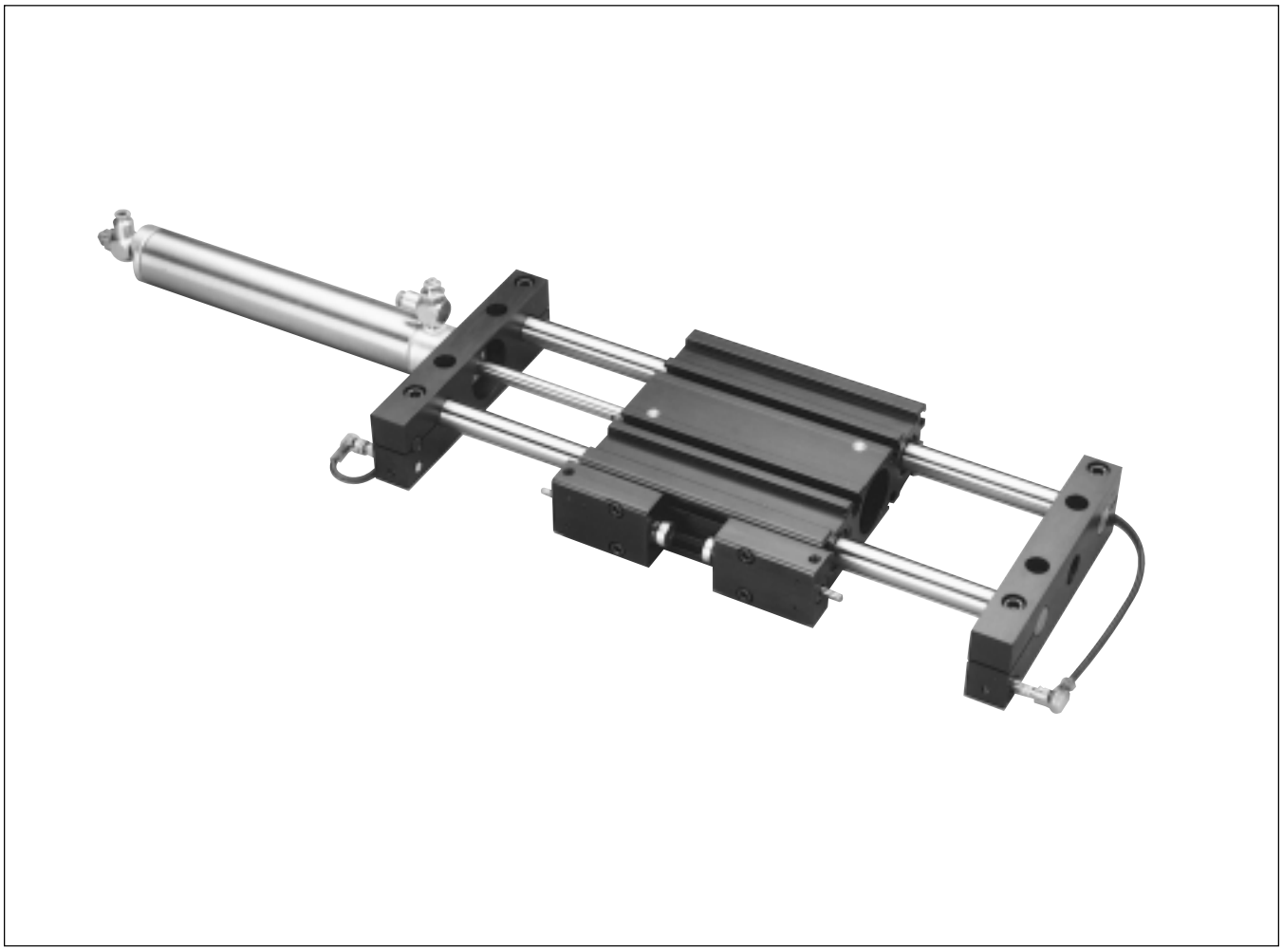
XLB Series

Base Slides



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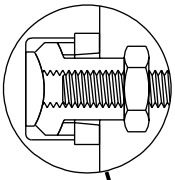
Automation Actuator Division
Wadsworth, OH 44281

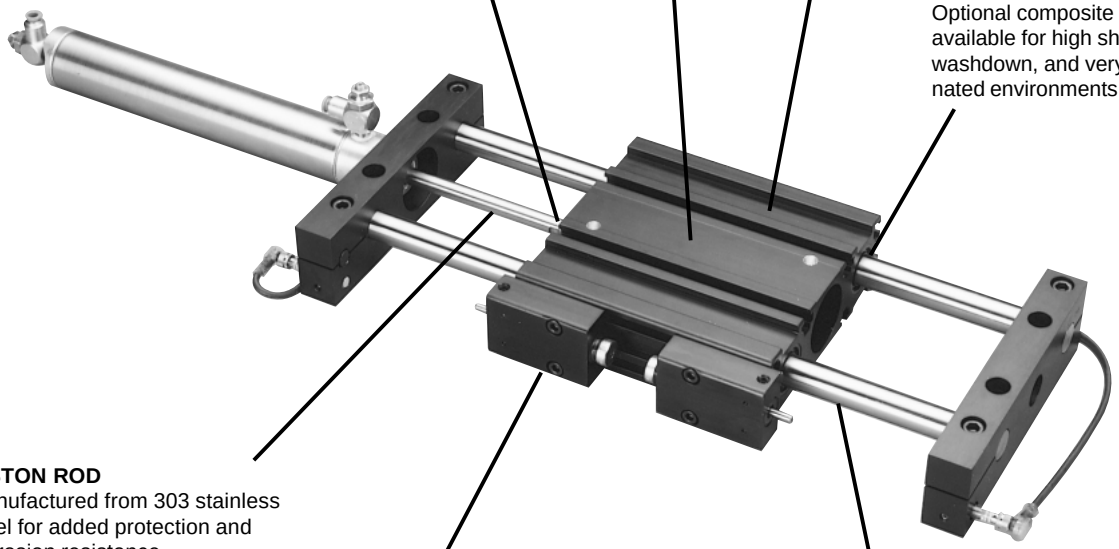
LIGHTWEIGHT BODY
A unique extruded aluminum profile reduces weight which allows for less inertia in applications requiring the body's movement.

PATENTED CYLINDER ALIGNMENT COUPLER*
Allows piston rod to self-center thus extending cylinder life especially when the support shafts deflect under load.



SQUARE NUT "T" SLOTS
Are extruded into the main housing for mounting flexibility and quick setup. For added flexibility, through holes are standard and dowel pin holes are optional.

BEARINGS
Sealed recirculating ball bearings provide precise alignment with very low friction and wear. Optional composite bushings are available for high shock, washdown, and very contaminated environments.



PISTON ROD
Manufactured from 303 stainless steel for added protection and corrosion resistance.

SHOCK/STROKE ADJUSTERS
Shock absorbers integrated with an adjustable positive stop provides smooth deceleration and stroke adjustment. One adjustment moves both components in unison – eliminating multiple iterations during setup. Shocks can be added in the field.

SUPPORT SHAFTS
Case hardened to Rc 60-65, support shafts are machined from high carbon alloy steel. This extreme surface hardness protects the shaft's round ways from nicks and scratches - enhancing component life and reducing maintenance.

*U.S. Patent #5,413,031

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XLB Series Base Slides

Designed for lighter loads, the XLB Series base slide provides precise, torque resistant linear motion in a very light weight, compact package. Built into the main body, or saddle, an alignment coupler allows the piston rod to self-center. This extends cylinder life especially when the support shafts deflect under load.

The main body is manufactured from anodized extruded aluminum incorporating "T" slots for mounting flexibility. "T" slots support optional stroke adjusters and shock absorbers. One adjustment moves both components in unison – eliminating multiple iterations during setup.

Supported by the main body are four pre-lubricated recirculating ball bearings and two precision ground support shafts. Optional composite bushings may be specified. Outboard wiper seals protect the bearings from contamination and retain lubrication. This ensures long life with reduced maintenance. A pre-lubricated stainless steel air cylinder with a stainless steel piston rod provides thrust while the support shafts and bearings provide positive load support for millions of non-lube, trouble-free cycles.

Available options include reed, Hall Effect and inductive proximity sensors, prox ready, self-compensating hydraulic shock absorbers, shock ready, bumpers, adjustable stop collars, flow controls, fluorocarbon seals and 3-position cylinders.

Specifications

- Maximum operating pressure: 100 psi
- Operating characteristics: double acting standard
  (single acting available)
- Four support rod sizes: 1/4", 3/8", 1/2", 3/4"
- Stroke tolerance: +.060, -.000
- Mounting: unrestricted
- Operating temperature range (cylinder):
  Standard seals 0 to 165°F
  Fluorocarbon seals* 0 to 250°F
- Filtration requirement: 40 micron filtered, dry air

*See Fluorocarbon seal option for high temperature applications.

Quick Reference Data

Model	Support Rod Diameter (in)	Cylinder Bore Size (in)	Maximum Stroke (in)	Force Output on Extension at 80 psi (lb)	Force Output on Retraction at 80 psi (lb)	Unit Weight (lb)	
						Base	Per inch
04	1/4	9/16	12	20	18	1.05	0.052
06	3/8	3/4	12	35	31	2.15	0.098
08	1/2	1-1/16	18	70	64	3.95	0.163
12	3/4	1-1/2	24	140	128	9.30	0.335

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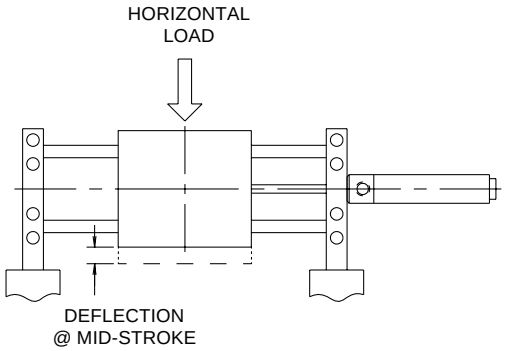
Horizontal Load

The plots on this page illustrate the side load vs. actuator stroke for the XLB slides. Applied loads will cause a slight deflection of the support rods. Deflection distance is also shown. The graphs include the weight of the support rods and tooling plate and are based on a bearing life equivalent to 10 million inches of travel for dynamic conditions. Higher dynamic loads will reduce cycle life. For static loads, multiply the information in the graph by 1.5.

NOTE: Actuator life may vary depending on the severity of the following variables:

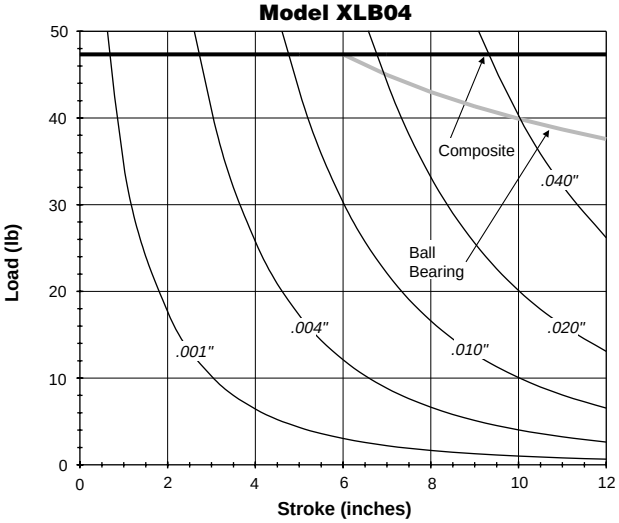
- Acceleration
- Velocity
- Vibration
- Orientation



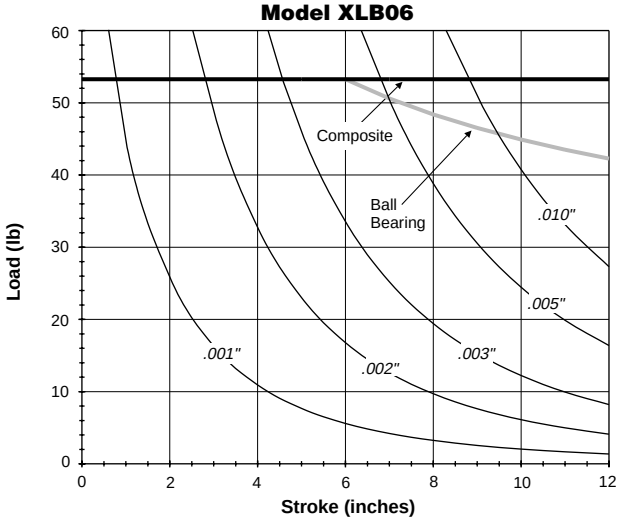
EXAMPLE:
An XLB06 with ball bearings and a stroke of 10 inches will have a load capacity of 45 lbs.

Dynamic Horizontal Load Capacity and Deflection vs. Stroke

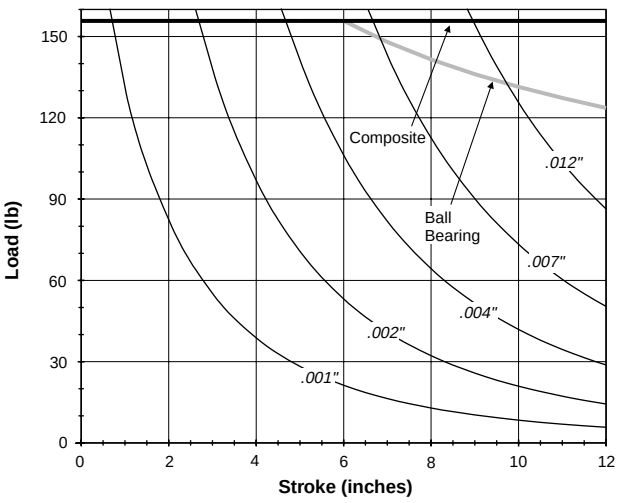
Model XLB04



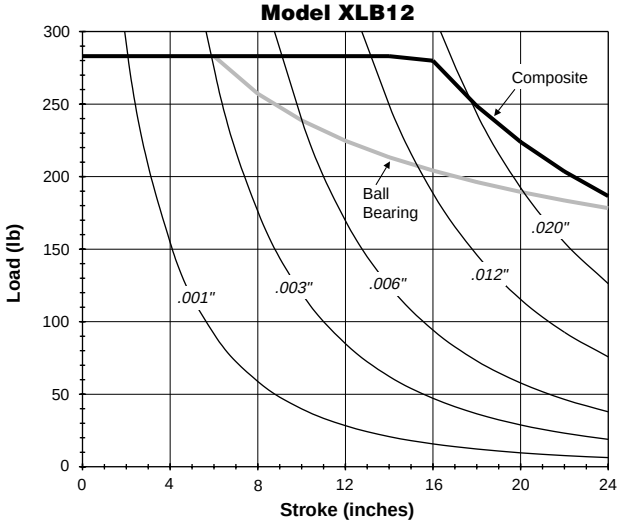
Model XLB06



Model XLB08



Model XLB12



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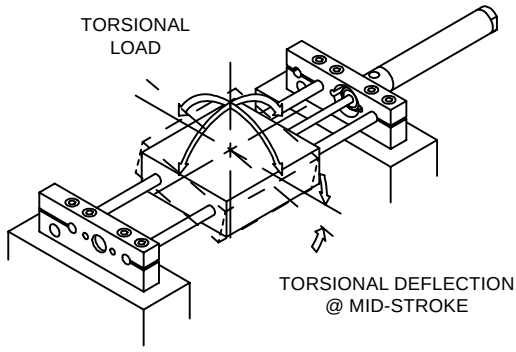
Symmetrical Torque Capacity

The plots on this page provide the torsional load vs. actuator stroke for various slide sizes. Torsional loads will cause a slight amount of angular deflection of the tooling plate. Angular deflection is also shown. The data presented is based on a bearing life equivalent to 10 million inches of travel for dynamic conditions. Higher dymanic torques will reduce cycle life. For static torque, multiply the information in the graph by 1.5.

NOTE: Actuator life may vary depending on the severity of the following variables:

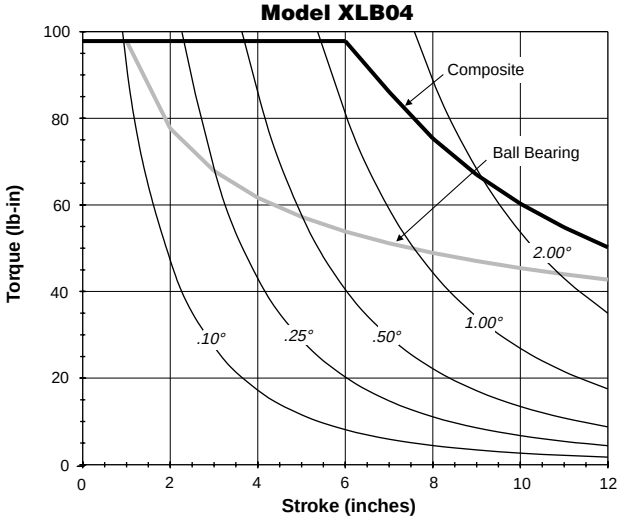
- Acceleration
- Velocity
- Vibration
- Orientation



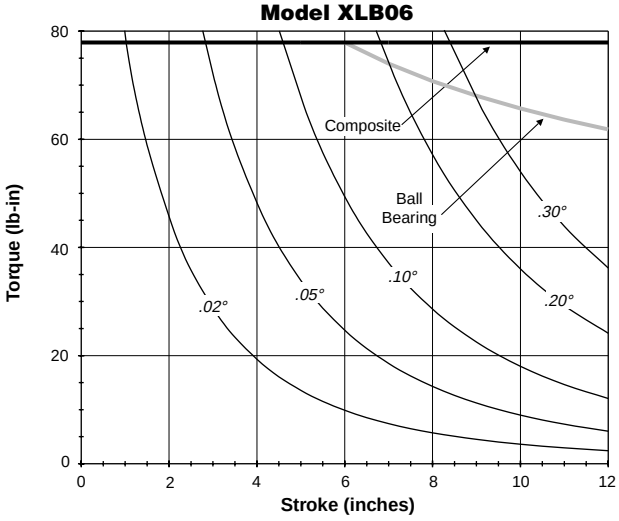
EXAMPLE:
An XLB04 with composite bushings and a stroke of 10 inches will have a load capacity of 60 lb-in.

Symmetrical Torsional Load Capacity and Deflection vs. Stroke

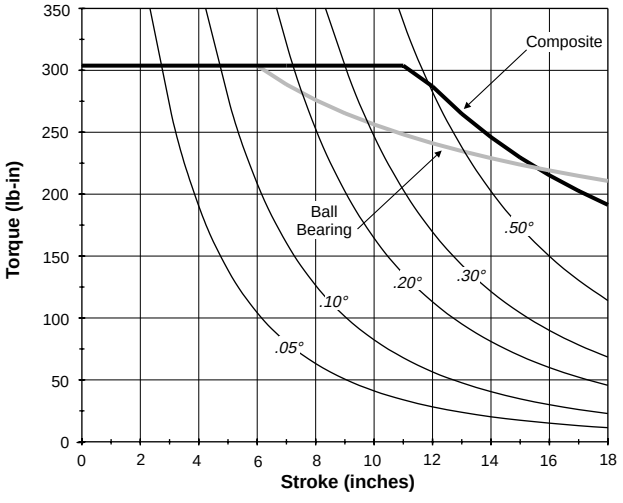
Model XLB04



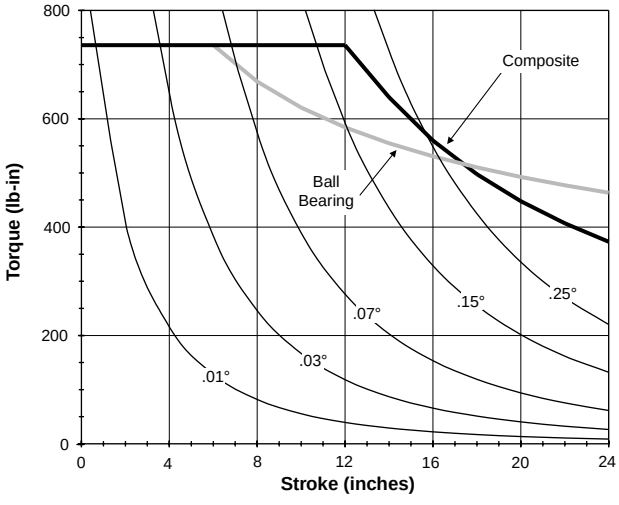
Model XLB06



Model XLB08



Model XLB12



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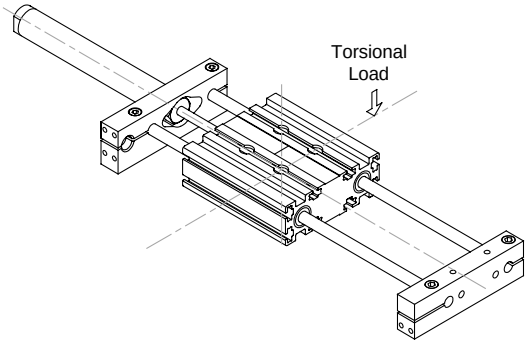
Asymmetrical Torque Capacity

Asymmetrical loading occurs when the load is applied to one side of the unit. XLB Series units can resist torsional loads that are asymmetrical. The graphs on this page show torsional load capacity for both composite and linear ball bearings.

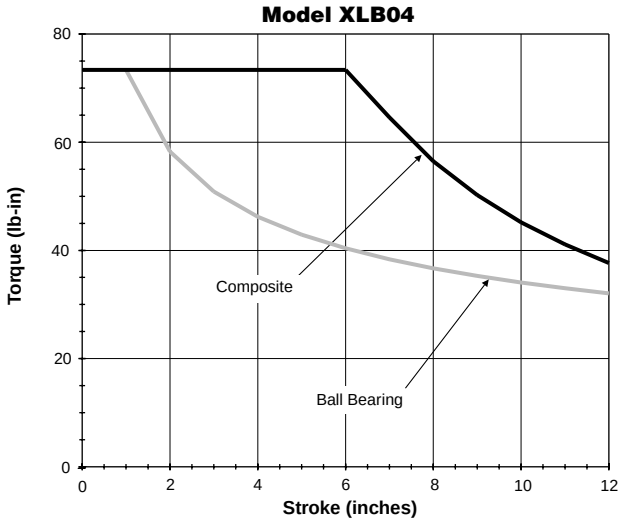
NOTE: Actuator life may vary depending on the severity of the following variables:

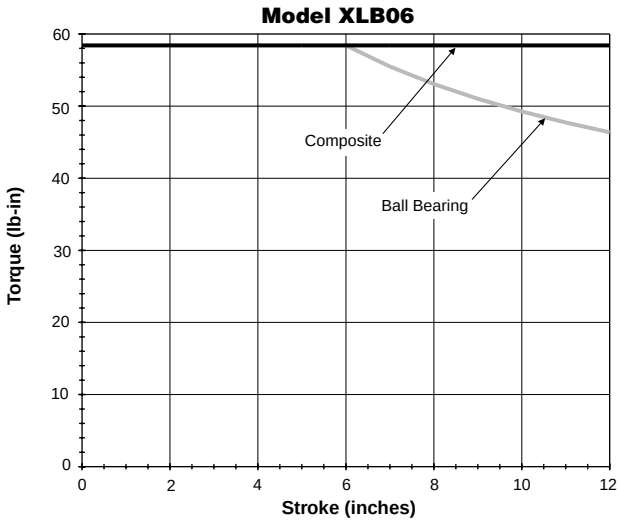
- Acceleration
- Velocity
- Vibration
- Orientation

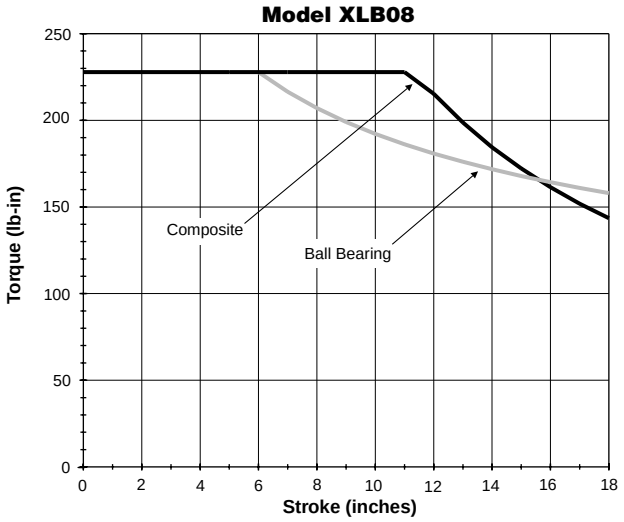


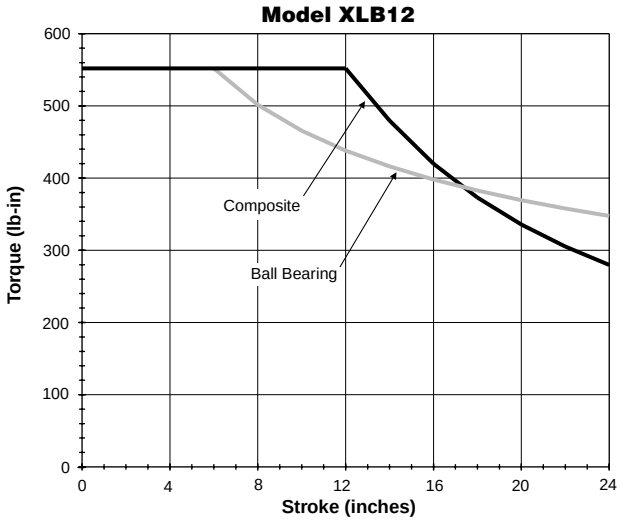
EXAMPLE:
An XLB12 with ball bearings and a stroke of 16 inches will have an asymmetrical torque capacity of 400 lb-in.

Asymmetrical Torsional Load Capacity vs. Stroke









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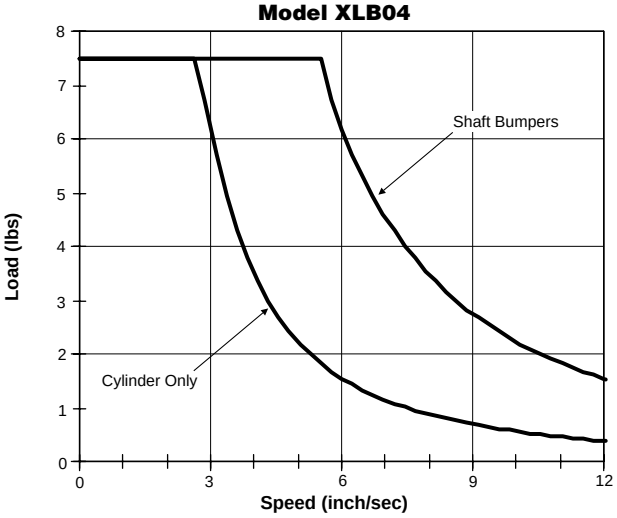
Kinetic Energy

These plots illustrate the stopping capacity of the XL Series with bumpers or cylinder only. This type of sizing is based on the weight of the load and the speed at which the load is moving. The bumper plots are based on a 0.020 deflection.

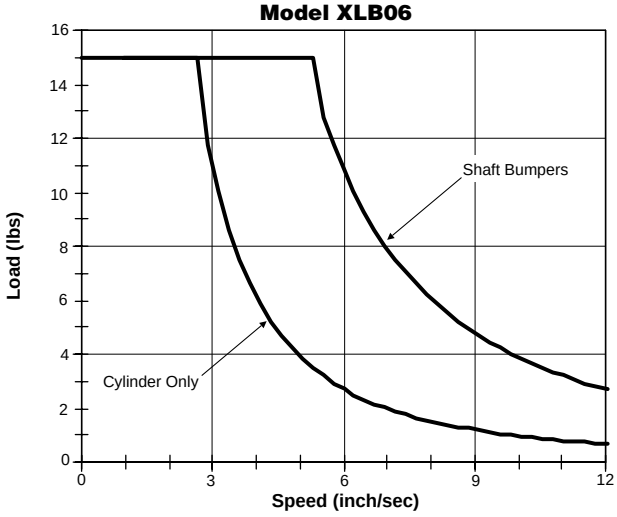
For values above the cushion line, shock absorbers must be specified. Follow the shock absorber sizing steps on the following page to ensure proper stopping capacity.

NOTE: *These charts are to be used only to determine the stopping capacity of each guided cylinder.*

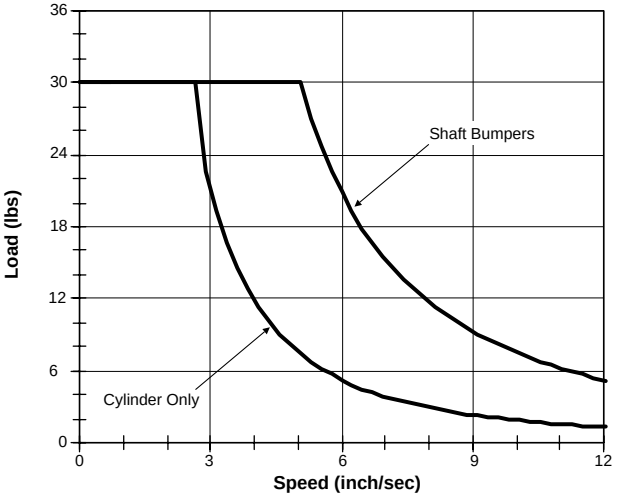
Model XLB04



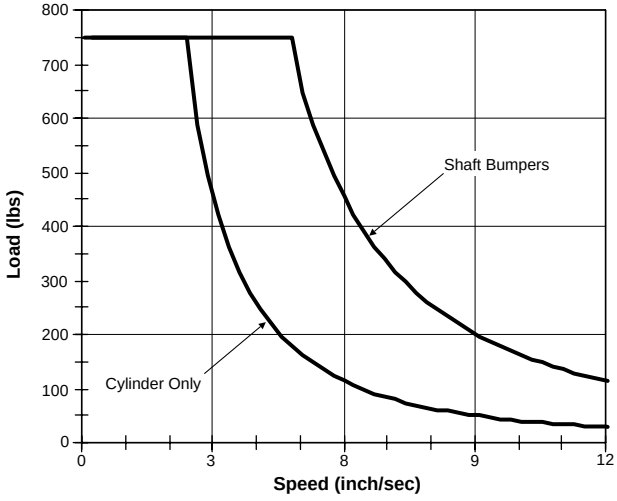
Model XLB06



Model XLB08



Model XLB12



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Kinetic Energy

Steps to sizing a guided cylinder with shocks:

1) Determine the "Moving Weight", W.

   Use Table 1 to determine the "Kinetic Energy Weight" of a given slide. This value should be added to the weight of the load the slide will be carrying.

   Moving Weight (lbs) =
   Kinetic Energy Weight (lbs) + Weight of Load (lbs)

2) Determine the velocity of the load, V (in/second)

3) Determine the cylinder force output at the operating pressure, $F_{cylinder}$ (lbs)

4) Detemine the Kinetic Energy of the load:

   $KE = 0.2 \times W \times V^2$ (lb-in)

5) Determine the Energy per Cycle, E_{cycle} (lb-in):

   $E_{cycle} = KE + F_{cylinder} \times$ Shock Stroke
   (unless stroke adjusters are used, 1 inch is standard)

   This value should be less than the value listed in table 2

6) Determine the Energy per Hour: E_{hour} (in-lbs)

   $E_{hour} = 2 \times E_{cycle} \times$ # of cycles in one hour
   (a cycle is defined as the extension and retraction of the slide)

   This value should be less than the value listed in table 2

7) Determine the Effective Weight of the load

$$W_{effective} = \frac{E_{cycle}}{0.2 \times V^2}$$

   This value should be between the values listed in table 2

Table 1

Model	Base Weight (lb)	Stroke Adder (lb per in)
XLB04	0.42	0.01
XLB06	0.89	0.01
XLB08	1.57	0.02
XLB12	3.43	0.04

Table 2

Size	Total Energy per Cycle (lb-in)	Total Energy per Hour (lb-in)	Effective Weight (lb)	Velocity Range (in/sec)
04	20	120,000	1.5 - 5	6 - 96
06	45	125,000	1.5 - 14	6 - 120
08	150	300,000	2 - 22	6 - 144
12	300	400,000	50 - 150	6 - 144

Example:

An XLB12-15A-B will be carrying a load of 15 lbs at a velocity of 30 in/second (cycling 20 times per hour) while operating at 50 psi. Is this unit properly sized?

1) Moving Weight = [3.43 + (15 × 0.04)] + 15 lbs = 19.03 lbs
2) V = 30 in/second = 2.5 ft/second
3) $F_{cylinder} = 87.5 \times 0.75 = 65.6$ lbs
4) $KE = 0.2 \times 19.03 \times 2.5^2 = 23.79$ lb-in
5) $E_{cycle} = 23.79 + 65.6 = 89.29$ lb-in
6) $E_{hour} = 2 \times 89.29 \times 20 = 3572$ lb-in

7) $$W_{effective} = \frac{89.29}{0.2 \times (2.5)^2} = 71.4 \text{ lbs}$$

The shock will dissipate the energy of the load.

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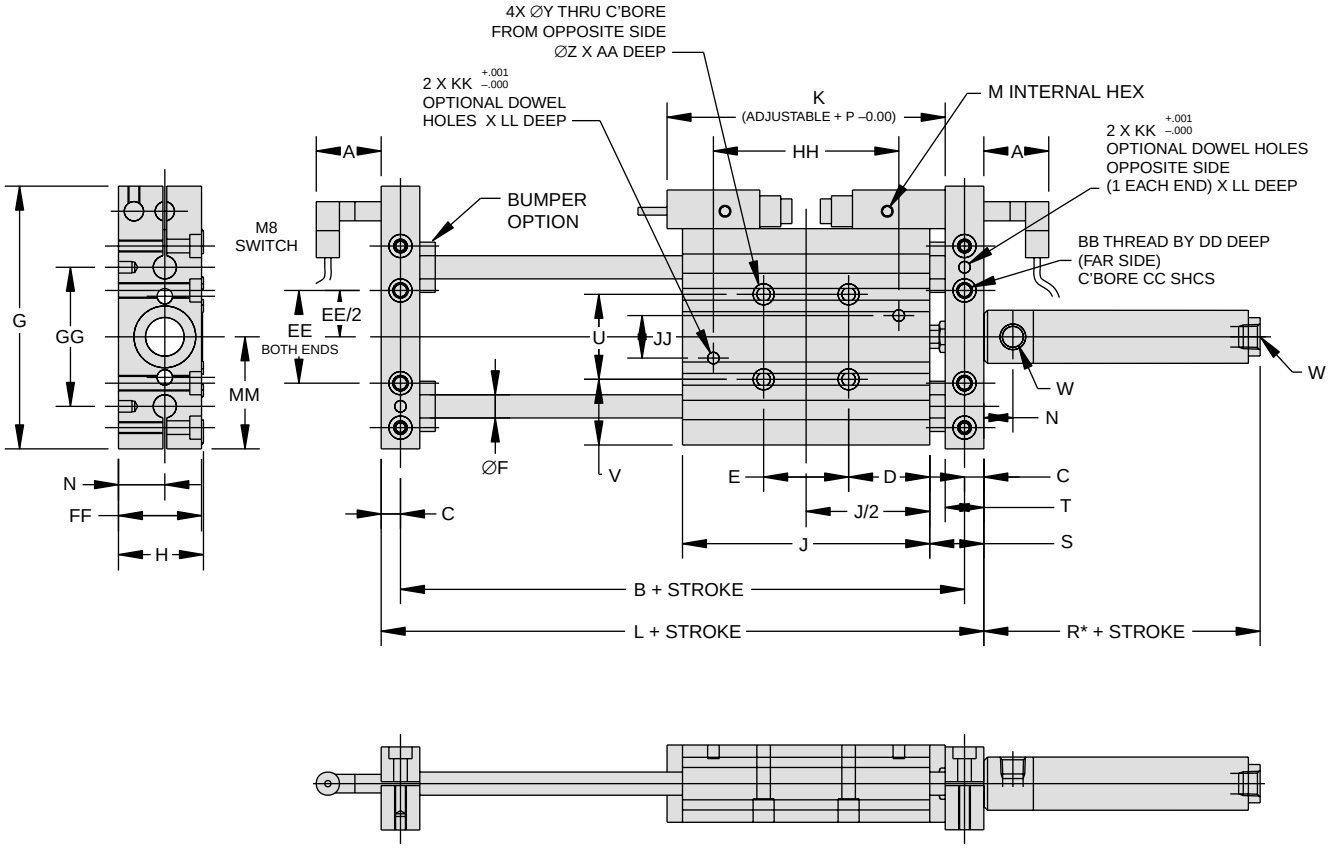
Basic Dimensions



Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R*	R_1	S	T
XLB04	1.18	4.000	.250	1.000	1.000	.250	3.38	1.00	3.00	3.50	4.50	3/32	.40	.50	2.15	2.25	.75	.50
XLB06	1.05	5.125	.313	1.312	1.375	.375	4.25	1.25	4.00	4.50	5.75	3/32	.47	.75	2.47	2.47	.88	.63
XLB08	.92	6.250	.375	1.625	1.750	.500	5.38	1.50	5.00	5.50	7.00	1/8	.57	.75	2.80	2.92	1.00	.75
XLB12	.68	8.000	.500	2.125	2.250	.750	7.00	2.00	6.50	7.00	9.00	1/8	.62	1.25	3.06	3.18	1.25	1.00

Model	U	V	W	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM	NN
XLB04	1.000	.875	#10-32	.19	.31	.25	#10-32	.28	.38	1.125	1.09	1.750	2.000	.438	.126	.19	1.44	.625
XLB06	1.375	1.063	1/8 NPTF	.22	.34	.38	1/4-20	.38	.50	1.500	1.34	2.250	3.000	.688	.188	.22	1.81	.750
XLB08	1.750	1.375	1/8 NPTF	.28	.44	.38	5/16-18	.44	.63	2.000	1.56	3.000	3.750	.938	.251	.25	2.37	.875
XLB12	2.250	1.875	1/8 NPTF	.34	.53	.50	3/8-16	.53	.75	2.500	2.06	4.000	5.000	1.250	.313	.32	3.06	1.125

* Use R_1 dimension when bumpers are specified.

All dimensions shown in inches.

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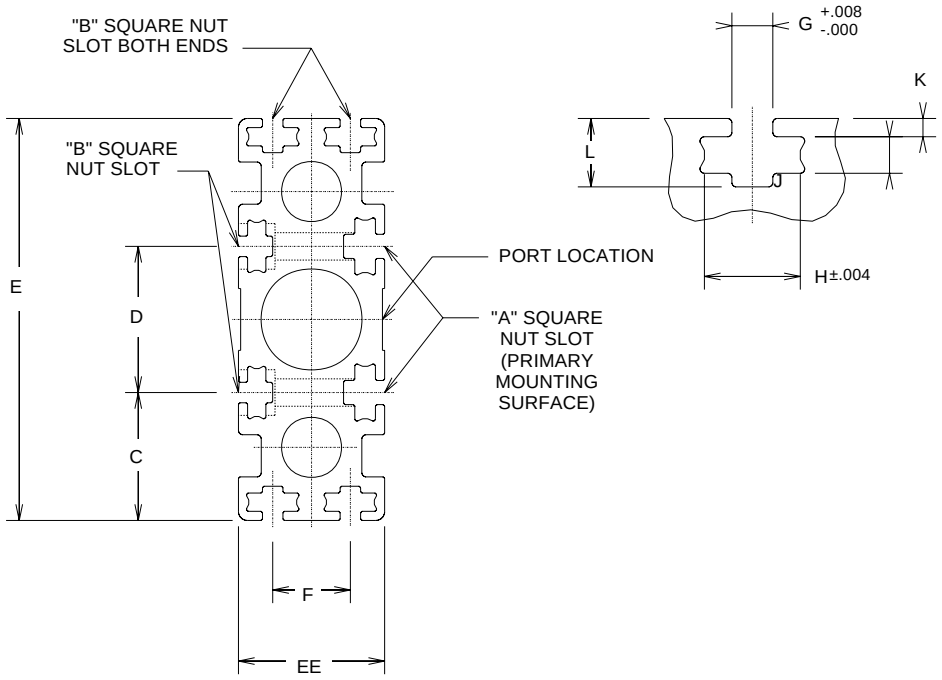
Square Nut "T" Slot



Model	Body Dimensions							Slot	Slot Dimensions				
	A	B	C	D	E	EE	F		G	H	J	K	L
04	8-32	6-32	.875	1.000	2.75	1.00	.531	A	.174	.359	.141	.062	.281
								B	.138	.328	.125	.062	.234
06	10-32	8-32	1.063	1.375	3.50	1.25	.688	A	.190	.391	.141	.094	.312
								B	.164	.359	.141	.094	.312
08	1/4-20	10-32	1.375	1.750	4.50	1.50	.875	A	.250	.453	.203	.125	.438
								B	.190	.391	.141	.094	.312
12	5/16-18	1/4-20	1.875	2.250	6.00	2.00	1.250	A	.312	.578	.234	.156	.563
								B	.250	.453	.202	.125	.438

Square Nut Kits

Each slide is equipped with (4) square nuts for the "A" slot and (4) for the "B" slot. Additional square nuts can be ordered. Each kit contains 8 square nuts (4 primary, 4 secondary).

Model	Kit Number
04	NK04
06	NK06
08	NK08
12	NK12

All dimensions shown in inches.

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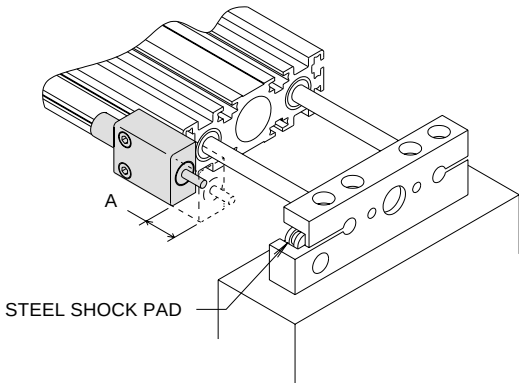
Shock/Stroke Adjuster (A, A1, A2)

Hydraulic shock absorbers dissipate energy, allowing increased operating speeds. Shocks are fixed orifice self-compensating type and will provide constant deceleration despite changing energy conditions. The shock housing can be used as a stop. By moving the shock housing, the stroke is adjusted. Maximum allowable stroke adjustment is shown in the table.

NOTE: Do not allow the shock to protrude through the adjustable stop housing as damage may occur if the shock comes into contact with the tool plate. Additionally, damage may occur if the shock piston rod is twisted or turned.



Shock Ready (A3, A4, A5)

Shock absorber bracket(s) and tooling plate(s) are provided. Shock may be field added.

Maximum Allowable Stroke Adjustment per Side

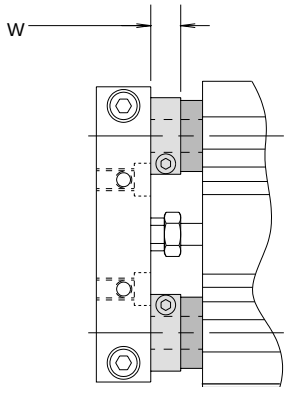
Model	A
04	.50
06	.75
08	.75
12	1.25

Bumpers/Adjustable Stop Collars (B, B1, B2, B3, B4, B5)

Bumpers reduce noise and permit faster cycle times thereby increasing production rates. They can be placed on the extend, retract or both positions.

An extend stop collar provides travel adjustment. A stop collar can also be specified for the retract stroke. This stop collar is optional and is only provided if requested. The retract stop collar option (B3) and the stop collar both ends option (B4) reduce the stroke of the slide by the dimension shown.

EXAMPLE:
Four inches of stoke are desired with an adjustable stop collar on the retract position. Utilizing the table, a "W" dimension for an 04 size unit would be .28". A 4" stroke unit would have a net stroke of 3.72". If the full 4" of stroke is required, a 5" stroke unit must be ordered. The stops can then be adjusted to provide the desired stroke of 4".



Model	W
04	.281
06	.344
08	.406
12	.500

All dimensions shown in inches.

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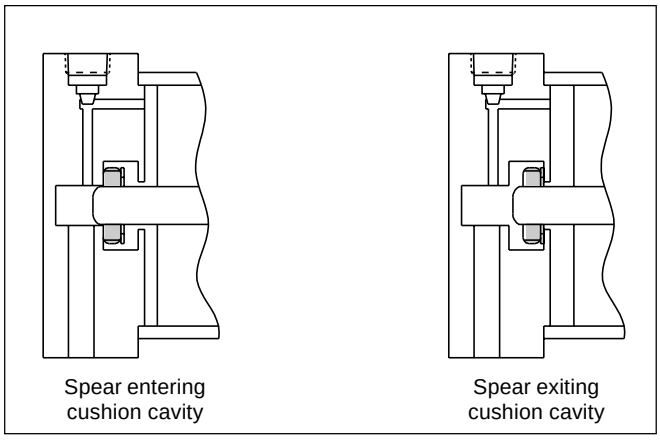
Cushions on Cylinder (C)

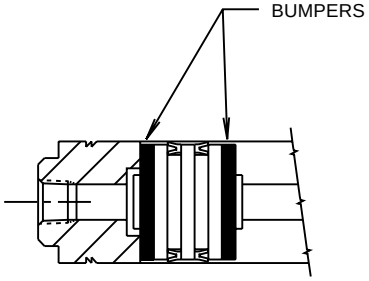
Optional cylinder cushions are available at both ends. The check seal cushions float radially and longitudinally to compensate for problems with misalignment. Flow paths molded on the circumference of the seal allow exceptionally rapid return stroke without the use of ball checks. A captive cushion screw provides safe cushion adjustment while the cylinder is pressurized. The brass adjustment screw provides maximum corrosion resistance.

The cushion adjustment screw is hidden by the XL housing. The cushion adjustment screw is factory set at full cushion less 1/2 of a turn.



Bumpers on Cylinders (D)

Available on both ends only, bumpers may be specified on the cylinder to reduce noise. Bumpers add length to the cylinder. See Dimensional Data for "R_1" length.

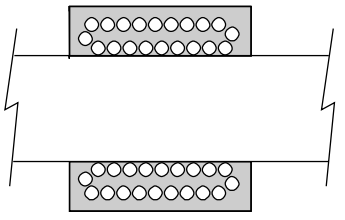


Composite Bushings (T)

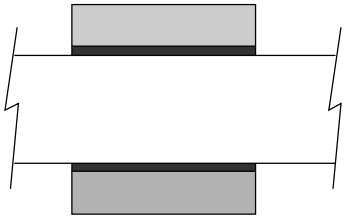
Selection should be based on the following criteria:

Application Requirement	Ball Bearing	Composite
Precision	Excellent	Good
Friction	Low	Higher
Friction Coefficient	Constant	Variable
Precision over Life of Bearing	Constant	Variable
Static Load Capacity	Good	Excellent
Dynamic Load Capacity	Good	Good with Lower Efficiency
Lubrication	Required	Not Required
Vibration Resistance	Fair	Excellent
Contamination Resistance	Fair	Excellent
Washdown Compatibility	Poor	Excellent

For bearing load capacities, reference the Engineering Data in this section.



Recirculating Ball Bearing

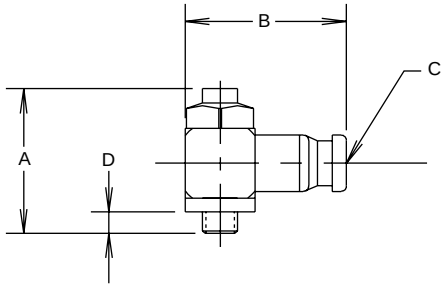


Composite Bushing

Flow Controls (F, G)

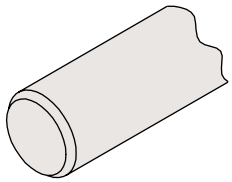
Right angle flow control valves allow precise adjustment of cylinder speed by metering exhaust air flow. Presto-Lok push-in or NPT ports provide 360° orientation capability.

Model	A	B		C		D	Thickness
		Presto-Lok	NPT	Presto-Lok	NPT		
04	1.63	1.38	1.18	5/32	N/A	.16	.67
06	1.63	1.38	1.18	5/32	1/8	.44	.67
08	1.63	1.38	1.18	1/4	1/8	.44	.67
12	1.63	1.38	1.18	1/4	1/8	.44	.67



Stainless Steel Shafts (K)

Case hardened, high carbon alloy steel shafting is utilized for standard slides. Stainless steel shafting can be specified for corrosive applications.



Fluorocarbon Seals (V)

Standard abrasion resistant nitrile seals should be used for general purpose applications with temperatures of 0 to 165°F. Fluorocarbon seals are recommended for high temperature applications up to 250°F.

*Consult factory for higher temperature operation.

Option	Temperature Range* (°F)
Shock Absorbers	32 - 150
Bumpers	0 - 200
Piston Magnets	0 - 165
Switches	14 - 140

Dowel Pin Holes (E)

See Basic Dimensions for location and size.

All dimensions shown in inches.

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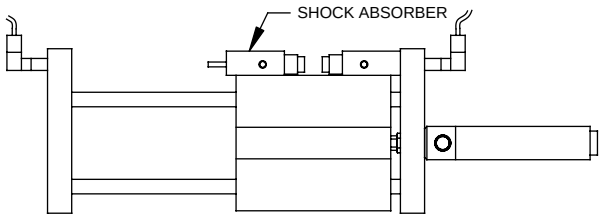
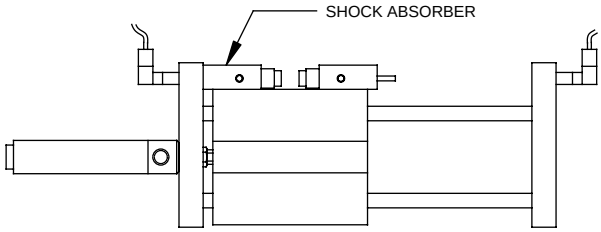
Left Hand Assembly (L)

When shock absorbers or proximity sensors are specified, units are shipped with the cylinder mounted on the right hand side of the slide when viewing the cylinder port. The shocks or sensors are located on the upper right and left. The slide can be ordered with the cylinder on the opposite side by specifying an "L" in the model number.

STANDARD ORIENTATION

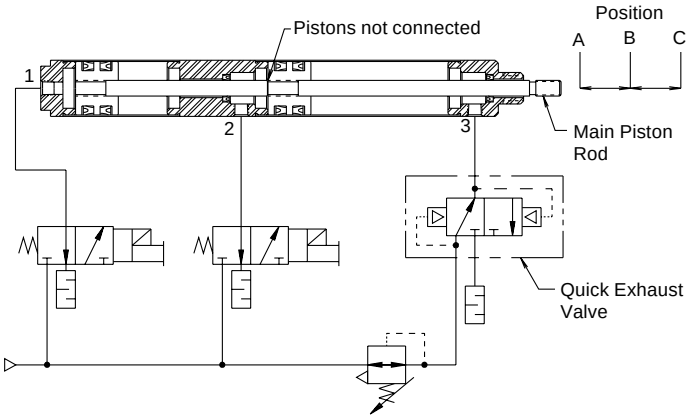


LEFT HAND ORIENTATION



Three-Position Cylinder

The three position unit utilizes a duplex air cylinder to provide the center position. This option can be specified with all other options. However, shock absorbers, bumpers and body mounted inductive proximity sensors operate on the fully extended and retracted positions only. Cylinder mounted reed and Hall Effect switches detect the center position of the slide.



Operation:

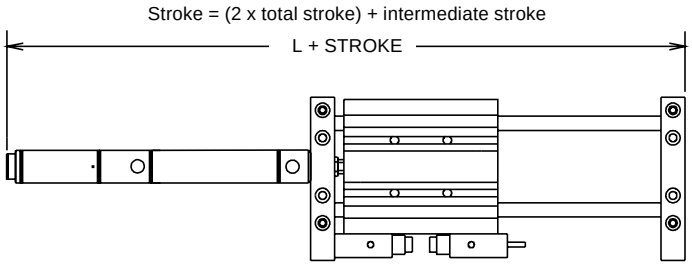
Position A (fully retracted) is obtained by applying pressure to Port 3 with Ports 2 and 1 vented to atmosphere. Position B (mid-position) is obtained by applying pressure to Port 1 while maintaining a lower pressure to Port 3. The pressure at Port 3 prevents the main piston rod from over-travelling. A quick exhaust valve can be used to maintain pressure while allowing full exhaust capability. Position C (fully extended) is obtained by applying pressure to Port 2.

Dimensional Data:

Three position units utilize a longer cylinder. All other dimensions remain the same.

Maximum Stroke for Intermediate Position

Model	Stroke (in)
04	3
06	6
08	9
12	12



Model	L
04	8.86
06	10.95
08	12.70
12	15.33

All dimensions shown in inches.

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Switch Characteristics

Proximity Sensors

- End of stroke sensing
- Solid state electronics
- LED indicator on plug-in style switch
- 10-30 VDC
- PNP and NPN available
- Senses metal tool plate
- Highest cost
- Long life

Hall Effect Switches

- Fully adjustable travel
- Solid state electronics
- LED indicator
- 6-30 VDC
- PNP and NPN available
- Senses magnet on cylinder piston
- Medium cost
- Long life

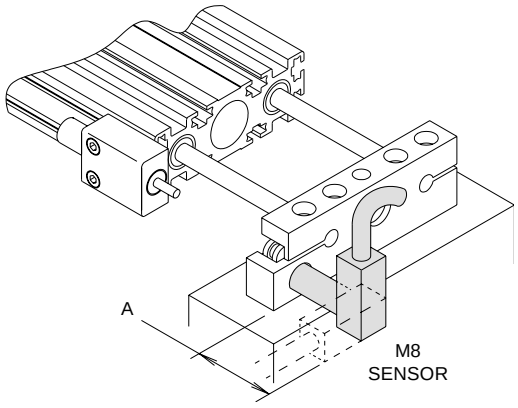
Reed Switches

- Fully adjustable travel
- Mechanical reed
- LED indicator
- 6-30 VDC or 85-150 VAC
- Senses magnet on cylinder piston
- Lowest cost
- Medium life

Proximity Sensors - 8mm Barrel Type

Proximity sensors sense the extend and retract positions of the slide. The proximity sensor is attached to the end mounting plate and remains in the proper position even when the stroke is adjusted. The sensor is pre-set at the factory and does not require adjustment. Should adjustment be necessary, care should be taken to ensure that the sensor does not come into contact with the stroke adjust stop block. Distance from the stop block to the sensor should be approximately .016 inches.

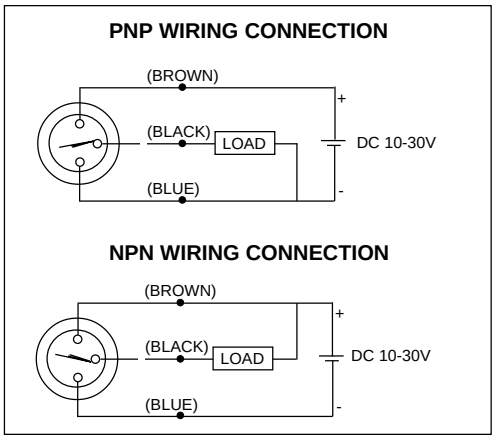
NOTE: When proximity sensors are specified with bumpers/adjustable stop collars, the sensor is mounted on the slide housing.



Model	A
04	1.18
06	1.05
08	.92
12	.68

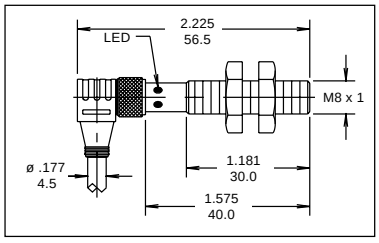
Electrical Specifications

Voltage:	10-30 VDC (3 wire) PNP or NPN
No Load Current:	5.5-9.5 mA
Continuous Current:	150mA
Switching Speed:	8 ms
Switch Frequency:	5000 Hz
Switching Distance:	Aluminum = 0.016 in (0.4mm) Brass = 0.028 in (0.7 mm) Steel = 0.039 in (1.0 mm)
Overload Protection:	Triggered at 170mA
Reverse Polarity Protection:	Incorporated
Temp. Range:	-13 to 158°F (-25 to 70°C)
Enclosure:	Meets NEMA 1,3,4,6,13 and IEC IP67, fully encapsulated



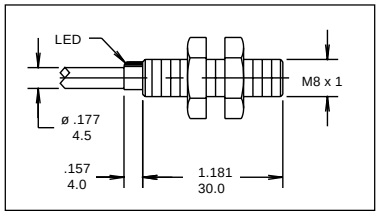
PLUG-IN SENSOR (P1, N1)

A threaded right angle cordset is included as standard. The cordset contains two LEDs: 1- power, 2 - target indication. Cordset length is 20 ft. (6m).



POTTED-IN SENSOR (P, N)

Lead type sensor with 20 ft. (6m) cord length



All dimensions shown in inches.

Parker Automation

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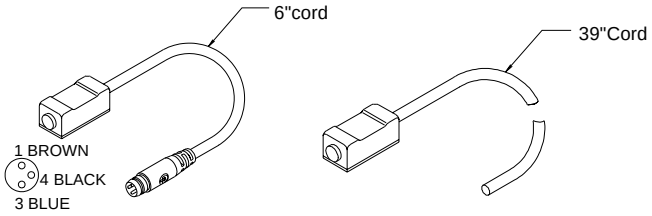
Wadsworth, OH 44281

Switches (order separately)

Switch Description	Part Number
PNP Hall Effect w/6" male plug-in connector	146715000C
NPN Hall Effect w/6" male plug-in connector	146714000C
PNP Hall Effect w/39" potted-in leads	1467150000
NPN Hall Effect w/39" potted-in leads	1467140000
Reed switch w/6" male plug-in connector	145903000C
Reed switch w/39" potted-in leads	1459030000



Switch Specifications

Hall Effect Switches

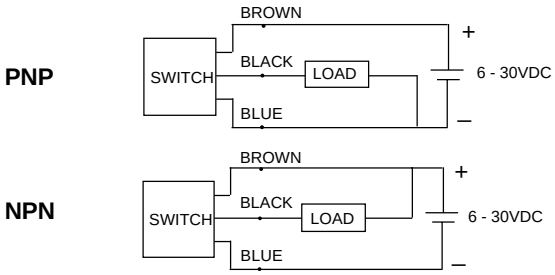
Type:	Solid State (PNP or NPN)
Switching Logic:	Normally Open
Supply Voltage Range:	6 - 30VDC
Current Output Range:	Up to100 mA at 5 VDC, Up to 200 mA at 12 VDC and 24 VDC
Current Consumption:	7 mA at 5 VDC, 15 mA at 12 VDC, and 30 mA at 24 VDC
Switching Frequency:	1000 Hz Maximum
Residual Voltage:	1.5V Maximum
Leakage Current:	10uA Maximum
Breakdown Voltage:	1.8kVACrms for 1 sec., lead to case
Min. Current for LED:	1mA
Operating Temperature:	14 to 140°F (-10 to 60°C)
Enclosure Protection:	Meets IEC IP67, fully encapsulated
Lead Wire:	3 conductor, 24 gauge
Lead Wire Length:	39 in (1 m)
Vibration Resistance:	10-55 Hz, 1.5mm double amplitude

Reed Switches

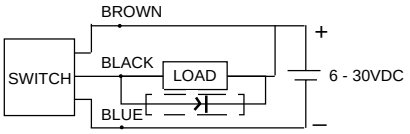
Switching Logic:	Normally open, SPST
Voltage Rating:	85-125 VAC or 6-30 VDC*
Power Rating:	10 Watts AC or DC/resistive load 5 Watts AC or DC/inductive load
Switching Current Range:	30-200 mA/resistive load (PC, sequencer) 30-100 mA/inductive load (relay)
Switching Frequency:	300 Hz maximum
Breakdown Voltage:	1.8kVACrms for 1 sec., lead to case
Min. Current for LED:	18mA
Operating Temperature:	14 to 140°F (-10 to 60°C)
Enclosure Protection:	Meets IEC IP67, fully encapsulated
Lead Wire:	2 conductor, 22 Gauge
Lead Wire Length:	39 in (1 m)
Vibration Resistance:	10-55 Hz, 1.5mm double amplitude

* Polarity is restricted for DC operation
(+) to Brown
(-) to Blue
If these connections are reversed, the contacts will close but the LED will not light.

WIRING CONNECTION



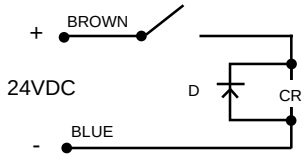
PROTECTION CIRCUIT*



* When connecting an inductive load (relay, solenoid valve, etc.), a protection circuit is recommended. Use a 100V, 1A diode. (NPN connection shown.)

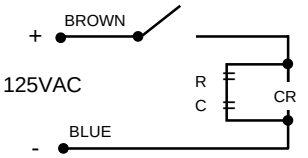
PROTECTION CIRCUIT (INDUCTIVE LOADS)

(Required for proper operation 24VDC)
Select a diode with a breakdown voltage and current rating according to the load. Place a diode in parallel to the load with the polarity as indicated:



CR: Relay coil (under 0.5W coil rating)

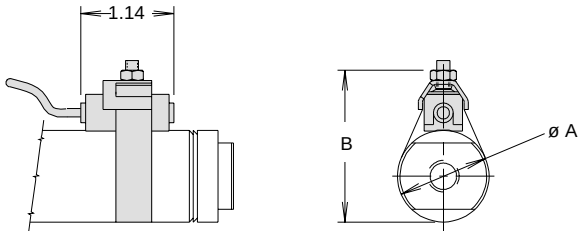
(Recommended for longer switch life 125VAC)
Select a resistor and capacitor according to the load. Place a resistor and capacitor in parallel to the load:



CR: Relay coil (under 2W coil rating)
R: Resistor under 1 K ohm
C: Capacitor 0.1 µF

Switch Clamps (order separately)

Model	Clamp Part Number	ØA	B
04	L074730056	.62	1.35
06	L074730075	.86	1.60
08	L074730106	1.12	1.86
12	L074730150	1.56	2.30



Cordset with Female Quick connect
(order separately)

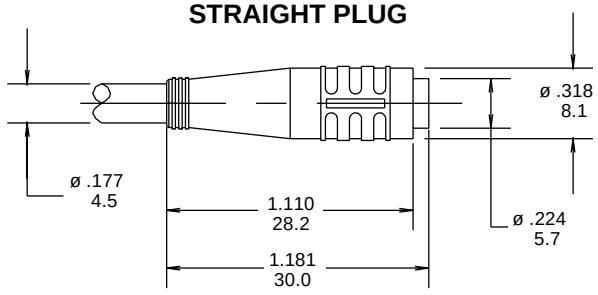
A female connector is available for all switches with the male quick connect option. The male plug will accept a snap-on or threaded connector. Parker's cordset part numbers and other manufacturer's part numbers are listed below:

Manufacturer	Threaded Connector	Snap-On Connector
Parker	B8786	B8785
Brad Harrison	45310-102	45300-102
Lumberg	RKMV3-G1/5m	RKM3-G1/5m
Hirschmann	—	ELKA-K308PUR014
Turck	PKG 3M-6/S90	PKG 3-6/S90

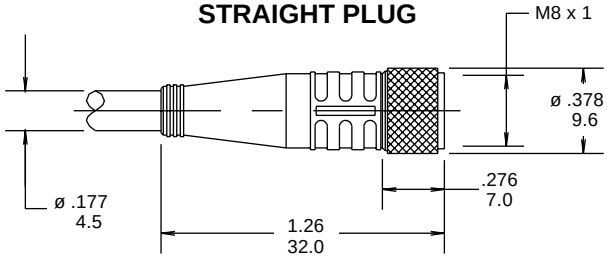
Cordset Specifications:

Connector:	Oil resistant polyurethane body material, PA 6 (Nylon) contact carrier, spacings to VDE 0110 Group C, (30 VAC/36 VDC)
Contacts:	Gold plated beryllium copper, machined from solid stock
Coupling Method:	Snap-Lock or chrome plated brass nut
Cord Construction:	Oil resistant black PUR jacket, non-wicking, non-hygroscopic, 300V. Cable end is stripped and tinned.
Conductors:	Extra high flex stranding, PVC insulation
Temperature:	-40 to 194°F (-40 to 90°C)
Protection:	NEMA 1,3,4,6P and IEC IP67
Cable Length:	20 ft. (6m.)

SNAP-ON
STRAIGHT PLUG



THREADED
STRAIGHT PLUG



All dimensions shown in inches.

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Wadsworth, OH 44281

MODEL CODE AND ORDERING INFORMATION

Example: XLB08 - 06BPL - FV - B

XLB	08	–	06	B	P	L	–	FV	–	B	

Series

XLB - XL Series Base Slide

Model

04 - 1/4" Dia support shaft, 9/16" dia bore cylinder
06 - 3/8" Dia support shaft, 3/4" dia bore cylinder
08 - 1/2" Dia support shaft, 1-1/16" dia bore cylinder
12 - 3/4" Dia support shaft, 1-1/2" dia bore cylinder

Stroke (in)

Order in 1" increments. See Quick Reference on page 29 for maximum strokes for each model.
For three position units, specify intermediate and total stroke separated by a "/", ie. 02/06.

Slide Configuration Options

Omit - None
A - Shock/stroke adjust (both ends)
A1 - Shock/stroke adjust (extend only)
A2 - Shock/stroke adjust (retract only)
A3 - Shock ready (both ends)
A4 - Shock ready (extend only)
A5 - Shock ready (retract only)
B - Bumpers (both ends) ^
B1 - Bumpers (extend only) ^
B2 - Bumpers (retract only)^
B3 - Bumpers, adjustable stop collar (retract only)^
B4 - Bumpers, adjustable stop collar (both ends)^
B5 - Bumpers, adjustable stop collar (extend only)^
C - Cushions on cylinder (both ends)
X - Special (detail in clear text)

Slide Proximity Sensor Options

Omit - None
P - PNP - lead type
N - NPN - lead type
P1 - PNP, plug in leads
N1 - NPN, plug in leads
J - Prox ready, 8mm (no sensors supplied)

NOTE: Inductive proximity sensors are included with the P,N,P1, & N1 options. Order Reed and Hall Effect switches separately. See chart below. Piston magnet is provided as standard.

Slide Orientation

Omit - Standard
L - Left hand assembly

Other Options (More than one selection is possible)

Omit - None
D - Bumpers on cylinder only
E - Dowel pin holes
F - Flow controls (Presto-Lok)
G - Flow controls (NPT)*
K - Stainless steel support shafts
T - Composite bushings
V - Fluorocarbon piston seals
X - Special (detail in clear text)

Design Series

B - Current Design Series

Special Options/Modifications

Omit - Standard unit
(Two digit code assigned by factory when any "X" appears in the model number or when special options or features are required.)

* Not available on Model 04.
^ Bumpers on cylinder are included with all "B"options at no extra charge.

Switch Description	Part Number
PNP Hall Effect w/6" male plug-in connector	146715000C
NPN Hall Effect w/6" male plug-in connector	146714000C
PNP Hall Effect w/39" potted-in leads	1467150000
NPN Hall Effect w/39" potted-in leads	1467140000
Reed switch w/6" male plug-in connector	145903000C
Reed switch w/39" potted-in leads	1459030000

Model	Clamp Part Number
04	L074730056
06	L074730075
08	L074730106
12	L074730150

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