

Harmonic Planetary[®] Gears Offer Low Backlash for Life.

ew models are being added to our planetary Quick Connect® gearhead line. Building a high precision actuator is easily achieved by coupling any servomotor to one of our precision Quick Connect® servo gearheads.

Planetary gears have simultaneous meshing between the sun gear, planet gears, and the internal ring gear. Harmonic Planetary® gears use a precision engineered elastic ring gear which compensates for interference between meshing parts. This proprietary Harmonic Planetary[®] gear design provides smooth and quiet motion and maintains ultra-low backlash for the life of the reducer.

Harmonic Planetary[®] Gears

- Ratios: 3:1 50:1
- Peak Torque: 3.9 N•m 3940 N•m
- Sizes: 40mm 230mm
- Output Configurations: Hollow Shaft, Flange, Keyed Shaft, Smooth Shaft

HPN Planetary gearheads are priced to deliver a great value. They feature a robust design utilizing helical gears for quiet performance and long life. These gearheads are available with short lead times and are designed to couple to any servo motor with our Quick Connect® coupling. HPN gearheads are suitable for use in a wide range of applications for precision motion control and positioning. HPN Harmonic Planetary® gears are available in 5 sizes: 11, 14, 20, 32, and 40, with reduction ratios ranging from 3:1 to 50:1. Plus, they are dimensionally compatible with popular gearhead models. This new value series of planetary gears carry the reputation for quality and reliability for which Harmonic Drive® products are known throughout the world.

High torque HPGP and standard torque HPG Quick Connect[®] gearheads offer high precision and low backlash (standard: < 3-arc-min, optional: <1 arc-min). Harmonic Planetary® HPG gearheads are also available with helical gearing and low reduction ratios. The new models, HPG-R, offer lowspeed ratios from 3:1 through 10:1 including all integer ratios in between. Two stage ratios are currently offered in HPG standard and HPGP gearheads, and will be available soon for the new HPG-R. HPG standard torque gear is also available in three sizes as a right-angle configuration for use when space is limited. Innovative ring gear ensures consistent, low backlash for the life of the gearhead.



The HPF Harmonic Planetary® gear unit delivers hightorque and high-accuracy with a hollow shaft design. The gearhead incorporates continuous backlash compensation that ensures low backlash throughout the life of the gear. An extralarge cross roller bearing serves as the output flange and can directly support large loads with exceptionally high moment stiffness. The large coaxial hollow shaft allows cables, shafts, ball screws or lasers to pass directly through the axis of rotation.

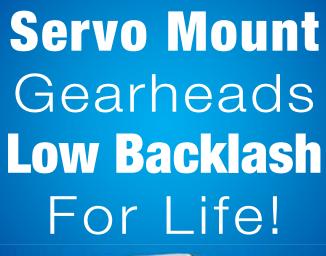
Harmonic Drive LLC has a dedicated website for its Harmonic Planetary® gearheads, offering users a quick and easy way to choose the best product for their application. Developed with the design engineer in mind, the website features a robust product selector tool, PDF and DXF drawings, as well as downloadable 3-D solid models. The Product Selector Tool enables the design engineer to quickly filter through Harmonic Drive product specifications to find the right gearhead to connect to their servomotor.

Electromate is the exclusive Canadian distributor of Harmonic Drive products (except the Province of Alberta)



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HPN Harmonic Planetary[®] value series provides a low cost solution without the need to compromise on quality or performance. This new value series of planetary gears carry the reputation for quality and reliability for which Harmonic Drive® products are known throughout the world.

- Helical Gearing
- Available in 5 frame sizes
- Peak Torque: 9Nm to 752Nm
- Ratios: 3:1 to 31:1, new two-stage ratios available soon
- Quick Connect[®] mounting system



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Partners in Precision

 High Efficiency Backlash: <5 arc-min (single stage), <7 arc-min (two stage) Fast Delivery Shaft output available with key and centertapped hole or with center-tapped hole

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