

160 and 210mm Low-Profile Rotary Table Indexers



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.



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

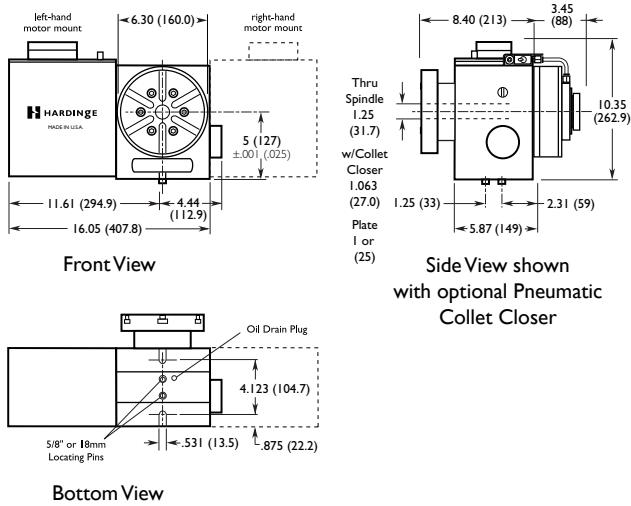
GD160LP GD210LP

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	Dual Bearing	Dual Bearing
Maximum part weight	100 lb / 45 kg	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 ± 0.0254)	6.000" ± 0.001 (152.4 ± 0.0254)
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	

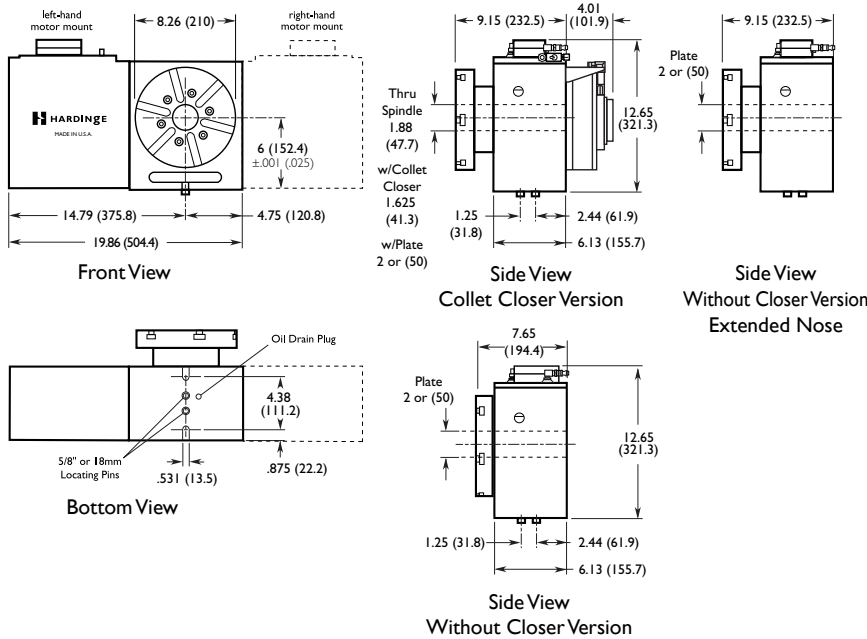
Notes: 2 – maximum torque applied before slipping occurs
3 – from standard GE Fanuc H104 amplifier (results vary when using servo control box or 220v power source)
6 – accuracies can be improved with electronic compensation
7 – continuous rotation available



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)	29/32" (23.01)
Collets – Square (max. capacity)	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	1/8" - 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 7/16" (65.00)
3-Jaw Chucks (diameter)	5", 6", 8"
Sure-Grip® Expanding Collets	
Collet Style	1/2" - 4" (12.70 - 101.6)
Spindle Style	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



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