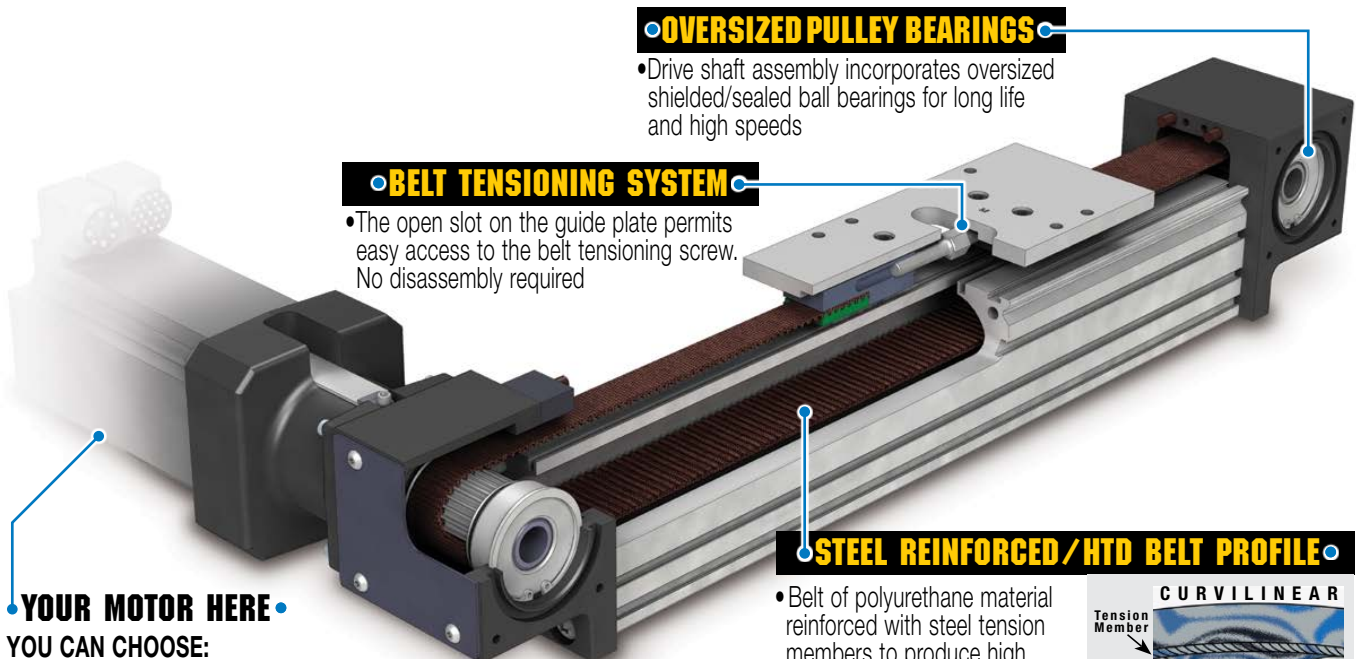


# UNGUIDED RODLESS BELT-DRIVE ACTUATOR

The MXB-U rodless actuator is a pre-assembled compact linear belt solution for use in applications with existing guides & supports. This economical actuator features speeds up to 5080 mm/sec (200 in/sec) and thrusts up to 1859 N (418 lbf). Built-to-order in stroke lengths up to 5842 mm (230 in).

# MXB-U



**OVERSIZED PULLEY BEARINGS**

- Drive shaft assembly incorporates oversized shielded/sealed ball bearings for long life and high speeds

**BELT TENSIONING SYSTEM**

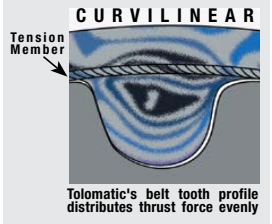
- The open slot on the guide plate permits easy access to the belt tensioning screw. No disassembly required

**YOUR MOTOR HERE • YOU CAN CHOOSE:**

- Choose ACSi (Integrated servo motor/drive) for a complete motion solution tested and assembled at the factory
- Specify the device to be installed and actuator ships with proper mounting hardware

**STEEL REINFORCED / HTD BELT PROFILE**

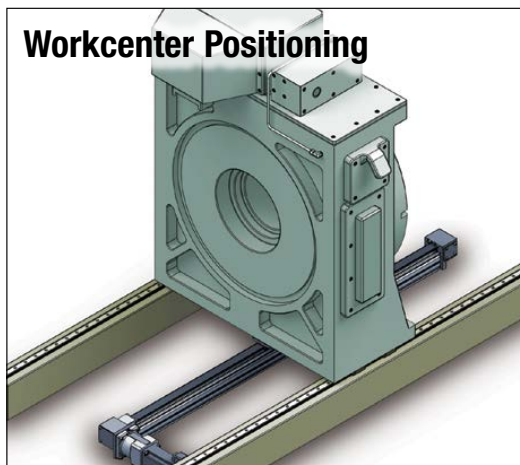
- Belt of polyurethane material reinforced with steel tension members to produce high carrier thrusts without belt stretch.



**CURVILINEAR**

Tension Member

Tolomatic's belt tooth profile distributes thrust force evenly



## Applications:

- Adhesive dispensing
- Aligning
- Animation
- Assembly
- Automotive
- Camera positioning
- Conveyors
- Cutting
- Diverters
- Inspection
- Laser marking
- Material cutting
- Milling
- Packaging equipment
- Parts transfer
- Pick & place
- Positioning
- Product handling
- Slitting
- Sorting
- Spraying
- Stacking
- Table positioning
- Test stations
- Wire winding

## Available Options:

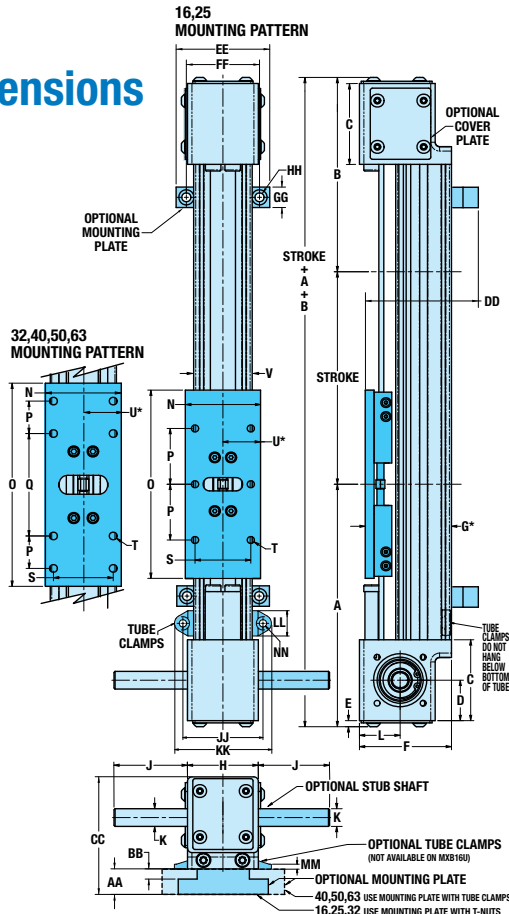
**Mounting**  
Mounting Plates,  
Tube Clamps

**Sensors**  
With integrated mounting

# UNGUIDED RODLESS BELT-DRIVE ACTUATOR

# MXB-U

## Dimensions



|         | MXB16 | MXB25  | MXB32  | MXB40  | MXB50  | MXB63  |
|---------|-------|--------|--------|--------|--------|--------|
| A       | 135.3 | 173.9  | 187.8  | 216.6  | 224.7  | 275.1  |
| B       | 119.0 | 139.3  | 154.7  | 192.7  | 205.0  | 262.1  |
| C       | 50.8  | 58.0   | 55.9   | 78.7   | 82.6   | 96.1   |
| D       | 25.4  | 29.0   | 25.4   | 39.4   | 40.0   | 45.3   |
| E       | 3.8   | 4.4    | 4.4    | 4.4    | 4.4    | 4.4    |
| F       | 52.8  | 66.0   | 77.5   | 93.8   | 110.6  | 139.3  |
| G*      | 45.3  | 61.9   | 77.4   | 88.3   | 109.6  | 135.5  |
| H       | 44.5  | 50.8   | 69.9   | 82.6   | 98.4   | 111.1  |
| J (LMI) | 15.0  | 57.7   | 57.7   | 47.5   | 47.5   | 47.5   |
| J (RP)  | 46.6  | 57.7   | 57.7   | 47.5   | 47.5   | 47.5   |
| K       | Ø9.53 | Ø12.70 | Ø12.70 | Ø12.70 | Ø12.70 | Ø12.70 |
| L       | 26.4  | 29.2   | 27.9   | 39.7   | 41.5   | 52.2   |
| N       | 34.9  | 54.0   | 63.5   | 88.9   | 95.3   | 114.3  |

Measurements in mm

## Specifications

| MXB SIZE | MAX. THRUST | BELT DEAD LENGTH | MAXIMUM STROKE* |
|----------|-------------|------------------|-----------------|
|          | N           | mm               | mm              |
| 16       | 169         | 363.0            | 5842            |
| 25       | 672         | 475.5            | 5181            |
| 32       | 930         | 556.0            | 5156            |
| 40       | 1112        | 633.7            | 5130            |
| 50       | 1446        | 692.2            | 5130            |
| 63       | 1859        | 917.2            | 2590            |

|               |              |
|---------------|--------------|
| Max. Velocity | 5080 mm/sec  |
| Repeatability | ± 0.051 mm   |
| Temp. Range   | -12 to 54 °C |

|    | MXB16  | MXB25  | MXB32   | MXB40   | MXB50   | MXB63   |
|----|--------|--------|---------|---------|---------|---------|
| O  | 110.0  | 135.0  | 170.0   | 200.0   | 216.0   | 304.8   |
| P  | 40.0   | 40.0   | 27.1    | 25.4    | 25.4    | 40.0    |
| Q  | -      | -      | 87.7    | 114.3   | 69.8    | 130.0   |
| S  | 28.0   | 40.0   | 50.0    | 72.0    | 79.4    | 98.3    |
| T  | M4x0.7 | M6x1.0 | M8x1.25 | M8x1.25 | M8x1.25 | M10x1.5 |
| U* | 17.5   | 27.0   | 31.8    | 44.5    | 47.7    | 57.2    |
| V  | 30.00  | 42.00  | 55.37   | 64.00   | 78.74   | 100.00  |

### OPTIONAL MOUNTING PLATES

|    | MXB16                            | MXB25                            | MXB32                             | MXB40            | MXB50            | MXB63            |
|----|----------------------------------|----------------------------------|-----------------------------------|------------------|------------------|------------------|
| AA | 15.9                             | 15.9                             | 19.1                              | 25.4             | 31.8             | 25.4             |
| BB | 6.4                              | 6.4                              | 7.6                               | -                | -                | -                |
| CC | 68.7                             | 81.9                             | 96.5                              | 119.4            | 119.4            | 164.6            |
| DD | 60.9                             | 77.7                             | 95.2                              | 106.1            | 127.4            | 153.3            |
| EE | 60.0                             | 63.5                             | 86.4                              | 127.0            | 142.2            | 203.2            |
| FF | 44.5                             | 50.8                             | 59.9                              | 112.0            | 127.0            | 177.8            |
| GG | 25.4                             | 25.4                             | 25.4                              | 20.1             | 20.1             | 25.4             |
| HH | Ø5.6 THRU<br>└┘Ø9.4<br>└┘5.6 (2) | Ø5.6 THRU<br>└┘Ø9.4<br>└┘5.6 (2) | Ø7.1 THRU<br>└┘Ø11.2<br>└┘7.1 (2) | Ø7.1 THRU<br>(2) | Ø7.1 THRU<br>(2) | Ø7.1 THRU<br>(2) |

### OPTIONAL TUBE CLAMPS

|    | MXB16 | MXB25 | MXB32 | MXB40 | MXB50 | MXB63 |
|----|-------|-------|-------|-------|-------|-------|
| JJ | -     | 57.0  | 74.1  | 82.7  | 97.5  | 131.7 |
| KK | -     | 69.0  | 87.4  | 96.7  | 111.5 | 150.7 |
| LL | -     | 18.0  | 16.0  | 14.0  | 14.0  | 19.0  |
| MM | -     | 3.6   | 4.3   | 3.8   | 3.8   | 6.1   |
| NN | -     | 5.2   | 7.1   | 7.1   | 7.1   | 10.7  |

▲\*In order for the actuator to operate properly, dimensions "G" and "U" must not vary more than ±0.51mm over the entire length of the stroke.

ACTUATOR SIZING

COMPLETE INFORMATION, SIZING SOFTWARE AND SOLID MODELS AVAILABLE AT: [www.tolomatic.com](http://www.tolomatic.com)

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