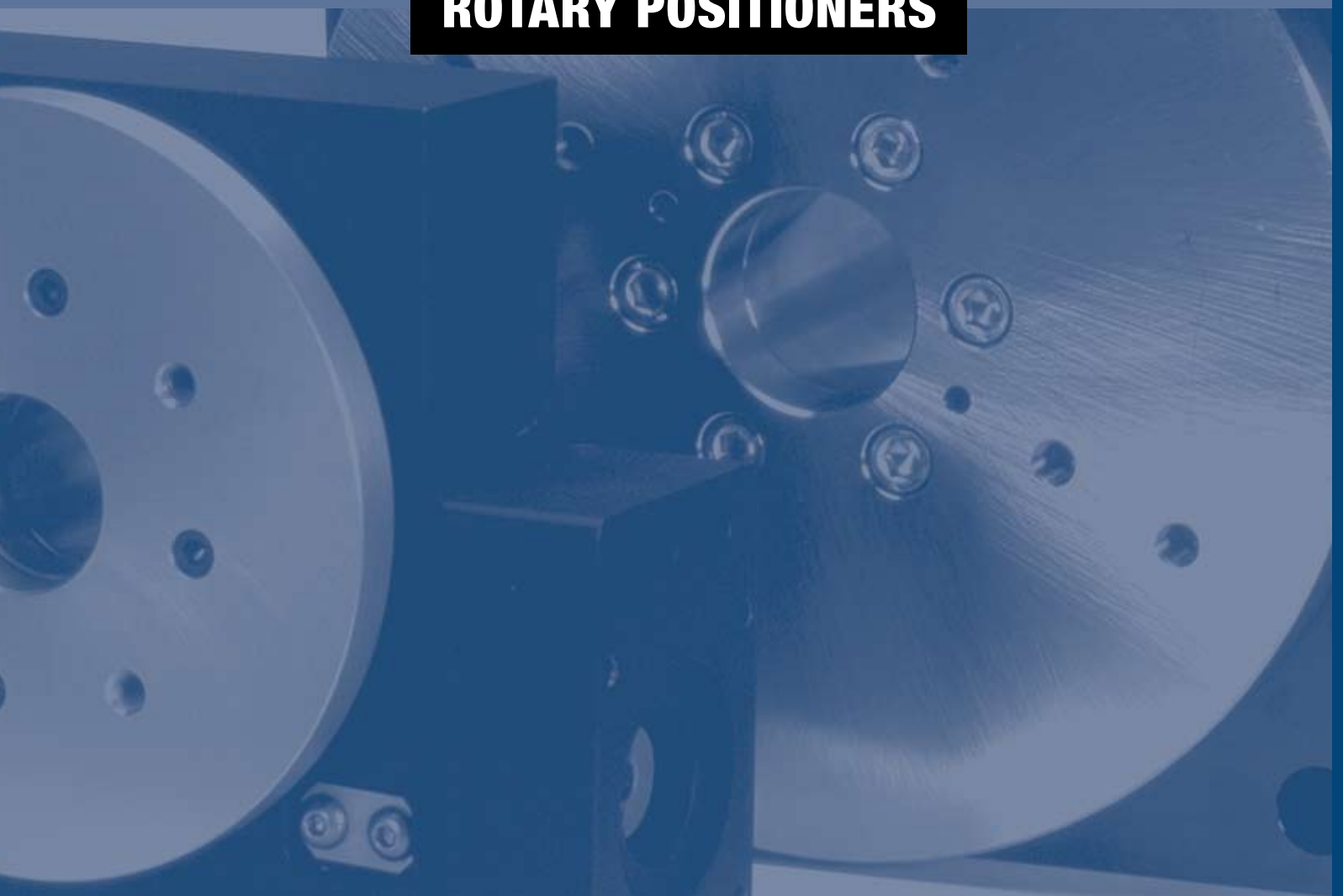


# ROTARY POSITIONERS



# RT Series Rotary Stage Design

## Medium Load Capacity Rotary Table Series

Newmark's line of rotary stages offer high resolution and repeatability. Newmark rotary stages are suitable for a wide number of uses ranging from lightweight positioning of optics to light duty machine tool applications.



### RT-2 Series

- Compact design
- Size 17 stepper motor



### RT-3 Series

- Low cost
- Size 17 stepper motor

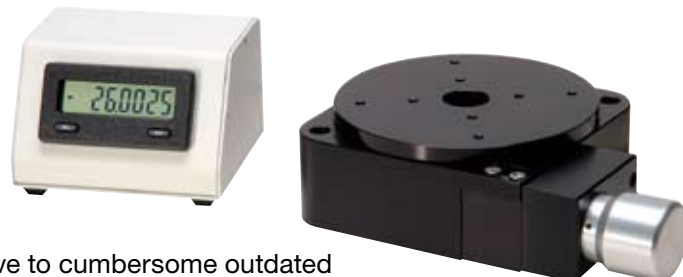
All rotary stages are machined from 6061 aluminum alloy to provide a light yet stiff and stable stage.



### RT-5 Series

- Low profile
- Size 17 stepper motor

The design takes advantage of a thrust bearing systems for the table movement. This design approach offers excellent stability and low cost. The stages are offered with different gear ratio options. A proprietary gear preload system insures zero backlash in the gear train.



### Digital Read Out Unit

This is a smart, user-friendly alternative to cumbersome outdated micrometer arrangements. This product offers instant position feedback with the use of a 8 digit display. Any of the RT Series rotary stage can be configured to use the DRO unit.

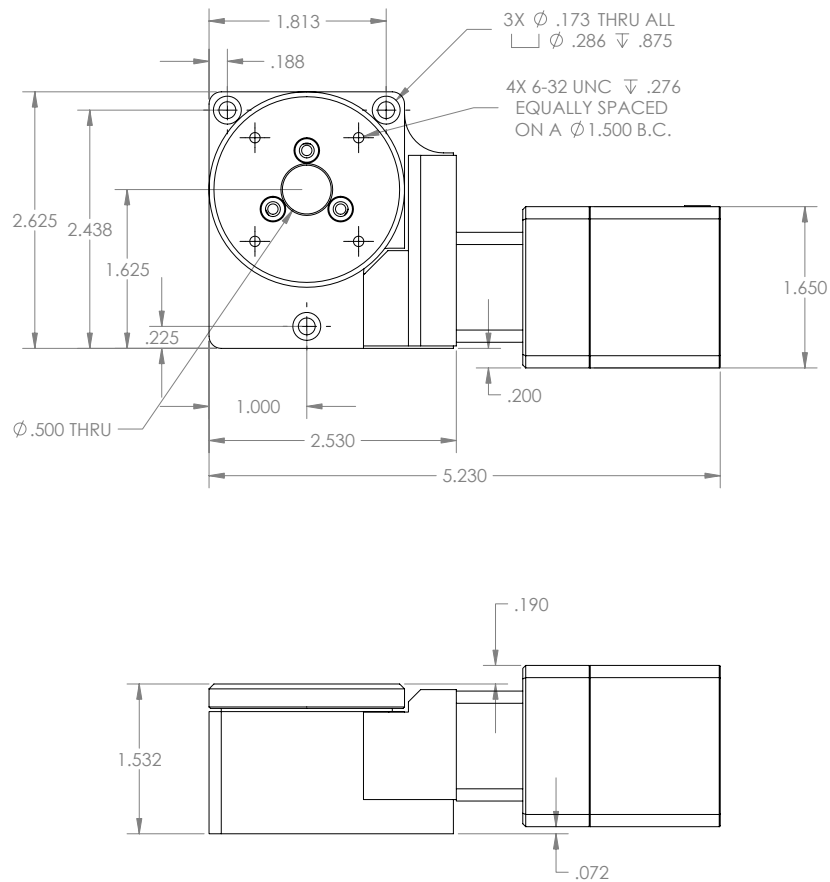
# RT-2 Series Rotary Stage

## RT-2 Specifications

Repeatability	5 arc-seconds
Resolution	0.32 arc-seconds (Microstepping)
Gear Ratio	80:1
Motor Size	Nema 17
Max. Load	15 lbs.
Moment	15 in-lb
Max. Speed	20°/sec
Travel	360° Continuous
Stage Weight	1lb.



## Dimensions

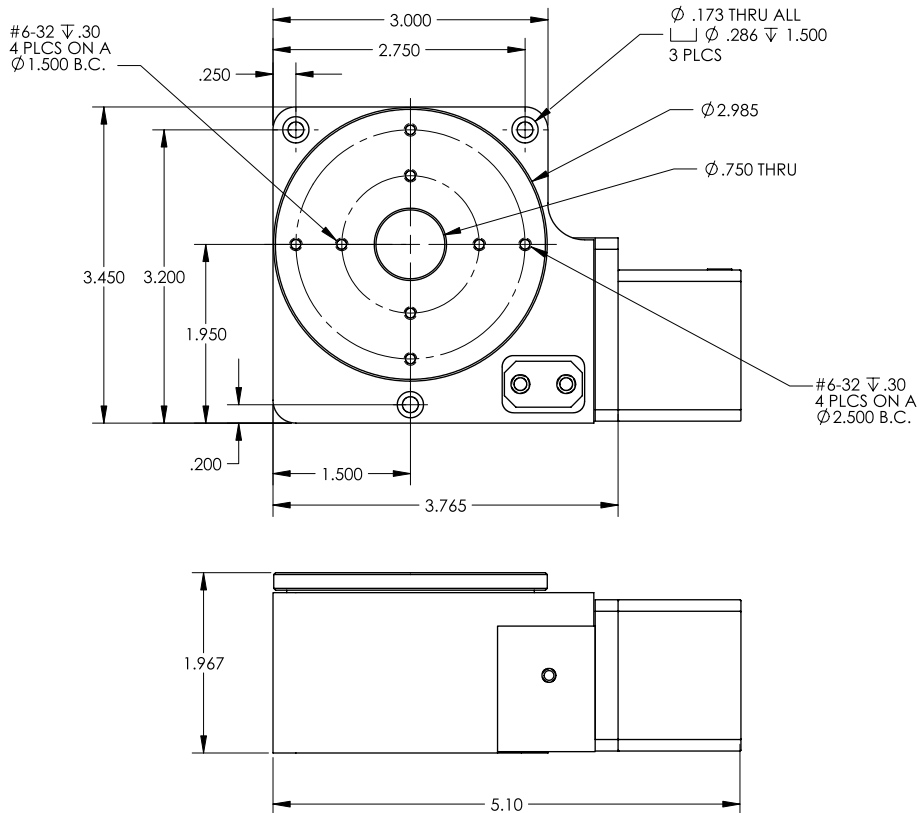


# RT-3 Series Rotary Stage

RT-3 Specifications	
Resolution	0.29 arc-seconds (Microstepping)
Gear Ratio	90:1
Max. Load	45 lbs.
Moment	45 in-lbs.
Travel	360° Continuous
Max. input Speed	900 RPM
Stage Weight	3.5 lbs.
Finish	Black Anodize



## Dimensions



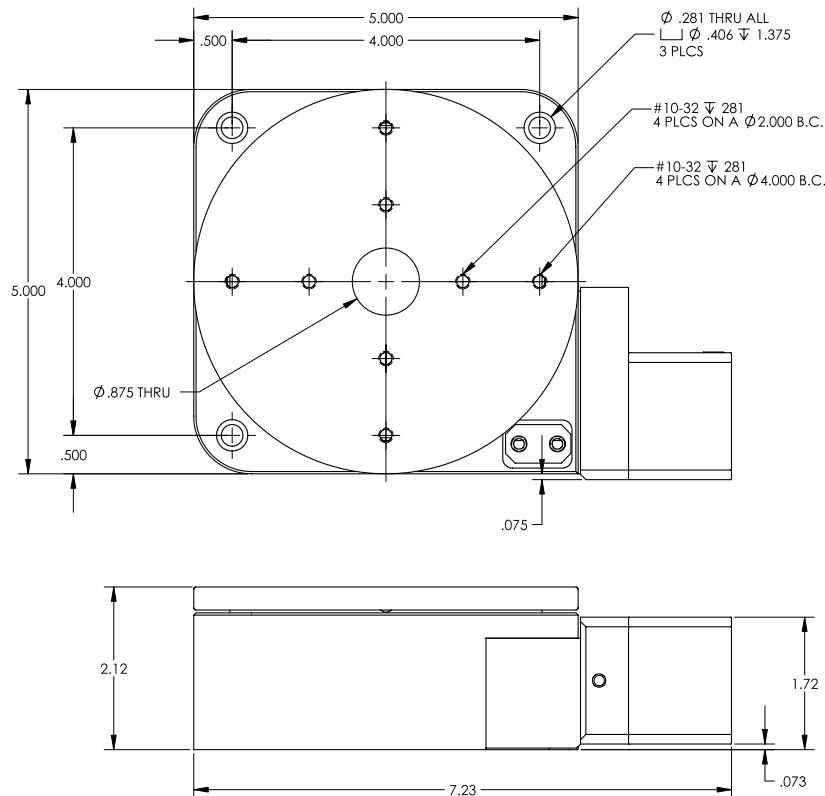
# RT-5 Series Rotary Stage

## RT-5 Specifications

Repeatability	5 arc-seconds
Resolution	0.36 arc-seconds (Microstepping)
Gear Ratio	72:1
Motor Size	Nema 17
Max. Load	100 lbs.
Moment	96 in-lbs
Max. input Speed	1200 RPM
Travel	360° Continuous
Stage Weight	5 lbs.



## Dimensions



# RM Series Rotary Stage Design

## High Performance Series

Newmark's line of rotary stages offer high resolution and repeatability. Newmark rotary stages are suitable for a wide number of uses ranging from lightweight positioning of optics to heavy duty machine tool applications.

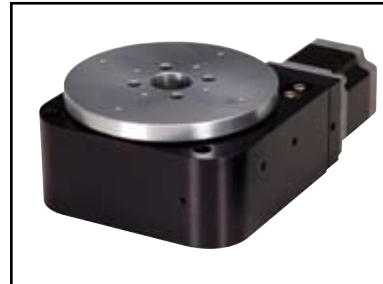
All rotary stages are machined from 6061 aluminum alloy to provide a light yet stiff and stable stage.

The design takes advantage of a single preloaded crossed roller bearing for the table movement. This design approach eliminates the use of a dual bearing configuration thus improving on axial runout and wobble. The stages are offered with different gear ratio options. A proprietary gear preload system insures zero backlash in the gear train.



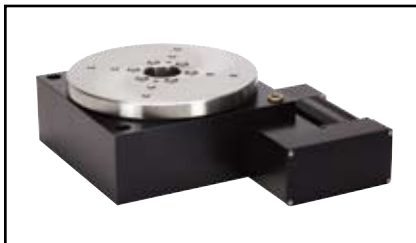
### RM-3 Series

- 3" dia. top
- Compact design
- Size 17 stepper motor



### RM-5 Series

- 5" dia. top
- Low cost
- Size 23 stepper motor



### RM-8 Series

- 8" dia. top
- High load capacity
- Belt or direct drive



### RMS-5 Series

- 5" dia. top
- Sealed
- Custom top plates



### Digital Read Out Unit

This is a smart, user-friendly alternative to cumbersome outdated micrometer arrangements. This product offers instant position feedback with the use of a 8 digit display. Any of the RM Series rotary stage can be configured to use the DRO unit.

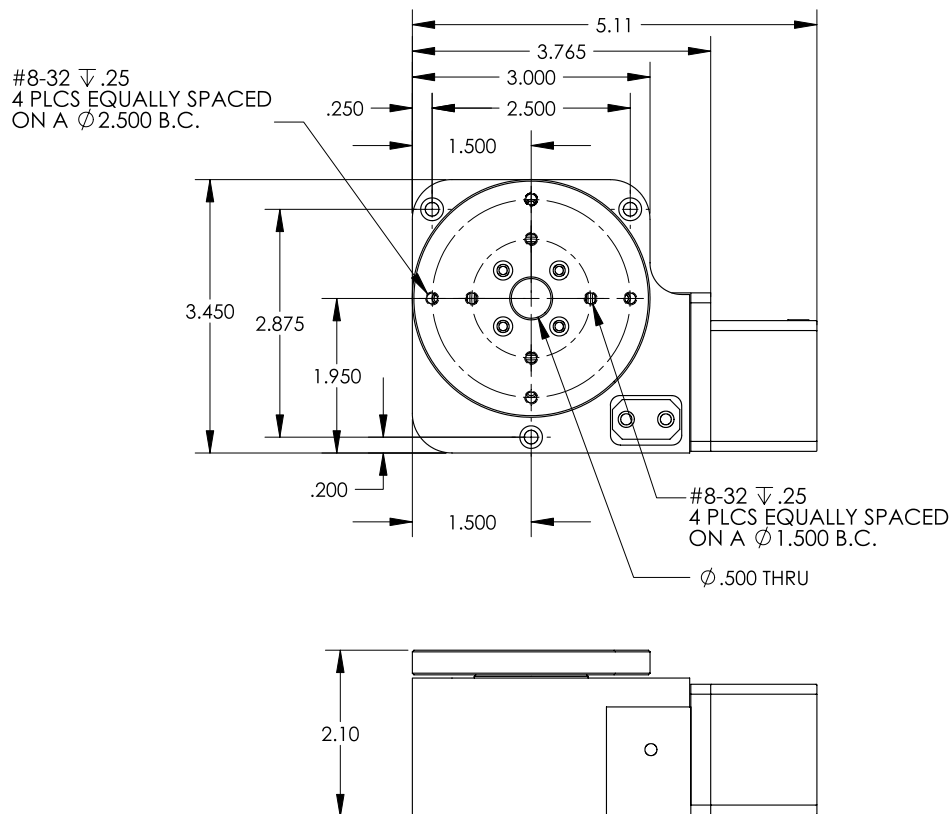
# RM-3 Series Rotary Stage

## RM-3 Specifications

Repeatability	5 arc-seconds
Resolution	0.29 arc-seconds (Microstepping)
Gear Ratio	90:1
Motor Size	Nema 17
Max. Load	150 lbs.
Moment	150 in-lb
Max. Input Speed	900 RPM
Travel	360° Continuous
Stage Weight	3 lbs.



## Dimensions





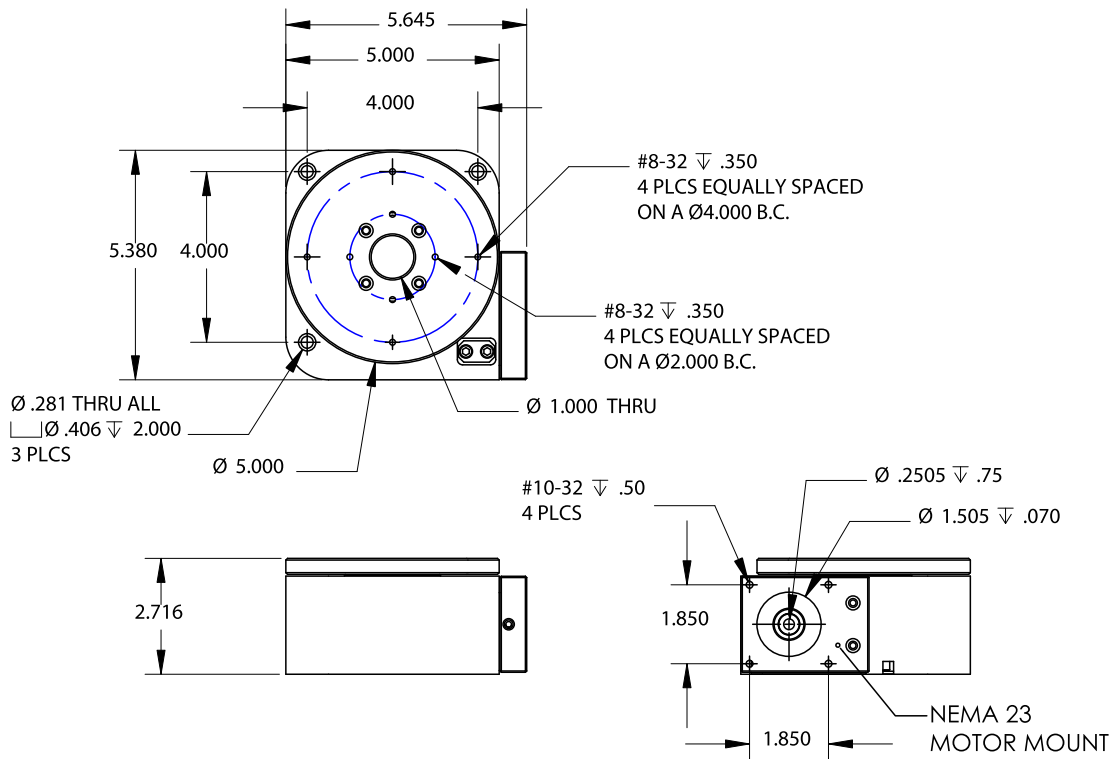
# RM-5 Series Rotary Stage

## RM-5 Specifications

Repeatability	5 arc-seconds
Resolution	0.36 arc-seconds (Microstepping)
Gear Ratio	72:1
Motor Size	Nema 23
Max. Load	275 lbs.
Moment	260 in•lb
Max. Input Speed	1200 RPM
Travel	360° Continuous
Stage Weight	8 lbs.



## Dimensions



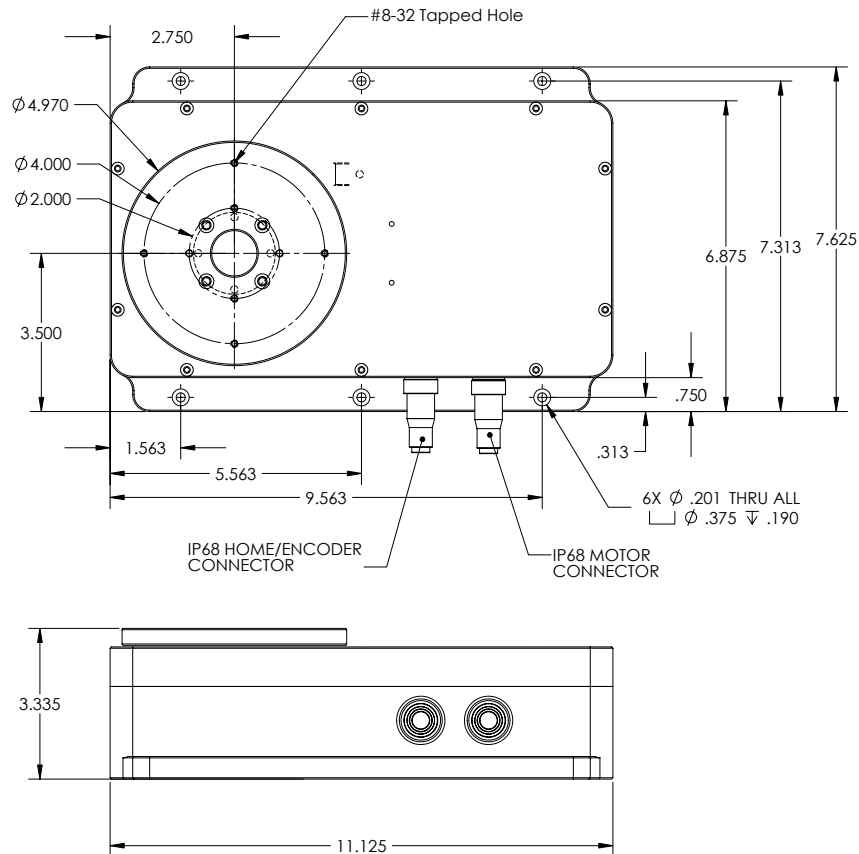


# RMS-5 Series Submersible Rotary Stage

RMS-5 Specifications	
Repeatability	5 arc-seconds
Resolution	0.36 arc-seconds (Microstepping)
Gear Ratio	72:1
Motor Size	Nema 23 step or servo motor
Max. Load	80 lbs.
Max. Speed	200°/sec (servo motor) 20°/sec (stepper motor)
Travel	360° Continuous
Stage Weight	11 lbs.



## Dimensions

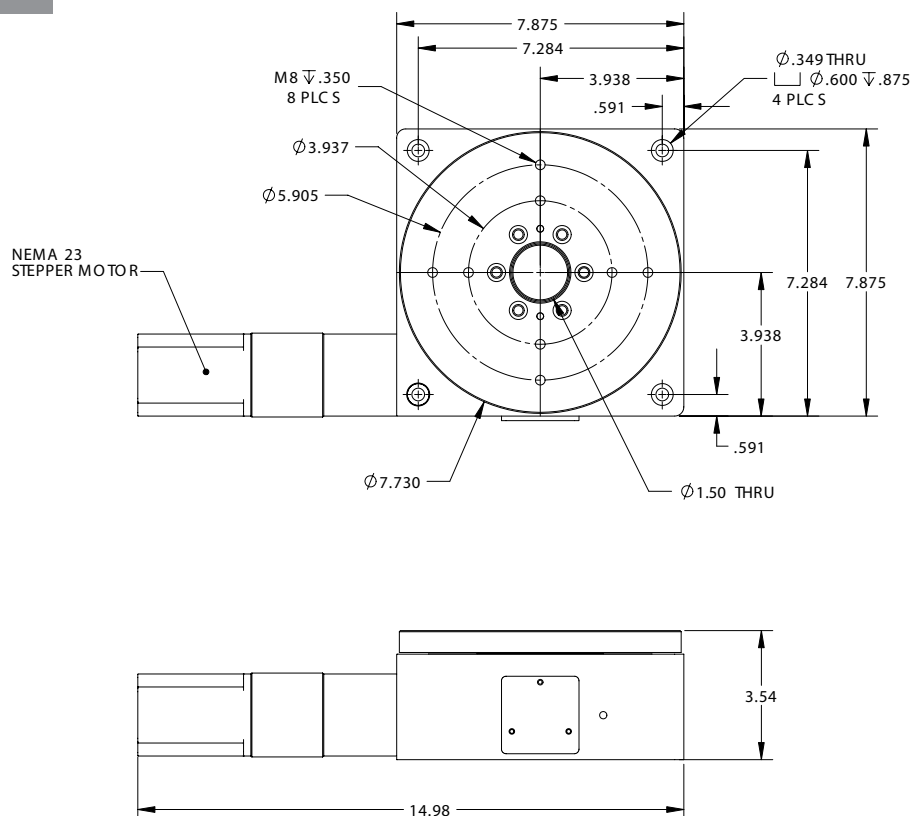


# RM-8 Series Rotary Stage

RM-8 Specifications	
Repeatability	5 arc-seconds
Resolution	0.32 arc-seconds (Microstepping)
Gear Ratio	80:1
Motor Size	Nema 23
Moment	200 ft-lbs
Max. Load	700 lbs.
Max. Input Speed	1500 RPM
Travel	360° Continuous
Stage Weight	30 lbs.

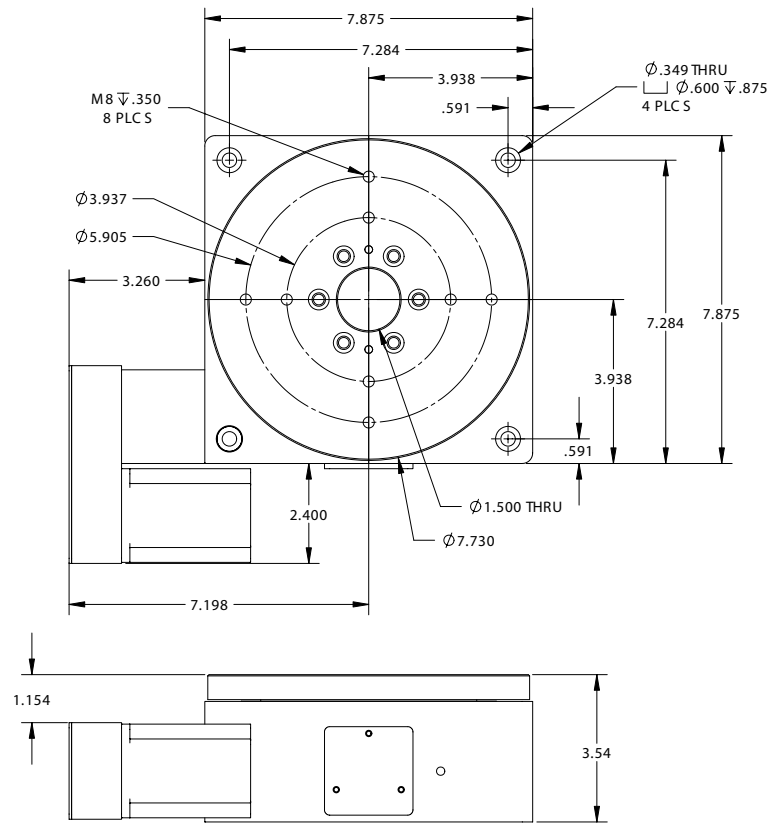


## Dimensions

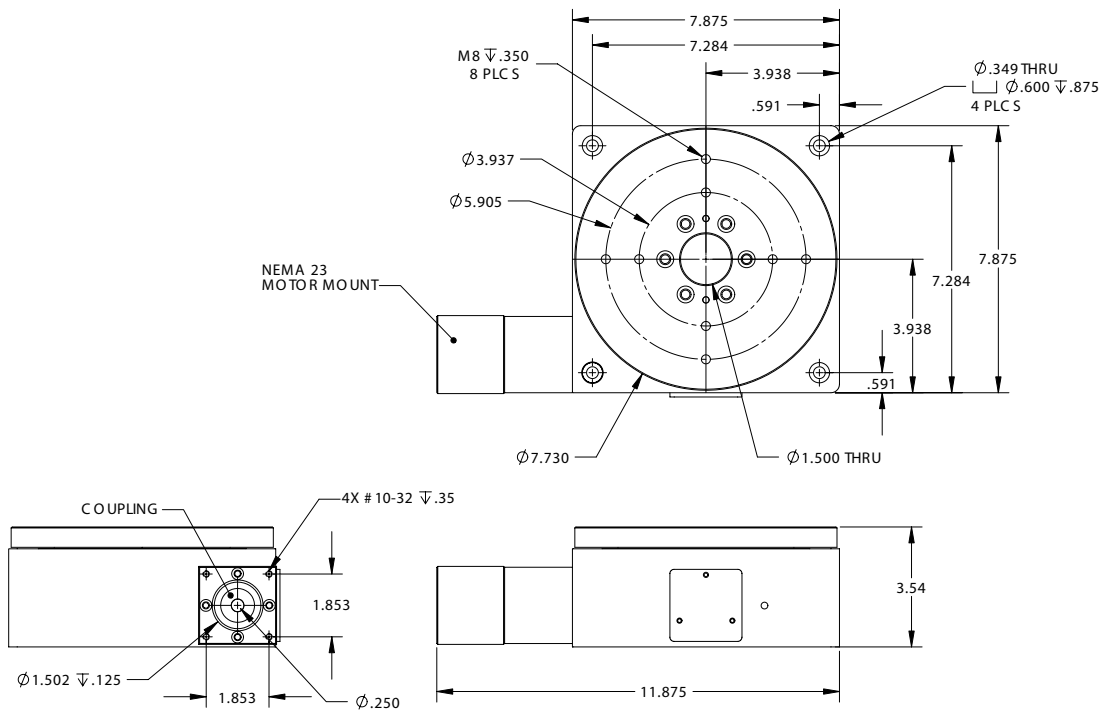


Dimensions

**Belt Drive Option**



Dimensions



Newmark Systems, Inc is a world-wide leading designer and manufacturer of precision positioning systems for OEM applications as well as research and development for optical technologies. Newmark's products and expertise are increasingly utilized in sophisticated new technologies including semiconductor manufacturing and testing, and fiber optic communications.

Since 1995, Newmark Systems, Inc has consistently provided positioning equipment, motion control and optical solutions to a growing number of an elite group of industry leaders that includes names such as Hughes, Raytheon, Boeing, Textron, Intel, Lucent and Delphi.

Newmark's precision systems and components have also found a niche in the research arena. We are proud to have been able to provide quality engineering support and positioning components to Research organizations such as JPL, UCLA, TRW, Lawrence Livermore and Cornell University.



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