

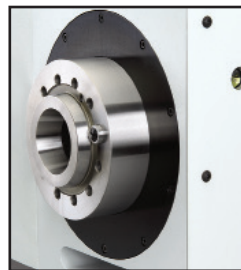


Face plate included

Standard Features

- 160 and 210mm slotted face plates are precision ground on a Kellenberger® grinding machine
- A2-4 (GD160LP) and A2-5 (GD210LP) extended-nose spindles accept collets, expanding collets, step chucks, manual chucks, power chucks and slotted face plates
- Built-in clamp to handle off-center drilling, cross-axis milling and other high-force cutting applications
- Fast clamp and release in milliseconds for increased parts-per-hour
- Hardened steel worm and hardened steel worm gear for long life and continued accuracy
- Double eccentric design for finest possible factory gear mesh
- Left- or right-hand motor mount
- Use with all-digital servo control on most brands of machines, or as 4th-axis (Fanuc, Siemens, Haas, Heidenhain)

Extended-nose spindle design provides optimum clearance.



Options

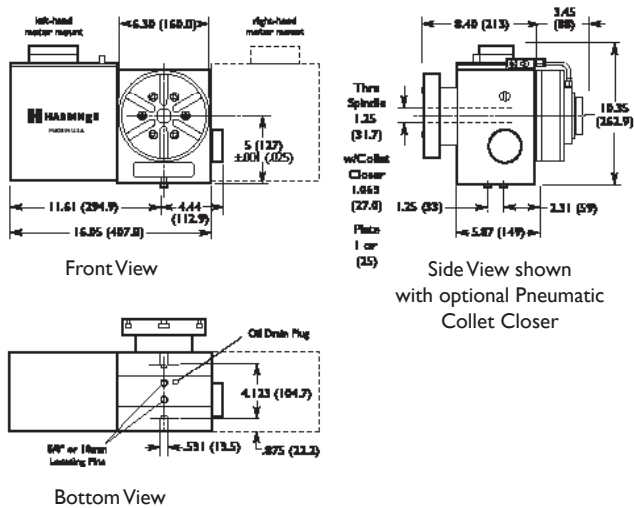
- Pneumatic Collet Closer (draw bar force at 80 psi)
GD160LP – 1850 lb / 835 kg
GD210LP – 3191 lb / 1440 kg
- GD210LP available with or without collet-ready spindle
- Tailstocks, plate and cube trunnions (GD160LP plate trunnion only)
- Complete array of Hardinge spindle tooling

Sleek, fast and accurate. Engineered to support heavy loads and high-force cutting applications while maintaining accuracy over a long life. Fast clamp and release in milliseconds gives you increased parts-per-hour. Hardinge rotary tables have collet-ready spindles for increased part gripping options.

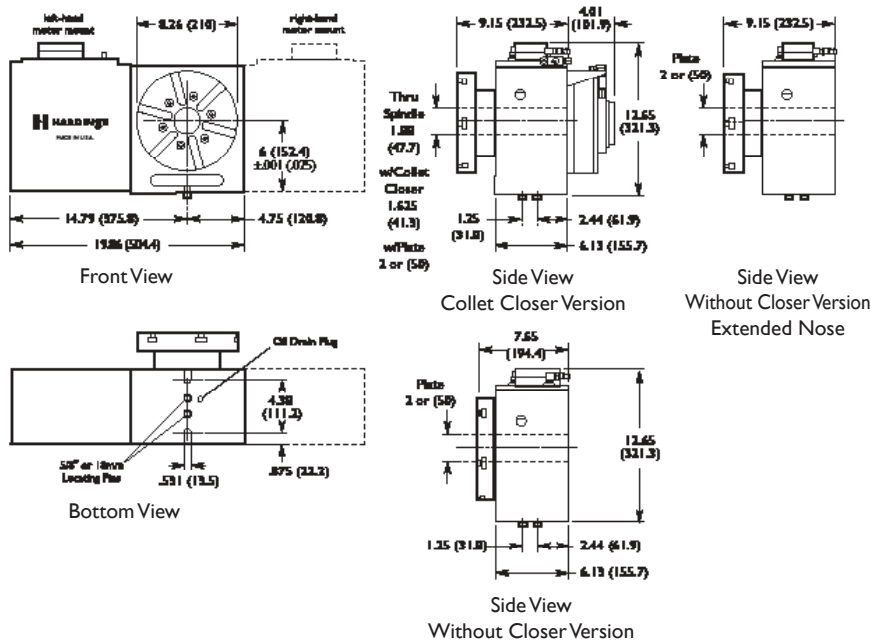
| | GD160LP | GD210LP |
|--|---------------------------------|-----------------------------------|
| SERVO CONTROL / PROGRAMMING | | |
| Servo Model | Standard Servo | |
| Storage - Number of programs/steps | up to 50/1000 | |
| RS-232 Interface | YES | |
| Text Display | multiple lines | |
| Infrared Upload/Download | YES | |
| Baud Rate Capacity | up to 56K | |
| SPINDLE | | |
| Runout Maximum (TIR) | 0.0002" (.005) | |
| Backlash | 40 arc-sec | |
| Speed | 0.001 to 240° per sec | |
| Maximum RPM Rapid ^{Min-1} | 40 | |
| Load Support Maximum part weight | Dual Bearing 100 lb / 45 kg | Dual Bearing 220 lb / 100kg |
| Spindle Type | A2-4 | A2-5 |
| Table Diameter | 6.299" (160) | 8.267" (210) |
| Thru Diameter Face Plate (maximum) | 1" or 25mm choice | 2" or 50mm choice |
| Thru Dia. Opt. Collet Closer (max) | 1.08" (27.4) | 1.62" (41.27) |
| Width of T-slot | .44" (11.2) | .57" (14.4) |
| Collets | Standard 5C | Standard 16C |
| Spindle center to base | 5.000" ± 0.001 (127 ± 0.254) | 6.000" ± 0.001 (152.4 ± 0.254) |
| POSITIONING | | |
| Accuracy ⁶ | ±20 arc-sec | ±15 arc-sec |
| Repeatability | ±5 arc-sec | |
| Resolution (degree) | 0.001 | |
| Max Rotation/Step (degree) ⁷ | 9999.99 | |
| Gear Diameter (inch/mm) | 3.7 (94) | 6.2 (157) |
| MOTOR | | |
| Type (DC servo) | 0.78 hp / 0.58kW | 2.0 hp / 1.50 kW |
| Clamping Torque ² (pneumatic) | 150 ft-lb / 203 Nm | 275 ft-lb / 373 Nm |
| Torque ³ at Spindle | 73 ft-lb / 99 Nm | 90 ft-lb / 122 Nm |
| Duty Cycle | 90% at full speed | |
| OPERATING SPECIFICATIONS | | |
| Gear Ratio (worm, gear & timing belt) | 90:1 | |
| Operating Temp. (maximum ambient) | 120°F/49°C | |
| Power Requirements (VAC) | 115 +/- 5% @ 10 amps | |
| Maximum Air Pressure | 100 psi / 6.9 bar | |
| Minimum Air Pressure | 85 psi / 5.8 bar | |
| WEIGHT | | |
| Rotary Table | 120 lb / 57 kg | 200 lb / 90.7 kg |
| Control | 9.54 lb / 4.34 kg | |

Notes: 2 – maximum torque applied before slipping occurs
3 – from standard GE Fanuc H104 amplifier (results vary when using servo control box or 220v power source)
6 – accuracies can be improved with electronic compensation
7 – continuous rotation available

GD160LP Dimensions:



GD210LP Dimensions:



(millimeters in parentheses)



Hardinge collet-ready spindles accept collets, expanding collets and step chucks with the use of an optional collet closer.

GD160LP Workholding Capacities

| | |
|-----------------------------------|--|
| Collets – Round (max. capacity) | 1 ¹ / ₁₆ " (26.98) |
| Collets – Hex (max. capacity) | 2 ⁹ / ₃₂ " (23.01) |
| Collets – Square (max. capacity) | 3 ³ / ₄ " (19.05) |
| Step Chucks – Regular Depth | up to 4" (101.6) |
| Step Chucks – Extra Depth | up to 4" (101.6) |
| Sure-Grip® Expanding Collets | 1 ¹ / ₈ " - 3" (3.17 - 76.2) |
| 3-Jaw Manual Chuck | 5" (127) |
| 3-Jaw Manual Chuck | 6" (152.4) |
| 3-Jaw Sure-Grip® Power Chuck | 4" (101.6) |
| Fixture Plate – Collet Style | 3 ³ / ₈ " (85.72) |
| Fixture Plate – Collet Style | 4 ³ / ₈ " (111.12) |
| Slotted Face Plate (diameter) | 6.3" (160) |
| Collet Stops for part positioning | YES |

GD210LP Workholding Capacities

| | |
|-----------------------------------|--|
| Collets – Round (max. capacity) | 1 ⁵ / ₈ " (41.27) |
| Collets – Hex (max. capacity) | 1 ¹³ / ₃₂ " (35.71) |
| Collets – Square (max. capacity) | 1 ⁹ / ₆₄ " (28.97) |
| Step Chucks – Regular Depth | up to 6" (152.4) |
| Step Chucks – Extra Depth | up to 6" (152.4) |
| FlexC Collet System - Style D | 2 ⁹ / ₁₆ " (65.00) |
| 3-Jaw Chucks (diameter) | 5", 6", 8" |
| Sure-Grip® Expanding Collets | |
| Collet Style | 1 ¹ / ₂ " - 4" (12.70 - 101.6) |
| Spindle Style | 1 ¹ / ₈ " - 4" (3.17 - 101.6) |
| Fixture Plates | |
| Spindle Mount | 5 ¹ / ₂ " (139.70) |
| Spindle Mount | 8 ⁷ / ₈ " (225.42) |
| Collet Style | 6 ³ / ₈ " (161.92) |
| Slotted Face Plate | 8.26" (210) |
| Slotted Face Plate | 8 ⁷ / ₈ " (225.42) |
| Slotted Face Plate | 10" (254) |
| Collet Stops for part positioning | YES |

Forkardt
 2155 Traversefield Drive
 Traverse City, MI 49686
 800-544-3823
 www.forkardt.com

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