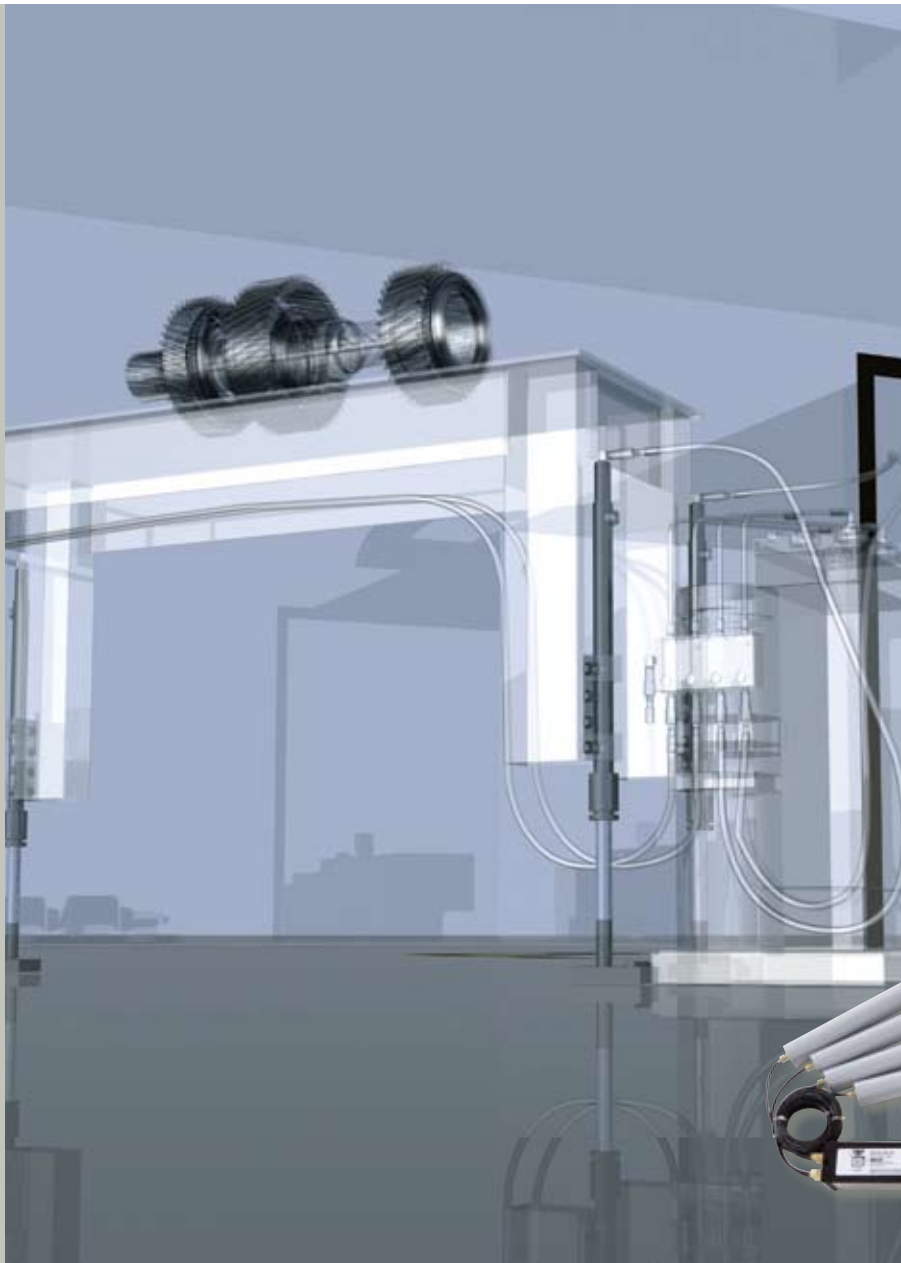


Find the right height for your application requirements

Ergonomic Height Adjustable Systems



Dyna-Lift®

ISO 9001: 2000 Registered
Made in USA



The background image shows a complex industrial machine. At the top, there are two large, cylindrical rotating brushes or rollers. Below them, a transparent protective enclosure houses various mechanical components, including a control unit with multiple ports and sensors. Cables and hoses are connected to the machine, suggesting a sophisticated automated system.

Innovation and High Performance

- In-house research and development and dedicated production facilities utilizing the latest technologies
- Expertise and competence in products and applications
- Optimized solutions for the customer
- High quality standards
- High degree of supply, reliability and service



We set the table for your requirements

Ergonomic, height-adjustable workbenches are quickly becoming the standard in industry. And as more people demand height-adjustability, Dyna-Lift is the standard for delivering it.

But it doesn't stop there. Dyna-Lift is available at three levels - Dyna-Lift, Intermediate Dyna-Lift and Super Dyna-Lift - with capabilities ranging anywhere from a few hundred pounds to 20,000 pounds.

In addition to work tables, other common applications include office furniture, hospital beds, assembly line fixtures, rehabilitation tables. Less conventional applications have included casket lifts, massage table lifts and lectern/podium lifts.

We have developed Dyna-Lift applications for many light and heavy industrial, office and medical applications, including a successful product to help Boeing make the production of airplane wings height-adjustable for workers.

Every customer has a special, unique need that they use Dyna-Lift to satisfy. This is why Bucher Hydraulics excels at a timely response, outstanding research of our clients' needs, engineering of the right applications and ultimately the best solution for each situation.



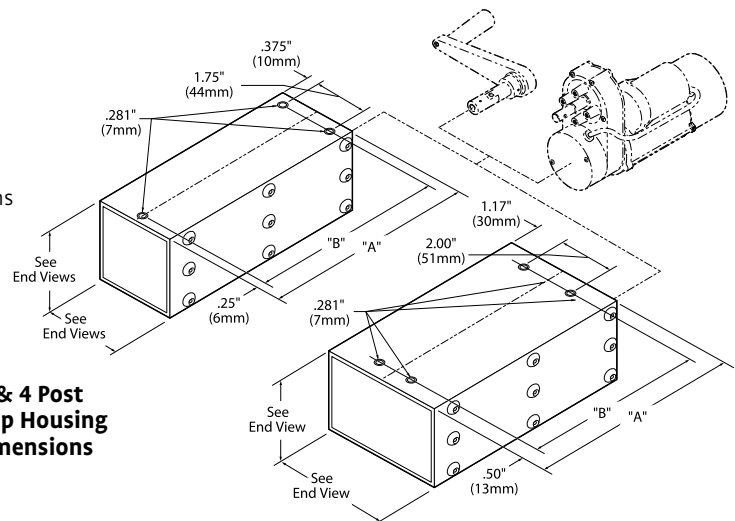
Manual, Electric and Multi-Post Units

General Description

- Complete ready-to-install Height Adjustable System
- Choose from 1 - 6 Cylinders
- Manual or Electric Operation
- Custom Systems Available

Technical Information

- System Capacity:
 - 250 lbs. (113 kg) per Cylinder
 - 1000 lbs. (450 kg) max. capacity on all Base Dyna-Lifts
 - 1500 lbs. (680 kg) maximum capacity on Heavy Duty Dyna-Lift Systems
- Weight: Typical 2 Post Manual Unit with 16 Inch Stroke Cylinder:
 - 10 Pounds (4.54 kg)
- Typical 4 Post Manual Unit with 12 Inch Stroke Cylinder:
 - 27 Pounds (12.25 kg)
- Typical 6 Post Electric Unit with 12 Inch Stroke Cylinder:
 - 72 Pounds (32.69 kg)
- System Must Be Guided
- System Ships Fully Charged and Ready-to-Install
- Smooth, Quiet Operation
- Flexible Tubing: 1" Bend Radius
- Highly Refined White Hydraulic Fluid
- Units are Rechargeable and Fully Serviceable in the Field
- Powder Coated Housing Finish
- **Manual Unit:**
 - Five Revolutions Per Inch Travel
 - Retractable Handle (Standard)
- **Electric Unit:**
 - 87 RPM
 - Internal Limit Switches
 - Thermal Overload Protection
 - UL Recognized CSA Certified
 - 12 VDC Switch. 30mA in Operation

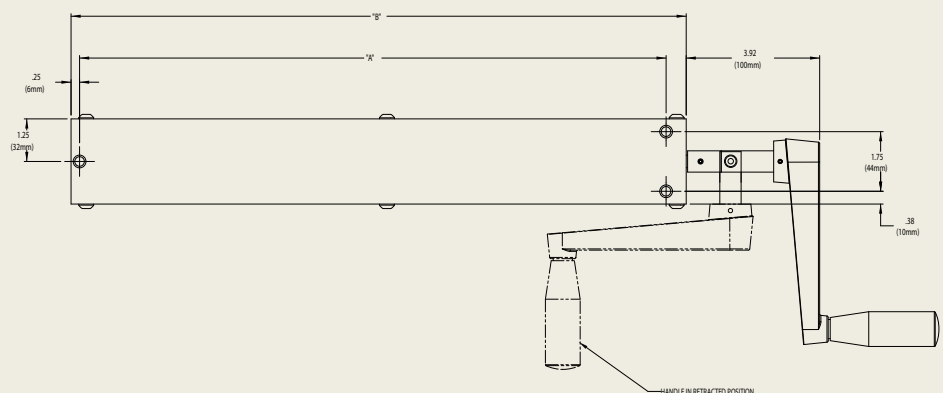


**2 & 4 Post
Pump Housing
Dimensions**

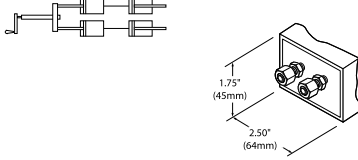
**6 Post
Pump Housing
Dimensions**

Typical 4 Post Manual Pump Assembly

4 Post Manual		
Stroke	"A" Dimension	"B" Dimension
6 (152)	11.12 (282 mm)	11.96 (304 mm)
8 (203)	13.15 (334 mm)	13.99 (355 mm)
10 (254)	15.18 (386 mm)	16.02 (407 mm)
12 (305)	17.21 (437 mm)	18.05 (458 mm)
14 (356)	19.24 (489 mm)	20.08 (510 mm)
16 (406)	21.28 (541 mm)	22.12 (562 mm)

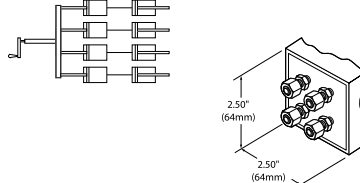


2 Post System Schematic



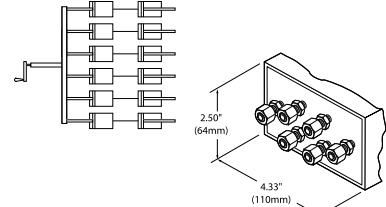
2 Post End View

4 Post System Schematic



4 Post End View

6 Post System Schematic



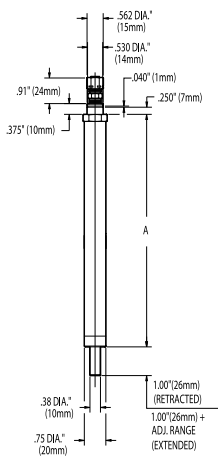
6 Post End View

2 Post Pump Housing		
Lift Cylinder Adj. Range IN (mm)	A Length IN (mm)	B Length IN (mm)
6 (152)	11.96 (304)	11.12 (283)
8 (203)	13.99 (355)	13.15 (334)
10 (254)	16.02 (407)	15.18 (386)
12 (305)	18.05 (458)	17.21 (438)
14 (356)	20.08 (510)	19.24 (489)
16 (406)	22.12 (562)	21.28 (541)

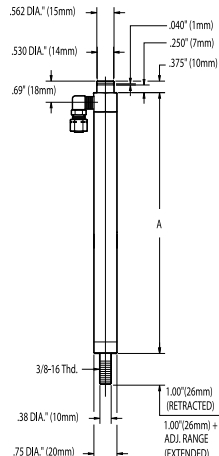
4 Post Pump Housing		
Lift Cylinder Adj. Range IN (mm)	A Length IN (mm)	B Length IN (mm)
6 (152)	11.96 (304)	11.12 (283)
8 (203)	13.99 (355)	13.15 (334)
10 (254)	16.02 (407)	15.18 (386)
12 (305)	18.05 (458)	17.21 (438)
14 (356)	20.08 (510)	19.24 (489)
16 (406)	22.12 (562)	21.28 (541)

6 Post Pump Housing		
Lift Cylinder Adj. Range IN (mm)	A Length IN (mm)	B Length IN (mm)
6 (152)	12.15 (309)	11.40 (290)
8 (203)	14.18 (360)	13.43 (341)
10 (254)	16.21 (412)	15.48 (393)
12 (305)	18.24 (463)	17.49 (444)
14 (356)	20.27 (515)	19.52 (496)
16 (406)	22.31 (567)	21.56 (548)

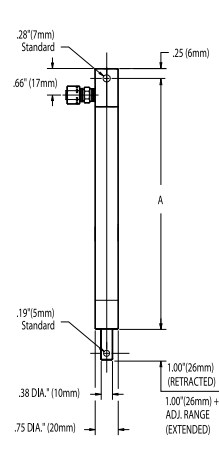
Typical Cylinder Configurations



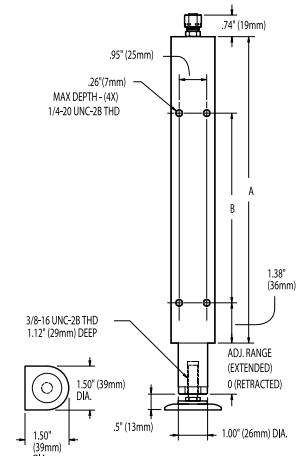
Cylinder Type A1A	
Lift Cylinder Adj. Range IN (mm)	A Length IN (mm)
6 (152)	8.38 (213)
8 (203)	10.38 (264)
10 (254)	12.38 (314)
12 (305)	14.38 (365)
14 (356)	16.38 (416)
16 (406)	18.38 (467)



Cylinder Type B2D	
Lift Cylinder Adj. Range IN (mm)	A Length IN (mm)
6 (152)	8.75 (222)
8 (203)	10.75 (273)
10 (254)	12.75 (324)
12 (305)	14.75 (375)
14 (356)	16.75 (425)
16 (406)	18.75 (476)



Cylinder Type C1C	
Lift Cylinder Adj. Range IN (mm)	A Length IN (mm)
6 (152)	8.88 (226)
8 (203)	10.88 (276)
10 (254)	12.88 (327)
12 (305)	14.88 (378)
14 (356)	16.88 (429)
16 (406)	18.88 (480)



Cylinder Type D1A		
Lift Cylinder Adj. Range IN (mm)	A Length IN (mm)	B Length IN (mm)
6 (152)	11.50 (292)	6.50 (165)
8 (203)	13.50 (343)	9.45 (240)
10 (254)	15.50 (394)	9.45 (240)
12 (305)	17.50 (445)	13.38 (340)
14 (356)	19.50 (495)	13.38 (340)
16 (406)	21.50 (546)	13.38 (340)

Dyna-Lift® System Selection Guide

# of Cylinders	Actuator Type	Cylinder Body Type	Cylinder/Pump Fitting Type
----------------	---------------	--------------------	----------------------------

- 1 M = Manual Crank Drive
- 2 N = No motor / handle
- 3 E = 115 V AC (60 Hertz)
- 4 2 = 220 V AC (50 Hertz)
- 5 3 = 12 V DC
- 6 4 = 24 V DC
- 5 = 115 V AC High speed

(AC motors include a rocker switch. DC motors do not.)

- A = In Line Tubing Port/
External Retaining
Ring Mount
(Cylinder Tube End)
- B = 90° Tubing Port/
External Retaining
Ring Mount
(Cylinder Tube End)
- C = 90° Tubing Port/
External Clevis Mount
(Cylinder Tube End)
- D = In Line Tube Port/
A - Style Cylinder
Mounted Inside
1" Support Sleeve,
Inside 1.5" x 1.5"
D - Shaped Housing
with 4 1/4-20
Mounting Holes.
Requires No External
Guide Support.

- 1 = Straight / straight
- 2 = 90° / straight
- 3 = Straight / 90°
- 4 = 90° / 90°
- 5 = 180° / straight
- 6 = 180° / 90°

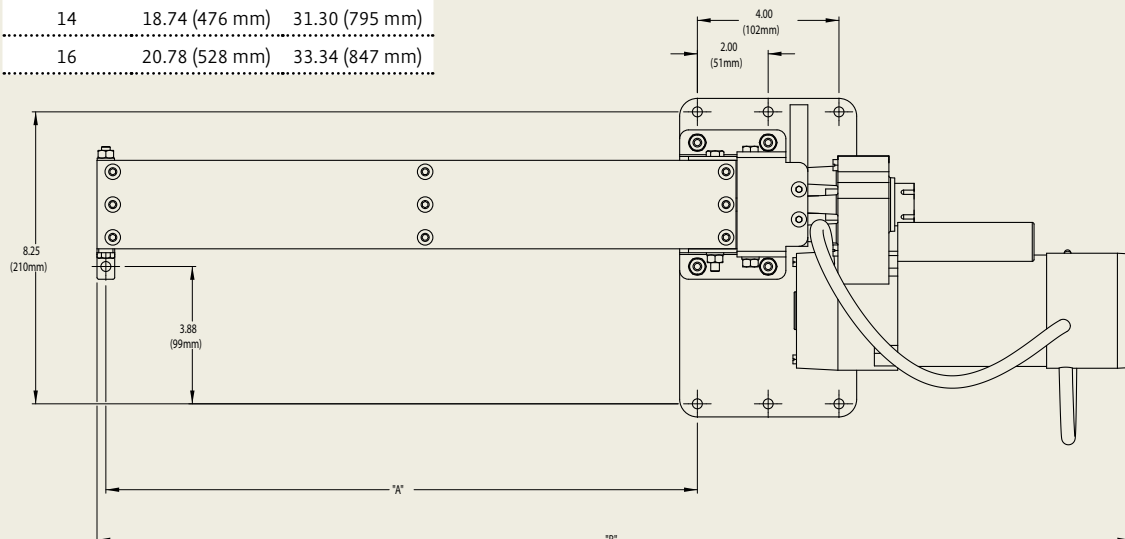
(see page 5 for typical cylinder configurations)





Typical 4 Post Electric Pump Assembly

4 Post Electric		
Stroke	"A" Dimension	"B" Dimension
6	10.62 (270 mm)	23.18 (589 mm)
8	12.65 (321 mm)	25.21 (640 mm)
10	14.68 (373 mm)	27.24 (691 mm)
12	16.71 (424 mm)	29.27 (744 mm)
14	18.74 (476 mm)	31.30 (795 mm)
16	20.78 (528 mm)	33.34 (847 mm)

- 2 = Internal Mount for
2" x 2" Extrusion with 1" Support
Sleeve, Foot Glide, Internal Bushing
& End Cap
- 3 = Internal Mount for 3" x 3" Extrusion
with 1" Support Sleeve, Foot Glide,
Internal Bushing & End Cap
- 9 = Internal Mount for 90 mm x 90 mm
Extrusion with 1" Support Sleeve,
Foot Glide, Internal Bushing & End Cap

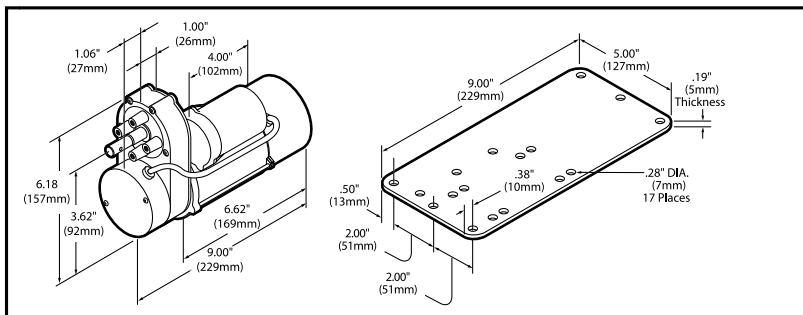
(see page 9 for internal mount cylinders)



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Live End Rod Type	Cylinder Adjustment Range Inches (mm)	Standard or Custom	Tubing Lengths
 A = Straight Rod End	06 (156)	S = Standard	Custom Flexible Tubing Lengths Required From Pump Unit To Each Cylinder Cyl # 1 _____ Cyl # 2 _____ Cyl # 3 _____ Cyl # 4 _____ Cyl # 5 _____ Cyl # 6 _____
 B = Retainer Ring Rod End	08 (203)	H = Heavy Duty 1500 lb. capacity	
 C = Clevis Rod End	10 (254)	T = Telescopic Leg Assembly (TLA) (W BIC Style leg cylinder only.)	
 D = Threaded Rod End	12 (305)		
D Style Rod Type Options A = 3/8" Adapter with 3/8" Foot Glide	16 (406)		
B = 3/8" Adapter without Foot Glide	20 (508) ** 4 Post Units Only **		
C = 1/2" Adapter with 1/2" Caster			
D = 1/2" Adapter with 1/2" Foot Glide			
E = 1/2" Adapter without Foot Glide			
F = 3/8" SS Adapter, 3/8" SS Foot Glide with SS Piston Rod (for clean room and wash down environments)			
G = 1/2" SS Adapter, 1/2" SS Foot Glide with SS Piston Rod (for clean room and wash down environments)			
			Standard Tube Lengths 2 cyl. 96"-60" 4 cyl. 96"-96"-60"-60" 6 cyl. 120"-120"-120"-96"-96"-96" Max. Recommended Tube Length is 12'

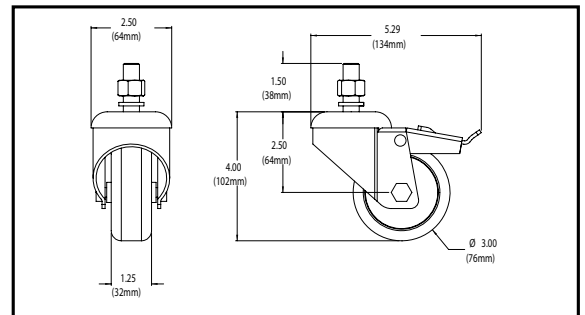
Parts and Accessories

The following components can be ordered separately should modifications be needed in the field. Please consult our factory for any specific requirements you may have prior to shipment.

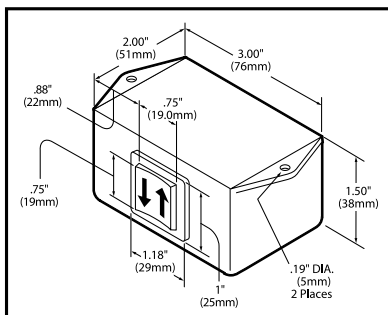


Electric Motor

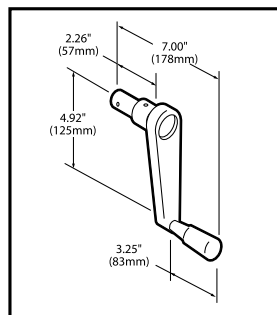
Motor Mounting Bracket



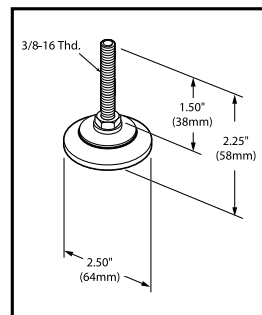
Locking Caster Option



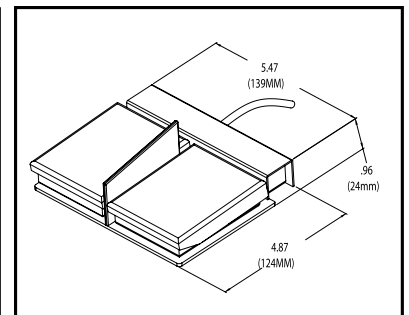
Rocker Switch Housing
(Comes Standard with AC Electric Unit)



Retractable Folding Handle
For Manual Unit



Foot Glide For 4-Post System



Footpedal (option w/electric unit)

Heavy Duty Dyna-Lift® Dyna-Lift®

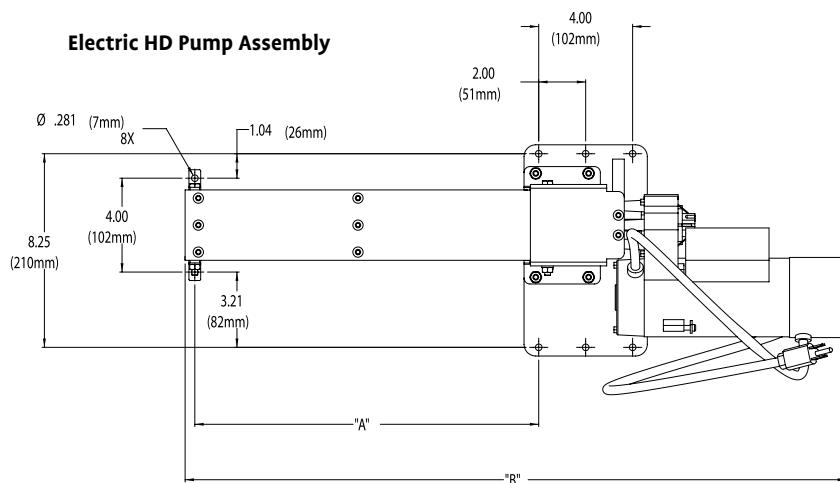
1,500 lbs. (680 kg) Capacity



Height adjustability in minutes with an Easy-to-Install Heavy Duty Dyna-Lift® kit.

The New Heavy Duty Dyna-Lift® kit quickly converts a fixed height structure to one with a 0 -12" range of height adjustment. Now the void is filled from the maximum 1,000 lbs. lift capacity of the "Base" Dyna-Lift® to the 3,000 lbs. capacity Intermediate Dyna-Lift®. The 1,500 lbs. capacity Heavy Duty Dyna-Lift® is now available for both retrofit and OEM applications in either manual or electric actuation.

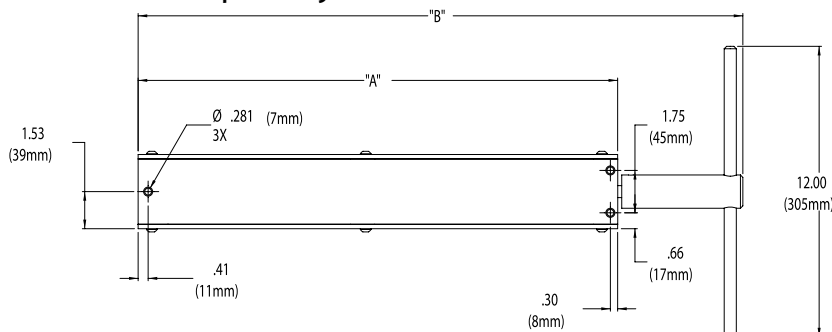
Electric HD Pump Assembly



Manual		
Stroke	"A" Dimension	"B" Dimension
6	15.75 (400 mm)	20.91 (531 mm)
8	15.74 (400 mm)	20.91 (531 mm)
10	19.80 (503 mm)	24.97 (634 mm)
12	19.80 (503 mm)	24.97 (634 mm)

Electric		
Stroke	"A" Dimension	"B" Dimension
6	14.65 (372 mm)	28.48 (723 mm)
8	14.65 (372 mm)	28.48 (723 mm)
10	18.71 (475 mm)	32.54 (827 mm)
12	18.71 (475 mm)	32.54 (827 mm)

Manual HD Pump Assembly



Specifications		
Description	mm	Model #
4 Cylinder, Electric, 06" Stroke	152	4E-DIA-06-H
4 Cylinder, Electric, 08" Stroke	203	4E-DIA-08-H
4 Cylinder, Electric, 10" Stroke	254	4E-DIA-10-H
4 Cylinder, Electric, 12" Stroke	305	4E-DIA-12-H
4 Cylinder, Manual, 06" Stroke	152	4M-DIA-06-H
4 Cylinder, Manual, 08" Stroke	203	4M-DIA-08-H
4 Cylinder, Manual, 10" Stroke	254	4M-DIA-10-H
4 Cylinder, Manual, 12" Stroke	305	4M-DIA-12-H

(Also Available in 20" or 508 mm Stroke)

Dyna-Lift® Internal & External Aluminum Extrusion Mount

Raise or Lower your Structures with an Easy-to-Install Dyna-Lift® System



External Leg Assembly

- Retrofit the “D” style cylinder to many different size extrusions via the Dyna-Lift “L” Bracket.
- Dyna-Lift “L” Bracket universally fits different sizes of extrusion via the T-Slot.
- Simply tighten down Bracket to T-Slot with an allen wrench.



Internal Leg Assembly

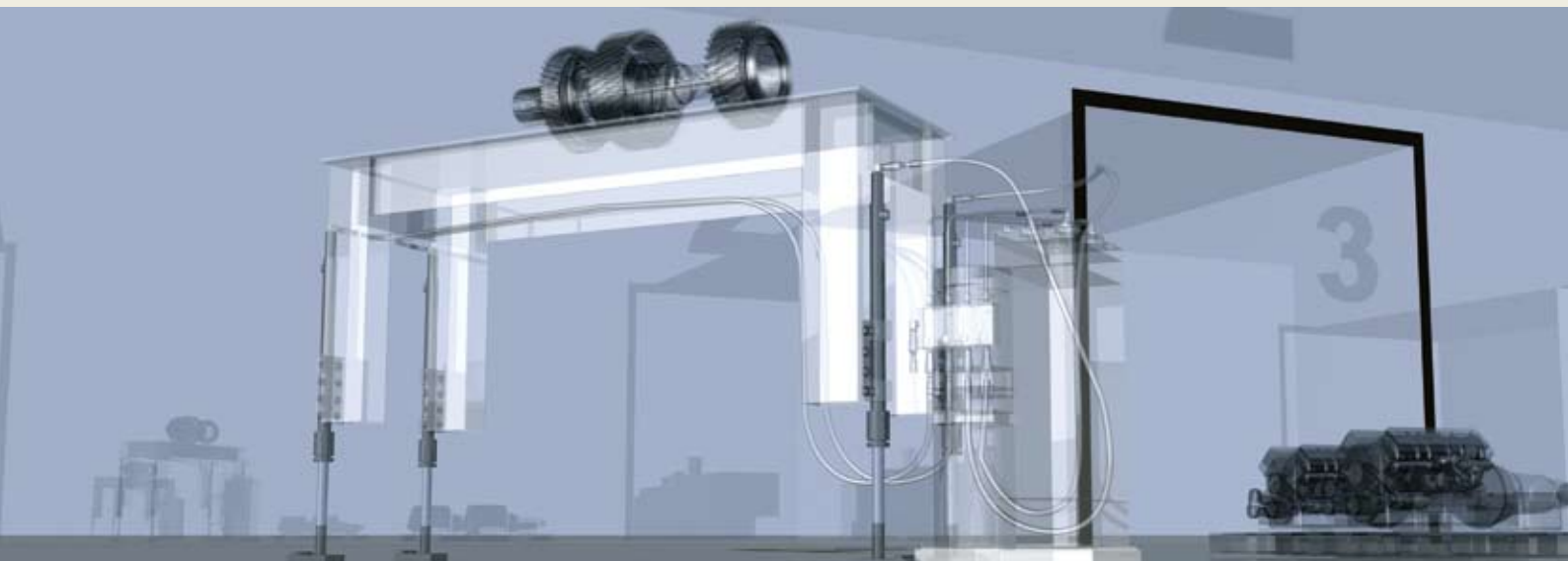
- Internal cylinder mount available for 2” x 2” and 3” x 3” extrusions.



External Mount



Internal Mount



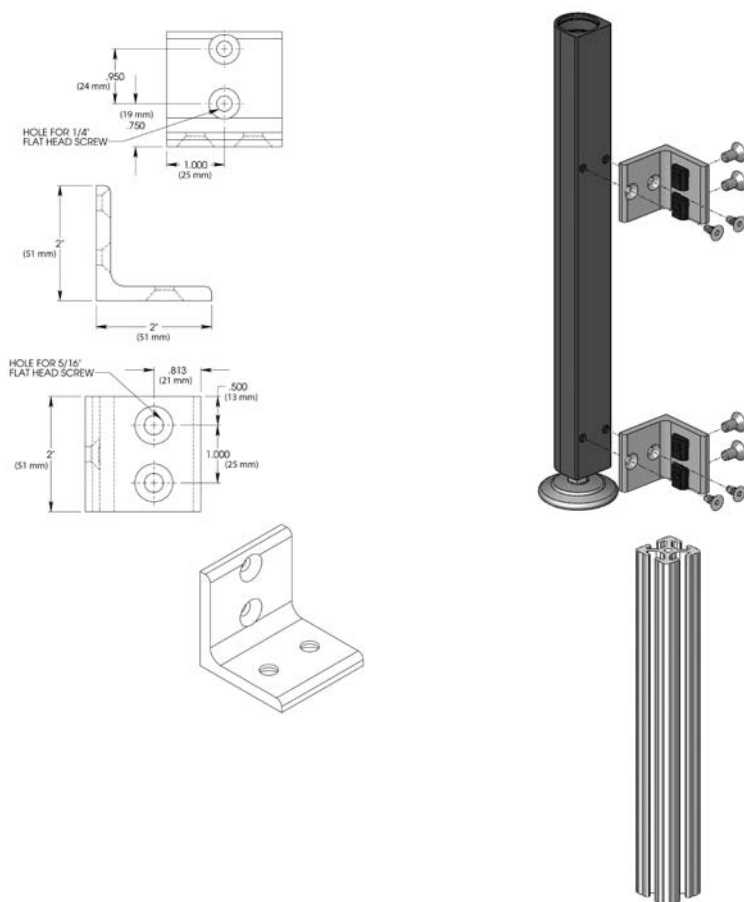
Technical Information

- Adjustment ranges available in: 6", 8", 10", 12", 14" and 16" stroke.
- Lifting capacities up to 1,500 lbs. (with a Heavy Duty Dyna-Lift).
- Single acting cylinders, power up and gravity down. Approximately 20 lbs. of weight per cylinder needed to retract properly.
- Manual (hand crank) or electric actuation available.

External Leg Assembly

Advantages

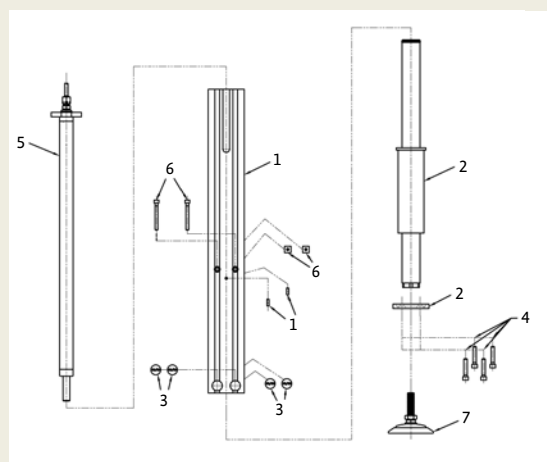
- Universally fits many different sizes of extruded aluminum structures via T-Slot.
- Easy installation as an OEM design or as an add-on retrofit to a pre-existing structure.



Internal Leg Assembly

Advantages

- Easily mounts inside most 2" x 2" and 3" x 3" extruded aluminum structures.
- Internally mounted cylinder neatly hides away unwanted outside obstructions.
- Perfect application for OEM's and custom machine builders.



Assembly Instructions

(typical 2"x2" internal mount)

1. Drive the dowel pins into the #31 drilled holes in extrusion until flush.
2. Slide the end bracket over the support sub assembly so that the counter bore of the bracket mates with the lip on the housing.
3. Insert the support sub assembly with end bracket into the extrusion at the end machined for the butt fasteners.
4. Attach the support sub assembly to the extrusion with the #10-32 cap screws and butt fasteners.
5. Slide the cylinder sub assembly into the slotted end of the extrusion until the cylinder stop hits the dowel pins.
6. Slide the #8-32 cap screws thru the counter bored holes in the extrusion and secure with the t-nuts.
7. Thread the adjustable glide into the foot.

The leg is now ready for table mounting.

Description	mm	Model #
Four Cylinder, Manual, 06" Stroke	152	4M-A1A-06-INT
Four Cylinder, Manual, 08" Stroke	203	4M-A1A-08-INT
Four Cylinder, Manual, 10" Stroke	254	4M-A1A-10-INT
Four Cylinder, Manual, 12" Stroke	305	4M-A1A-12-INT
Four Cylinder, Manual, 14" Stroke	356	4M-A1A-14-INT
Four Cylinder, Manual, 16" Stroke	406	4M-A1A-16-INT

Description	mm	Model #
Four Cylinder, Electric, 06" Stroke	152	4E-A1A-06-INT
Four Cylinder, Electric, 08" Stroke	203	4E-A1A-08-INT
Four Cylinder, Electric, 10" Stroke	254	4E-A1A-10-INT
Four Cylinder, Electric, 12" Stroke	305	4E-A1A-12-INT
Four Cylinder, Electric, 14" Stroke	356	4E-A1A-14-INT
Four Cylinder, Electric, 16" Stroke	406	4E-A1A-16-INT

Telescopic Leg Assembly (T.L.A.)

Specifically designed to provide optimum form and function for industry specific ergonomic height adjustable needs. The two piece anodized aluminum extrusions were designed to work in tandem with each other to provide smooth, quiet, rigid height adjustability regardless of off-center or cantilever loads.

The T.L.A. System allows Original Equipment Manufacturers to easily integrate the columns into custom applications. Simply bolt on your top and bottom frame with cross member, then add your table top. The T.L.A. System offers the perfect height adjustable solution for your ergonomic OEM design.

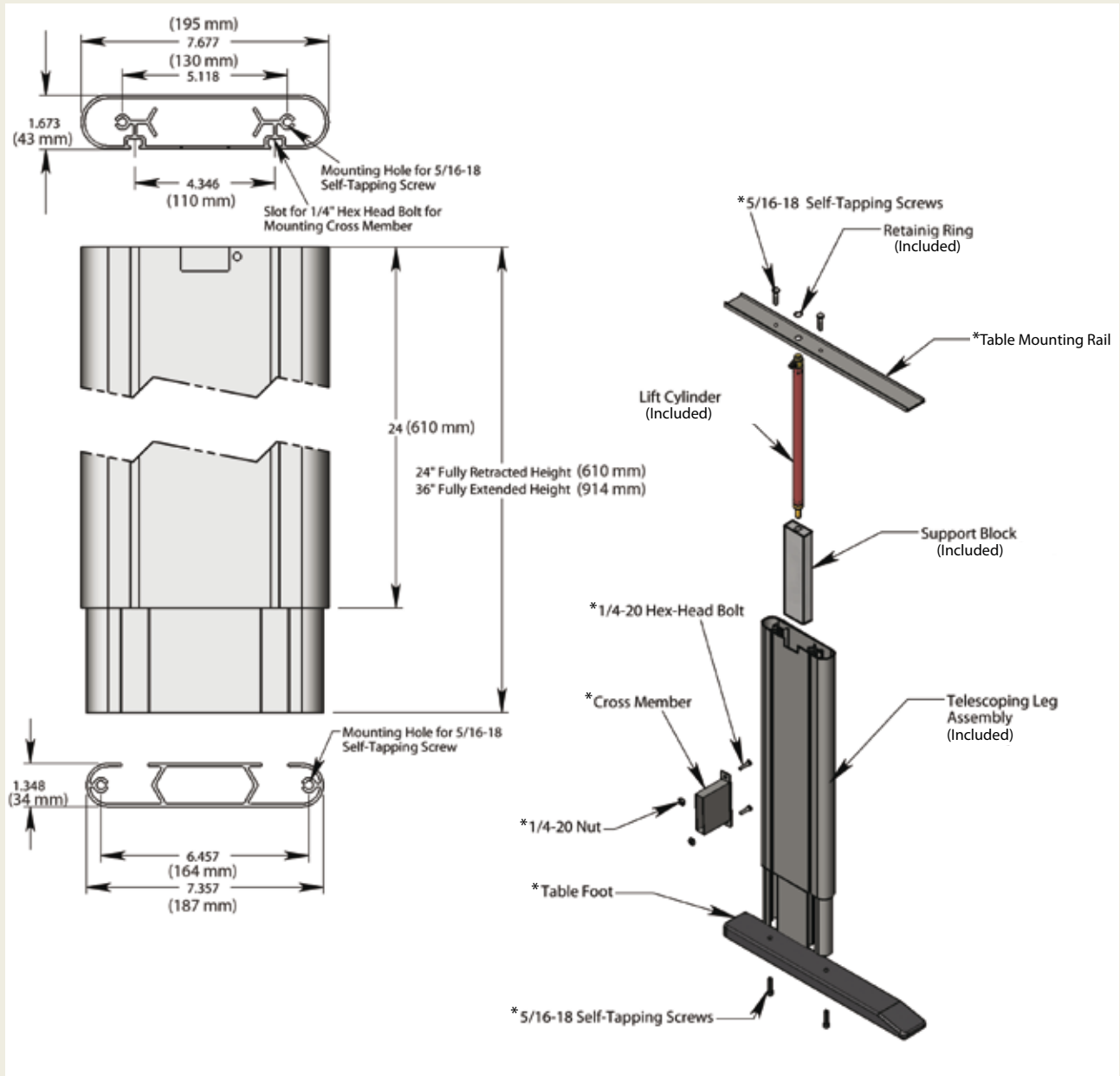


Exterior view Interior view



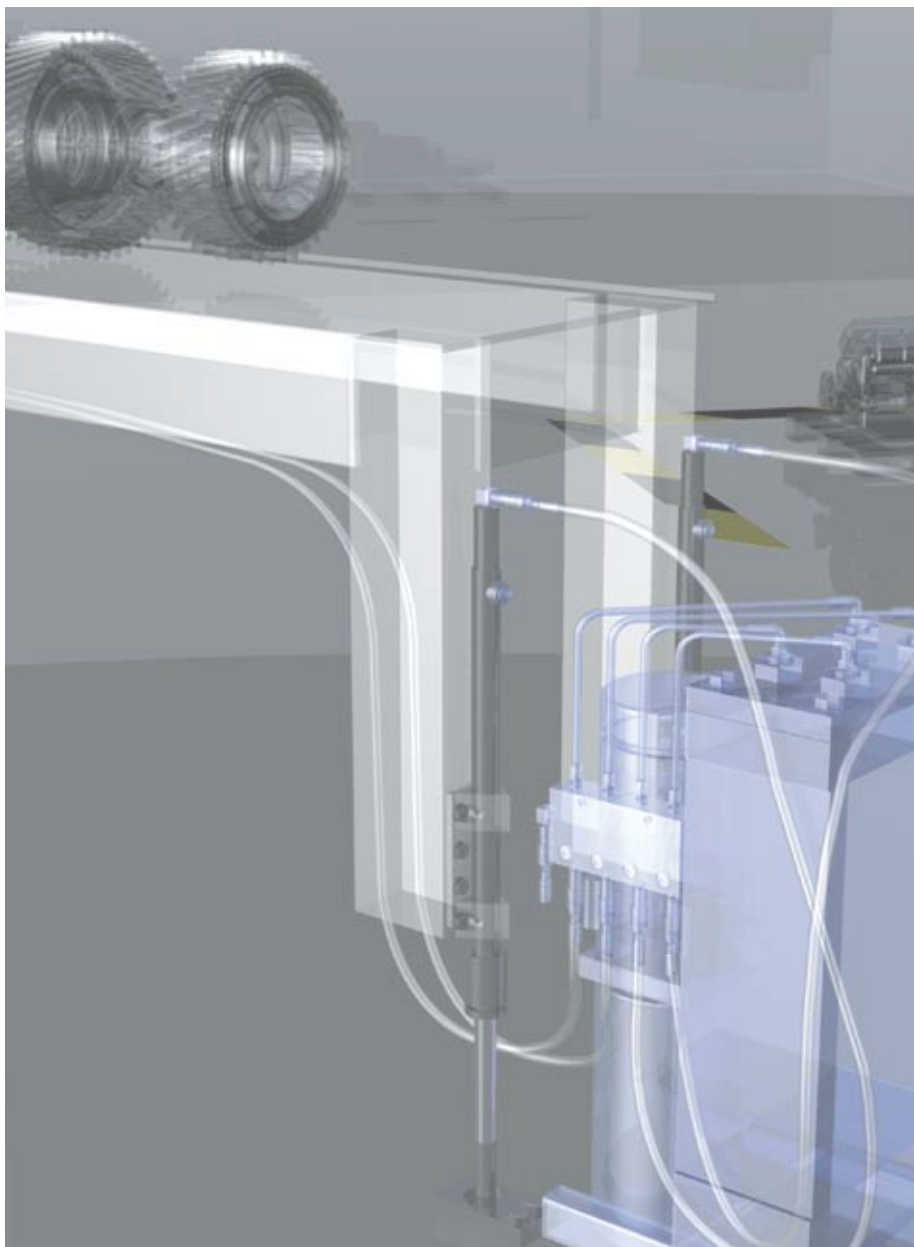
Technical Information

- Materials: extruded aluminum with clear matte anodized finish
- Adjustment range: 12" (305mm)
24" (610mm) fully retracted
36" (914mm) fully extended
- Capacity:
250 lbs. per column
500 lbs. per set of 2 columns
- Multiple columns available
- Designed to be used with B1C cylinders
- Manual (hand crank) or electric actuation



*** Items above with an asterisk are not included with the T.L.A. Assembly**

Description	mm	Model #
Two Cylinder, Manual, 12" Stroke	305	2M-B1C-12-T
Two Cylinder, Electric, 12" Stroke	305	2E-B1C-12-T



Bucher Hydraulics
info@bucherhydraulics.com

For further information visit us at:
www.bucherhydraulics.com
or **www.dynalift.com**