



TBG-12



TBG-12 OPTIONS

X AXIS TRAVEL (MM)

- 500
- 1000
- 2000
- Custom

Z AXIS TRAVEL (MM)

- 250
- 500
- Custom

OPTIONS FOR:

- Motor/Controls
- Gearbox
- Sensor

HOW TO BUILD YOUR TBG-12:



Features

- Fast and versatile belt driven 2 axis Pick & Place system
- One single belt drives both axes
- Two fixed motor mounting locations
- Fixed motors reduce load, cable management and inertia requirements
- Positional repeatability +/- .10 mm [.004 inches]
- Speeds up to 4 M/sec.
- Sealed linear profile rail and bearing guidance
- Mounting flexibility for a variety of end effectors

Macron Solutions Since 1987

MACRON DYNAMICS, INC.
100 Phyllis Drive
Croydon, PA 19021

1-800-MACRON-1 (1-800-622-7661)
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Macron Guarantee

All Macron actuators and belt drives are covered by our
1-Year Warranty



TBG-12

SPECIFICATIONS

Configuration	X/Z T-Bot
Specifications	
Maximum Speed - mm/sec - X Axis [Z Axis]	1000
Maximum Payload - lbs.	5
Repeatability - mm	+/- 0.05
Positional Accuracy - mm/meter	0.8
Acceleration Max. - G's dependant on payload	10
Ultimate tensile strength for belts - lbs. [N]	800 [3559]
Recommended belt running load - lbs. [N]	200 [889]
Motor Sizing Information	
Pulley Size - lbs. [N]	12 - 28
Weight of single shafted drive pulley - oz. [kgs]	4.7 [0.13]
Weight of idler pulley - oz. [kgs]	4.3 [0.12]
Weight of Z Axis beam - lbs. [kgs] (dependant on travels)	4.5 to 8.4 [2 to 3.8]
Weight of complete Z axis - lbs. (dependant on travel)	9.4 to 13.2 [4.2 to 6]
Travel per revolution - mm	105
Pulley pitch diameter - mm	33.42
Pulley material / width - mm	steel / 12
Coefficient of Friction - multiple/lbs.	0.05

SPECIFICATIONS

Unit Weight	
Unit Weight - lbs. (dependant on travels)	40 to 100
Sizing	
Standard X Travels - mm	500 to 2000
Standard Z Travels - mm	250 to 500

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