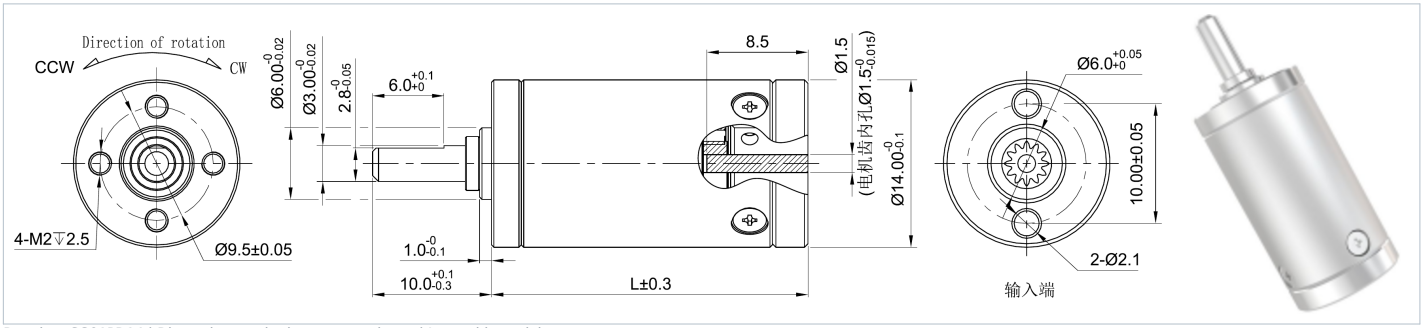
14P | Ø14 mm Micro Planetary Gearhead

GEARHEAD ONLY / PRODUCT TECHNICAL DATASHEET

SIGGEAR / 14P / DRAWING SG01PD14 REV 1.0 | 17 NOV 2026

01 MECHANICAL INTERFACE / SOURCE DRAWING



Drawing: SG01PD14 | Dimensions and tolerances as shown | Input side at right

02 GENERAL TECHNICAL DATA

Nominal outside diameter	**Ø14 mm**	Number of stages	**1–4**
Gearhead body length	**15.2–26.6 mm**	Backlash at no load	**≤ 1.5°**
Reduction ratio range	**3.75:1–471.6:1**	Operating temperature	**−40 to +120 °C**
Max. radial load (10 mm from flange)	**7.85 N**	Max. axial shaft load	**2.45 N**
Radial shaft play	**≤ 0.04 mm**	Axial shaft play	**≤ 0.20 mm**
Housing / gears	**Steel**	Output bearing	**Ball bearing**

03 PERFORMANCE BY REDUCTION STAGE

Stage	L (mm)	Rated torque (mN·m)	Momentary torque (mN·m)	Eff.	Available reduction ratios (x:1)
1	15.2	343.2	686.5	90%	3.75 / 4.38 / 4.66
2	19.0	392.3	784.5	80%	14 / 16.4 / 17.5 / 19.2 / 20.4 / 21.7
3	22.8	490.3	980.7	73%	52.7 / 61.6 / 65.5 / 71.9 / 76.5 / 81.4 / 84 / 89.4 / 95.1 / 101.2
4	26.6	588.4	1,176.8	66%	197.75 / 231 / 245.74 / 269.8 / 287 / 305.4 / 315.1 / 335.25 / 356.7 / 368 / 379.5 / 391.6 / 416.6 / 443.2 / 471.6

04 MOTOR COMPATIBILITY / ENGINEERING NOTES

- Motor supply reference: 3–36 VDC, as stated in the supplied product specification. This is the motor supply range, not a voltage rating of the gearhead itself.
- Input speed: The 8,000 rpm limit shown in the earlier source sheet is not applied as a universal gearhead limit. Motors with measured speeds from 1,000 to 50,000 rpm can be used; the final combination should still be matched to ratio, load, duty cycle, lubrication and thermal conditions.
- Torque: Rated allowable torque is a continuous-load reference. Maximum momentary torque is a peak limit and is not a continuous rating. Confirm application-specific life and duty requirements before production release.
- Source note: The supplied sheet states a DC motor power recommendation below 5 W. Higher-power motor combinations should be reviewed against the actual operating point before being specified as a matched assembly.

Technical parameters are subject to change without notice. Confirm drawing revision and application requirements before production.