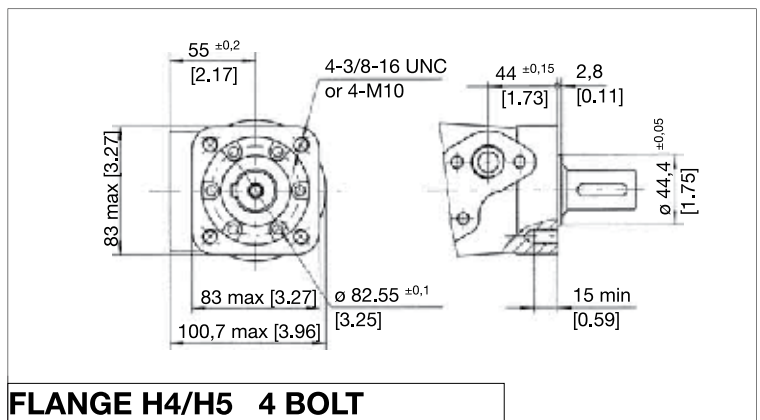
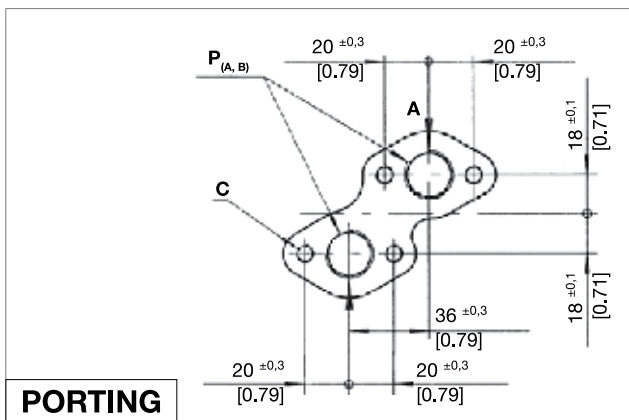
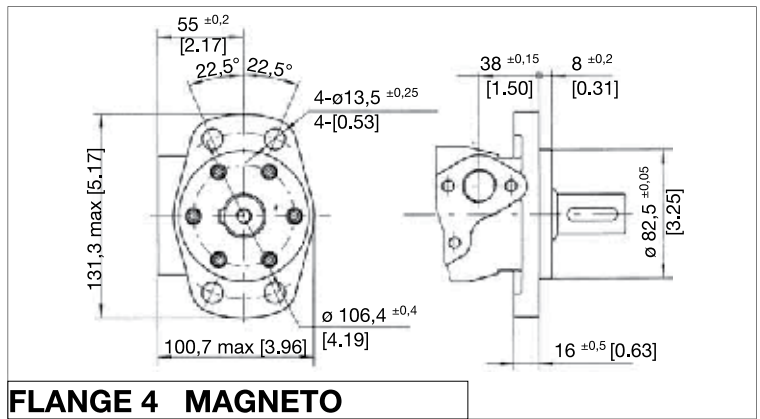
# BMP CROSS SECTION







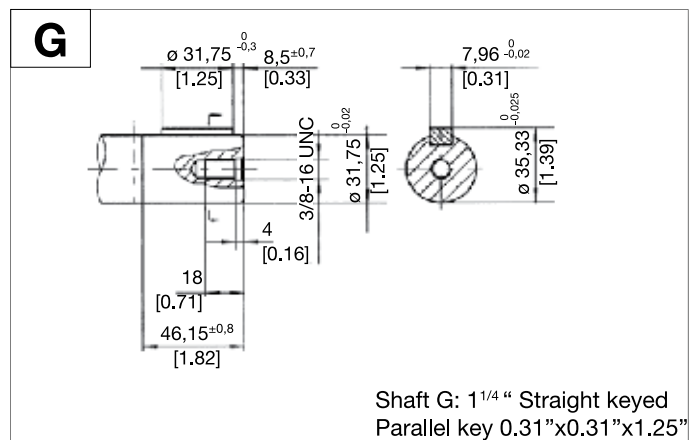
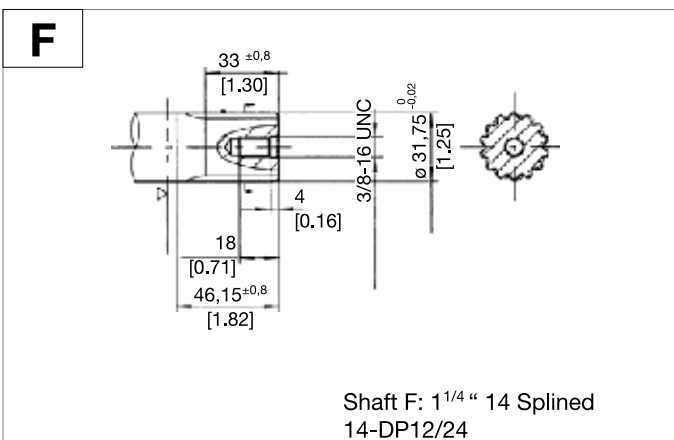
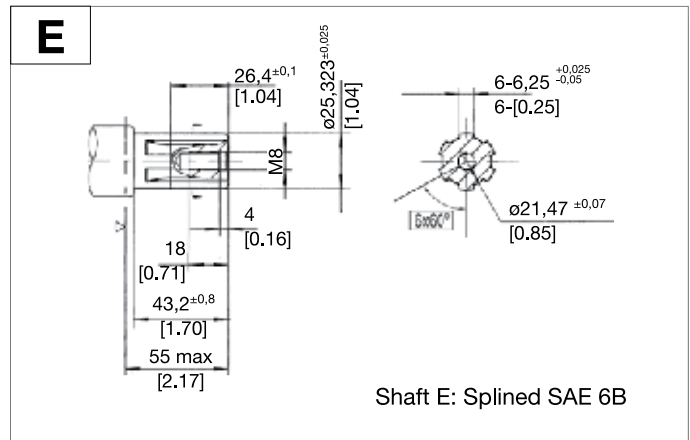
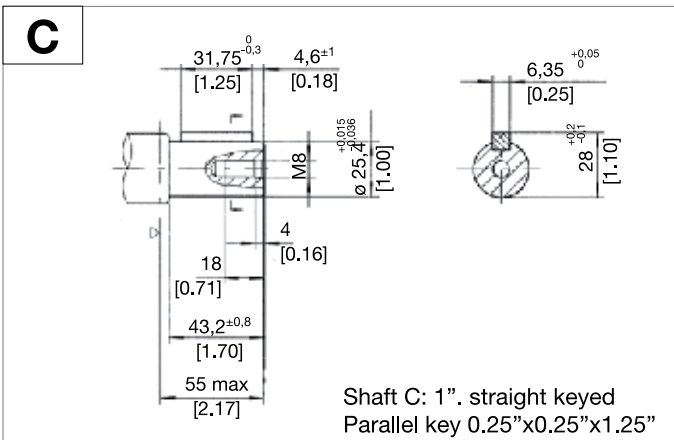
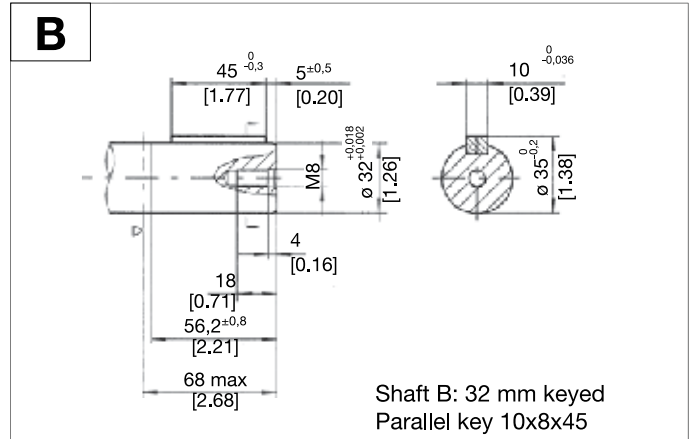
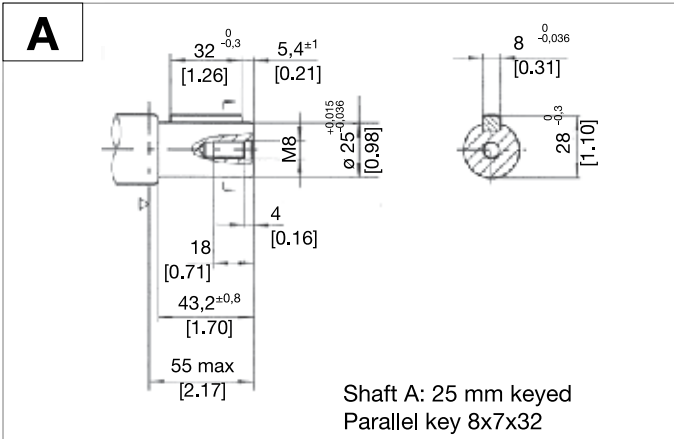
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BMP 80	[5.53]	[0.41]	140.5	10.5
BMP 100	[5.63]	[0.51]	143	13
BMP 125	[5.75]	[0.63]	146	16
BMP 160	[5.94]	[0.83]	151	21
BMP 200	[6.18]	[1.02]	157	26
BMP 250	[6.38]	[1.26]	162	32
BMP 315	[6.77]	[1.65]	172	42
BMP 400	[7.17]	[2.05]	182	52



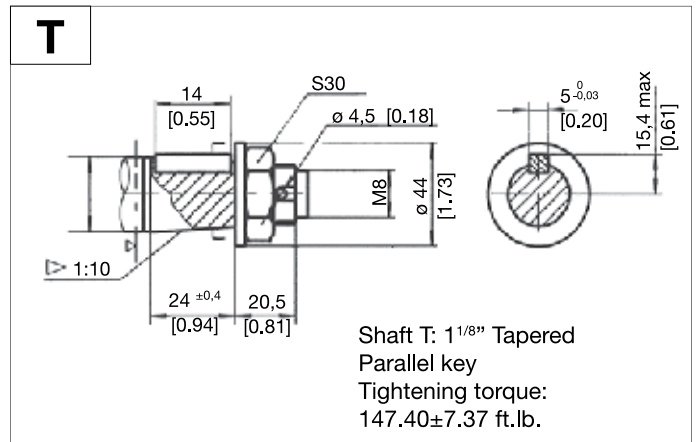
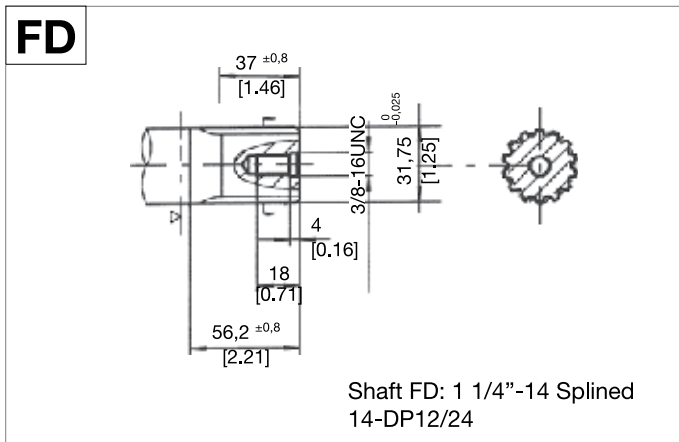
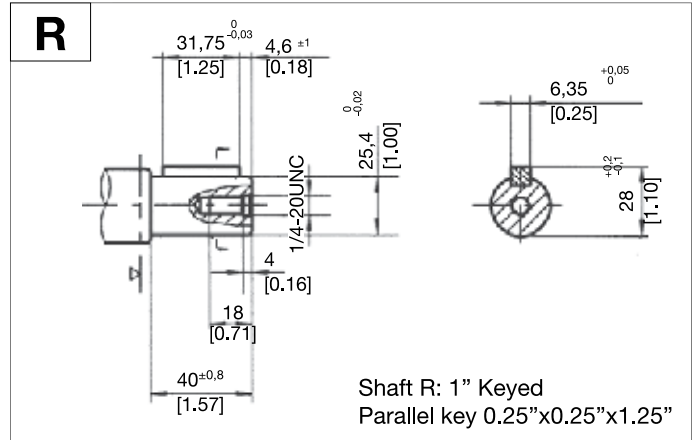
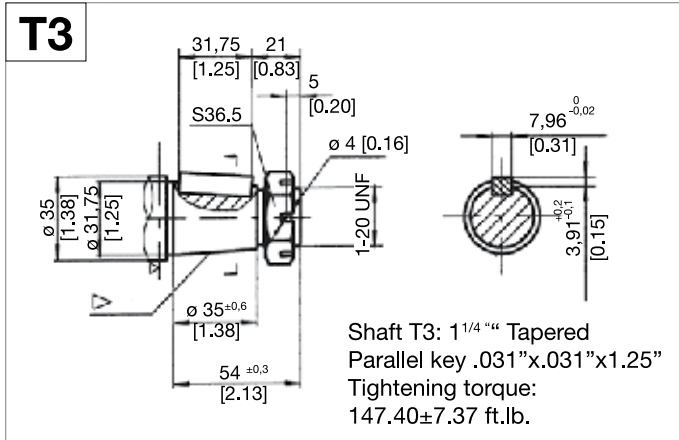
## PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	P	DEPTH	R	DEPTH
PORTS - A and B	G 1/2	15 mm	M22 X 1.5	15 mm	7/8-14 O-RING	17 mm	1/2-14NPTF	15 mm	PT(RC)1/2	15 mm
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	PT(RC)1/4	9.7 mm
BOLTS - C	4-M8	13 mm	4-M8	13 mm	4-5/16-18UNC	13 mm	4-5/16-18UNC	13 mm	4-M8	13 mm

# BMP MOTOR SHAFT EXTENSIONS

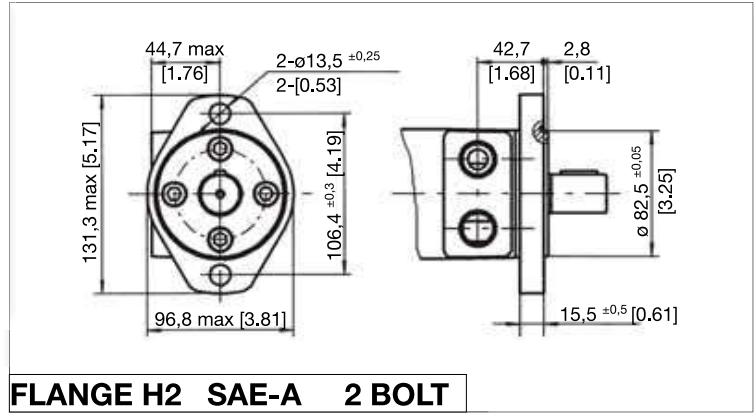
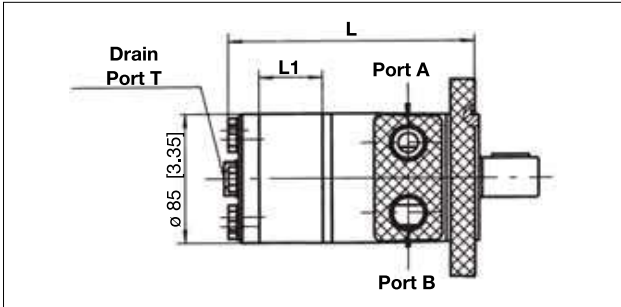


▷ Motor Mounting Surface

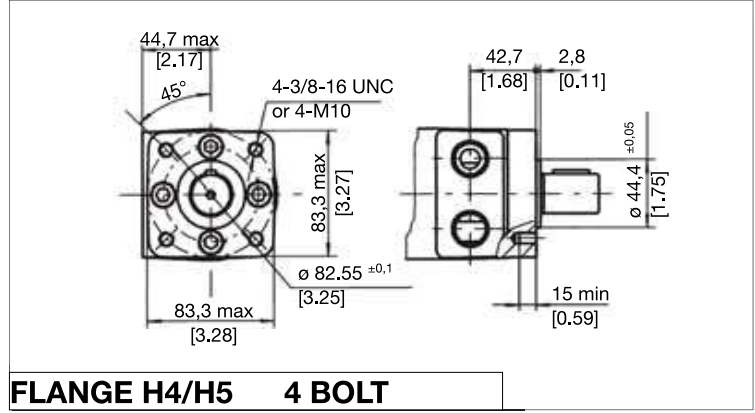
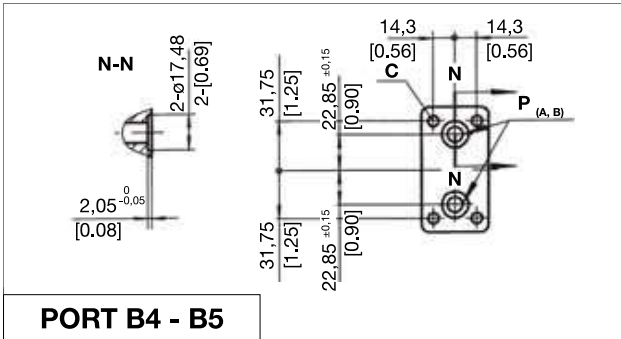
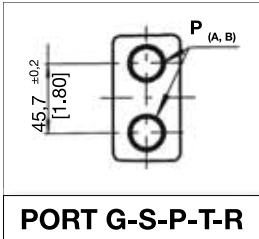
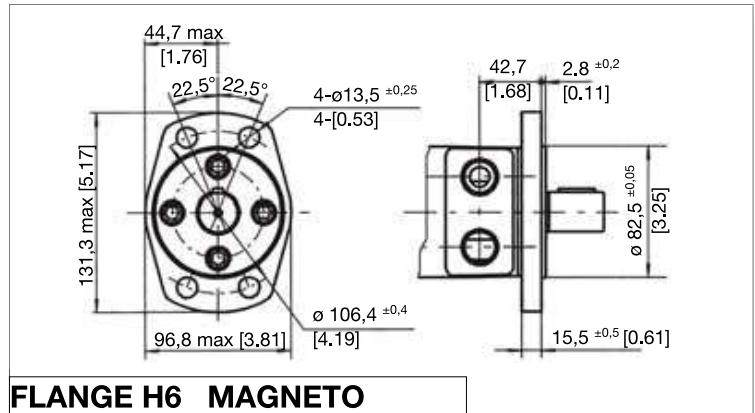


▷ Motor Mounting Surface

# BMPH DIMENSIONS & MOUNTING DATA

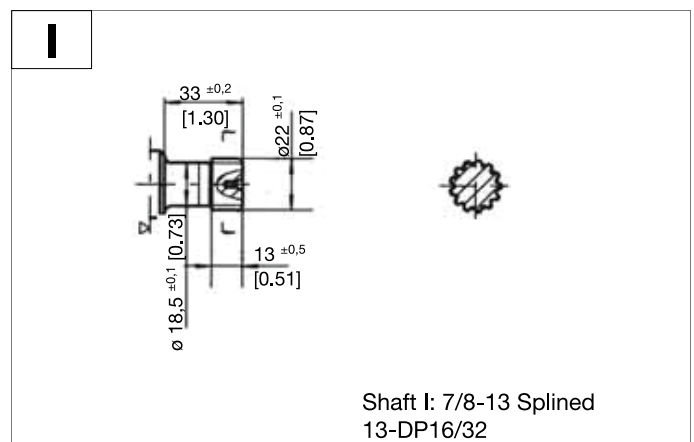
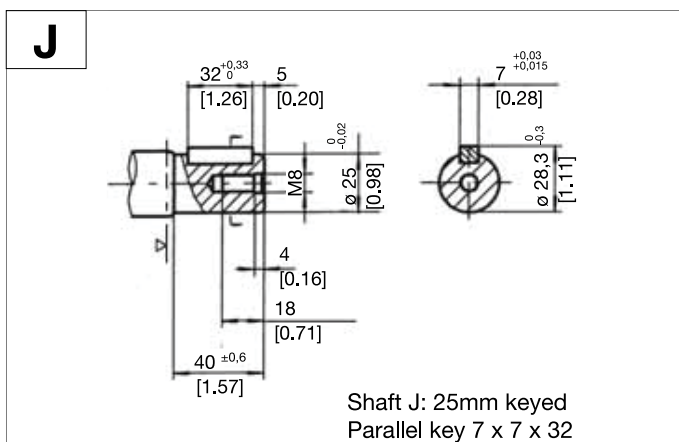
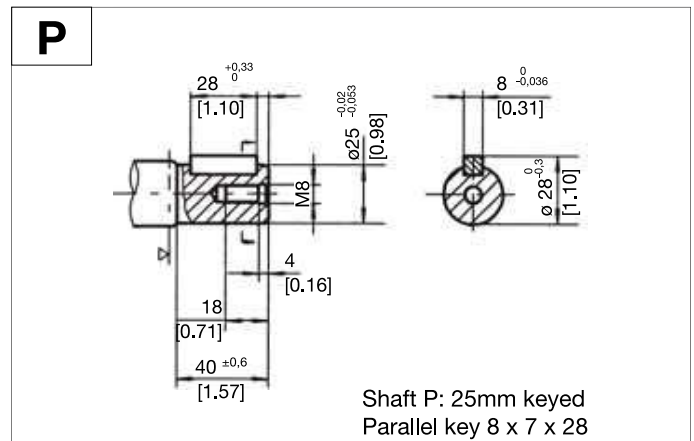
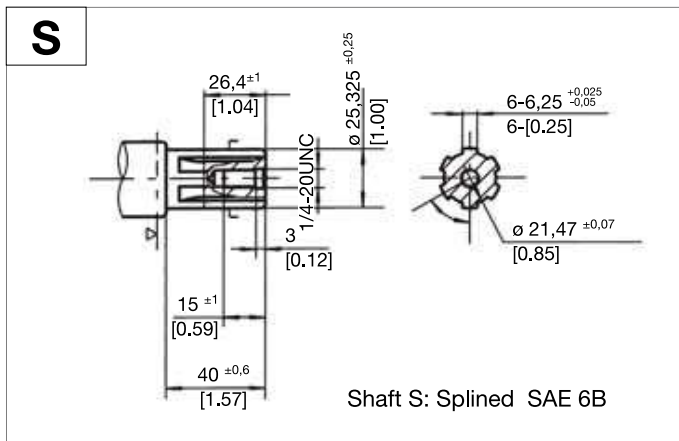
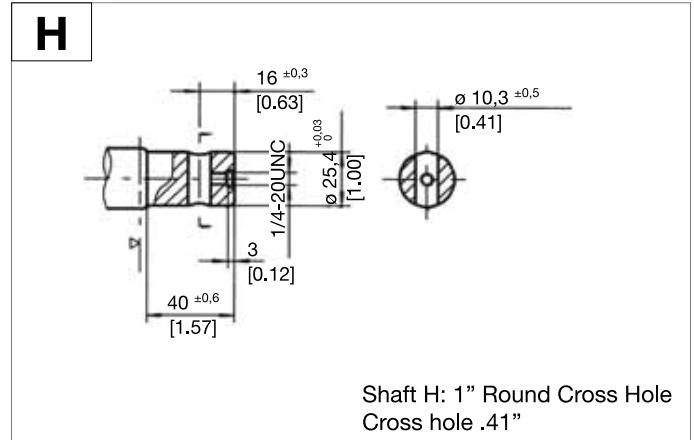
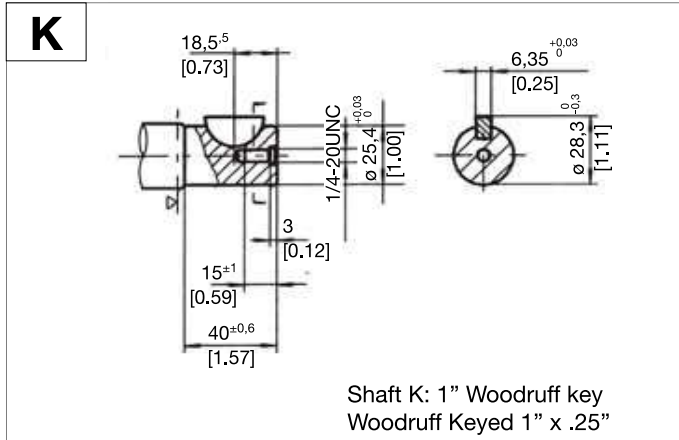


MODEL	[INCHES]		MILLIMETERS	
	L	L1	L	L1
BMPH 50	[5.39]	[.28]	141	7
BMPH 80	[5.53]	[0.41]	144.5	10.5
BMPH 100	[5.63]	[0.51]	147	13
BMPH 125	[5.75]	[0.63]	150	16
BMPH 160	[5.94]	[0.83]	155	21
BMPH 200	[6.18]	[1.02]	160	26
BMPH 250	[6.38]	[1.26]	166	32
BMPH 315	[6.77]	[1.65]	176	42
BMPH 400	[7.17]	[2.05]	186	52



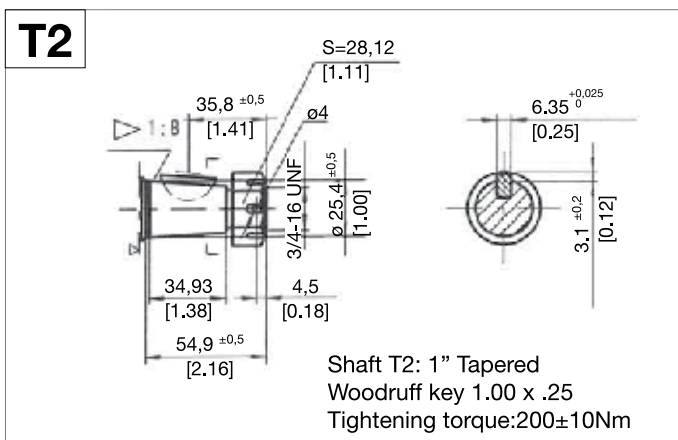
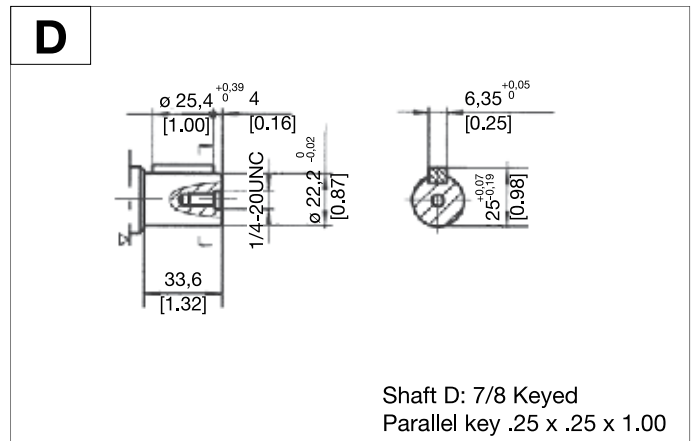
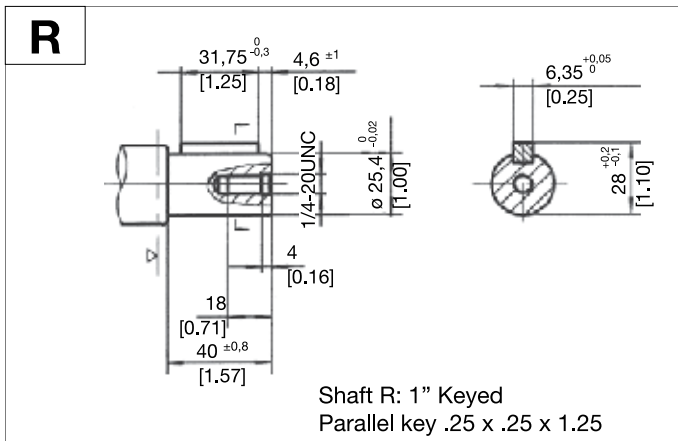
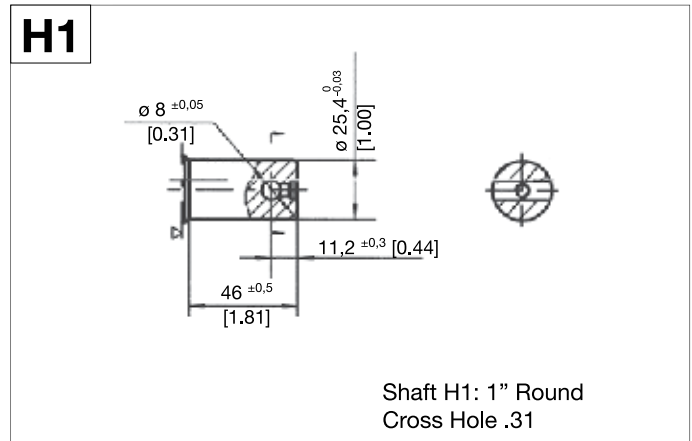
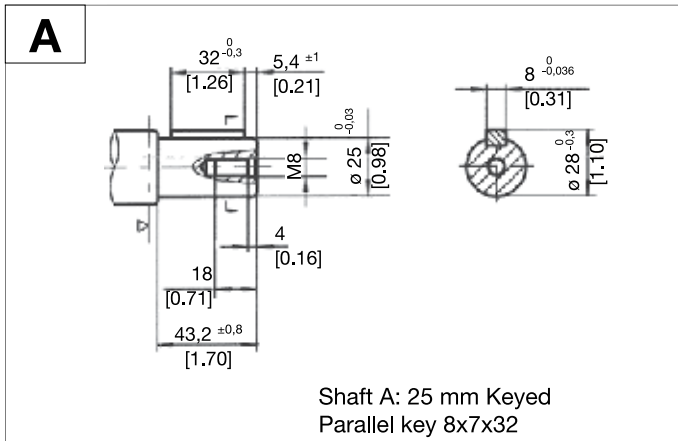
## PORT & DRAIN PORT ORDERING CODES

ORDER CODE	G	DEPTH	S	DEPTH	P	DEPTH	T	DEPTH	R	DEPTH	B4	DEPTH	B5	DEPTH
PORTS - A and B	G 1/2	15 mm	7/8-14 O-RING	17 mm	1/2-14NPTF	15 mm	3/4 16 O-RING	15 mm	PT(RC) 1/2	15 mm	Ø10	-	Ø10	-
TANK PORT - T	G 1/4	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	PT(RC) 1/4	9.7 mm	7/16 20UNF	12 mm	G 1/4	12 mm
BOLTS - C	-	-	-	-	-	-	-	-	-	-	4-5/16 18UNC	13 mm	4-M8	13 mm



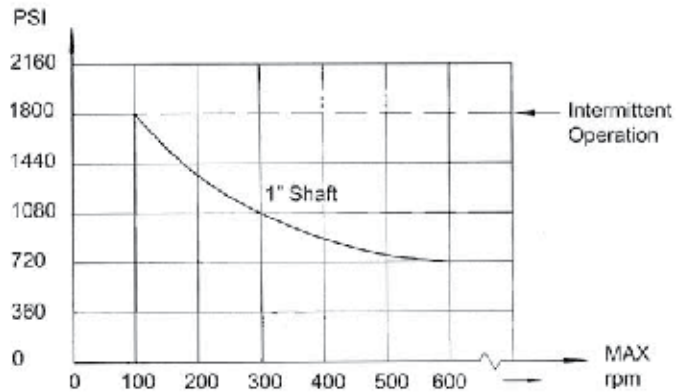
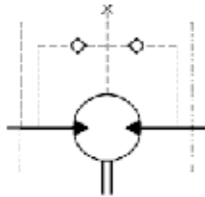
▷ Motor Mounting Surface

# BMPH MOTOR SHAFT EXTENSIONS



▷ Motor Mounting Surface

**Shaft Seal Rated Pressure**

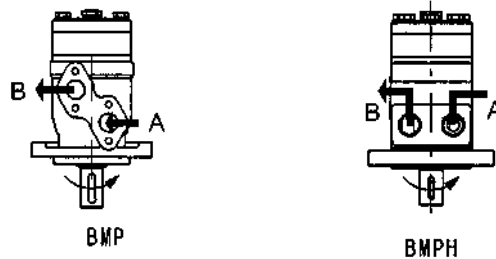


**Case Drain**

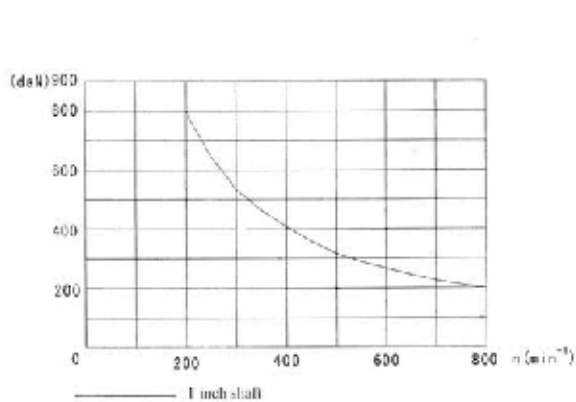
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the drain line is used, the pressure exerted on the shaft seal is equal to the return line pressure

**Direction of shaft rotation: Standard**

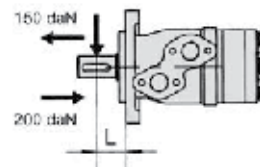
When facing shaft end of motor, shaft to rotate:  
 Clockwise when port "A" is pressurized.  
 Counter-clockwise when port "B" is pressurized.



**Status of the shaft's radial force**



$$F_r = \frac{800}{n} + \frac{2500}{95 + L}$$



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

Rhomb Flange  $L=30$ mm  
 Square Flange  $L=24$ mm

# BMP ORDERING INFORMATION



	1	2	3	4	5	6	7	8
BMP	N1							

1	2	3	4	5	6	7	8	
N1	DISP. cc (cu. in.)	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS	
Needle Bearing for High Radial Load (Standard)	36 (2.2)	2	SAE - A 2 Bolt Pilot: 3.25"	C Shaft 1" Straight Parallel Key 0.25"x0.25"x1.25"	S Port: 7/8" - 14 O-ring Manifold Drain: 7/16"-20 UNF Bolts: 4 x 5/16"-18UNC	NONE STANDARD	00 NO PAINT	NONE STANDARD
	50 (3.15)	4	Magneto Pilot Pilot: 3.25"	F 1 1/4" 14 Splined 14-DP12/24	P Port: 1/2" - 14 NPTF Manifold Drain: 7/16"-20 UNF Bolts: 4 x 5/16"-18UNC	R OPPOSITE	NONE BLACK	0 NO CASE DRAIN
	80 (4.74)	H4	SAE - A 4 Bolt Pilot: 3.25"	E Splined SAE 6B	D Port: G 1/2 Manifold Mount Drain: G 1/4 Bolts: 4 x M8			F FREE RUNNING
	100 (5.87)			R Short shaft 1" Parallel key 0.25"x0.25"x1.25"	M Port: M22x1.5 Manifold Mount Drain: M14x1.5 Bolts: 4 x M8			LS LOW SPEED VALVE
	125 (7.2)			FD 1 1/4" 14 Splined (long) 14-DP12/24				HTS HIGH TEMP SEAL
	160 (9.51)			G 1 1/4" Straight Parallel key 0.31"x0.31"x1.25"				
	200 (11.59)			A Shaft 25mm Parallel key 8x7x32				
	250 (14.09)			B Shaft 32mm Parallel key 10x8x45				
	315 (19.13)			T 1 1/4" Tapered Parallel key 0.20"x0.20"x0.55"				
400 (23.61)			T3 1 1/8" Tapered Parallel key 0.20"x0.20"x1.00"					

Please contact us for options not listed above.



	1	2	3	4	5	6	7	8
<b>BMPH</b>	<b>N1</b>							

1	2	3		4		5		6		7		8	
N1	DISP. cc (cu. in.)	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
Needle Bearing for High Radial Load (Standard)	36 (2.2)	H2	SAE - A 2 Bolt Pilot: 3.25"	K	Shaft: 1" woodruff Key Woodruff key 1"x.25	S	7/8 - 14 O-RING, 7/16-20 UNF	NONE	STANDARD	00	NO PAINT	NONE	STANDARD
	50 (3.15)	H6	Magneto Pilot Pilot: 3.25"	S	Shaft: Splined SAE 6B	P	1/2 - 14 NPTF, 7/16-20 UNF	R	REVERSE	NONE	BLACK	0	NO CASE DRAIN
	80 (4.74)	H4	SAE - A 4 Bolt Pilot: 3.25"	H	Shaft: 1" Round Cross Hole Cross Hole .41"	T	3/4 - 16 O-RING, 7/16-20 UNF					F	FREE RUNNING
	100 (5.87)			H1	Shaft: 1" Round Cross Hole Cross Hole .31"	G	G 1/2, G 1/4					LS	LOW SPEED VALVE
	125 (7.2)			I	Shaft: 7/8-13 Splined	B4	10mm O-RING MANIFOLD 4x5/16-18 UNC 7/16-20 UNF (G1/4)					HTS	HIGH TEMP SEAL
	160 (9.51)			D	Shaft: 7/8 Parallel key: .25x.25x1.00	B5	10mm O-RING MANIFOLD 4xM8, 7/16-20 UNF (G1/4)						
	200 (11.59)			T2	Shaft: 1" Tapered Woodruff Key 1.00x.25								
	250 (14.09)			A	Shaft 25mm Parallel key 8x7x32								
	315 (19.13)			P	Shaft 25mm Parallel key 8x7x28								
400 (23.61)			J	Shaft 25mm Parallel key 7x7x32									

Please contact us for options not listed above.

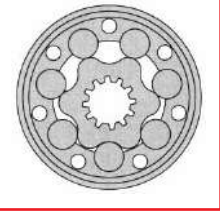
# BMPH CROSS REFERENCE DATA



		DISPLACEMENT 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	ANFIELD	BMPH-50-H4-K-P	BMPH-80-H4-K-P	BMPH-100-H4-K-P	N/A	ADM150-4RP	BMPH-200-H4-K-P	BMPH-250-H4-K-P	BMPH-315-H4-K-P	BMPH-400-H4-K-P	
			PRINCE	ADM50-4RP	ADM75-4RP	ADM100-4RP	N/A	ADM150-4RP	ADM200-4RP	ADM250-4RP	ADM300-4RP	ADM400-4RP	ADM500-4RP
		CHAR-LYNN®	101-1001	101-1002	101-1003	101-1755	101-1004	101-1005	101-1006	101-1007	101-1008	101-1009	101-1008
		DANFOSS	151-2121	151-2122	151-2123	151-2124	151-2125	151-2126	151-2127	151-2128	151-2129	151-2130	151-2131
		#10 SAE	ANFIELD	BMPH-50-H4-K-S	BMPH-80-H4-K-S	BMPH-100-H4-K-S	N/A	ADM150-4RO	BMPH-200-H4-K-S	BMPH-250-H4-K-S	BMPH-315-H4-K-S	BMPH-400-H4-K-S	BMPH-500-H4-K-S
			PRINCE	ADM50-4RO	ADM75-4RO	ADM100-4RO	N/A	ADM150-4RO	ADM200-4RO	ADM250-4RO	ADM300-4RO	ADM400-4RO	ADM500-4RO
	CHAR-LYNN®	101-1009	101-1010	101-1011	101-1751	101-1012	101-1013	101-1014	101-1015	101-1016	101-1017	101-1018	
	DANFOSS	151-2041	151-2042	151-2043	151-2044	151-2045	151-2046	151-2047	151-2048	151-2049	151-2050	151-2051	
	Manifold	ANFIELD	BMPH-50-H4-K-B4	BMPH-80-H4-K-B4	BMPH-100-H4-K-B4	N/A	ADM150-4RT	BMPH-200-H4-K-B4	BMPH-250-H4-K-B4	BMPH-315-H4-K-B4	BMPH-400-H4-K-B4	BMPH-500-H4-K-B4	
		PRINCE	ADM50-4RT	ADM75-4RT	ADM100-4RT	N/A	ADM150-4RT	ADM200-4RT	ADM250-4RT	ADM300-4RT	ADM400-4RT	ADM500-4RT	
		CHAR-LYNN®	101-1017	101-1018	101-1019	101-1759	101-1020	101-1021	101-1022	101-1023	101-1024	101-1025	
		DANFOSS	151-2201	151-2202	151-2203	151-2201	151-2202	151-2203	151-2204	151-2205	151-2206	151-2207	
1/2" NPT		ANFIELD	BMPH-50-H4-S-P	BMPH-80-H4-S-P	BMPH-100-H4-S-P	N/A	ADM150-4SP	BMPH-200-H4-S-P	BMPH-250-H4-S-P	BMPH-315-H4-S-P	BMPH-400-H4-S-P	BMPH-500-H4-S-P	
		PRINCE	ADM50-4SP	ADM75-4SP	ADM100-4SP	N/A	ADM150-4SP	ADM200-4SP	ADM250-4SP	ADM300-4SP	ADM400-4SP	ADM500-4SP	
CHAR-LYNN®	101-1049	101-1050	101-1051	101-1766	101-1052	101-1053	101-1054	101-1055	101-1056	101-1057	101-1058		
DANFOSS	151-2131	151-2132	151-2133	151-2134	151-2135	151-2136	151-2137	151-2138	151-2139	151-2140	151-2141		
#10 SAE	ANFIELD	BMPH-50-H4-S-S	BMPH-80-H4-S-S	BMPH-100-H4-S-S	N/A	ADM150-4SS	BMPH-200-H4-S-S	BMPH-250-H4-S-S	BMPH-315-H4-S-S	BMPH-400-H4-S-S	BMPH-500-H4-S-S		
	PRINCE	ADM50-4SS	ADM75-4SS	ADM100-4SS	N/A	ADM150-4SS	ADM200-4SS	ADM250-4SS	ADM300-4SS	ADM400-4SS	ADM500-4SS		
	CHAR-LYNN®	101-1057	101-1058	101-1059	101-1872	101-1060	101-1061	101-1062	101-1063	101-1064	101-1065		
	DANFOSS	151-2051	151-2052	151-2053	151-2054	151-2055	151-2056	151-2057	151-2058	151-2059	151-2060		
	Manifold	ANFIELD	BMPH-50-H4-S-B4	BMPH-80-H4-S-B4	BMPH-100-H4-S-B4	N/A	ADM150-4SB4	BMPH-200-H4-S-B4	BMPH-250-H4-S-B4	BMPH-315-H4-S-B4	BMPH-400-H4-S-B4	BMPH-500-H4-S-B4	
		PRINCE	ADM50-4SB4	ADM75-4SB4	ADM100-4SB4	N/A	ADM150-4SB4	ADM200-4SB4	ADM250-4SB4	ADM300-4SB4	ADM400-4SB4	ADM500-4SB4	
CHAR-LYNN®	101-1065	101-1066	101-1067	101-1770	101-1068	101-1069	101-1070	101-1071	101-1072	101-1073	101-1074		
DANFOSS	151-2211	151-2212	151-2213	151-2214	151-2215	151-2216	151-2217	151-2218	151-2219	151-2220	151-2221		
2 BOLT FLANGE	Woodruff Keyed	1/2" NPT	ANFIELD	BMPH-50-H2-K-P	BMPH-80-H2-K-P	BMPH-100-H2-K-P	N/A	ADM150-2RP	BMPH-200-H2-K-P	BMPH-250-H2-K-P	BMPH-315-H2-K-P	BMPH-400-H2-K-P	
			PRINCE	ADM50-2RP	ADM75-2RP	ADM100-2RP	N/A	ADM150-2RP	ADM200-2RP	ADM250-2RP	ADM300-2RP	ADM400-2RP	ADM500-2RP
		CHAR-LYNN®	101-1025	101-1026	101-1027	101-1706	101-1028	101-1029	101-1030	101-1031	101-1032	101-1033	
		DANFOSS	151-2081	151-2082	151-2083	151-2084	151-2085	151-2086	151-2087	151-2088	151-2089	151-2090	
		#10 SAE	ANFIELD	BMPH-50-H2-K-S	BMPH-80-H2-K-S	BMPH-100-H2-K-S	N/A	ADM150-2RO	BMPH-200-H2-K-S	BMPH-250-H2-K-S	BMPH-315-H2-K-S	BMPH-400-H2-K-S	BMPH-500-H2-K-S
			PRINCE	ADM50-2RO	ADM75-2RO	ADM100-2RO	N/A	ADM150-2RO	ADM200-2RO	ADM250-2RO	ADM300-2RO	ADM400-2RO	ADM500-2RO
	CHAR-LYNN®	101-1033	101-1034	101-1035	101-1702	101-1036	101-1037	101-1038	101-1039	101-1040	101-1041	101-1042	
	DANFOSS	151-2001	151-2002	151-2003	151-2004	151-2005	151-2006	151-2007	151-2008	151-2009	151-2010	151-2011	
	Manifold	ANFIELD	BMPH-50-H2-K-B4	BMPH-80-H2-K-B4	BMPH-100-H2-K-B4	N/A	ADM150-4RT	BMPH-200-H2-K-B4	BMPH-250-H2-K-B4	BMPH-315-H2-K-B4	BMPH-400-H2-K-B4	BMPH-500-H2-K-B4	
		PRINCE	ADM50-4RT	ADM75-4RT	ADM100-4RT	N/A	ADM150-4RT	ADM200-4RT	ADM250-4RT	ADM300-4RT	ADM400-4RT	ADM500-4RT	
		CHAR-LYNN®	101-1041	101-1042	101-1043	101-11710	101-1044	101-1045	101-1046	101-1047	101-1048	101-1049	
		DANFOSS	151-2161	151-2162	151-2163	151-2164	151-2165	151-2166	151-2167	151-2168	151-2169	151-2170	
1/2" NPT		ANFIELD	BMPH-50-H2-S-P	BMPH-80-H2-S-P	BMPH-100-H2-S-P	N/A	ADM150-2SP	BMPH-200-H2-S-P	BMPH-250-H2-S-P	BMPH-315-H2-S-P	BMPH-400-H2-S-P	BMPH-500-H2-S-P	
		PRINCE	ADM50-2SP	ADM75-2SP	ADM100-2SP	N/A	ADM150-2SP	ADM200-2SP	ADM250-2SP	ADM300-2SP	ADM400-2SP	ADM500-2SP	
CHAR-LYNN®	101-1073	101-1074	101-1075	101-1727	101-1076	101-1077	101-1078	101-1079	101-1080	101-1081	101-1082		
DANFOSS	151-2091	151-2092	151-2093	151-2094	151-2095	151-2096	151-2097	151-2098	151-2099	151-2100	151-2101		
#10 SAE	ANFIELD	BMPH-50-H2-S-S	BMPH-80-H2-S-S	BMPH-100-H2-S-S	N/A	ADM150-2SS	BMPH-200-H2-S-S	BMPH-250-H2-S-S	BMPH-315-H2-S-S	BMPH-400-H2-S-S	BMPH-500-H2-S-S		
	PRINCE	ADM50-2SS	ADM75-2SS	ADM100-2SS	N/A	ADM150-2SS	ADM200-2SS	ADM250-2SS	ADM300-2SS	ADM400-2SS	ADM500-2SS		
	CHAR-LYNN®	101-1081	101-1082	101-1083	101-1723	101-1084	101-1085	101-1086	101-1087	101-1088	101-1089		
	DANFOSS	151-2011	151-2012	151-2013	151-2014	151-2015	151-2016	151-2017	151-2018	151-2019	151-2020		
	Manifold	ANFIELD	BMPH-50-H2-S-B4	BMPH-80-H2-S-B4	BMPH-100-H2-S-B4	N/A	ADM150-2SB4	BMPH-200-H2-S-B4	BMPH-250-H2-S-B4	BMPH-315-H2-S-B4	BMPH-400-H2-S-B4	BMPH-500-H2-S-B4	
		PRINCE	ADM50-2SB4	ADM75-2SB4	ADM100-2SB4	N/A	ADM150-2SB4	ADM200-2SB4	ADM250-2SB4	ADM300-2SB4	ADM400-2SB4	ADM500-2SB4	
CHAR-LYNN®	101-1089	101-1090	101-1091	101-1731	101-1092	101-1093	101-1094	101-1095	101-1096	101-1097	101-1098		
DANFOSS	151-2171	151-2172	151-2173	151-2174	151-2175	151-2176	151-2177	151-2178	151-2179	151-2180	151-2181		

Char-Lynn® is a registered trademark of the Eaton Corporation

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.



The BMR/BMRS series advanced GEROLER gear set, shaft distribution flow, hydraulic motors are a compact, low noise, high efficient high torque low speed design. The GEROLER gear set also affords a reliable smooth start up at low pressure..

The special design of the valve linkage and high pressure capability of the shaft seal provides a long operating life and these motors can be used in either series or parallel operation.

The low weight advanced construction design is manufactured in accordance with the requirements of ISO 9000-2000 quality system.

## BMR TECHNICAL SPECIFICATIONS

DISTRIBUTION TYPE			BMR 50	BMR 80	BMR 100	BMR 125	BMR 160	BMR 200	BMR 250	BMR 315	BMR 375
GEOMETRIC DISPLACEMENT	[in <sup>3</sup> ./rev.]		[3.13]	[4.92]	[6.15]	[7.62]	[9.59]	[12.16]	[15.38]	[19.19]	[23.27]
	cm <sup>3</sup> /rev.		<b>51.3</b>	<b>80.6</b>	<b>100.8</b>	<b>124.9</b>	<b>157.2</b>	<b>199.2</b>	<b>252</b>	<b>314.5</b>	<b>370</b>
MAX. SPEED RPM	RATED		755	750	600	475	375	300	240	190	160
	CONT.		<b>970</b>	<b>940</b>	<b>750</b>	<b>600</b>	<b>470</b>	<b>375</b>	<b>300</b>	<b>240</b>	<b>200</b>
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[884]	[1415]	[1769]	[2211]	[2830]	[2919]	[3113]	[3184]	[3714]
		N*M	<b>100</b>	<b>160</b>	<b>200</b>	<b>250</b>	<b>320</b>	<b>330</b>	<b>352</b>	<b>360</b>	<b>420</b>
	CONT.	[LB. IN.]	[884]	[1680]	[2123]	[2582]	[3210]	[3166]	[3113]	[3184]	[3714]
		N*M	<b>100</b>	<b>190</b>	<b>240</b>	<b>292</b>	<b>363</b>	<b>358</b>	<b>352</b>	<b>360</b>	<b>420</b>
	INT.	[LB. IN.]	[1114]	[1946]	[2476]	[3007]	[3803]	[3962]	[4157]	[4157]	[4847]
		N*M	<b>126</b>	<b>220</b>	<b>280</b>	<b>340</b>	<b>430</b>	<b>448</b>	<b>470</b>	<b>470</b>	<b>548</b>
MAX. OUTPUT [HP] KW	RATED	[HP]	[10]	[17]	[17]	[16]	[17]	[14]	[12]	[9]	[9]
		KW	<b>7.7</b>	<b>12.3</b>	<b>12.3</b>	<b>12.0</b>	<b>12.3</b>	<b>10</b>	<b>9</b>	<b>7</b>	<b>6.5</b>
	CONT.	[HP]	[10]	[20]	[20]	[19]	[19]	[15]	[12]	[9]	[12]
		KW	<b>7.7</b>	<b>15</b>	<b>15</b>	<b>14</b>	<b>14</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>8.6</b>
	INT.	[HP]	[13]	[23]	[23]	[22]	[22]	[19]	[16]	[12]	[16]
		KW	<b>9.7</b>	<b>17</b>	<b>17</b>	<b>16</b>	<b>16</b>	<b>14</b>	<b>12</b>	<b>9</b>	<b>12</b>
MAX. PRES-SURE DROP [PSI] MPa	RATED	[PSI]	[2030]	[2030]	[2030]	[2030]	[2030]	[1740]	[1595]	[1232]	[1232]
		MPa	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>8.5</b>	<b>8.5</b>
	CONT.	[PSI]	[2030]	[2537]	[2537]	[2537]	[2392]	[1885]	[1595]	[1232]	[1232]
		MPa	<b>14</b>	<b>17.5</b>	<b>17.5</b>	<b>17.5</b>	<b>16.5</b>	<b>13</b>	<b>11</b>	<b>8.5</b>	<b>8.5</b>
	INT.	[PSI]	[2537]	[2900]	[2900]	[2900]	[2900]	[2537]	[2030]	[1667]	[1667]
		MPa	<b>17.5</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>17.5</b>	<b>14</b>	<b>11.5</b>	<b>11.5</b>
MAX. FLOW [GPM] L/MIN	CONT.	[GPM]	[10.6]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]
		L/MIN	<b>40</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>
	INT.	[GPM]	[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	<b>50</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>
WEIGHT [LB] KG	[LB]	[15]	[15]	[15]	[16]	[17]	[18]	[19]	[20]	[20]	
	KG	<b>6.7</b>	<b>6.9</b>	<b>6.9</b>	<b>7.2</b>	<b>7.5</b>	<b>8</b>	<b>8.5</b>	<b>9</b>	<b>9.3</b>	

- \* Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- \* Continuous pressure: Max. value of operating motor continuously.
- \* Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- \* Peak pressure: Max. value of operating motor in 0.6 second per minute.

# BMR/BMRS PERFORMANCE DATA

**BMR 50** [3.13 in<sup>3</sup>/rev] 51.3 cm<sup>3</sup>/rev. Max cont. Max int.

	[725]	[1015]	[1305]	[1450]	[1740]	[2030]	[2320]	[2537]	[PSI]
	5	7	9	10	12	14	16	17.5	MPa
GPM	[1.3]	[310]	[398]	[539]	[593]	[681]	[778]		
	5	35	45	61	67	77	88		
L/min	[2.6]	[318]	[407]	[548]	[610]	[708]	[840]	[955]	[1061]
	10	36	46	62	69	80	95	108	120
Flow (L/min)	[3.9]	[310]	[433]	[557]	[646]	[778]	[884]	[964.]	[1088]
	15	35	49	63	73	88	100	109	123
Flow (L/min)	[5.3]	[305]	[416]	[539]	[610]	[734]	[849]	[964]	[1114]
	20	34.5	47	61	69	83	96	109	126
Flow (L/min)	[6.6]	[301]	[398]	[539]	[610]	[716]	[849]	[964]	[1114]
	25	34	45	61	69	81	96	109	126
Flow (L/min)	[7.9]	[292]	[389]	[531]	[593]	[708]	[840]	[955]	[1114]
	30	33	44	60	67	80	95	108	126
Flow (L/min)	[9.2]	[274]	[371]	[522]	[584]	[708]	[822]	[946]	[1097]
	35	31	42	59	66	80	93	107	124
Max cont.	[10.6]	[265]	[363]	[513]	[584]	[699]	[814]	[937]	[1079]
	40	30	41	58	66	79	92	106	122
Max int.	[11.9]	[261]	[354]	[504]	[575]	[690]	[796]	[929]	[1070]
	45	29.5	40	57	65	78	90	105	121

**BMR 80** [4.92 in<sup>3</sup>/rev] 80.6 cm<sup>3</sup>/rev. Max cont. Max int.

	[725]	[1015]	[1305]	[1450]	[1740]	[2030]	[2320]	[2537]	[PSI]
	5	7	9	10	12	14	16	17.5	MPa
GPM	[2.6]	[486]	[681]	[867]	[946]	[1150]	[1318]	[1503]	[1592]
	10	55	77	98	107	130	149	170	180
L/min	[5.3]	[442]	[722]	[929]	[1044]	[1167]	[1415]	[1574]	[1671]
	20	50	81.6	105	118	132	160	178	189
Flow (L/min)	[7.9]	[425]	[654]	[858]	[1008]	[1159]	[1327]	[1584]	[1680]
	30	48	74	97	114	131	150	179	190
Flow (L/min)	[10.6]	[398]	[628]	[840]	[929]	[1132]	[1318]	[1565]	[1663]
	40	45	71	95	105	128	149	177	188
Flow (L/min)	[13.2]	[371]	[619]	[796]	[867]	[1106]	[1300]	[1512]	[1654]
	50	42	70	90	98	125	147	171	187
Flow (L/min)	[15.8]	[336]	[557]	[752]	[840]	[1044]	[1256]	[1495]	[1636]
	60	38	63	85	95	118	142	169	185
Max cont.	[18.5]	[318]	[513]	[708]	[787]	[991]	[1229]	[1450]	[1583]
	70	36	58	80	89	112	139	164	179
Max int.	[19.8]	[256]	[495]	[681]	[751]	[973]	[1176]	[1424]	[1565]
	75	29	56	77	85	110	133	161	177

**BMR 100** [6.15 in<sup>3</sup>/rev] 100.8 cm<sup>3</sup>/rev. Max cont. Max int.

	[725]	[1015]	[1305]	[1450]	[1740]	[2030]	[2320]	[2537]	[PSI]
	5	7	9	10	12	14	16	17.5	MPa
GPM	[2.6]	[619]	[884]	[1079]	[1220]	[1406]	[1610]	[1857]	[1963]
	10	70	100	122	138	159	182	210	222
L/min	[5.3]	[601]	[840]	[1088]	[1265]	[1459]	[1769]	[1955]	[2105]
	20	68	95	123	143	165	200	221	238
Flow (L/min)	[7.9]	[548]	[831]	[1070]	[1238]	[1450]	[1716]	[1946]	[2123]
	30	62	94	121	140	164	194	220	240
Flow (L/min)	[10.6]	[522]	[778]	[1052]	[1185]	[1424]	[1698]	[1928]	[2105]
	40	59	88	119	134	161	192	218	238
Flow (L/min)	[13.2]	[486]	[734]	[1035]	[1106]	[1389]	[1636]	[1919]	[2078]
	50	55	83	117	125	157	185	217	235
Flow (L/min)	[15.8]	[425]	[699]	[973]	[1052]	[1344]	[1592]	[1893]	[2061]
	60	48	79	110	119	152	180	214	233
Max cont.	[18.5]	[380]	[619]	[884]	[991]	[1256]	[1503]	[1778]	[2025]
	70	43	70	100	112	142	170	201	229
Max int.	[19.8]	[345]	[557]	[858]	[929]	[1238]	[1477]	[1742]	[2008]
	75	39	63	97	105	140	167	197	227

**BMR 125** [7.62 in<sup>3</sup>/rev] 124.9 cm<sup>3</sup>/rev. Max cont. Max int.

	[725]	[1015]	[1305]	[1450]	[1740]	[2030]	[2320]	[2537]	[PSI]
	5	7	9	10	12	14	16	17.5	MPa
GPM	[2.6]	[796]	[1079]	[1415]	[1530]	[1813]	[2096]	[2282]	[2388]
	10	90	122	160	173	205	237	258	270
L/min	[5.3]	[752]	[1044]	[1046]	[1521]	[1840]	[2211]	[2459]	[2582]
	20	85	118	159	172	208	250	278	292
Flow (L/min)	[7.9]	[725]	[946]	[1397]	[1450]	[1822]	[2131]	[2450]	[2574]
	30	82	107	158	164	206	241	277	291
Flow (L/min)	[10.6]	[699]	[929]	[1327]	[1424]	[1804]	[2105]	[2432]	[2556]
	40	79	105	150	161	204	238	275	289
Flow (L/min)	[13.2]	[663]	[849]	[1282]	[1415]	[1751]	[2087]	[2317]	[2494]
	50	75	96	145	160	198	236	262	282
Flow (L/min)	[15.8]	[548]	[840]	[1229]	[1397]	[1618]	[1963]	[2246]	[2467]
	60	62	95	139	158	183	222	254	279
Max cont.	[18.5]	[522]	[734]	[1106]	[1327]	[1574]	[1875]	[2211]	[2317]
	70	59	83	125	150	178	212	250	262
Max int.	[19.8]	[495]	[708]	[1079]	[1282]	[1521]	[1813]	[2167]	[2308]
	75	56	80	122	145	172	205	245	261

**BMR 160** [9.59 in<sup>3</sup>/rev] 157.2 cm<sup>3</sup>/rev. Max cont. Max int.

	[725]	[1015]	[1305]	[1450]	[1740]	[2030]	[2320]	[2537]	[PSI]
	5	7	9	10	12	14	16	17.5	MPa
GPM	[2.6]	[1017]	[1415]	[1822]	[1946]	[2299]	[2653]	[3007]	[3202]
	10	115	160	203	220	260	300	340	362
L/min	[5.3]	[1026]	[1415]	[1813]	[2034]	[2344]	[2830]	[3140]	[3361]
	20	116	160	205	230	265	320	355	380
Flow (L/min)	[7.9]	[929]	[1397]	[1786]	[1955]	[2308]	[2697]	[3042]	[3343]
	30	105	158	202	221	261	305	344	378
	[10.6]	[884]	[1282]	[1733]	[1928]	[2273]	[2644]	[3007]	[3308]
	40	100	145	196	218	257	299	340	374
	[13.2]	[796]	[1238]	[1680]	[1848]	[2211]	[2609]	[2972]	[3237]
	50	90	140	190	209	250	295	336	366
	[15.8]	[743]	[1203]	[1592]	[1760]	[2123]	[2529]	[2919]	[3184]
	60	84	136	180	199	240	286	330	360
Max cont.	[18.5]	[575]	[1061]	[1450]	[1592]	[1972]	[2476]	[2830]	[3095]
	70	65	120	164	180	223	280	320	350
Max int.	[19.8]	[522]	[1026]	[1397]	[1548]	[1946]	[2406]	[2777]	[3025]
	75	59	116	158	175	220	272	314	342

TORQUE [LB-IN]  
TORQUE (N•M)  
SPEED (RPM)

Max cont.  
Max int.

**BMR 200** [9.59 in<sup>3</sup>/rev] 157.2 cm<sup>3</sup>/rev. Max cont. Max int.

	[725]	[1015]	[1305]	[1508]	[1740]	[2030]	[2537]	[PSI]
	5	7	9	10.5	12	14	17.5	MPa
GPM	[2.6]	[1309]	[1813]	[2255]	[2565]	[2892]	[3272]	[3909]
	10	148	205	255	290	327	370	442
L/min	[5.3]	[1238]	[1786]	[2211]	[2857]	[2919]	[3635]	[3962]
	20	140	202	250	323	330	411	448
Flow (L/min)	[7.9]	[1150]	[1707]	[2131]	[2715]	[2874]	[3334]	[3936]
	30	130	193	241	307	325	377	445
	[10.6]	[1105]	[1645]	[2052]	[2697]	[2768]	[3449]	[3856]
	40	125	186	232	305	313	390	436
	[13.2]	[1061]	[1565]	[1990]	[2609]	[2697]	[3378]	[3776]
	50	120	177	225	295	305	382	427
	[15.8]	[973]	[1468]	[1954]	[2521]	[2582]	[3290]	[3706]
	60	110	166	221	285	292	372	419
Max cont.	[18.5]	[867]	[1327]	[1813]	[2158]	[2459]	[2927]	[3626]
	70	98	150	205	244	278	331	410
Max int.	[19.8]	[752]	[1247]	[1760]	[2078]	[2370]	[2857]	[3538]
	75	85	141	199	235	268	323	400

TORQUE [LB-IN]  
TORQUE (N•M)  
SPEED (RPM)

Max cont.  
Max int.

**BMR 250** [15.38 in<sup>3</sup>/rev] 252 cm<sup>3</sup>/rev. Max cont. Max int.

	[435]	[725]	[1015]	[1160]	[1450]	[1595]	[2030]	[2537]	[PSI]
	3	5	7	8	10	11	14	17.5	MPa
GPM	[2.6]	[1017]	[1415]	[2220]	[2609]	[3095]	[3361]	[4157]	[4732]
	10	115	180	251	295	350	380	470	535
L/min	[5.3]	[973]	[1574]	[2229]	[2600]	[3113]	[3405]	[4157]	[4847]
	20	110	178	252	294	352	385	470	548
Flow (L/min)	[7.9]	[884]	[1503]	[2193]	[2521]	[3078]	[3370]	[4148]	[4820]
	30	100	170	248	285	348	381	469	545
	[10.6]	[805]	[1406]	[2052]	[2370]	[2936]	[3237]	[4068]	[4687]
	40	91	159	232	268	332	366	460	530
	[13.2]	[716]	[1309]	[1910]	[2229]	[2830]	[3113]	[4006]	[4608]
	50	81	148	216	252	320	352	453	521
	[15.8]	[663]	[1167]	[1778]	[2078]	[2697]	[3007]	[3829]	[4466]
	60	75	132	201	235	305	340	433	505
Max cont.	[18.5]	[442]	[1035]	[1671]	[1946]	[2565]	[2830]	[3644]	[4378]
	70	50	117	189	220	290	320	412	495
Max int.	[19.8]	[371]	[929]	[1592]	[1866]	[2485]	[2742]	[3582]	[4298]
	75	42	105	180	211	281	310	405	486

TORQUE [LB-IN]  
TORQUE (N•M)  
SPEED (RPM)

Max cont.  
Max int.

**BMR 315** [19.19 in<sup>3</sup>/rev] 314.5 cm<sup>3</sup>/rev. Max cont. Max int.

	[435]	[725]	[942]	[1160]	[1305]	[1885]	[1957]	[PSI]
	3	5	6.5	8	9	13	13.5	MPa
GPM	[2.6]	[1194]	[1901]	[2467]	[3033]	[3387]	[4555]	[4864]
	10	135	215	279	343	383	515	550
L/min	[5.3]	[1176]	[1910]	[2556]	[3086]	[3361]	[4493]	[4882]
	20	133	216	289	349	380	508	552
Flow (L/min)	[7.9]	[1105]	[1813]	[2432]	[3016]	[3316]	[4369]	[4802]
	30	125	205	275	341	375	494	543
	[10.6]	[999]	[1724]	[2361]	[2963]	[3246]	[4289]	[4652]
	40	113	195	267	335	367	485	526
	[13.2]	[814]	[1503]	[2237]	[2839]	[3113]	[4192]	[4519]
	50	92	170	253	321	352	474	511
	[15.8]	[707]	[1415]	[2043]	[2697]	[2954]	[4050]	[4351]
	60	80	160	231	305	334	458	492
Max cont.	[18.5]	[504]	[1203]	[1901]	[2520]	[2830]	[3927]	[4245]
	70	57	136	215	285	320	444	480
Max int.	[19.8]	[486]	[1097]	[1813]	[2379]	[2724]	[3776]	[4148]
	75	55	124	205	269	308	427	469

TORQUE [LB-IN]  
TORQUE (N•M)  
SPEED (RPM)

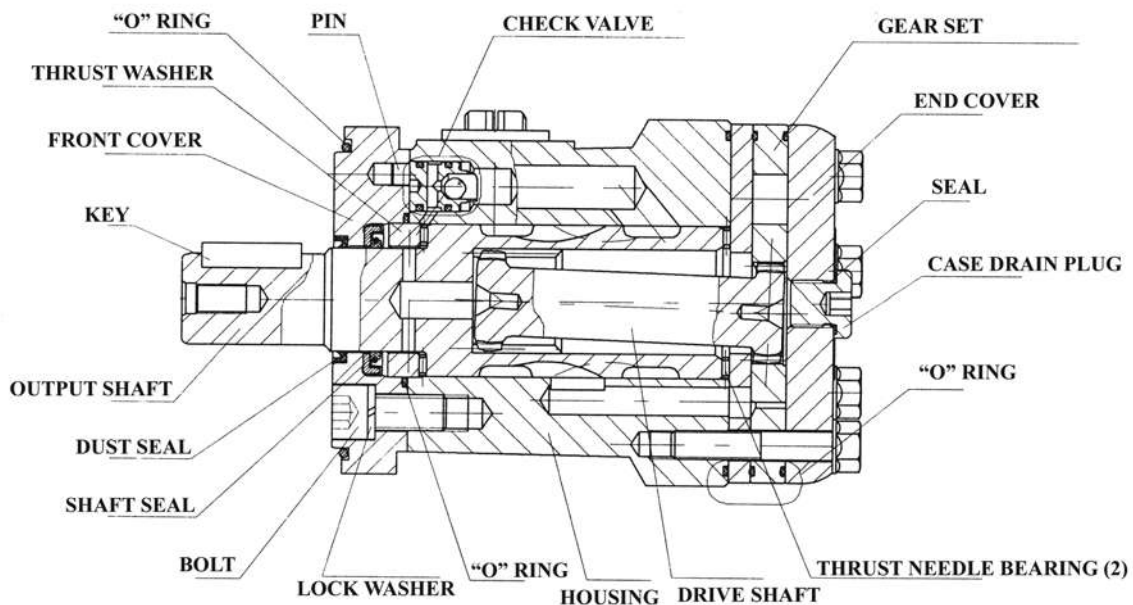
Max cont.  
Max int.

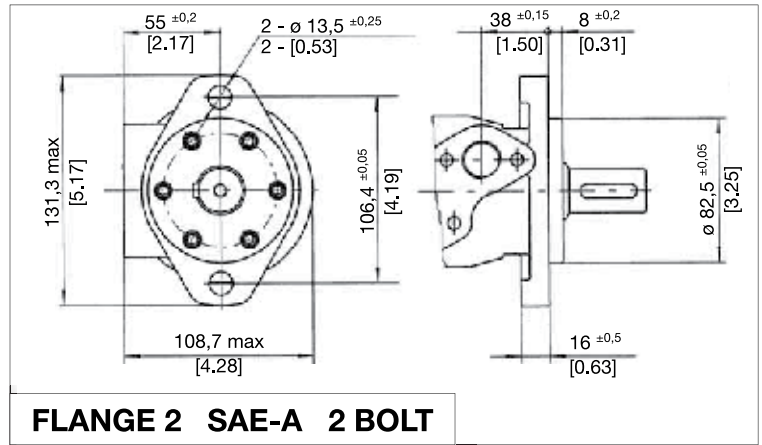
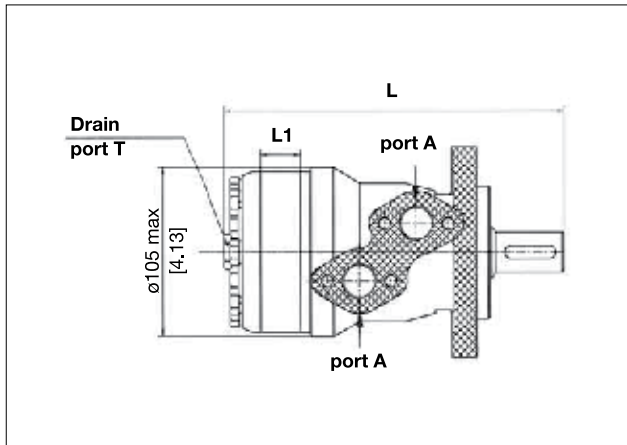


## BMR/BMRS PERFORMANCE DATA

BMR 375 [22.58 in <sup>3</sup> /rev] 370 cm <sup>3</sup> /rev.		Max cont.		Max int.					
		[435]	[725]	[942]	[1160]	[1305]	[1885]	[1957]	[PSI]
		3	5	6.5	8	9	13	13.5	MPa
GPM	[2.6]	[1415]	[2388]	[3007]	[3714]	[4157]	[4864]	[5395]	
	10	160	270	340	420	470	550	610	
L/min	[5.3]	[1406]	[2299]	[3007]	[3626]	[4157]	[4776]	[5351]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	20	159	260	340	410	470	540	605	
Flow (L/min)	[7.9]	[1327]	[1990]	[2918]	[3538]	[3980]	[4687]	[5306]	
	30	150	225	330	400	450	530	600	
	[10.6]	[1194]	[2123]	[2742]	[3317]	[3803]	[4599]	[5218]	
	40	135	240	310	375	430	520	590	
	[13.2]	[1061]	[2034]	[2609]	[3184]	[3714]	[4466]	[5041]	
	50	120	230	295	360	420	505	570	
	[15.8]	[867]	[1857]	[2432]	[3007]	[3449]	[4334]	[4864]	
	60	98	210	275	340	390	490	550	
Max cont.	[18.5]	[663]	[1548]	[2211]	[2830]	[3272]	[4112]	[4687]	Max cont.
	70	75	175	250	320	370	465	530	
Max int.	[19.8]	[575]	[1415]	[2034]	[2742]	[3184]	[3980]	[4555]	Max int.
	75	65	160	230	310	360	450	515	
		<b>200</b>	<b>199</b>	<b>198</b>	<b>195</b>	<b>192</b>	<b>187</b>	<b>178</b>	

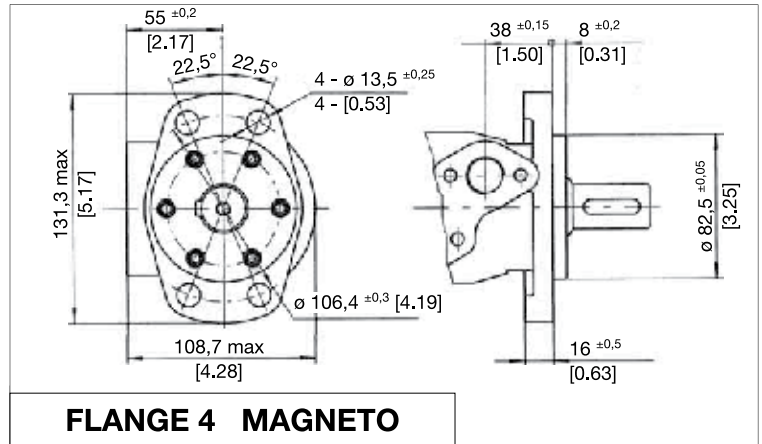
## BMR/BMRS CROSS SECTION



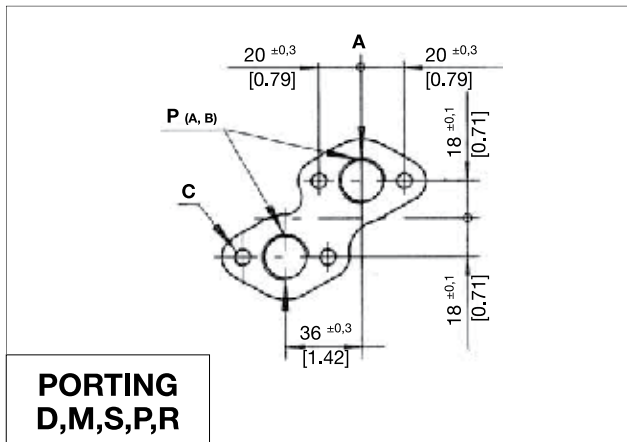


**FLANGE 2 SAE-A 2 BOLT**

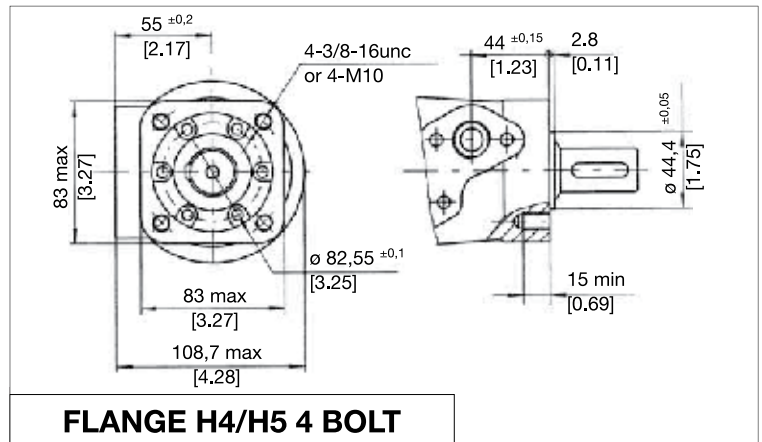
MODEL	[INCHES]		MILLIMETERS	
	L	L1	L	L1
BMR 50	[5.51]	[0.39]	140	10
BMR 80	[5.75]	[0.63]	146	16
BMR 100	[5.91]	[0.79]	150	20
BMR 125	[6.10]	[0.98]	155	25
BMR 160	[6.36]	[1.24]	161.5	31.5
BMR 200	[6.69]	[1.57]	170	40
BMR 250	[7.09]	[1.97]	180	50
BMR 315	[7.56]	[2.44]	192	62
BMR 375	[8.03]	[2.91]	204	74



**FLANGE 4 MAGNETO**



**PORTING  
D, M, S, P, R**

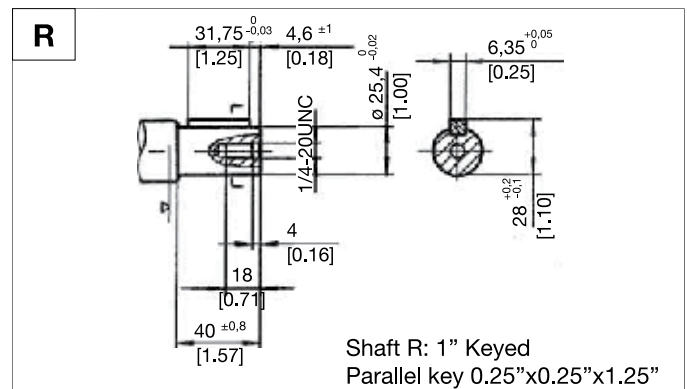
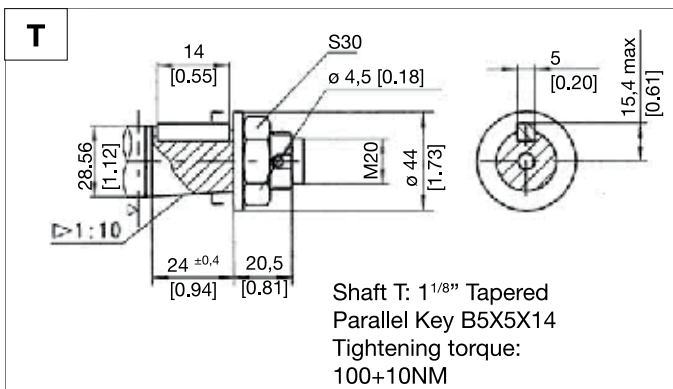
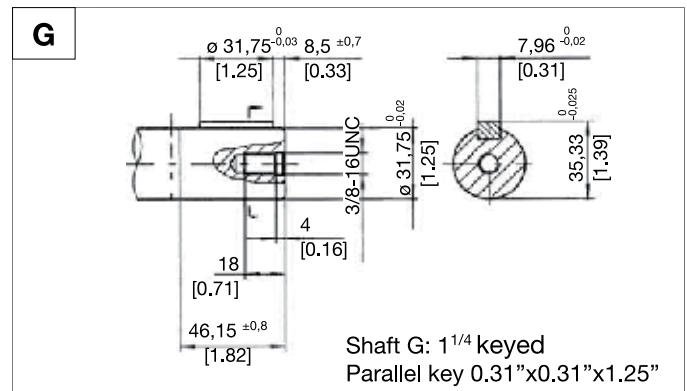
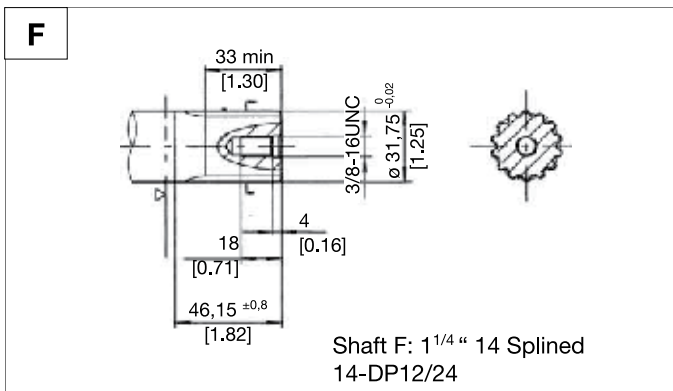
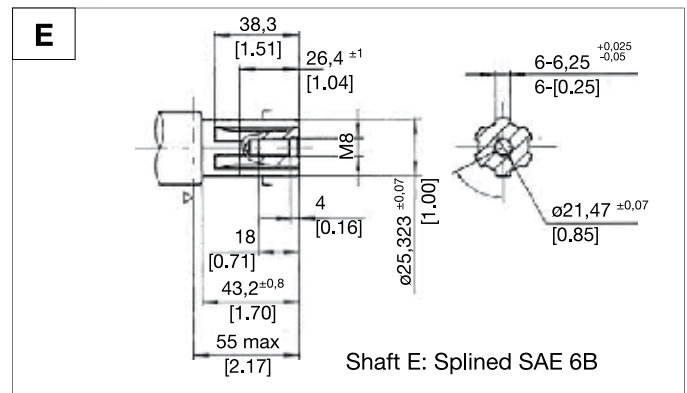
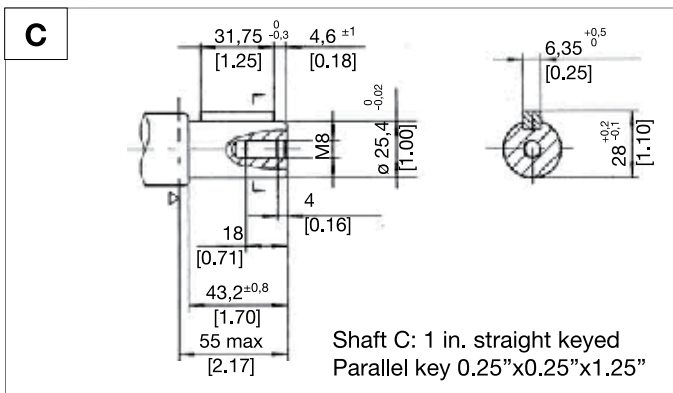
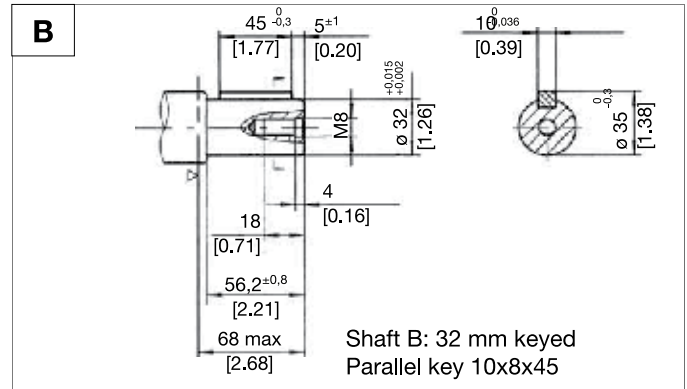
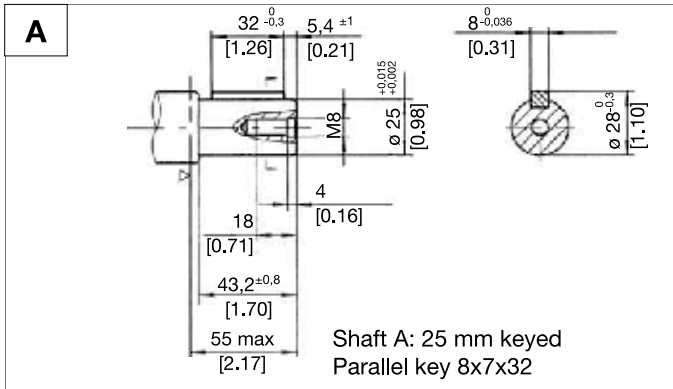


**FLANGE H4/H5 4 BOLT**

## PORT & DRAIN PORT ORDERING CODES

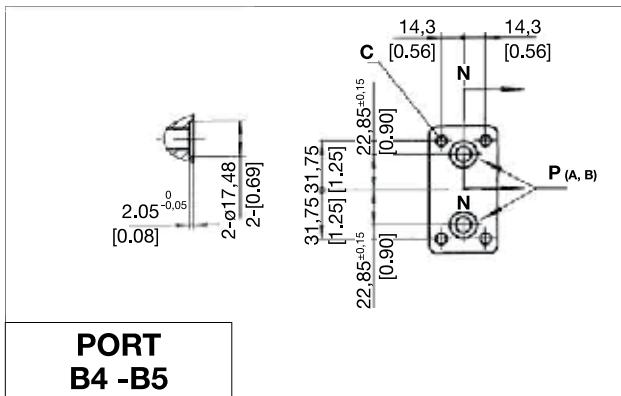
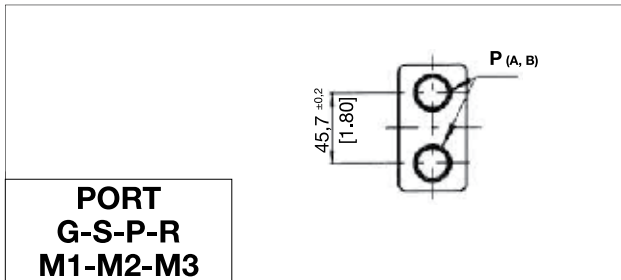
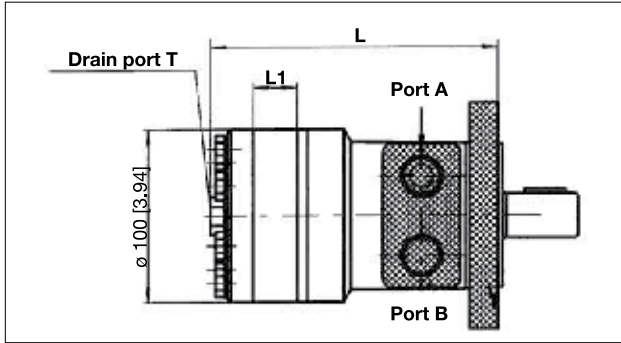
ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	P	DEPTH	R	DEPTH
PORTS - A and B	G 1/2	15 mm	M22 X 1.5	15 mm	7/8-14 O-RING	17 mm	1/2-14NPTF	15 mm	PT(RC)1/2	15 mm
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	PT(RC)1/4	9.7 mm
BOLTS - C	4-M8	13 mm	4-M8	13 mm	4-5/16-18UNC	13 mm	4-5/16-18UNC	13 mm	4-M8	13 mm

# BMR MOTOR SHAFT EXTENSIONS

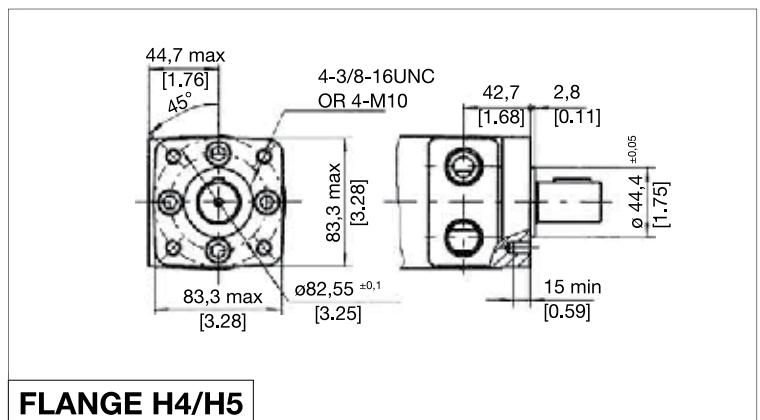
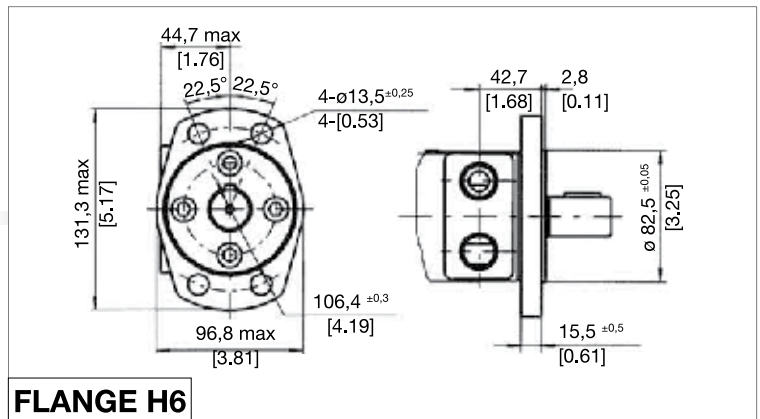
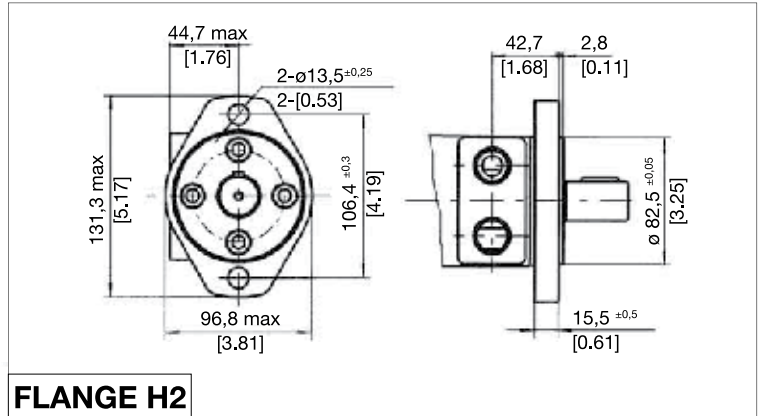


▷ Motor Mounting Surface



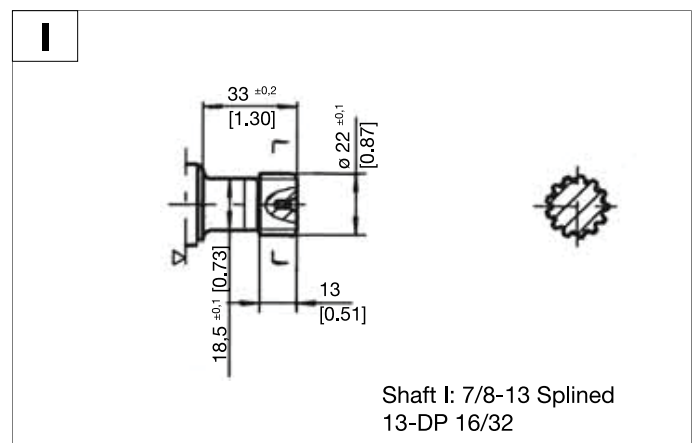
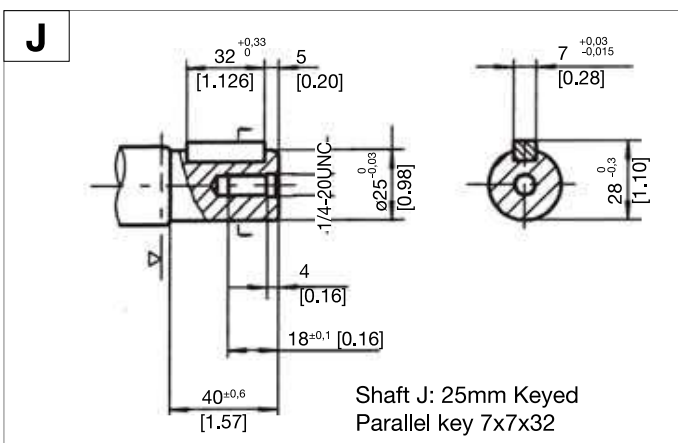
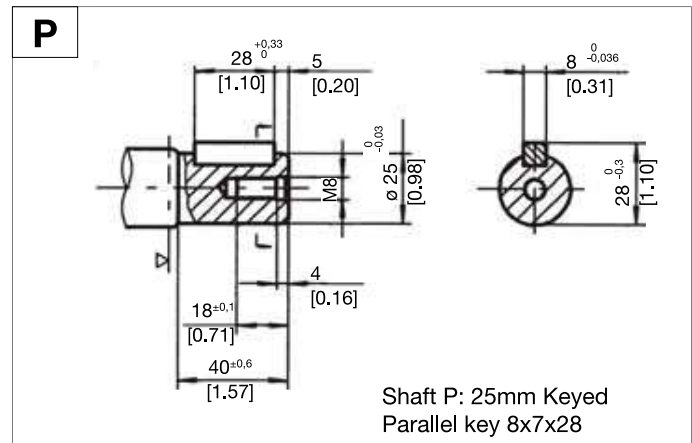
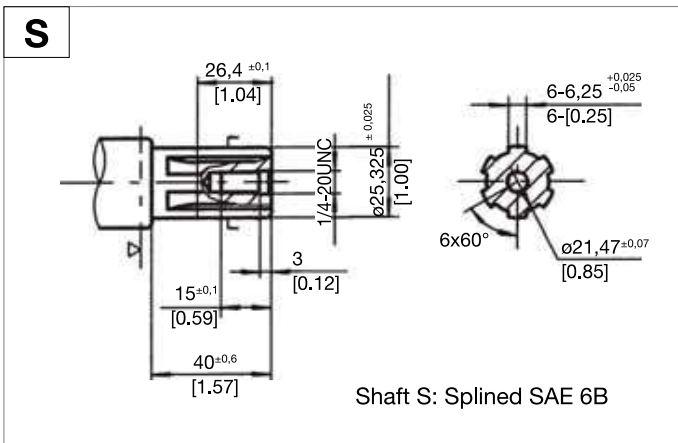
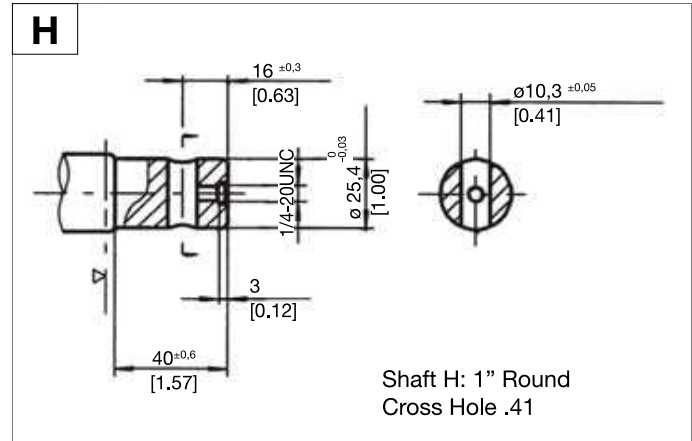
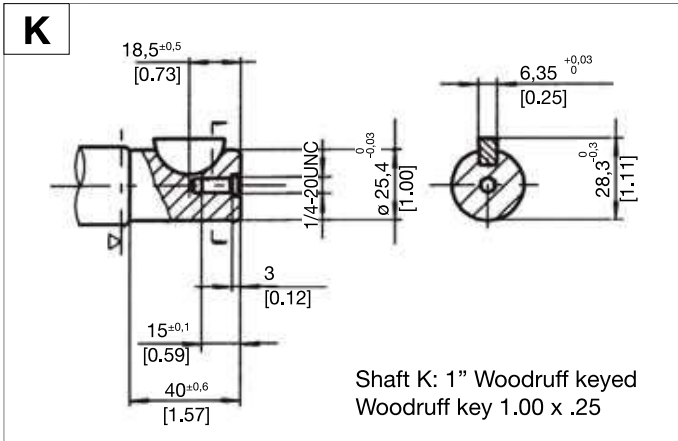


MODEL	[INCHES]		MILLIMETERS	
	L	L1	L	L1
BMRS 50	[5.67]	[0.39]	144	10
BMRS 80	[5.91]	[0.63]	150	16
BMRS 100	[6.06]	[0.79]	154	20
BMRS 125	[6.26]	[0.98]	159	25
BMRS 160	[6.12]	[1.24]	155.5	31.5
BMRS 200	[6.85]	[1.57]	174	40
BMRS 250	[7.24]	[1.97]	184	50
BMRS 315	[7.72]	[2.44]	196	62
BMRS 375	[8.19]	[2.91]	208	74

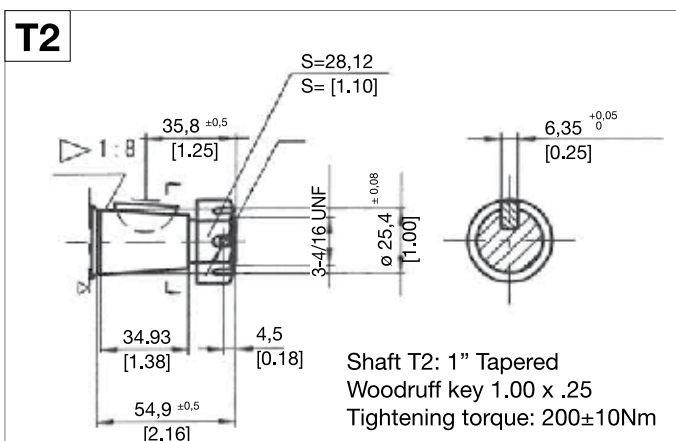
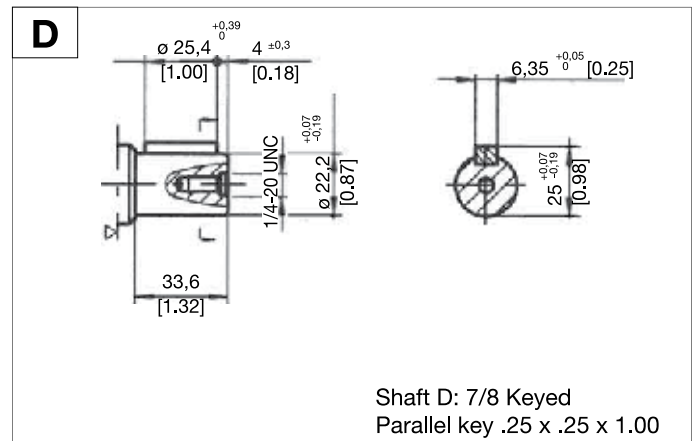
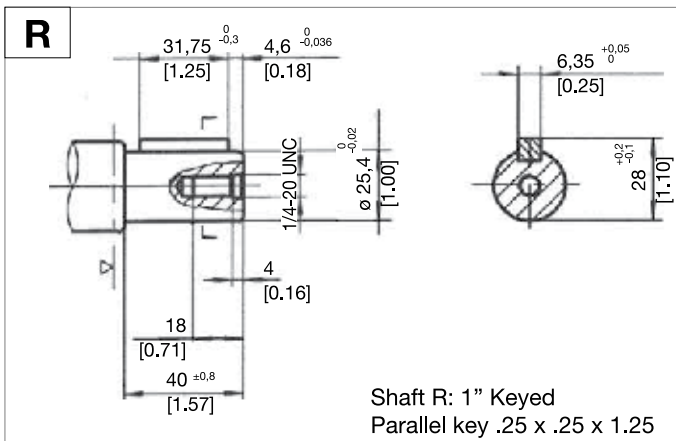
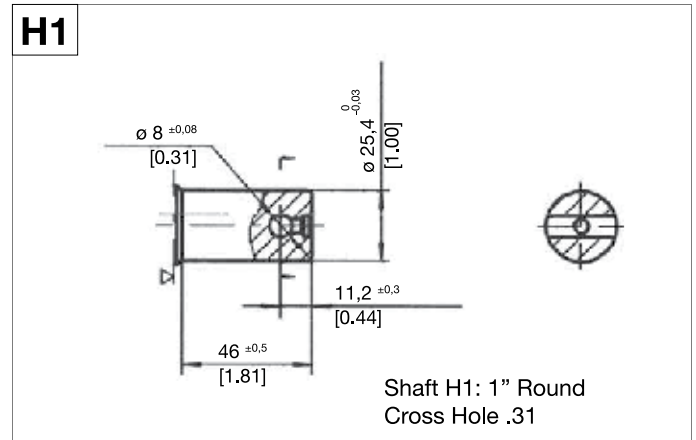
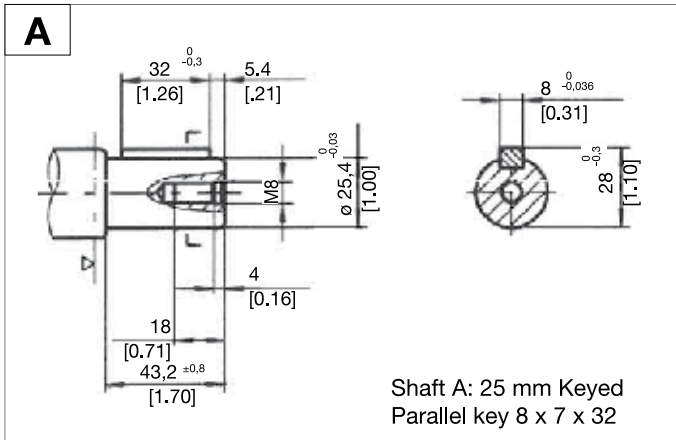


## PORT & DRAIN PORT ORDERING CODES

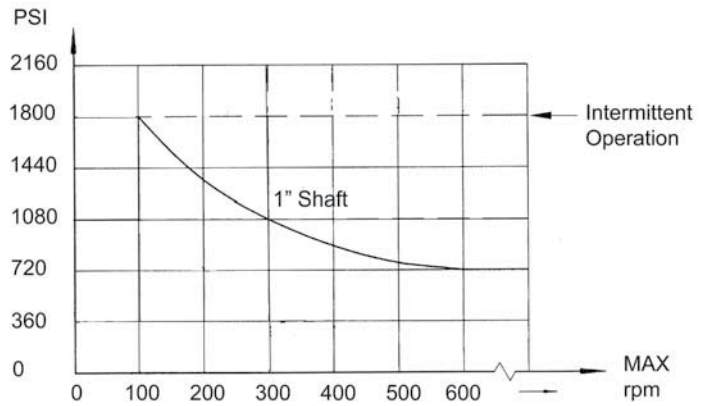
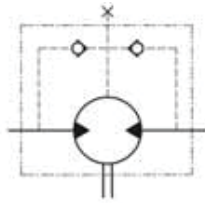
ORDER CODE	G	DEPTH	S	DEPTH	P	DEPTH	R	DEPTH	M1	DEPTH	M2	DEPTH	M3	DEPTH	B4	DEPTH	B5	DEPTH
PORTS A and B	G 1/2	15 mm	7/8-14 O-RING	17 mm	1/2 14NPTF	15 mm	PT(RC) 1/2	15 mm	M18 X 1.5	15 mm	M20 X 1.5	15 mm	M22 X 1.5	15 mm	Ø10	-	Ø10	-
TANK PORT T	G 1/4	12 mm	7/16 20UNF	12 mm	7/16 20UNF	12 mm	PT(RC) 1/4	9.7 mm	M10 X 1	12 mm	M10 X 1	12 mm	M10 X 1	12 mm	7/16 20UNF	12 mm	G1/4	12 mm
BOLTS - C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4-5/16 18UNC	13 mm	4-M8	13 mm



▷ Motor Mounting Surface

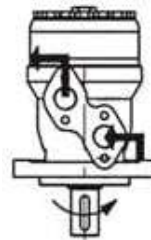


**PERMISSIBLE SHAFT SEAL PRESSURE**

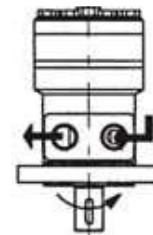


IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

**SHAFT ROTATION DIRECTION**

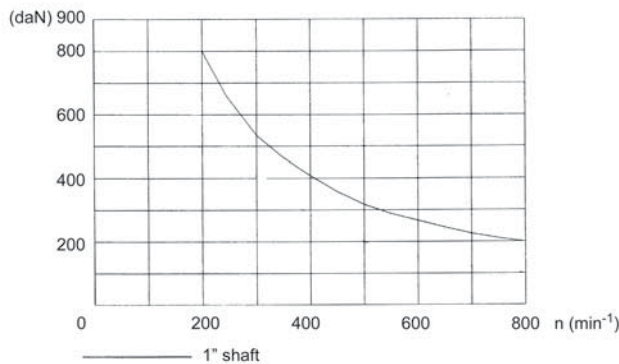


BMR

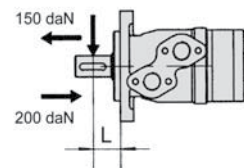


BMRS

**STATUS OF THE SHAFT'S RADIAL FORCE**



$$F_r = \frac{800}{n} + \frac{2500}{95 + L}$$



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

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

	1	2	3	4	5	6	7
<b>BMR</b>							

1	2	3	4	5	6	7	
DISP. cc (cu. in.)	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS	
50 (3.15)	2	SAE - A 2 Bolt Pilot: 3.25"	<b>A</b> Shaft 25mm Parallel key 8x7x32	<b>D</b> G1/2 Manifold Mount 4xM8, G1/4	<b>NONE</b> STANDARD	<b>00</b> NO PAINT	<b>NONE</b> STANDARD
80 (4.74)	4	4 Bolt Magneto Pilot: 3.25"	<b>B</b> Shaft 32mm Parallel key 10x8x45	<b>S</b> 7/8-14 O-ring manifold 4x5/16-18UNC, 7/16-20UNF	<b>R</b> OPPOSITE	<b>NONE</b> BLACK	<b>0</b> NO CASE DRAIN
100 (5.87)	H4	SAE - A 4 Bolt Pilot: 3.25"	<b>C</b> Shaft 1" 25" x 0.25" x 1"	<b>P</b> 1/2-14 NPTF Manifold 4x5/16-18UNC, 7/16-20UNF			<b>F</b> FREE RUNNING
125 (7.2)			<b>E</b> Splined SAE 6B	<b>R</b> PT(Rc)1/2 Manifold 4xM8, PT(Rc)1/4			<b>LS</b> LOW SPEED
160 (9.51)			<b>R</b> Short shaft 1" Parallel key 25" x 0.25" x 1"				<b>HPS</b> HIGH PRESSURE SEAL
200 (11.59)			<b>F</b> 1 1/4" 14 Splined 14-DP12/24				
250 (14.09)			<b>FD</b> Long 1 1/4" 14 Splined 14-DP12/24				
315 (19.13)			<b>G</b> 1 1/4" Parallel key 31" x 0.31" x 1.25"				
375 (23.27)			<b>T</b> 1 1/4" Tapered Parallel key B5X5X14				

For options not listed here, please contact us.

# BMRS ORDERING INFORMATION



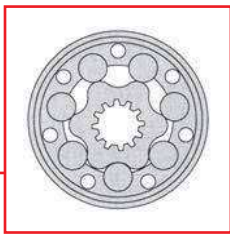
	1	2	3	4	5	6	7
BMRS							

1	2		3		4		5		6		7		
DISP. cc (cu. in.)	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS		
50 (3.15)	H2	SAE - A 2 Bolt Pilot: 3.25"	K	Shaft K: 1" Woodruff Woodruff key 1.00x.25	S	7/8 - 14 O-RING 7/16-20 UNF (G1/4)	NONE	STANDARD	00	NO PAINT	NONE	STANDARD	
80 (4.74)	H4	SAE - A 4 Bolt Pilot: 3.25"	S	Shaft S: Splined SAE 6B	P	1/2 NPTF, 7/16-20UNF	R	OPPOSITE	NONE	BLACK	0	NO CASE DRAIN	
100 (5.87)	H6	4 Bolt Magneto Pilot: 3.25"	H	Shaft H: 1" Round Cross Hole .41	G	G1/2, G1/4					F	FREE RUNNING	
125 (7.2)			H1	Shaft H1: 1" Round Cross Hole .31	B4	Ø10 O-ring manifold 4 x 5/16- 18 7/16-20UNF (G 1/4)					LS	LOW SPEED	
160 (9.51)			I	7/8" 13 Splined 13-DP16/32	B5	Ø10 O-ring manifold 4 x M8, 7/16-20UNF (G 1/4)						HPS	HIGH PRESSURE SEAL
200 (11.59)			D	Shaft D: 7/8 Parallel key .25x.25x1.00									
250 (14.09)													
315 (19.13)													
375 (23.27)													

For options not listed here, please contact us.







# Model BMER-2



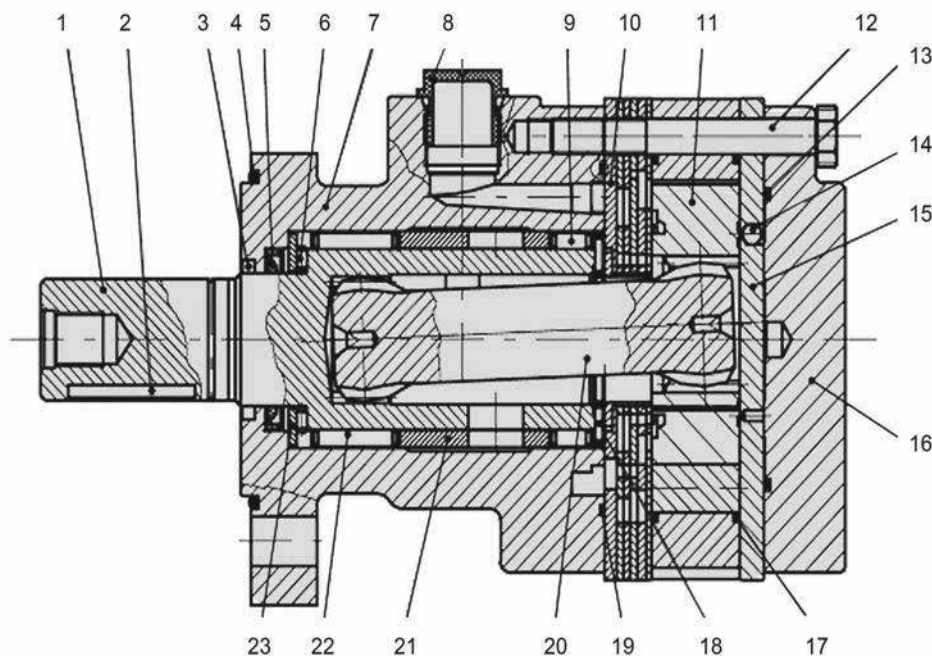
The BMER-2 series motor adapts the GEROLER gear set design with high speed distribution flow and high pressure. These motors can be supplied with various options for multifunctional operations in accordance with the application requirements. The output shaft tapered roller bearings permit high axial and radial forces offering a smooth operation during low pressure start up and high pressure operation. These low weight advanced construction design motors are manufactured in accordance with the requirements of ISO 9001-2000 quality system.



## BMER-2 TECHNICAL SPECIFICATIONS

MODEL		BMER-2 125	BMER-2 160	BMER-2 200	BMER-2 230	BMER-2 250	BMER-2 300	BMER-2 350	BMER-2 375	BMER-2 400	BMER-2 475	BMER-2 540	BMER-2 650	BMER-2 750
DISPLACEMENT in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		7.20 (118)	9.52 (156)	11.96 (196)	13.91 (228)	15.68 (257)	18.08 (296)	21.05 (345)	22.63 (371)	24.71 (405)	28.18 (462)	32.94 (540)	39.48 (647)	45.45 (745)
MAX SPEED RPM	CONT.	360	375	330	290	290	250	220	200	185	160	140	115	100
	INT.	490	470	425	385	350	315	270	240	220	195	170	138	120
MAX TORQUE in lbf	CONT.	2876	3983	4691	5531	6195	7169	8009	8762	8939	9602	8673	8983	9293
	INT.	3363	4646	5310	6284	6992	8231	9160	10089	10443	10443	10974	11063	10443
MAX DIFFERENTIAL PSI	CONT.	2973	2973	2973	2973	2973	2973	2973	2973	2755	2538	2030	1740	1523
	INT.	3481	3481	3481	3481	3481	3481	3481	3481	3263	2756	2538	2248	1740
MAX FLOW GPM	CONT.	11.88	15.85	18.49	18.49	19.81	21.13	21.13	19.81	19.81	19.81	19.81	19.81	19.81
	INT.	15.85	19.81	22.45	22.45	23.77	25.09	25.09	23.77	23.77	23.77	23.77	23.77	23.77
WEIGHT (lbs) MAGNETO MOUNT		23.37	24.03	24.69	24.91	25.13	25.57	26.46	27.56	28.00	28.66	29.76	31.97	33.07
WEIGHT (lbs) WHEEL MOUNT		26.4	26.6	27	27.3	27.7	28.6	29	29.7	30.1	30.8	32.1	34.1	35.2

## BMER-2 CROSS SECTION



### Display Key

- 1 Output Shaft
- 2 Key
- 3 Dust Seal
- 4 "O" Ring
- 5 Shaft Seal
- 6 Axial Needle Bearing
- 7 Housing
- 8 Port Plug
- 9 Radial Needle Bearing
- 10 Timing Plate
- 11 Rolortorc Gear Set
- 12 Bolt
- 13 "O" Ring
- 14 Ball
- 15 Balance Plate
- 16 End Cover
- 17 "O" Ring
- 18 Axial Needle Bearing
- 19 "O" Ring
- 20 Drive Shaft
- 21 Spacer Bushing
- 22 Radial Needle Bearing
- 23 Thrust Washer



BMER-2-125 [118cm<sup>3</sup>/rev.]  
Pressure (PSI)

		254	508	1015	1523	2030	2538	2973	3481
		Max.cont.							Max.int.
2		20	50	96	137				
		<b>14</b>	<b>13</b>	<b>11</b>	<b>7</b>				
4		24	53	110	166	221			
		<b>28</b>	<b>26</b>	<b>24</b>	<b>19</b>	<b>13</b>			
8			55	113	174	225	266	294	336
			<b>60</b>	<b>54</b>	<b>50</b>	<b>45</b>	<b>39</b>	<b>35</b>	<b>26</b>
15			53	114	180	234	275	326	348
			<b>115</b>	<b>110</b>	<b>100</b>	<b>96</b>	<b>90</b>	<b>84</b>	<b>76</b>
25			48	110	164	226	272	323	352
			<b>194</b>	<b>185</b>	<b>173</b>	<b>168</b>	<b>160</b>	<b>155</b>	<b>149</b>
34				108	166	220	278	315	373
				<b>276</b>	<b>260</b>	<b>244</b>	<b>232</b>	<b>225</b>	<b>217</b>
45				98	160	215	271	308	369
				<b>362</b>	<b>350</b>	<b>342</b>	<b>325</b>	<b>322</b>	<b>303</b>
Max.cont.	53			90	152	208	265	304	
				<b>423</b>	<b>418</b>	<b>404</b>	<b>399</b>	<b>371</b>	
Max.int.	60			82	141	205	260	300	
				<b>488</b>	<b>472</b>	<b>455</b>	<b>442</b>	<b>421</b>	

BMER-2-160 [156cm<sup>3</sup>/rev.]  
Pressure (PSI)

		254	508	1015	1523	2030	2538	2973	3481
		Max.cont.							Max.int.
2		35	74	146	218	298			
		<b>8</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>2</b>			
4		29	78	157	235	316	370	424	
		<b>22</b>	<b>19</b>	<b>18</b>	<b>16</b>	<b>14</b>	<b>13</b>	<b>8</b>	
8		35	78	158	236	312	373	450	526
		<b>47</b>	<b>44</b>	<b>42</b>	<b>40</b>	<b>37</b>	<b>34</b>	<b>32</b>	<b>27</b>
15		37	74	155	234	310	368	440	517
		<b>93</b>	<b>90</b>	<b>86</b>	<b>84</b>	<b>82</b>	<b>79</b>	<b>75</b>	<b>69</b>
25			68	152	227	308	364	436	499
			<b>155</b>	<b>151</b>	<b>147</b>	<b>142</b>	<b>137</b>	<b>131</b>	<b>124</b>
34			68	152	227	308	364	436	499
			<b>214</b>	<b>213</b>	<b>210</b>	<b>204</b>	<b>198</b>	<b>191</b>	<b>184</b>
45			64	143	218	296	360	425	481
			<b>282</b>	<b>280</b>	<b>275</b>	<b>268</b>	<b>263</b>	<b>256</b>	<b>245</b>
53				135	216	293	357	421	476
				<b>330</b>	<b>327</b>	<b>322</b>	<b>315</b>	<b>306</b>	<b>296</b>
Max.cont.	60			122	207	284	350	416	467
				<b>379</b>	<b>376</b>	<b>368</b>	<b>362</b>	<b>356</b>	<b>345</b>
Max.int.	68			109	196	273	345	416	
				<b>423</b>	<b>419</b>	<b>414</b>	<b>406</b>	<b>345</b>	
	75			104	188	270	337	416	
				<b>472</b>	<b>466</b>	<b>460</b>	<b>450</b>	<b>337</b>	

BMER-2-200 [196cm<sup>3</sup>/rev.]  
Pressure (PSI)

		254	508	1015	1523	2030	2538	2973	3481
		Max.cont.							Max.int.
2		39	88	132	286	370			
		<b>8</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>2</b>			
4		42	85	188	270	361	427	506	
		<b>16</b>	<b>14</b>	<b>13</b>	<b>11</b>	<b>10</b>	<b>9</b>	<b>6</b>	
8		43	90	192	291	367	450	529	600
		<b>35</b>	<b>32</b>	<b>29</b>	<b>28</b>	<b>27</b>	<b>25</b>	<b>23</b>	<b>19</b>
15		38	92	196	298	381	462	530	602
		<b>74</b>	<b>71</b>	<b>68</b>	<b>64</b>	<b>60</b>	<b>58</b>	<b>55</b>	<b>50</b>
25			82	188	283	377	456	528	605
			<b>124</b>	<b>121</b>	<b>117</b>	<b>113</b>	<b>108</b>	<b>103</b>	<b>92</b>
34			79	183	270	362	447	515	591
			<b>170</b>	<b>169</b>	<b>167</b>	<b>160</b>	<b>154</b>	<b>146</b>	<b>135</b>
45				163	259	352	441	510	593
				<b>223</b>	<b>218</b>	<b>212</b>	<b>208</b>	<b>199</b>	<b>189</b>
53				149	256	350	440	501	582
				<b>260</b>	<b>258</b>	<b>254</b>	<b>248</b>	<b>241</b>	<b>230</b>
60				132	248	336	432	497	575
				<b>299</b>	<b>292</b>	<b>284</b>	<b>276</b>	<b>272</b>	<b>263</b>
Max.cont.	68			120	230	330	412	486	570
				<b>336</b>	<b>332</b>	<b>327</b>	<b>319</b>	<b>310</b>	<b>301</b>
Max.int.	75			108	208	311	403	480	
				<b>375</b>	<b>372</b>	<b>365</b>	<b>358</b>	<b>350</b>	
	85			184	280	380	462		
				<b>425</b>	<b>420</b>	<b>411</b>	<b>390</b>		

BMER-2-230 [228cm<sup>3</sup>/rev.]  
Pressure (PSI)

		254	508	1015	1523	2030	2538	2973	3481
		Max.cont.							Max.int.
2		44	90	182	291	374			
		<b>6</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>			
4		48	100	216	310	405	484	549	
		<b>15</b>	<b>13</b>	<b>11</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>3</b>	
8		50	104	212	320	421	518	603	700
		<b>31</b>	<b>29</b>	<b>27</b>	<b>25</b>	<b>23</b>	<b>20</b>	<b>16</b>	<b>10</b>
15		44	106	207	318	426	529	623	712
		<b>63</b>	<b>61</b>	<b>58</b>	<b>55</b>	<b>52</b>	<b>47</b>	<b>41</b>	<b>34</b>
25			101	209	324	428	532	620	705
			<b>103</b>	<b>100</b>	<b>96</b>	<b>92</b>	<b>87</b>	<b>81</b>	<b>71</b>
34			88	205	316	421	522	623	702
			<b>145</b>	<b>143</b>	<b>139</b>	<b>133</b>	<b>126</b>	<b>120</b>	<b>109</b>
45				186	294	422	507	595	688
				<b>192</b>	<b>187</b>	<b>182</b>	<b>176</b>	<b>170</b>	<b>160</b>
53				175	290	393	496	584	678
				<b>226</b>	<b>221</b>	<b>215</b>	<b>208</b>	<b>203</b>	<b>194</b>
60				152	270	390	485	569	661
				<b>256</b>	<b>253</b>	<b>248</b>	<b>242</b>	<b>235</b>	<b>222</b>
Max.cont.	68			140	265	351	482	563	642
				<b>292</b>	<b>288</b>	<b>283</b>	<b>278</b>	<b>273</b>	<b>256</b>
Max.int.	75			124	235	344	448	552	
				<b>324</b>	<b>321</b>	<b>316</b>	<b>308</b>	<b>300</b>	
	85			207	335	442	546		
				<b>366</b>	<b>360</b>	<b>351</b>	<b>338</b>		

Torque (N•m) 380  
Speed (rpm) 411

□ cont.  
■ int.

# BMER-2 PERFORMANCE DATA



BMER-2-250 [257cm³/rev.]

Pressure (PSI)

254 508 1015 1523 2030 2538 2973 3481

Max.cont. Max.int.

Flow (L/min)	Pressure (PSI)							
	254	508	1015	1523	2030	2538	2973	3481
2	48 5	111 2						
4	54 12	113 11	237 10	362 9	471 8	570 6	642 3	
8	54 27	115 26	244 24	366 22	482 20	587 18	688 14	
15	50 57	113 56	256 54	367 51	485 48	591 45	692 43	794 37
25	44 95	114 93	241 90	360 86	488 82	593 77	699 72	782 63
34		95 129	226 125	348 121	481 116	590 111	686 106	774 96
45		77 174	215 173	346 170	468 166	572 161	674 155	779 143
53		66 203	200 202	325 200	448 196	564 190	657 184	756 175
60			180 232	296 229	438 225	550 220	642 215	741 202
68			162 262	294 261	415 257	548 250	637 241	730 228
Max.cont. 75			137 290	274 289	388 285	520 280	618 273	726 260
85			130 328	261 326	370 322	509 316	604 307	
Max.int. 90			85 348	224 347	358 344	490 336		

BMER-2-300 [296cm³/rev.]

Pressure (PSI)

254 508 1015 1523 2030 2538 2973 3481

Max.cont. Max.int.

Flow (L/min)	Pressure (PSI)							
	254	508	1015	1523	2030	2538	2973	3481
2	50 3	93 1						
4	62 11	141 10	294 9	429 8	502 7	618 4		
8	63 22	147 21	298 20	432 19	565 16	667 13	761 9	819 5
15	66 48	144 47	305 45	427 43	568 39	671 33	810 28	894 20
25	59 82	138 81	289 80	420 76	552 71	676 64	791 56	932 44
34	48 113	130 112	297 110	393 107	562 102	689 96	805 86	926 73
45		96 150	268 149	385 148	527 143	636 135	753 124	880 112
53		76 177	242 176	383 175	524 173	631 165	758 152	900 138
60		64 200	225 199	362 198	506 193	627 186	753 174	892 162
68			200 225	333 224	470 222	630 212	750 201	882 194
Max.cont. 75			178 251	322 250	464 247	610 240	741 232	870 215
85			140 285	316 284	455 278	570 270	728 257	
Max.int. 95			106 316	260 314	431 311	552 307	700 292	

BMER-2-350 [345cm³/rev.]

Pressure (PSI)

254 508 1015 1523 2030 2538 2973 3481

Max.cont. Max.int.

Flow (L/min)	Pressure (PSI)							
	254	508	1015	1523	2030	2538	2973	3481
2	63 4	133 4						
4	64 10	135 9	290 8	440 7				
8	68 21	146 20	310 20	458 19	589 18	735 16	847 12	
15	72 42	150 41	314 40	468 39	627 37	769 35	880 32	984 26
25	63 70	148 69	313 68	470 66	628 63	765 60	892 55	1018 46
34	52 97	133 96	304 95	455 93	619 89	760 85	905 78	1034 68
45		100 129	261 128	442 127	583 125	736 118	887 112	1028 101
53		85 152	247 150	418 148	566 145	715 139	880 132	1024 118
60		65 171	233 170	410 169	550 167	712 162	842 155	996 143
68			218 195	387 194	543 190	696 185	825 175	976 162
Max.cont. 75			206 215	373 214	515 212	680 206	822 197	966 183
85			176 243	355 242	510 239	679 234	808 227	
Max.int. 95			353 272	509 269	645 265			

BMER-2-375 [371cm³/rev.]

Pressure (PSI)

254 508 1015 1523 2030 2538 2973 3481

Max.cont. Max.int.

Flow (L/min)	Pressure (PSI)							
	254	508	1015	1523	2030	2538	2973	3481
2	75 3							
4	83 8	160 8	330 7	488 6	636 5	761 3		
8	81 18	170 17	356 17	527 16	679 14	822 12	948 9	1060 5
15	76 39	162 38	356 37	533 35	683 32	845 29	978 25	1102 18
25	68 65	156 64	350 62	524 59	680 55	857 48	994 44	1138 35
34	58 90	148 89	339 87	506 83	690 77	841 71	993 63	1145 53
45		121 120	302 119	478 117	650 113	813 108	972 100	1134 90
53		95 141	282 140	466 138	628 134	785 128	934 120	1103 105
60		75 161	264 161	428 160	592 158	766 155	925 151	1070 141
68			232 182	422 180	585 176	756 169	901 161	1066 148
Max.cont. 75			207 201	380 200	556 197	738 190	865 181	1012 165
85			175 228	370 226	526 221	700 216	832 206	
Max.int. 90			148 242	316 240	500 237	654 226		

Torque (N•m) 645  
Speed (rpm) 265

cont.  
int.

BMER-2-400 [405cm³/rev.]

Pressure (PSI)

	254	508	1015	1523	2030	2538	2756	3263
						Max.cont.	Peak	

Flow (L/min)	Pressure (PSI)							
	254	508	1015	1523	2030	2538	2756	3263
2	85 3	170 2						
4	90 8	182 7	368 6	540 5	715 4	885 3		
8	93 17	190 16	385 15	575 14.4	750 13	895 10	950 9	1155 7
15	88 36	180 35	380 34	575 33	750 31	905 28	980 24	1165 20
25	88 60	180 59	380 58	575 56	750 53	915 49	1010 44	1165 40
34	75 83	165 83	365 82	560 81	750 77	915 72	1000 68	1180 60
45		150 110	350 350	545 545	735 735	900 900	980 980	1165 1165
53		125 130	330 129	525 128	720 125	885 120	960 112	1150 100
60		100 147	305 147	505 146	680 145	860 142	940 138	1125 130
68			275 167	480 167	660 164	845 158	925 150	1100 140
75			250 184	455 183	635 180	820 176	900 170	1065 158
85			225 209	415 208	600 206	785 202	865 194	
90			160 220	365 218	575 216	770 210		

BMER-2-475 [462cm³/rev.]

Pressure (PSI)

	254	508	1015	1523	2030	2538	1740
						Max.cont.	Peak

Flow (L/min)	Pressure (PSI)						
	254	508	1015	1523	2030	2538	1740
2	93 2	186 1					
4	98 7	202 6	405 5	608 5	805 4		
8	98 15	206 14	430 13	652 13	844 12	1005 10	1180 8
15	94 31	202 30	441 28	654 28	875 26	1056 23	1238 20
25	94 52	202 51	441 48	654 45	875 43	1056 39	1238 35
34	75 72	180 71	420 68	660 65	850 61	1085 55	1266 44
45		144 96	380 95	627 93	835 90	1062 84	1261 73
53		116 113	346 112	573 111	795 107	1008 102	1212 90
60		82 128	318 128	539 127	790 124	975 119	1186 110
68		58 146	272 145	520 144	740 141	955 136	1156 125
75			230 161	480 160	702 158	920 153	1116 140
85			200 182	454 180	662 177	876 168	
90			150 194	378 193	615 190	840 182	

BMER-2-540 [540cm³/rev.]

Pressure (PSI)

	254	508	1015	1523	2030	2538
					Max.cont.	Max.int.

Flow (L/min)	Pressure (PSI)					
	254	508	1015	1523	2030	2538
2	105 2	198 2				
4	125 6	231 5	470 5	688 4	932 4	1136 3
8	134 13	238 13	496 12	749 11	966 11	1175 8
15	122 27	230 26	505 26	750 25	981 24	1218 21
25	100 44	225 43	500 42	774 41	986 39	1220 35
34	80 62	212 61	481 60	748 58	977 54	1243 49
45		173 82	437 82	714 81	936 79	1190 75
53		142 97	416 97	678 96	938 94	1170 89
60		106 110	380 110	664 109	896 108	1158 106
68		85 125	357 124	616 124	870 123	1108 120
75			318 138	600 137	826 135	1100 132
85			292 154	538 153	780 152	
90			214 169	486 168	755 168	

Torque (N•m) 486  
Speed (rpm) 168

BMER-2-650 [647cm³/rev.]

Pressure (PSI)

	254	508	1015	1523	1740	2248
						Max.cont.

Flow (L/min)	Pressure (PSI)					
	254	508	1015	1523	1740	2248
2	119 2	230 1				
4	135 5	268 5	552 4	805 4	940 3	
8	145 11	285 11	574 10	825 10	955 9	1255 7
15	140 22	280 22	595 21	875 21	982 20	1276 16
25	130 37	275 36	590 36	886 35	1005 34	1302 30
34	115 51	260 51	580 50	890 49	1015 47	1310 44
45		235 69	555 68	870 67	995 66	1280 63
53		200 80	520 80	850 79	975 78	1250 76
60		170 91	490 91	825 90	935 89	1215 88
68		145 104	430 103	775 102	880 101	1185 99
75			420 114	730 113	855 112	1130 110
83			380 130	660 129	795 128	
90			290 138	585 137	730 136	

BMER-2-750 [745cm³/rev.]

Pressure (PSI)

	254	508	1015	1523	1740	2030
						Max.cont.

Flow (L/min)	Pressure (PSI)					
	254	508	1015	1523	1740	2030
2	145 2	280 1				
4	160 4	321 4	654 4	960 3	1115 3	1312 2
8	162 9	335 9	688 9	1026 8	1159 8	1347 7
15	156 19	330 19	694 18	1047 18	1184 17	1376 16
25	142 32	320 31	688 30	1046 30	1179 29	1373 27
34	110 44	288 44	658 42	1021 41	1169 40	1366 37
45		71 60	242 59	620 59	982 58	1143 55
53		202 70	568 69	941 68	1105 67	1308 66
60		140 79	527 78	898 77	1086 76	1286 74
68		100 90	486 90	852 89	1034 88	1251 87
75		65 99	425 99	812 98	980 97	1178 96
83			395 110	745 109	906 108	
90			298 120	660 119	800 117	

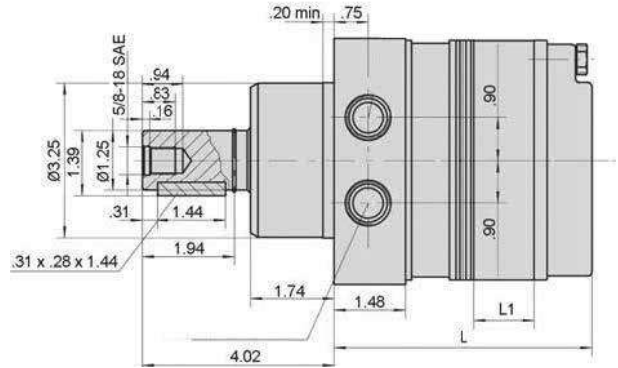
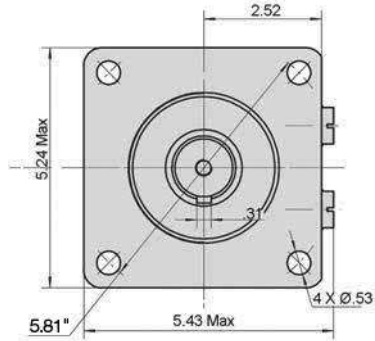
cont.  
int.

## BMER-2 INSTALLATION DATA

### Wheel Mount

WS: Port 7/8 - 14 UNF  
 WP: Port 1/2 - 14 NPTF  
 WD: Port G 1/2

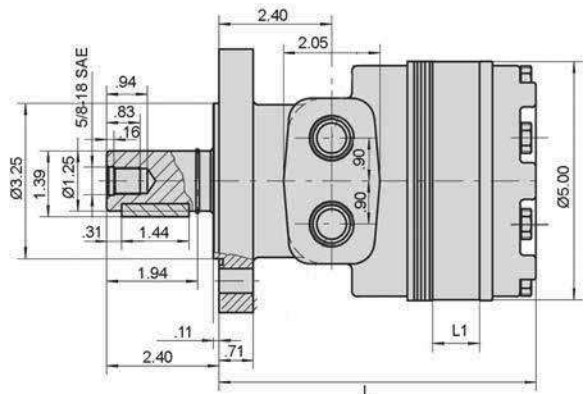
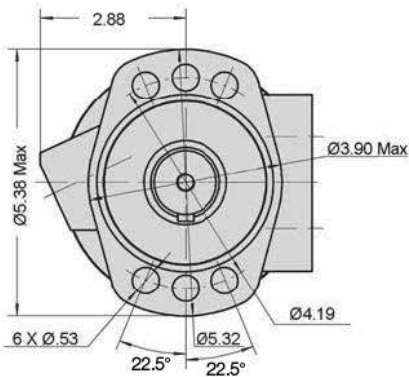
Motor Size	L	L1
125	4.69"	0.40"
160	4.80"	0.53"
200	4.94"	0.67"
230	5.04"	0.77"
250	5.14"	0.87"
300	5.30"	1.00"
350	5.43"	1.18"
375	5.53"	1.25"
400	5.67"	1.40"
475	5.83"	1.55"
540	6.14"	1.88"
650	6.54"	2.24"
750	6.81"	2.50"



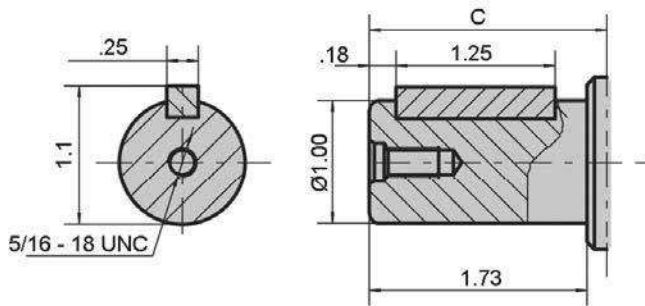
### Magneto Mount

FS: Port 7/8 - 14 UNF  
 FP: Port 1/2 - 14 NPTF  
 FD: Port G 1/2

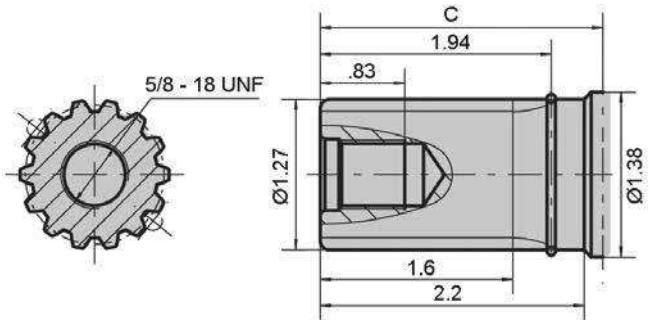
Motor Size	L	L1
125	6.18"	0.40"
160	6.30"	0.53"
200	6.44"	0.67"
230	6.54"	0.77"
250	6.63"	0.87"
300	6.77"	1.00"
350	6.93"	1.18"
375	7.03"	1.25"
400	7.17"	1.40"
475	7.32"	1.55"
540	7.64"	1.88"
650	8.03"	2.24"
750	8.27"	2.50"



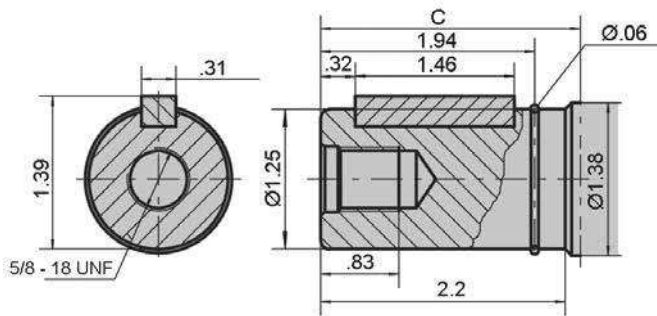
## RW - 1" Keyed



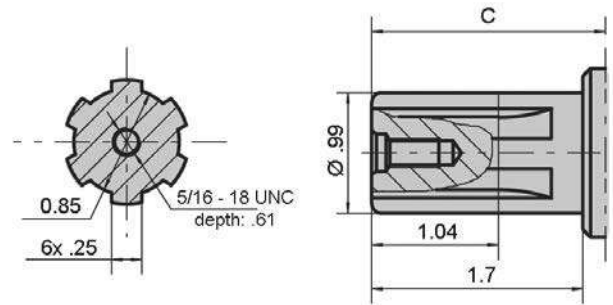
## FD1 - 14-Tooth Spline



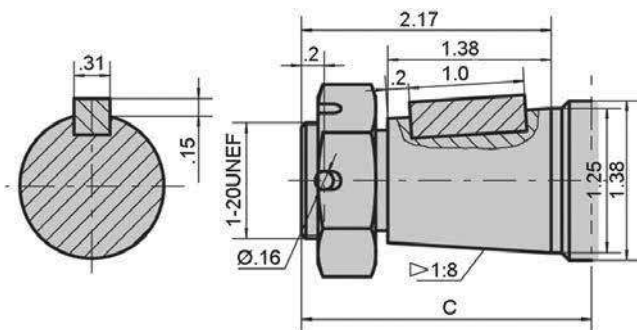
## G2 - 1 1/4" Keyed



## SW - SAE 6B 1" Spline



## T4 - 1 1/4" Tapered

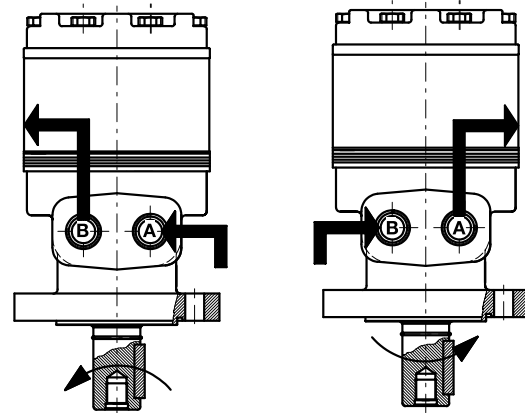


### Dimension "C" From Mounting Flange to Shaft End

Shaft Code	Wheel Mount (WS)	Magneto Mount (FS)
RW	3.58"	1.96"
G2	4.05"	2.40"
T4	4.21"	2.56"
FD1	4.05"	2.40"
SW	3.58"	1.96"

## Shaft Rotation Direction: Reverse Timed

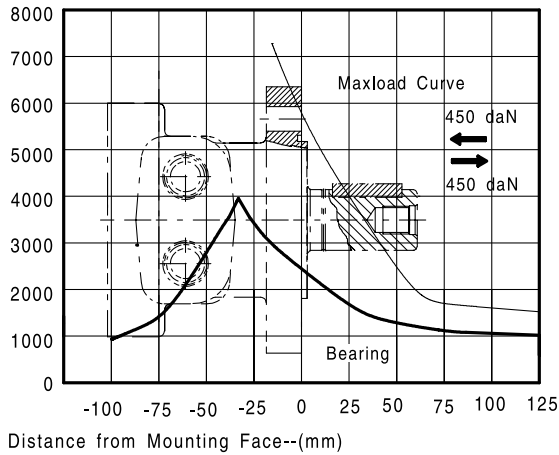
- When facing shaft end of motor, shaft to rotate:
- Clockwise when port "B" is pressurized.
  - Counter-clockwise when port "A" is pressurized.



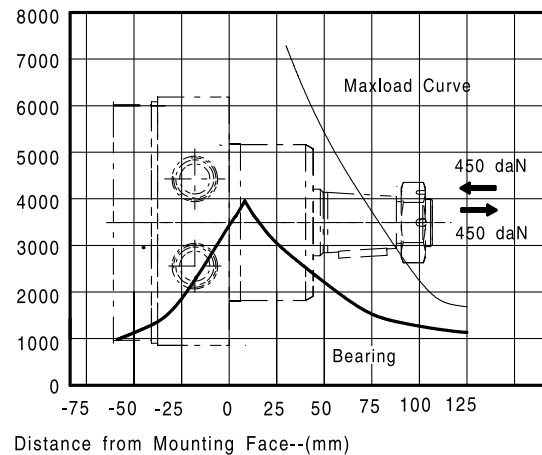
Counterclockwise Rotation      Clockwise Rotation

## Axial and Radial Forces

BMER-2 for Magneto Mount  
Side load - (daN)



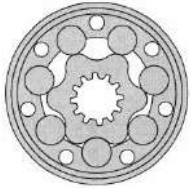
BMER-2 for Wheel Mount  
Side load - (daN)



	1	2	3	4	5	6
<b>BMER-2</b>						<b>HPS</b>

1	2		3	4		5		6			
FRAME SIZE cc (cu. in.)	FLANGE / PORT / PILOT		DRIVE SHAFT	ROTATION DIRECTION		PAINT		STANDARD			
125 (7.20)	WS	Wheel Mount Ports: 7/8-14 O-ring Pilot: 3.25"	RW	1" Keyed	OMIT	Standard	OMIT	Black	HPS	High Pressure Shaft Seal (Standard)	
160 (9.52)		WP									Wheel Mount Ports: 1/2-14 NPTF Pilot: 3.25"
200 (11.96)	WD		Wheel Mount Ports: G 1/2 Pilot: 3.25"	T4	1¼" Tapered						
230 (13.91)		FS	Magneto Mount Ports: 7/8-14 O-ring Pilot: 3.25"	FD1	14-Tooth Spline						
250 (15.68)	FP		Magneto Mount Ports: 1/2-14 NPTF Pilot: 3.25"	SW	SAE 6B 1" Spline						
300 (18.08)		FD	Magneto Mount Ports: G 1/2 Pilot: 3.25"								
350 (21.05)											
375 (22.63)											
400 (24.71)											
475 (28.18)											
540 (32.94)											
650 (39.48)											
750 (45.45)											





# Model BMH



The BMH series advanced GEROLER gear set, shaft distribution flow, hydraulic motor is a compact, low noise, high efficient high torque low speed design. The GEROLER gear set also affords a reliable smooth start up at low pressure. The special design of the valve linkage and high pressure capability of the shaft seal provides a long operating life and these motors can be used in either series or parallel operation. The low weight advanced construction design is manufactured in accordance with the requirements of ISO 9001-2008 quality system.

## BMH TECHNICAL SPECIFICATIONS

DISTRIBUTION TYPE		BMH 200	BMH 250	BMH 315	BMH 400	BMH 500	
GEOMETRIC DISPLACEMENT	[in <sup>3</sup> /rev.]	[12.40]	[15.62]	[19.29]	[24.80]	[29.86]	
	cm <sup>3</sup> /rev.	<b>203.2</b>	<b>255.9</b>	<b>316.1</b>	<b>406.4</b>	<b>489.2</b>	
MAX. SPEED RPM	RATED	263	209	169	131	109	
	CONT.	366	290	236	183	155	
	<b>INT.</b>	<b>439</b>	<b>348</b>	<b>282</b>	<b>220</b>	<b>166</b>	
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[2636]	[3317]	[4015]	[4219]	[4059]
		<b>N*M</b>	<b>298</b>	<b>375</b>	<b>454</b>	<b>477</b>	<b>459</b>
	CONT.	[LB. IN.]	[4510]	[5492]	[6545]	[7641]	[7066]
		<b>N*M</b>	<b>510</b>	<b>621</b>	<b>740</b>	<b>864</b>	<b>799</b>
	INT.	[LB. IN.]	[5121]	[6208]	[7314]	[8738]	[8588]
		<b>N*M</b>	<b>579</b>	<b>702</b>	<b>827</b>	<b>988</b>	<b>971</b>
	PEAK	[LB. IN.]	[5757]	[6987]	[8225]	[9658]	[9658]
		<b>N*M</b>	<b>651</b>	<b>790</b>	<b>930</b>	<b>1092</b>	<b>1092</b>
MAX. OUTPUT [HP] KW	RATED	[HP]	[11]	[11]	[11]	[9]	[7]
		<b>KW</b>	<b>8.2</b>	<b>8.2</b>	<b>8.2</b>	<b>6.6</b>	<b>5.2</b>
	CONT.	[HP]	[15]	[12]	[13]	[10]	[9]
		<b>KW</b>	<b>11.2</b>	<b>9.2</b>	<b>9.8</b>	<b>7.4</b>	<b>6.5</b>
	INT.	[HP]	[23]	[20]	[17]	[17]	[15]
		<b>KW</b>	<b>17</b>	<b>15</b>	<b>13</b>	<b>13</b>	<b>11</b>
MAX. PRESSURE DROP [PSI] MPa	RATED	[PSI]	[1813]	[1813]	[1813]	[1450]	[1160]
		<b>MPa</b>	<b>12.5</b>	<b>12.5</b>	<b>12.5</b>	<b>10</b>	<b>8</b>
	CONT.	[PSI]	[2538]	[2538]	[2538]	[2248]	[1813]
		<b>MPa</b>	<b>17.5</b>	<b>17.5</b>	<b>17.5</b>	<b>15.5</b>	<b>12.5</b>
	INT.	[PSI]	[2900]	[2900]	[2900]	[2755]	[2320]
		<b>MPa</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>19</b>	<b>16</b>
	PEAK	[PSI]	[3263]	[3263]	[3263]	[3045]	[2610]
		<b>MPa</b>	<b>22.5</b>	<b>22.5</b>	<b>22.5</b>	<b>21</b>	<b>18</b>
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]
		<b>L/MIN</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>
	CONT.	[GPM]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		<b>L/MIN</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>
	INT.	[GPM]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]
		<b>L/MIN</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>
WEIGHT [LB] KG	[LB]	[23]	[24]	[25]	[27]	[29]	
	KG	10.5	11	11.5	12.3	13	

- \* Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- \* Continuous pressure: Max. value of operating motor continuously.
- \* Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- \* Peak pressure: Max. value of operating motor in 0.6 second per minute.

**BMH 200** [12.40 in<sup>3</sup>/rev] 203.2 cm<sup>3</sup>/rev. Max cont. Max int.

		[507]	[1015]	[1522]	[2030]	[2537]	[2900]	[PSI]
		3.5	7	10.5	14	17.5	20	MPA
GPM	[1.3]	[867]	[1716]	[2512]				TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	5	25	25	22				
L/min	[2.6]	[893]	[1804]	[2662]	[3458]	[4263]		TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	10	43	41	36	29	14		
Flow (L/min)	[5.3]	[876]	[1778]	[2689]	[3555]	[4502]	[5094]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	20	100	97	93	85	69	56	
Flow (L/min)	[7.9]	[858]	[1742]	[2653]	[3555]	[4510]	[5121]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	145	143	139	130	114	101	
Flow (L/min)	[10.6]	[796]	[1680]	[2582]	[3529]	[4484]	[5112]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	40	200	200	200	188	168	153	
Flow (L/min)	[13.2]	[725]	[1618]	[2512]	[3467]	[4422]	[5050]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	50	248	246	244	235	213	199	
Flow (L/min)	[15.9]	[646]	[1539]	[2423]	[3396]	[4360]	[4979]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	60	292	290	287	279	260	244	
Flow (L/min)	[18.5]	[557]	[1442]	[2335]	[3308]	[4254]	[4900]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	70	352	350	349	338	318	301	
Max cont.	[19.8]	[522]	[1389]	[2291]	[3237]	[4201]	[4838]	Max cont.
	75	366	365	363	355	335	319	
Max int.	[21.1]	[469]	[1327]	[2238]	[3166]	[4121]	[4758]	Max int.
	80	381	381	380	371	352	338	
Max int.	[23.8]	[345]	[1238]	[2131]	[3078]	[4033]	[4652]	Max int.
	90	443	437	434	426	407	392	

**BMH 250** [15.61 in<sup>3</sup>/rev] 255.9 cm<sup>3</sup>/rev. Max cont. Max int.

		[507]	[1015]	[1305]	[1740]	[2102]	[2537]	[2900]	[PSI]
		3.5	7	9	12	14.5	17.5	20	MPA
GPM	[1.3]	[1070]	[2176]	[2812]	[3520]				TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	5	19	19	18	14				
L/min	[2.6]	[1150]	[2282]	[2927]	[3759]	[4555]	[5262]		TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	10	34	33	31	29	23	12		
Flow (L/min)	[5.3]	[1150]	[2282]	[2936]	[3821]	[4599]	[5492]	[6208]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	20	78	77	76	73	65	53	42	
Flow (L/min)	[7.9]	[1079]	[2220]	[2892]	[3794]	[4599]	[5492]	[6191]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	115	113	111	105	96	84	75	
Flow (L/min)	[10.6]	[1017]	[2123]	[2857]	[3732]	[4537]	[5448]	[6173]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	40	157	157	156	150	139	127	114	
Flow (L/min)	[13.2]	[929]	[2052]	[2777]	[3635]	[4466]	[5359]	[6076]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	50	196	195	192	185	173	159	147	
Flow (L/min)	[15.9]	[831]	[1946]	[2671]	[3546]	[4387]	[5271]	[5979]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	60	232	230	226	218	206	192	180	
Flow (L/min)	[18.5]	[720]	[1848]	[2547]	[3440]	[4281]	[5147]	[5890]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	70	274	274	274	266	252	238	222	
Max cont.	[19.8]	[637]	[1795]	[2476]	[3370]	[4201]	[5076]	[5828]	Max cont.
	75	290	289	287	279	266	251	236	
Max int.	[21.1]	[584]	[1716]	[2414]	[3281]	[4130]	[5006]	[5757]	Max int.
	80	303	302	298	290	279	264	249	
Max int.	[23.8]	[433]	[1574]	[2264]	[3140]	[4006]	[4882]	[5607]	Max int.
	90	348	347	345	337	325	309	292	

**BMH 315** [19.29 in<sup>3</sup>/rev] 316.1 cm<sup>3</sup>/rev. Max cont. Max int.

		[507]	[1087]	[1450]	[1957]	[2247]	[2537]	[2900]	[PSI]
		3.5	7.5	10	13.5	15.5	17.5	20	MPA
GPM	[1.3]	[1371]	[2874]						TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	5	15	13						
L/min	[2.6]	[1442]	[3025]	[4015]	[4917]				TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	10	27	24	18	14				
Flow (L/min)	[5.3]	[1495]	[3087]	[4048]	[5147]	[5872]	[6483]	[7155]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	20	63	61	55	48	40	32	19	
Flow (L/min)	[7.9]	[1459]	[3042]	[4157]	[5130]	[5917]	[6545]	[7287]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	93	89	82	77	67	59	46	
Flow (L/min)	[10.6]	[1362]	[2980]	[4112]	[5103]	[5864]	[6518]	[7314]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	40	126	126	119	111	99	88	73	
Flow (L/min)	[13.2]	[1247]	[2874]	[4024]	[5023]	[5802]	[6438]	[7287]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	50	159	155	148	139	126	115	98	
Flow (L/min)	[15.9]	[1070]	[2759]	[3891]	[4908]	[5687]	[6323]	[7181]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	60	187	186	179	169	154	143	124	
Flow (L/min)	[18.5]	[911]	[2636]	[3759]	[4785]	[5581]	[6217]	[7075]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	70	222	222	215	205	187	176	157	
Max cont.	[19.8]	[831]	[2538]	[3688]	[4678]	[5510]	[6155]	[7004]	Max cont.
	75	236	233	224	215	196	184	166	
Max int.	[21.1]	[725]	[2450]	[3591]	[4581]	[5404]	[6085]	[6934]	Max int.
	80	246	244	236	228	210	197	174	
Max int.	[23.8]	[548]	[2264]	[3414]	[4387]	[5245]	[5917]	[6783]	Max int.
	90	282	280	275	266	248	234	209	

**BMH 400** [24.80 in<sup>3</sup>/rev] 406.40 cm<sup>3</sup>/rev. Max cont. Max int.

		[507]	[870]	[1522]	[1812]	[2247]	[2755]	[PSI]
		3.5	6	10.5	12.5	15.5	19	MPA
GPM	[1.3]	[1733]	[3078]	[4564]				TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	5	13	13	10				
L/min	[2.6]	[1813]	[3210]	[4829]	[6209]	[7597]		TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	10	22	21	21	17	11		
Flow (L/min)	[5.3]	[1848]	[3237]	[4802]	[6262]	[7730]	[8738]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	20	50	49	46	41	36	31	
Flow (L/min)	[7.9]	[1778]	[3157]	[4793]	[6244]	[7641]	[8703]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	73	72	70	63	56	51	
Flow (L/min)	[10.6]	[1725]	[3060]	[4705]	[6200]	[7588]	[8605]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	40	99	98	96	86	77	71	
Flow (L/min)	[13.2]	[1530]	[2936]	[4581]	[6076]	[7500]	[8473]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	50	123	122	118	107	97	90	
Flow (L/min)	[15.9]	[1362]	[2821]	[4431]	[5908]	[7368]	[8349]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	60	146	144	141	128	115	106	
Flow (L/min)	[18.5]	[1221]	[2697]	[4245]	[5740]	[7199]	[8181]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	70	174	173	169	156	141	130	
Max cont.	[19.8]	[1132]	[2600]	[4121]	[5634]	[7093]	[8057]	Max cont.
	75	183	181	177	163	149	138	
Max int.	[21.1]	[999]	[2450]	[3989]	[5492]	[6951]	[7951]	Max int.
	80	192	191	188	174	158	144	
Max int.	[23.8]	[796]	[2264]	[3829]	[5262]	[6783]	[7792]	Max int.
	90	220	220	215	202	183	165	

## BMH PERFORMANCE DATA

BMH 500 [29.85 in<sup>3</sup>/rev] 489.2 cm<sup>3</sup>/rev. Max cont. Max int.

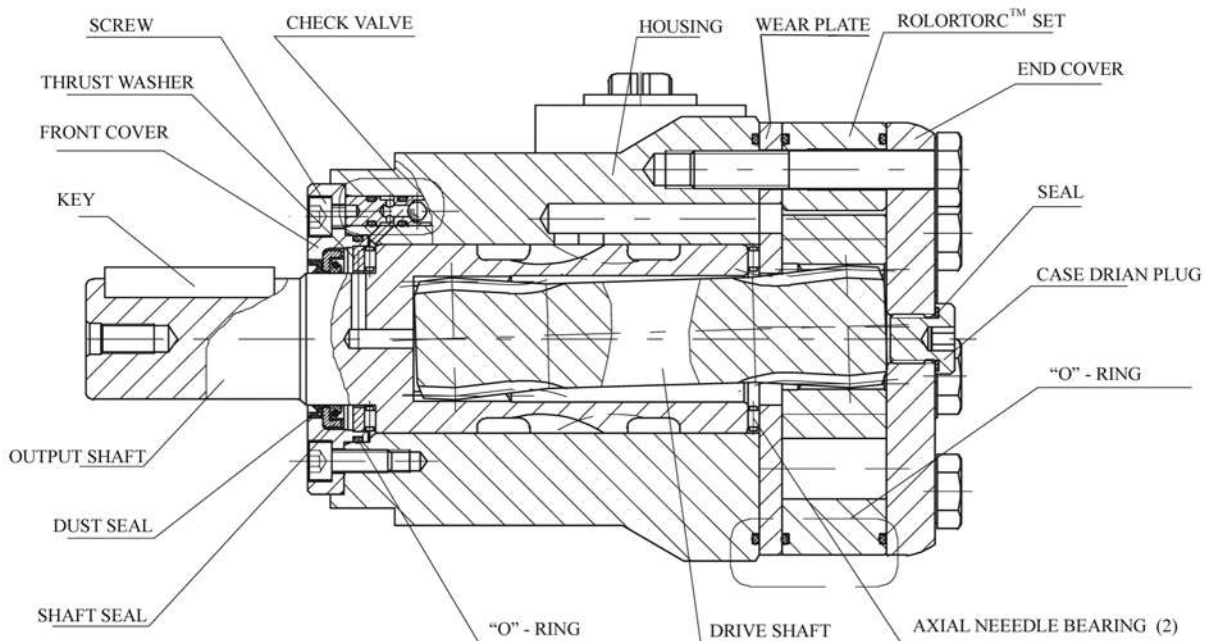
	362 2.5	725 5	1232 8.5	1450 10	1812 12.5	2320 16	[PSI] MPa
GPM L/min	[1.3] 5	[1459] 165 <b>11</b>	[2804] 317 <b>11</b>	[4564] 516 <b>8</b>			
	[2.6] 10	[1574] 178 <b>20</b>	[2963] 335 <b>19</b>	[4908] 555 <b>17</b>	[5917] 669 <b>15</b>	[6996] 791 <b>13</b>	[8570] 969 <b>9</b>
Flow (L/min)	[5.3] 20	[1565] 177 <b>42</b>	[2927] 331 <b>42</b>	[4944] 559 <b>41</b>	[5952] 673 <b>38</b>	[7066] 799 <b>36</b>	[8738] 988 <b>29</b>
	[7.9] 30	[1521] 172 <b>64</b>	[2830] 320 <b>63</b>	[4891] 553 <b>61</b>	[5864] 663 <b>57</b>	[7004] 792 <b>53</b>	[8694] 983 <b>47</b>
	[10.6] 40	[1442] 163 <b>85</b>	[2733] 309 <b>85</b>	[4785] 541 <b>83</b>	[5784] 654 <b>79</b>	[6925] 783 <b>75</b>	[8588] 971 <b>67</b>
	[13.2] 50	[1291] 146 <b>103</b>	[2618] 296 <b>103</b>	[4625] 523 <b>103</b>	[5616] 635 <b>97</b>	[6792] 768 <b>93</b>	[8437] 954 <b>85</b>
	[15.9] 60	[1070] 121 <b>124</b>	[2432] 275 <b>124</b>	[4440] 502 <b>123</b>	[5430] 614 <b>117</b>	[6606] 747 <b>113</b>	[8260] 934 <b>103</b>
	[18.5] 70	[858] 97 <b>148</b>	[2264] 256 <b>148</b>	[4263] 482 <b>148</b>	[5280] 597 <b>140</b>	[6447] 729 <b>134</b>	[8110] 917 <b>122</b>
Max cont.	[19.8] 75	[699] 79 <b>155</b>	[2123] 240 <b>155</b>	[4148] 469 <b>155</b>	[5147] 582 <b>152</b>	[6315] 714 <b>144</b>	[7977] 902 <b>130</b>
	[21.1] 80	[531] 60 <b>166</b>	[1999] 226 <b>166</b>	[4006] 453 <b>166</b>	[5041] 570 <b>159</b>	[6200] 701 <b>153</b>	[7818] 884 <b>139</b>
Max int.	[23.8] 90	[301] 34 <b>166</b>	[1778] 201 <b>165</b>	[3723] 421 <b>164</b>	[4864] 550 <b>157</b>	[5952] 673 <b>156</b>	[7685] 869 <b>155</b>

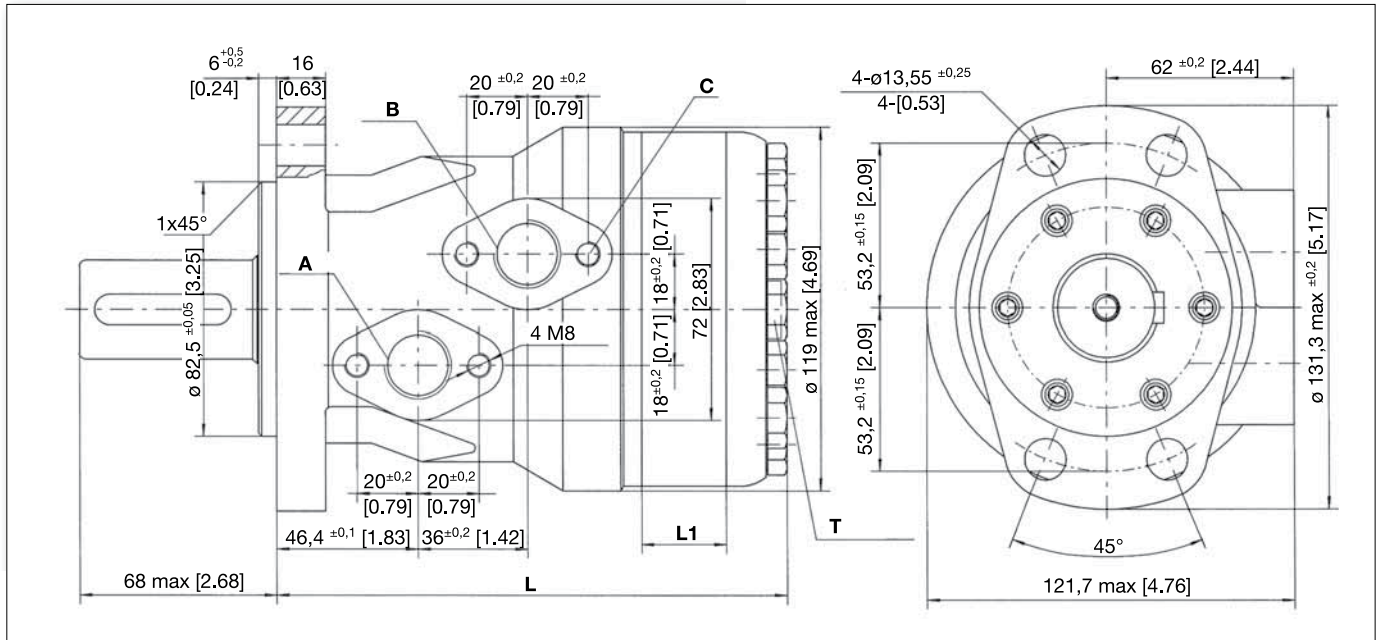
TORQUE (LB-IN)  
TORQUE (N•M)  
SPEED (RPM)

Max cont.

Max int.

## BMH CROSS SECTION





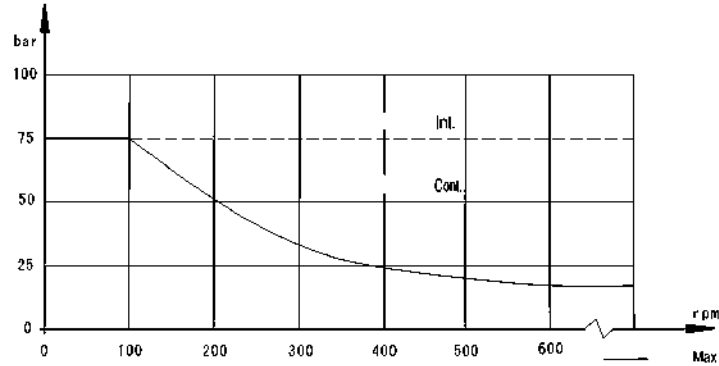
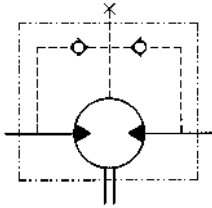
MODEL	[INCHES]		MILLIMETERS	
	L	L1	L	L1
BMH 200	[6.61]	[1.06]	168	27
BMH 250	[6.89]	[1.34]	175	34
BMH 315	[7.24]	[1.65]	184	42
BMH 400	[7.68]	[2.13]	195	54
BMH 500	[8.11]	[2.56]	206	65

## PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	P	DEPTH	R	DEPTH
PORTS - A and B	G 1/2	15 mm	M22 X 1.5	15 mm	7/8-14 O-RING	15 mm	1/2-14NPTF	15 mm	PT(RC)1/2	15 mm
TANK PORT - T	G 1/4	12 mm	M14 X 1.5	12 mm	7/16-20 UNF	12 mm	7/16-20 UNF	12 mm	PT(RC)1/4	1/4
BOLTS - C	4-M8	13 mm	4-M8	13 mm	4-M8	13 mm	4-M8	13 mm	4-M8	13 mm

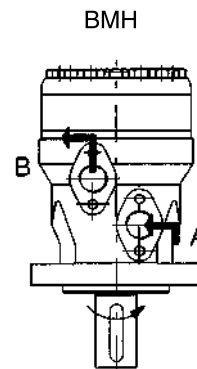
**Permissible shaft seal pressure**

In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.



**Direction of shaft rotation: Standard**

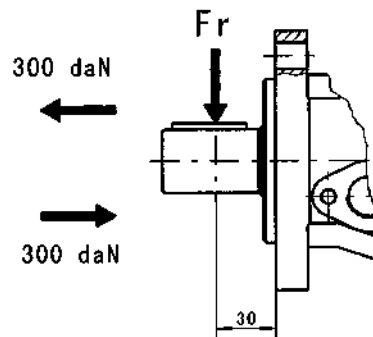
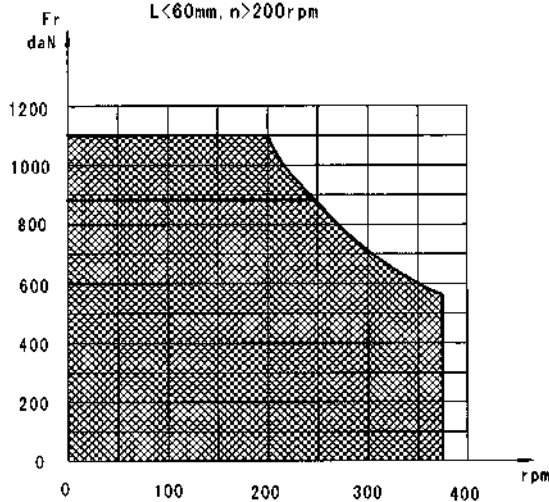
When facing shaft end of motor, shaft to rotate:  
 Clockwise when port "A" is pressurized.  
 Counter-clockwise when port "B" is pressurized.



Status of the shaft's radial force

$$F_r = \frac{1100}{n} \times \frac{25000}{103.5+L} \text{ daN}$$

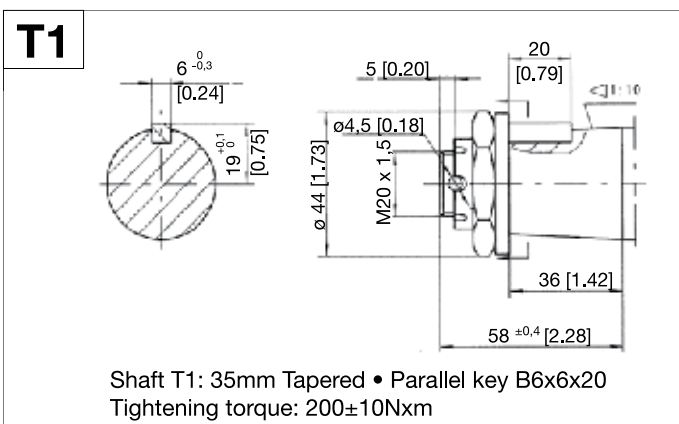
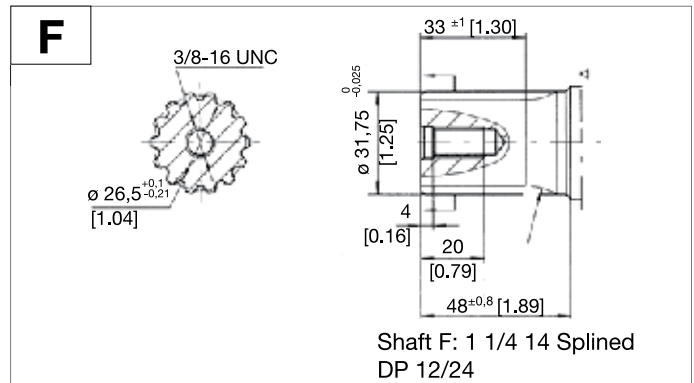
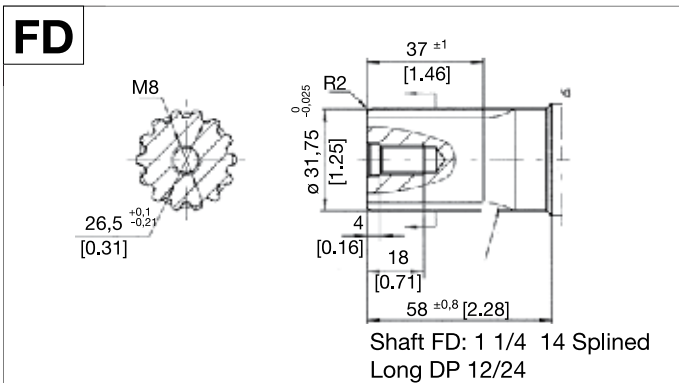
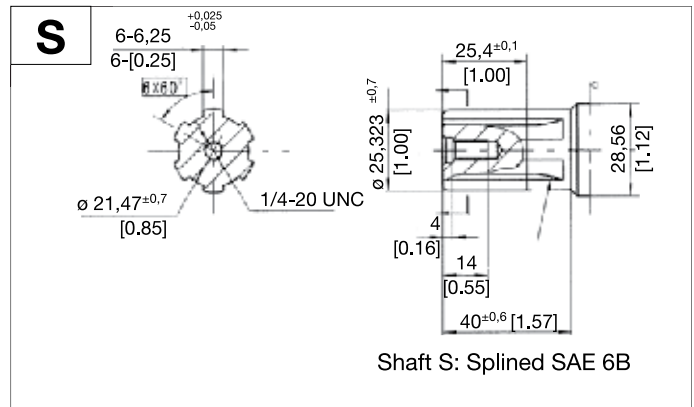
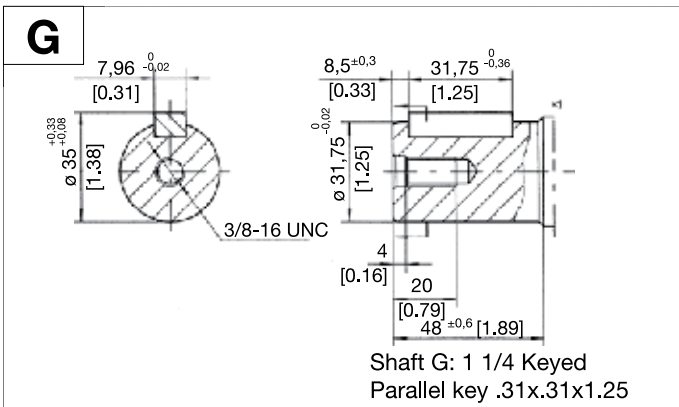
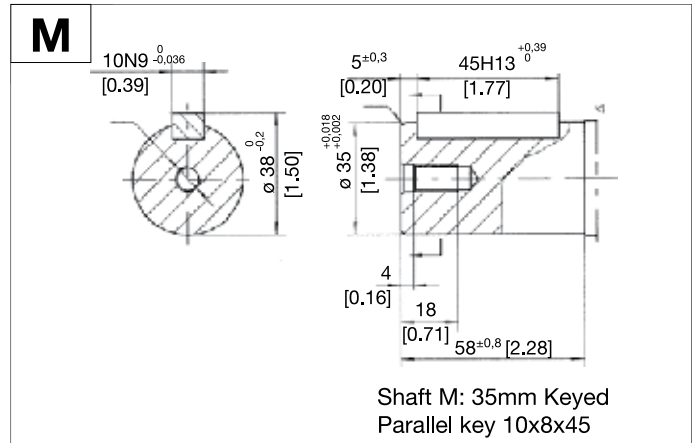
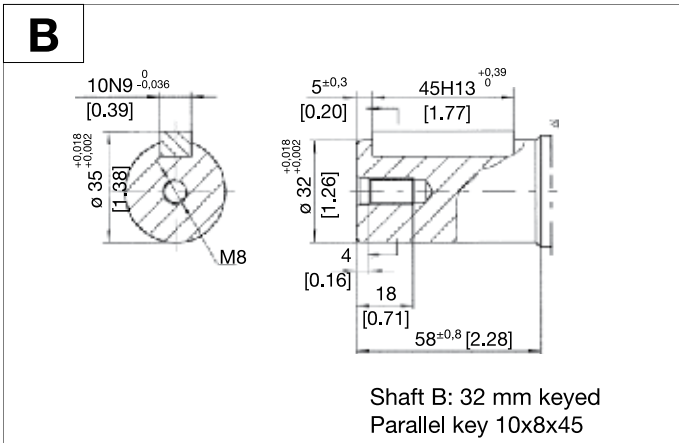
L < 60mm, n > 200rpm



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

— shaft #1" (425.4mm) and shaft SAE 6B

The drawing is the Possible load when L=30mm.



▷ Motor Mounting Surface

# BMH ORDERING INFORMATION

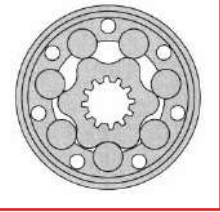


	1	2	3	4	5	6	7
BMH							

1	2	3	4	5	6	7
DISP. cc (cu. in.)	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
200 (12.4)	4 MAGNETO 3.25" PILOT	B Shaft: 32mm Keyed parallel key 10x8x45	D G1/2 Manifold mount 4 X M8 G1/4	NONE STANDARD	00 NO PAINT	NONE STANDARD
250 (15.62)		M Shaft: 35 Keyed parallel key 10x8x45	S 7/8-14 O-ring Manifold mount 4 X M8 7/16-20 UNF	R OPPOSITE	NONE BLACK	0 NO CASE DRAIN
315 (19.29)		F Shaft: 11/4 14 splined 14-DP12/24	M M22 x 1.5 Manifold mount 4 X M8 M14 x 1.5			F FREE RUNNING
400 (24.80)		FD Long Shaft: 11/4 14 splined 14-DP12/24	P 1/2-14 NPTF Manifold 4xM8 7/16-20 UNF			LS LOW SPEED
500 (29.86)		G Shaft 11/4 Keyed parallel key .31x.31x1 1/4	R PT(Rc)1/2 Manifold mount 4 X M8 ,PT(Rc)1/4			HPS HIGH PRESSURE SEAL
		T1 35mm tapered parallel key B6x6x20				
	S Shaft: Splined SAE 6B					

For options not listed here, please contact us.





The BMSY series motor adapts the advanced GEROLER gear set design with DISC distribution flow and high pressure. These motors can be supplied with various options for multifunctional operations in accordance with the application requirements. The output shaft tapered roller bearings permit high axial and radial forces offering a smooth operation during low pressure start up and high pressure operation. These low weight advanced construction design motors are manufactured in accordance with the requirements of the ISO 9001-2008 quality system.

## BMSY TECHNICAL DATA

DISTRIBUTION TYPE		BMSY 80	BMSY 100	BMSY 125	BMSY 160	BMSY 200	BMSY 250	BMSY 315	BMSY 400	BMSY 475	
GEOMETRIC DISPLACEMENT	[in <sup>3</sup> /rev.]	[4.92]	[6.15]	[7.63]	[9.40]	[11.84]	[14.83]	[18.97]	[24.04]	[28.98]	
	cm <sup>3</sup> /rev.	80,6	100,8	125	154	194	243	311	394	475	
MAX. SPEED RPM	RATED	675	540	432	337	270	216	171	135	110	
	CONT.	800	748	600	470	375	300	240	185	155	
	INT.	988	900	720	560	450	360	280	225	185	
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[1548]	[1946]	[2414]	[3936]	[4466]	[5483]	[6191]	[6766]	[6898]
		N*M	<b>175</b>	<b>220</b>	<b>273</b>	<b>445</b>	<b>505</b>	<b>620</b>	<b>700</b>	<b>765</b>	<b>780</b>
	CONT.	[LB. IN.]	[1990]	[2565]	[3228]	[4289]	[5183]	[6262]	[7783]	[7783]	[8048]
		N*M	<b>225</b>	<b>290</b>	<b>365</b>	<b>485</b>	<b>586</b>	<b>708</b>	<b>880</b>	<b>880</b>	<b>910</b>
	INT.	[LB. IN.]	[2211]	[2830]	[3538]	[4776]	[5704]	[7128]	[8490]	[8490]	[8490]
		N*M	<b>250</b>	<b>320</b>	<b>400</b>	<b>540</b>	<b>645</b>	<b>806</b>	<b>960</b>	<b>960</b>	<b>960</b>
MAX. OUTPUT [HP] KW	RATED	[HP]	[16]	[17]	[17]	[17]	[17]	[15]	[13]	[12]	
		KW	<b>12</b>	<b>12.4</b>	<b>12.4</b>	<b>12.4</b>	<b>12.4</b>	<b>12.4</b>	<b>11.2</b>	<b>9.6</b>	<b>8.6</b>
	CONT.	[HP]	[21]	[24]	[24]	[24]	[24]	[24]	[23]	[15]	[12]
		KW	<b>16</b>	<b>18</b>	<b>18</b>	<b>18.1</b>	<b>18.1</b>	<b>18</b>	<b>17</b>	<b>11</b>	<b>9</b>
	INT.	[HP]	[27]	[29]	[31]	[34]	[32]	[32]	[27]	[16]	[15]
		KW	<b>20</b>	<b>22</b>	<b>23</b>	<b>25</b>	<b>24</b>	<b>23.8</b>	<b>20.2</b>	<b>12</b>	<b>11</b>
MAX. PRES-SURE DROP [PSI] MP <sub>A</sub>	RATED	[PSI]	[2320]	[2320]	[2320]	[2755]	[2755]	[2610]	[2320]	[2030]	[1740]
		MP <sub>A</sub>	<b>16</b>	<b>16</b>	<b>16</b>	<b>19</b>	<b>19</b>	<b>18</b>	<b>16</b>	<b>14</b>	<b>12</b>
	CONT.	[PSI]	[2913]	[2913]	[2913]	[3045]	[3045]	[2900]	[2900]	[2320]	[2030]
		MP <sub>A</sub>	<b>20.5</b>	<b>20.5</b>	<b>20.5</b>	<b>21</b>	<b>21</b>	<b>20</b>	<b>20</b>	<b>16</b>	<b>14</b>
	INT.	[PSI]	[3263]	[3263]	[3263]	[3263]	[3263]	[3263]	[3263]	[2538]	[2175]
		MP <sub>A</sub>	<b>22.5</b>	<b>22.5</b>	<b>22.5</b>	<b>22.5</b>	<b>22.5</b>	<b>22.5</b>	<b>22.5</b>	<b>17.5</b>	<b>15</b>
	PEAK	[PSI]	[4278]	[4278]	[4278]	[3263]	[3263]	[3263]	[3263]	[2900]	[2538]
		MP <sub>A</sub>	<b>29.5</b>	<b>29.5</b>	<b>29.5</b>	<b>22.5</b>	<b>22.5</b>	<b>22.5</b>	<b>22.5</b>	<b>20</b>	<b>17.5</b>
MAX. FLOW [GPM] L/MIN	CONT.	[GPM]	[17.17]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	<b>65</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>
	INT.	[GPM]	[21.14]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]
		L/MIN	<b>80</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>
MAX. INLET PRESSURE [PSI] MP <sub>A</sub>	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MP <sub>A</sub>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>
	CONT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MP <sub>A</sub>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>
	INT.	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]
		MP <sub>A</sub>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
WEIGHT [LB] KG	[LB]	[22]	[22.4]	[23]	[24]	[24]	[26]	[27]	[29]	[31]	
	KG	<b>9.8</b>	<b>10</b>	<b>10.3</b>	<b>10.7</b>	<b>11.1</b>	<b>11.6</b>	<b>12.3</b>	<b>13.2</b>	<b>14.3</b>	

- Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- Continuous pressure: Max. value of operating motor continuously.
- Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- Peak pressure: Max. value of operating motor in 0.6 second per minute.

# BMSY PERFORMANCE DATA

**BMSY 80** [4.92 in<sup>3</sup>/rev] 80.6 cm<sup>3</sup>/rev. Max cont. Max int.

	[508] 3.5	[1015] 7	[1523] 10.5	[2030] 14	[2538] 17.5	[3045] 20.5	[3263] 22.5	[PSI] MPa
GPM L/min	[3.9]	[310] 35	[708] 80	[1061] 120	[1397] 158	[1725] 195	[2016] 228	[2202] 249
	15	<b>180</b>	<b>174</b>	<b>168</b>	<b>164</b>	<b>158</b>	<b>151</b>	<b>143</b>
TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	[7.9]	[310] 35	[708] 80	[1061] 120	[1397] 158	[1725] 195	[2016] 232	[2202] 260
	30	<b>362</b>	<b>352</b>	<b>346</b>	<b>338</b>	<b>330</b>	<b>322</b>	<b>310</b>
Flow (L/min)	[10.6]	[310] 35	[699] 79	[1057] 119	[1311] 155	[1707] 193	[2008] 227	[2211] 250
	40	<b>487</b>	<b>480</b>	<b>468</b>	<b>457</b>	<b>446</b>	<b>438</b>	<b>425</b>
Max cont.	[13.2]	[265] 30	[681] 77	[1035] 117	[1353] 153	[1698] 192	[1981] 224	[2193] 248
	50	<b>612</b>	<b>603</b>	<b>592</b>	<b>581</b>	<b>572</b>	<b>558</b>	<b>542</b>
Max int.	[15.9]	[248] 28	[681] 77	[1035] 117	[1353] 153	[1698] 192	[1981] 224	[2149] 243
	60	<b>735</b>	<b>726</b>	<b>718</b>	<b>703</b>	<b>687</b>	<b>673</b>	<b>646</b>
Max cont.	[17.17]	[230] 26	[663] 75	[1026] 116	[1335] 151	[1663] 188	[1919] 217	[2087] 236
	65	<b>794</b>	<b>786</b>	<b>773</b>	<b>760</b>	<b>744</b>	<b>722</b>	<b>706</b>
Max int.	[21.19]	[212] 24	[637] 72	[964] 109	[1256] 142	[1557] 176	[1823] 206	[2009] 227
	80	<b>981</b>	<b>968</b>	<b>955</b>	<b>925</b>	<b>893</b>	<b>870</b>	<b>832</b>

**BMSY 100** [6.15 in<sup>3</sup>/rev] 100.8 cm<sup>3</sup>/rev. Max cont. Max int.

	[508] 3.5	[1015] 7	[1523] 10.5	[2030] 14	[2538] 17.5	[3045] 20.5	[3263] 22.5	[PSI] MPa
GPM L/min	[3.9]	[425] 48	[840] 95	[1327] 150	[1769] 200	[2211] 250	[2494] 282	[2742] 310
	15	<b>146</b>	<b>144</b>	<b>139</b>	<b>135</b>	<b>130</b>	<b>120</b>	<b>105</b>
TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	[7.9]	[398] 45	[831] 94	[1291] 146	[1751] 198	[2211] 250	[2565] 290	[2804] 317
	30	<b>291</b>	<b>289</b>	<b>278</b>	<b>274</b>	<b>269</b>	<b>258</b>	<b>242</b>
Flow (L/min)	[10.6]	[380] 43	[787] 89	[1256] 142	[1733] 196	[2193] 248	[2517] 288	[2795] 316
	40	<b>387</b>	<b>384</b>	<b>374</b>	<b>359</b>	<b>350</b>	<b>335</b>	<b>320</b>
Max cont.	[13.2]	[354] 40	[778] 88	[1194] 135	[1716] 194	[2184] 247	[2529] 286	[2786] 315
	50	<b>486</b>	<b>483</b>	<b>473</b>	<b>462</b>	<b>450</b>	<b>430</b>	<b>420</b>
Max int.	[15.9]	[327] 37	[778] 88	[1167] 132	[1636] 185	[2158] 244	[2563] 283	[2759] 312
	60	<b>588</b>	<b>584</b>	<b>574</b>	<b>562</b>	<b>550</b>	<b>538</b>	<b>520</b>
Max cont.	[19.8]	[310] 35	[708] 80	[1150] 130	[1592] 180	[2123] 240	[2467] 279	[2742] 310
	75	<b>740</b>	<b>735</b>	<b>720</b>	<b>705</b>	<b>696</b>	<b>676</b>	<b>653</b>
Max int.	[23.8]	[245] 30	[663] 75	[1047] 124	[1503] 170	[2087] 236	[2397] 271	[2684] 303
	90	<b>850</b>	<b>840</b>	<b>810</b>	<b>787</b>	<b>770</b>	<b>750</b>	<b>747</b>

**BMSY 125** [1.63 in<sup>3</sup>/rev] 125 cm<sup>3</sup>/rev. Max cont. Max int.

	[508] 3.5	[1015] 7	[1523] 10.5	[2030] 14	[2538] 17.5	[3045] 20.5	[3263] 22.5	[PSI] MPa
GPM L/min	[3.9]	[486] 55	[1061] 120	[1557] 176	[2167] 245	[2733] 309	[3051] 345	[3317] 375
	15	<b>115</b>	<b>113</b>	<b>110</b>	<b>104</b>	<b>98</b>	<b>90</b>	<b>84</b>
TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	[7.9]	[486] 55	[1061] 120	[1548] 175	[2241] 250	[2786] 315	[3219] 364	[3573] 404
	30	<b>231</b>	<b>228</b>	<b>225</b>	<b>214</b>	<b>202</b>	<b>188</b>	<b>172</b>
Flow (L/min)	[10.6]	[469] 53	[1044] 118	[1574] 178	[2211] 250	[2786] 315	[3219] 364	[3564] 403
	40	<b>312</b>	<b>309</b>	<b>290</b>	<b>289</b>	<b>278</b>	<b>262</b>	<b>235</b>
Max cont.	[13.2]	[442] 50	[1017] 115	[1557] 176	[2193] 248	[2784] 315	[3201] 362	[3511] 397
	50	<b>391</b>	<b>386</b>	<b>378</b>	<b>365</b>	<b>352</b>	<b>339</b>	<b>308</b>
Max int.	[15.9]	[398] 45	[999] 113	[1512] 171	[2131] 241	[2729] 308	[3166] 358	[3511] 397
	60	<b>469</b>	<b>461</b>	<b>450</b>	<b>437</b>	<b>425</b>	<b>400</b>	<b>372</b>
Max cont.	[19.8]	[398] 45	[913] 110	[1477] 167	[2123] 240	[2706] 306	[3113] 352	[3440] 389
	75	<b>588</b>	<b>574</b>	<b>560</b>	<b>544</b>	<b>526</b>	<b>505</b>	<b>481</b>
Max int.	[23.8]	[354] 40	[929] 105	[1433] 162	[2096] 237	[2662] 301	[3033] 343	[3343] 378
	90	<b>710</b>	<b>696</b>	<b>680</b>	<b>661</b>	<b>646</b>	<b>628</b>	<b>610</b>

**BMSY 160** [9.4 in<sup>3</sup>/rev] 154 cm<sup>3</sup>/rev. Max cont. Max int.

	[508] 3.5	[1015] 7	[1523] 10.5	[2030] 14	[2538] 17.5	[3045] 21	[3263] 22.5	[PSI] MPa
GPM L/min	[3.9]	[619] 70	[1256] 142	[1901] 215	[2636] 298	[3290] 372	[3847] 435	[4210] 476
	15	<b>93</b>	<b>91</b>	<b>89</b>	<b>85</b>	<b>80</b>	<b>76</b>	<b>58</b>
TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	[7.9]	[646] 73	[1335] 151	[1990] 225	[2759] 312	[3378] 382	[4033] 456	[4351] 492
	30	<b>189</b>	<b>187</b>	<b>181</b>	<b>176</b>	<b>170</b>	<b>162</b>	<b>153</b>
Flow (L/min)	[10.6]	[663] 75	[1344] 152	[2016] 228	[2777] 314	[3387] 383	[4015] 454	[4316] 488
	40	<b>252</b>	<b>250</b>	<b>246</b>	<b>239</b>	<b>234</b>	<b>228</b>	<b>212</b>
Max cont.	[13.2]	[619] 70	[1309] 148	[1990] 225	[2697] 305	[3290] 372	[3936] 445	[4245] 480
	50	<b>313</b>	<b>310</b>	<b>306</b>	<b>298</b>	<b>293</b>	<b>285</b>	<b>272</b>
Max int.	[15.9]	[601] 68	[1265] 143	[1928] 218	[2618] 296	[3272] 370	[3909] 442	[4245] 480
	60	<b>378</b>	<b>376</b>	<b>370</b>	<b>362</b>	<b>353</b>	<b>346</b>	<b>332</b>
Max cont.	[19.8]	[548] 62	[1238] 140	[1866] 211	[2574] 291	[3228] 365	[3883] 439	[4201] 475
	75	<b>475</b>	<b>469</b>	<b>461</b>	<b>450</b>	<b>441</b>	<b>432</b>	<b>414</b>
Max int.	[23.8]	[522] 59	[1159] 131	[1786] 202	[2529] 286	[3157] 357	[3759] 425	[4068] 460
	90	<b>567</b>	<b>561</b>	<b>554</b>	<b>543</b>	<b>532</b>	<b>520</b>	<b>509</b>

**BMSY 200 [11.8 in<sup>3</sup>/rev] 194 cm<sup>3</sup>/rev.**

		[508]	[1015]	[1523]	[2030]	[2538]	[3045]	[3263]	[PSI]
		3.5	7	10.5	14	17.5	21	22.5	MPa
GPM	[3.9]	[769]	[1583]	[2414]	[3281]	[4166]	[4970]	[5395]	
	L/min	87	179	273	371	471	562	610	
15		<b>74</b>	<b>73</b>	<b>71</b>	<b>68</b>	<b>64</b>	<b>60</b>	<b>48</b>	
[7.9]		[805]	[1680]	[2547]	[3414]	[4325]	[5059]	[5466]	TORQUE (LB-IN)
		91	190	288	386	489	572	618	
30		<b>150</b>	<b>148</b>	<b>143</b>	<b>140</b>	<b>134</b>	<b>128</b>	<b>119</b>	TORQUE (N•M)
[10.6]		[831]	[1707]	[2618]	[3485]	[4404]	[5165]	[5704]	SPEED (RPM)
		94	193	296	394	498	584	645	
40		<b>198</b>	<b>195</b>	<b>192</b>	<b>188</b>	<b>183</b>	<b>178</b>	<b>167</b>	
[13.2]		[796]	[1689]	[2582]	[3440]	[4360]	[5130]	[5607]	
		90	191	292	389	493	580	634	
50		<b>248</b>	<b>246</b>	<b>241</b>	<b>236</b>	<b>230</b>	<b>223</b>	<b>212</b>	
[15.9]		[752]	[1636]	[2467]	[3378]	[4272]	[5085]	[5501]	
		85	185	279	382	483	575	622	
60		<b>300</b>	<b>295</b>	<b>288</b>	<b>281</b>	<b>273</b>	<b>263</b>	<b>251</b>	
Max cont	[19.8]	[690]	[1557]	[2397]	[3272]	[4174]	[4961]	[5395]	Max cont.
		78	176	271	370	472	561	610	
75		<b>374</b>	<b>370</b>	<b>364</b>	<b>360</b>	<b>352</b>	<b>340</b>	<b>331</b>	Max cont.
Max int.	[23.8]	[601]	[1442]	[2344]	[3193]	[4033]	[4820]	[5298]	Max int.
		68	163	265	361	456	545	599	
90		<b>443</b>	<b>440</b>	<b>435</b>	<b>428</b>	<b>424</b>	<b>413</b>	<b>400</b>	Max int.

**BMSY 250 [14.8 in<sup>3</sup>/rev] 243 cm<sup>3</sup>/rev.**

		[508]	[1015]	[1523]	[2030]	[2537]	[2900]	[3262]	[PSI]
		3.5	7	10.5	14	17.5	20	22.5	MPa
GPM	[3.9]	[773]	[2043]	[3104]	[4086]	[5174]	[6023]	[6881]	
	L/min	110	231	351	462	585	681	778	
15		<b>59</b>	<b>58</b>	<b>56</b>	<b>53</b>	<b>50</b>	<b>46</b>	<b>35</b>	
[7.9]		[1026]	[2087]	[3175]	[4201]	[5280]	[6191]	[6987]	TORQUE (LB-IN)
		116	236	359	475	597	700	790	
30		<b>119</b>	<b>117</b>	<b>114</b>	<b>108</b>	<b>102</b>	<b>92</b>	<b>80</b>	TORQUE (N•M)
[10.6]		[1044]	[2131]	[3210]	[4245]	[5298]	[6244]	[7040]	SPEED (RPM)
		118	241	363	480	599	706	796	
40		<b>162</b>	<b>159</b>	<b>156</b>	<b>150</b>	<b>143</b>	<b>134</b>	<b>121</b>	
[13.2]		[982]	[2069]	[3113]	[4174]	[5227]	[6129]	[6969]	
		111	234	352	472	591	693	788	
50		<b>203</b>	<b>201</b>	<b>197</b>	<b>191</b>	<b>182</b>	<b>173</b>	<b>158</b>	
[15.9]		[937]	[1981]	[3051]	[4086]	[5147]	[6058]	[6828]	
		106	224	345	462	582	685	772	
60		<b>244</b>	<b>242</b>	<b>237</b>	<b>230</b>	<b>220</b>	<b>208</b>	<b>194</b>	
Max cont	[19.8]	[893]	[1893]	[3007]	[4015]	[5041]	[5925]	[6721]	Max cont.
		101	214	340	454	570	670	760	
75		<b>303</b>	<b>299</b>	<b>294</b>	<b>285</b>	<b>272</b>	<b>260</b>	<b>244</b>	Max cont.
Max int.	[23.8]	[822]	[1848]	[2963]	[3953]	[4944]	[5811]	[6624]	Max int.
		93	209	335	447	559	657	749	
90		<b>363</b>	<b>359</b>	<b>354</b>	<b>348</b>	<b>340</b>	<b>328</b>	<b>303</b>	Max int.

**BMSY 315 [18.9 in<sup>3</sup>/rev] 311 cm<sup>3</sup>/rev.**

		[508]	[1015]	[1522]	[2030]	[2537]	[2900]	[3262]	[PSI]
		3.5	7	10.5	14	17.5	20	22.5	MPa
GPM	[3.9]	[1309]	[2689]	[4033]	[5421]	[6739]	[7774]	[8649]	
	L/min	148	304	456	613	762	879	978	
15		<b>48</b>	<b>47</b>	<b>45</b>	<b>43</b>	<b>41</b>	<b>39</b>	<b>27</b>	
[7.9]		[1371]	[2777]	[4112]	[5616]	[6881]	[7818]	[8738]	TORQUE (LB-IN)
		155	314	465	635	778	884	988	
30		<b>95</b>	<b>93</b>	<b>91</b>	<b>89</b>	<b>86</b>	<b>82</b>	<b>67</b>	TORQUE (N•M)
[10.6]		[1415]	[2839]	[4236]	[5749]	[7040]	[8013]	[8817]	SPEED (RPM)
		160	321	479	650	796	906	997	
40		<b>127</b>	<b>125</b>	<b>121</b>	<b>117</b>	<b>115</b>	<b>109</b>	<b>91</b>	
[13.2]		[1371]	[2777]	[4112]	[5642]	[6898]	[7836]	[8738]	
		155	314	465	638	780	886	988	
50		<b>159</b>	<b>157</b>	<b>153</b>	<b>149</b>	<b>145</b>	<b>142</b>	<b>128</b>	
[15.9]		[1535]	[2706]	[4006]	[5483]	[6766]	[7836]	[8632]	
		151	306	453	620	765	886	976	
60		<b>187</b>	<b>185</b>	<b>181</b>	<b>176</b>	<b>169</b>	<b>157</b>	<b>143</b>	
Max cont	[19.8]	[1291]	[2653]	[3936]	[5421]	[6677]	[7739]	[8543]	Max cont.
		146	300	445	613	755	875	966	
75		<b>238</b>	<b>236</b>	<b>232</b>	<b>227</b>	<b>224</b>	<b>220</b>	<b>196</b>	Max cont.
Max int.	[23.8]	[1194]	[2512]	[3856]	[5315]	[6545]	[7632]	[8419]	Max int.
		135	284	436	601	740	863	952	
90		<b>286</b>	<b>283</b>	<b>278</b>	<b>272</b>	<b>265</b>	<b>257</b>	<b>232</b>	Max int.

**BMSY 400 [24.0 in<sup>3</sup>/rev] 394 cm<sup>3</sup>/rev.**

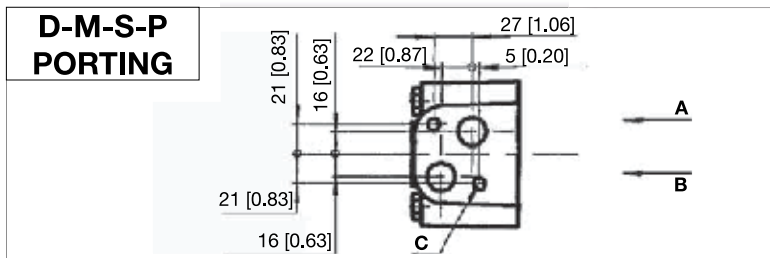
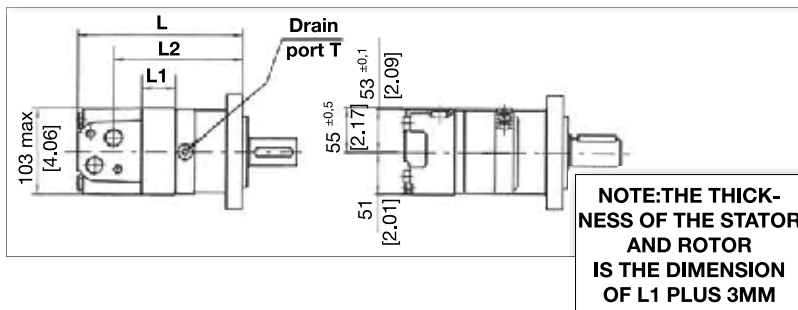
		[508]	[1015]	[1523]	[2030]	[2320]	[2538]	[PSI]
		3.5	7	10.5	14	16	17.5	MPa
GPM	[3.9]	[1645]	[3352]	[5112]	[6889]	[7924]	[8720]	
	L/min	186	379	578	779	896	986	
15		<b>37</b>	<b>36</b>	<b>35</b>	<b>33</b>	<b>31</b>	<b>29</b>	
[7.9]		[1680]	[3431]	[5218]	[6996]	[8004]	[8764]	TORQUE (LB-IN)
		190	388	590	791	905	991	
30		<b>75</b>	<b>73</b>	<b>71</b>	<b>68</b>	<b>65</b>	<b>61</b>	TORQUE (N•M)
[10.6]		[1725]	[3485]	[5271]	[7049]	[8066]	[8826]	SPEED (RPM)
		195	394	596	797	912	998	
40		<b>99</b>	<b>97</b>	<b>95</b>	<b>93</b>	<b>90</b>	<b>85</b>	
[13.2]		[1689]	[3431]	[5191]	[6943]	[7995]	[8694]	
		191	388	587	785	904	983	
50		<b>125</b>	<b>123</b>	<b>118</b>	<b>114</b>	<b>109</b>	<b>102</b>	
[15.9]		[1645]	[3431]	[5191]	[6943]	[7995]	[8694]	
		186	388	587	785	904	983	
60		<b>149</b>	<b>146</b>	<b>142</b>	<b>137</b>	<b>131</b>	<b>122</b>	
Max cont	[19.8]	[1601]	[3290]	[5094]	[6810]	[7880]	[8605]	Max cont.
		181	372	576	770	891	973	
75		<b>187</b>	<b>183</b>	<b>177</b>	<b>171</b>	<b>164</b>	<b>153</b>	Max cont.
Max int.	[23.8]	[1557]	[3246]	[5050]	[6775]	[7809]	[8534]	Max int.
		176	367	571	766	883	965	
90		<b>226</b>	<b>221</b>	<b>214</b>	<b>208</b>	<b>199</b>	<b>183</b>	Max int.

## BMSY PERFORMANCE DATA

BMSY 475 [28.9 in<sup>3</sup>/rev] 475 cm<sup>3</sup>/rev. Max cont. Max int.

	[508]	[1015]	[1523]	[2030]	[2538]	[PSI]	
	3.5	7	10.5	14	17.5	MPA	
GPM	[3.9]	[1928]	[3883]	[5843]	[7889]	[8800]	
L/min	15	218	439	661	892	995	
		<b>30</b>	<b>29</b>	<b>28</b>	<b>27</b>	<b>25</b>	
	[7.9]	[1972]	[3980]	[5979]	[8048]	[8862]	TORQUE [LB-IN]
	30	223	450	676	910	1002	TORQUE (N•M)
		<b>61</b>	<b>60</b>	<b>58</b>	<b>56</b>	<b>53</b>	SPEED (RPM)
Flow (L/min)	[10.6]	[2016]	[4077]	[6094]	[8198]	[8994]	
	40	228	461	689	927	1017	
		<b>82</b>	<b>80</b>	<b>77</b>	<b>74</b>	<b>68</b>	
	[13.2]	[1981]	[4033]	[6032]	[8136]	[8915]	
	50	224	456	682	920	1008	
		<b>103</b>	<b>101</b>	<b>97</b>	<b>92</b>	<b>86</b>	
	[15.9]	[1946]	[3989]	[5987]	[8075]	[8826]	
	60	220	451	677	913	998	
		<b>123</b>	<b>121</b>	<b>118</b>	<b>112</b>	<b>105</b>	
Max cont.	[19.8]	[1875]	[3918]	[5872]	[7968]	[8667]	
	75	212	443	664	901	980	
		<b>155</b>	<b>153</b>	<b>147</b>	<b>140</b>	<b>132</b>	Max cont.
Max int.	[23.8]	[1733]	[3723]	[5687]	[7756]	[8481]	
	90	196	421	643	877	959	
		<b>186</b>	<b>184</b>	<b>178</b>	<b>170</b>	<b>157</b>	Max int.

## MOUNTING DATA

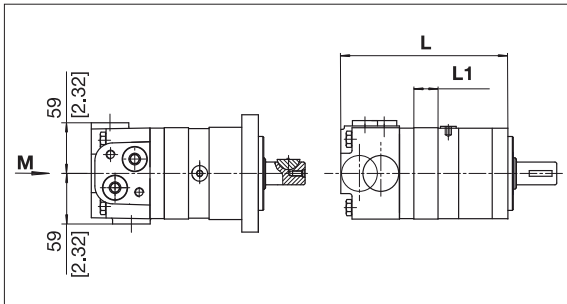


### PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D depth	M depth	S depth	P depth
<b>PORTS - A AND B</b>	G 1/2 18 mm	M 22 x 1.5 18 mm	7/8-14 O-ring 18 mm	1/2-14 NPT 15 mm
<b>TANK PORT - T</b>	G 1/4 12 mm	M 14 x 1.5 12 mm	7/16-20UNF 12 mm	7/16-20 UNF 12 mm
<b>BOLTS-C</b>	2-M10 13 mm	2-M10 13 mm	2-3/8-16 unc 13 mm	2-3/8-16 unc 13 mm

	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
<b>BMSY 80</b>	[6.69]	[0.63]	[4.98]	170	16	126.5
<b>BMSY 100</b>	[6.85]	[0.79]	[5.14]	174	20	130.5
<b>BMSY 125</b>	[7.05]	[0.98]	[5.33]	179	25	135.5
<b>BMSY 160</b>	[7.15]	[1.09]	[5.43]	181.5	27.5	137.7
<b>BMSY 200</b>	[7.44]	[1.39]	[5.72]	189	35.1	145.2
<b>BMSY 250</b>	[7.92]	[1.85]	[6.19]	201	47	157.2
<b>BMSY 315</b>	[8.39]	[2.33]	[6.67]	213	59	169.2
<b>BMSY 400</b>	[25.4]	[2.72]	[7.07]	223	69	179.5
<b>BMSY 475</b>	[9.33]	[3.27]	[7.22]	237	83	183.5

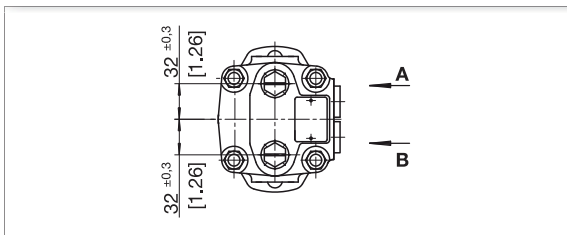
	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
<b>BMSY 80 W</b>	[5.22]	[0.63]	[3.50]	132.5	16	89
<b>BMSY 100 W</b>	[5.37]	[0.79]	[3.66]	136.5	20	93
<b>BMSY 125 W</b>	[5.57]	[0.98]	[3.86]	141.5	25	98
<b>BMSY 160 W</b>	[5.67]	[1.08]	[3.96]	143.9	27.5	100.5
<b>BMSY 200 W</b>	[5.96]	[1.38]	[4.25]	151.4	35.1	108
<b>BMSY 250 W</b>	[6.43]	[1.85]	[4.72]	163.4	47	120
<b>BMSY 315 W</b>	[6.91]	[2.32]	[5.20]	175.4	59	132
<b>BMSY 400 W</b>	[7.30]	[2.72]	[5.59]	185.5	69	142
<b>BMSY 475 W</b>	[7.85]	[3.27]	[6.14]	199.5	83	156



MODEL	[INCHES]		MILLIMETERS	
	L	L1	L	L1
BMSY 80	[6.93]	[0.63]	176	16
BMSY 100	[7.09]	[0.79]	180	20
BMSY 125	[7.28]	[0.98]	185	25
BMSY 160	[7.36]	[1.06]	187	27
BMSY 200	[7.64]	[1.34]	194	34
BMSY 250	[7.95]	[1.65]	202	42
BMSY 315	[8.43]	[2.13]	214	54
BMSY 400	[9.02]	[2.72]	229	69
BMSY 475	[9.57]	[3.27]	243	83

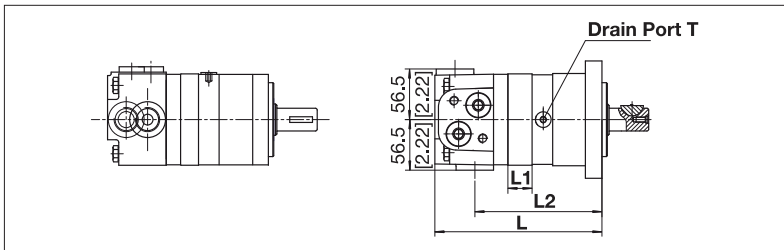
MODEL	[INCHES]		MILLIMETERS	
	L	L1	L	L1
BMSY 80 WE	[5.83]	[0.63]	148	16
BMSY 100 WE	[5.98]	[0.79]	152	20
BMSY 125 WE	[6.18]	[0.98]	157	25
BMSY 160 WE	[6.26]	[1.06]	159	27
BMSY 200 WE	[6.54]	[1.34]	166	34
BMSY 250 WE	[6.85]	[1.65]	174	42
BMSY 315 WE	[7.32]	[2.13]	186	54
BMSY 400 WE	[7.91]	[2.72]	201	69
BMSY 475 WE	[8.46]	[3.27]	215	83

### PORTING END PORTS



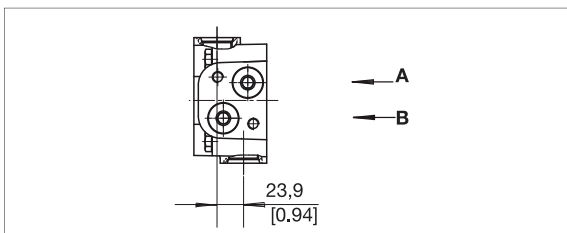
### PORT & DRAIN PORT ORDERING CODES

ORDER CODE	EE-D depth	EE-M2 depth	EE-S2 depth
PORTS - A AND B	G 1/2 18 mm	M22x1.5 - 18 mm	7/8-14 O-ring 18 mm
TANK PORT - T	G 1/4 12 mm	M14x1.5 - 12 mm	7/16-20 UNF 12 mm



MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
BMSY 80	[6.93]	[0.63]	[5.12]	176	16	130
BMSY 100	[7.09]	[0.79]	[5.28]	180	20	134
BMSY 125	[7.28]	[0.98]	[5.47]	185	25	139
BMSY 160	[7.36]	[1.06]	[5.55]	187	27	141
BMSY 200	[7.64]	[1.34]	[5.83]	194	34	148
BMSY 250	[7.95]	[1.65]	[6.14]	202	42	156
BMSY 315	[8.43]	[2.13]	[6.61]	214	54	168
BMSY 400	[9.02]	[2.72]	[7.20]	229	69	183
BMSY 475	[9.57]	[3.27]	[7.76]	243	83	197

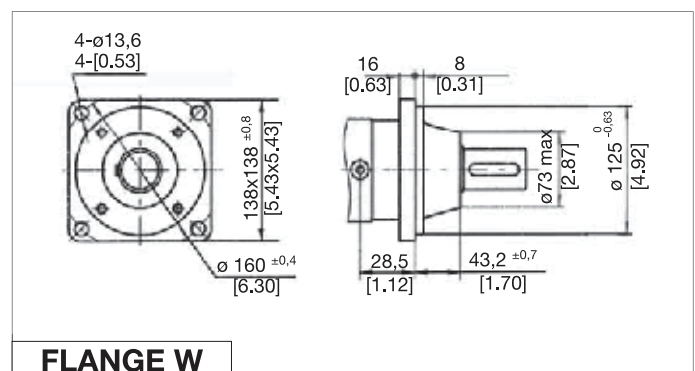
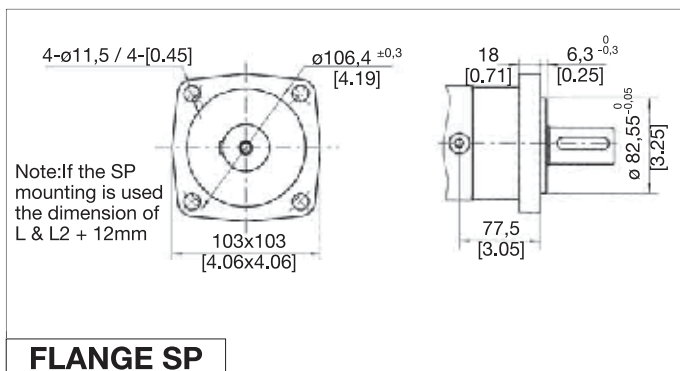
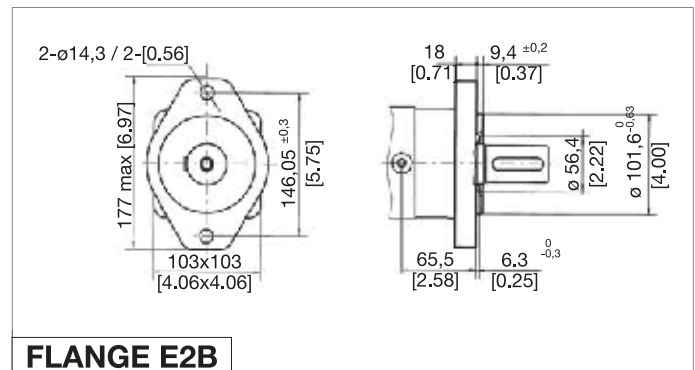
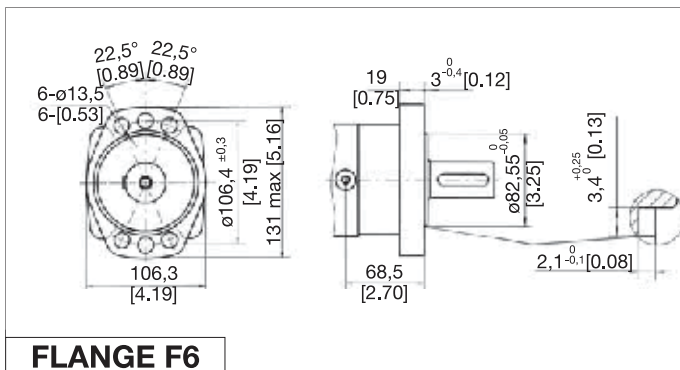
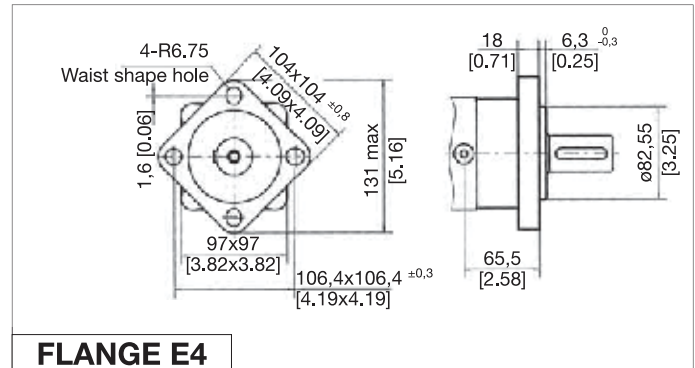
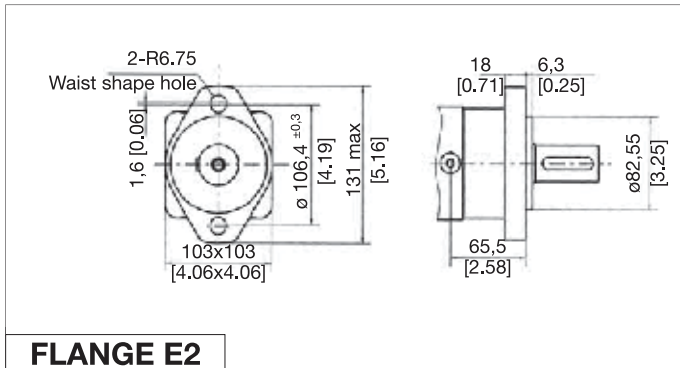
### ED PORTING 180° PORTS



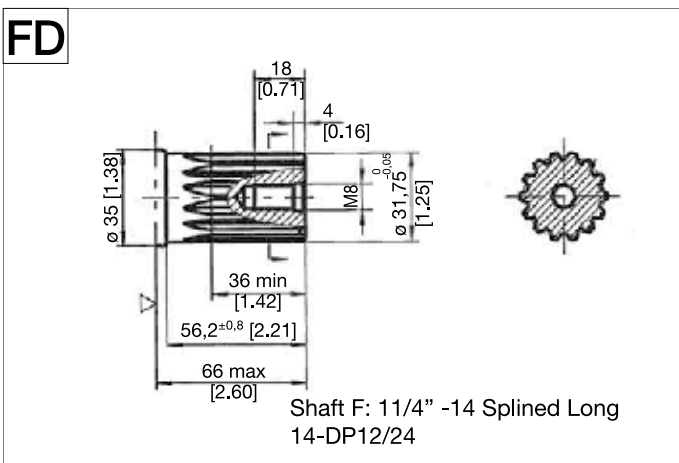
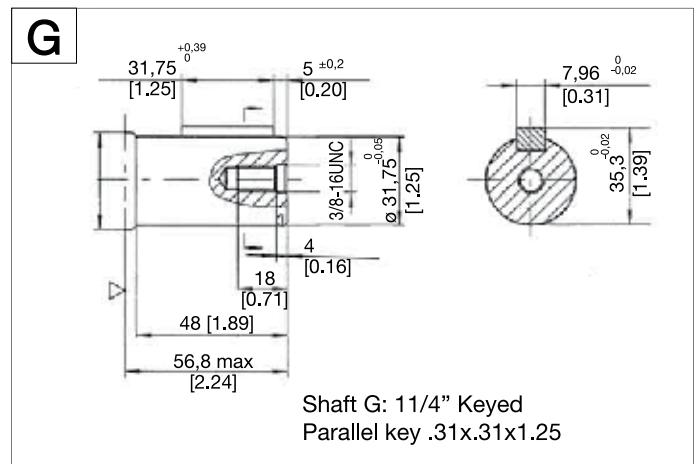
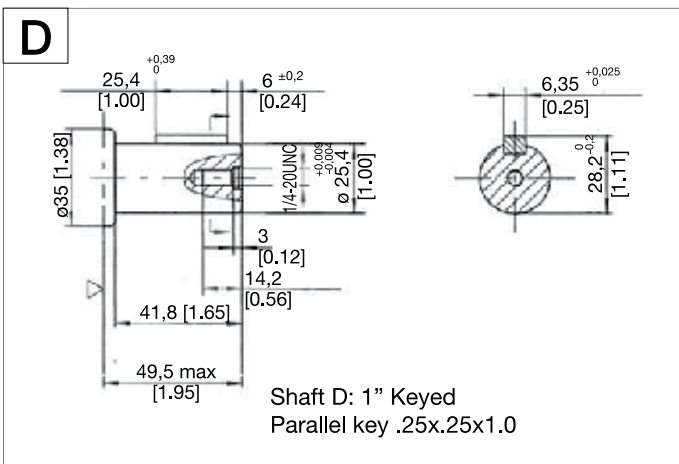
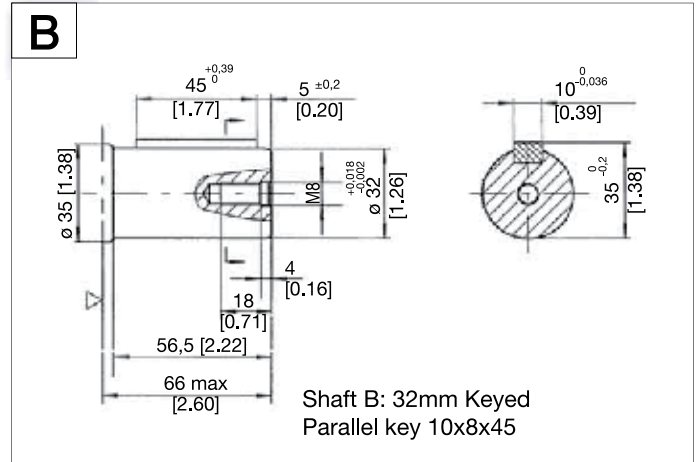
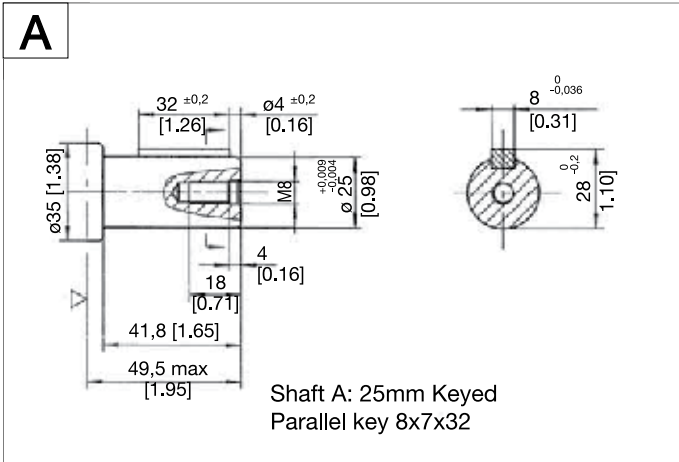
### PORT & DRAIN PORT ORDERING CODES

ORDER CODE	ED depth
PORTS - A AND B	1-1/16-12 UN O-ring 18 mm
T	7/16-20 UNF 12 mm

MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
BMSY 80	[5.83]	[0.63]	[4.02]	148	16	102
BMSY 100	[5.98]	[0.79]	[4.17]	152	20	106
BMSY 125	[6.18]	[0.98]	[4.37]	157	25	111
BMSY 160	[6.26]	[1.06]	[4.45]	159	27	113
BMSY 200	[6.54]	[1.34]	[4.69]	166	34	119
BMSY 250	[7.01]	[1.65]	[5.00]	178	42	127
BMSY 315	[7.48]	[2.13]	[5.47]	190	54	139
BMSY 400	[8.07]	[2.72]	[6.06]	205	69	154
BMSY 475	[8.62]	[3.27]	[6.61]	219	83	168

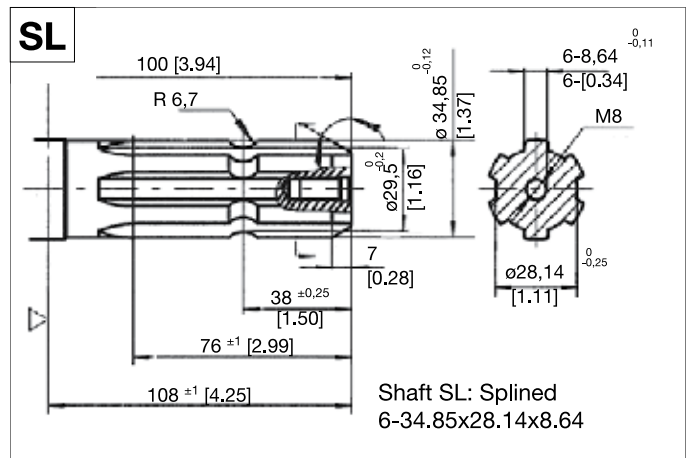
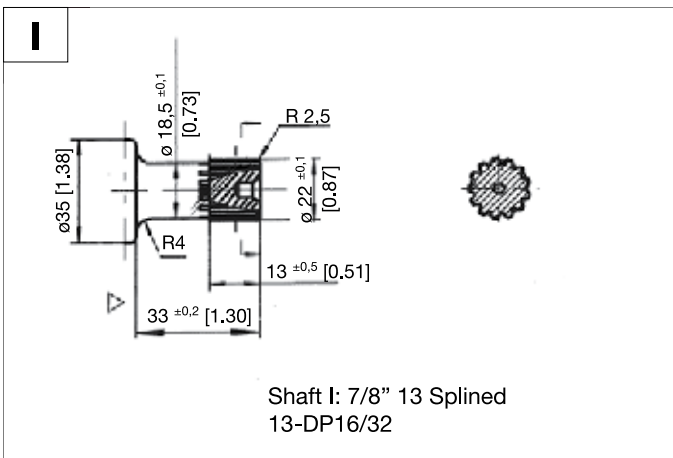
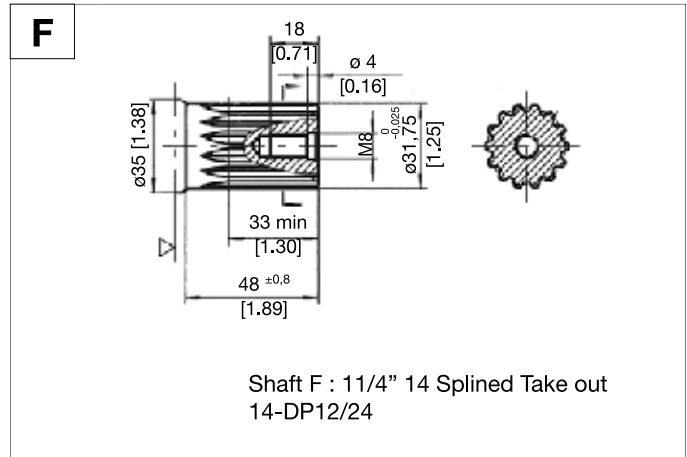
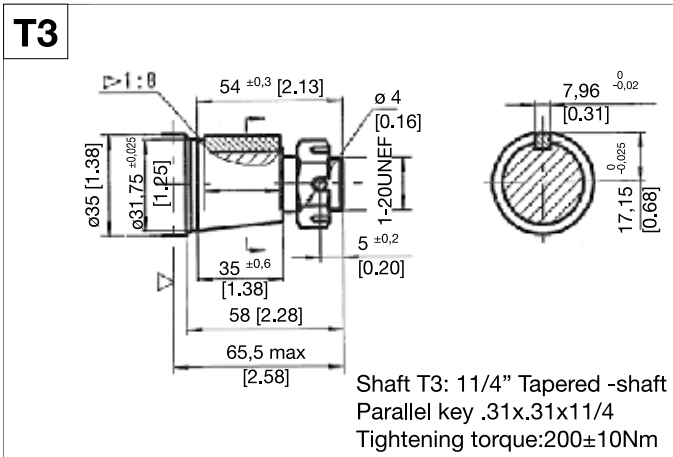
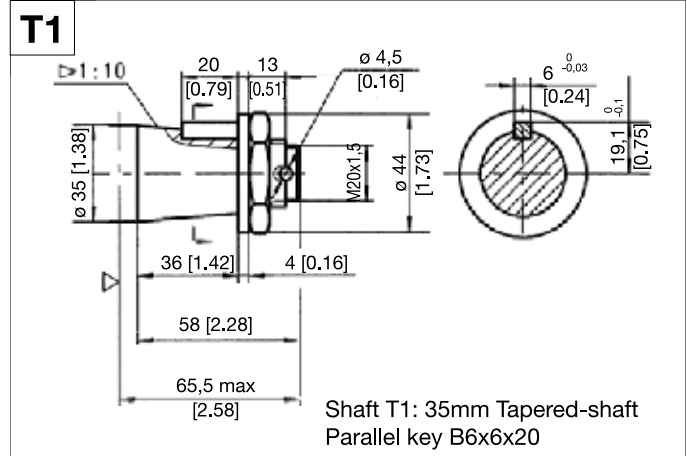
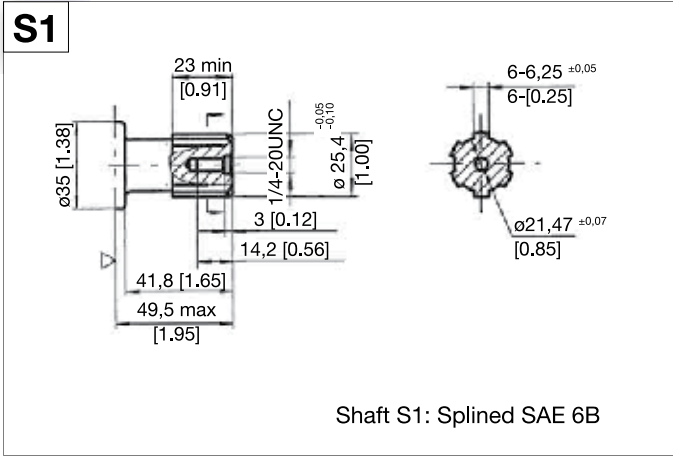






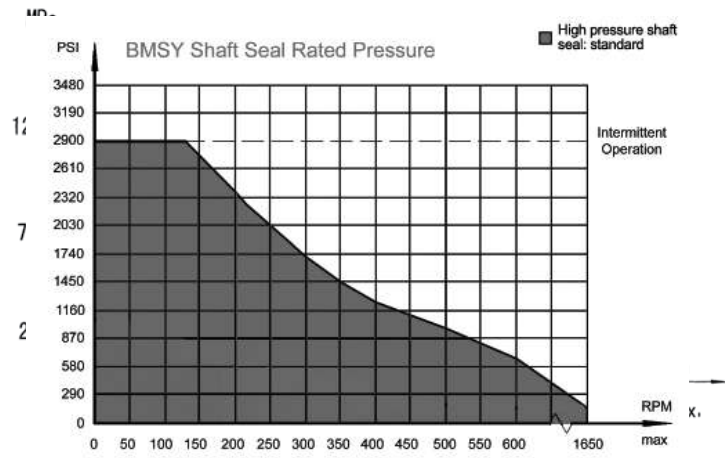
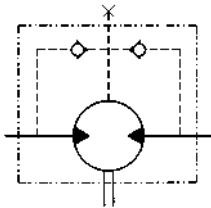
▷ Motor Mounting Surface





▷ Motor Mounting Surface

Permissible shaft seal pressure

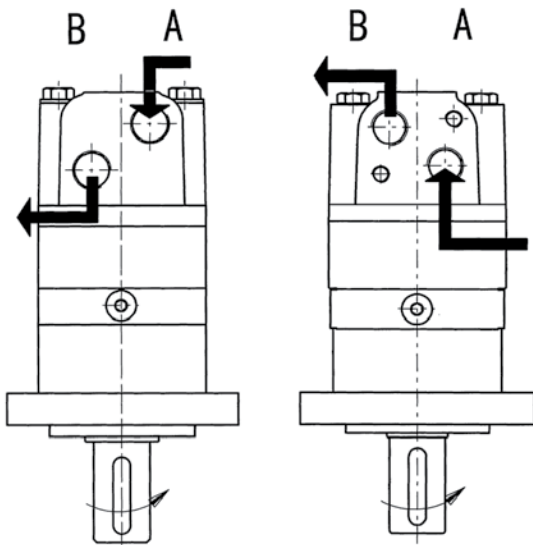


2.Chart for high pressure shaft seal.

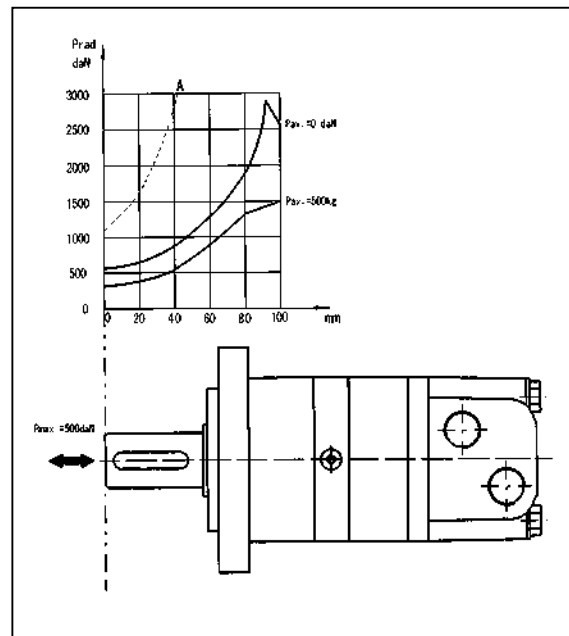
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate:  
 Clockwise when port "A" is pressurized.  
 Counter-clockwise port "B" is pressurized.



Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.

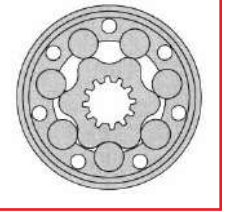
# ORDERING INFORMATION



	1	2	3	4	5	6	7
BMSY							CV-HPS

1	2		3		4		5		6		7	
DISP. cc (cu. in.)	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		OPTIONS	
80 (4.92)	E2	SAE 2-bolt, Pilot 3.25"	D	Shaft: 1" parallel Key .25x.25x1.0	S	7/8-14 O-ring Manifold 2-3/8-16 UNC, 7/16-20UNF	NONE	STANDARD	00	NO PAINT	CV	INTERNAL CHECK VALVE (STANDARD)
100 (6.15)	E4	4-bolt flange, Pilot 3.25"	G	Shaft: 11/4" parallel Key .31x.31x1.25	P	1/2-14 NPTF Manifold 2-3/8-16 UNC, 7/16-20UNF	R	OPPOSITE	NONE	BLACK	HPS	HIGH PRESSURE SHAFT SEAL (STANDARD)
125 (7.63)	F6	Magneto flange, Pilot 3.25"	A	Shaft: 25mm parallel Key 8x7x32	D	G1/2 Manifold mount 2-M10, G1/4					F	FREE RUNNING
160 (9.4)	SP	4 Bolt-flange, Pilot 3.25"	B	Shaft: 32mm parallel Key 10x8x45	M	M22 x 1.5 Manifold mount 2-M10, M14x1.5					LL	LOW LEAKAGE
200 (11.84)	W	Wheel-flange	F	Shaft 11/4-14,splined 14DP12/24							LS	LOW SPEED VALVE
250 (14.83)	E2B	SAE B 2-Bolt Pilot 4.00"	FD	Long Shaft: 11/4-14 splined 14-DP12/24	EE M2	M22x1.5 M14x1.5						
315 (18.97)			SL	Shaft: Ø34.85, Splined 6-34.85x28.14x8.64	EE S2	7/8-14 UNF O-RING 7/16-20 UNF						
400 (24.04)			T1	35mm Tapered parallel Key B6x6x20								
475 (28.99)			T3	1/14 Tapered parallel Key .31x.31x1.250	ED	1-1/16-12 UNF O-RING 7/16-20 UNF						
			S1	Shaft: SAE-6 B splined								
			I	Shaft: 7/8-13 splined 13-DP16/32								

Please contact us for any options not listed above.



The BMT series motor adapts the advanced GEROLOR gear set design with DISC distribution flow and high pressure. These motors can be supplied with various options for multifunctional operations in accordance with the application requirements. The output shaft tapered roller bearings permit high axial and radial forces offering a smooth operation during low pressure start up and high pressure operation. These low weight advanced construction design motors are manufactured in accordance with the requirements of the ISO 9001-2008 quality system. The BMT series comes in 4 styles: BMT, BMTE, BMTS, and BMTJ.

## BMT TECHNICAL SPECIFICATIONS

DISTRIBUTION TYPE		BMT 160	BMT 200	BMT 250	BMT 315	BMT 400	BMT 500	BMT 630	BMT 800	
GEOMETRIC DISPLACEMENT	[in <sup>3</sup> ./rev.]	[9.83]	[12.29]	[15.37]	[19.92]	[25.08]	[31.96]	[38.39]	[48.93]	
	cm <sup>3</sup> /rev.	161.1	201.4	251.8	326.3	410.9	523.6	629.1	801.8	
MAX. SPEED RPM	RATED	470	475	381	294	228	183	150	121	
	CONT.	614	615	495	380	302	237	196	154	
	INT	770	743	592	458	364	284	233	185	
MAX. TORQUE [IN. LB.] N*M	RATED	[IN.LB.]	[3352]	[4166]	[5147]	[6704]	[7924]	[9401]	[10,224]	[10,675]
		N*M	379	471	582	758	896	1063	1156	1207
	CONT.	[IN. LB.]	[4166]	[5209]	[6430]	[8508]	[9684]	[11,011]	[11,656]	[12,948]
		N*M	471	589	727	962	1095	1245	1318	1464
	INT.	[IN. LB.]	[507]	[6350]	[7853]	[10,206]	[11,223]	[12,461]	[13,248]	[13,443]
		N*M	57.3	718	888	1154	1269	1409	1498	1520
	PEAK	[IN.LB.]	[5917]	[7411]	[9162]	[11,907]	[12,826]	[14,538]	[14,317]	[1725]
		N*M	669	838	1036	1346.3	1450.3	1643.8	1618.8	1665
MAX. OUTPUT [HP] KW	RATED	[HP]	[25.0]	[31.4]	[31.1]	[31.2]	[28.7]	[27.3]	[24.4]	[20.5]
		KW	18.7	23.4	23.2	23.3	21.4	20.4	18.2	15.3
	CONT.	[HP]	[37.1]	[46.8]	[46.2]	[46.8]	[41.8]	[38.6]	[33.9]	[29.8]
		KW	27.7	34.9	34.5	34.9	31.2	28.8	25.3	22.2
	INT.	[HP]	[42.9]	[53.6]	[53.6]	[53.6]	[46.9]	[46.9]	[36.8]	[35.9]
		KW	32	40	40	40	35	35	27.5	26.8
MAX. PRES- SURE DROP [PSI] MP <sub>A</sub>	RATED	[PSI]	[2320]	[2320]	[2320]	[2320]	[2175]	[2030]	[1740]	[1523]
		MP <sub>A</sub>	16	16	16	16	15	14	12	10.5
	CONT.	[PSI]	[2900]	[2900]	[2900]	[2900]	[2610]	[2320]	[2030]	[1813]
		MP <sub>A</sub>	20	20	20	20	18	16	14	12.5
	INT.	[PSI]	[3480]	[3480]	[3480]	[3480]	[3045]	[2610]	[2320]	[1885]
		MP <sub>A</sub>	24	24	24	24	21	18	16	13
	PEAK	[PSI]	[4060]	[4060]	[4060]	[4060]	[3480]	[3045]	[2755]	[2320]
		MP <sub>A</sub>	28	28	28	28	24	21	19	16
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[21.1]	[26.4]	[26.4]	[26.4]	[26.4]	[26.4]	[26.4]	[26.]
		L/MIN	80	100	100	100	100	100	100	100
	CONT.	[GPM]	[26.4]	[33]	[33]	[33]	[33]	[33]	[33]	[33]
		L/MIN	100	125	125	125	125	125	125	125
	INT.	[GPM]	[33]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]
		L/MIN	125	150	150	150	150	150	150	150
MAX. INLET PRESSURE [PSI] MP <sub>A</sub>	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MP <sub>A</sub>	21	21	21	21	21	21	21	21
	CONT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MP <sub>A</sub>	21	21	21	21	21	21	21	21
	INT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MP <sub>A</sub>	25	25	25	25	25	25	25	25
	PEAK	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]
		MP <sub>A</sub>	30	30	30	30	30	30	30	30
WEIGHT [LB] KG	[LB]	[43]	[44]	[45]	[46]	[48]	[52]	[53]	[55]	
	KG	19.5	20	20.5	21	22	23	24	25	

- Continuous pressure: Max. value of operating motor continuously.
- Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- Peak pressure: Max. value of operating motor in 0.6 second per minute.

# BMT (E,S,J) PERFORMANCE DATA



**BMT 160** [9.83 in<sup>3</sup>./rev.] 161.1 cm<sup>3</sup>/rev. Max cont. Max int.

		[580] 4	[1160] 8	[1450] 10	[1740] 12	[2320] 16	[2900] 20	[3480] 24	[PSI] MPa
GPM	[2.7]	[778]	[1557]	[2016]	[2432]	[3193]	[3953]	[4732]	
	10	88	176	228	275	361	447	535	
L/min	[5.3]	60	59	58	56	54	50	44	
	20	[787]	[1601]	[2070]	[2450]	[3290]	[4059]	[4926]	TORQUE (LB-IN) TORQUE (N•M) SPEED (RPM)
Flow (L/min)	[10.6]	[805]	[1592]	[2079]	[2450]	[3370]	[4166]	[5068]	
	40	91	180	235	277	381	471	573	
Flow (L/min)	[15.9]	[725]	[1574]	[2078]	[2449.79]	[3370]	[4157]	[5059]	
	60	82	178	235	277	381	470	572	
Flow (L/min)	[21.1]	[689.84]	[1530.02]	[2025.28]	[2440.95]	[3351.88]	[4121.31]	[5014.55]	
	80	78	173	229	276	379	466	567	
Max cont.	[26.4]	[619]	[1415]	[1928]	[2379]	[3272]	[4024]	[4935]	
	100	70	160	218	269	370	455	558	Max cont.
Max int.	[33.0]	[513]	[1309]	[1866]	[2308]	[3175]	[3962]	[4882]	
	125	58	148	211	261	359	448	552	Max int.

**BMT 200** [12.29 in<sup>3</sup>./rev.] 201.4 cm<sup>3</sup>/rev. Max cont. Max int.

		[580] 4	[1160] 8	[1450] 10	[1740] 12	[2320] 16	[2900] 20	[3480] 24	[PSI] MPa
GPM	[2.7]	[1097]	[2061]	[2556]	[3007]	[4015]	[4953]	[5917]	
	10	124	233	289	340	454	560	669	
L/min	[5.3]	47	46	45	42	39	37	33	
	20	[1106]	[2114]	[2635.52]	[3069]	[4139]	[5094]	[6155]	TORQUE (LB-IN) TORQUE (N•M) SPEED (RPM)
Flow (L/min)	[10.6]	[1061]	[2131]	[2618]	[3113]	[4201]	[5210]	[6332]	
	40	120	241	296	352	475	589	716	
Flow (L/min)	[15.9]	[1026]	[2096]	[2609]	[3113]	[4227]	[5209]	[6350]	
	60	116	237	295	352	478	589	718	
Flow (L/min)	[21.1]	[955]	[2043]	[2556]	[3095]	[4192]	[5183]	[6332]	
	80	108	231	289	350	474	586	716	
Max cont.	[26.4]	[876]	[2008]	[2529]	[3042]	[4166]	[5130]	[6297]	
	100	99	227	286	344	471	580	712	
Max cont.	[33.0]	[743]	[1840]	[2441]	[2945]	[4059]	[5006]	[6164]	
	125	84	208	276	333	459	566	697	Max cont.
Max int.	[39.6]	[619]	[1716]	[2299]	[2865]	[3953]	[4900]	[6032]	
	150	70	194	260	324	447	554	682	Max int.

**BMT 250** [15.37 in<sup>3</sup>./rev.] 251.8 cm<sup>3</sup>/rev. Max cont. Max int.

		[580] 4	[1160] 8	[1450] 10	[1740] 12	[2320] 16	[2900] 20	[3480] 24	[PSI] MPa
GPM	[2.7]	[1220]	[2529]	[3140]	[3706]	[4944]	[6094]	[7287]	
	10	138	286	355	419	559	689	824	
L/min	[5.3]	38	38	37	36	34	32	31	
	20	[1265]	[2618]	[3219]	[3821]	[5130]	[6262]	[7544]	TORQUE (LB-IN) TORQUE (N•M) SPEED (RPM)
Flow (L/min)	[10.6]	[1229]	[2662]	[3290]	[3891]	[5244]	[6394]	[7818]	
	40	139	301	372	440	593	723	884	
Flow (L/min)	[15.9]	[1167]	[2600]	[3290]	[3900]	[5236]	[6430]	[7853]	
	60	132	294	372	441	592	727	888	
Flow (L/min)	[21.1]	[1132]	[2503]	[3219]	[3829]	[5191]	[6377]	[7845]	
	80	128	283	364	433	587	721	887	
Max cont.	[26.4]	[1114]	[2494]	[3140]	[3776]	[5147]	[6332]	[7774]	
	100	126	282	355	427	582	716	879	
Max cont.	[33.0]	[1026]	[2299]	[3007]	[3661]	[5023]	[6217]	[7641]	
	125	116	260	340	414	568	703	864	Max cont.
Max int.	[39.6]	[778]	[2140]	[2830]	[3511]	[4882]	[6067]	[7491]	
	150	88	242	320	397	552	686	847	Max int.

**BMT 315** [19.92 in<sup>3</sup>./rev.] 326.3 cm<sup>3</sup>/rev. Max cont. Max int.

		[580] 4	[1160] 8	[1450] 10	[1740] 12	[2320] 16	[2900] 20	[3480] 24	[PSI] MPa
GPM	[2.7]	[1627]	[3210]	[4006]	[4820]	[6491]	[7880]	[9392]	
	10	184	363	453	545	734	891	1062	
L/min	[5.3]	30	29	28	27	26	25	23	
	20	[1672]	[3361]	[4174]	[4970]	[6695]	[8110]	[9808]	TORQUE (LB-IN) TORQUE (N•M) SPEED (RPM)
Flow (L/min)	[10.6]	[1689]	[3370]	[4280]	[5041]	[6845]	[8437]	[10,162]	
	40	191	381	484	570	774	954	1149	
Flow (L/min)	[15.9]	[1672]	[3325]	[4360]	[5068]	[6828]	[8508]	[10,206]	
	60	189	376	493	573	772	962	1154	
Flow (L/min)	[21.1]	[1583]	[3263]	[4236]	[4997]	[6951]	[8437]	[10,197]	
	80	179	369	479	565	786	954	1153	
Max cont.	[26.4]	[1495]	[3157]	[4130]	[4970]	[6704]	[8331]	[10,109]	
	100	169	357	467	562	758	942	1143	
Max cont.	[33.0]	[1300]	[2972]	[3953]	[4811]	[6589]	[8136]	[9967]	
	125	147	336	447	544	745	920	1127	Max cont.
Max int.	[39.6]	[1052]	[2812]	[3821]	[4652]	[6306]	[7907]	[9702]	
	150	119	318	432	526	713	894	1097	Max int.

**BMT 400 [25.08 in<sup>3</sup>./rev.] 410,9 cm<sup>3</sup>/rev.** Max cont. Max int.

	[435] 3	[870] 6	[1305] 9	[1740] 12	[2175] 15	[2610] 18	[3045] 21	[PSI] MPa
GPM [2.7]	[1557]	[3246]	[4953]	[6323]	[7827]	[9286]	[10,692]	
L/min 10	176	367	560	715	885	1050	1209	
	<b>24</b>	<b>23</b>	<b>22</b>	<b>21</b>	<b>20</b>	<b>19</b>	<b>18</b>	
[5.3]	[1583]	[3272]	[4997]	[6421]	[7951]	[9472]	[10,931]	TORQUE [LB-IN]
20	179	370	565	726	899	1071	1236	TORQUE (N•M)
	<b>49</b>	<b>48</b>	<b>47</b>	<b>44</b>	<b>42</b>	<b>40</b>	<b>38</b>	SPEED (RPM)
[10.6]	[1557]	[3272]	[5015]	[6483]	[8128]	[9649]	[11,170]	
40	176	370	567	733	919	1091	1263	
	<b>96</b>	<b>95</b>	<b>93</b>	<b>90</b>	<b>87</b>	<b>83</b>	<b>79</b>	
[15.9]	[1539]	[3193]	[4979]	[6447]	[8136]	[9684]	[11,223]	
60	174	361	563	729	920	1095	1269	
	<b>145</b>	<b>143</b>	<b>139</b>	<b>135</b>	<b>131</b>	<b>127</b>	<b>121</b>	
[21.1]	[1468]	[3122]	[4891]	[6359]	[8066]	[9587]	[11,170]	
80	166	353	553	719	912	1084	1263	
	<b>193</b>	<b>191</b>	<b>188</b>	<b>184</b>	<b>180</b>	<b>176</b>	<b>170</b>	
[26.4]	[1327]	[2998]	[4758]	[6262]	[7924]	[9437]	[11,073]	
100	150	339	538	708	896	1067	1252	
	<b>242</b>	<b>240</b>	<b>238</b>	<b>234</b>	<b>228</b>	<b>224</b>	<b>218</b>	
[33.0]	[1194]	[2733]	[4634]	[6085]	[7721]	[9242]	[10,799]	
125	135	309	524	688	873	1045	1221	
	<b>302</b>	<b>300</b>	<b>298</b>	<b>294</b>	<b>289</b>	<b>285</b>	<b>178</b>	Max cont.
[39.6]	[1114]	[2582]	[4493]	[5890]	[7535]	[9021]	[10,586]	
150	126	292	508	666	852	1020	1197	
	<b>364</b>	<b>362</b>	<b>358</b>	<b>354</b>	<b>350</b>	<b>346</b>	<b>339</b>	Max int.

**BMT 500 [31.96 in<sup>3</sup>./rev.] 523,6 cm<sup>3</sup>/rev.** Max cont. Max int.

	[435] 3	[870] 6	[1305] 9	[1740] 12	[2030] 14	[2320] 16	[2610] 18	[PSI] MPa
GPM [2.7]	[1963]	[3989]	[6120]	[7889]	[9286]	[10,551]	[11,851]	
L/min 10	222	451	692	892	1050	1193	1340	
	<b>18</b>	<b>18</b>	<b>18</b>	<b>17</b>	<b>16</b>	<b>15</b>	<b>13</b>	
[5.3]	[2043]	[4104]	[6313]	[8119]	[9463]	[10,790]	[12,178]	TORQUE [LB-IN]
20	231	464	714	918	1070	1220	1377	TORQUE (N•M)
	<b>37</b>	<b>36</b>	<b>35</b>	<b>34</b>	<b>33</b>	<b>32</b>	<b>30</b>	SPEED (RPM)
[10.6]	[2034]	[4121]	[6430]	[8322]	[9675]	[11,002]	[12,576]	
40	230	466	727	941	1094	1244	1422	
	<b>75</b>	<b>74</b>	<b>73</b>	<b>72</b>	<b>70</b>	<b>68</b>	<b>64</b>	
[15.9]	[1990]	[4042]	[6315]	[8322]	[9622]	[11,011]	[12,461]	
60	225	457	714	941	1088	1245	1409	
	<b>113</b>	<b>112</b>	<b>111</b>	<b>109</b>	<b>107</b>	<b>105</b>	<b>101</b>	
[21.1]	[1884]	[3812]	[6155]	[8198]	[9516]	[11,002]	[12,390]	
80	213	431	696	927	1076	1244	1401	
	<b>151</b>	<b>150</b>	<b>149</b>	<b>147</b>	<b>145</b>	<b>143</b>	<b>138</b>	
[26.4]	[1716]	[3714]	[6014]	[7968]	[9401]	[10,825]	[12,231]	
100	194	420	680	901	1063	1224	1383	
	<b>189</b>	<b>188</b>	<b>187</b>	<b>185</b>	<b>183</b>	<b>181</b>	<b>177</b>	
[33.0]	[1610]	[3520]	[5669]	[7756]	[9056]	[10,604]	[11,957]	
125	182	398	641	877	1024	1199	1352	
	<b>237</b>	<b>236</b>	<b>235</b>	<b>233</b>	<b>231</b>	<b>229</b>	<b>225</b>	Max cont.
[39.6]	[1300]	[3263]	[5466]	[7544]	[8879]	[10,321]	[11,718]	
150	147	369	618	853	1004	1167	1325	
	<b>284</b>	<b>283</b>	<b>282</b>	<b>280</b>	<b>278</b>	<b>276</b>	<b>272</b>	Max int.

**BMT 630 [38.39 in<sup>3</sup>./rev.] 629,1 cm<sup>3</sup>/rev.** Max cont. Max int.

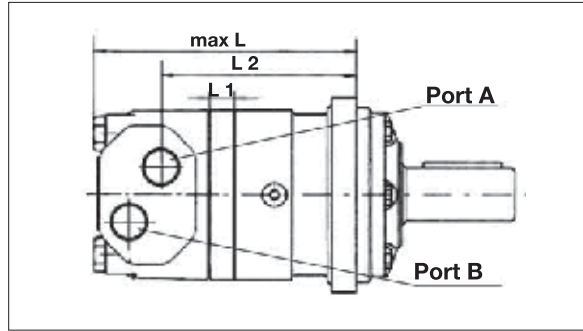
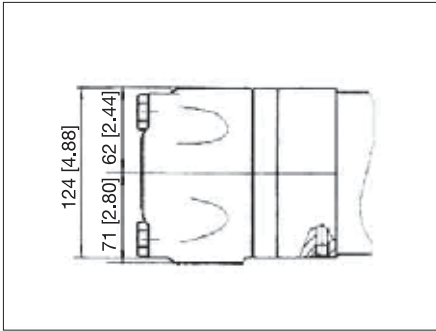
	[435] 3	[870] 6	[1305] 9	[1522] 10.5	[1740] 12	[2030] 14	[2320] 16	[PSI] MPa
GPM [2.7]	[2061]	[4599]	[7031]	[7977]	[9498]	[10,560]	[12,054]	
L/min 10	233	520	795	902	1074	1194	1363	
	<b>14</b>	<b>14</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>11</b>	<b>11</b>	
[5.3]	[2096]	[4900]	[7402]	[8428]	[9879]	[10,958]	[12,444]	TORQUE [LB-IN]
20	237	554	837	953	1117	1239	1407	TORQUE (N•M)
	<b>28</b>	<b>27</b>	<b>27</b>	<b>26</b>	<b>26</b>	<b>24</b>	<b>22</b>	SPEED (RPM)
[10.6]	[2114]	[4891]	[7606]	[8729]	[10,356]	[11,568]	[13,116]	
40	239	553	860	987	1171	1308	1483	
	<b>62</b>	<b>62</b>	<b>61</b>	<b>60</b>	<b>59</b>	<b>56</b>	<b>54</b>	
[15.9]	[1972]	[4811]	[7632]	[8649]	[10,365]	[11,656]	[13,248]	
60	223	544	863	978	1172	1318	1498	
	<b>94</b>	<b>94</b>	<b>92</b>	<b>91</b>	<b>90</b>	<b>86</b>	<b>82</b>	
[21.1]	[1946]	[4749]	[7553]	[8534]	[10,365]	[11,621]	[13,239]	
80	220	537	854	965	1172	1314	1497	
	<b>123</b>	<b>122</b>	<b>121</b>	<b>119</b>	<b>118</b>	<b>114</b>	<b>110</b>	
[26.4]	[1840]	[4617]	[7358]	[8358]	[10,224]	[11,524]	[13,160]	
100	208	522	832	945	1156	1303	1488	
	<b>156</b>	<b>155</b>	<b>153</b>	<b>152</b>	<b>150</b>	<b>147</b>	<b>142</b>	
[33.0]	[1778]	[4413]	[7164]	[8234]	[10,056]	[11,426]	[13,018]	
125	201	499	810	931	1137	1292	1472	
	<b>196</b>	<b>196</b>	<b>194</b>	<b>192</b>	<b>191</b>	<b>187</b>	<b>183</b>	Max cont.
[39.6]	[1539]	[4351]	[6943]	[8145]	[9914]	[11,294]	[12,859]	
150	174	492	785	921	1121	1277	1454	
	<b>233</b>	<b>232</b>	<b>231</b>	<b>230</b>	<b>227</b>	<b>223</b>	<b>217</b>	Max int.

**BMT 800 [48.93 in<sup>3</sup>./rev.] 801,8 cm<sup>3</sup>/rev.** Max cont. Max int.

	[435] 3	[870] 6	[1305] 9	[1522] 10.5	[1812] 12.5	[1885] 13	[PSI] MPa
GPM [2.7]	[3060]	[5987]	[8871]	[10,250]	[12,072]	[12,293]	
L/min 10	346	677	1003	1159	1365	1390	
	<b>12</b>	<b>12</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>10</b>	
[5.3]	[3148]	[6120]	[9145]	[10,462]	[12,417]	[12,895]	TORQUE [LB-IN]
20	356	692	1034	1183	1404	1458	TORQUE (N•M)
	<b>24</b>	<b>24</b>	<b>24</b>	<b>23</b>	<b>22</b>	<b>18</b>	SPEED (RPM)
[10.6]	[3228]	[6217]	[9428]	[10,931]	[12,903]	[13,408]	
40	365	703	1066	1236	1459	1516	
	<b>50</b>	<b>50</b>	<b>49</b>	<b>48</b>	<b>46</b>	<b>40</b>	
[15.9]	[3131]	[6217]	[9375]	[10,940]	[12,948]	[13,443]	
60	354	703	1060	1237	1464	1520	
	<b>74</b>	<b>73</b>	<b>71</b>	<b>71</b>	<b>68</b>	<b>63</b>	
[21.1]	[2936]	[6067]	[9286]	[10,843]	[12,948]	[13,390]	
80	332	686	1050	1226	1464	1514	
	<b>99</b>	<b>98</b>	<b>98</b>	<b>96</b>	<b>93</b>	<b>86</b>	
[26.4]	[2697]	[5784]	[9065]	[10,675]	[12,780]	[13,319]	
100	305	654	1025	1207	1445	1506	
	<b>125</b>	<b>123</b>	<b>123</b>	<b>121</b>	<b>118</b>	<b>110</b>	
[33.0]	[2476]	[5501]	[8747]	[10,445]	[12,576]	[13,151]	
125	280	622	989	1181	1422	1487	
	<b>154</b>	<b>153</b>	<b>153</b>	<b>150</b>	<b>149</b>	<b>140</b>	Max cont.
[39.6]	[2184]	[5218]	[8428]	[10,224]	[12,435]	[13,054]	
150	247	590	953	1156	1406	1476	
	<b>185</b>	<b>184</b>	<b>183</b>	<b>181</b>	<b>179</b>	<b>172</b>	Max int.



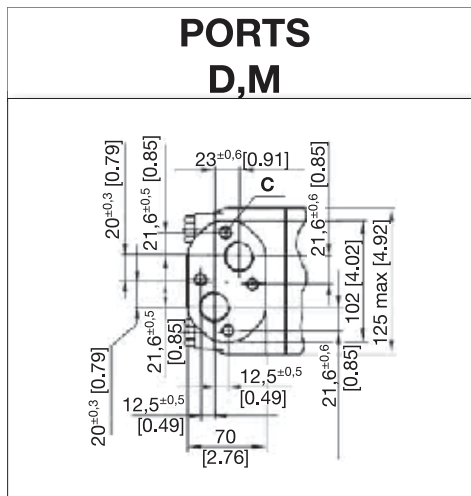
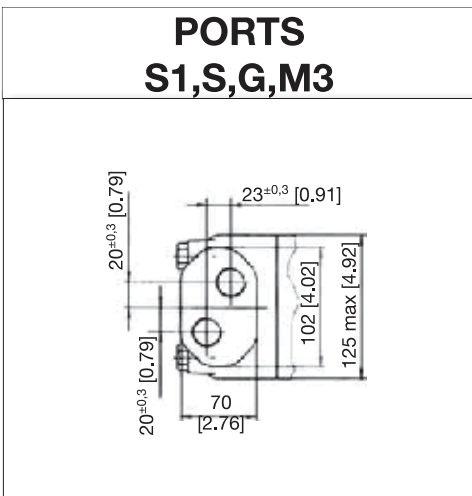
# BMT MOUNTING DATA



MODEL	[INCHES]		MILLIMETERS	
	L1	L2	L1	L2
BMTW160	[0.67]	[3.03]	17	77
BMTW200	[0.83]	[3.19]	21	81
BMTW250	[1.07]	[3.42]	27	87
BMTW315	[0.79]	[3.58]	20	91
BMTW400	[1.07]	[3.86]	27	98
BMTW500	[1.38]	[4.17]	35	106
BMTW630	[1.85]	[4.64]	47	118
BMTW800	[2.29]	[5.08]	58	129

MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
BMT160	[7.60]	[0.67]	[5.61]	193	17	142.5
BMT200	[7.76]	[0.83]	[5.77]	197	21	146.5
BMT250	[8.00]	[1.07]	[6.01]	203	27	152.5
BMT315	[8.19]	[0.79]	[6.17]	208	20	156.5
BMT400	[8.47]	[1.07]	[6.44]	215	27	163.5
BMT500	[8.78]	[1.38]	[6.76]	223	35	171.5
BMT630	[9.26]	[1.85]	[7.23]	235	47	183.5
BMT800	[9.69]	[2.29]	[7.66]	246	58	194.5

Note: 1) The thickness of the stator and rotor for displacements from 160-250 is the dimension of L1 + 3mm  
 2) The thickness of the stator and rotor for displacements from 315-800 is the dimension of L1 + 7mm.

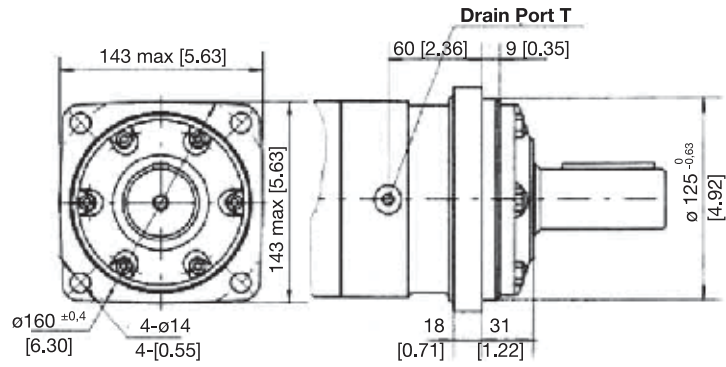


## PORT & DRAIN PORT ORDERING CODES

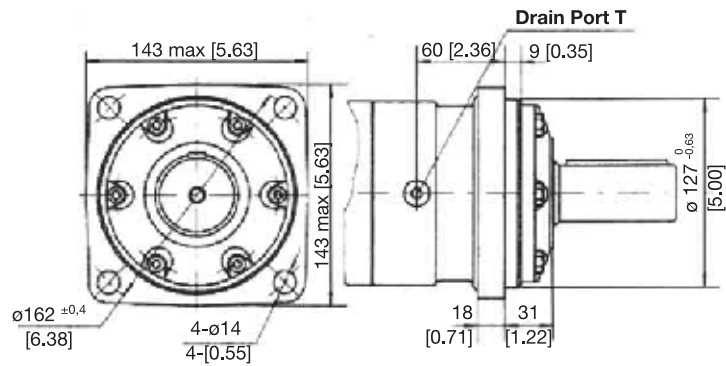
ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	G	DEPTH	M3	DEPTH	S1	DEPTH
PORTS - A and B	G 3/4	18 mm	M27 X 2	18 mm	1-1/16-12 UN	18 mm	G 3/4	18 mm	M27 X 2	18 mm	1-1/16-12 UN	18 MM
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	9/16-18UNF	12 mm	G 1/4	12 mm	M14X1.5	12MM	7/16-20UNF	12MM
BOLTS - C	4-M10	10 mm	4-M10	10 mm								



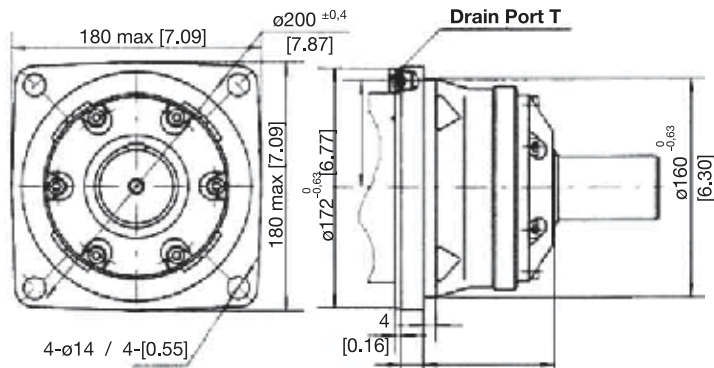
**FLANGE 4**



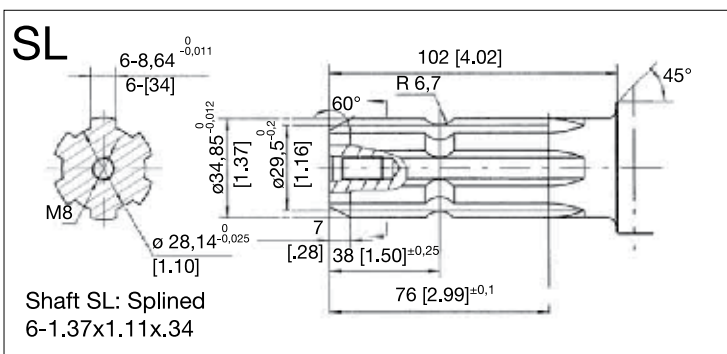
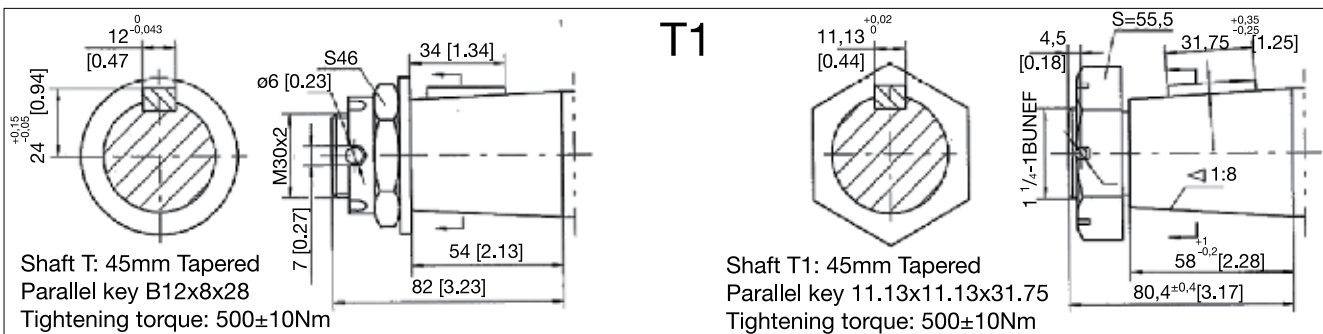
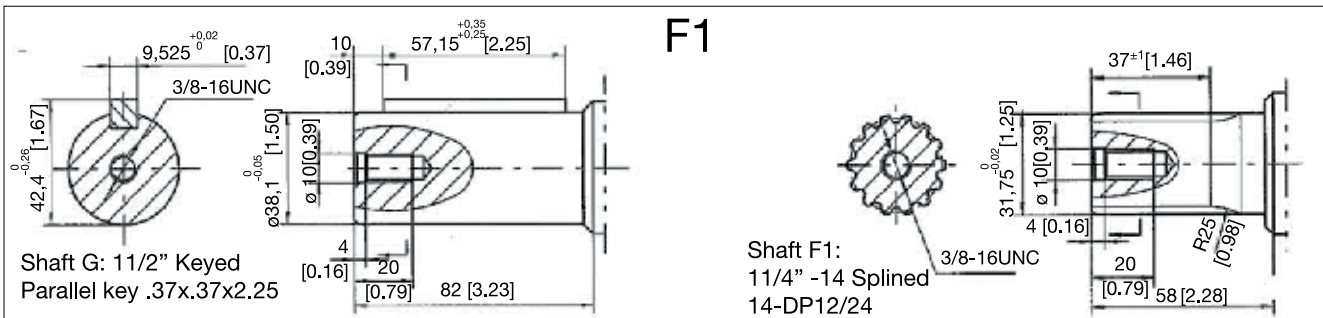
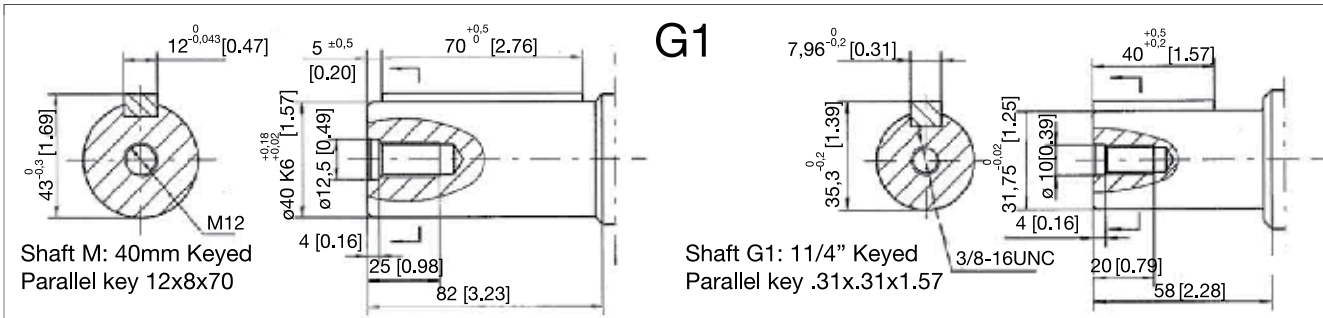
**FLANGE K6**



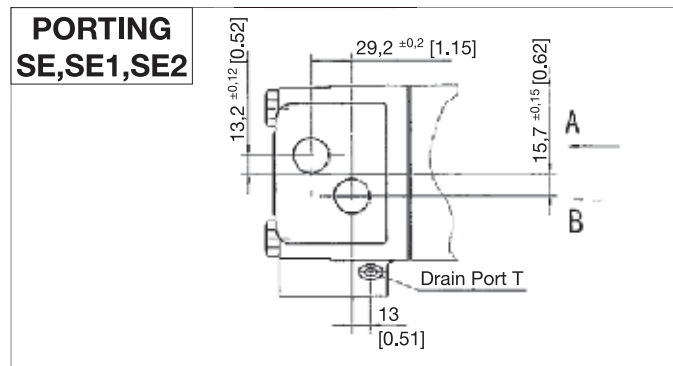
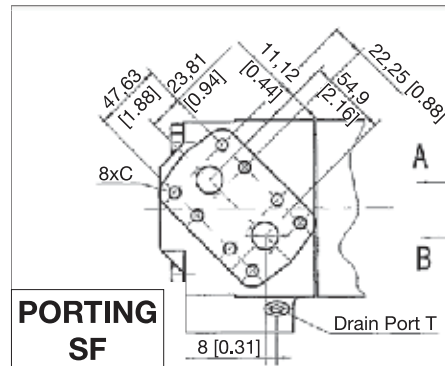
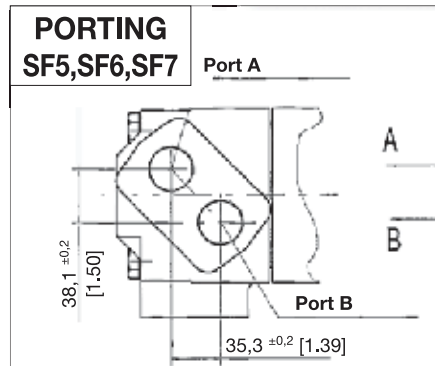
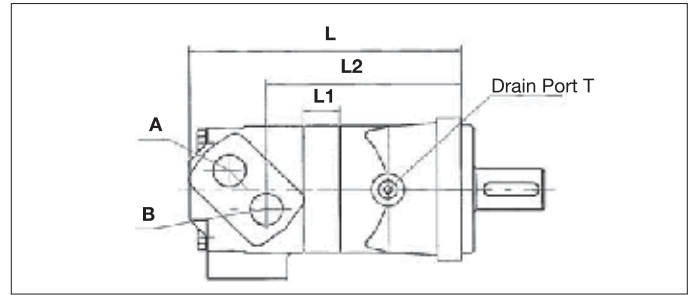
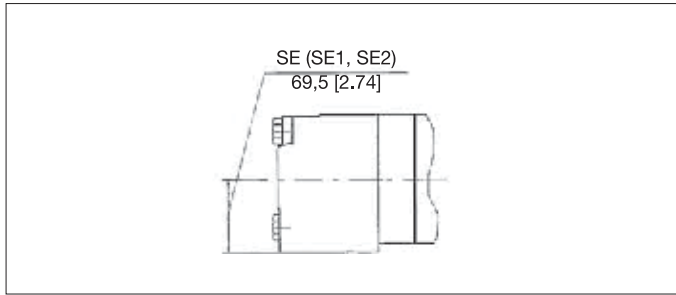
**FLANGE W**



# BMT DRIVE SHAFT DATA



Motor Mounting Surface

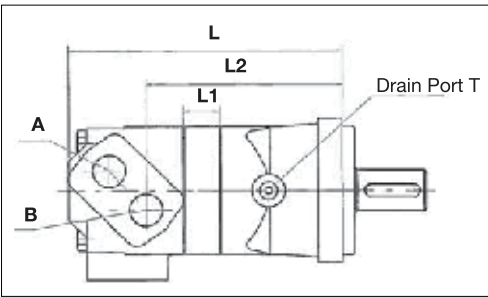


MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
BMTE 230	[9.39]	[0.48]	[6.48]	238.5	12	164.5
BMTE 250	[9.47]	[0.56]	[6.56]	240.5	14	166.5
BMTE 315	[9.71]	[0.79]	[6.80]	246.5	20	172.5
BMTE 400	[9.98]	[1.07]	[7.07]	253.5	27	179.5
BMTE 500	[10.30]	[1.38]	[7.39]	261.5	35	187.5
BMTE 630	[10.77]	[1.85]	[7.86]	273.5	47	199.5
BMTE 800	[11.20]	[2.29]	[8.29]	284.5	58	210.5

- Note: 1)The dimensional data for ports SF,SF1 and SF2 are as the chart indicates  
 2) The dimensional data for ports DV,MV and SV are as followed: L dimension-16mm and L2 dimension + 6.5mm.  
 3) The dimensional data for ports SE,SE1,SE2 and WE are as followed: L dimension -70mm and L2 dimension -52mm  
 4)The thickness of the stator and rotor for displacements from 315-800 is the dimension of L1 + 7mm.

ORDER CODE	SF6	DEPTH	SF7	DEPTH	SF	DEPTH	SF3/SF5	DEPTH	SE	DEPTH	SE1	DEPTH	SE2	DEPTH
PORTS - A and B	M33X2	18 mm	G1	18 mm	3/4"	18 mm	1-5/16-12UN	18 mm	1-1/16-12UN	18 mm	1-1/16-12UN	18 mm	G3/1	18 mm
TANK PORT - T	M14X1.5	12 mm	G 1/4	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	9/16 UNF	12 mm	7/16-20UNF	12 mm	G 1/4	12 mm
BOLTS - C	-	-	-	-	8X3/8-16UNC	-	-	-	-	-	-	-	-	-

# BMTE MOUNTING FLANGE DATA

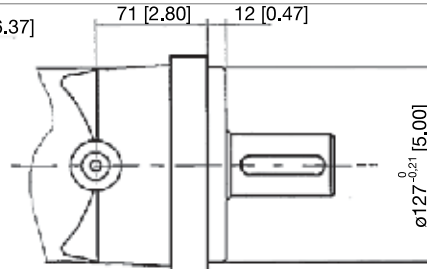
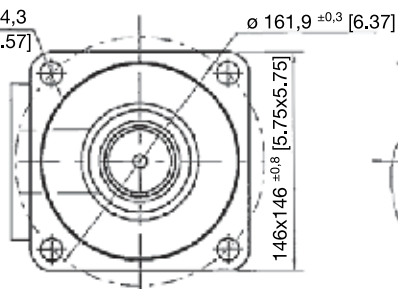


**NOTE:**  
THE THICKNESS  
OF THE STATOR  
AND ROTOR FOR  
DISPLACEMENTS  
315-800 IS THE  
DIMENSION OF  
L1 + 7 MM

MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
BMTE 230	[9.39]	[0.48]	[6.48]	238.5	12	164.5
BMTE 250	[9.47]	[0.56]	[6.56]	240.5	14	166.5
BMTE 315	[9.71]	[0.79]	[6.80]	246.5	20	172.5
BMTE 400	[9.98]	[1.07]	[7.07]	253.5	27	179.
BMTE 500	[10.30]	[1.38]	[7.39]	261.5	35	187.5
BMTE 630	[10.77]	[1.85]	[7.86]	273.5	47	199.5
BMTE 800	[11.20]	[2.29]	[8.29]	284.5	58	210.5

## FLANGE CC

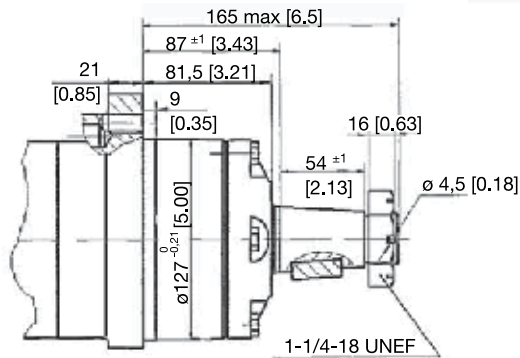
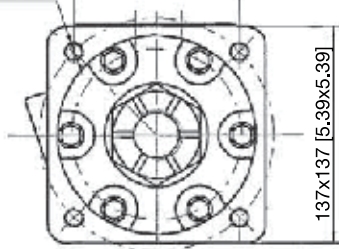
4 x  $\phi$  14,3  
4 x  $\phi$  [0.57]

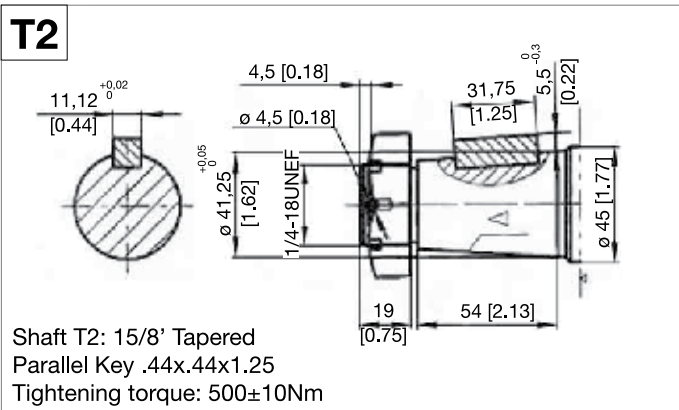
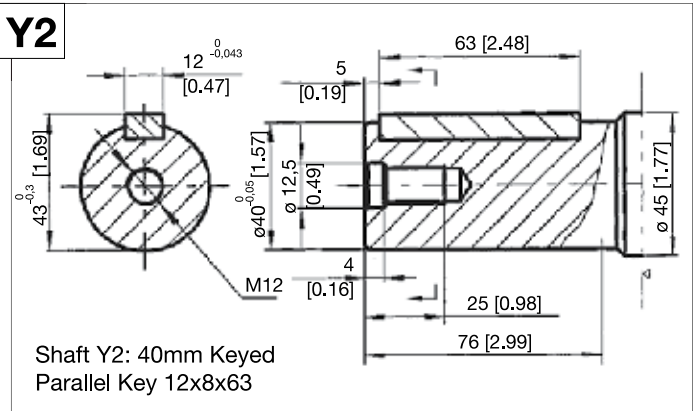
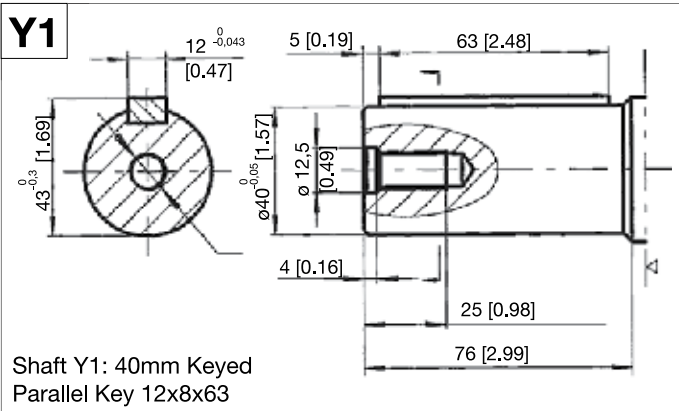
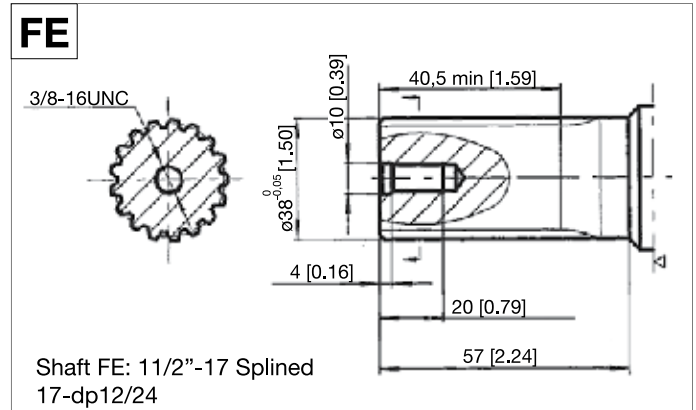
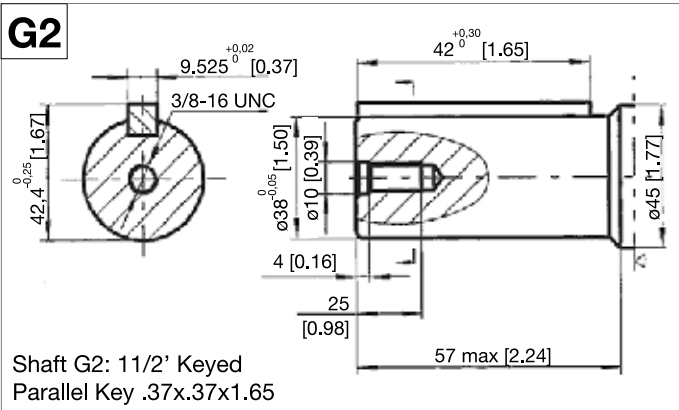


## FLANGE WE

4x1/2-13UNC

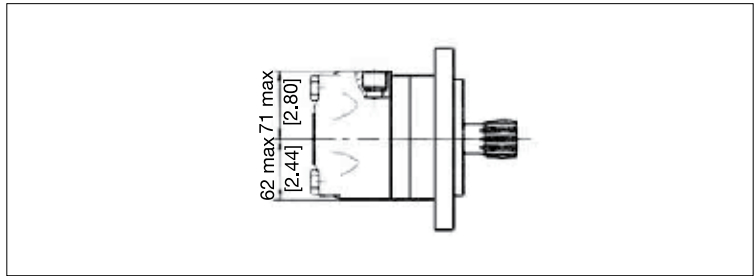
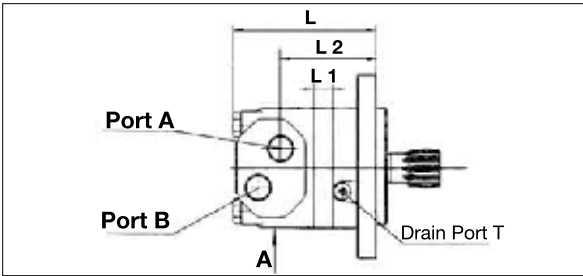
104,4x104,4  $\pm 0,2$   
[4.11x4.11]





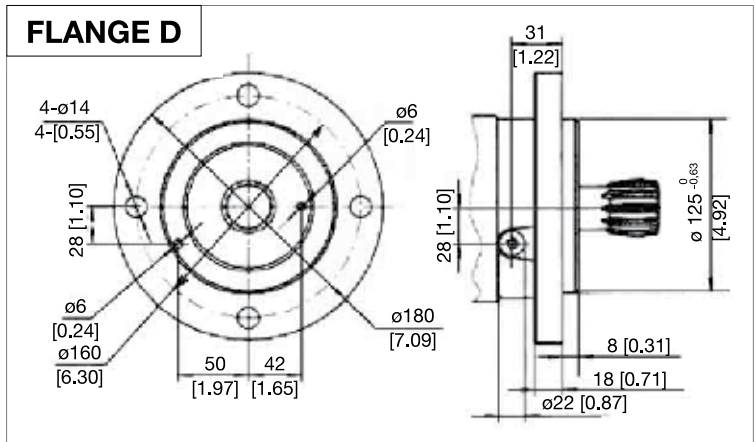
▷ Motor Mounting Surface

# BMTS DIMENSION & MOUNTING DATA



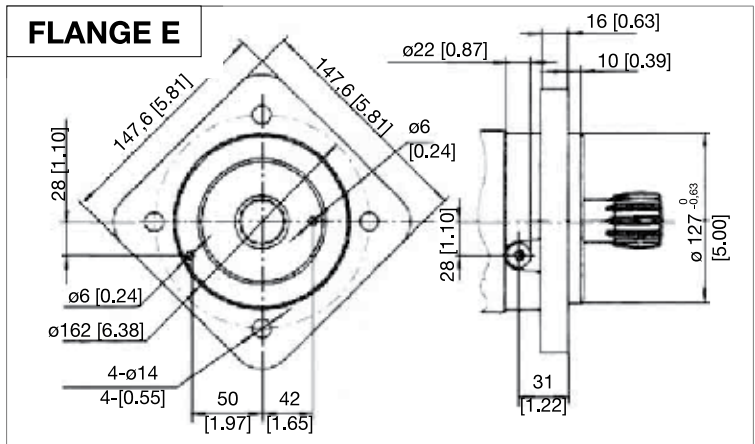
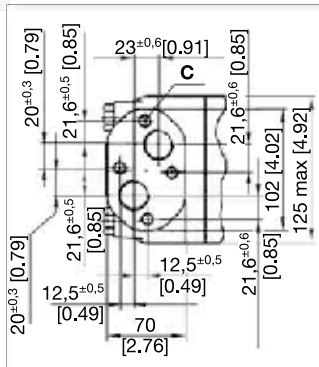
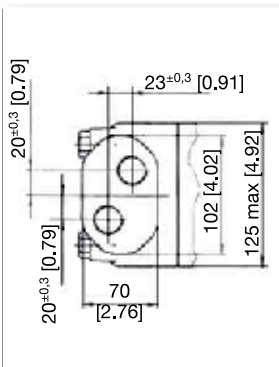
MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
<b>BMTS 160</b>	[5.83]	[0.67]	[3.80]	148	17	96.5
<b>BMTS 200</b>	[5.98]	[0.83]	[3.96]	152	21	100.5
<b>BMTS 250</b>	[6.22]	[1.06]	[4.23]	158	27	107.5
<b>BMTS 315</b>	[6.42]	[0.79]	[4.53]	163	20	115
<b>BMTS 400</b>	6.69	[1.06]	[4.80]	170	27	122
<b>BMTS 500</b>	[7.01]	[1.38]	[5.12]	178	35	130
<b>BMTS 630</b>	[7.48]	[1.85]	[5.59]	190	47	142
<b>BMTS 800</b>	[7.91]	[2.28]	[6.02]	201	58	153

Note: 1)The thickness of the stator and rotor for displacements from 160-250 is the dimension of L1 + 3mm  
 2)The thickness of the stator and rotor for displacements from 315-800 is the dimension of L1 + 7mm.



## PORTS S1,S,G2,M3

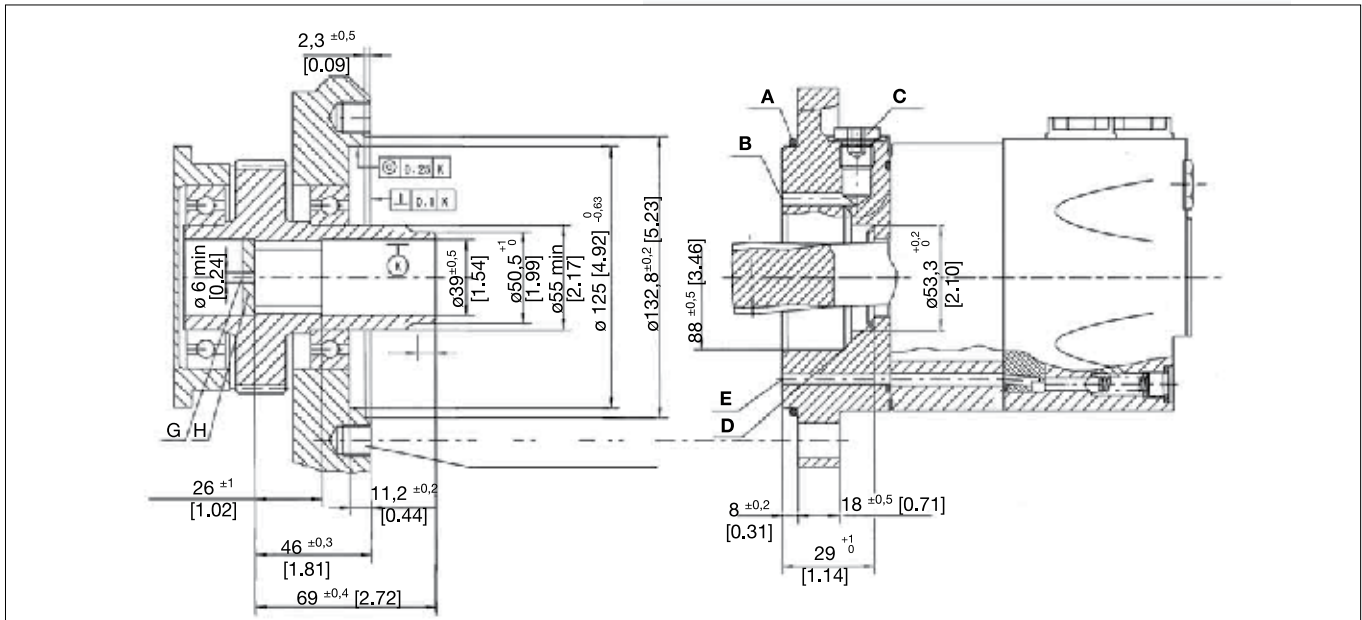
## PORTS D,M



## PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	G	DEPTH	M3	DEPTH	S1	DEPTH
<b>PORTS - A and B</b>	G 3/4	18 mm	M27 X 2	18 mm	1-1/16-12 UN	18 mm	G 3/4	18 mm	M27 X 2	18 mm	1-1/16-12 UN	18 mm
<b>TANK PORT - T</b>	G 1/4	12 mm	M14 X1.5	12 mm	9/16-18UNF	12 mm	G 1/4	12 mm	M14X1.5	12 mm	7/16-20UNF	12mm
<b>BOLTS - C</b>	4-M10	10 mm	4-M10	10 mm								

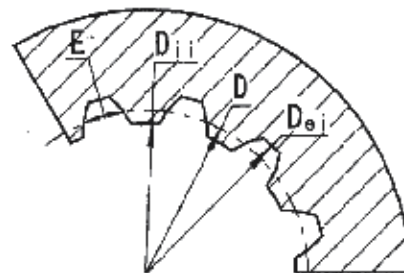




- A: O-ring:125x3
- B: External drain channel
- C: Drain connection G 1/4;12 mm deep
- D: Conical seal ring
- E: Internal drain channel
- F: M12;min. 18mm deep
- G: Oil circulation hole
- H: Hardened stop plate

**INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT**

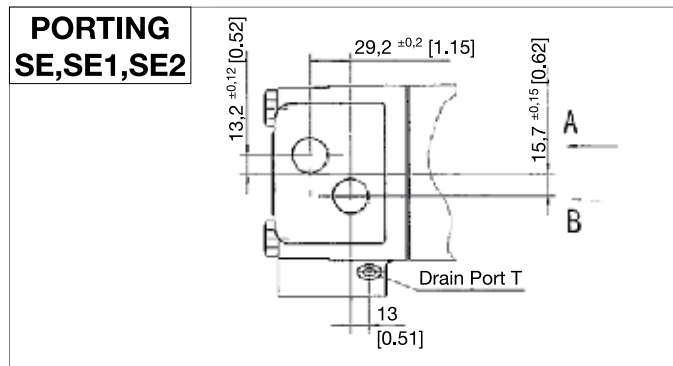
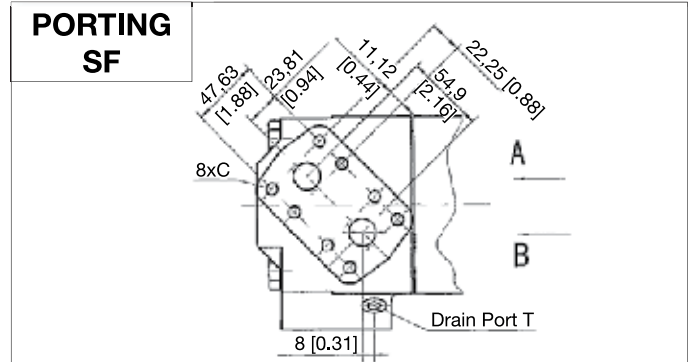
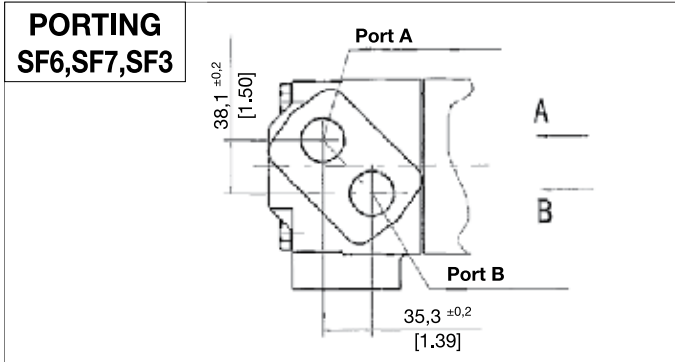
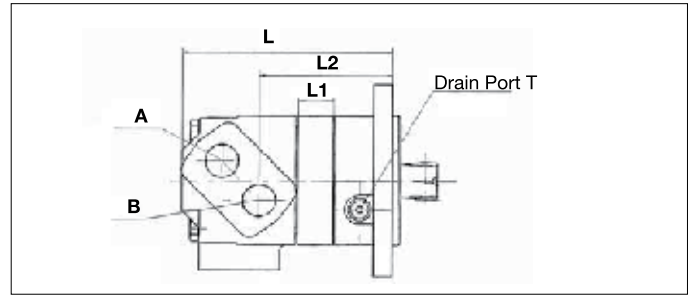
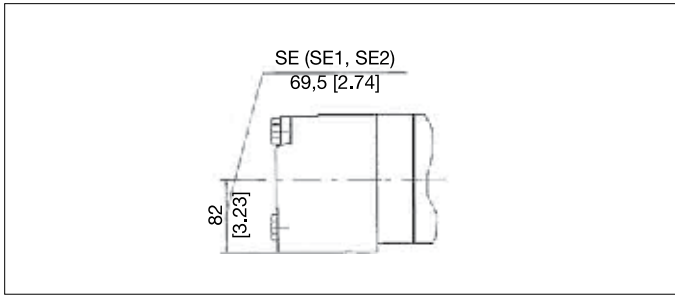
FILLET ROOT SIDE FIT		mm
NUMBER OF TEETH	Z	16
DIAMETRAL PITCH	DP	12/24
PRESSURE ANGLE	$\alpha_D$	30°
PITCH DIA.	D	Ø33.8656
MAJOR DIA.	D <sub>EI</sub>	Ø38.4
MINOR DIA.	D <sub>II</sub>	Ø32.15
SPACE WIDTH CIRCULAR	E	4.516 ±0.037



Hardening Specification: HRC 62±2  
Effective case depth 0.7±0.2



# BMTJ PORTING DATA

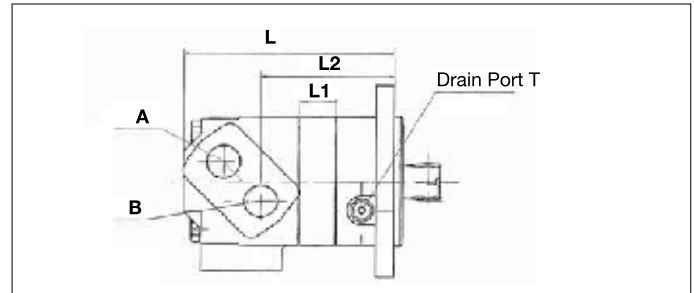
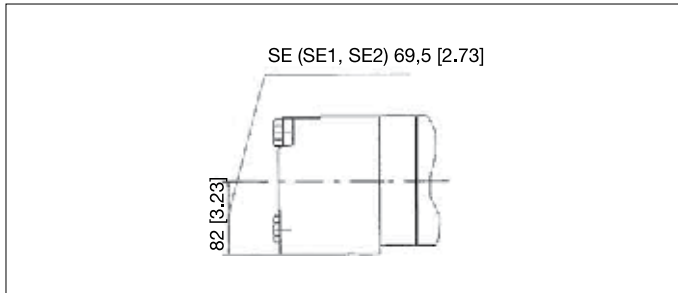


MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
BMTJ 230	[6.93]	[0.48]	[41.15]	176	12	104.5
BMTJ 250	[7.01]	[0.56]	[4.20]	178	14	106.5
BMTJ 315	[7.25]	[0.79]	[4.43]	184	20	112.5
BMTJ 400	[7.52]	[1.07]	[4.71]	191	27	119.5
BMTJ 500	[7.84]	[1.38]	[5.02]	199	35	127.5
BMTJ 630	[8.31]	[1.85]	[5.50]	211	47	139.5
BMTJ 800	[8.74]	[2.29]	[5.93]	222	58	150.5

- Note: 1) The dimensional data for ports SF,SF1 and SF2 are as the chart indicates  
 2) The dimensional data for ports DV,MV and SV are as followed: L dimension-16mm and L2 dimension + 6,5mm.  
 3) The dimensional data for ports SE,SE1,SE2 and WE are as followed: L dimension -70mm and L2 dimension -59 mm  
 4) The thickness of the stator and rotor for displacements from 315-800 is the dimension of L1 + 7mm.

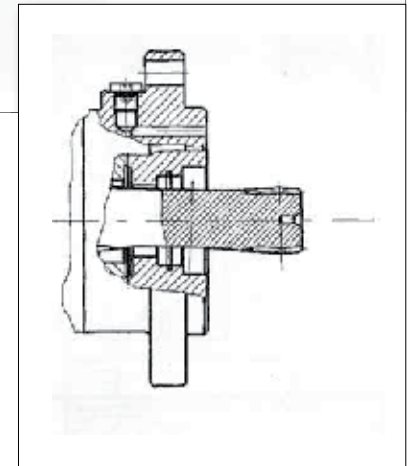
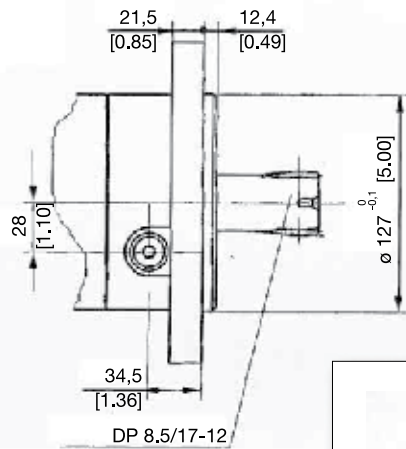
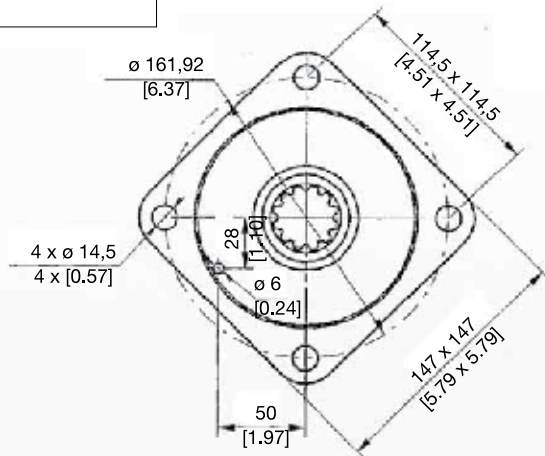
**PORT & DRAIN PORT ORDERING CODES**

ORDER CODE	SF6	DEPTH	SF7	DEPTH	SF	DEPTH	SF3	DEPTH	SE	DEPTH	SE1	DEPTH	SE2	DEPTH
PORTS - A and B	M33X2	18 mm	G1	18 mm	3/4"	18 mm	1-5/16-12UN	18 mm	1-16-12UN	18 mm	1-1/16-12UN	18 mm	G3/4	18 mm
TANK PORT - T	M14X1.5	12 mm	G1/4	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	9/16-18UNF	12 mm	7/16-20UNF	12 mm	G1/4	12 mm
BOLTS - C					8X3/8-16UNC	-	-	-						



**NOTE: THE THICKNESS OF THE STATOR AND ROTOR FOR DISPLACEMENTS 230-800 IS THE DIMENSION OF L1 + 7MM**

## FLANGE J

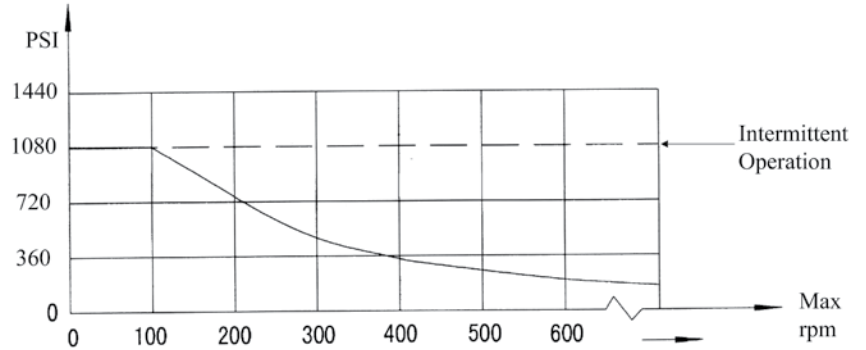
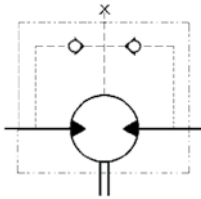


MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
BMTJ 230	[6.93]	[0.48]	[41.15]	176	12	104.5
BMTJ 250	[7.01]	[0.56]	[4.20]	178	14	106.5
BMTJ 315	[7.25]	[0.79]	[4.43]	184	20	112.5
BMTJ 400	[7.52]	[1.07]	[4.71]	191	27	119.5
BMTJ 500	[7.84]	[1.38]	[5.02]	199	35	127.5
BMTJ 630	[8.31]	[1.85]	[5.50]	211	47	139.5
BMTJ 800	[8.74]	[2.29]	[5.93]	222	58	150.5

▷ Motor Mounting Surface



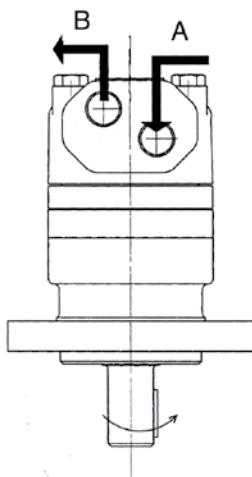
**SHAFT SEAL RATED PRESSURE**



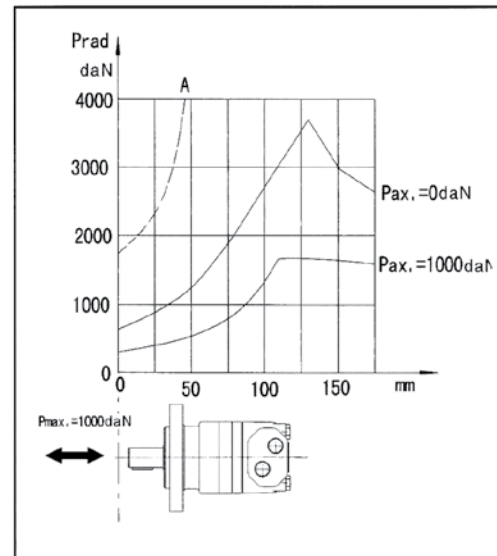
**CASE DRAIN**

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**



Axial and Radial forces



The output shaft runs tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve risk of breakage. The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.

# BMT ORDERING INFORMATION

	1	2	3	4	5	6	7
BMT							

1	2	3	4	5	6	7	
DISP. cc (cu. in.)	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS	
160 (9.83)	4	4-Ø14 Square-flange Ø160, pilot Ø125x9	M Shaft: 40mmKeyed Key 12x9x70	D G3/4 Manifold Mount 4-M10, G1/4	NONE STANDARD	00 NO PAINT	NONE STANDARD
200 (12.29)	K6	4-Ø14.5 Square-flange Ø162, pilot Ø127x9	G Shaft: 11/2" Keyed parallel Key .38x.38x2.25	M M27x2 Manifold Mount 4-M10, M14x1.5	R OPPOSITE	NONE BLACK	F FREE RUNNING
250 (15.37)	W	4-Ø18 Wheel-flange Ø200, pilot Ø160x7	F Shaft: 11/2"-17,Splined 17-DP12/24	S 1 1/16-12un, 9/16-18UNF			LL LOW LEAKAGE VALVE
315 (19.92)			T Shaft: 45mm Tapered parallel key B12x28x8	S1 1-1/16-12UN, 7/16-20UNF			LS LOW SPEED VALVE
400 (25.08)			T1 Shaft: 45mm Tapered key 11.13x11.13x31.75	G G3/4 - G1/4			HP HIGH PRESSURE SEAL
500 (31.96)			S L Shaft: Ø34.85, splined 6-34.85x28.14x8.64	M3 M27x2 - M14x1.5			HT HIGH TEMP SEAL
630 (38.39)			G1 Shaft: 11/4 Keyed parallel key 7.96x7.96x40				
800 (48.93)			F1 Shaft: 11/4"-14 Splined 14-DP12/24				

Please contact us for any options not listed.

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>BMTE</b>							

1	2		3		4		5		6		7	
DISP. cc (cu. in.)	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
250 (15.37)	CC	4-Ø14.3 Square-flange Ø169.9, pilot Ø127x12	G2	11/2" KEYED PARALLEL KEY .37X.37X1.65	SF	3/4" MANIFOLD MOUNT, 8-3/8-16UNC 7/16-20UNF	NONE	STANDARD	00	NO PAINT	NONE	STANDARD
315 (19.92)	WE	4-Ø18 Wheel-flange Ø147, pilot Ø127x9	FE	11/2"-17 SPLINED 17-DP 12/24	SE	1-1/16-12UNF ORING 9/16-18 UNF	R	OPPOSITE	NONE	BLACK	F	FREE RUNNING
400 (25.08)			Y1	40MM KEYED PARALLEL KEY 12X8X63	SE1	1-1/16-12UNF ORING 7/16-20UNF					LL	LOW LEAKAGE
500 (31.96)			Y2	40MM KEYED PARALLEL KEY 12X8X63	SE2	G3/4 - G1/4					LS	LOW SPEED VALVE
630 (38.34)			T2	15/8" TAPERED PARALLEL KEY .44X.44X1.25	SF3	1-5/16-12UNF 7/16-20UNF					HP	HIGH PRESSURE SEAL
800 (48.93)					SF5	1-5/16-12UNF O-ring 7/16-20 UNF on rear cover					HT	HIGH TEMP SEAL
					SF6	M33x2, M14x1.5						
					SF7	G1, G 1/4						

Please contact the factory for any options not listed.

# BMTS ORDERING INFORMATION



	1	2	3	4	5	6	7
BMTS							

1	2		3		4		5		6		7	
DISP. cc (cu. in.)	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
160 (9.83)	D	4-Ø14 Circle-flange Ø160, pilot Ø125x8	SS	Short shaft DP12/24	D	G3/4 Manifold Mount 4-M10, G1/4	NONE	STANDARD	00	NO PAINT	NONE	STANDARD
200 (12.29)	E	4-Ø14.5 Square-flange Ø162, pilot Ø127x10			M	M27x2 Manifold Mount 4-M10, M14x1.5	R	REVERSE	NONE	BLACK	F	FREE RUNNING
250 (15.37)					S	17/16-12 O-RING, 9/16-18UNF					LL	LOW LEAKAGE VALVE
315 (19.92)					S1	1-1/16-12 O-RING, 7/16-20UNF					LS	LOW SPEED
400 (25.08)					G	G3/4 - G1/4						
500 (31.96)					M3	M27x2 - M14x1.5						
630 (38.39)												
800 (48.93)												

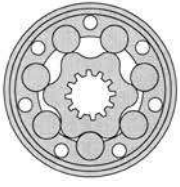
Please contact the factory for any options not listed.



	1	2	3	4	5	6	7
BMTJ							

1	2		3		4		5		6		7	
DISP. cc (cu. in.)	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
250 (15.37)	J	Squareflange 169.9mm, pilot 127mmx12.4	SS	Short shaft 12- DP8.5/17	SF	3/4", Manifold Mount, 8-3/8UNC 7/16-20UNF	NONE	STANDARD	00	NO PAINT	NONE	STANDARD
315 (19.92)					SF6	M33x2, M14x1.5	R	REVERSE	NONE	BLACK	F	FREE RUNNING
400 (25.08)					SF7	G1, G 1/4					LL	LOW LEAKAGE
500 (31.96)					SE	1-1/16-12 UN O-RING 9/16-18UNF					LS	LOW SPEED
630 (38.39)					SE1	1-1/16-12UNC O-RING 7/16-20UNF						
800 (48.93)					SE2	G3/4 - G1/4						
					SF3	1-5/16-12 ORING 7/16-20UNF						

Please contact the factory for any options not listed.



# Model BMV



The BMV series adapts the advanced GEROLER gear set design with **DISC** distribution flow and high pressure. These motors can be supplied with various options for multifunctional operations in accordance with the application requirements. The output shaft tapered roller bearings permit high axial and radial forces offering a smooth operation during low pressure startup and high pressure operation. These low weight advanced construction design motors are manufactured in accordance with the requirements of ISO 9001-2008 quality system.

## BMV TECHNICAL SPECIFICATIONS

DISTRIBUTION TYPE			BMV 315	BMV 400	BMV 500	BMV 630	BMV 800	BMV 1000	
GEOMETRIC DISPLACEMENT	[in./rev.]		[20.32]	[25.57]	[31.61]	[40.63]	[48.88]	[60.40]	
	cm <sup>3</sup> /rev.		<b>333</b>	<b>419</b>	<b>518</b>	<b>666</b>	<b>801</b>	<b>990</b>	
MAX. SPEED RPM	RATED		335	270	215	170	140	105	
	CONT.		446	354	386	223	185	145	
	INT		<b>649</b>	<b>526</b>	<b>425</b>	<b>331</b>	<b>275</b>	<b>220</b>	
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[6456]	[9021]	[10701]	[12576]	[14061]	[17821]	
		N*M	<b>730</b>	<b>1020</b>	<b>1210</b>	<b>1422</b>	<b>1590</b>	<b>2015</b>	
	CONT.	[LB. IN.]	[8181]	[10790]	[12824]	[14504]	[16008]	[17821]	
		N*M	<b>925</b>	<b>1220</b>	<b>1450</b>	<b>1640</b>	<b>1810</b>	<b>2015</b>	
	INT.	[LB. IN.]	[9728]	[12727]	[15742]	[17688]	[18661]	[20164]	
		N*M	<b>1100</b>	<b>1439</b>	<b>1780</b>	<b>2000</b>	<b>2110</b>	<b>2280</b>	
	PEAK	[LB. IN.]	[11931]	[15035]	[18758]	[20677]	[21845]	[21226]	
		N*M	<b>1349</b>	<b>1700</b>	<b>2121</b>	<b>2338</b>	<b>2470</b>	<b>2400</b>	
MAX. OUTPUT [HP] KW	RATED	[HP]	[34]	[39]	[37]	[34]	[31]	[28]	
		KW	<b>25.6</b>	<b>28.8</b>	<b>27.2</b>	<b>25.3</b>	<b>23.3</b>	<b>21.2</b>	
	CONT.	[HP]	[58]	[61]	[78]	[52]	[47]	[38]	
		KW	<b>43</b>	<b>45.2</b>	<b>58.6</b>	<b>38.3</b>	<b>35.1</b>	<b>28.6</b>	
	INT.	[HP]	[70]	[70]	[70]	[62]	[54]	[54]	
		KW	<b>52</b>	<b>52</b>	<b>52</b>	<b>46</b>	<b>40</b>	<b>40</b>	
MAX. PRESSURE DROP [PSI] MPa	RATED	[PSI]	[2320]	[2320]	[2320]	[2320]	[2030]	[2030]	
		MPa	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>14</b>	<b>14</b>	
	CONT.	[PSI]	[2900]	[2900]	[2900]	[2610]	[2320]	[2030]	
		MPa	<b>20</b>	<b>20</b>	<b>20</b>	<b>18</b>	<b>16</b>	<b>14</b>	
	INT.	[PSI]	[3480]	[3480]	[3480]	[3045]	[2610]	[2329]	
		MPa	<b>24</b>	<b>24</b>	<b>24</b>	<b>21</b>	<b>18</b>	<b>16</b>	
	PEAK	[PSI]	[4060]	[4060]	[4060]	[3480]	[3045]	[2610]	
		MPa	<b>28</b>	<b>28</b>	<b>28</b>	<b>24</b>	<b>21</b>	<b>18</b>	
	MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[29.0]	[29.0]	[29.0]	[29.0]	[29.0]	[29.0]
			L/MIN	<b>110</b>	<b>110</b>	<b>110</b>	<b>110</b>	<b>110</b>	<b>110</b>
CONT.		[GPM]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	
		L/MIN	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>	
INT.		[GPM]	[59.4]	[59.4]	[59.4]	[59.4]	[59.4]	[59.4]	
		L/MIN	<b>225</b>	<b>225</b>	<b>225</b>	<b>225</b>	<b>225</b>	<b>225</b>	
MAX. INLET PRESSURE [PSI] MPa	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	
		MPa	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	
	CONT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	
		MPa	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	
	INT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	
		MPa	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	
	PEAK	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	
		MPa	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	
WEIGHT [LB] KG	[LB]	[70]	[72]	[74]	[77]	[80]	[84.6]		
	KG	<b>31.8</b>	<b>32.6</b>	<b>33.5</b>	<b>34.9</b>	<b>36.5</b>	<b>38.6</b>		

- Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- Continuous pressure: Max. value of operating motor continuously.
- Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- Peak pressure: Max. value of operating motor in 0.6 second per minute.

BMV 315 [20.32 in<sup>3</sup>/rev] 333 cm<sup>3</sup>/rev. Max cont. Max int.

	[1015]	[1450]	[2030]	[2320]	[2610]	[2900]	[3045]	[3480]	[PSI]
	7	10	14	16	18	20	21	24	MPa
GPM	[7.9]	[2697]	[3847]	[5351]	[6350]	[6987]	[7889]	[8331]	[9375]
	30	305	435	605	718	790	892	942	1060
Flow (L/min)	[15.9]	[2680]	[3936]	[5528]	[6509]	[7323]	[8181]	[8561]	[9702]
	60	303	445	625	736	828	925	968	1097
Flow (L/min)	[23.8]	[2653]	[3891]	[5528]	[6456]	[7305]	[8154]	[8508]	[9569]
	90	300	440	625	730	826	922	962	1082
Flow (L/min)	[27.7]	[2609]	[3847]	[5483]	[6421]	[7270]	[8110]	[8473]	[9534]
	105	295	435	620	726	822	917	958	1078
Flow (L/min)	[31.7]	[2565]	[3812]	[5395]	[6368]	[7252]	[8066]	[8419]	[9463]
	120	290	431	610	720	820	912	952	1070
Max cont.	[39.6]	[2459]	[3635]	[5324]	[6332]	[7093]	[7995]	[8331]	[9348]
	150	278	411	602	716	802	904	942	1057
Max int.	[50.2]	[2299]	[3467]	[5200]	[6279]	[7031]	[7889]	[8225]	
	190	260	392	588	710	795	892	930	

TORQUE [LB-IN]  
TORQUE (N•M)  
SPEED (RPM)

Max cont.  
Max int.

BMV 400 [25.56 in<sup>3</sup>/rev] 419 cm<sup>3</sup>/rev. Max cont. Max int.

	[1015]	[1450]	[2030]	[2320]	[2610]	[2900]	[3045]	[3480]	[PSI]
	7	10	14	16	18	20	21	24	MPa
GPM	[7.9]	[3467]	[5236]	[7181]	[8800]	[9286]	[10,436]	[10,569]	[12,249]
	30	392	592	812	995	1050	1180	1195	1385
Flow (L/min)	[15.9]	[3555]	[5430]	[7270]	[9021]	[9463]	[10,790]	[10,922]	[12,603]
	60	402	614	822	1020	1070	1220	1235	1425
Flow (L/min)	[23.8]	[3502]	[5359]	[7208]	[8977]	[9419]	[10,701]	[10,834]	
	90	396	606	815	1015	1065	1210	1225	
Flow (L/min)	[27.7]	[3449]	[5306]	[7119]	[8932]	[9392]	[10,657]	[10,790]	
	105	390	600	805	1010	1062	1205	1220	
Flow (L/min)	[31.7]	[3396]	[5253]	[7058]	[8888]	[9330]	[10,613]	[10,701]	
	120	384	594	798	1005	1055	1200	1210	
Max cont.	[39.6]	[3317]	[5147]	[7005]	[8862]	[9198]			
	150	375	582	792	1002	1040			
Max int.	[50.2]	[3184]	[5076]	[6960]	[8729]	[9065]			
	190	360	574	787	987	1025			

TORQUE [LB-IN]  
TORQUE (N•M)  
SPEED (RPM)

Max cont.  
Max int.

BMV 500 [31.60 in<sup>3</sup>/rev] 518 cm<sup>3</sup>/rev. Max cont. Max int.

	[1015]	[1450]	[2030]	[2320]	[2610]	[2900]	[3045]	[3480]	[PSI]
	7	10	14	16	18	20	21	24	MPa
GPM	[7.9]	[3909]	[5970]	[8826]	[10,436]	[11,143]	[12,470]	[13,133]	[15,557]
	30	442	675	998	1180	1260	1410	1485	1759
Flow (L/min)	[15.9]	[4024]	[6058]	[9065]	[10,701]	[11,188]	[12,780]	[13,354]	[15,742]
	60	455	685	1025	1210	1265	1445	1510	1780
Flow (L/min)	[23.8]	[3980]	[5996]	[9021]	[10,657]	[11,143]	[12,824]	[13,443]	[15,795]
	90	450	678	1020	1205	1260	1450	1520	1786
Flow (L/min)	[27.7]	[3936]	[5943]	[8950]	[10,613]	[11,099]	[12,788]	[13,381]	
	105	445	672	1012	1200	1255	1446	1513	
Flow (L/min)	[31.7]	[3891]	[5908]	[8888]	[10,560]	[11,055]	[12,373]	[13,354]	
	120	440	668	1005	1194	1250	1399	1510	
Max cont.	[39.6]	[3847]	[5864]	[8844]	[10,489]	[11,020]			
	150	435	663	1000	1186	1246			
Max int.	[50.2]	[3785]	[5819]	[8782]					
	190	428	658	993					

TORQUE [LB-IN]  
TORQUE (N•M)  
SPEED (RPM)

Max cont.  
Max int.

BMV 630 [40.63 in<sup>3</sup>/rev] 666 cm<sup>3</sup>/rev. Max cont. Max int.

	[1015]	[1450]	[2030]	[2320]	[2610]	[2900]	[3045]	[3480]	[PSI]
	7	10	14	16	18	20	21	24	MPa
GPM	[7.9]	[5395]	[7783]	[11,320]	[12,417]	[14,292]	[15,742]	[16,300]	[17,564]
	30	610	880	1280	1404	1616	1780	1843	1986
Flow (L/min)	[15.9]	[5439]	[7853]	[11,816]	[12,488]	[14,398]	[15,919]		
	60	615	888	1336	1412	1628	1800		
Flow (L/min)	[23.8]	[5377]	[7765]	[11,771]	[12,576]	[14,504]	[16,008]		
	90	608	878	1331	1422	1640	1810		
Flow (L/min)	[27.7]	[5306]	[7712]	[11,727]	[12,514]	[14,433]	[15,831]		
	105	600	872	1326	1415	1632	1790		
Flow (L/min)	[31.7]	[5262]	[7650]	[11,586]	[12,426]	[14,372]	[15,742]		
	120	595	865	1310	1405	1625	1780		
Max cont.	[39.6]	[5218]	[7562]	[11,515]	[12,364]				
	150	590	855	1302	1398				
Max int.	[50.2]	[5183]	[7482]						
	190	586	846						

TORQUE [LB-IN]  
TORQUE (N•M)  
SPEED (RPM)

Max cont.  
Max int.

# BMV PERFORMANCE DATA

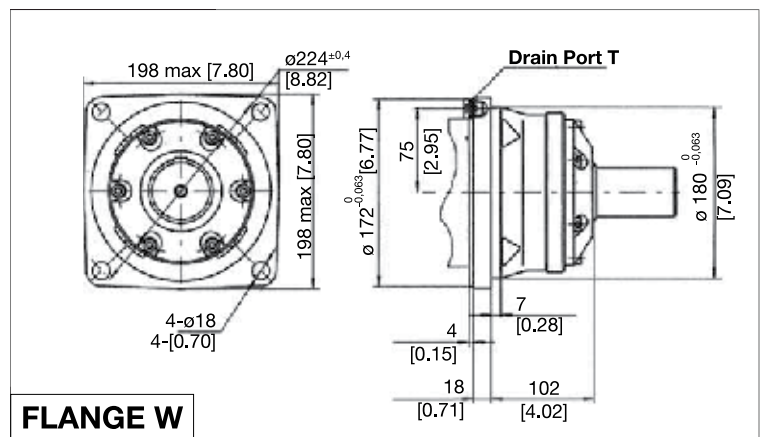
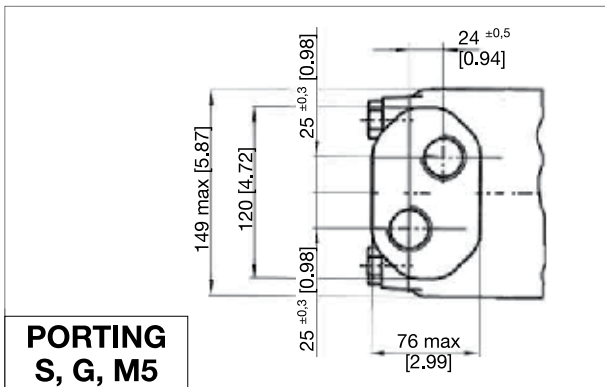
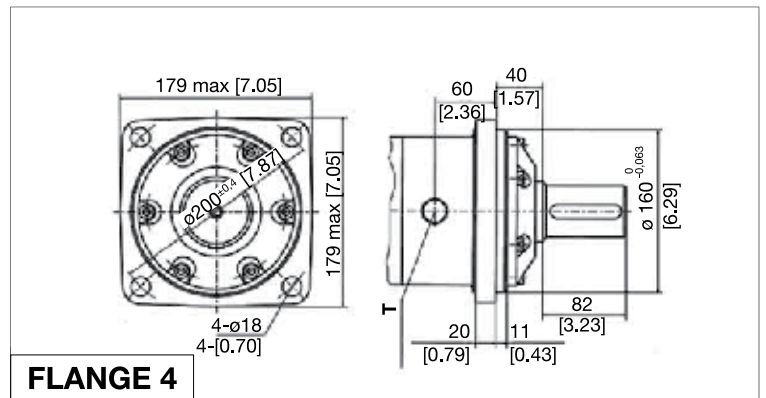
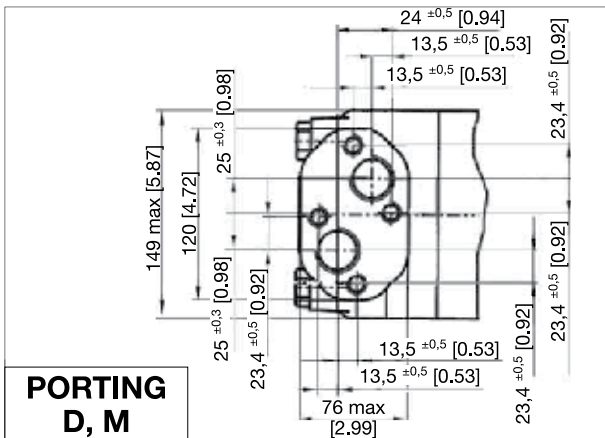
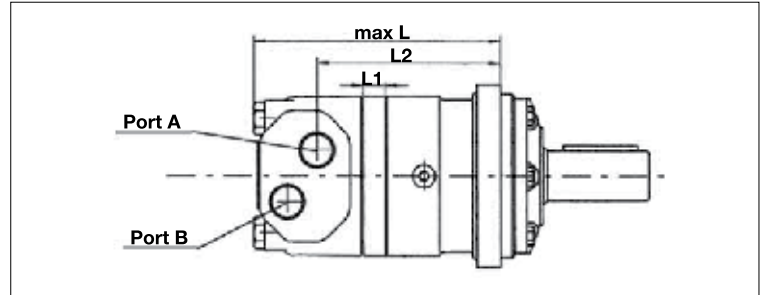
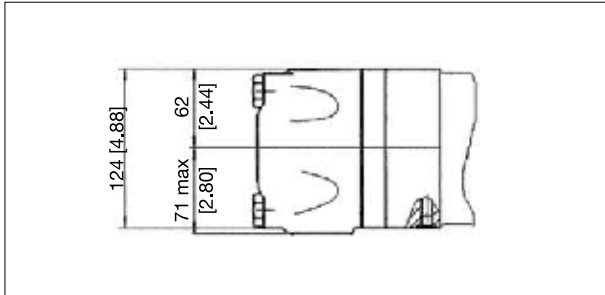


BMV 800 [48.87 in<sup>3</sup>/rev] 801 cm<sup>3</sup>/rev. Max cont.

		[1015]	[1450]	[2030]	[2320]	[PSI]
		7	10	14	16	MPa
GPM	[7.9]	[6987]	[10,056]	[13,991]	[15,831]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	L/min	790	1137	1582	1790	
30		<b>35</b>	<b>33</b>	<b>30</b>	<b>28</b>	
	[15.9]	[7093]	[10,100]	[14,062]	[16,008]	
60		802	1142	1590	1810	
		<b>68</b>	<b>66</b>	<b>62</b>	<b>60</b>	
Flow (L/min)	[23.8]	[7031]	[10,038]	[13,974]	[15,919]	
	L/min	795	1135	1580	1800	
90		<b>110</b>	<b>107</b>	<b>102</b>	<b>100</b>	
	[27.7]	[6960]	[9994]	[13,938]	[15,848]	
105		787	1130	1576	1792	
		<b>129</b>	<b>125</b>	<b>120</b>	<b>117</b>	
[31.7]	[6916]	[9941]	[13,699]	[15,565]		
	L/min	782	1124	1549	1760	
120		<b>146</b>	<b>142</b>	<b>136</b>	<b>132</b>	
	[39.6]	[6863]	[9781]	[13,522]		
Max cont.	L/min	776	1106	1529		
		<b>184</b>	<b>180</b>	<b>176</b>		
Max int.	[50.2]	[6792]	[9728]			
	L/min	768	1100			
		<b>233</b>	<b>229</b>			

BMV 1000 [60.40 in<sup>3</sup>/rev] 990 cm<sup>3</sup>/rev. Max cont.

		[1015]	[1450]	[2030]	[2320]	[PSI]
		7	10	14	16	MPa
GPM	[7.9]	[8649]	[12410]	[12511]	[20075]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	L/min	978	1410	1980	2270	
30		<b>28</b>	<b>27</b>	<b>26</b>	<b>24</b>	
	[15.9]	[8773]	[12576]	[17821]	[20129]	
60		992	1422	2015	2280	
		<b>58</b>	<b>56</b>	<b>55</b>	<b>51</b>	
Flow (L/min)	[23.8]	[8129]	[12603]	[17715]	[20129]	
	L/min	987	1425	2003	2276	
90		<b>87</b>	<b>85</b>	<b>82</b>	<b>76</b>	
	[27.7]	[8694]	[12541]	[17635]	[19837]	
105		983	1418	1994	2243	
		<b>101</b>	<b>98</b>	<b>94</b>	<b>87</b>	
[31.7]	[8623]	[12461]	[17582]	[19669]		
	L/min	975	1409	1988	2224	
120		<b>113</b>	<b>109</b>	<b>105</b>	<b>100</b>	
	[39.6]	[8499]	[12099]	[16830]		
Max cont.	L/min	961	1368	1903		
		<b>140</b>	<b>136</b>	<b>123</b>		
Max int.	[50.2]	[8340]	[11833]			
	L/min	943	1338			
		<b>170</b>	<b>158</b>			



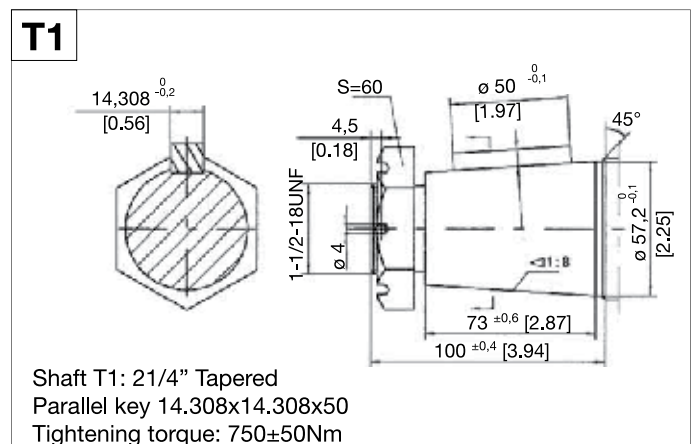
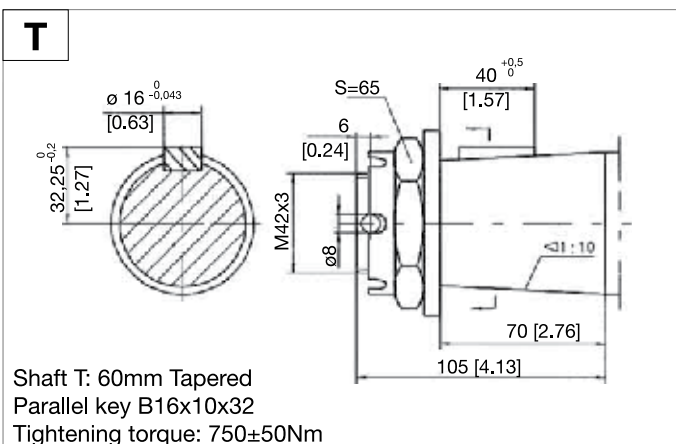
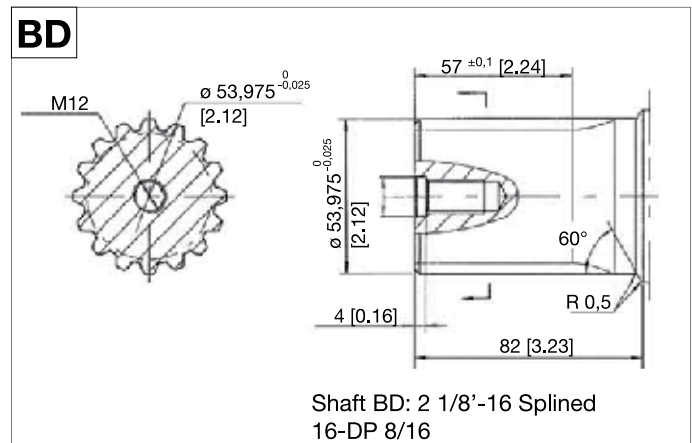
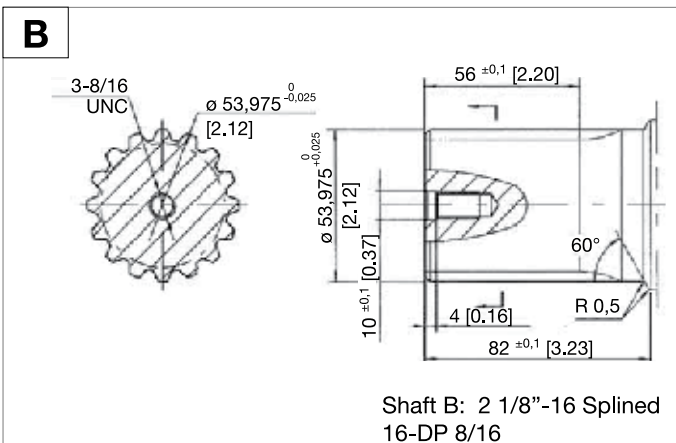
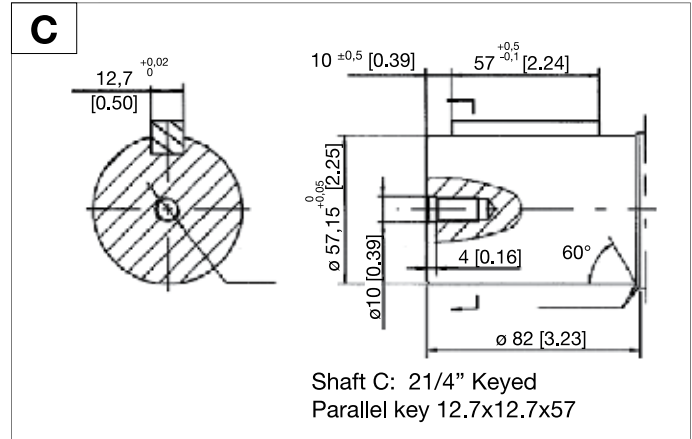
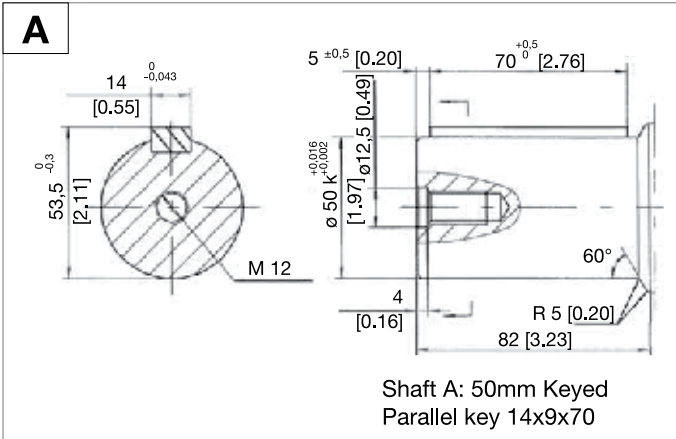
MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
BMV315	[8.55]	[0.79]	[6.36]	217	20	161.5
BMV400	[8.82]	[1.06]	[6.63]	224	27	168.5
BMV500	[9.13]	[1.38]	[6.95]	232	35	176.5
BMV630	[9.61]	[1.85]	[7.42]	244	47	188.5
BMV800	[10.04]	[2.28]	[7.85]	255	58	199.5

MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
BMVW315	[5.85]	[0.79]	[3.68]	148.5	20	93.5
BMV400	[6.12]	[1.06]	[3.96]	155.5	27	100.5
BMV500	[6.44]	[1.38]	[4.27]	163.5	35	108.5
BMV630	[6.91]	[1.85]	[4.74]	175.5	47	120.5
BMV800	[7.34]	[2.28]	[5.18]	186.5	58	131.5

**PORT & DRAIN PORT ORDERING CODES**

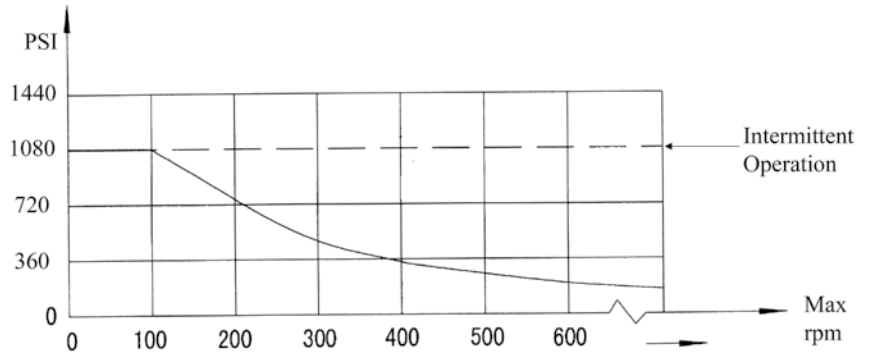
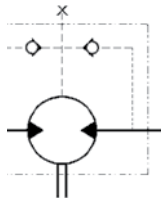
ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	G	DEPTH	M5	DEPTH
PORTS - A and B	G 1	18 mm	M33 X 2	18 mm	1-5/16-12UN	18 mm	G 1	18 mm	M33 X 2	18 mm
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	9/16-18UNF	12 mm	G 1/4	12 mm	M14X1.5	12 mm
BOLTS - C	4-M12	10 mm	4-M12	10 mm	-	-	-	-	-	-

# BMV MOTOR SHAFT EXTENSIONS



▷ Motor Mounting Surface

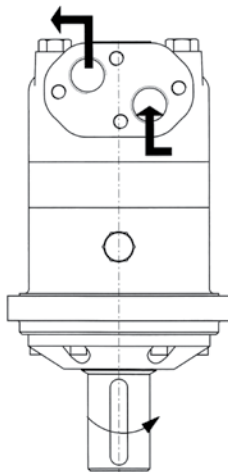
**SHAFT SEAL RATED PRESSURE**



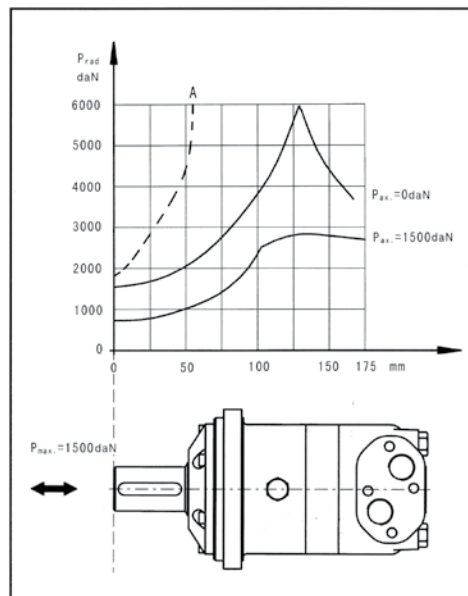
**CASE DRAIN**

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**



Axial and Radial forces



The output shaft runs tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve risk of breakage. The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.



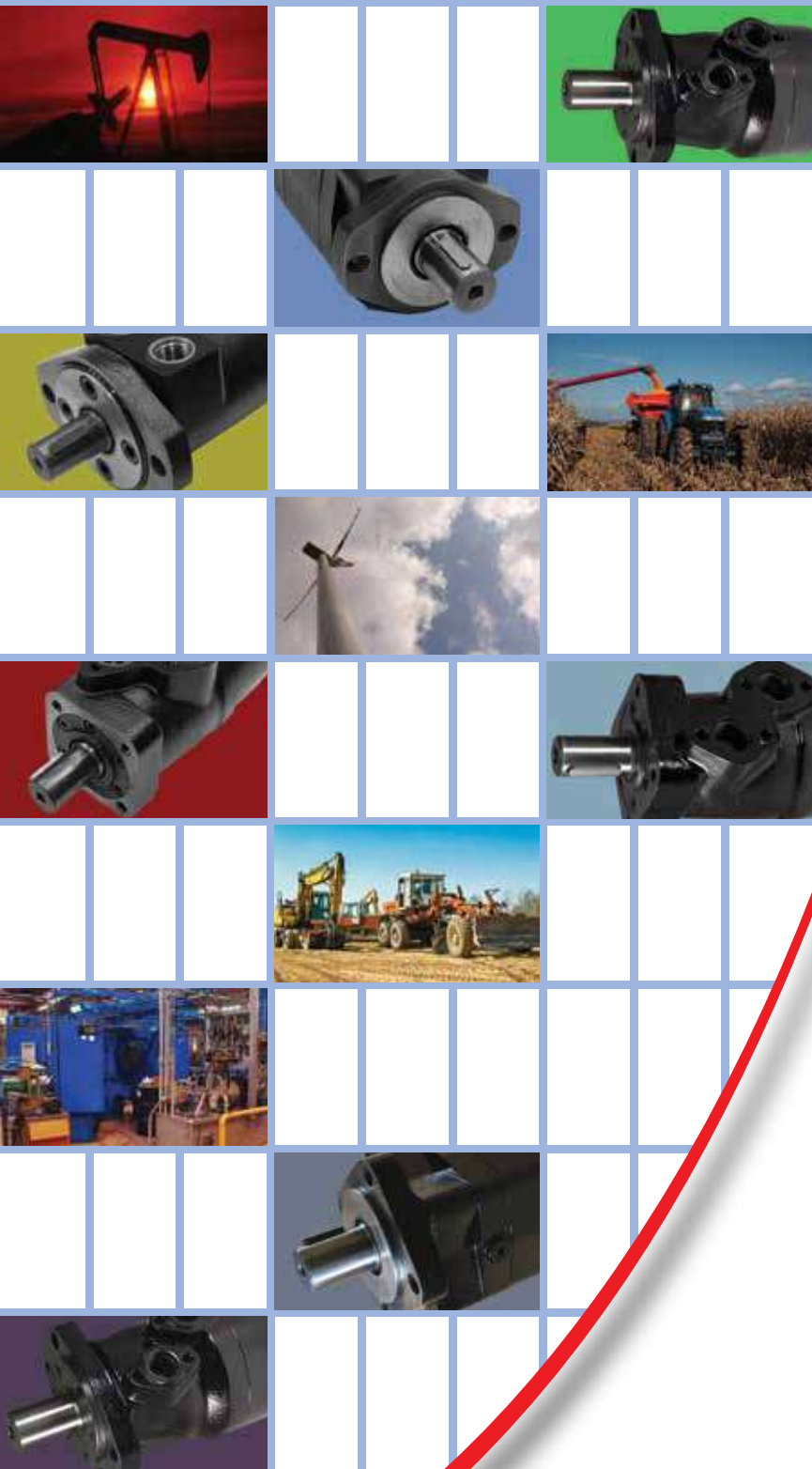
# BMV ORDERING INFORMATION



	1	2	3	4	5	6
BMV						

1	2		3		4		5		6	
DISP. cc (cu. in.)	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT	
315 (20.32)	4	4-Ø14.5 Square-flange pilot Ø160x11	A	Shaft: 50mm Keyed, parallel key 14x9x70	D	G1 Manifold 4xM12, G1/4	NONE	STANDARD	00	NO PAINT
400 (25.57)	W	4-Ø18 Wheel-flange Ø224, pilot Ø180x10	BD	Shaft: 2 1/8" Splined 16-DP8/16	M	M33x2 Manifold 4-M12, M14x1.5	R	OPPOSITE	NONE	BLACK
500 (31.61)	K6	4-Ø14.2 Square flange pilot Ø161.9	B	Shaft: 2 1/8" Splined 16-DP8/16	S	1-5/16-12UN, 9/16- 18UNF				
630 (40.63)			C	Shaft: 2 1/4" Keyed parallel key 12.7x12.7x57	G	G1, G1/4				
800 (48.88)			T	60mm Tapered parallel key B16x10x32	M5	M33x2, M14x1.5				
1000 (60.4)			T1	2 1/4" Tapered parallel key 14.308x14.308x50						





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