

Dover Motion

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Features

- : High load capacity; high torsional stiffness
- : 4" to 12" diameter versions
- : Anti-backlash worm assembly

Description

The RTR Series of motorized rotary tables provides unlimited angular positioning with a high load capacity. The RTR Series design uses a large crossed roller bearing, which provides high torsional stiffness in addition to its high load capacity. The 6", 8", 10", and 12" diameter versions include a preloaded, anti-backlash worm assembly to provide exceptional angular accuracy and repeatability. A Hall

effect limit sensor provides a convenient "home" reference position, accurate to a single step. These units include a motor with a knob and a flexible coupling.

Travel can be restricted by requesting a second position sensor. A clear aperture is available on each model.

Specifications

Specifications	RTR-4	RTR-6	RTR-8	RTR-10	RTR-12
Diameter (inches)	4	6	8	10	12
Worm/Gear Ratio	90:1 45:1	180:1 36:1	180:1 36:1	180:1	180:1
Resolution ¹	0.002 0.004	0.001 0.005	0.001 0.005	0.001	0.001
Accuracy (degree)			0.05		
Bidirectional Repeatability (degree)	0.01	0.007	0.007	0.005	0.005
Vertical Runout (µm)			<25		
Radial Runout (µm)			20		
Axis Runout (degree)			0.03		
Load Capacity (kg)	15	30	30	45	45
Radial Load Capacity (kg)	3	7	7	12	12
Maximum Speed			15 rps at worm		
Total Mass (kg)	2.3	4.1	6.4	9.1	12.7

Configuration

Motor	Stepper (oz-in)	400 step/rev	118	Others available
	200 step/rev		135	Others available 294

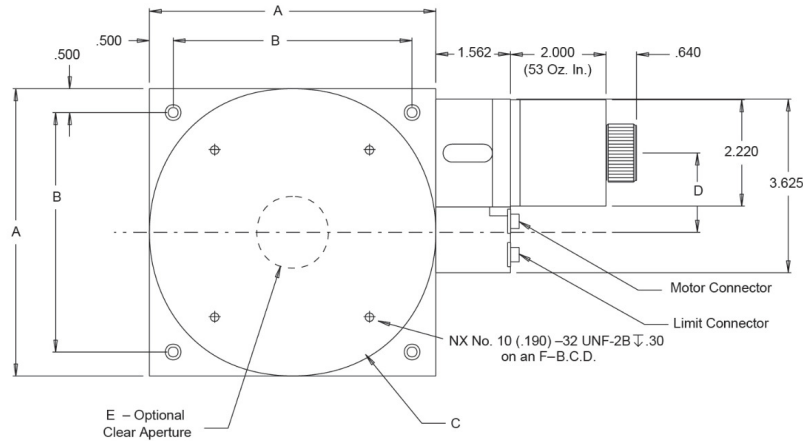
Option

Encoder Rotary (counts/rev.) ³	2000	4000
Clear Aperture Option (inches)	See dimension page for sizes	

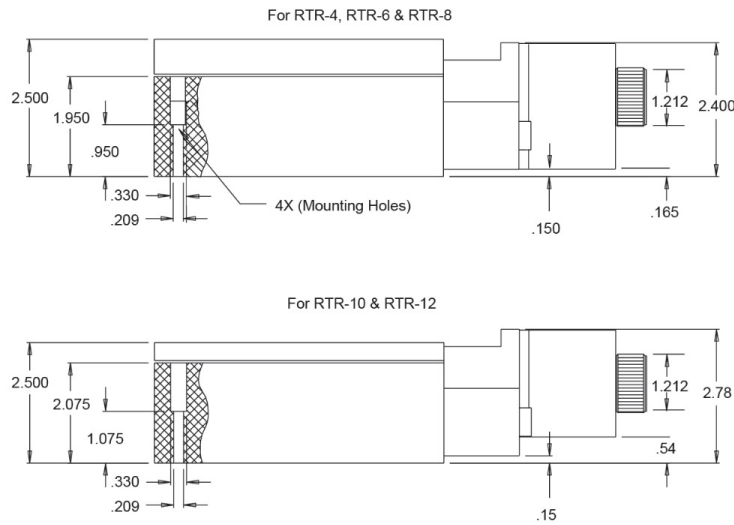
¹Resolution assuming ÷10 microstep drive and standard 200 step/rev. stepping motor, or servo motor with 2000 count/rev. rotary encoder.

Dimensions

Top View



Side View



NOTE:
1. Limit will be tripped when the table is moving in a counter clockwise direction.

Model	A	B	C	D	E	F	N
RTR-4	4	3	4	0.953	0.5	3	4
RTR-6	6	5	6	1.66	1.5	5	4
RTR-8	8	7	8	1.66	1.5	6	8
RTR-10	10	9	10	3.03	3.0	8	8
RTR-12	12	11	12	3.03	3.0	10	8

Measurements in inches