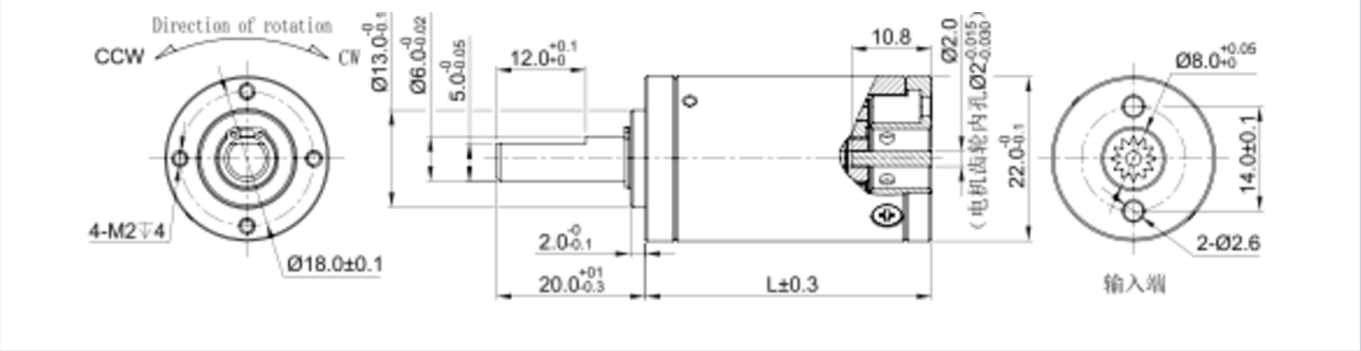
PG SERIES / PRECISION PLANETARY GEARHEADS

22P | Ø22 mm Miniature Planetary Gearhead

GEARHEAD ONLY / PRODUCT TECHNICAL DATASHEET

SIGGEAR / 22P / DRAWING SG01PD22 REV 1.0 | 17 NOV 2026

01 MECHANICAL INTERFACE / SOURCE DRAWING



Drawing: SG01PD22 | Dimensions and tolerances as shown | Input side at right

02 GENERAL TECHNICAL DATA

Nominal outside diameter	Ø22 mm	Number of stages	1–4
Gearhead body length	22.6–38.5 mm	Backlash at no load	≤ 1.5°
Reduction ratio range	3.5:1–509.1:1	Operating temperature	−40 to +120 °C
Max. radial load (10 mm from flange)	15.69 N	Radial shaft play	≤ 0.04 mm
Max. axial shaft load	4.90 N	Axial shaft play	≤ 0.20 mm

Housing / gears: steel. Output bearing: ball bearing. Input-speed suitability depends on the matched motor, load, gearhead design and duty cycle; no universal rpm ceiling is specified.

03 PERFORMANCE BY REDUCTION STAGE

STAGE	L (mm)	RATED (mN·m)	MOMENTARY (mN·m)	EFF. (%)	AVAILABLE REDUCTION RATIOS (x:1)
1	22.6	784.5	1,569.1	90%	3.5 / 4 / 4.75
2	27.9	980.7	1,961.3	80%	12.25 / 14 / 16 / 16.6 / 19 / 22.6
3	33.2	1,471.0	2,942.0	73%	42.9 / 49 / 56 / 58.2 / 64 / 66.5 / 76 / 79 / 90.25 / 107.2
4	38.5	2,451.7	4,903.3	66%	150.1 / 171.5 / 196 / 203.7 / 224 / 232.7 / 256 / 266 / 276.4 / 304 / 315.9 / 361 / 375.1 / 428.7 / 509.1

Rated allowable torque is a continuous-load reference; maximum momentary torque is not a continuous rating. Stage efficiency is a reference value; confirm ratio-specific behavior and source drawing revision before production.