



## BMSY SERIES HYDRAULIC MOTOR

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

### Characteristic features:

- \* Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- \* The output shaft adapts in tapered roller bearings that permit high axial and radial forces. The case can offers capacities of high pressure and high torque in the wide of applications.
- \* Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life , provide smooth and reliable operation.
- \* The new series motor is suitable for vehicles with greater loads and pressure drop.

### Main Specification

Type		BMSY BMSYS 80	BMSY BMSYS 100	BMSY BMSYS 125	BMSY BMSYS 160	BMSY BMSYS 200	BMSY BMSYS 250	BMSY BMSYS 315	BMSY BMSYS 400	BMSY BMSYS 475
Geometric displacement (cm <sup>3</sup> /rev.)		80.6	100.8	125	154	194	243	311	394	475
Max. speed (rpm)	cont.	800	748	600	470	375	300	240	185	155
	int.	988	900	720	560	450	360	280	225	185
Max. torque (N•m)	cont.	225	290	365	485	586	708	880	880	910
	int.	305	390	480	590	705	860	1000	980	990
Max. output (kW)	cont.	16	18	18	18.1	18.1	18	17	11	9
	int.	20	22	23	25	24	23.8	20.2	12	11
Max. pressure drop (MPa)	cont.	20.5	20.5	20.5	21	21	20	20	16	14
	int.	27.5	27.5	27.5	26	25	25	24	19	15
	peak	29.5	29.5	29.5	28	27	27	26	21	17.5
Max. flow (L/min)	cont.	65	75	75	75	75	75	75	75	75
	int.	80	90	90	90	90	90	90	90	90
Max. inlet pressure (MPa)	cont.	25	25	25	25	25	25	25	25	25
	int.	30	30	30	30	30	30	30	30	30
Weight (kg)		9.8	10	10.3	10.7	11.1	11.6	12.3	13.2	14.3

\* Continuous pressure:Max. value of operating motor continuously.

\* Intermittent pressure:Max. value of operating motor in 6 seconds per minute.

\* Peak pressure:Max. value of operating motor in 0.6 second per minute.

Performance Data

BMSY80 [80.6cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	20.5	22.5
--	-----	---	------	----	------	------	------

Flow (L/min)	Max.cont.							Max.int.
	3.5	7	10.5	14	17.5	20.5	22.5	
15	35	80	120	158	195	228	249	
	<b>180</b>	<b>174</b>	<b>168</b>	<b>164</b>	<b>158</b>	<b>151</b>	<b>143</b>	
30	35	80	120	158	195	232	260	
	<b>362</b>	<b>352</b>	<b>346</b>	<b>338</b>	<b>330</b>	<b>322</b>	<b>310</b>	
40	35	79	119	155	193	227	250	
	<b>487</b>	<b>480</b>	<b>468</b>	<b>457</b>	<b>446</b>	<b>438</b>	<b>425</b>	
50	30	77	117	153	192	224	248	
	<b>612</b>	<b>603</b>	<b>592</b>	<b>581</b>	<b>572</b>	<b>558</b>	<b>542</b>	
60	28	77	117	153	192	224	243	
	<b>735</b>	<b>726</b>	<b>718</b>	<b>703</b>	<b>687</b>	<b>673</b>	<b>646</b>	
Max.cont.	26	75	116	151	188	217	236	
	<b>794</b>	<b>786</b>	<b>773</b>	<b>760</b>	<b>744</b>	<b>722</b>	<b>706</b>	
Max.int.	24	72	109	142	176	206	227	
	<b>981</b>	<b>968</b>	<b>955</b>	<b>925</b>	<b>893</b>	<b>870</b>	<b>832</b>	

BMSY100 [100.8cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	20.5	22.5
--	-----	---	------	----	------	------	------

Flow (L/min)	Max.cont.							Max.int.
	3.5	7	10.5	14	17.5	20.5	22.5	
15	48	95	150	200	250	282	310	
	<b>146</b>	<b>144</b>	<b>139</b>	<b>135</b>	<b>130</b>	<b>120</b>	<b>105</b>	
30	45	94	146	198	250	290	317	
	<b>291</b>	<b>289</b>	<b>278</b>	<b>274</b>	<b>269</b>	<b>258</b>	<b>242</b>	
40	43	89	142	196	248	288	316	
	<b>387</b>	<b>384</b>	<b>374</b>	<b>359</b>	<b>350</b>	<b>335</b>	<b>320</b>	
50	40	88	135	194	247	286	315	
	<b>486</b>	<b>483</b>	<b>473</b>	<b>462</b>	<b>450</b>	<b>430</b>	<b>420</b>	
60	37	88	132	185	244	283	312	
	<b>588</b>	<b>584</b>	<b>574</b>	<b>562</b>	<b>550</b>	<b>538</b>	<b>520</b>	
Max.cont.	35	80	130	180	240	279	310	
	<b>740</b>	<b>735</b>	<b>720</b>	<b>705</b>	<b>696</b>	<b>676</b>	<b>653</b>	
Max.int.	30	75	124	170	236	271	303	
	<b>850</b>	<b>840</b>	<b>810</b>	<b>787</b>	<b>770</b>	<b>750</b>	<b>747</b>	

BMSY125 [125cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	20.5	22.5
--	-----	---	------	----	------	------	------

Flow (L/min)	Max.cont.							Max.int.
	3.5	7	10.5	14	17.5	20.5	22.5	
15	55	120	176	245	309	345	375	
	<b>115</b>	<b>113</b>	<b>110</b>	<b>104</b>	<b>98</b>	<b>90</b>	<b>84</b>	
30	55	120	175	250	315	364	404	
	<b>231</b>	<b>228</b>	<b>223</b>	<b>214</b>	<b>202</b>	<b>188</b>	<b>172</b>	
40	53	118	178	250	315	364	403	
	<b>312</b>	<b>309</b>	<b>290</b>	<b>289</b>	<b>278</b>	<b>262</b>	<b>235</b>	
50	50	115	176	248	315	362	397	
	<b>391</b>	<b>386</b>	<b>378</b>	<b>365</b>	<b>352</b>	<b>339</b>	<b>308</b>	
60	45	113	171	241	308	358	397	
	<b>469</b>	<b>461</b>	<b>450</b>	<b>437</b>	<b>425</b>	<b>400</b>	<b>372</b>	
Max.cont.	45	110	167	240	306	352	389	
	<b>588</b>	<b>574</b>	<b>560</b>	<b>544</b>	<b>526</b>	<b>505</b>	<b>481</b>	
Max.int.	40	105	162	237	301	343	378	
	<b>710</b>	<b>696</b>	<b>680</b>	<b>661</b>	<b>646</b>	<b>628</b>	<b>610</b>	

BMSY160 [154cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
--	-----	---	------	----	------	----	------

Flow (L/min)	Max.cont.							Max.int.
	3.5	7	10.5	14	17.5	21	22.5	
15	70	142	215	298	372	435	476	
	<b>93</b>	<b>91</b>	<b>89</b>	<b>85</b>	<b>80</b>	<b>76</b>	<b>58</b>	
30	73	151	225	312	382	456	492	
	<b>189</b>	<b>187</b>	<b>181</b>	<b>176</b>	<b>170</b>	<b>162</b>	<b>153</b>	
40	75	152	228	314	383	454	488	
	<b>252</b>	<b>250</b>	<b>246</b>	<b>239</b>	<b>234</b>	<b>228</b>	<b>212</b>	
50	70	148	225	305	372	445	480	
	<b>313</b>	<b>310</b>	<b>306</b>	<b>298</b>	<b>293</b>	<b>285</b>	<b>272</b>	
60	68	143	218	296	370	442	480	
	<b>378</b>	<b>376</b>	<b>370</b>	<b>362</b>	<b>353</b>	<b>346</b>	<b>332</b>	
Max.cont.	62	140	211	291	365	439	475	
	<b>475</b>	<b>469</b>	<b>461</b>	<b>450</b>	<b>441</b>	<b>432</b>	<b>414</b>	
Max.int.	59	131	202	286	357	425	460	
	<b>567</b>	<b>561</b>	<b>554</b>	<b>543</b>	<b>532</b>	<b>520</b>	<b>509</b>	

TORQUE(N•m) 301  
SPEED (r/min) 646

□ cont.  
■ int.

Performance Data

BMSY200 [194cm³/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	21	22.5
Flow (L/min)	15	87 <b>74</b>	179 <b>73</b>	273 <b>71</b>	371 <b>68</b>	471 <b>64</b>	562 <b>60</b>	610 <b>48</b>
	30	91 <b>150</b>	190 <b>148</b>	288 <b>143</b>	386 <b>140</b>	489 <b>134</b>	572 <b>128</b>	618 <b>119</b>
	40	94 <b>198</b>	193 <b>195</b>	296 <b>192</b>	394 <b>188</b>	498 <b>183</b>	584 <b>178</b>	645 <b>167</b>
	50	90 <b>248</b>	191 <b>246</b>	292 <b>241</b>	389 <b>236</b>	493 <b>230</b>	580 <b>223</b>	634 <b>212</b>
	60	85 <b>300</b>	185 <b>295</b>	279 <b>288</b>	382 <b>281</b>	483 <b>273</b>	575 <b>263</b>	622 <b>251</b>
	Max.cont.	75	78 <b>374</b>	176 <b>370</b>	271 <b>364</b>	370 <b>360</b>	472 <b>352</b>	561 <b>340</b>
Max.int.	90	68 <b>443</b>	163 <b>440</b>	265 <b>435</b>	361 <b>428</b>	456 <b>424</b>	545 <b>413</b>	599 <b>400</b>

BMSY250 [243cm³/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	20	22.5
Flow (L/min)	15	110 <b>59</b>	231 <b>58</b>	351 <b>56</b>	462 <b>53</b>	585 <b>50</b>	681 <b>46</b>	778 <b>35</b>
	30	116 <b>119</b>	236 <b>117</b>	359 <b>114</b>	475 <b>108</b>	597 <b>102</b>	700 <b>92</b>	790 <b>80</b>
	40	118 <b>162</b>	241 <b>159</b>	363 <b>156</b>	480 <b>150</b>	599 <b>143</b>	706 <b>134</b>	796 <b>121</b>
	50	111 <b>203</b>	234 <b>201</b>	352 <b>197</b>	472 <b>191</b>	591 <b>182</b>	693 <b>173</b>	788 <b>158</b>
	60	106 <b>244</b>	224 <b>242</b>	345 <b>237</b>	462 <b>230</b>	582 <b>220</b>	685 <b>208</b>	772 <b>194</b>
	Max.cont.	75	101 <b>303</b>	214 <b>299</b>	340 <b>294</b>	454 <b>285</b>	570 <b>272</b>	670 <b>260</b>
Max.int.	90	93 <b>363</b>	209 <b>359</b>	335 <b>354</b>	447 <b>348</b>	559 <b>340</b>	657 <b>328</b>	749 <b>303</b>

BMSY315 [311cm³/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	20	22.5
Flow (L/min)	15	148 <b>48</b>	304 <b>47</b>	456 <b>45</b>	613 <b>43</b>	762 <b>41</b>	879 <b>39</b>	978 <b>27</b>
	30	155 <b>95</b>	314 <b>93</b>	465 <b>91</b>	635 <b>89</b>	778 <b>86</b>	884 <b>82</b>	988 <b>67</b>
	40	160 <b>127</b>	321 <b>125</b>	479 <b>121</b>	650 <b>117</b>	796 <b>115</b>	906 <b>109</b>	997 <b>91</b>
	50	155 <b>159</b>	314 <b>157</b>	465 <b>153</b>	638 <b>149</b>	780 <b>145</b>	886 <b>142</b>	988 <b>128</b>
	60	151 <b>187</b>	306 <b>185</b>	453 <b>181</b>	620 <b>176</b>	765 <b>169</b>	886 <b>157</b>	976 <b>143</b>
	Max.cont.	75	146 <b>238</b>	300 <b>236</b>	445 <b>232</b>	613 <b>227</b>	755 <b>224</b>	875 <b>220</b>
Max.int.	90	135 <b>286</b>	284 <b>283</b>	436 <b>278</b>	601 <b>272</b>	740 <b>265</b>	863 <b>257</b>	952 <b>232</b>

BMSY400 [394cm³/rev.]

		Pressure (MPa)					
		3.5	7	10.5	14	16	17.5
Flow (L/min)	15	186 <b>37</b>	379 <b>36</b>	578 <b>35</b>	779 <b>33</b>	896 <b>31</b>	986 <b>29</b>
	30	190 <b>75</b>	388 <b>73</b>	590 <b>71</b>	791 <b>68</b>	905 <b>65</b>	991 <b>61</b>
	40	195 <b>99</b>	394 <b>97</b>	596 <b>95</b>	797 <b>93</b>	912 <b>90</b>	998 <b>85</b>
	50	191 <b>125</b>	388 <b>123</b>	587 <b>118</b>	785 <b>114</b>	904 <b>109</b>	983 <b>102</b>
	60	186 <b>149</b>	388 <b>146</b>	587 <b>142</b>	785 <b>137</b>	904 <b>131</b>	983 <b>122</b>
	Max.cont.	75	181 <b>187</b>	372 <b>183</b>	576 <b>177</b>	770 <b>171</b>	891 <b>164</b>
Max.int.	90	176 <b>226</b>	367 <b>221</b>	571 <b>214</b>	766 <b>208</b>	883 <b>199</b>	965 <b>183</b>

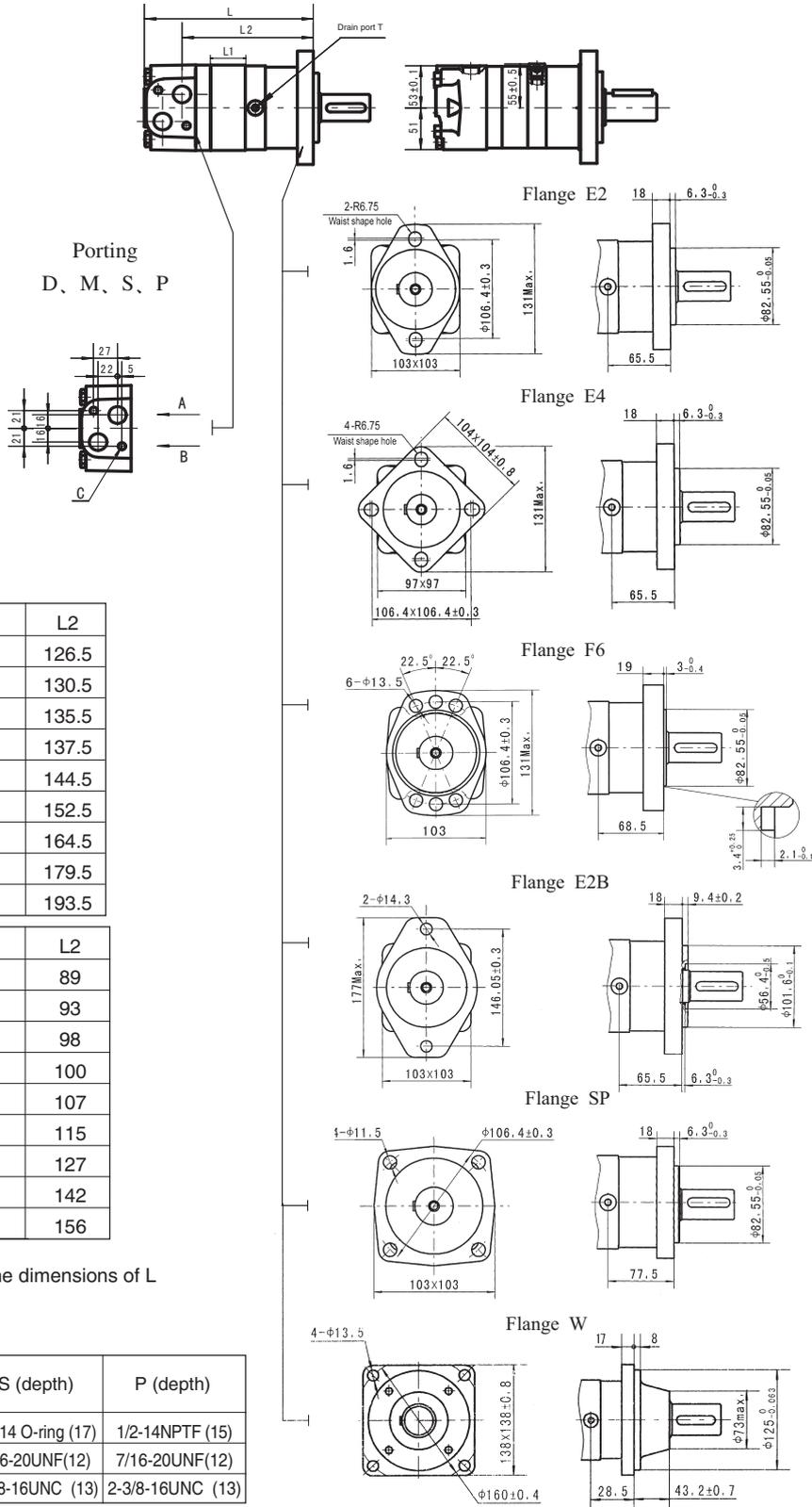
BMSY475 [475cm³/rev.]

		Pressure (MPa)				
		3.5	7	10.5	14	15
Flow (L/min)	15	218 <b>30</b>	439 <b>29</b>	661 <b>28</b>	892 <b>27</b>	995 <b>25</b>
	30	223 <b>61</b>	450 <b>60</b>	676 <b>58</b>	910 <b>56</b>	1002 <b>53</b>
	40	228 <b>82</b>	461 <b>80</b>	689 <b>77</b>	927 <b>74</b>	1017 <b>68</b>
	50	224 <b>103</b>	456 <b>101</b>	682 <b>97</b>	920 <b>92</b>	1008 <b>86</b>
	60	220 <b>123</b>	451 <b>121</b>	677 <b>118</b>	913 <b>112</b>	998 <b>105</b>
	Max.cont.	75	212 <b>155</b>	443 <b>153</b>	664 <b>147</b>	901 <b>140</b>
Max.int.	90	196 <b>186</b>	421 <b>184</b>	643 <b>178</b>	877 <b>170</b>	959 <b>157</b>

TORQUE (N\*m) 766  
SPEED (rpm) 208

cont.  
int.

BMSY DIMENSIONS AND MOUNTING DATA



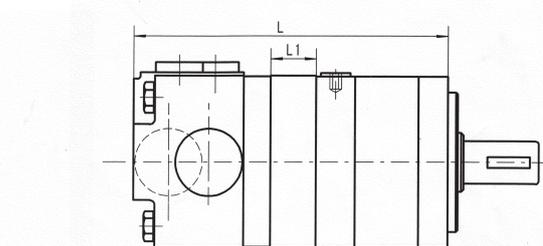
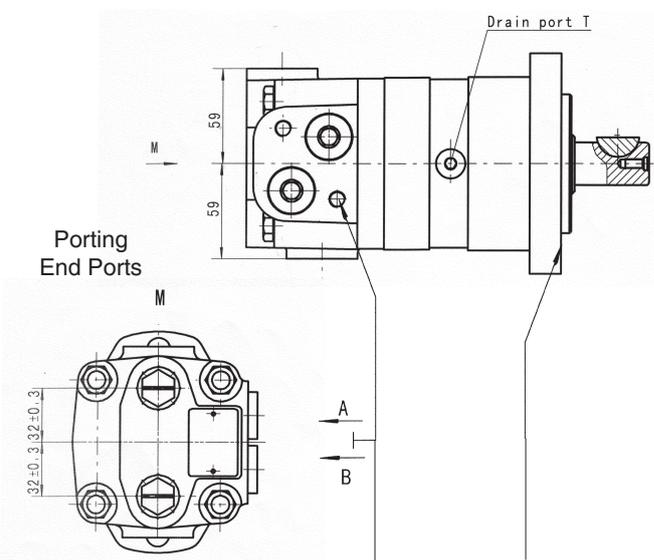
Model	L	L1	L2
BMSY-80	170	16	126.5
BMSY-100	174	20	130.5
BMSY-125	179	25	135.5
BMSY-160	181	27	137.5
BMSY-200	188	34	144.5
BMSY-250	196	42	152.5
BMSY-315	208	54	164.5
BMSY-400	223	69	179.5
BMSY-475	237	83	193.5

Model	L	L1	L2
BMSY-80-W	132.5	16	89
BMSY-100-W	136.5	20	93
BMSY-125-W	141.5	25	98
BMSY-160-W	143.5	27	100
BMSY-200-W	150.5	34	107
BMSY-250-W	158.5	42	115
BMSY-315-W	170.5	54	127
BMSY-400-W	185.5	69	142
BMSY-475-W	199.5	83	156

Note: If the mounting SP is used, the dimensions of L and L2 should plus 12mm.

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2(15)	M22x1.5(15)	7/8-14 O-ring (17)	1/2-14NPTF (15)
T	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10(13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)

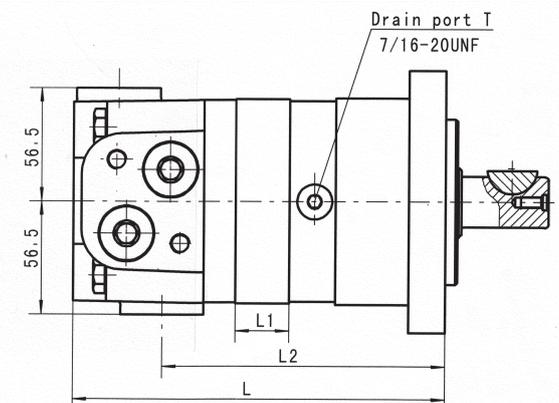
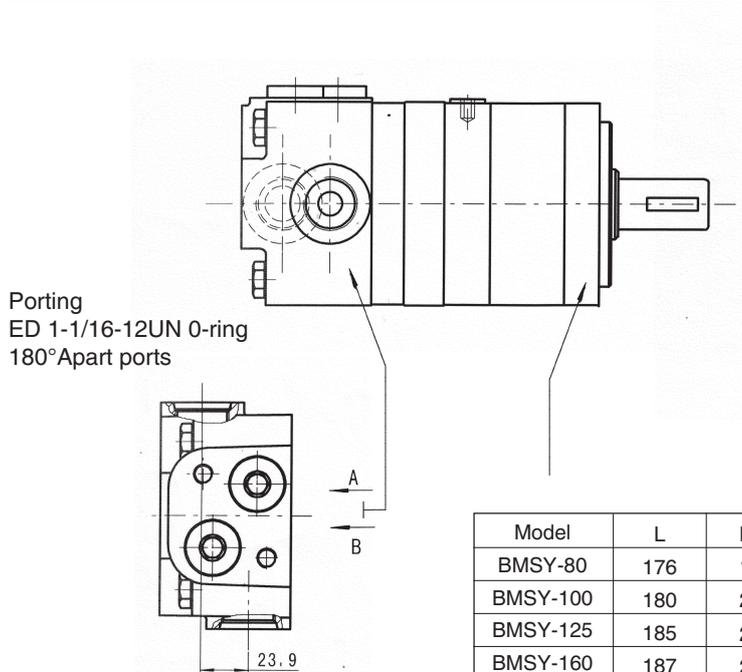
BMSY DIMENSIONS AND MOUNTING DATA



End Ports P(A/B)

Model	L	L1	Model	L	L1
BMSY-80	176	16	BMSY-80-WE	148	16
BMSY-100	180	20	BMSY-100-WE	152	20
BMSY-125	185	25	BMSY-125-WE	157	25
BMSY-160	187	27	BMSY-160-WE	159	27
BMSY-200	194	34	BMSY-200-WE	166	34
BMSY-250	202	42	BMSY-250-WE	174	42
BMSY-315	214	54	BMSY-315-WE	186	54
BMSY-400	229	69	BMSY-400-WE	201	69
BMSY-475	243	83	BMSY-475-WE	215	83

Code	EE-D (depth)	EE-M2 (depth)	EE-S2 (depth)
Mounting			
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (17)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)



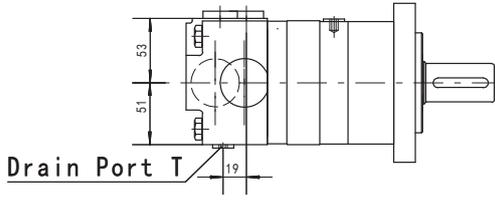
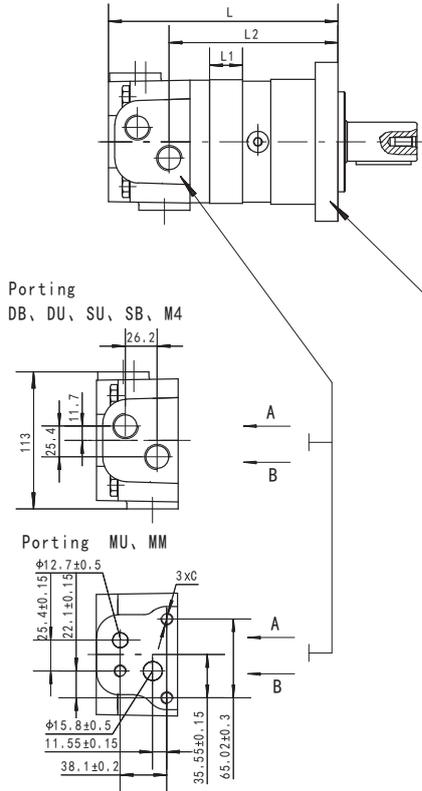
Porting ED 1-1/16-12UN O-ring 180° Apart ports

Model	L	L1	L2
BMSY-80	176	16	130
BMSY-100	180	20	134
BMSY-125	185	25	139
BMSY-160	187	27	141
BMSY-200	194	34	148
BMSY-250	202	42	156
BMSY-315	214	54	168
BMSY-400	229	69	183
BMSY-475	243	83	197

Model	L	L1	L2
BMSY-80-WE	148	16	102
BMSY-100-WE	152	20	106
BMSY-125-WE	157	25	111
BMSY-160-WE	159	27	113
BMSY-200-WE	166	34	119
BMSY-250-WE	178	42	127
BMSY-315-WE	190	54	139
BMSY-400-WE	205	69	154
BMSY-475-WE	219	83	168

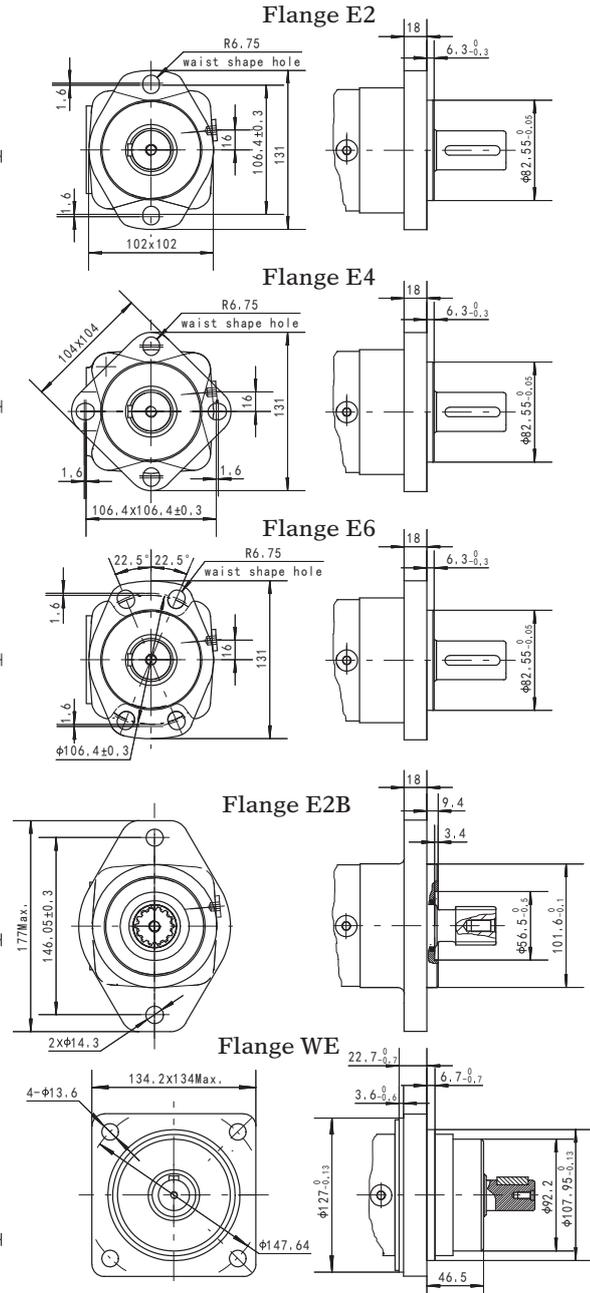
Code	ED (depth)
Mounting	
P(A,B)	1-1/16-12UN (18)
T	7/16-20UNF (12)

BMSY DIMENSIONS AND MOUNTING DATA



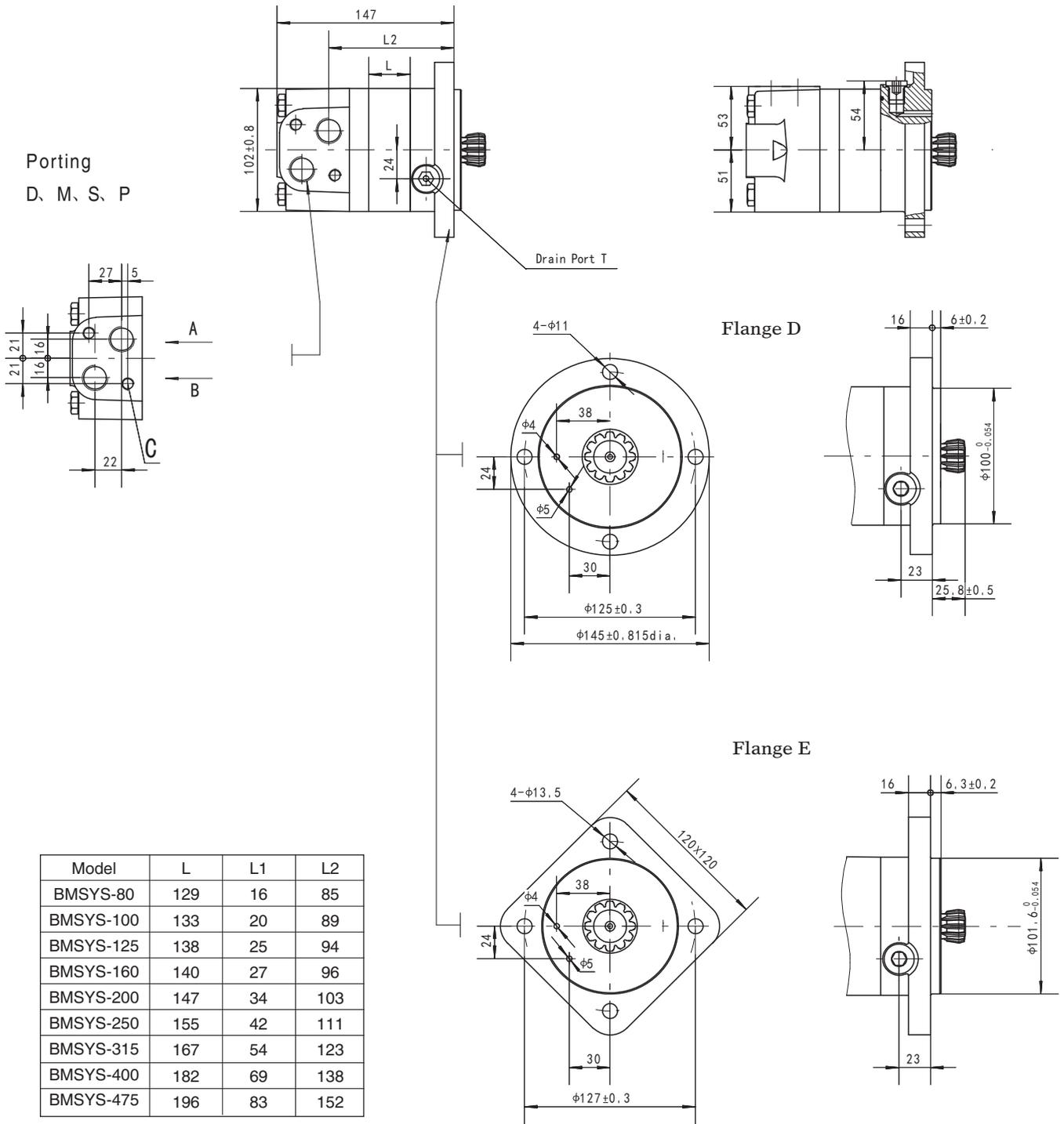
Model	L	L1	L2
BMSY-80	177	16	126.5
BMSY-100	181	20	130.5
BMSY-125	186	25	135.5
BMSY-160	188	27	137.5
BMSY-200	195	34	144.5
BMSY-250	203	42	152.5
BMSY-315	215	54	164.5
BMSY-400	230	69	179.5
BMSY-475	244	83	193.5

Model	L	L1	L2
BMSY-80-WE	148.5	16	98
BMSY-100-WE	152.5	20	102
BMSY-125-WE	157.5	25	107
BMSY-160-WE	159.5	27	109
BMSY-200-WE	166.5	34	116
BMSY-250-WE	174.5	42	124
BMSY-315-WE	186.5	54	136
BMSY-400-WE	201.5	69	151
BMSY-475-WE	215.5	83	165



Code	DB(depth)	DU (depth)	SU (depth)	SB (depth)	M4 (depth)	MU	MM
P(A,B)	G1/2(15)	G1/2(15)	7/8-14O-ring(17)	7/8-14O-ring(17)	M22x1.5(15)	Φ12.7,Φ15.8	Φ12.7,Φ15.8
T	G1/4(12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	G1/4(12)
C						3/8-16UNC	M10

BMSYS DIMENSIONS AND MOUNTING DATA

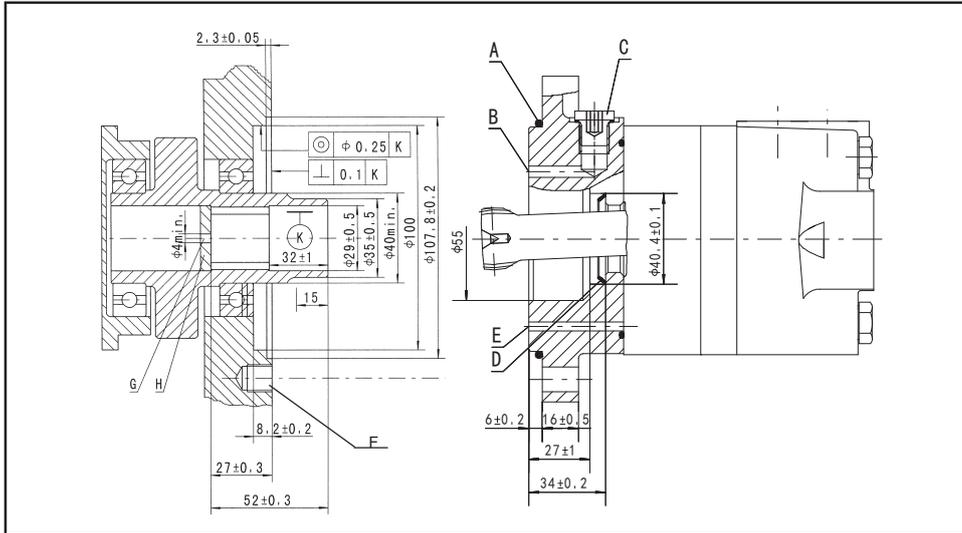


Model	L	L1	L2
BMSYS-80	129	16	85
BMSYS-100	133	20	89
BMSYS-125	138	25	94
BMSYS-160	140	27	96
BMSYS-200	147	34	103
BMSYS-250	155	42	111
BMSYS-315	167	54	123
BMSYS-400	182	69	138
BMSYS-475	196	83	152

Code	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2(15)	M22x1.5(15)	7/8-14O-ring(17)	1/2-14NPTF(15)
T	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10(13)	2-M10(13)	2-3/8-16UNC(13)	2-3/8-16UNC(13)



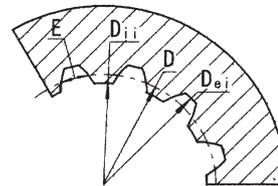
BMSYS DIMENSIONS AND MOUNTING DATA



- A: O-ring:100x3
- B: External drain channel
- C: Drain connection G 1/4;12 mm deep
- D: Conical seal ring
- E: Internal drain channel
- F: M10;min. 15mm deep
- G: Oil circulation hole
- H: Hardened stop plate

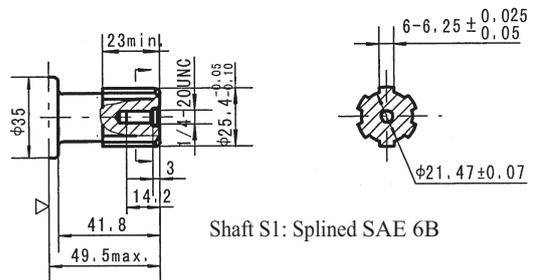
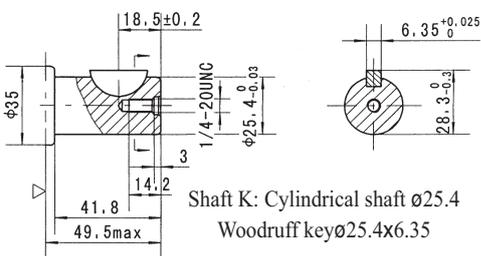
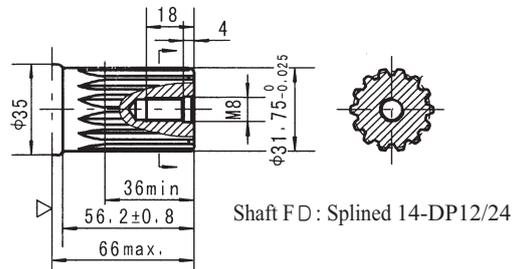
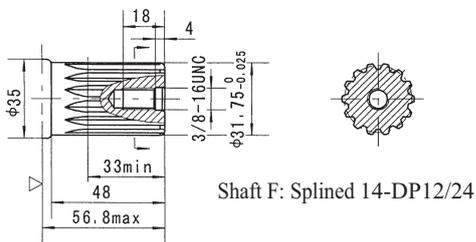
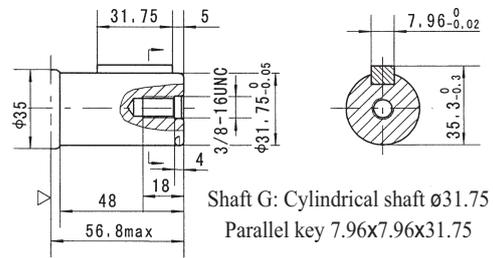
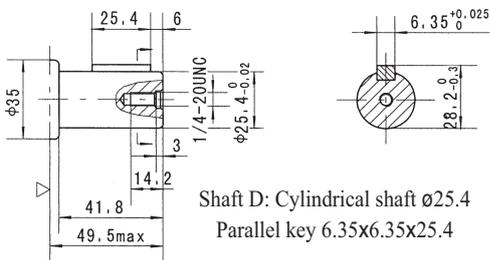
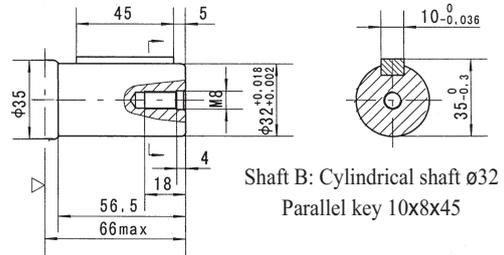
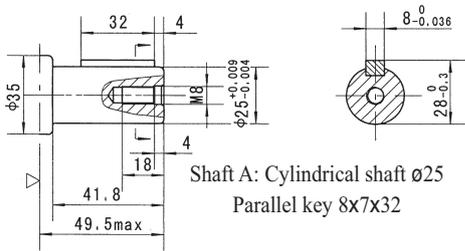
INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	$\alpha_d$	30°
Pitch Dia.	D	ø25.4
Major Dia.	$D_{ei}$	ø28 <sup>0</sup> <sub>-0.1</sub>
Minor Dia.	$D_{ii}$	ø23 <sup>+0.033</sup> <sub>0</sub>
Space Width [Circular]	E	4.308±0.02



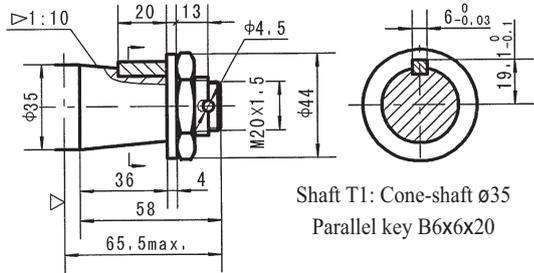
Hardening Specification: HRC 62±2  
Effective case depth 0.7±0.2

SHAFT EXTENSIONS FOR BMSY MOTORS

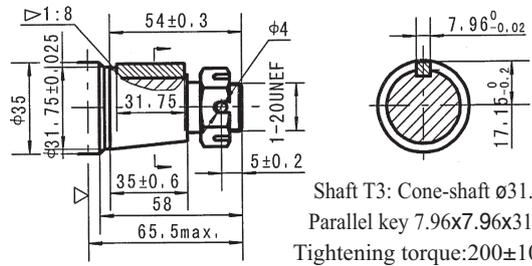


▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)

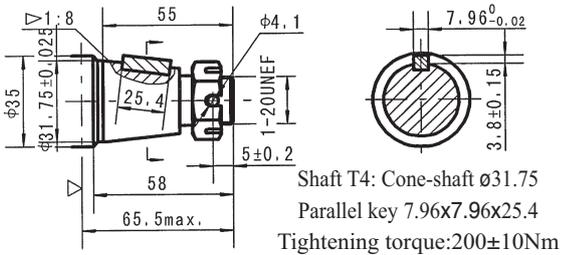
SHAFT EXTENSIONS FOR BMSY MOTORS



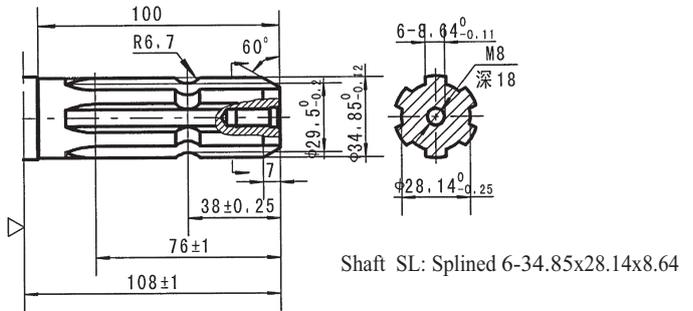
Shaft T1: Cone-shaft ø35  
Parallel key B6x6x20



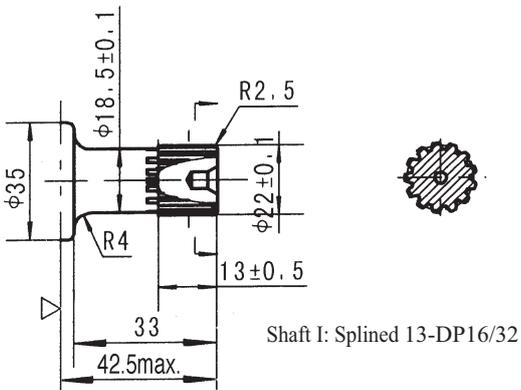
Shaft T3: Cone-shaft ø31.75  
Parallel key 7.96x7.96x31.75  
Tightening torque:200±10Nm



Shaft T4: Cone-shaft ø31.75  
Parallel key 7.96x7.96x25.4  
Tightening torque:200±10Nm



Shaft SL: Splined 6-34.85x28.14x8.64



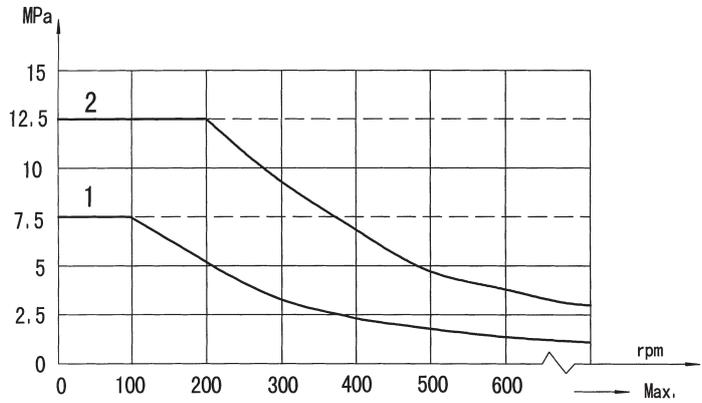
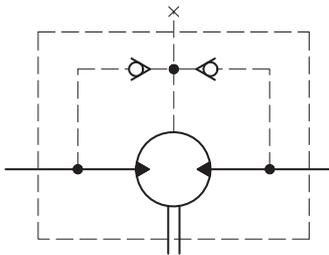
Shaft I: Splined 13-DP16/32

- ▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)  
Note:Mounting SP is the same with shaft modle T1、D、B、F and G.



## BMSY Series Hydraulic Motor

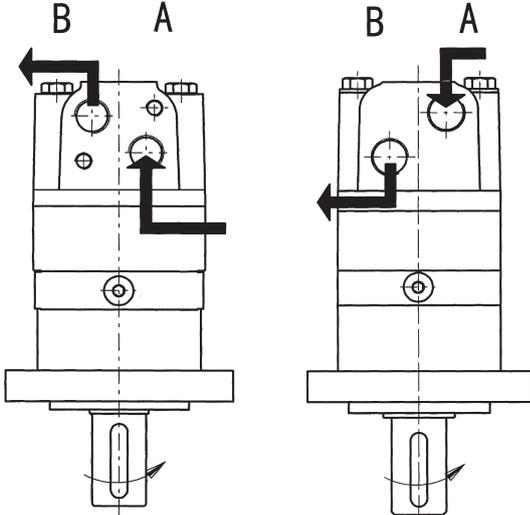
### Permissible shaft seal pressure



Note: 1. Chart for standard shaft seal;  
2. Chart for high pressure shaft seal.

### Standard 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.



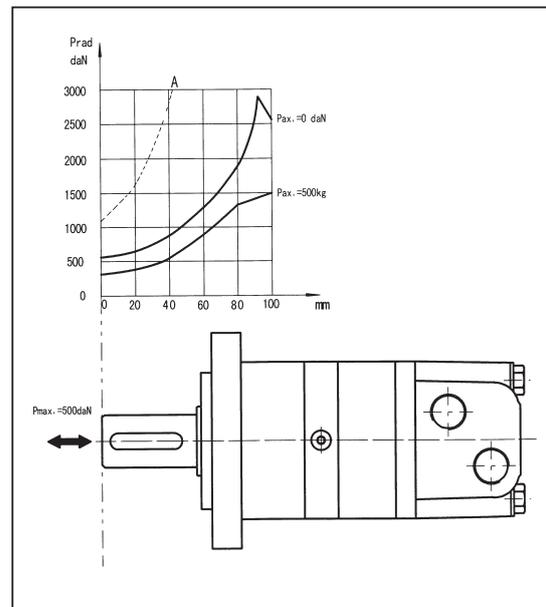
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

### Oil flow in drain line

The table shows the Max. oil flow in the drain line at a return pressure less than 0.5-1MPa.

Pressure drop (MPa)	Viscosity (mm <sup>2</sup> /s)	Oil flow in the drain line (L/min.)
14	20	1.5
	35	1
21	20	3
	35	2

### 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.

Order Information



Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function	
S			B Shaft Ø32 , parallel key 10x8x45 D Shaft Ø25.4 , parallel key 6.35x6.35x25.4 G Shaft Ø31.75 , parallel key 7.96x7.96x31.75 F Shaft Ø31.75 , splined key 14-DP12/24 FD Long Shaft Ø31.75 , splined key 14-DP12/24 SL shaft Ø34.85, Splined key 6-34.85x28.14x8.64 T1 Cone-shaft Ø35 , parallel key B6x6x20 T3 Cone-shaft Ø 31.75 , parallel key 7.96x7.96x31.75 S1 Shaft Ø25.4 , splined key SAE 6B I Sub-shaft Ø22 , splined key 13-DP16/32	D G1/2 Manifold Mount 2-M10, G1/4 M M22x1.5 Manifold Mount 2-M10, M14x1.5 S 7/8-14UNF O-ring manifold 2-3/8-16, 7/16-20UNF P 1/2-14NPTF manifold 2-3/8-16UNC, 7/16-20UNF	Omit Standard R Opposite	00 Blue Black Silver gray	Omit F LS	Standard Free Running Low Speed
			Dmit Short shaft 12-DP12/24					
			Emit Short shaft 12-DP12/24					
			Emit Short shaft 12-DP12/24					
			Emit Short shaft 12-DP12/24					
			Emit Short shaft 12-DP12/24					
			Emit Short shaft 12-DP12/24					
			Emit Short shaft 12-DP12/24					
			Emit Short shaft 12-DP12/24					
			Emit Short shaft 12-DP12/24					
			Emit Short shaft 12-DP12/24					

Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function	
S			A Shaft Ø25 , parallel key 8x7x32 B Shaft Ø32 , parallel key 10x8x45 K Shaft Ø25.4 , Woodruff key Ø25.4x6.35 G Shaft Ø31.75 , parallel key 7.96x7.96x31.75 F Shaft Ø31.75 , splined key 14-DP12/24 FE Shaft Ø31.75 , splined key 14-DP12/24 T4 Cone-shaft Ø31.75 , parallel key 7.96x7.96x25.4 S1 Shaft Ø25.4 , splined key SAE 6B I Sub-shaft Ø21.74 , splined key 13-DP16/32	EE-D G1/2, G1/4 EE-M 2M22x1.5, M14x1.5 EE-S2 7/8-14UNF O-ring, 7/16-20 UNF ED 1-1/16-12UN O-ring, 7/16-20 UNF DB G1/2, G1/4 DU G1/2, 7/16-20 UNF SB 7/8-14UNF O-ring, G1/4 SU 7/8-14UNF O-ring, 7/16-20 UNF M4 M22x1.5, M14x1.5 MU 1/2", 5/8" Crosshole Manifold 3x3/8-16UNC, 7/16-20UNF MM 1/2", 5/8" Crosshole Manifold 3xM10, G1/4 G G1/2, G1/4 M2 M22x1.5, M14x1.5 S2 7/8-14UNF O-ring, 7/16-20 UNF	Omit Standard R Opposite	00 Blue Black Silver gray	Omit F LS	Standard Free Running Low Speed
			Amit Short shaft 12-DP12/24					
			Amit Short shaft 12-DP12/24					
			Amit Short shaft 12-DP12/24					
			Amit Short shaft 12-DP12/24					
			Amit Short shaft 12-DP12/24					
			Amit Short shaft 12-DP12/24					
			Amit Short shaft 12-DP12/24					
			Amit Short shaft 12-DP12/24					
			Amit Short shaft 12-DP12/24					
			Amit Short shaft 12-DP12/24					

Note: When the table is used, please fill the code of left rows in the table and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. The information of mounting flange, output shaft and ports are the same as BMS series. The SP flange afflies to shafts of T1, D, B, F, G. If the specification is not in the table or you have specific requirements, please contact us.