

# 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.

- Suitable for use below  $1 \times 10^{-10}$  mBar
- Multiple ratio options, 5:1 through 100:1
- Additional gear ratios available for special order.
- Low inertia
- High precision, low backlash
- Service life > 10,000 hours
- Bakeable to 200°C



## SPECIFICATIONS

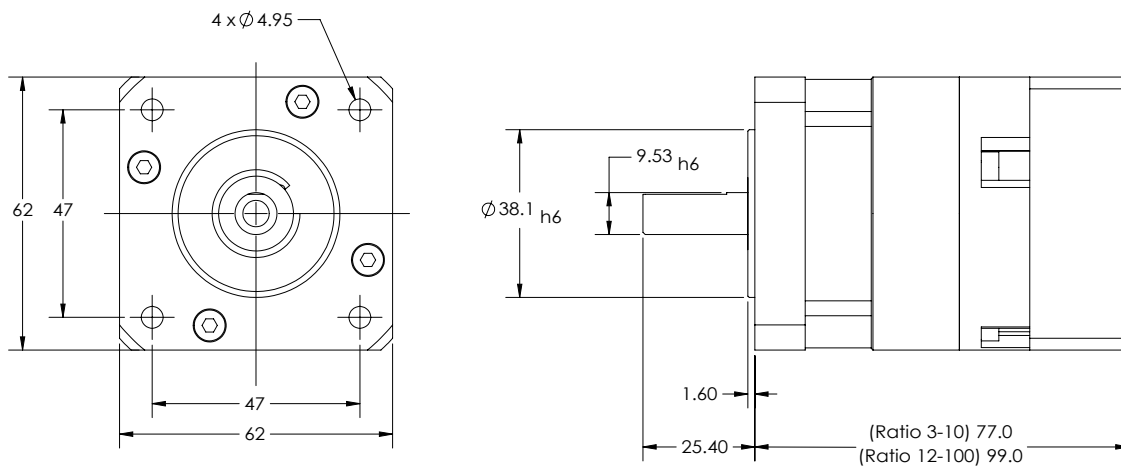
Reduction Ratio (:1)	Nominal Output Torque Nm	Maximum Acceleration Torque Nm	Gear Inertia kg-cm <sup>2</sup>	Backlash <sup>(1)</sup> arc-min	Efficiency at nominal torque %	Radial Load <sup>(2)</sup> N	Axial Load <sup>(2)</sup> N	Maximum Mass kg	Lubrication
5	19.6	36.4	0.084	<12	96	665	765	1.2	NyeTorr® 6300
10	10.6	21.2	0.007						
20	21.5	40.0	0.083	<16	94	665	765	1.6	
50	20.0	40.0	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:  $<1 \times 10^{-10}$  mBar  
 Max. temperature: +200°C  
 Min. temperature: -65°C

(1) Measured at 2% of rated torque

(2) @100rpm, radial load applied at centre of shaft

## DIMENSIONS



## ORDERING INFORMATION

Order Code	
PG57-XX	UHV Planetary Gearhead for AML Stepper Motors

Related Products	
D57.1	1,000 mNm UHV Stepper Motor



Arun Microelectronics Ltd.  
 Unit 2, Bury Mill Farm  
 Bury Gate  
 PULBOROUGH  
 RH20 1NN  
 United Kingdom

Tel: +44 (0)1903 884141  
 Email: sales@arunmicro.com

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