

PG57 Planetary Gearhead

UHV Planetary Gearhead for use with D57 Series Stepper Motors

The PG57 series gearheads couple directly to the AML D57 stepper motor and are suitable for use in UHV environments. Primarily used for increasing resolution, torque multiplication and inertia matching. They are designed for maximum torque capacity, high efficiency and low backlash.



FEATURES

- Suitable for use below 1×10^{-10} mBar
- Multiple ratio options, 3:1 through 100:1
- High efficiency, >94%
- Low inertia
- High precision, low backlash
- Service life >10,000 Hrs
- Bakeable to 200°C
- RoHS compliant

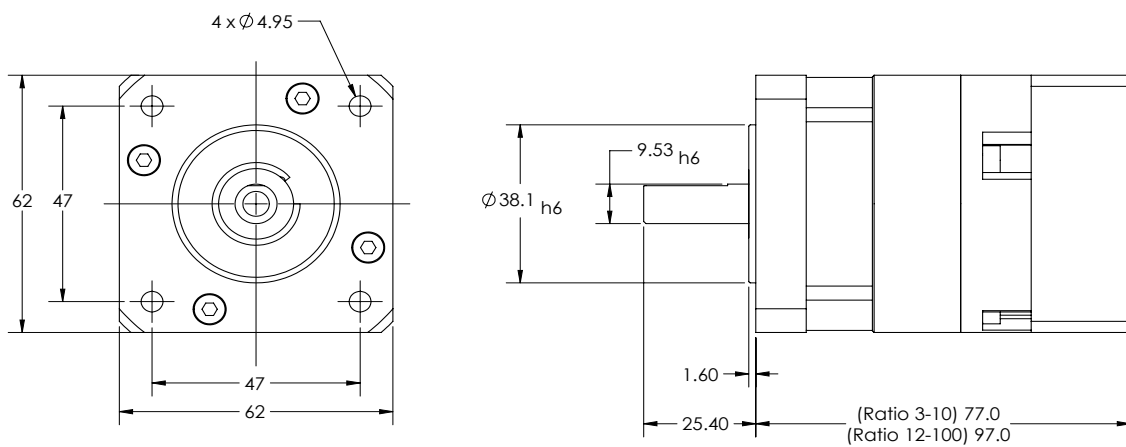
SPECIFICATIONS

Reduction Ratio (:1)	Nominal Output Torque Nm	Maximum Acceleration Torque Nm	Gear Inertia kg-cm ²	Backlash ⁽¹⁾ arc-min	Efficiency at nominal torque %	Radial Load ⁽²⁾ N	Axial Load ⁽²⁾ N	Mass kg	Lubrication		
3	12.0	24.0	0.140	<12	96	665	765	1.2	Nyetorr 6300		
4	18.9	36.4	0.100								
5	19.6	36.4	0.084								
7	16.7	33.4	0.075								
10	10.6	21.2	0.007								
12	18.2	36.4	0.097	<16	94			665		765	1.6
15	19.4	36.4	0.083								
20	21.5	40.0	0.083								
25	20.0	40.0	0.083								
30	22.5	40.0	0.070								
40	21.5	40.0	0.070								
50	20.0	40.0	0.070								
70	16.7	33.4	0.070								
100	10.6	21.2	0.070								

Nominal input speed: 4500 rpm
 Maximum input speed: 8000 rpm
 Direction of rotation: Same as input
 Vacuum environment: $<1 \times 10^{-10}$
 Max. temperature: +200°C

(1) Measured at 2% of rated torque
 (2) @100rpm, radial load applied at centre of shaft

DIMENSIONS



ORDERING INFORMATION

Order Code	
PG57-xx	Precision Planetary Gearhead
Related products	
D57.1	180mNm UHV Stepper Motor

AML pursues a policy of continuous improvement and reserves the right to make detail changes to specifications without consultation. E and OE.

Order code format		
	PG57-	10
Order Code		
Ratio		



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