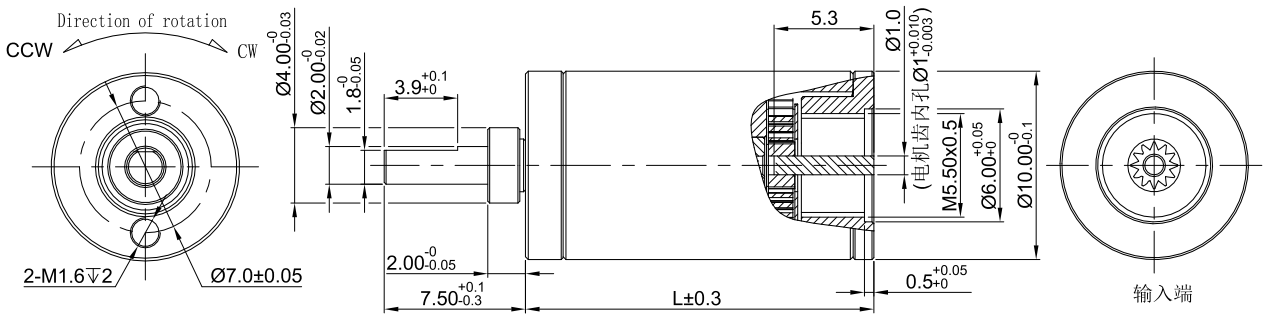
10P | Ø10 mm Micro Planetary Gearhead

GEARHEAD ONLY / PRODUCT TECHNICAL DATASHEET

SIGGEAR / 10P / DRAWING SG01PD10 REV 1.0 | 09 NOV 2026

01 MECHANICAL INTERFACE / SOURCE DRAWING



Drawing: SG01PD10 | Dimensions and tolerances as shown | Input side at right

02 GENERAL TECHNICAL DATA

Nominal outside diameter	**Ø10 mm**	Number of stages	**1–4**
Gearhead body length	**10.25–18.50 mm**	Backlash at no load	**≤ 1.5°**
Reduction ratio range	**3.5:1–428.7:1**	Operating temperature	**−40 to +120 °C**
Max. radial load (10 mm from flange)	**5.88 N**	Radial shaft play	**≤ 0.04 mm**
Max. axial shaft load	**1.47 N**	Axial shaft play	**≤ 0.15 mm**

Housing / gears: Steel / Steel; output bearing: Ball Bearing.

03 PERFORMANCE BY REDUCTION STAGE

STAGE	L (mm)	RATED (mN·m)	MOMENTARY (mN·m)	EFF. (%)	AVAILABLE REDUCTION RATIOS (x:1)
1	10.25	127.5	255.0	90%	3.5 / 4 / 4.75
2	13.00	147.1	294.2	80%	12.25 / 14 / 16 / 16.6 / 19 / 22.6
3	15.75	176.5	353.0	73%	42.9 / 49 / 56 / 58.2 / 64 / 66.5 76 / 79 / 90.25 / 107.2
4	18.50	196.1	392.3	66%	150.1 / 171.5 / 196 / 203.7 / 224 232.7 / 256 / 266 / 276.4 / 304 315.9 / 361 / 375.1 / 428.7

Rated allowable torque is a continuous-load reference; maximum momentary torque is not a continuous rating.
Input-speed eligibility depends on the matched motor, load, gearhead design and duty cycle; no universal rpm ceiling.
Stage efficiency is a reference value; confirm ratio-specific behavior and source drawing revision before production.