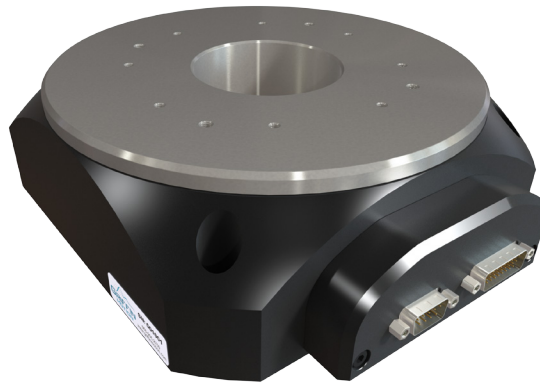


Precision Rotary Table

FEATURES

- Compact Low-Profile Design
- Continuous 360° rotation
- 65mm through bore
- High resolution, absolute encoder
- Direct drive brushless servo motor



The RTS-DD Series Rotary tables are compact, direct drive, precision positioning tables designed for laboratory, factory automation and semiconductor processing equipment. The brushless direct drive technology eliminates backlash and improves reliability by eliminating sliding friction throughout the stage. The compact stage profile helps to minimize abbe error when used in conjunction with other motion axes. The bore allows convenient routing of vacuum or high voltage lines for a range of wafer chucks. Positioning resolution can be selected to meet the needs of the final application.



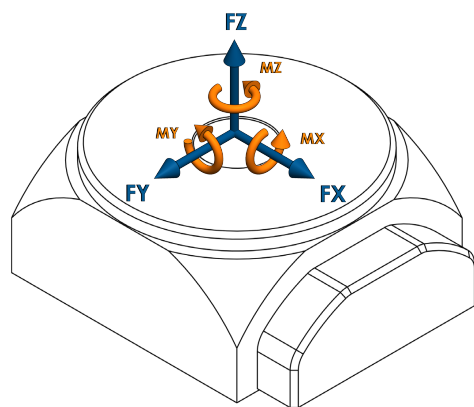
1040 CLASSIC ROAD | APEX, NC 27539
P: 866.906.2709 | F: 919.882.1430
www.griffinmotion.com

RTS-DD-200-S-M-S-S-A-00

Motion Specifications

Product Specifications

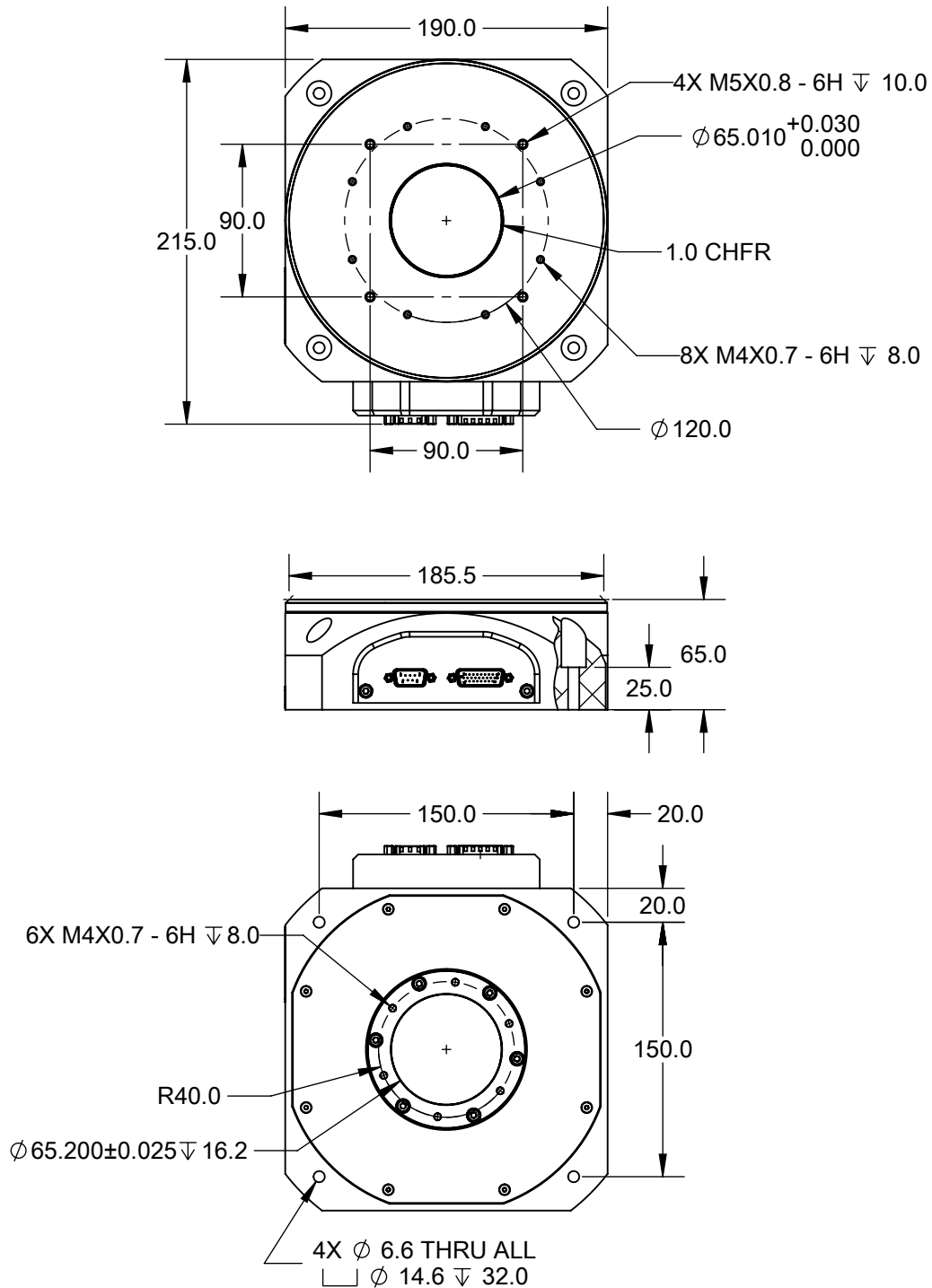
Angular Accuracy (arc-sec)	20
Angular Repeatability (arc-sec)	3
Angular Resolution (arc-sec)	0.019
Angular Velocity (deg/s)	2190
Axial Runout (μm)	10
Continuous Torque (N-m)	3.5
Encoder Output	BiSS C (uni-directional) 26 bit
Force X (N)	250
Force Y (N)	250
Force Z (N)	500
Height (mm)	65
Length (mm)	215
Limit Switches	No
Moment X (N-m)	25
Moment Y (N-m)	25
Moment Z (N-m)	3.5
Encoder Resolution (arc-sec)	0.019 (67108864cts/rev)
Peak Torque (N-m)	19
Radial Runout (μm)	10
Rotational Inertia ($\text{kg}\cdot\text{m}^2$)	0.01491
Stage Mass (kg)	8.16
Temperature Range ($^{\circ}\text{C}$)	-40 to +85
Travel Range (deg)	360 continuous
Width (mm)	190
Wobble (arc-sec)	10



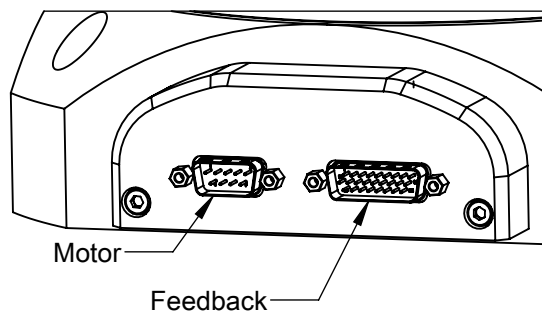
LOAD DIRECTIONS

Part Number Description

RTS	RTS Series
DD	Direct Drive
200	200mm Diameter
S	Absolute Metal Ring
M	26 Bits Per Revolution
S	Stainless Steel Hub
S	Standard Precision
A	Wide Temperature Range
00	Standard Product (Call for custom)



Feedback Connector (DSUB26HD MALE)	
PIN	NAME
1	+5V
2	*
3	*
4	*
5	*
6	*
7	CLOCK+ (MA+)
8	DATA+ (SLO+)
9	*
10	*
11	*
12	*
13	*
14	*
15	*
16	CLOCK- (MA-)
17	DATA- (SLO-)
18	*
19	GND
20	HALL A
21	HALL B
22	HALL C
23	*
24	*
25	*
26	*
* Reserved	



Motor Connector (DSUB9 MALE)	
PIN	NAME
1	*
2	*
3	*
4	*
5	*
6	PHASE A
7	PHASE B
8	PHASE C
9	*
* Reserved	



RTS-DD-200-S-M-S-S-A-00

Electrical Specifications

Motor Specifications	
Motor Type	3 Φ Brushless DC
BEMF Constant (V/KRPM)	114.7
Electrical Time Constant (ms)	2.13
Max Bus Voltage (VDC)	300
Max Continuous Current (A)	3.19
Motor Torque Constant (N·m/A)	1.096
Peak Current (A)	17.7
Pin to Pin Inductance (mH)	12.71
Pin to Pin Resistance (ohm)	5.93
Poles per Revolution	24

Feedback Specifications	
Supply Voltage (V)	5.0 $\pm$ 10%
Supply Current (mA)	250
Encoder Feedback	Yes
Encoder Type	Absolute
Encoder Output	BiSS C (uni-directional) 26 bit
Encoder Resolution	26 bit (67 108 864 counts per revolution, $\approx$ 0.019 arc second)
Encoder Error and Warning bits	active low
Hall Switch Output	Open-Collector, No Pullup Resistor
Hall Switch max current (mA)	-20
Limit Switches	No