

RIT - 200, Mechanical Rotary Index Table

Precision 50:1 worm gear drive & high stiffness angular contact bearings

ABTech's high precision mechanical rotary index tables combined with Heidenhains RON 200 series encoders and ND 200 series single axis displays make an ideal set up for high precision light duty machining or metrology inspection.



The rotary tables feature sealed 4-point angular contact bearings, providing high stiffness and radial error motions of 50 μ "(1.25 μ m) or better.

The drive is a bronze worm gear (50:1), manually driven by an ergonomic hand wheel. The modular design approach accommodates motor driven versions, including amplifier/controller options and complete turn-key systems.

The single axis display provides easy operation and easy to read digital display. An RS-232-C interface is available as well as switching inputs and outputs for simple automation environments.

Features:

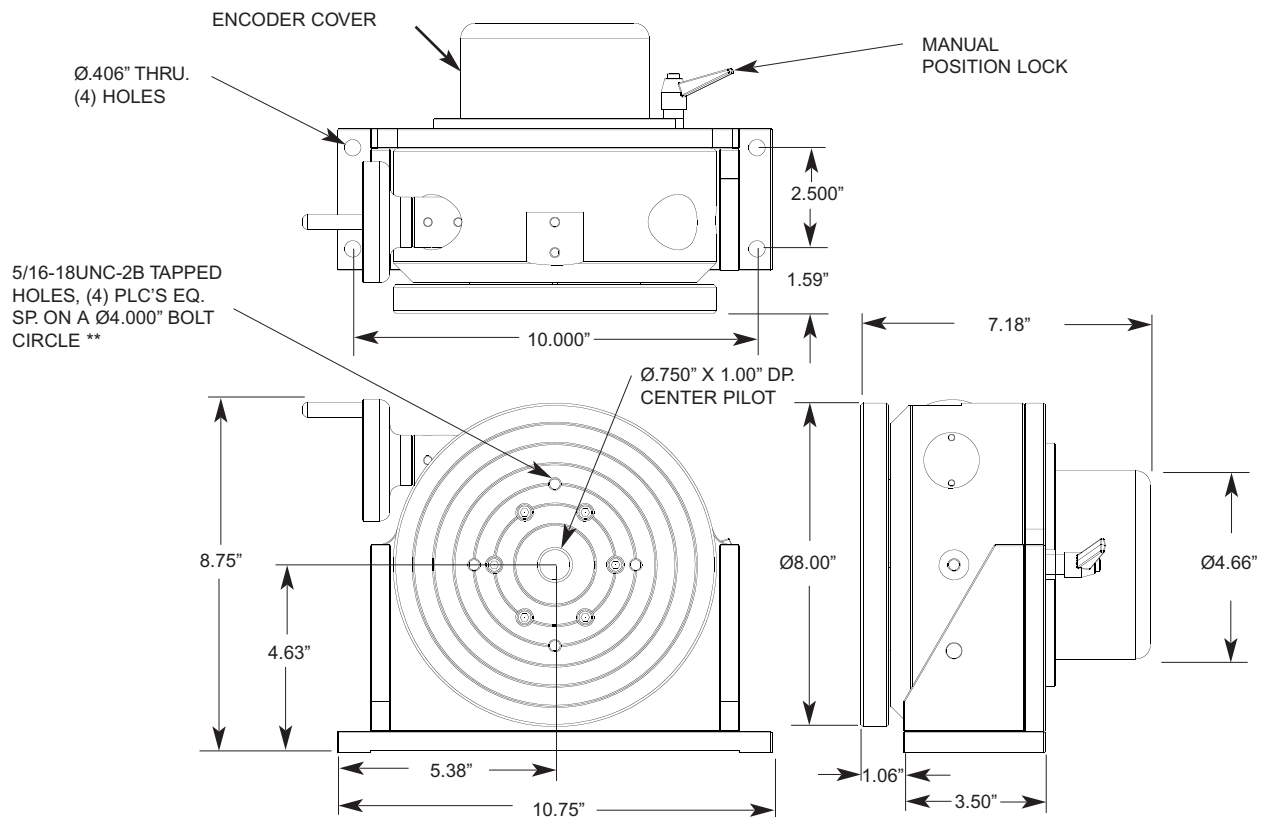
- 4-Point preloaded angular contact bearings
- Sealed bearings for light duty machining
- High stiffness & load capacity
- Radial error motion: 0.000,05" (1.25 μ m)
- Worktable face runout: 0.0002" (50 μ m) or better
- worktable diameter: 8.00" (200mm) standard
- 50:1 worm drive
- Precision rotary encoder (± 7 arc sec accuracy)
- Motors available (stepper or servo)
- Heidenhain ND 281 single axis display
- Manual position lock



Back view - encoder side

Specifications

RIT-200 Mechanical Index Drive



Table

Radial Error Motion: 0.000,05" (1.25µm)
Worktable face runout: 0.0002" (50µm)
Center pilot hole runout: 0.0001" (40µm)

*Encoder: ±7 arc-sec / 9000 line resolution
±6 arc-sec / 10,000 line resolution
±5 arc-sec / 18,000 line resolution

Measuring step: 0.0005°

Drive ratio: 100:1 worm gear

Balanced load capacity: 150lbs (68Kg)

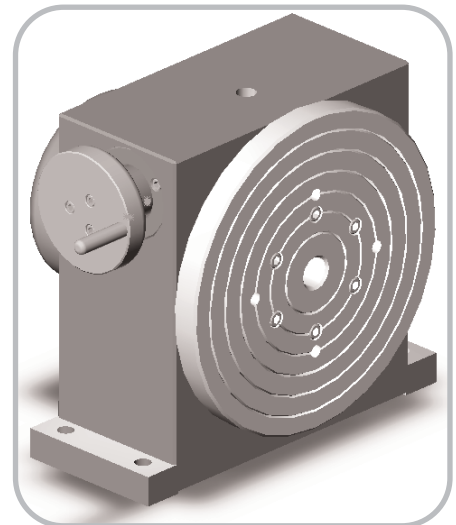
Table weight: 40lbs (18.14Kg)

Display

Display step: 1° to 0.0001°
Display in deg.min.sec or decimal degree
Features - Tolerance check & min/max evaluation
Data interface: RS-232-C
Switching inputs & outputs for simple automation equipment.

Accessories/Options

- Special worktables
- Theta - Z axis mounting
- Work holding chucks & tooling
- Motors (steppers or servo)
- Programmable amplifier/controller
- Motion controllers



Square housing design adapts optional motor driven tables

* = Higher accuracy/resolution encoders available, consult ABTech, Inc.

** = Additional hole quantities, size and locations available, Consult ABTech, Inc.
Specifications are subject to change without notification

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On Line: www.abtechmfg.com