

TWIN PROFILE RAIL STAGE WITH ENCLOSED DESIGN

TRS

The TRS Twin profile rail stage with enclosed design is built from the ground up to be highly rigid and very accurate. Available in 100 & 165 sizes, load up to 6.0 kN (1,349 lbf).

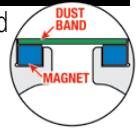
ENDURANCE TECHNOLOGY™ *Endurance Technology features are designed for maximum durability to provide extended service life.*

RETAINED STAINLESS STEEL DUST BANDS

- Retained exterior dust band keeps contaminants from entering the actuator interior, protecting components for reduced maintenance and increased uptime
- Made of fatigue resistant, flexible and corrosion resistant stainless steel

NON-WEAR BAND RETENTION

- Magnetically retained band is not subject to wear as are other mechanically retained systems

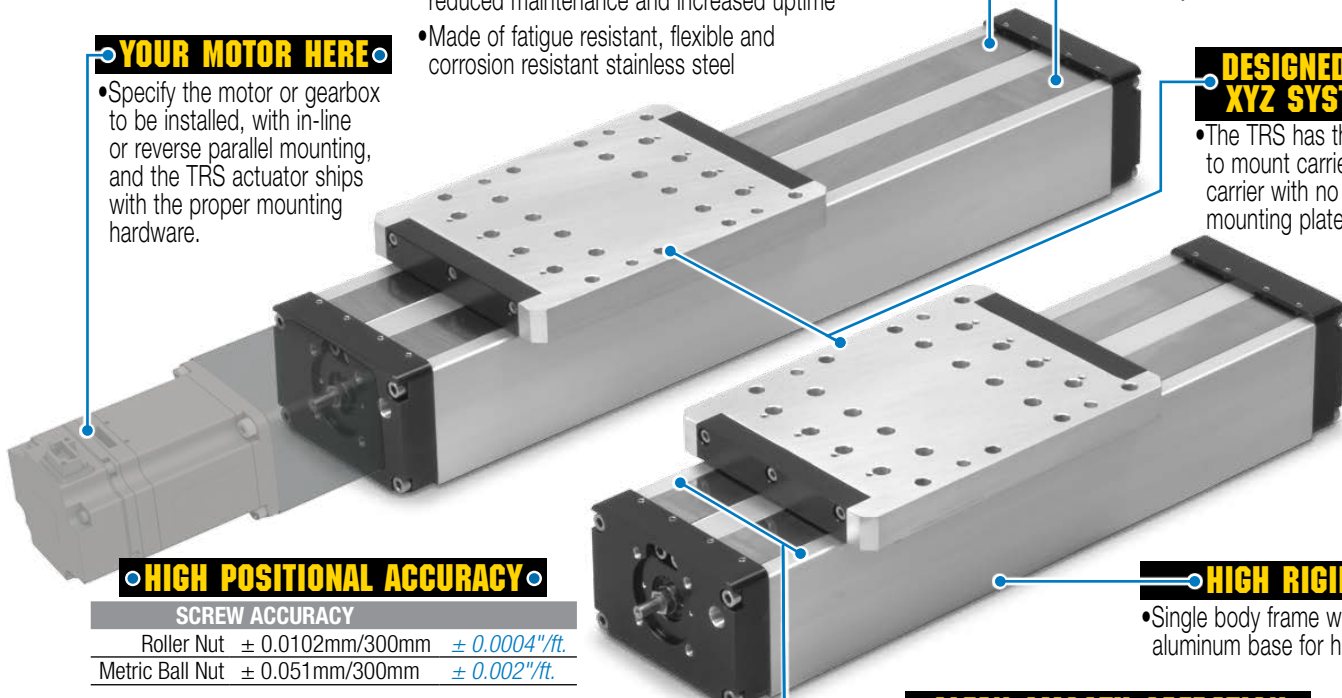


YOUR MOTOR HERE

- Specify the motor or gearbox to be installed, with in-line or reverse parallel mounting, and the TRS actuator ships with the proper mounting hardware.

DESIGNED FOR XYZ SYSTEMS

- The TRS has the ability to mount carrier to carrier with no additional mounting plates



HIGH POSITIONAL ACCURACY

SCREW ACCURACY

| | | |
|-----------------|------------------|---------------|
| Roller Nut | ± 0.0102mm/300mm | ± 0.0004"/ft. |
| Metric Ball Nut | ± 0.051mm/300mm | ± 0.002"/ft. |

HIGH RIGIDITY

- Single body frame with thick aluminum base for high rigidity

BREATHER/PURGE PORTS

- Purge Port:** positive pressure with air lines and filters insure that contaminants do not enter the interior of the actuator.

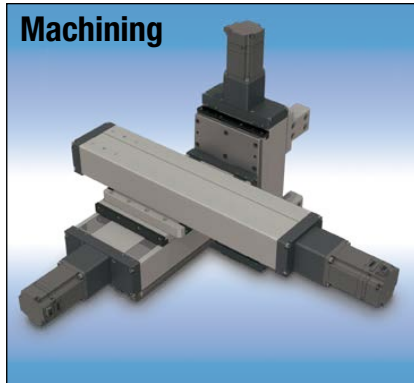
CLEAN SMOOTH OPERATION

- Smooth and flat surface to create the cleanest sealing design in the industry
- Wiper and seal are integrated in carrier design to help with clean and smooth operation

Applications:

- Machine centers
- Machine tools
- Drilling
- Cutting
- Laser positioning
- Material handling systems
- Pick & place
- XYZ axis (2 & 3 axis configurations)
- and more

Machining



Options

- Roller screw
- Zero backlash bearings
- Zero backlash nut and screw
- Fixed switch holes on housing side

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Specifications

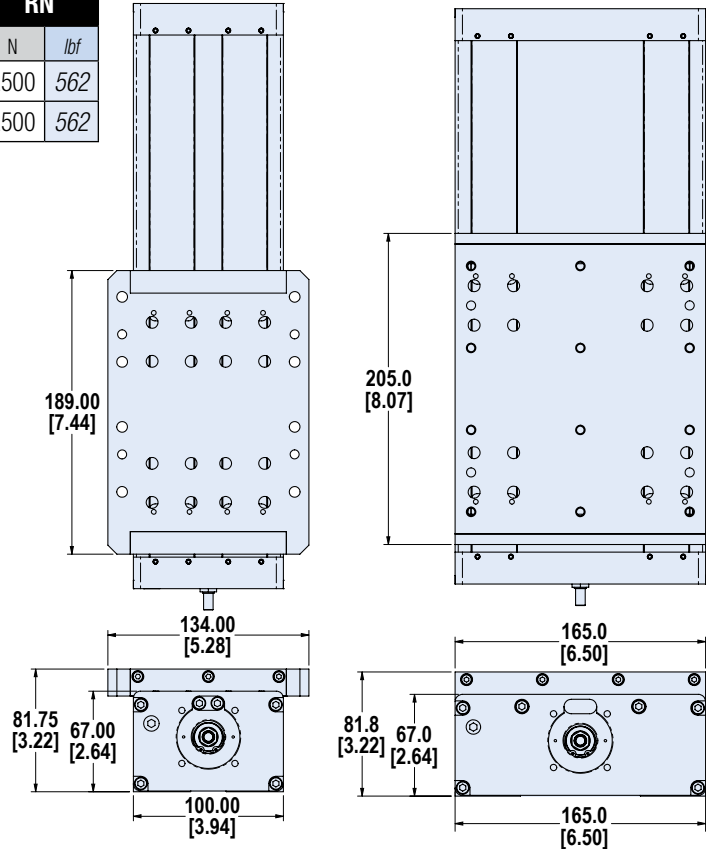
| TRS SIZE | MAX. STROKE | | MAX. BENDING MOMENTS | | | | MAX FORCE | | AXIAL FORCE | | | |
|----------|-------------|------|----------------------|-------|---------|-------|-----------|------|-------------|-----|------|-----|
| | | | Mx | | My / Mz | | Fz / Fy | | BN | | RN | |
| | mm | in | N-m | lb-in | N-m | lb-in | N | lbf | N | lbf | N | lbf |
| 100 | 1600 | 63.0 | 125 | 1106 | 240 | 2124 | 5100 | 1147 | 2500 | 562 | 2500 | 562 |
| 165 | 2438 | 95.0 | 291 | 2575 | 281 | 2487 | 5100 | 1147 | 2500 | 562 | 2500 | 562 |

Dimensions

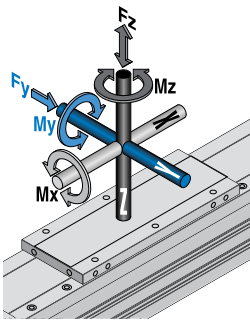
Dimensions in mm [dimensions in brackets = inches]

SIZE: 100

SIZE: 165



| TRS SIZE | SCREW CODE | LEAD | LEAD ACCURACY | | AXIAL CLEARANCE | | DLR @ 1M Rev | |
|----------|------------|--------|---------------|--------|-----------------|--------|--------------|-------|
| | | mm/rev | mm/300mm | in/ft | mm | in | N | lbf |
| 100 | BN04 | 4.0 | 0.100 | 0.0039 | 0.07 | 0.0028 | 5,500 | 1236 |
| | BN05 | 5.0 | 0.100 | 0.0039 | 0.07 | 0.0028 | 12,000 | 2698 |
| | BN10 | 10.0 | 0.052 | 0.0020 | 0.05 | 0.0020 | 5,400 | 1214 |
| 165 | BN04 | 4.0 | 0.100 | 0.0039 | 0.07 | 0.0028 | 5,500 | 1236 |
| | BN05 | 5.0 | 0.100 | 0.0039 | 0.07 | 0.0028 | 12,000 | 2698 |
| | BN10 | 10.0 | 0.052 | 0.0020 | 0.05 | 0.0020 | 5,400 | 1214 |
| | RN05 | 5.0 | 0.010 | 0.0004 | 0.03 | 0.0012 | 53,600 | 12050 |
| | RN10 | 10.0 | 0.010 | 0.0004 | 0.03 | 0.0012 | 47,200 | 10611 |



ACTUATOR
SIZING

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