

## TWIN RAIL STAGE STROKE CONFIGURABLE ACTUATOR

The TRS Twin profile rail stage is a highly capable stage product with an enclosed design that is built from the ground up to be highly rigid and accurate. Available in 100 & 165 sizes, loads up to 1,356 lbf (6.0 kN).

### ENDURANCE TECHNOLOGY™

A Tolomatic Design Principle

Endurance Technology features are designed for maximum durability to provide extended service life.

#### 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.

#### STAINLESS STEEL DUST BANDS

Reduces the number of contaminants that enter the actuator interior, protecting components for reduced maintenance and increased uptime

#### BREATHER/PURGE PORTS

Positive pressure with air lines and filters help limit the number of contaminants that enter the interior of the actuator.

#### DESIGNED FOR MULTI-AXIS SYSTEMS



The TRS can be mounted carrier to carrier with no additional mounting plates

### Applications:

- Machine centers
- Machine tools
- Drilling
- Cutting
- Laser positioning
- Pick & place
- Material handling systems
- X Y Z axis (2 & 3 axis configurations)
- And more

#### MULTIPLE SCREW TECHNOLOGIES

##### ROLLER NUT

Roller nuts provide the highest thrust and life ratings available



##### BALL NUT

Ball nuts offer efficiency at a cost effective price



##### SCREW ACCURACY

± 0.0102mm/300mm; ± 0.0004"/ft.

##### SCREW ACCURACY

± 0.051mm/300mm; ± 0.002"/ft.

#### CLEAN SMOOTH DESIGN

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

#### HIGH RIGIDITY

Sturdy extruded body with machined base

#### OPTIONAL TOE CLAMPS

Slot and clamps for convenient and flexible mounting



#### OPTIONAL SWITCH WITH RAIL

12 switch choices in normally open or normally closed; with flying leads or quick-disconnect.

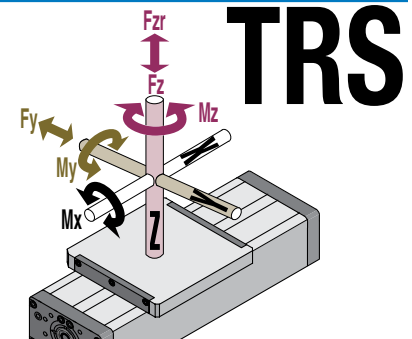


# TWIN RAIL STAGE STROKE CONFIGURABLE ACTUATOR

## Specifications

TRS SIZE	SCREW CODE	MAX. STROKE		LEAD	LEAD ACCURACY		BACKLASH		DLR @ 1M Rev	
		mm	in		mm/rev	mm/300mm	in/ft	mm	in	N
100	BNM05	750	29.5	5.0	0.100	0.0039	0.07-0.12	0.0028-0.0050	12,000	2,698
	BNM10	750	29.5	10.0	0.052	0.0020	0.07-0.12	0.0028-0.0050	8,500	1,918
165	BNM05	1100	43.3	5.0	0.100	0.0039	0.07-0.12	0.0028-0.0050	12,000	2,698
	BNM10	1100	43.3	10.0	0.052	0.0020	0.07-0.12	0.0028-0.0050	8,500	1,918
	RN05	575*	22.6*	5.0	0.010	0.0004	0.03	0.0012	53,600	12,050
	RN10	575*	22.6*	10.0	0.010	0.0004	0.03	0.0012	37,900	7,846

\*Values listed for LMI configuration. RP values are 557 mm [21.9 in].



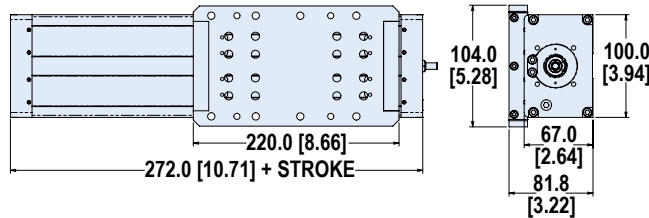
TRS SIZE	MAX. BENDING MOMENTS					
	Mx		My		Mz	
	N-m	lb-in	N-m	lb-in	N-m	lb-in
100	105	932	256	2,266	231	2,047
165	294	2,604	348	3,084	315	2,785

## Dimensions

Dimensions in mm [dimensions in brackets = inches]

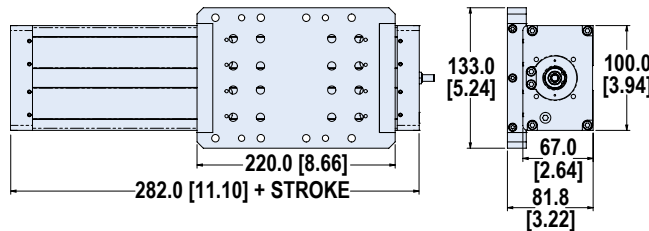
### SIZE: 100 STD

NOTE: All TRS actuators have the same height. 100 STD and 100 C2C have the same body size but different carrier mounting and dowel holes.

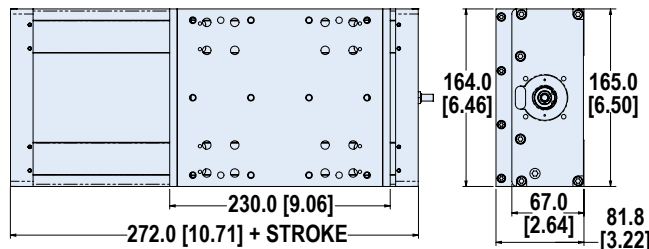


### SIZE: 100 C2C

C2C = Carrier-to-Carrier Mounting



### SIZE: 165



TRS SIZE	MAX. LOAD			AXIAL FORCE
	Fy	Fz	Fzr	
	kN	kN	kN	kN
100	3.7	4.8	4.1	2.5
165	4.7	6.0	5.2	2.5

TRS SIZE	MAX. LOAD			AXIAL FORCE
	Fy	Fz	Fzr	
	lbf	lbf	lbf	lbf
100	838	1,085	928	562
165	1,048	1,356	1,160	562

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**COMPLETE INFORMATION, SIZING ASSISTANCE AND SOLID MODELS AVAILABLE: CONTACT TOLOMATIC**

# Tolomatic™

EXCELLENCE IN MOTION

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 = Certified site: Hamel, MN

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