

# ACCESSORIES

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## **350 Torque Tubes**

350 Features and Benefits  
350 Dimensions  
351 How to Order

## **352 Idlers**

352 Features and Benefits  
352 Disassembly  
352 Spare Parts  
353 How to Order

## **354 Magnetic Switches**

354 Limit Switches

## **355 Mounting Clamps**

355 Features and Benefits

## **356 Linear Scales**

356 Features and Benefits

## **357 T-Bars**

357 Features and Benefits

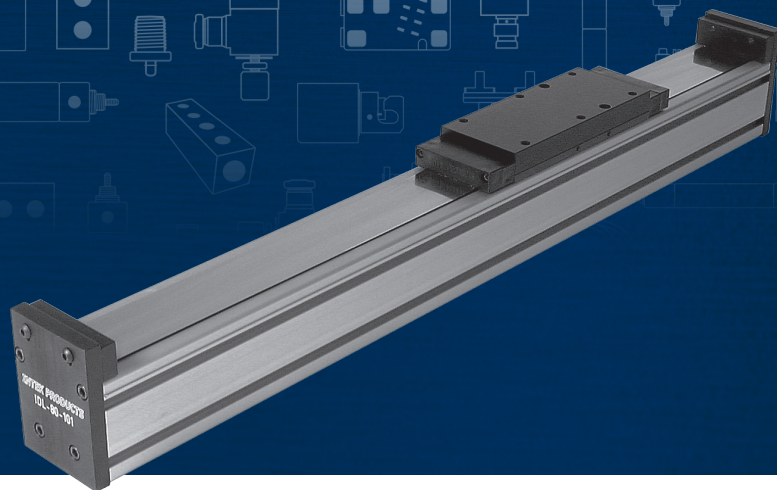
## **358 Adapter Plates**

358 Adapter Plate (Inline Style)  
359 Adapter Plate (Belt Reduction Style)









## ELECTRIC MOTION ACCESSORIES

This section covers available standard accessories for use with many or all of the Bimba electric actuator family. Please review these pages for available options that may be used with your selected electric actuator. It is important to remember that there may be other accessory options available that are not shown in this section of the catalog.

The various parts shown within each section constitute potential accessories that you may wish to employ with one or more Bimba electric actuators found within this catalog. However, not all accessories are compatible with all electric actuators. Please note that an accessory is only required when selected by a customer to complete his motion system.



# PRODUCT FEATURES

## TORQUE TUBES

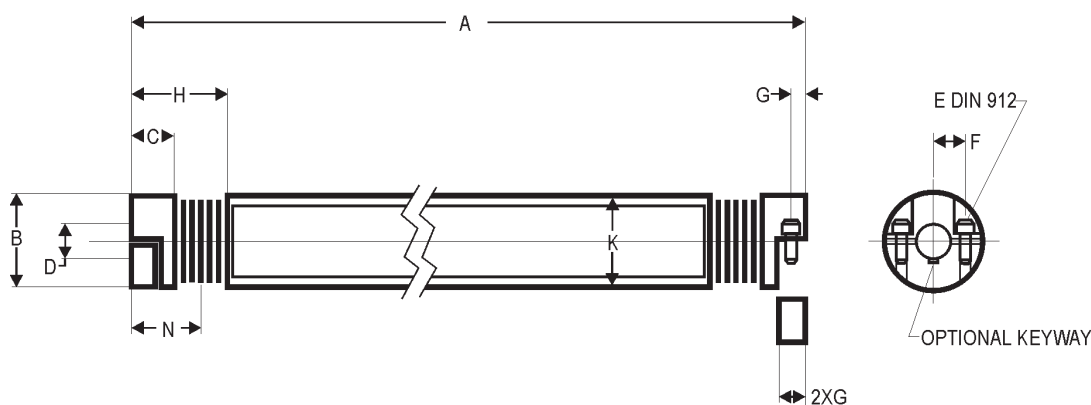
A torque tube is a mechanical tube member of a single or multi-axis electric actuator system. It is intended to provide support and high stiffness to systems that span a longer distance than is often found in a gantry system. Providing backlash-free, torsionally stiff performance, a Bimba torque tube is a perfect complement to Bimba electric actuators that require an external support member.



## FEATURES AND BENEFITS

- Backlash-free and torsionally stiff
- Spanning larger axial distances
- Easy mounting and dismounting
- Clamping hubs with two radial screws
- Intermediate tube section mounted on gimbals in the clamping hub
- Bellows made of flexible high grade stainless steel
- Aluminum intermediate tube section
- Low moment of inertia

## DIMENSIONS



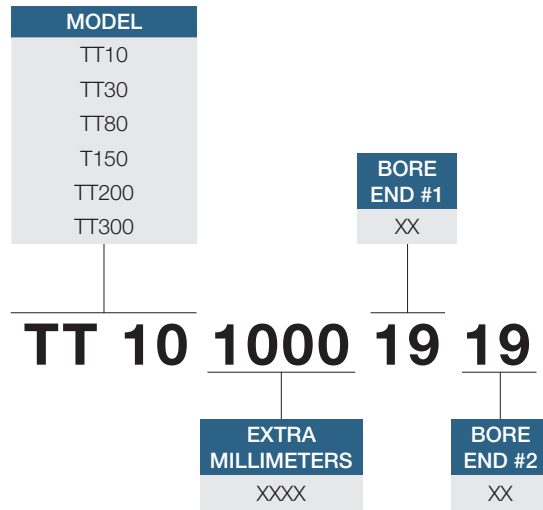
SIZE RATED TORQUE (NM)	OVERALL LENGTH FROM-TO (mm)	OUTER DIAMETER (mm)	FIT LENGTH (mm)	INTER DIAMETER (mm)	WITH KEYWAY (mm)	DIN912 SCREW SIZE	TIGHTENING TORQUE (NM)
TT	A	B	C	D	DN	E	
10	110-6000	40	18	5-20	17	M4	5
30	140-6000	55	27	10-28	23	M8	15
80	170-6000	68	31	12-32	29	M8	40
150	190-6000	81	35.5	19-42	36	M10	70
200	210-6000	90	40.5	22-45	45	M12	110
300	250-6000	110	43	30-60	60	M12	110

SIZE RATED TORQUE (NM)	DISTANCE (mm)	CLAMP WIDTH (mm)	BELLOWS BODY (mm)	OUTER TUBE DIAMETER (mm)	CENTER LINES (mm)	AXIAL MIS-ALIGNMENT (mm)
TT	F	G	H	K	N	
10	15	5	44.5	35	25	2
30	19	7.5	57.5	50	34	2
80	23	9.5	71	60	41	3
150	27	11	78	75	47	4
200	31	12.5	88	90	52	4
300	38	13	94	100	58	4



# HOW TO ORDER

An example of a basic torque tube unit with length 10 and one extra meter of length is shown below.



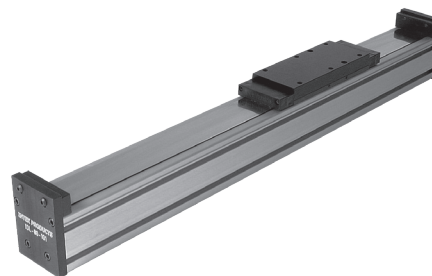


# PRODUCT FEATURES

## IDLERS

An idler is a mechanical member of a single or multi-axis electric actuator system. It is essentially built from the base foundation of an S80 or S110 electric actuator but is assembled without the internal ballscrew drive system and associated external drive shaft. However, it does contain an external carriage assembly with the internal self-lube ball-bearing rail system found on the S80.

It is intended to be used as a supporting member and provide high stiffness to single-axis or gantry applications that span shorter distances. An idler allows the design engineer to move much larger loads than would be possible by a single electric actuator. It effectively becomes the adjacent or parallel support member of a Bimba actuator, leading to greater load and moment loading capability.



## FEATURES AND BENEFITS

- Stainless steel sealing strip cover
- Long life self-lubricant linear bearings
- Smooth operation with high stiffness and moment capacity
- Low friction
- Supports high loads in most any mounting configuration

## DISASSEMBLY

Call Bimba before any disassembly of the linear actuator. Bimba's warranty may be voided if the customer disassembles the linear actuator.

If disassembly is required, then the first thing to be removed is the sealing strip. At each end of the actuator is a sealing strip clamp as listed below. Remove the bolts holding the clamps, then flip the end of the strip over to access the bottom clamp fixture. Remove this by disassembling the bolts and slide the strip out of the carriage.

To reinstall, reverse this procedure, making sure that adequate tension is on the strip to insure that buckling of the strip does not occur.

## SPARE PARTS

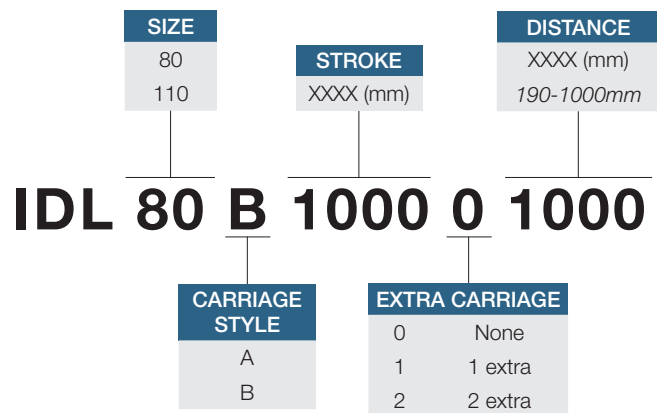
Please use the linear actuator serial number installed at the drive end for all inquiries along with the original purchase order number (if available). Describe the part required and contact Bimba at [cs@bimba.com](mailto:cs@bimba.com).

AVAILABLE SPARE PARTS	SIZE 80	SIZE 110
Stainless Sealing Strip	S80-16	S110-13
Sealing Strip Clamp	S80-14	S110-14
Double Carriage Assembly	S80-09	S110-09
Single Carriage Assembly	S80-10	S110-10



# HOW TO ORDER

An example of a basic size 80 idler with a B-style carriage and 10000m stroke is shown below.



# PRODUCT FEATURES

## MAGNETIC SWITCHES

Bimba magnetic limit switches offer a one-stop selection experience with a large offering of reed and solid-state switches. These switches provide a position interface between the electric actuator and the electrical control system. Our pre-tested solutions also eliminate costly, time-consuming design and testing required if the magnetic switch is purchased separately and provides an aesthetically pleasing installation. They are available in AC, DC, reed, PNP, NPN, TRIAC, 2-wire SS (EdgeSwitch™) NO, NC, illuminated, track-mounted, band-mounted, pigtail, or M8 quick-connect types. Bimba is sure to have a magnetic switch to meet your unique application needs.



SWITCH ACCESSORY PNO

PART NUMBER	SWITCH TYPE	OPERATION
SW-PNO	PNP	Normally Open
SW-PNC	PNP	Normally Closed
SW-NNO	NPN	Normally Open
SW-NNC	NPN	Normally Closed

### Cordset with Quick Connect

For Non-Flex 5M Cables: Part Number CBL-NFX-050-M

For Flex 5M Cables: Part Number CBL-FX-050-M

## LIMIT SWITCHES

Limit switches are available from Bimba in many different types, styles, and feature sets, leading to a near certain likelihood of finding one that meets your application needs.

## MOUNTING CLAMPS

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To secure an actuator to the machine frame, hold-down clamps are available. They are designed to fit perfectly in the extruded body actuator T-channel. Appropriate sized clamps are available for the IDL80/110 actuator, as well as all of Bimba's electric actuators.



## FEATURES AND BENEFITS

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- Pre-configured mounting clamps allow for secure mounting in horizontal or vertical positions
- Anodized aluminum mounting clamps offer strength and protection in harsh installs

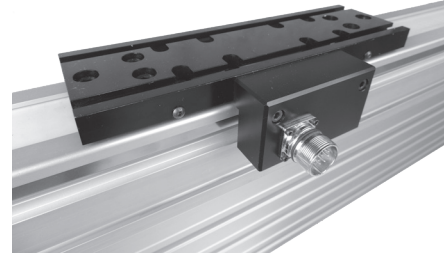


# PRODUCT FEATURES

## LINEAR SCALES

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In those extreme cases where precision beyond the normal tight accuracy of our actuator is desired, Bimba offers external Linear Scales that are capable of providing extended position precision to as tight as  $10\mu\text{m}$ . These scales are composed of a reading head and external scale and are available in incremental or absolute versions which can be added to your actuator, as an additional component, when included in the final part number.



## FEATURES AND BENEFITS

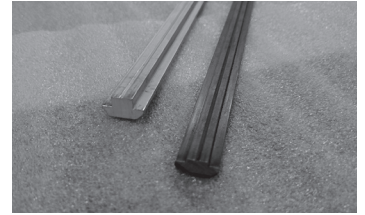
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- Standard  $10\mu$  position resolution offers extreme precision for high precision positioning applications
- $1\mu$  and  $0.1\mu$  types available, increasing precision by 10 and 100 times

## T-BARS

A T-bar is a mechanical tube member of a Bimba electric belt-drive actuator system. These T-bars slide and mount into the T-slot on the carriage and are intended for customers to drill and tap as they want so that they can mount to any B80, B110 or ST80 carriages. The length matches the carriage lengths.

It is intended to be a supporting member and provide high stiffness to systems that span a longer distance as is often found in single axis actuators.



## FEATURES AND BENEFITS

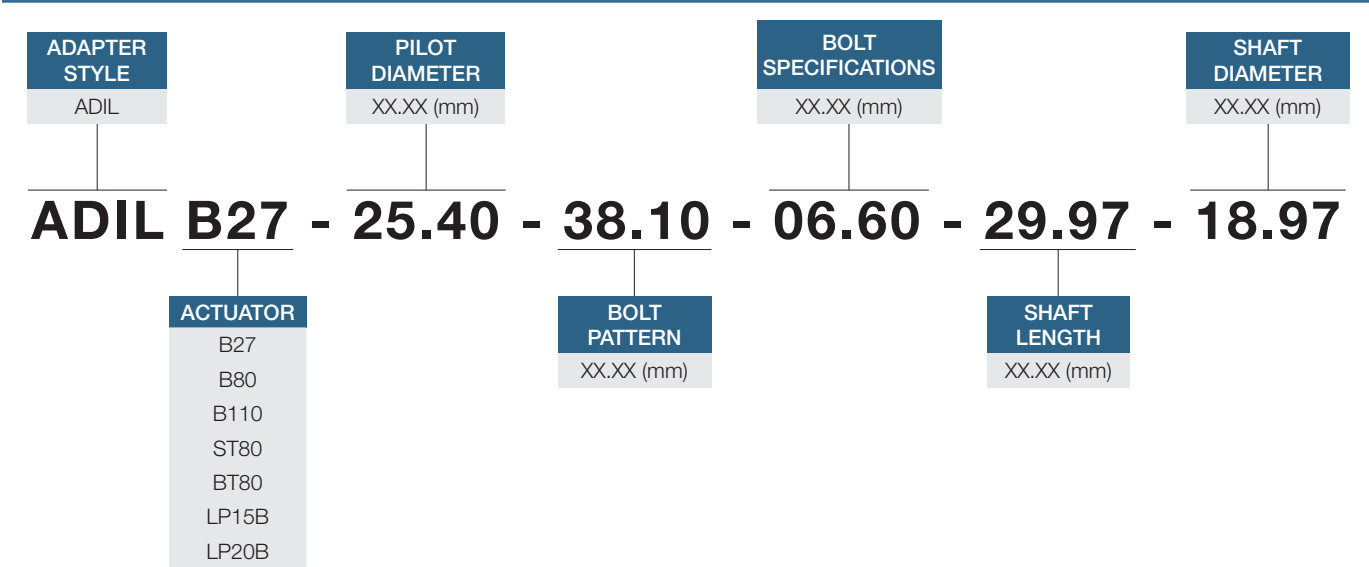
- Offers customized mounting
- Available with most Bimba belt and ballscrew rodless actuators
- Provides increased stiffness, leading to more stable positioning
- Ideal for long length actuators

PART NUMBER
B80-190L
B80-260L
B110-210L
B110-305L

# HOW TO ORDER

Adapter plates are available for a variety of Bimba electric actuators. If an adapter plate is required, please submit the adapter plate style (ADIL) and actuator code (B27, B80, etc.), as well as either the motor print or the five dimensions noted below.

## ADAPTER PLATE (INLINE STYLE)



## ADAPTER PLATE TIPS

- Inline adapters (IL) are used with any Bimba electric actuator, including both ballscrew and belt drive types.
- When an adapter is ordered, the adapter plate information listed above must be provided at the time of order to avoid delays.
- As an option, you may submit the motor drawing print in lieu of the five dimensions (e.g., ADIL-B27 Motor Print).



Adapter plates are available for a variety of Bimba electric actuators. If an adapter plate is required, please submit the adapter plate style (ADBR) and actuator code (S27, S80, etc.), as well as either the motor print or the five dimensions noted below.

## ADAPTER PLATE (BELT REDUCTION STYLE)

ADAPTER STYLE	PILOT DIAMETER	BOLT SPECIFICATIONS	SHAFT DIAMETER
ADBR	XX.XX (mm)	XX.XX (mm)	XX.XX (mm)

**ADBR B27 - 25.40 - 38.10 - 06.60 - 29.97 - 18.97**

ACTUATOR	BOLT PATTERN	SHAFT LENGTH
S27	XX.XX (mm)	XX.XX (mm)
S80		
S110		
LP15S		
LP20S		

## ADAPTER PLATE TIPS

- Belt Reduction (BR) adapters are typically used with ballscrew actuators, such as the Bimba S Series.
- When an adapter is ordered, the adapter plate information listed above must be provided at the time of order to avoid delays.
- Belt Reduction adapters are available in 1:1, 1.5:1, 2:1, and 2.5:1 ratios.
- As an option, you may submit the motor drawing print in lieu of the five dimensions (e.g., ADBR-B27 Motor Print).

The top of the page features a dark blue header with a repeating pattern of white technical line drawings of various mechanical components, including valves, actuators, and connectors. The word "NOTES" is printed in white, uppercase, sans-serif font in the top left corner of this header.

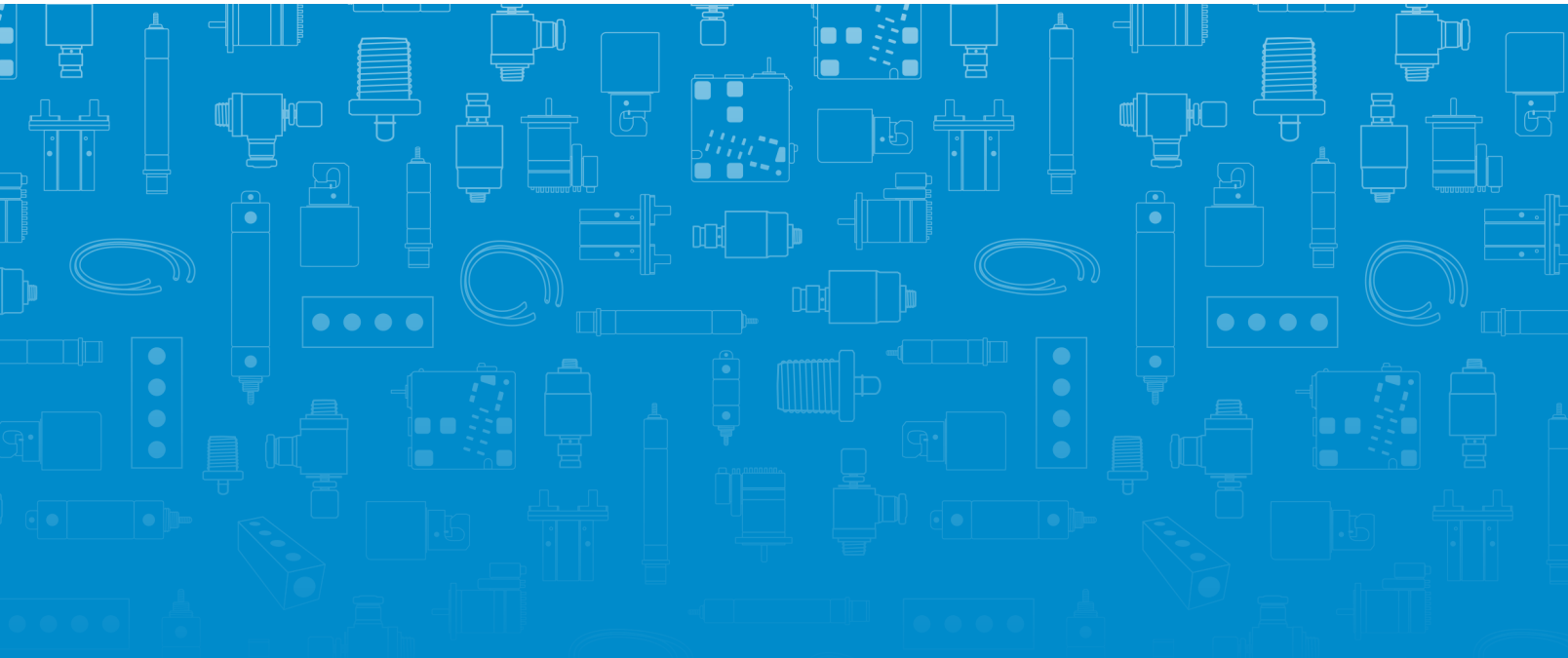
# NOTES



# NOTES



Your stocking distributor is:



**Bimba**

25150 S. Governors Hwy University Park, Illinois 60484

Phone: 708-534-8544 Toll Free: 800-44-BIMBA Fax: 708-235-2014

Email: [cs@bimba.com](mailto:cs@bimba.com) [www.bimba.com](http://www.bimba.com)

