

P5 - Series High Precision Instrument Ovoid Gearhead

P5 Series instrument gearheads conform to the international ovoid standard. The units have established a reputation for excellent running, strength and reliability.

Features include:

- Suited to a wide range of in stock motors; Permanent magnet steppers, AC synchronous and DC instrument servo motors
- High precision spur cut brass gearing allows for long running life, control accuracy and high dynamic performance
- Low cost due to advanced design and optimised manufacturing techniques
- A wide range of ratios available
- Shaft specials, potentiometers and clutches can be added if required



P5 Series - Standard Gear Ratios

Order code	Ratio	Efficiency	Maximum Continuous Torque
P5-G01	25:6	80	20
P5-G03	25:4	80	25
P5-G04	25:3	80	35
P5-G05	10:1	70	40
P5-G06	25:2	70	45
P5-G08	50:3	70	60
P5-G09	20:1	70	65
P5-G11	25:1	70	70
P5-G14	100:3	70	75
P5-G16	125:3	70	80
P5-G17	50:1	70	80
P5-G19	125:2	65	80
P5-G21	250:3	65	80
P5-G23	125:1	65	80
P5-G27	250:1	65	80
P5-G34	500:1	58	85
P5-G41	1250:1	58	90
P5-G62	15000:1	43	100

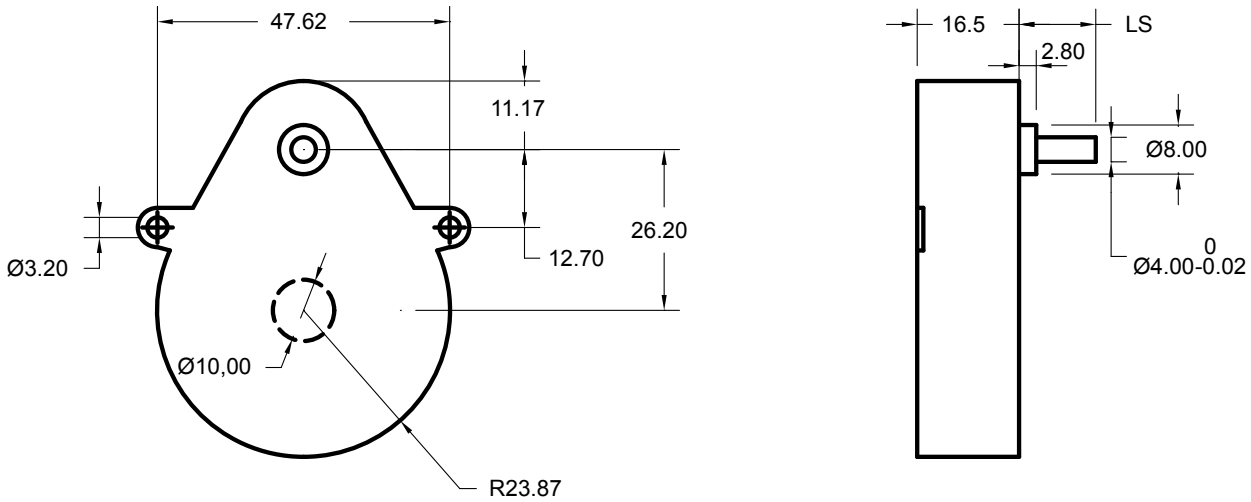
General Specification

Max recommended Input speed	rpm	5000
Max radial Load	N	50 @ 8mm from mounting face
Max static load axial load	N	150 N (for press fit on shaft)
Ambient temperature range	°C	-30 to +65
Max axial shaft play	µm	250
Max radial shaft play	µm	25
Direction of rotation @ output with respect to input		
Ratio codes	No. of stages	Direction of rotation
P5-G01 to G04	2	Same
P5-G05 to G17	3	Opposite
P5-G19 to G27	4	Same
P5-G34 to G41	5	Opposite
P5-G62	7	Opposite

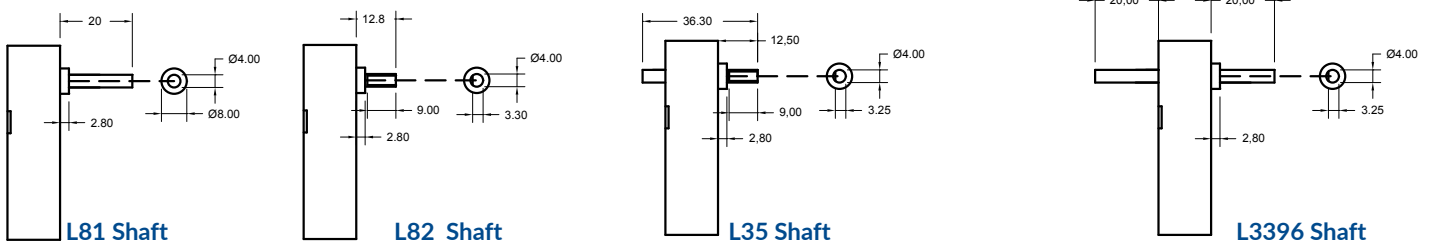


Mechanical specification

Outline dimensions (mm)

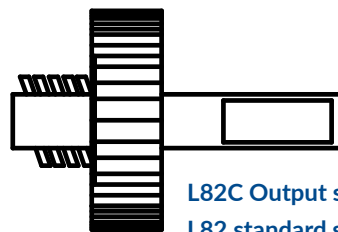


Shaft options



L82 Shaft with Internal Clutch

P5 series gearbox maybe specified with an optional internal friction clutch. The L82C internal clutch is set to a slip torque of 0.6Nm and is designed to protect the gearhead against damage resulting from excessive torque in a stall condition.



L82C Output shaft dimensions as L82 standard shaft

Complete Geared Motor Assemblies

McLennan has a wide range of permanent magnet steppers, AC synchronous and DC servo motors, which can be fitted to the P5. This can be as components with a customer fitting kit or as a complete, fully tested assembly. We have the in-house engineering facility to offer customer specials and added value like motor connectors etc. All of our gearboxes and motors are available from stock.

Positional Servo Drive Assemblies

If required a P5 geared motor assembly can be fitted with a potentiometer, which when connected can provide an analogue reference signal proportional to the output shaft position. The servo drive option can be fitted to any standard ratio.

A variety of potentiometer options are available from stock to provide you with the ideal solution for your application. The potentiometer is directly coupled to the P5 output shaft via a no backlash coupling. This can incorporate a friction clutch to protect the potentiometer against an over travel condition.