

## BMT Series

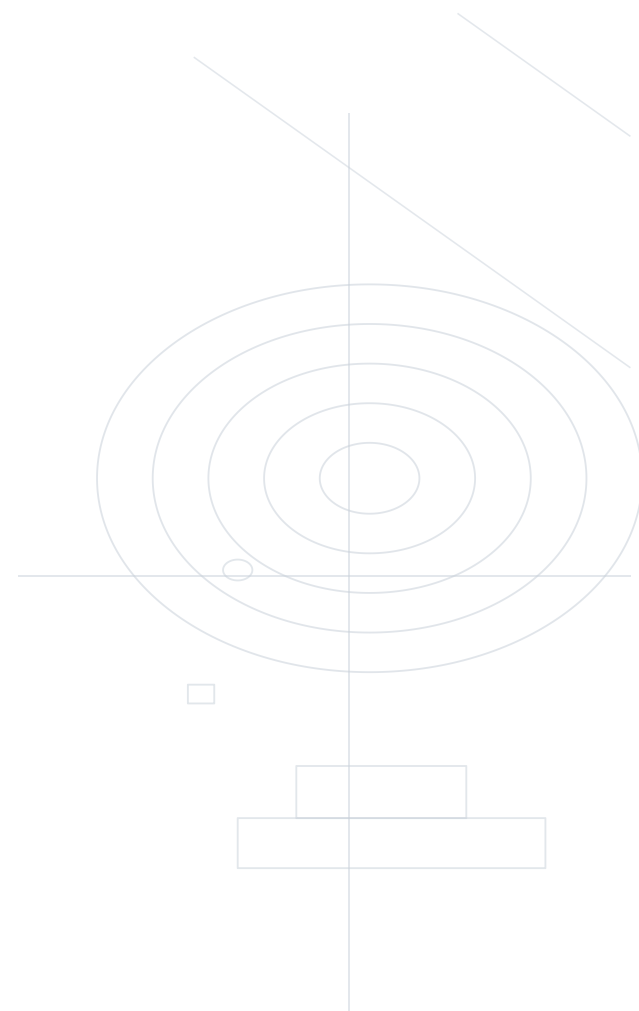
### BMT Series Orbital Hydraulic Motor

Professional hydraulic components for mobile machinery and industrial systems.

Category: Orbital Hydraulic Motors

Application:

Compact Mobile Machinery / Industrial Hydraulic Systems

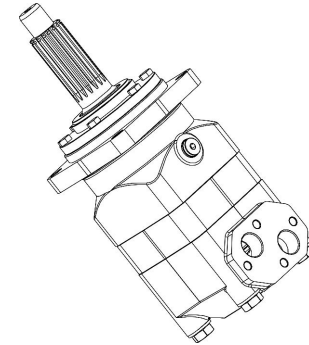


**BMT Series Orbital Hydraulic Motor** is an advanced end-face distribution hydraulic motor. This series uses a column-mounted gerotor pair and features high working pressure, high efficiency, good efficiency retention, and long service life. Multi-function variants can be designed based on the standard structure according to customer requirements. Features:

\*Features advanced rotor-stator parameter design, resulting in low starting pressure, high efficiency, and excellent stability.

\*High operating pressure and high output torque. The tapered roller bearing design provides strong resistance to axial and radial loads, enabling the motor to directly drive working mechanisms and expanding its range of applications.

\*An advanced end-face distribution structure ensures high distribution accuracy and strong self-compensation capabilities against wear, guaranteeing high volumetric efficiency and a long service life, as well as stable motor speed and load-speed characteristics.



### Main Technical Parameters

| Type   |              | BMT<br>BMTZ<br>160 | BMT<br>BMTZ<br>200 | BMT<br>BMTZ<br>230 | BMT<br>BMTZ<br>250 | BMT<br>BMTZ<br>315 | BMT<br>BMTZ<br>400 | BMT<br>BMTZ<br>500 | BMT<br>BMTZ<br>630 | BMT<br>BMTZ<br>800 |
|--|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Actual Displacement (cm <sup>3</sup> /rev.)  |              | 166.6              | 210                | 234.5              | 267.9              | 337                | 426.7              | 535.8              | 672.1              | 853.1              |
| Max. Speed<br>(rpm)                          | Rated        | 455                | 455                | 410                | 358                | 285                | 220                | 180                | 140                | 110                |
|  | Continuous   | 590                | 580                | 520                | 460                | 365                | 290                | 230                | 182                | 143                |
|  | Intermittent | 740                | 710                | 630                | 555                | 440                | 350                | 280                | 220                | 175                |
| Max. Torque<br>(N.m)                         | Rated        | 390                | 490                | 535                | 619                | 780                | 930                | 1080               | 1170               | 1280               |
|  | Continuous   | 485                | 613                | 675                | 770                | 980                | 1120               | 1245               | 1400               | 1550               |
|  | Intermittent | 580                | 735                | 825                | 935                | 1170               | 1300               | 1400               | 1600               | 1600               |
|  | Peak         | 690                | 870                | 965                | 1100               | 1385               | 1500               | 1680               | 1800               | 1800               |
| Max. Output Power<br>(KW)                    | Rated        | 18.7               | 23.4               | 23.2               | 23.2               | 23.3               | 21.4               | 20.4               | 18.2               | 15.3               |
|  | Continuous   | 27.7               | 34.9               | 34.7               | 34.5               | 34.9               | 31.2               | 28.8               | 25.3               | 22.2               |
|  | Intermittent | 32                 | 40                 | 40                 | 40                 | 40                 | 35                 | 35                 | 27.5               | 26.8               |
| Max. Working Pressure<br>Difference<br>(MPa) | Rated        | 16                 | 16                 | 16                 | 16                 | 16                 | 15                 | 14                 | 12                 | 10.5               |
|  | Continuous   | 20                 | 20                 | 20                 | 20                 | 20                 | 18                 | 16                 | 12                 | 10.5               |
|  | Intermittent | 24                 | 24                 | 24                 | 24                 | 24                 | 21                 | 18                 | 16                 | 13                 |
|  | Peak         | 28                 | 28                 | 28                 | 28                 | 28                 | 24                 | 21                 | 19                 | 16                 |
| Max. Flow<br>(L/min)                         | Rated        | 80                 | 100                | 100                | 100                | 100                | 100                | 100                | 100                | 100                |
|  | Continuous   | 100                | 125                | 125                | 125                | 125                | 125                | 125                | 125                | 125                |
|  | Intermittent | 125                | 150                | 150                | 150                | 150                | 150                | 150                | 150                | 150                |
| Max. Inlet Pressure (MPa)                    | Rated        | 21                 | 21                 | 21                 | 21                 | 21                 | 21                 | 21                 | 21                 | 21                 |
|  | Continuous   | 21                 | 21                 | 21                 | 21                 | 21                 | 21                 | 21                 | 21                 | 21                 |
|  | Intermittent | 25                 | 25                 | 25                 | 25                 | 25                 | 25                 | 25                 | 25                 | 25                 |
|  | Peak         | 30                 | 30                 | 30                 | 30                 | 30                 | 30                 | 30                 | 30                 | 30                 |

\*Rated speed and torque refer to output values under rated flow and pressure.

\*Continuous values refer to the maximum values at which this displacement motor can operate continuously.

\*Intermittent values refer to the maximum values at which this displacement motor operates for 6 seconds within 1 minute.

\*Peak values refer to the maximum values at which this displacement motor operates for 0.6 seconds within 1 minute.

Performance Parameters

|                   |     | BMT-160 [166.6cm³/rev.]<br>Pressure (MPa) |            |            |            |            |            |            |
|-------------------|-----|---|------------|------------|------------|------------|------------|------------|
|                   |     | 4   | 8          | 10         | 12         | 16         | 20         | 24         |
| Flow (L/min)      | 10  | 91<br>58                                  | 182<br>57  | 236<br>56  | 284<br>54  | 373<br>52  | 462<br>48  | 553<br>43  |
|                   | 20  | 92<br>117                                 | 187<br>116 | 242<br>113 | 286<br>110 | 385<br>105 | 475<br>100 | 576<br>92  |
| Max. Continuous   | 40  | 94<br>240                                 | 186<br>238 | 243<br>235 | 286<br>228 | 394<br>222 | 487<br>216 | 593<br>205 |
|                   | 60  | 85<br>359                                 | 184<br>355 | 243<br>350 | 286<br>344 | 394<br>337 | 486<br>329 | 591<br>319 |
| Max. Intermittent | 80  | 81<br>476                                 | 179<br>473 | 237<br>469 | 285<br>462 | 392<br>454 | 482<br>447 | 586<br>432 |
|                   | 100 | 72<br>594                                 | 165<br>591 | 225<br>586 | 278<br>578 | 383<br>571 | 471<br>563 | 570<br>551 |
|                   | 125 | 60<br>745                                 | 153<br>739 | 218<br>733 | 270<br>725 | 371<br>717 | 463<br>707 | 571<br>691 |

|                   |     | BMT-200<br>[210cm³/rev.]Pressure (MPa) |            |            |            |            |            |            |
|-------------------|-----|--|------------|------------|------------|------------|------------|------------|
|                   |     | 4                                      | 8          | 10         | 12         | 16         | 20         | 24         |
| Flow (L/min)      | 10  | 129<br>45                              | 243<br>44  | 301<br>43  | 355<br>40  | 473<br>37  | 584<br>35  | 697<br>32  |
|                   | 20  | 130<br>91                              | 249<br>90  | 311<br>88  | 362<br>86  | 488<br>83  | 601<br>80  | 726<br>72  |
| Max. Continuous   | 40  | 125<br>187                             | 251<br>185 | 309<br>183 | 367<br>179 | 495<br>176 | 614<br>171 | 747<br>160 |
|                   | 60  | 161<br>285                             | 247<br>283 | 308<br>280 | 367<br>275 | 498<br>270 | 614<br>265 | 749<br>252 |
| Max. Intermittent | 80  | 113<br>379                             | 241<br>377 | 301<br>373 | 365<br>368 | 494<br>362 | 611<br>355 | 747<br>344 |
|                   | 100 | 103<br>473                             | 237<br>470 | 298<br>466 | 359<br>462 | 491<br>455 | 605<br>448 | 742<br>441 |
|                   | 125 | 88<br>590                              | 217<br>586 | 288<br>582 | 347<br>577 | 478<br>571 | 590<br>564 | 727<br>548 |
|                   | 150 | 73<br>713                              | 202<br>710 | 271<br>705 | 338<br>697 | 466<br>688 | 578<br>677 | 711<br>654 |

|                   |     | BMT-250<br>[267.9cm³/rev.]Pressure (MPa) |            |            |            |            |            |            |
|-------------------|-----|--|------------|------------|------------|------------|------------|------------|
|                   |     | 4  | 8          | 10         | 12         | 16         | 20         | 24         |
| Flow (L/min)      | 10  | 147<br>36                                | 304<br>36  | 378<br>35  | 446<br>34  | 595<br>32  | 733<br>30  | 877<br>29  |
|                   | 20  | 152<br>71                                | 315<br>70  | 387<br>70  | 460<br>68  | 617<br>66  | 753<br>63  | 907<br>58  |
| Max. Continuous   | 40  | 148<br>147                               | 320<br>145 | 396<br>143 | 468<br>140 | 631<br>137 | 769<br>133 | 940<br>126 |
|                   | 60  | 140<br>223                               | 313<br>222 | 396<br>219 | 469<br>215 | 630<br>210 | 773<br>206 | 945<br>195 |
| Max. Intermittent | 80  | 136<br>298                               | 301<br>297 | 387<br>295 | 461<br>289 | 625<br>285 | 767<br>281 | 944<br>267 |
|                   | 100 | 134<br>372                               | 300<br>370 | 378<br>368 | 454<br>364 | 619<br>358 | 762<br>351 | 935<br>337 |
|                   | 125 | 123<br>465                               | 277<br>462 | 362<br>459 | 440<br>454 | 604<br>447 | 748<br>441 | 919<br>427 |
|                   | 150 | 94<br>556                                | 257<br>554 | 340<br>550 | 422<br>545 | 587<br>538 | 730<br>531 | 901<br>512 |

|                   |     | BMT-315[337cm³/rev.]Pressure (MPa) |            |            |            |            |            |             |
|-------------------|-----|------------------------------------|------------|------------|------------|------------|------------|-------------|
|                   |     | 4                                  | 8          | 10         | 12         | 16         | 20         | 24          |
| Flow (L/min)      | 10  | 190<br>29                          | 375<br>28  | 468<br>27  | 563<br>26  | 758<br>25  | 920<br>24  | 1097<br>22  |
|                   | 20  | 195<br>58                          | 392<br>57  | 487<br>56  | 580<br>54  | 782<br>52  | 947<br>50  | 1145<br>48  |
| Max. Continuous   | 40  | 197<br>117                         | 393<br>116 | 500<br>114 | 589<br>111 | 799<br>108 | 985<br>105 | 1186<br>100 |
|                   | 60  | 195<br>177                         | 388<br>175 | 409<br>173 | 592<br>169 | 797<br>167 | 994<br>163 | 1192<br>153 |
| Max. Intermittent | 80  | 185<br>236                         | 381<br>234 | 495<br>231 | 584<br>229 | 793<br>224 | 985<br>220 | 1191<br>210 |
|                   | 100 | 175<br>295                         | 369<br>294 | 482<br>291 | 580<br>288 | 783<br>285 | 973<br>280 | 1180<br>267 |
|                   | 125 | 152<br>368                         | 347<br>366 | 462<br>363 | 562<br>359 | 769<br>355 | 950<br>350 | 1164<br>338 |
|                   | 150 | 123<br>443                         | 328<br>441 | 446<br>439 | 543<br>435 | 736<br>430 | 923<br>417 | 1133<br>411 |

Torque (N·m) 422  
Speed (rpm) 545

Continuous / Intermittent

Performance Parameters

|                   |     | BMT-400 [426.7cm³/rev.] |            |            |            |            |             |             | Max. Continuous<br>Max. Intermittent |
|-------------------|-----|-------------------------|------------|------------|------------|------------|-------------|-------------|--------------------------------------|
|                   |     | Pressure (MPa)          |            |            |            |            |             |             |                                      |
|                   |     | 3                       | 6          | 9          | 12         | 15         | 18          | 21          |                                      |
| Flow (L/min)      | 10  | 183<br>23               | 381<br>22  | 581<br>21  | 742<br>20  | 919<br>19  | 1090<br>18  | 1255<br>17  |                                      |
|                   | 20  | 186<br>47               | 384<br>46  | 587<br>45  | 754<br>42  | 934<br>40  | 1112<br>39  | 1283<br>37  |                                      |
|                   | 40  | 183<br>92               | 384<br>91  | 589<br>90  | 761<br>87  | 954<br>84  | 1133<br>80  | 1311<br>76  |                                      |
|                   | 60  | 181<br>140              | 375<br>138 | 585<br>134 | 757<br>130 | 955<br>126 | 1137<br>122 | 1318<br>116 |                                      |
|                   | 80  | 172<br>186              | 366<br>184 | 574<br>181 | 747<br>177 | 947<br>173 | 1126<br>169 | 1311<br>164 |                                      |
|                   | 100 | 156<br>233              | 352<br>231 | 559<br>229 | 735<br>225 | 930<br>219 | 1108<br>216 | 1300<br>210 |                                      |
| Max. Continuous   | 125 | 140<br>291              | 321<br>289 | 544<br>287 | 714<br>283 | 906<br>278 | 1085<br>275 | 1268<br>268 |                                      |
| Max. Intermittent | 150 | 131<br>350              | 303<br>348 | 527<br>345 | 692<br>332 | 885<br>337 | 1059<br>333 | 1143<br>326 |                                      |

|                   |     | BMT-500 [535.8cm³/rev.] |            |            |            |             |             |             | Max. Continuous<br>Max. Intermittent |
|-------------------|-----|-------------------------|------------|------------|------------|-------------|-------------|-------------|--------------------------------------|
|                   |     | Pressure (MPa)          |            |            |            |             |             |             |                                      |
|                   |     | 3                       | 6          | 9          | 12         | 14          | 16          | 18          |                                      |
| Flow (L/min)      | 10  | 227<br>18               | 462<br>18  | 708<br>18  | 912<br>17  | 1074<br>16  | 1221<br>15  | 1371<br>13  |                                      |
|                   | 20  | 236<br>36               | 475<br>35  | 731<br>34  | 939<br>33  | 1095<br>32  | 1248<br>31  | 1409<br>29  |                                      |
|                   | 40  | 235<br>73               | 477<br>72  | 744<br>71  | 963<br>70  | 1119<br>68  | 1273<br>66  | 1455<br>62  |                                      |
|                   | 60  | 230<br>110              | 468<br>109 | 731<br>108 | 963<br>106 | 1113<br>104 | 1274<br>103 | 1442<br>99  |                                      |
|                   | 80  | 218<br>147              | 441<br>146 | 712<br>146 | 948<br>144 | 1101<br>142 | 1273<br>140 | 1434<br>135 |                                      |
|                   | 100 | 198<br>185              | 430<br>184 | 696<br>183 | 922<br>181 | 1088<br>179 | 1252<br>177 | 1415<br>173 |                                      |
| Max. Continuous   | 125 | 186<br>232              | 407<br>231 | 656<br>230 | 897<br>228 | 1048<br>226 | 1227<br>224 | 1383<br>220 |                                      |
| Max. Intermittent | 150 | 150<br>277              | 377<br>276 | 632<br>275 | 873<br>274 | 1027<br>272 | 1194<br>270 | 1356<br>266 |                                      |

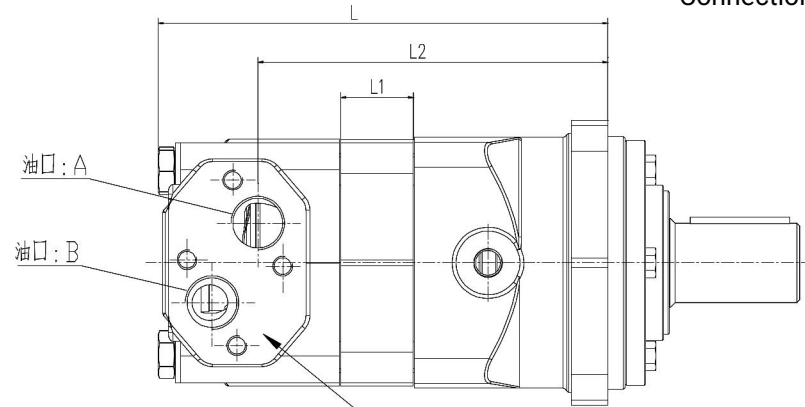
|                   |     | BMT-630 [672.1cm³/rev.] |            |            |             |             |             |             | Max. Continuous<br>Max. Intermittent |
|-------------------|-----|-------------------------|------------|------------|-------------|-------------|-------------|-------------|--------------------------------------|
|                   |     | Pressure (MPa)          |            |            |             |             |             |             |                                      |
|                   |     | 3                       | 6          | 9          | 10.5        | 12          | 14          | 16          |                                      |
| Flow (L/min)      | 10  | 249<br>13               | 555<br>13  | 849<br>12  | 964<br>12   | 1147<br>13  | 1276<br>10  | 1456<br>11  |                                      |
|                   | 20  | 253<br>26               | 592<br>25  | 894<br>25  | 1018<br>24  | 1193<br>24  | 1324<br>22  | 1503<br>21  |                                      |
|                   | 40  | 255<br>58               | 591<br>58  | 919<br>57  | 1054<br>56  | 1251<br>55  | 1397<br>52  | 1584<br>51  |                                      |
|                   | 60  | 238<br>88               | 581<br>88  | 922<br>86  | 1045<br>85  | 1252<br>84  | 1408<br>81  | 1600<br>77  |                                      |
|                   | 80  | 235<br>115              | 574<br>114 | 912<br>113 | 1031<br>111 | 1252<br>110 | 1404<br>107 | 1599<br>103 |                                      |
|                   | 100 | 222<br>146              | 558<br>145 | 889<br>143 | 1009<br>142 | 1235<br>140 | 1392<br>137 | 1590<br>133 |                                      |
| Max. Continuous   | 125 | 215<br>183              | 533<br>183 | 865<br>181 | 995<br>180  | 1215<br>179 | 1380<br>175 | 1573<br>171 |                                      |
| Max. Intermittent | 150 | 186<br>218              | 526<br>217 | 838<br>216 | 984<br>215  | 1198<br>212 | 1304<br>209 | 1553<br>203 |                                      |

|              |     | BMT-800 [853.1cm³/rev.] |            |             |             |             |             | Max. Continuous<br>Max. Intermittent |
|--------------|-----|-------------------------|------------|-------------|-------------|-------------|-------------|--------------------------------------|
|              |     | Pressure (MPa)          |            |             |             |             |             |                                      |
|              |     | 3                       | 6          | 9           | 10.5        | 12.5        | 13          |                                      |
| Flow (L/min) | 10  | 368<br>11               | 720<br>11  | 1067<br>10  | 1233<br>10  | 1452<br>10  | 1479<br>9   |                                      |
|              | 20  | 379<br>23               | 736<br>23  | 1100<br>23  | 1258<br>22  | 1494<br>21  | 1551<br>17  |                                      |
|              | 40  | 388<br>47               | 748<br>47  | 1134<br>46  | 1315<br>45  | 1552<br>43  | 1613<br>38  |                                      |
|              | 60  | 377<br>70               | 748<br>69  | 1128<br>67  | 1316<br>67  | 1558<br>64  | 1617<br>59  |                                      |
|              | 80  | 353<br>93               | 730<br>92  | 1117<br>92  | 1304<br>90  | 1539<br>87  | 1611<br>81  |                                      |
|              | 100 | 325<br>117              | 696<br>116 | 1090<br>116 | 1284<br>114 | 1537<br>111 | 1602<br>103 |                                      |
| 连续最大         | 125 | 298<br>145              | 662<br>144 | 1052<br>144 | 1256<br>141 | 1513<br>140 | 1582<br>132 |                                      |
| 断续最大         | 150 | 263<br>174              | 628<br>173 | 1014<br>172 | 1130<br>170 | 1496<br>168 | 1570<br>162 |                                      |

Torque(N·m) 984  
Speed (rpm) 215

Continuous / Intermittent

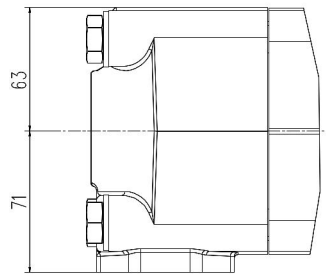
BMT Mounting and Connection Dimensions



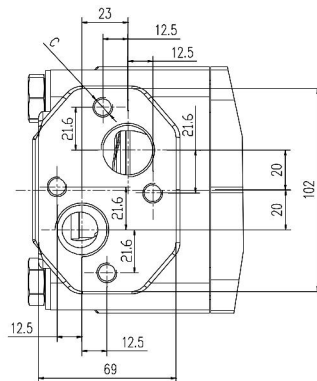
| 排量(ml/r) | BMT-160 | 200   | 230   | 250   | 315   | 400   | 500   | 630   | 800   |
|----------|---------|-------|-------|-------|-------|-------|-------|-------|-------|
| L1(mm)   | 6.5     | 10    | 12    | 14.7  | 20.3  | 27.5  | 36.5  | 47.5  | 62    |
| L2(mm)   | 145.5   | 149   | 151   | 153.7 | 159.3 | 166.5 | 175.5 | 186.5 | 201   |
| L(mm)    | 196     | 199.5 | 201.5 | 204.2 | 209.8 | 217   | 226   | 237   | 251.5 |

注: 转定子副厚度为: L1+7

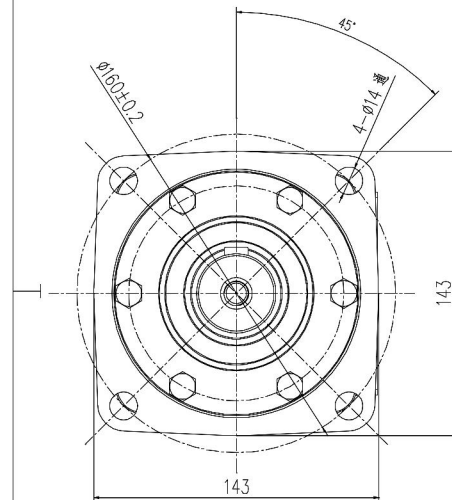
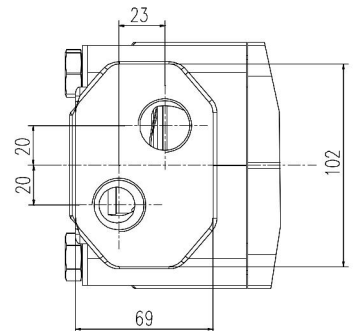
| 代号    | 连接形式                     | P(A/B) | 4-C     | T                       |
|-------|--------------------------|--------|---------|-------------------------|
| D(英)  | G3/4(18)                 |        | M10(15) | G1/4(12)                |
| M(英)  | M27X2(18)                |        | M10(15) | M14X1.5(12)             |
| M1(英) | M22X1.5(18)              |        | M10(15) | M14X1.5(12)             |
| M3(英) | M27X2(18)                |        | /       | M14X1.5(12)             |
| S(英)  | 1-1/16-12UN 'O'-ring(17) |        | /       | 9/16-18UNF 'O'-ring(12) |
| S1(英) | 1-1/16-12UN 'O'-ring(17) |        | /       | 7/16-20UNF 'O'-ring(12) |
| G(英)  | G3/4(18)                 |        | /       | G1/4(12)                |



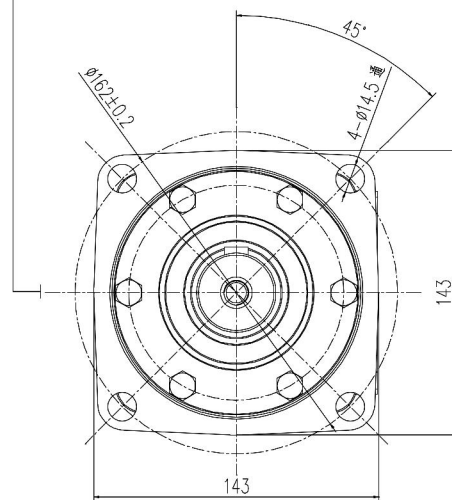
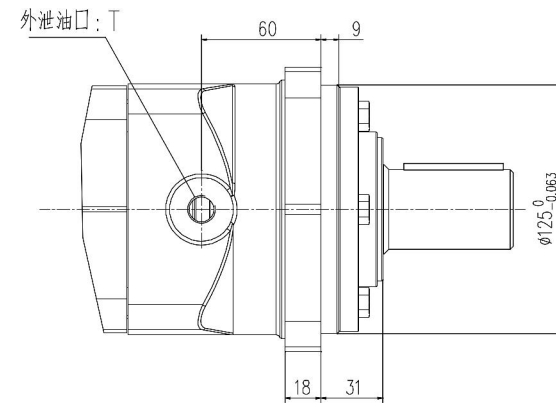
油口: D, M, M1



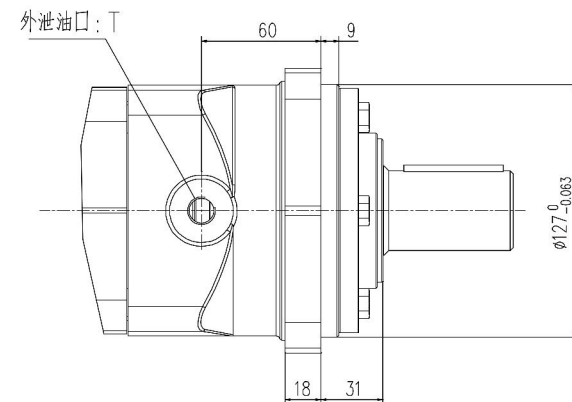
油口: S, S1, G, M3



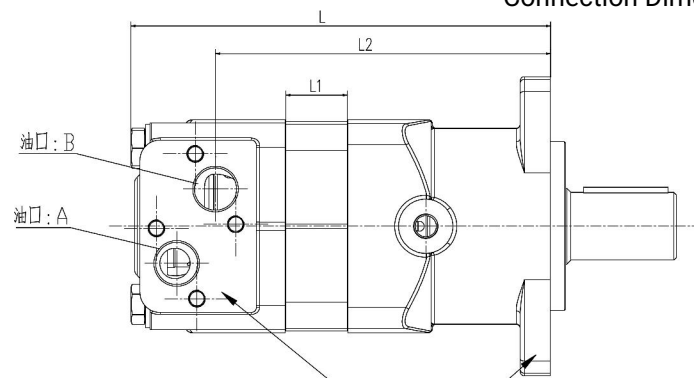
4 法兰



K6 法兰



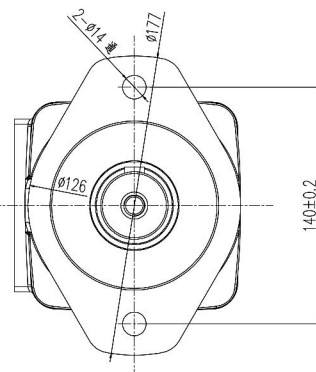
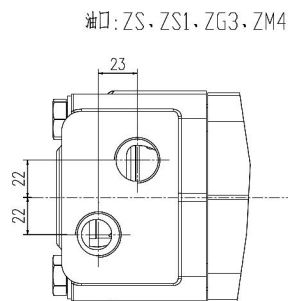
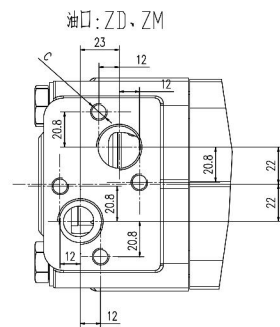
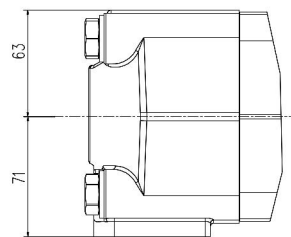
BMTZ Mounting and Connection Dimensions



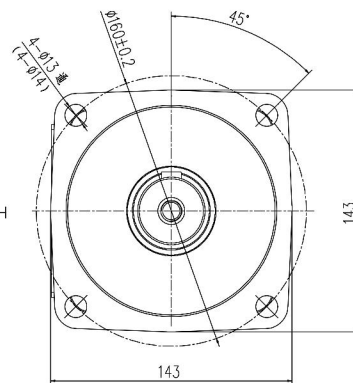
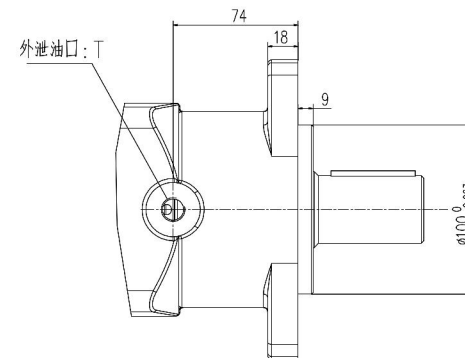
| 排量(ml/r) | BMTZ-160 | 200   | 230   | 250   | 315   | 400   | 500   | 630   | 800   |
|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| L1(mm)   | 6.5      | 10    | 12    | 14.7  | 20.3  | 27.5  | 36.5  | 47.5  | 62    |
| L2(mm)   | 168.5    | 172   | 174   | 176.7 | 182.3 | 189.5 | 198.5 | 209.5 | 224   |
| L(mm)    | 219      | 222.5 | 224.5 | 227.2 | 232.8 | 240   | 249   | 260   | 274.5 |

注: 转定子副厚度为: L1+7

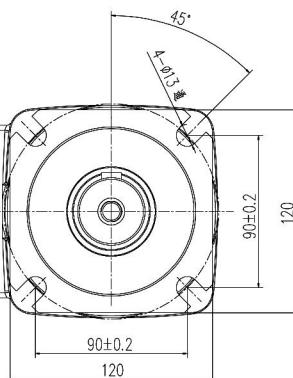
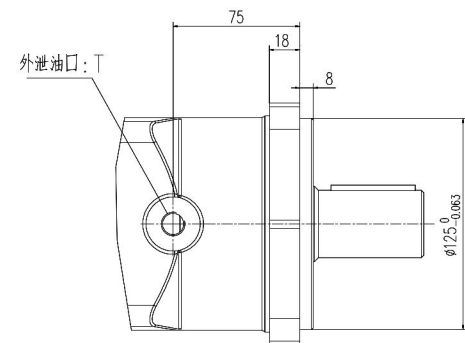
| 代号     | 连接形式                     | P(A/B) | 4-C     | T                       |
|--------|--------------------------|--------|---------|-------------------------|
| ZD(英)  | G3/4(18)                 |        | M10(15) | G1/4(12)                |
| ZM(英)  | M27X2(18)                |        | M10(15) | M14X1.5(12)             |
| ZM4(英) | M27X2(18)                |        | /       | M10X1(12)               |
| ZS(英)  | 1-1/16-12UN 'O'-ring(17) |        | /       | 9/16-18UNF 'O'-ring(12) |
| ZS1(英) | 1-1/16-12UN 'O'-ring(17) |        | /       | 7/16-20UNF 'O'-ring(12) |
| ZG3(英) | G3/4(18)                 |        | /       | M10X1(12)               |



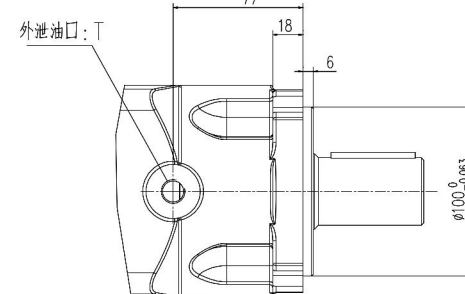
Z2 法兰



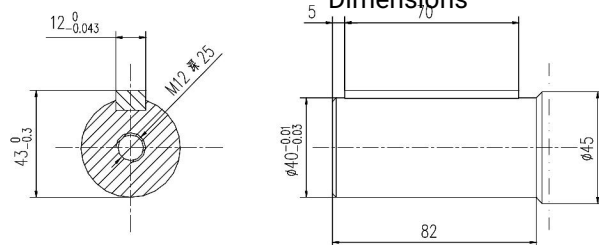
Z4 (& Z5) 法兰



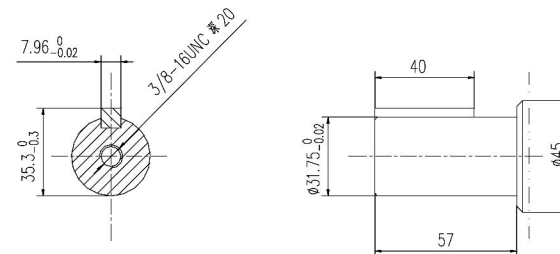
B2 法兰



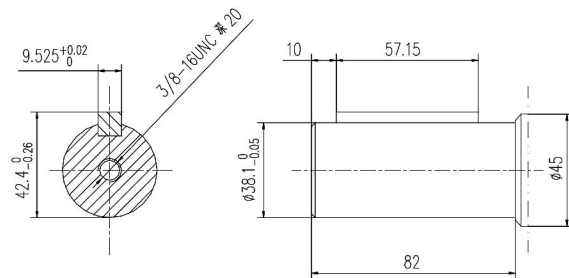
### BMT (Z) Shaft Extension Dimensions



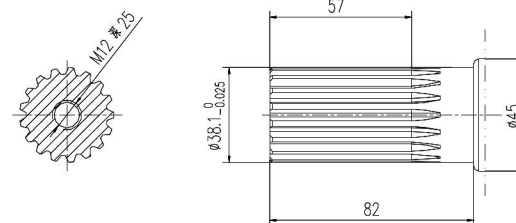
M轴: 圆柱轴  $\phi 40$ , 平键 12X8X70



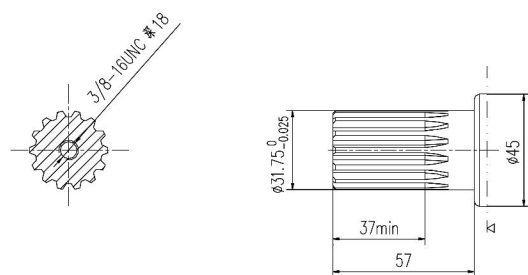
G1轴: 圆柱轴  $\phi 31.75$ , 平键 7.96X7.96X40



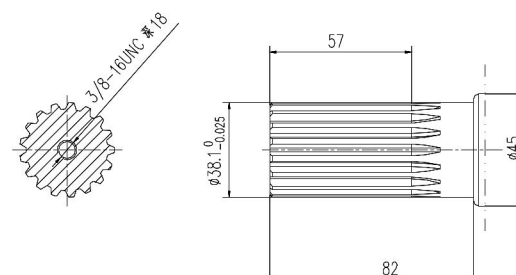
G轴: 圆柱轴  $\phi 38.1$ , 平键 9.525X9.525X57.15



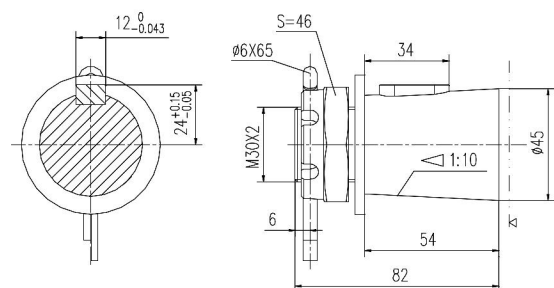
FD轴: 花键轴 17-DP12/24



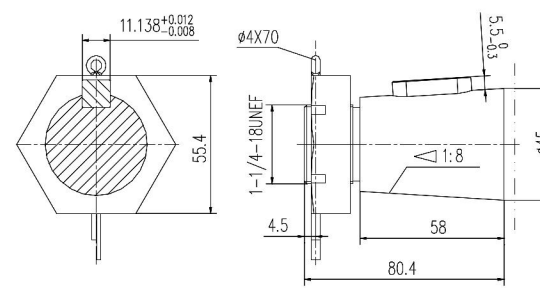
F1轴: 花键轴 14-DP12/24



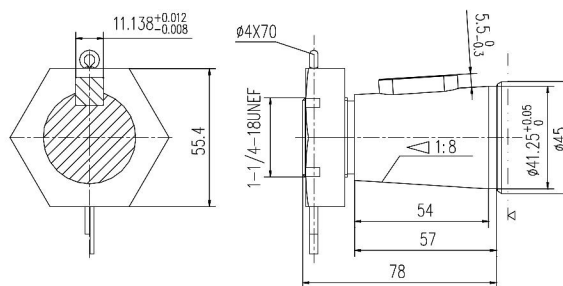
F轴: 花键轴 17-DP12/24



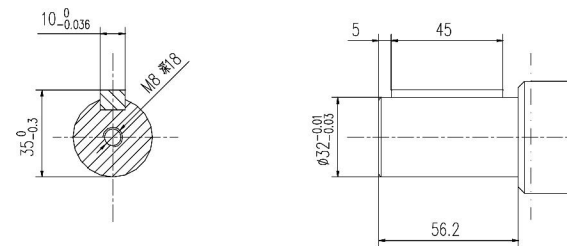
T轴: 锥轴  $\phi 45$ , 平键 12X8X25  
螺母紧固力矩:  $500 \pm 10\text{N.m}$



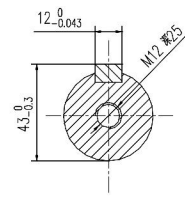
T1轴: 锥轴  $\phi 45$ , 平键 11.138X11.138X31.75  
螺母紧固力矩:  $500 \pm 10\text{N.m}$



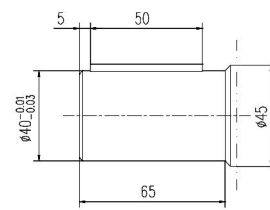
T2轴: 锥轴  $\phi 41.25$ , 平键 11.138X11.138X31.75  
螺母紧固力矩:  $500 \pm 10\text{N.m}$



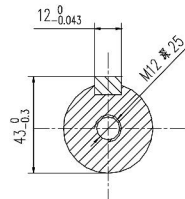
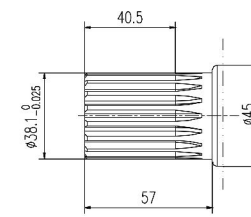
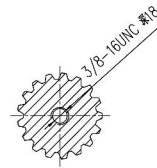
B轴: 圆柱轴  $\phi 32$ , 平键 10X8X45



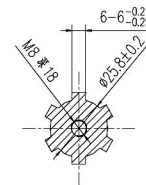
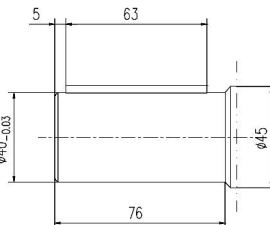
Y轴: 圆柱轴  $\phi 40$ , 平键 12X8X50



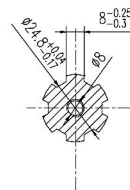
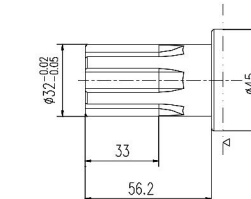
FE轴: 花键轴 17-DP12/24



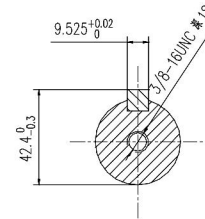
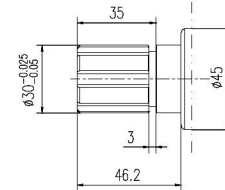
Y1轴: 圆柱轴  $\phi 40$ , 平键 12X8X63



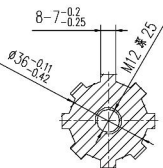
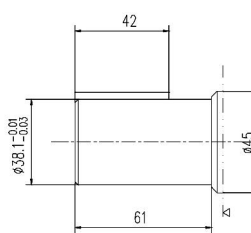
Z轴: 花键轴 6-32X25.8X6



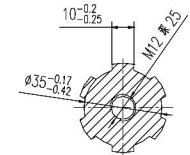
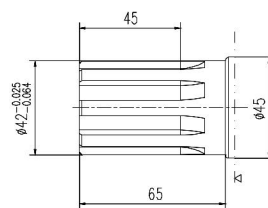
J轴: 花键轴 6-30X24.8X8



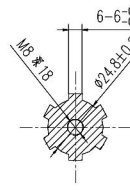
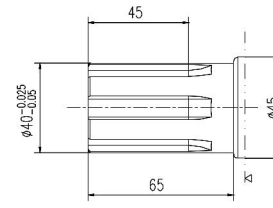
G2轴: 圆柱轴  $\phi 38.1$ , 平键 9.525X9.525X42



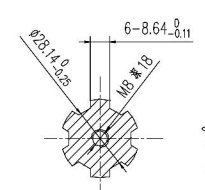
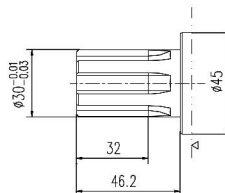
H轴: 花键轴 8-42X36X7



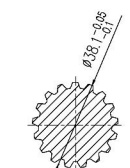
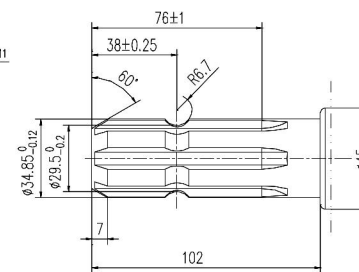
P轴: 花键轴 6-40X35X10



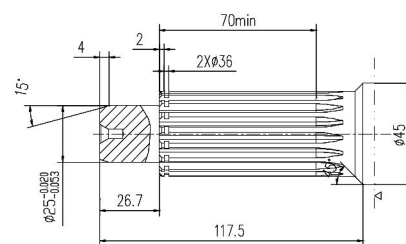
N轴: 花键轴 6-30X24.8X6



SL轴: 花键轴 6-34.85X28.14X8.64

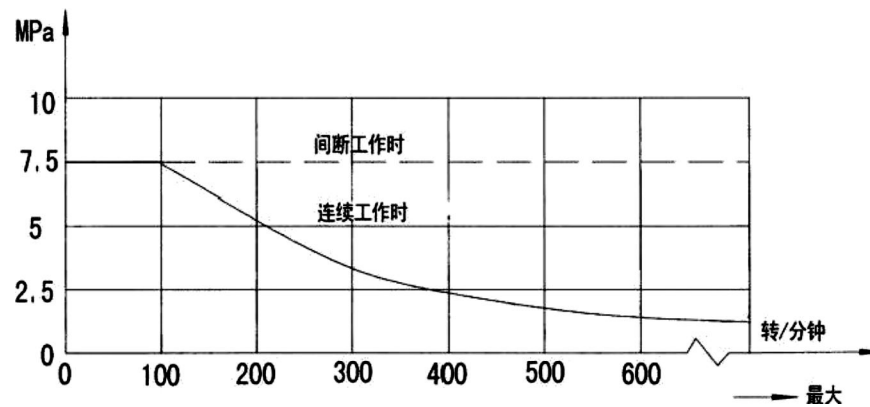
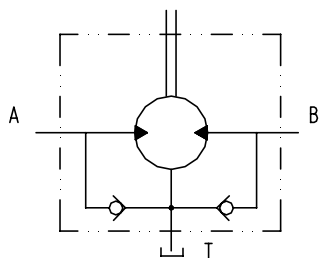


FG轴: 花键轴 17-DP12/24



BMT Series Orbital Hydraulic Motor

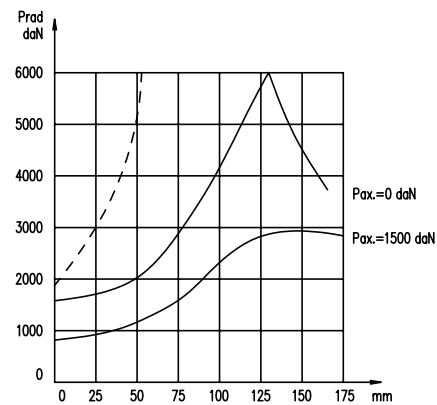
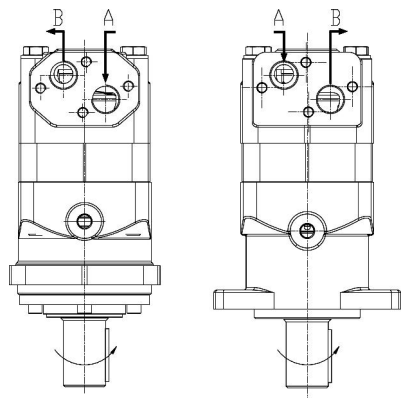
Allowable Pressure on Output Shaft Seal



None External Drain Line , Output Shaft Pressure Oil Pressure . External Drain Line , Outlet Shaft Pressure External Drain Line Pressure.

Output Shaft Standard Rotation Direction

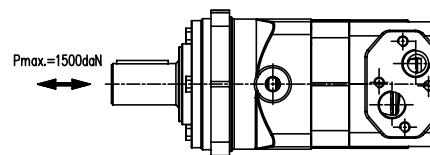
Motor Shaft Extension Direction, A Oil Port Pressure Oil, Output Shaft Direction Rotation ; Reverse , Direction Rotation. Shaft Direction Force / Diameter Direction Force



Drain Port Leakage Flow

The following table lists Standard Motor, External Drain Port Oil Pressure 0.51 MPa, External Drain Port Max. External Drain Flow.

| Working Pressure Difference (MPa) | Oil Kinematic Viscosity (mm <sup>2</sup> /s) | External Drain Port External Drain Flow (L/min.) |
|-----------------------------------|--|--|
| 14                                | 20   | 3  |
|                                   | 35   | 2  |
| 21                                | 20   | 6  |
|                                   | 35   | 4  |



A Max. Radial Force, recommended users ensure bearing life B10 ( 200rpm, 3000h Speed), Shaft Direction/radial load.

Ordering Information

1 2 3 4 5 6 7 8

| POS.1          | 2            | 3              |  | 4   |  | 5                     |    | 6  |  | 7            |          | 8                |                   |      |          |
|----------------|--------------|----------------|--|---|--|-----------------------|----|--|--|--------------|----------|------------------|-------------------|------|----------|
| Structure Code | Displacement | Flange / Pilot |  | Shaft Extension   |  | Oil Port / Drain Port |    | Rotation Direction                       |  | Paint Option |          | Special Function |                   |      |          |
| BMT            | 160          | 4              | 4-φ14Square Flange, φ160 , Pilotφ125X9   | M   | Straight Shaftφ40 , Length82 , Parallel Key12X8X70 , M12                 |                       | D  | G3/4,G1/4,Subplate4-M10                  |  | None         | Standard | 00               | Unpainted         | None | Standard |
|                | 200          | K6             | 4-φ14.5Square Flange, φ162 , Pilotφ127X9 | FD  | Involute Spline Shaftφ38.1,Length82,17-DP12/24 , M12                     |                       | M  | M27X2,M14X1.5,Subplate4-M10              |  | R            | Reverse  | B                | Blue Paint        |      |          |
|                | 230          |                |  | FE  | Involute Spline Shaftφ38.1,Length57,17-DP12/24 , 3/8-16UNC               |                       | S  | 1-1/16-12UN 'O'-ring,9/16-18UNF 'O'-ring |  |              |          | S                | Black Paint       |      |          |
|                | 250          |                |  | FG  | Involute Spline Shaftφ38.1,Length114,17-DP12/24 , Shaftφ25X26.7          |                       | S1 | 1-1/16-12UN 'O'-ring,7/16-20UNF 'O'-ring |  |              |          |                  | Silver Gray Paint |      |          |
|                | 315          |                |  | SL  | Straight-sided Spline Shaftφ6-34.85X28.14X8.64 , Length102 , M8          |                       | G  | G3/4,G1/4                                |  |              |          |                  |                   |      |          |
|                | 400          |                |  | G   | Straight Shaftφ38.1 , Length82 , Parallel Key9.525X9.525X57.15,3/8-16UNC |                       | M3 | M27X2,M14X1.5                            |  |              |          |                  |                   |      |          |
|                | 500          |                |  | G1  | Straight Shaftφ31.75 , Length57 , Parallel Key7.96X7.96X40,3/8-16UNC     |                       |    |  |  |              |          |                  |                   |      |          |
|                | 630          |                |  | J   | Straight-sided Spline Shaftφ6-30X24.8X6 , Length46.2 , M8                |                       |    |  |  |              |          |                  |                   |      |          |
| 800            |              |                | T  | φ45Tapered Shaft, taper1:10 , taper length54 , Parallel Key12*8*28 , ShaftLength82 , ShaftthreadM30X2 |  |                       |    |  |  |              |          |                  |                   |      |          |

1 2 3 4 5 6 7 8

| POS.1          | 2            | 3              |  | 4               |  | 5                     |     | 6  |  | 7            |          | 8                |                   |      |          |
|----------------|--------------|----------------|--|-----------------|--|-----------------------|-----|--|--|--------------|----------|------------------|-------------------|------|----------|
| Structure Code | Displacement | Flange / Pilot |  | Shaft Extension |  | Oil Port / Drain Port |     | Rotation Direction                       |  | Paint Option |          | Special Function |                   |      |          |
| BMTZ           | 160          | Z2             | 2-φ14Diamond Flange, φ140 , Pilotφ100X9                            | B               | Straight Shaftφ32 , Length56 , Parallel Key10X8X45,ShaftthreadM8         |                       | ZD  | G3/4,G1/4,Subplate4-M10                  |  | None         | Standard | 00               | Unpainted         | None | Standard |
|                | 200          | Z4             | 4-φ13SquareFlange, φ160 , Pilotφ125X8                              | Y               | Straight Shaftφ40 , Length65 , Parallel Key12X8X45 , M12                 |                       | ZM  | M27X2,M14X1.5,Subplate4-M10              |  | R            | Reverse  | B                | Blue Paint        |      |          |
|                | 230          | Z5             | 4-φ14SquareFlange, φ160 , Pilotφ125X8                              | B1              | Straight Shaftφ32 , Length60 , Parallel Key10X8X45,ShaftthreadM12        |                       | ZS  | 1-1/16-12UN 'O'-ring,9/16-18UNF 'O'-ring |  |              |          | S                | Black Paint       |      |          |
|                | 250          | B2             | 4-φ13SquareFlange(120X120), threadHoleDistance 90X90 , Pilotφ100X6 | G               | Straight Shaftφ38.1 , Length82 , Parallel Key9.525X9.525*57.15,3/8-16UNC |                       | ZS1 | 1-1/16-12UN 'O'-ring,7/16-20UNF 'O'-ring |  |              |          |                  | Silver Gray Paint |      |          |
|                | 315          |                |  |                 |  |                       | ZG3 | G3/4,M10X1                               |  |              |          |                  |                   |      |          |
|                | 400          |                |  |                 |  |                       | ZM4 | M27X2,M10X1                              |  |              |          |                  |                   |      |          |
|                | 500          |                |  |                 |  |                       |     |  |  |              |          |                  |                   |      |          |
|                | 630          |                |  |                 |  |                       |     |  |  |              |          |                  |                   |      |          |
| 800            |              |                |  |                 |  |                       |     |  |  |              |          |                  |                   |      |          |

Note: When using the ordering information, select the codes for motor structure, displacement, mounting flange, shaft extension, inlet/outlet ports, etc. from the colored positions on the left and write them to us in the above format. If the selected specification is not listed above or special requirements are needed, please contact us.

# CONTACT

# YUNLINK HYDRAULICS

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For product selection, quotation and OEM/ODM inquiries, please contact us.

## COMPANY

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**Hebei Yunlink Industrial Co., Ltd.**

**Email:** [sales@yunlinkhydraulic.com](mailto:sales@yunlinkhydraulic.com)

**WhatsApp:** +86 155 3213 6555

**Website:** [www.yunlinkhydraulic.com](http://www.yunlinkhydraulic.com)

**LinkedIn:** [linkedin.com/in/peterbai-hydraulics](https://www.linkedin.com/in/peterbai-hydraulics)

### Location:

No. 5 Yucai Street, North Industrial Zone  
Ningjin County, Xingtai City  
Hebei Province, China

## WHEN SENDING AN INQUIRY, PLEASE INCLUDE:

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1. Product model
2. Thread size / connection type
3. Required pressure and flow rate
4. Quantity
5. Application or equipment model