

Planetary Gearboxes PH Series

PH16

This is a group of planetary gearboxes or planetary gearheads of PH series, commercial series 2.

Its diameter is $\varnothing 16$ mm. It has 5 stages, 5 length, and 80 models for your selection.

It is for DC, step or servo motor that the power is less than 4.5W. The continuous output torque is 0.15-0.4 Nm.



Table 1: Features

| Stages | Length (mm / in.) | Efficiency (%) | Backlash | Weight (g / oz) |
|--------|-------------------|----------------|----------|-----------------|
| 1 | 14.8 / 0.58 | 90 | 3° | 15 / 0.40 |
| 2 | 18.4 / 0.72 | 81 | 3° | 20 / 0.53 |
| 3 | 22.0 / 0.87 | 73 | 3° | 25 / 0.66 |
| 4 | 25.6 / 1.01 | 65 | 3° | 30 / 0.79 |
| 5 | 29.2 / 1.15 | 59 | 3° | 35 / 0.93 |

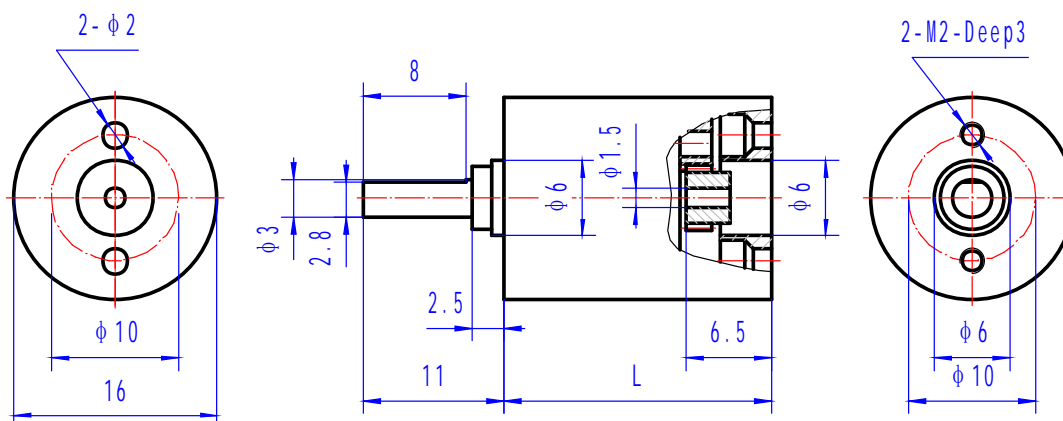


Table 2: Material and load

| Items | Description |
|-----------------------|--|
| Shell Material | Stainless steel |
| Gear Materiel | Steel, hard gear surface* |
| Output Shaft Materiel | Stainless steel |
| Flange Materiel | Aluminum |
| Bearing on Output End | Sliding bearing |
| Max. Input Speed | 6,000 rpm |
| Max. Radial Load | 8N |
| Max. Axial Load | 8N |
| Max. Install Force | 100N |
| Radial Clearance | 0.1mm |
| Axial Clearance | 0.2mm |
| Operating Temperature | -40 to 125 °C, (-40, to 257°F) -10 to 85 °C, (-14 to 185°F) for plastic gears |

*-- Optional of plastic or steel gear for first stage

Table 3: Ratio and output torque

| Model # | Ratio | Output Torque (Nm) | | Stages |
|---------|--------|--------------------|--------------|--------|
| | | Continuous | Intermittent | |
| 1216001 | 3.79 | 0.15 | 0.2 | 1 |
| 1216002 | 4.31 | | | |
| 1216003 | 5.08 | | | |
| 1216004 | 14.36 | 0.2 | 0.23 | 2 |
| 1216005 | 16.34 | | | |
| 1216006 | 18.60 | | | |
| 1216007 | 19.24 | 0.15 | 0.2 | 2 |
| 1216008 | 21.89 | | | |
| 1216009 | 25.78 | | | |
| 1216010 | 54.42 | 0.25 | 0.35 | 3 |
| 1216011 | 61.93 | | | |
| 1216012 | 70.48 | | | |
| 1216013 | 72.91 | 0.25 | 0.35 | 3 |
| 1216014 | 80.20 | | | |
| 1216015 | 82.97 | | | |
| 1216016 | 94.42 | 0.25 | 0.35 | 3 |
| 1216017 | 97.67 | | | |
| 1216018 | 111.16 | | | |
| 1216019 | 130.86 | | | |
| | | 0.2 | 0.3 | |

(Continued from Table 3: Ratio and output torque)

| Model # | Ratio | Output Torque (Nm) | | Stages |
|---------|----------|--------------------|--------------|--------|
| | | Continuous | Intermittent | |
| 1216020 | 206. 21 | 0. 3 | 0. 4 | 4 |
| 1216021 | 234. 67 | | | |
| 1216022 | 267. 06 | | | |
| 1216023 | 276. 27 | 0. 3 | 0. 4 | 4 |
| 1216024 | 303. 92 | | | |
| 1216025 | 314. 40 | | | |
| 1216026 | 345. 87 | 0. 3 | 0. 4 | 4 |
| 1216027 | 357. 80 | | | |
| 1216028 | 370. 13 | | | |
| 1216029 | 407. 18 | 0. 3 | 0. 4 | 4 |
| 1216030 | 421. 22 | | | |
| 1216031 | 479. 36 | | | |
| 1216032 | 495. 88 | 0. 3 | 0. 4 | 4 |
| 1216033 | 564. 33 | | | |
| 1216034 | 664. 36 | | | |
| 1216035 | 781. 44 | 0. 35 | 0. 45 | 5 |
| 1216036 | 889. 29 | | | |
| 1216037 | 1012. 03 | | | |
| 1216038 | 1046. 93 | 0. 35 | 0. 45 | 5 |
| 1216039 | 1151. 72 | | | |
| 1216040 | 1191. 42 | | | |
| 1216041 | 1310. 68 | 0. 35 | 0. 45 | 5 |
| 1216042 | 1355. 87 | | | |
| 1216043 | 1402. 61 | | | |
| 1216044 | 1491. 58 | 0. 35 | 0. 45 | 5 |
| 1216045 | 1543. 00 | | | |
| 1216046 | 1596. 20 | | | |
| 1216047 | 1755. 97 | 0. 35 | 0. 45 | 5 |
| 1216048 | 1816. 51 | | | |
| 1216049 | 1879. 14 | | | |
| 1216050 | 2067. 23 | 0. 35 | 0. 45 | 5 |
| 1216051 | 2138. 50 | | | |
| 1216052 | 2433. 66 | | | |
| 1216053 | 2517. 57 | 0. 35 | 0. 45 | 5 |
| 1216054 | 2865. 04 | | | |
| 1216055 | 3372. 90 | | | |

(Continued from Table 3: Ratio and output torque)

| Model # | Ratio | Output Torque (Nm) | | Stages |
|---------|----------|--------------------|--------------|--------|
| | | Continuous | Intermittent | |
| 1216056 | 2961.24 | 0.4 | 0.5 | 6 |
| 1216057 | 3369.95 | | | |
| 1216058 | 3835.07 | | | |
| 1216059 | 3967.30 | 0.4 | 0.5 | 6 |
| 1216060 | 4364.39 | | | |
| 1216061 | 4514.87 | | | |
| 1216062 | 4966.77 | 0.4 | 0.5 | 6 |
| 1216063 | 5138.01 | | | |
| 1216064 | 5315.16 | | | |
| 1216065 | 5652.29 | 0.4 | 0.5 | 6 |
| 1216066 | 5847.17 | | | |
| 1216067 | 6048.76 | | | |
| 1216068 | 6432.42 | 0.4 | 0.5 | 6 |
| 1216069 | 6654.20 | | | |
| 1216070 | 6883.62 | | | |
| 1216071 | 7120.95 | 0.4 | 0.5 | 6 |
| 1216072 | 7572.61 | | | |
| 1216073 | 7833.70 | | | |
| 1216074 | 8103.79 | 0.4 | 0.5 | 6 |
| 1216075 | 8914.92 | | | |
| 1216076 | 9222.29 | | | |
| 1216077 | 9540.25 | 0.4 | 0.5 | 6 |
| 1216078 | 10495.16 | | | |
| 1216079 | 10857.01 | | | |
| 1216080 | 12355.51 | 0.25 | 0.35 | |

Thanks! For more information about our planetary gearboxes in PJ series, PH series and PM series, please visit our website www.broadwaygear.com. Thanks!