Introduction to Gearheads

All units are precision ground planetary gear sets capable of sustained servo input speed. They can be ordered by themselves, or pre-mounted to the SmartMotor $^{\text{TM}}$ prior to shipment.

Each gearhead has a non-captive input pinion gear. This means the pinion is mounted onto the motor shaft and the gearhead is then mounted onto the motor flange.

Torque throughput on in-line (straight) gearheads are limited by input pinion diameters.

Typically the 7:1 ratio single-stage and 28:2 ratio two-stage gearheads have the higher torque ratings.

10:1 and 100:1 gearhead input pinions are very small and great care should be taken not to exceed maximum torque ratings for those gear ratios.

All right angle gearhead torque levels are limited by the right angle beveled gear sets. This is why all gear ratios show the same torque limits within that series.

All gearheads are limited to a maximum of 5000 RPM input pinion speed. This limit is due to differential speed across the input pinion bearings and lubrication flow. Exceeding 5000 RPM for any sustained amount of period will GREATLY decrease the life of the gearhead and will not be covered by warranty. However, for typical servo applications, there is no issue with reaching 5000RPM on each machine cycle peak speeds.

Please consult the factory for axial and radial load specifications. Load ratings are speed dependant and are charted across curves.

All specifications are subject to change without notice. Please consult the factory or website for latest data and CAD drawings.



Gearhead Series	Backlash (arc-minutes)	
	Single Stage	Two Stage
High Performance (S)	3	7
OEM Series (SP)	6	10
Right Angle (RAP)	7	11

Note: These are the low backlash values.

Animatics provides three series of gearheads.

The above chart is a quick reference to backlash specs.



Each gearhead is shipped with appropriate mounting hardware, fasteners, Allen key and pinion gap gauge.

2 Stage Gearheads Shown

