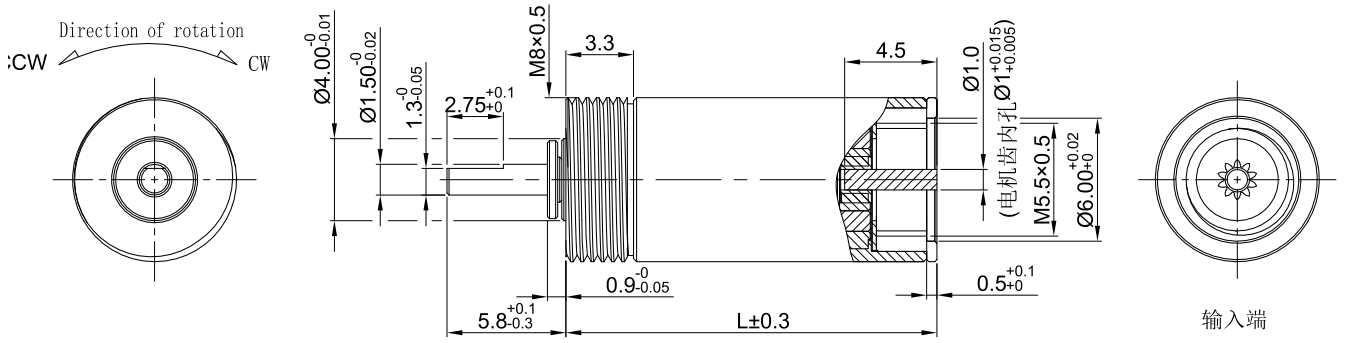
8P | Ø8 mm Micro Planetary Gearhead

GEARHEAD ONLY / PRODUCT TECHNICAL DATASHEET

SIGGEAR / 8P / DRAWING SG01PD08

REV 1.0 | 09 NOV 2026

01 MECHANICAL INTERFACE / SOURCE DRAWING



Drawing: SG01PD08 | Dimensions and tolerances as shown | Input side at right

02 GENERAL TECHNICAL DATA

Nominal outside diameter	**Ø8 mm**	Number of stages	**1–4**
Gearhead body length	**10.15–18.10 mm**	Backlash at no load	**≤ 1.5°**
Reduction ratio range	**3.8:1–731.16:1**	Operating temperature	**−40 to +120 °C**
Max. radial load (10 mm from flange)	**3.92 N**	Radial shaft play	**≤ 0.04 mm**
Max. axial shaft load	**0.98 N**	Axial shaft play	**≤ 0.15 mm**

Housing / gears: 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	10.15	19.6	39.2	90%	3.8 / 4.5 / 5.2
2	12.80	24.5	49.0	80%	14.4 / 17.1 / 19.8 / 20.3 / 23.4 27
3	15.45	29.4	58.8	73%	54.9 / 65 / 75.1 / 76.95 / 88.9 91.1 / 102.75 / 105.3 / 121.7 140.6
4	18.10	39.2	78.5	66%	208.5 / 246.9 / 285.3 / 292.4 337.9 / 346.3 / 390.46 / 400.14 410.1 / 462.4 / 473.85 / 534.3 547.56 / 632.74 / 731.16

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.