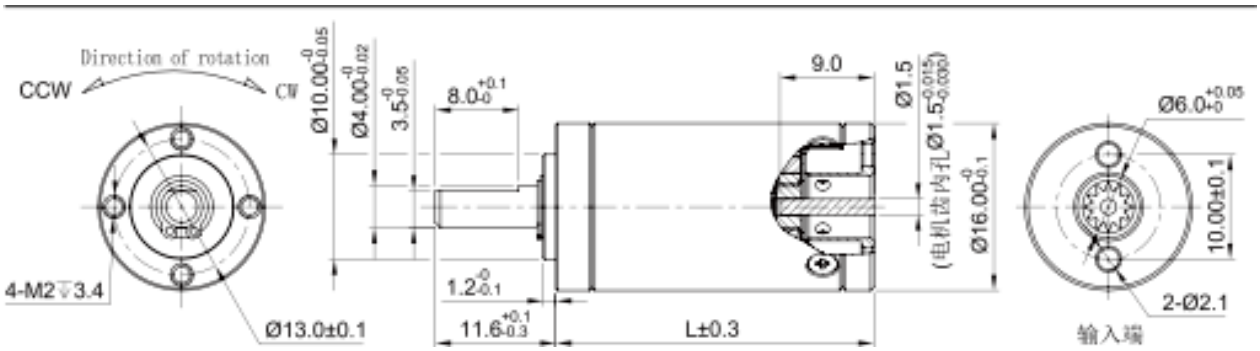
16P | Ø16 mm Micro Planetary Gearhead

GEARHEAD ONLY / PRODUCT TECHNICAL DATASHEET

SIGGEAR / 16P / DRAWING SG01PD16 REV 1.0 | 17 NOV 2026

01 MECHANICAL INTERFACE / SOURCE DRAWING



Drawing: SG01PD16 | Dimensions and tolerances as shown | Input side at right

02 GENERAL TECHNICAL DATA

Nominal outside diameter	**Ø16 mm**	Number of stages	**1–4**
Gearhead body length	**17.55–30.45 mm**	Backlash at no load	**≤ 1.5°**
Reduction ratio range	**3.85:1–459.5:1**	Operating temperature	**−40 to +120 °C**
Maximum radial load (10 mm from flange)	**15.69 N**	Radial shaft play	**≤ 0.04 mm**
Maximum axial shaft load	**4.90 N**	Axial shaft play	**≤ 0.20 mm**
Tested motor-speed compatibility	**1,000–50,000 rpm**	Housing / gears	**Steel / Steel**
Output bearing	**Ball bearing**	Adapted motor voltage	**3–36 VDC**
Recommended motor power	**< 10 W (source note)**	Input speed limit	**No universal rpm ceiling**



03 PERFORMANCE BY REDUCTION STAGE

STAGE	L (mm)	RATED TORQUE (mN·m)	MOMENTARY TORQUE (mN·m)	EFF. (%)	AVAILABLE REDUCTION RATIOS (x:1)
1	17.55	392.3	784.5	90	3.85 / 4.33 / 4.63
2	21.85	490.3	980.7	80	14.8 / 16.7 / 17.8 / 18.7 / 20 / 21.4
3	26.15	686.5	1961.3	73	57.1 / 64.2 / 68.6 / 72.2 / 77.2 / 81.2 / 82.5 / 86.8 / 92.8 / 99.25
4	30.45	882.6	2549.7	66	219.7 / 247 / 264.2 / 277.9 / 297.2 / 312.55 / 317.75 / 334.2 / 351.5 / 357.4 / 375.9 / 382.1 / 401.9 / 429.8 / 459.5

Rated allowable torque is a continuous-load reference; maximum momentary torque is not a continuous rating. Stage efficiency is a reference value. Tested motor-speed compatibility is based on the supplied SigGear engineering confirmation; final suitability depends on the matched motor, load, duty cycle and thermal conditions.

The source specification lists recommended DC motor power below 10 W. Confirm motor mounting, shaft interface and application-specific operating conditions with SigGear engineering before production release.