

Planetary Gearboxes PM Series

# PM20

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

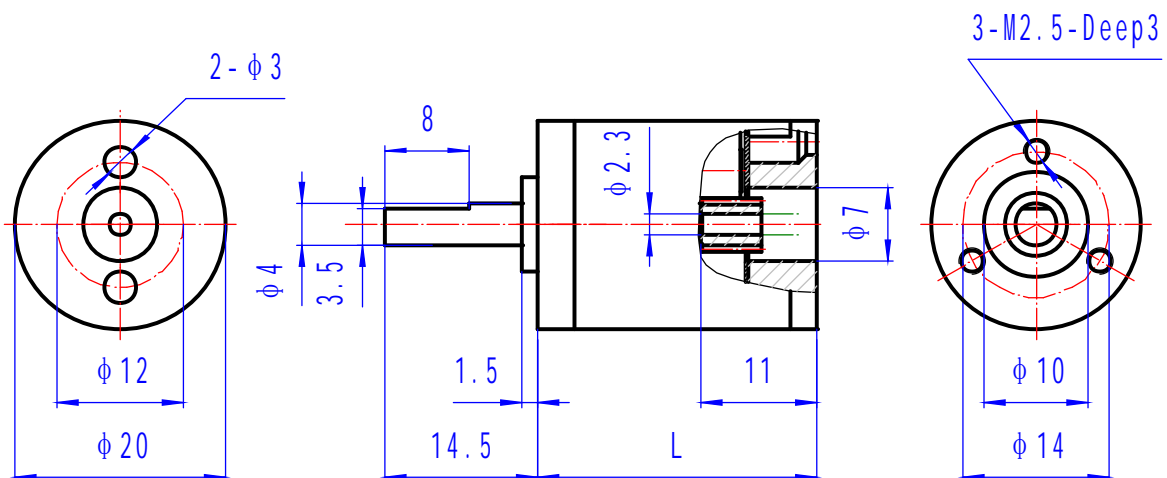
Its diameter is  $\varnothing 20$  mm. It has 5 stages, 5 length, and 20 models for your selection.

It is for DC, step or servo motor that the power is less than 5 W. The continuous output torque is 0.15-0.85 Nm.



Table 1: Features

| Stages | Length (mm / in.) | Efficiency (%) | Weight (g / oz) |
|--------|-------------------|----------------|-----------------|
| 1      | 20.3 / 0.80       | 90             | 25 / 0.66       |
| 2      | 24.1 / 0.95       | 81             | 32 / 0.85       |
| 3      | 27.9 / 1.10       | 73             | 40 / 1.06       |
| 4      | 33.7 / 1.33       | 65             | 48 / 1.27       |
| 5      | 37.5 / 1.48       | 59             | 55 / 1.45       |



**Table 2: Material and load**

| Items                 | Description  |
|-----------------------|--|
| Shell Material        | Carbon steel                                       |
| Gear Materiel         | First stage plastic, rest steel, hard gear surface |
| Output Shaft Materiel | Carbon steel                                       |
| Flange Materiel       | Aluminum   |
| Bearing on Output End | Rolling bearing                                    |
| Max. Input Speed      | 6,000 rpm  |
| Max. Radial Load      | 8 N  |
| Max. Axial Load       | 8 N  |
| Max. Install Force    | 100 N  |
| Radial Clearance      | 0.04 mm  |
| Axial Clearance       | 0.03 mm  |
| Operating Temperature | -10 to 85 , (14, to 185°F)                         |

**Table 3: Ratio and output torque**

| Model # | Ratio   | Output Torque (Nm) |              | Stages |
|---------|---------|--------------------|--------------|--------|
|         |         | Continuous         | Intermittent |        |
| 1320001 | 3.57    | 0.15               | 0.2          | 1      |
| 1320003 | 4.60    |                    |              |        |
| 1320005 | 12.75   | 0.25               | 0.35         | 2      |
| 1320008 | 16.42   |                    |              |        |
| 1320011 | 21.16   |                    |              |        |
| 1320015 | 45.52   | 0.5                | 0.75         | 3      |
| 1320018 | 58.63   |                    |              |        |
| 1320023 | 75.54   |                    |              |        |
| 1320028 | 97.34   |                    |              |        |
| 1320035 | 162.50  | 0.85               | 1.36         | 4      |
| 1320038 | 209.30  |                    |              |        |
| 1320044 | 269.68  |                    |              |        |
| 1320051 | 347.49  |                    |              |        |
| 1320059 | 447.75  |                    |              |        |
| 1320070 | 580.12  | 0.85               | 1.5          | 5      |
| 1320073 | 747.19  |                    |              |        |
| 1320079 | 962.77  |                    |              |        |
| 1320088 | 1240.54 | 0.85               | 1.5          | 5      |
| 1320099 | 1598.45 |                    |              |        |
| 1320109 | 2059.63 |                    |              |        |

For more information about our planetary gearboxes in PJ series, PH series and PM series, please visit our website [www.broadwaygear.com](http://www.broadwaygear.com). Thanks!