

Planetary Gearboxes PJ Series

PJ52

This is a group of planetary gearbox or planetary gearhead of PJ series, precision series.

Its diameter is $\varnothing 52$ mm. It has 5 stages, 5 lengths, and 125 models for your selection.

It is for DC, step or servo motor that the power is less than 200 W. The continuous output torque is 4-40 Nm.



Table 1: Features

| Stages | Length (mm / in.) | Efficiency (%) | Backlash | Weight (g / oz) |
|--------|-------------------|----------------|----------|-----------------|
| 1 | 45 / 1.77 | 90 | 0.3° | 475 / 12.56 |
| 2 | 53.5 / 2.11 | 80 | 0.6° | 575 / 15.20 |
| 3 | 62 / 2.44 | 73 | 0.8° | 675 / 17.84 |
| 4 | 70.5 / 2.78 | 66 | 0.8° | 775 / 20.48 |
| 5 | 79 / 3.11 | 59 | 0.8° | 875 / 23.13 |

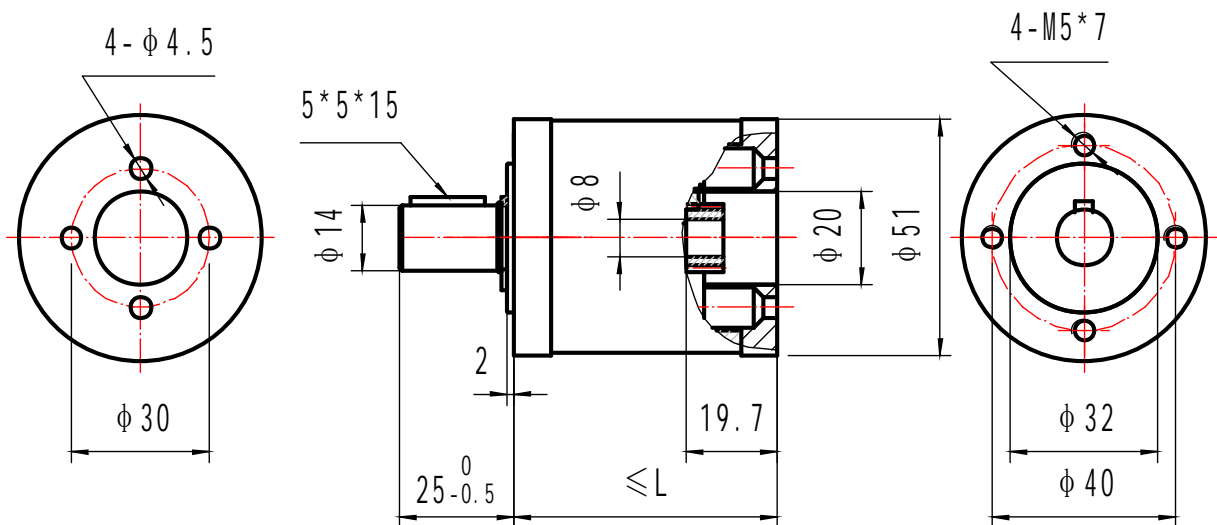


Table 2: Material and load

| Items | Description |
|-----------------------|------------------------------|
| Shell Material | Stainless steel |
| Gear Materiel | Steel, hard gear surface |
| Output Shaft Materiel | Stainless steel |
| Flange Materiel | Aluminum |
| Bearing on Output End | Rolling bearing |
| Max. Input Speed | 3,500 rpm |
| Max. Radial Load | 1000 N |
| Max. Axial Load | 500 N |
| Max. Install Force | 1200 N |
| Radial Clearance | 0.01 mm |
| Axial Clearance | 0.01 mm |
| Operating Temperature | -50 to 185 , (-58, to 365°F) |

Table 3: Ratio and output torque

| Model # | Ratio | Output Torque (Nm) | | Stages |
|---------|-------|--------------------|--------------|--------|
| | | Continuous | Intermittent | |
| 1152002 | 3.56 | 4 | 7 | 1 |
| 1152003 | 4.00 | | | |
| 1152004 | 5.60 | | | |
| 1152005 | 6.75 | | | |
| 1152009 | 12.66 | 20 | 26 | 2 |
| 1152010 | 14.24 | | | |
| 1152011 | 16.00 | | | |
| 1152013 | 19.94 | | | |
| 1152015 | 22.40 | | | |
| 1152016 | 24.03 | 20 | 26 | 2 |
| 1152017 | 27.00 | | | |
| 1152018 | 31.36 | | | |
| 1152019 | 37.80 | | | |
| 1152020 | 45.56 | 14 | 14 | |
| 1152026 | 45.06 | 40 | 52 | 3 |
| 1152028 | 50.69 | | | |
| 1152030 | 56.96 | | | |
| 1152032 | 64.00 | | | |
| 1152035 | 70.97 | | | |

(Continued from Table 3: Ratio and output torque)

| Model # | Ratio | Output Torque (Nm) | | Stages |
|---------|--------|--------------------|--------------|--------|
| | | Continuous | Intermittent | |
| 1152037 | 79.74 | 40 | 52 | 3 |
| 1152039 | 85.55 | | | |
| 1152040 | 89.60 | | | |
| 1152041 | 96.12 | | | |
| 1152043 | 108.00 | | | |
| 1152044 | 111.64 | 40 | 52 | 3 |
| 1152046 | 125.44 | | | |
| 1152047 | 134.57 | | | |
| 1152049 | 151.20 | | | |
| 1152050 | 162.20 | | | |
| 1152051 | 175.62 | | | |
| 1152052 | 182.25 | 40 | 52 | 3 |
| 1152053 | 211.68 | | | |
| 1152054 | 255.15 | | | |
| 1152055 | 307.55 | | | |
| 1152064 | 160.42 | 40 | 52 | 4 |
| 1152067 | 180.47 | | | |
| 1152071 | 202.78 | | | |
| 1152074 | 227.84 | | | |
| 1152077 | 252.66 | | | |
| 1152078 | 256.00 | 40 | 52 | 4 |
| 1152082 | 283.89 | | | |
| 1152085 | 304.55 | | | |
| 1152086 | 318.98 | | | |
| 1152088 | 342.19 | | | |
| 1152090 | 358.40 | 40 | 52 | 4 |
| 1152092 | 384.48 | | | |
| 1152094 | 397.44 | | | |
| 1152096 | 432.00 | | | |
| 1152098 | 446.57 | | | |
| 1152100 | 479.06 | 40 | 52 | 4 |
| 1152102 | 501.76 | | | |
| 1152103 | 538.27 | | | |
| 1152106 | 577.44 | | | |
| 1152107 | 604.80 | | | |
| 1152108 | 625.19 | 40 | 52 | 4 |
| 1152109 | 648.81 | | | |
| 1152111 | 702.46 | | | |
| 1152112 | 729.00 | | | |
| 1152113 | 753.58 | | | |

(Continued from Table 3: Ratio and output torque)

| Model # | Ratio | Output Torque (Nm) | | Stages |
|---------|---------|--------------------|--------------|--------|
| | | Continuous | Intermittent | |
| 1152115 | 846.72 | 40 | 52 | 4 |
| 1152116 | 908.33 | | | |
| 1152118 | 983.45 | | | |
| 1152119 | 1020.60 | | | |
| 1152120 | 1094.87 | | | |
| 1152121 | 1185.41 | 40 | 52 | 4 |
| 1152122 | 1230.19 | | | |
| 1152123 | 1428.84 | | | |
| 1152124 | 1722.26 | | | |
| 1152125 | 2075.94 | 12 | 14 | |
| 1152138 | 571.09 | 40 | 52 | 5 |
| 1152143 | 642.48 | | | |
| 1152148 | 721.89 | | | |
| 1152153 | 811.11 | | | |
| 1152157 | 899.47 | | | |
| 1152158 | 911.36 | 40 | 52 | 5 |
| 1152163 | 1010.64 | | | |
| 1152164 | 1024.00 | | | |
| 1152168 | 1084.19 | | | |
| 1152171 | 1135.55 | | | |
| 1152174 | 1218.19 | 40 | 52 | 5 |
| 1152176 | 1275.90 | | | |
| 1152180 | 1368.75 | | | |
| 1152182 | 1414.90 | | | |
| 1152183 | 1433.60 | | | |
| 1152186 | 1537.92 | 40 | 52 | 5 |
| 1152189 | 1589.78 | | | |
| 1152192 | 1705.46 | | | |
| 1152193 | 1728.00 | | | |
| 1152196 | 1786.27 | | | |
| 1152198 | 1916.25 | 40 | 52 | 5 |
| 1152201 | 2007.04 | | | |
| 1152203 | 2055.69 | | | |
| 1152204 | 2153.09 | | | |
| 1152206 | 2225.69 | | | |
| 1152208 | 2309.76 | 40 | 52 | 5 |
| 1152210 | 2419.20 | | | |
| 1152212 | 2500.77 | | | |
| 1152213 | 2595.24 | | | |
| 1152215 | 2682.75 | | | |

(Continued from Table 3: Ratio and output torque)

| Model # | Ratio | Output Torque (Nm) | | Stages |
|---------|----------|--------------------|--------------|--------|
| | | Continuous | Intermittent | |
| 1152217 | 2809.86 | 40 | 52 | 5 |
| 1152218 | 2916.00 | | | |
| 1152220 | 3014.32 | | | |
| 1152223 | 3233.67 | | | |
| 1152225 | 3386.88 | | | |
| 1152226 | 3501.08 | 40 | 52 | 5 |
| 1152227 | 3633.34 | | | |
| 1152230 | 3897.73 | | | |
| 1152231 | 3933.80 | | | |
| 1152232 | 4082.40 | | | |
| 1152233 | 4220.05 | 40 | 52 | 5 |
| 1152234 | 4379.47 | | | |
| 1152236 | 4741.63 | | | |
| 1152237 | 4920.75 | | | |
| 1152238 | 5086.67 | | | |
| 1152240 | 5507.32 | 40 | 52 | 5 |
| 1152241 | 5715.36 | | | |
| 1152242 | 6131.25 | | | |
| 1152244 | 6638.28 | | | |
| 1152245 | 6889.05 | | | |
| 1152246 | 7390.35 | 40 | 52 | 5 |
| 1152247 | 8001.50 | | | |
| 1152248 | 8303.77 | | | |
| 1152249 | 9644.67 | | | |
| 1152250 | 11625.27 | | | |
| 1152251 | 14012.60 | 12 | 14 | 5 |

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