



## M104- SERIES HYDRAULIC MOTOR TYPE CHARLYNN

M104- Type Charlynn is a 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 feautures:

- \* The motor has the same dimensions and mounting data as the hydraulic motors type BMS.
- \* The motor is described with 15-20% higher technical data(Max. torque and Max. pressure drop), thereby higher power. The new motor is suitable for vehicles with greater loads and pressure drop.

### Main Specificaion

| Type                                           |       | M104<br>80 | M104<br>100 | M104<br>125 | M104<br>160 | M104<br>200 | M104<br>250 | M104<br>315 | M104<br>400 | M104<br>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.  | 250        | 320         | 400         | 540         | 645         | 806         | 960         | 960         | 960         |
| 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.  | 22.5       | 22.5        | 22.5        | 22.5        | 22.5        | 22.5        | 22.5        | 17.5        | 15          |
|                                                | peak  | 29.5       | 29.5        | 29.5        | 22.5        | 22.5        | 22.5        | 22.5        | 20          | 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

M104-80 [80.6cm³/rev.]

Pressure (MPa)

|              |          | Max.cont. Max.int. |            |            |            |            |                |
|--------------|----------|--------------------|------------|------------|------------|------------|----------------|
|              |          | 3.5                | 7          | 10.5       | 14         | 17.5       | 20.5 22.5      |
| Flow (L/min) | 15       | 35                 | 80         | 120        | 158        | 195        | 228 249        |
|              |          | <b>180</b>         | <b>174</b> | <b>168</b> | <b>164</b> | <b>158</b> | <b>151 143</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>322 310</b> |
|              | 40       | 35                 | 79         | 119        | 155        | 193        | 227 250        |
| Max.cont.    | 50       | <b>487</b>         | <b>480</b> | <b>468</b> | <b>457</b> | <b>446</b> | <b>438 425</b> |
|              |          | 30                 | 77         | 117        | 153        | 192        | 224 248        |
|              | 60       | <b>612</b>         | <b>603</b> | <b>592</b> | <b>581</b> | <b>572</b> | <b>558 542</b> |
|              |          | 28                 | 77         | 117        | 153        | 192        | 224 243        |
|              | Max.int. | <b>735</b>         | <b>726</b> | <b>718</b> | <b>703</b> | <b>687</b> | <b>673 646</b> |
| Max.int.     |          | 26                 | 75         | 116        | 151        | 188        | 217 236        |
|              | 65       | <b>794</b>         | <b>786</b> | <b>773</b> | <b>760</b> | <b>744</b> | <b>722 706</b> |
|              | 80       | <b>981</b>         | <b>968</b> | <b>955</b> | <b>925</b> | <b>893</b> | <b>870 832</b> |

M104-100 [100.8cm³/rev.]

Pressure (MPa)

|              |          | Max.cont. Max.int. |            |            |            |            |                |
|--------------|----------|--------------------|------------|------------|------------|------------|----------------|
|              |          | 3.5                | 7          | 10.5       | 14         | 17.5       | 20.5 22.5      |
| Flow (L/min) | 15       | 48                 | 95         | 150        | 200        | 250        | 282 310        |
|              |          | <b>146</b>         | <b>144</b> | <b>139</b> | <b>135</b> | <b>130</b> | <b>120 105</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>258 242</b> |
|              | 40       | 43                 | 89         | 142        | 196        | 248        | 288 316        |
| Max.cont.    | 50       | <b>387</b>         | <b>384</b> | <b>374</b> | <b>359</b> | <b>350</b> | <b>335 320</b> |
|              |          | 40                 | 88         | 135        | 194        | 247        | 286 315        |
|              | 60       | <b>486</b>         | <b>483</b> | <b>473</b> | <b>462</b> | <b>450</b> | <b>430 420</b> |
|              |          | 37                 | 88         | 132        | 185        | 244        | 283 312        |
|              | Max.int. | <b>588</b>         | <b>584</b> | <b>574</b> | <b>562</b> | <b>550</b> | <b>538 520</b> |
| Max.int.     |          | 35                 | 80         | 130        | 180        | 240        | 279 310        |
|              | 75       | <b>740</b>         | <b>735</b> | <b>720</b> | <b>705</b> | <b>696</b> | <b>676 653</b> |
|              | 90       | <b>850</b>         | <b>840</b> | <b>810</b> | <b>787</b> | <b>770</b> | <b>750 747</b> |

M104-125 [125cm³/rev.]

Pressure (MPa)

|              |          | Max.cont. Max.int. |            |            |            |            |                |
|--------------|----------|--------------------|------------|------------|------------|------------|----------------|
|              |          | 3.5                | 7          | 10.5       | 14         | 17.5       | 20.5 22.5      |
| Flow (L/min) | 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 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>188 172</b> |
|              | 40       | 53                 | 118        | 178        | 250        | 315        | 364 403        |
| Max.cont.    | 50       | <b>312</b>         | <b>309</b> | <b>290</b> | <b>289</b> | <b>278</b> | <b>262 235</b> |
|              |          | 50                 | 115        | 176        | 248        | 315        | 362 397        |
|              | 60       | <b>391</b>         | <b>386</b> | <b>378</b> | <b>365</b> | <b>352</b> | <b>339 308</b> |
|              |          | 45                 | 113        | 171        | 241        | 308        | 358 397        |
|              | Max.int. | <b>469</b>         | <b>461</b> | <b>450</b> | <b>437</b> | <b>425</b> | <b>400 372</b> |
| Max.int.     |          | 45                 | 110        | 167        | 240        | 306        | 352 389        |
|              | 75       | <b>588</b>         | <b>574</b> | <b>560</b> | <b>544</b> | <b>526</b> | <b>505 481</b> |
|              | 90       | <b>710</b>         | <b>696</b> | <b>680</b> | <b>661</b> | <b>646</b> | <b>628 610</b> |

M104-160 [154cm³/rev.]

Pressure (MPa)

|              |          | Max.cont. Max.int. |            |            |            |            |                |
|--------------|----------|--------------------|------------|------------|------------|------------|----------------|
|              |          | 3.5                | 7          | 10.5       | 14         | 17.5       | 21 22.5        |
| Flow (L/min) | 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 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>162 153</b> |
|              | 40       | 75                 | 152        | 228        | 314        | 383        | 454 488        |
| Max.cont.    | 50       | <b>252</b>         | <b>250</b> | <b>246</b> | <b>239</b> | <b>234</b> | <b>228 212</b> |
|              |          | 70                 | 148        | 225        | 305        | 372        | 445 480        |
|              | 60       | <b>313</b>         | <b>310</b> | <b>306</b> | <b>298</b> | <b>293</b> | <b>285 272</b> |
|              |          | 68                 | 143        | 218        | 296        | 370        | 442 480        |
|              | Max.int. | <b>378</b>         | <b>376</b> | <b>370</b> | <b>362</b> | <b>353</b> | <b>346 332</b> |
| Max.int.     |          | 62                 | 140        | 211        | 291        | 365        | 439 475        |
|              | 75       | <b>475</b>         | <b>469</b> | <b>461</b> | <b>450</b> | <b>441</b> | <b>432 414</b> |
|              | 90       | <b>567</b>         | <b>561</b> | <b>554</b> | <b>543</b> | <b>532</b> | <b>520 509</b> |

TORQUE(N•m) 301  
SPEED (r/min) 646

cont.  
int.

## Performance Data

M104-200 [194cm<sup>3</sup>/rev.]

|              |    | Pressure (MPa) |            |            |            |            |            |            |
|--------------|----|----------------|------------|------------|------------|------------|------------|------------|
|              |    |                |            |            |            |            | Max.cont.  | Max.int.   |
|              |    | 3.5            | 7          | 10.5       | 14         | 17.5       | 21         | 22.5       |
| Flow (L/min) | 15 | 87             | 179        | 273        | 371        | 471        | 562        | 610        |
|              |    | <b>74</b>      | <b>73</b>  | <b>71</b>  | <b>68</b>  | <b>64</b>  | <b>60</b>  | <b>48</b>  |
|              | 30 | 91             | 190        | 288        | 386        | 489        | 572        | 618        |
|              |    | <b>150</b>     | <b>148</b> | <b>143</b> | <b>140</b> | <b>134</b> | <b>128</b> | <b>119</b> |
|              | 40 | 94             | 193        | 296        | 394        | 498        | 584        | 645        |
|              |    | <b>198</b>     | <b>195</b> | <b>192</b> | <b>188</b> | <b>183</b> | <b>178</b> | <b>167</b> |
| Max.cont.    | 50 | 90             | 191        | 292        | 389        | 493        | 580        | 634        |
|              |    | <b>248</b>     | <b>246</b> | <b>241</b> | <b>236</b> | <b>230</b> | <b>223</b> | <b>212</b> |
|              | 60 | 85             | 185        | 279        | 382        | 483        | 575        | 622        |
| Max.int.     |    | <b>300</b>     | <b>295</b> | <b>288</b> | <b>281</b> | <b>273</b> | <b>263</b> | <b>251</b> |
|              | 75 | 78             | 176        | 271        | 370        | 472        | 561        | 610        |
|              |    | <b>374</b>     | <b>370</b> | <b>364</b> | <b>360</b> | <b>352</b> | <b>340</b> | <b>331</b> |
| Max.int.     | 90 | 68             | 163        | 265        | 361        | 456        | 545        | 599        |
|              |    | <b>443</b>     | <b>440</b> | <b>435</b> | <b>428</b> | <b>424</b> | <b>413</b> | <b>400</b> |

M104-250 [243cm<sup>3</sup>/rev.]

|              |    | Pressure (MPa) |            |            |            |            |            |            |
|--------------|----|----------------|------------|------------|------------|------------|------------|------------|
|              |    |                |            |            |            |            | Max.cont.  | Max.int.   |
|              |    | 3.5            | 7          | 10.5       | 14         | 17.5       | 20         | 22.5       |
| Flow (L/min) | 15 | 110            | 231        | 351        | 462        | 585        | 681        | 778        |
|              |    | <b>59</b>      | <b>58</b>  | <b>56</b>  | <b>53</b>  | <b>50</b>  | <b>46</b>  | <b>35</b>  |
|              | 30 | 116            | 236        | 359        | 475        | 597        | 700        | 790        |
|              |    | <b>119</b>     | <b>117</b> | <b>114</b> | <b>108</b> | <b>102</b> | <b>92</b>  | <b>80</b>  |
|              | 40 | 118            | 241        | 363        | 480        | 599        | 706        | 796        |
|              |    | <b>162</b>     | <b>159</b> | <b>156</b> | <b>150</b> | <b>143</b> | <b>134</b> | <b>121</b> |
| Max.cont.    | 50 | 111            | 234        | 352        | 472        | 591        | 693        | 788        |
|              |    | <b>203</b>     | <b>201</b> | <b>197</b> | <b>191</b> | <b>182</b> | <b>173</b> | <b>158</b> |
|              | 60 | 106            | 224        | 345        | 462        | 582        | 685        | 772        |
| Max.int.     |    | <b>244</b>     | <b>242</b> | <b>237</b> | <b>230</b> | <b>220</b> | <b>208</b> | <b>194</b> |
|              | 75 | 101            | 214        | 340        | 454        | 570        | 670        | 760        |
|              |    | <b>303</b>     | <b>299</b> | <b>294</b> | <b>285</b> | <b>272</b> | <b>260</b> | <b>244</b> |
| Max.int.     | 90 | 93             | 209        | 335        | 447        | 559        | 657        | 749        |
|              |    | <b>363</b>     | <b>359</b> | <b>354</b> | <b>348</b> | <b>340</b> | <b>328</b> | <b>303</b> |

M104-315 [311cm<sup>3</sup>/rev.]

|              |    | Pressure (MPa) |            |            |            |            |            |            |
|--------------|----|----------------|------------|------------|------------|------------|------------|------------|
|              |    |                |            |            |            |            | Max.cont.  | Max.int.   |
|              |    | 3.5            | 7          | 10.5       | 14         | 17.5       | 20         | 22.5       |
| Flow (L/min) | 15 | 148            | 304        | 456        | 613        | 762        | 879        | 978        |
|              |    | <b>48</b>      | <b>47</b>  | <b>45</b>  | <b>43</b>  | <b>41</b>  | <b>39</b>  | <b>27</b>  |
|              | 30 | 155            | 314        | 465        | 635        | 778        | 884        | 988        |
|              |    | <b>95</b>      | <b>93</b>  | <b>91</b>  | <b>89</b>  | <b>86</b>  | <b>82</b>  | <b>67</b>  |
|              | 40 | 160            | 321        | 479        | 650        | 796        | 906        | 997        |
|              |    | <b>127</b>     | <b>125</b> | <b>121</b> | <b>117</b> | <b>115</b> | <b>109</b> | <b>91</b>  |
| Max.cont.    | 50 | 155            | 314        | 465        | 638        | 780        | 886        | 988        |
|              |    | <b>159</b>     | <b>157</b> | <b>153</b> | <b>149</b> | <b>145</b> | <b>142</b> | <b>128</b> |
|              | 60 | 151            | 306        | 453        | 620        | 765        | 886        | 976        |
| Max.int.     |    | <b>187</b>     | <b>185</b> | <b>181</b> | <b>176</b> | <b>169</b> | <b>157</b> | <b>143</b> |
|              | 75 | 146            | 300        | 445        | 613        | 755        | 875        | 966        |
|              |    | <b>238</b>     | <b>236</b> | <b>232</b> | <b>227</b> | <b>224</b> | <b>220</b> | <b>196</b> |
| Max.int.     | 90 | 135            | 284        | 436        | 601        | 740        | 863        | 952        |
|              |    | <b>286</b>     | <b>283</b> | <b>278</b> | <b>272</b> | <b>265</b> | <b>257</b> | <b>232</b> |

M104-400 [394cm<sup>3</sup>/rev.]

|              |    | Pressure (MPa) |            |            |            |            |            |          |
|--------------|----|----------------|------------|------------|------------|------------|------------|----------|
|              |    |                |            |            |            |            | Max.cont.  | Max.int. |
|              |    | 3.5            | 7          | 10.5       | 14         | 16         | 17.5       |          |
| Flow (L/min) | 15 | 186            | 379        | 578        | 779        | 896        | 986        |          |
|              |    | <b>37</b>      | <b>36</b>  | <b>35</b>  | <b>33</b>  | <b>31</b>  | <b>29</b>  |          |
|              | 30 | 190            | 388        | 590        | 791        | 905        | 991        |          |
|              |    | <b>75</b>      | <b>73</b>  | <b>71</b>  | <b>68</b>  | <b>65</b>  | <b>61</b>  |          |
|              | 40 | 195            | 394        | 596        | 797        | 912        | 998        |          |
|              |    | <b>99</b>      | <b>97</b>  | <b>95</b>  | <b>93</b>  | <b>90</b>  | <b>85</b>  |          |
| Max.cont.    | 50 | 191            | 388        | 587        | 785        | 904        | 983        |          |
|              |    | <b>125</b>     | <b>123</b> | <b>118</b> | <b>114</b> | <b>109</b> | <b>102</b> |          |
|              | 60 | 186            | 388        | 587        | 785        | 904        | 983        |          |
| Max.int.     |    | <b>149</b>     | <b>146</b> | <b>142</b> | <b>137</b> | <b>131</b> | <b>122</b> |          |
|              | 75 | 181            | 372        | 576        | 770        | 891        | 973        |          |
|              |    | <b>187</b>     | <b>183</b> | <b>177</b> | <b>171</b> | <b>164</b> | <b>153</b> |          |
| Max.int.     | 90 | 176            | 367        | 571        | 766        | 883        | 965        |          |
|              |    | <b>226</b>     | <b>221</b> | <b>214</b> | <b>208</b> | <b>199</b> | <b>183</b> |          |

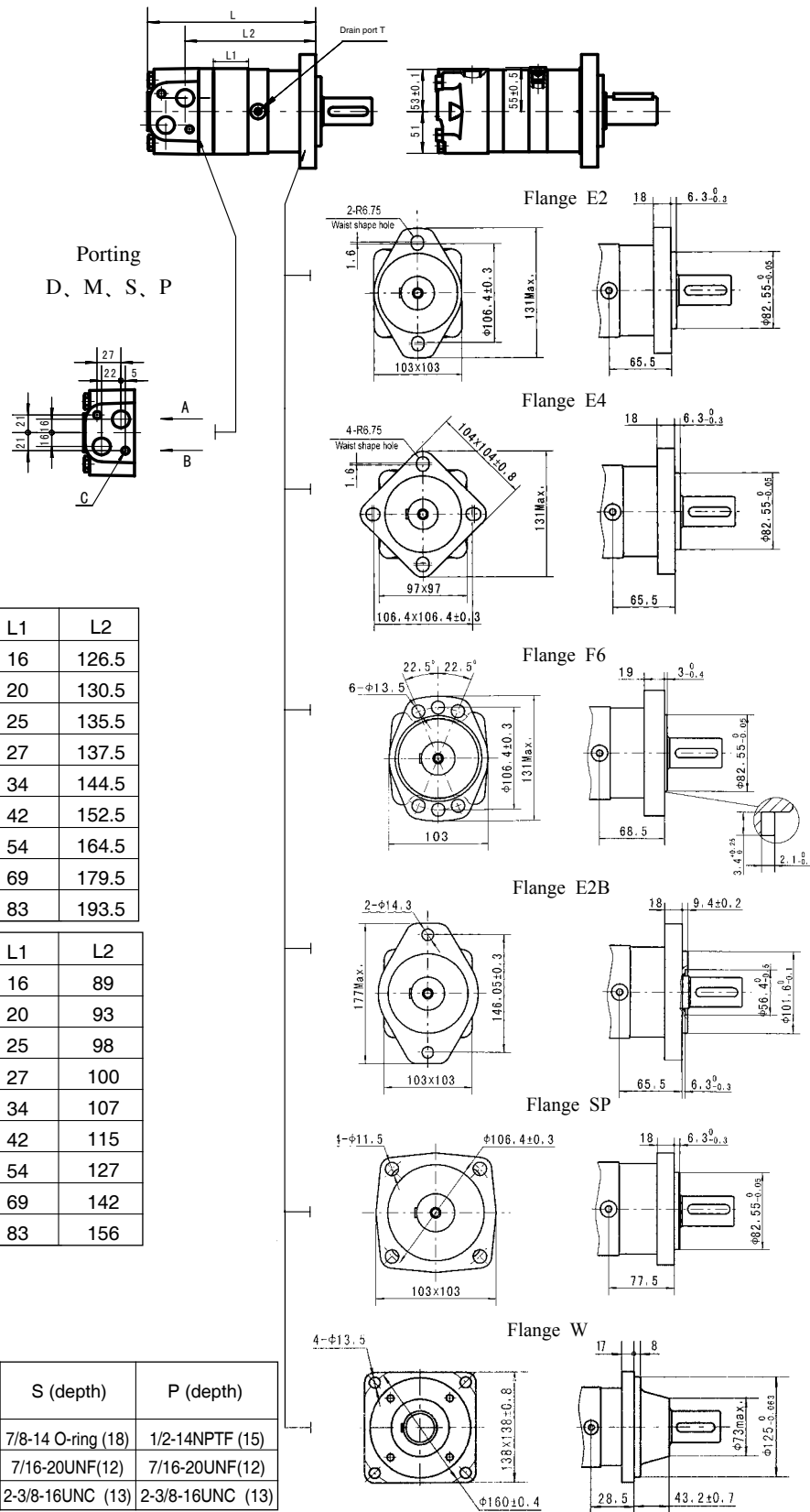
M104-475 [475cm<sup>3</sup>/rev.]

|              |    | Pressure (MPa) |            |            |            |            | Max.cont. | Max.int. |
|--------------|----|----------------|------------|------------|------------|------------|-----------|----------|
|              |    | 3.5            | 7          | 10.5       | 14         | 15         |           |          |
| Flow (L/min) | 15 | 218            | 439        | 661        | 892        | 995        |           |          |
|              |    | <b>30</b>      | <b>29</b>  | <b>28</b>  | <b>27</b>  | <b>25</b>  |           |          |
|              | 30 | 223            | 450        | 676        | 910        | 1002       |           |          |
|              |    | <b>61</b>      | <b>60</b>  | <b>58</b>  | <b>56</b>  | <b>53</b>  |           |          |
|              | 40 | 228            | 461        | 689        | 927        | 1017       |           |          |
|              |    | <b>82</b>      | <b>80</b>  | <b>77</b>  | <b>74</b>  | <b>68</b>  |           |          |
| Max.cont.    | 50 | 224            | 456        | 682        | 920        | 1008       |           |          |
|              |    | <b>103</b>     | <b>101</b> | <b>97</b>  | <b>92</b>  | <b>86</b>  |           |          |
|              | 60 | 220            | 451        | 677        | 913        | 998        |           |          |
| Max.int.     |    | <b>123</b>     | <b>121</b> | <b>118</b> | <b>112</b> | <b>105</b> |           |          |
|              | 75 | 212            | 443        | 664        | 901        | 980        |           |          |
|              |    | <b>155</b>     | <b>153</b> | <b>147</b> | <b>140</b> | <b>132</b> |           |          |
| Max.int.     | 90 | 196            | 421        | 643        | 877        | 959        |           |          |
|              |    | <b>186</b>     | <b>184</b> | <b>178</b> | <b>170</b> | <b>157</b> |           |          |

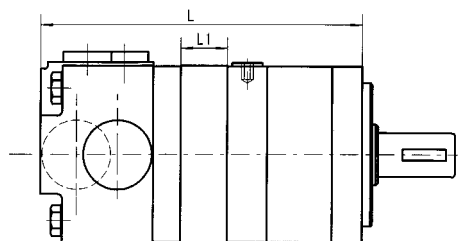
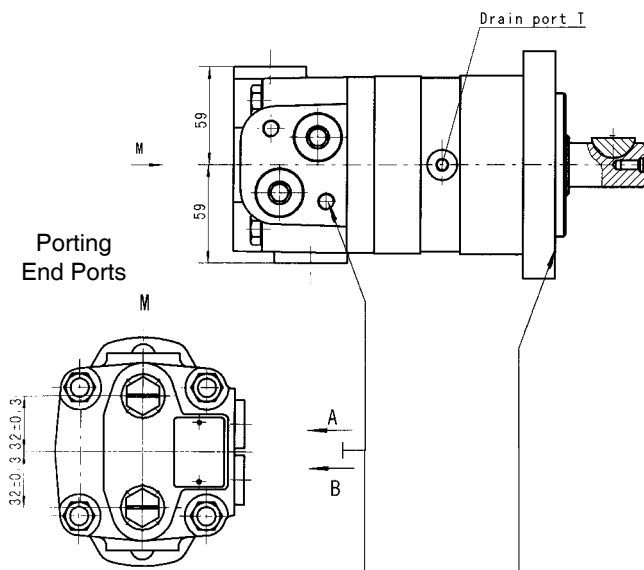
TORQUE (N•m) 766  
SPEED (rpm) 208

cont.  
int.

## M104- DIMENSIONS AND MOUNTING DATA



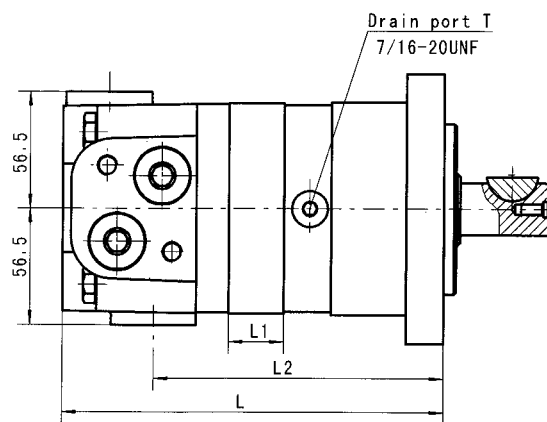
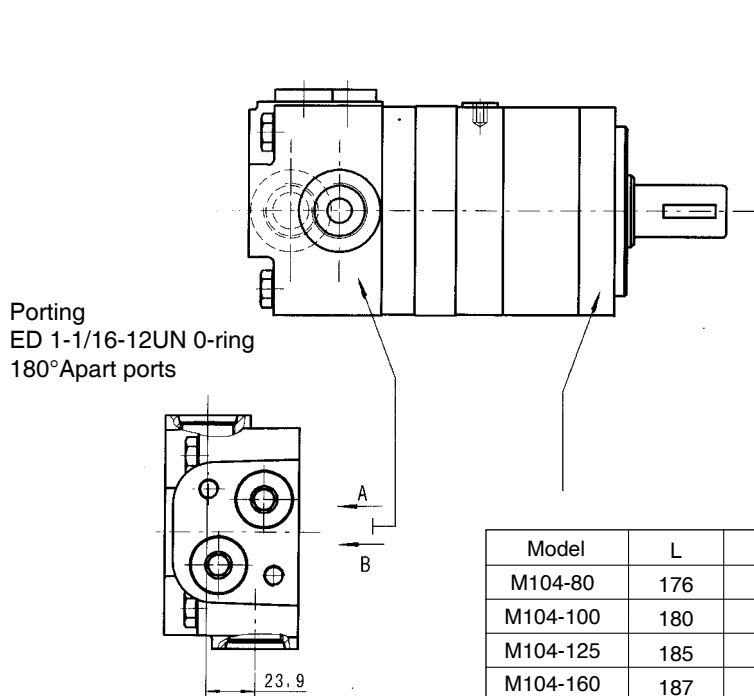
## M104 DIMENSIONS AND MOUNTING DATA



End Ports P(A\B)

| Model    | L   | L1 | Model       | L   | L1 |
|----------|-----|----|-------------|-----|----|
| M104-80  | 176 | 16 | M104-80-WE  | 148 | 16 |
| M104-100 | 180 | 20 | M104-100-WE | 152 | 20 |
| M104-125 | 185 | 25 | M104-125-WE | 157 | 25 |
| M104-160 | 187 | 27 | M104-160-WE | 159 | 27 |
| M104-200 | 194 | 34 | M104-200-WE | 166 | 34 |
| M104-250 | 202 | 42 | M104-250-WE | 174 | 42 |
| M104-315 | 214 | 54 | M104-315-WE | 186 | 54 |
| M104-400 | 229 | 69 | M104-400-WE | 201 | 69 |
| M104-475 | 243 | 83 | M104-475-WE | 215 | 83 |

| Code<br>Mounting | EE-D (depth) | EE-M2 (depth)  | EE-S2 (depth)      |
|------------------|--------------|----------------|--------------------|
| P(A,B)           | G1/2 (18)    | M22 x 1.5 (18) | 7/8-14 O-ring (18) |
| T                | G1/4 (12)    | M14 x 1.5 (12) | 7/16-20UNF(12)     |



| Code<br>Mounting | ED (depth) |
|------------------|------------|
| P(A,B)           | G1/2 (18)  |
| T                | G1/4 (12)  |

| Model    | L   | L1 | L2  |
|----------|-----|----|-----|
| M104-80  | 176 | 16 | 130 |
| M104-100 | 180 | 20 | 134 |
| M104-125 | 185 | 25 | 139 |
| M104-160 | 187 | 27 | 141 |
| M104-200 | 194 | 34 | 148 |
| M104-250 | 202 | 42 | 156 |
| M104-315 | 214 | 54 | 168 |
| M104-400 | 229 | 69 | 183 |
| M104-475 | 243 | 83 | 197 |

| Model       | L   | L1 | L2  |
|-------------|-----|----|-----|
| M104-80-WE  | 148 | 16 | 102 |
| M104-100-WE | 152 | 20 | 106 |
| M104-125-WE | 157 | 25 | 111 |
| M104-160-WE | 159 | 27 | 113 |
| M104-200-WE | 166 | 34 | 119 |
| M104-250-WE | 178 | 42 | 127 |
| M104-315-WE | 190 | 54 | 139 |
| M104-400-WE | 205 | 69 | 154 |
| M104-475-WE | 219 | 83 | 168 |

## Order Information

|      |   |   |   |   |   |   |   |   |
|------|---|---|---|---|---|---|---|---|
|      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| M104 |   |   |   |   |   |   |   |   |

| Pos.1 | 2     | 3                     |                                                    | 4            |                                                       | 5                                                |                                                                                                                                                                                                                                                                                           | 6                  |                      | 7                    |                                          | 8                     |                                                      |
|-------|-------|-----------------------|----------------------------------------------------|--------------|-------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------|----------------------|------------------------------------------|-----------------------|------------------------------------------------------|
| Code  | Disp. | Flange , Pilot , Port |                                                    | Output Shaft |                                                       | Port and Drain Port                              |                                                                                                                                                                                                                                                                                           | Rotation direction |                      | Paint                |                                          | Unusually function    |                                                      |
| Omit  | 80    | E2                    | 2-Ø13.5 Rhomb-flange Ø106.4,<br>Pilot Ø82.5 × 6.3  | A            | Shaft Ø25,Parllel key 8 × 7 × 32                      | D<br>M<br>S<br>P<br>EE-D<br>EE-M2<br>EE-S2<br>ED | G1/2 Manifold Mount 2-M10,G1/4<br>M22 × 1.5 Manifold Mount 2-M10,<br>M14 × 1.5<br>7/8-14UNF O-ring manifold<br>2-3/8-16,7/16-20UNF<br>1/2-14NPTF manifold<br>2-3/8-16UNC,7/16-20UNF<br>G1/2,G1/4<br>M22 × 1.5,M14 × 1.5<br>7/8-14UNF O-ring,7/16-20 UNF<br>1-1/16-12UN O-ring,7/16-20 UNF | Omit<br>R          | Standard<br>Opposite | 00<br>Omit<br>B<br>S | No paint<br>Blue<br>Black<br>Sliver Grey | Omit<br>LL<br>F<br>LS | Standard<br>Low Leakage<br>Free Running<br>Low Speed |
|       | 100   | E4                    | 4-Ø13.5 Rhomb-flange Ø106.4,<br>Pilot Ø82.5 × 6.3  | B            | Shaft Ø32,Parllel key 10 × 8 × 45                     |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |
|       | 125   |                       |                                                    | D            | Shaft Ø25.4,<br>Parllel key 6.35 × 6.35 × 25.4        |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |
|       | 160   | F6                    | 6-Ø13.5 Rhomb-flange Ø106.4,<br>Pilot Ø82.5 × 6.3  | G            | Shaft Ø31.75,<br>Parllel key 7.96 × 7.96 × 31.75      |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |
|       | 200   |                       |                                                    | F            | Shaft Ø31.75,Splined key 14-DP12/24                   |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |
|       | 250   | W                     | 4-Ø13.5 Wheel-flange Ø160,<br>Pilot Ø125 × 8       | FD           | Long Shaft Ø31.75,<br>Splined key 14-DP12/24          |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |
|       | 315   | E2B                   | 2-Ø14.3 Rhomb-flangeØ146.05,<br>Pilot Ø101.6 × 9.4 | SL           | Shaft Ø34.85,<br>Splined key 6-34.85 × 28.14 × 8.64   |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |
|       | 400   |                       |                                                    | T1           | Cone-shaft Ø35,parllel key B6 × 6 × 20                |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |
|       | 475   | SP                    | 4-Ø11.5 Square-flange Ø106.4,<br>Pilot Ø82.5 × 6.3 | T3           | Cone-shaft Ø31.75,<br>Parllel key 7.96 × 7.96 × 31.75 |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |
|       |       |                       |                                                    | S1           | Shaft Ø25.4,Splined key SAE 6B                        |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |
|       |       |                       |                                                    | I            | Sub-shaft Ø22,<br>Splined key 13-DP16/32              |                                                  |                                                                                                                                                                                                                                                                                           |                    |                      |                      |                                          |                       |                                                      |

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 informations of mounting flange,output shaft and frorts 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.