







Find the right height for your application requirements

### Ergonomic Height-Adjustable Systems

Industrial Ergonomics 612-532-6774

jeff@Industrial-Ergonomics.com





### We set the table for your requirements

Dyna-Lift® systems provide ergonomic solutions for workstation adjustability. When employees adjust their workstation with a Dyna-Lift®, it allows them to move throughout the day, from sitting to standing, which eliminates fatigue, pain, and potential injuries. Ergonomic, height-adjustable workstations provide the best posture solutions for multiple employees using the same workstation. Individual shift workers can use the same workstation and adjust it quickly to meet their specific height requirements and comfort.

Dyna-Lift® systems adjust a worktable, office furniture, lab equipment, industrial workbenches, hospital beds, assembly line fixtures, massage tables, podiums, rehabilitation tables, and so much more. As companies experience turnover, Dyna-Lift® will continue to adjust to meet new employee's height requirements without having to replace the system.

Dyna-Lift® systems are sturdy and can lift up to 1,500 lbs. Manufacturing, industrial, office, and medical environments use Dyna-Lift®.

Bucher Hydraulics recognizes there is a wide variety of customer needs. We can customize Dyna-Lift® systems to provide the smartest solution for your application.

### Dyna-Lift® Systems

- Provide a long lasting solution
- Improve workers' productivity & comfort
- Avoid work related injuries
- Operate smoothly and quietly
- Comply with ADA and OSHA guidelines
- Install quickly
- Ship fully charged







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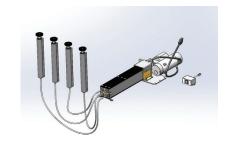


# Dyna-Lift®

# **Ergonomic Solutions**







Standard Systems 250 lb (113 kg)/Cylinder Capacity See pgs. 6 & 7

**Heavy-Duty Systems** 375 lb (170 kg)/Cylinder Capacity See pgs. 8 & 9



**Telescopic Leg System**Up to 375 lb (170 kg)/Cylinder Capacity/Column
See pgs. 10 & 11



Internal Extrusion Mount System Up to 375 lb (170 kg)/Cylinder Capacity See pg. 12



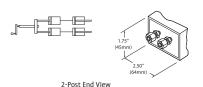
**External Extrusion Mount System**Up to 375 lb (170 kg)/Cylinder Capacity
See pg. 13



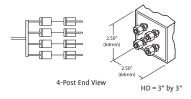
# **Pump & Cylinder Configurations**

### **Pump Schematics**

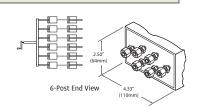
### 2-Post System



# 4-Post System 6-Post HD, Two 3-Post Systems 8-Post STD & HD, Two 4-Post Systems



6-Post	System
STD	Only

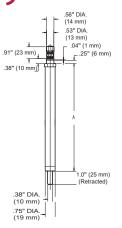


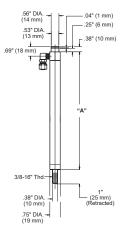
2-Post Pump Housing		
Lift Cylinder Adj. Range Inch (mm)	"A" Length Inch (mm)	"B" Length Inch (mm)
6 (152)	11.96 (304)	11.12 (283)
8 (203)	13.99 (355)	13.15 (334)
10 (254)	16.02 (407)	15.18 (386)
12 (305)	18.05 (458)	17.21 (438)
16 (406)	22.12 (562)	21.28 (541)

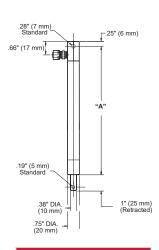
4-Post Pump Housing		
Lift Cylinder Adj. Range Inch (mm)	"A" Length Inch (mm)	"B" Length Inch (mm)
6 (152)	11.96 (304)	11.12 (283)
8 (203)	13.99 (355)	13.15 (334)
10 (254)	16.02 (407)	15.18 (386)
12 (305)	18.05 (458)	17.21 (438)
16 (406)	22.12 (562)	21.28 (541)

6-Post Pump Housing		
Lift Cylinder Adj. Range Inch (mm)	"A" Length Inch (mm)	"B" Length Inch (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)
16 (406)	22.31 (567)	21.56 (548)

### **Cylinder Options**







.95" (24 mm) - 28" (7 mm) Max Depth - (4X) 1/4-20 UNC-28 THD	.74" (19 mm)
3/8.16 UNC-2B THD .94" (24 mm) Deep HD = 1/2-13 1.5" DIA (38 mm) 1.5" DIA (38 mm) 1.28" (32" 1.31" (33"	"A" "B" (36 mm)  Adj. Range (Estended) 25 (Retracted)  1" (25 mm)  mm) Std

Cylinder Type A1A		
Lift Cylinder Adj. Range Inch (mm)	"A" Inch (mm)	
6 (152)	8.38 (213)	
8 (203)	10.38 (264)	
10 (254)	12.38 (314)	
12 (305)	14.38 (365)	
16 (406)	18.38 (467)	
20 (508)	22.38 (568) HD Only	

Cylinder Type B2D	
Lift Cylinder Adj. Range Inch (mm)	"A" Inch (mm)
6 (152)	8.75 (222)
8 (203)	10.75 (273)
10 (254)	12.75 (324)
12 (305)	14.75 (375)
16 (406)	18.38 (476)
20 (508)	22.75 (578) HD Only

Cylinder Type C1C		
Lift Cylinder Adj. Range Inch (mm)	"A" Inch (mm)	
6 (152)	8.88 (226)	
8 (203)	10.88 (276)	
10 (254)	12.88 (327)	
12 (305)	14.88 (378)	
16 (406)	18.88 (480)	
20 (508)	23.25 (591) HD Only	

Cylinder Type D1A & 20" D1D		
Lift Cylinder Adj. Range Inch (mm)	"A" Inch (mm)	"B" Inch (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)
16 (406)	21.50 (546)	13.38 (340)
20 (508)	25.50 (648)	17.38 (442) HD Only

# Dyna-Lift®

# Standard Systems (S)

#### **Advantages**

- Lifts up to 1,000 lbs. (454 kg)
- Rechargeable and fully serviceable in the field

#### **General Description**

- · Complete, ready-to-install, height-adjustable system
- Choose from 1 to 8 cylinders
- Manual or electric operation
- Custom systems available

#### **Technical Information**

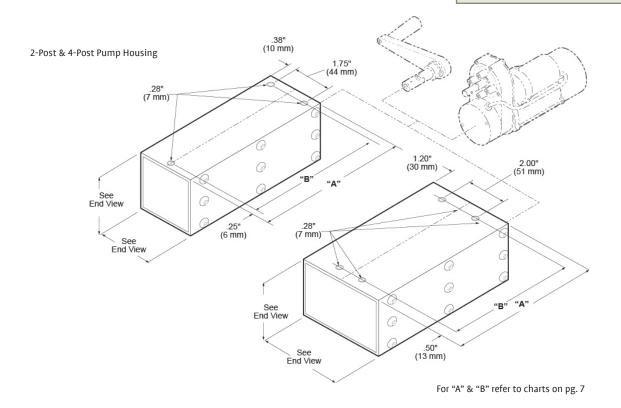
- · System capacity:
  - ° 250 lbs. (113 kg) per cylinder for Standard
- 1,000 lbs. (454 kg) max. total capacity on Standard
  System ships fully charged and ready-to-install
- Smooth, quiet operation
- Highly refined white hydraulic fluid
- Powder-coated housing finish



**Standard Manual** 



**Standard Electric** 

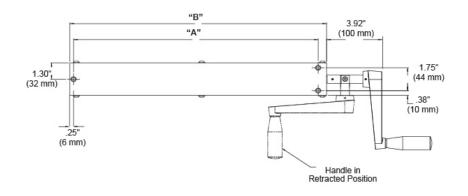




#### **Standard Manual Pump Assembly**

- Retractable handle
- Five revolutions per inch travel
- 2-Post Manual System with 16-inch stroke cylinder weighs 10 lbs. (4.54 kg)
- 4-Post Manual System with 12-inch stroke cylinder weighs 27 lbs. (12.25 kg)

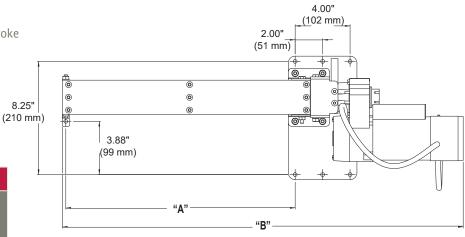
Standard Manual Specifications		
Stroke Inch (mm)	"A" Inch (mm)	"B" Inch (mm)
6 (152)	11.12 (282)	11.96 (304)
8 (203)	13.15 (334)	13.99 (355)
10 (254)	15.18 (386)	16.02 (407)
12 (305)	17.21 (437)	18.05 (458)
16 (406)	21.28 (541)	22.12 (562)



Standard Manual Pump

#### **Standard Electric Pump Assembly**

- Low voltage safety switch
- Internal limit switches
- Thermal overload protection
- UL recognized CSA certified
- 6-Post Electric System with 12-inch stroke cylinder weighs 72 lbs. (32.69 kg)



### **Standard Electric Specifications**

Stroke Inch (mm)	"A" Inch (mm)	"B" Inch (mm)
6 (152)	10.62 (270)	23.18 (589)
8 (203)	12.65 (321)	25.21 (640)
10 (254)	14.68 (373)	27.24 (691)
12 (305)	16.71 (424)	29.27 (744)
16 (406)	20.78 (528)	33.34 (847)

**Standard Electric Pump** 



## Heavy-Duty Systems (H)

#### **Advantages**

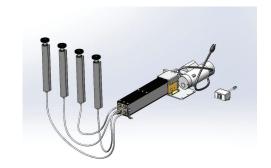
- High capacity with longer stroke
- · Rechargeable and fully serviceable in the field
- 2:1 pump to cylinder ratio

#### **General Description**

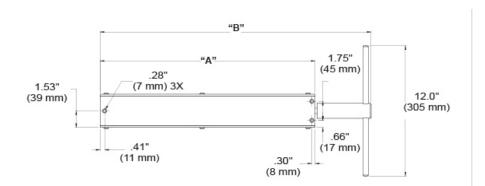
- Converts fixed height structure to one with a 0-20" range of height adjustment
- Manual or electric operation
- Retrofit & OEM applications
- · Custom systems available

#### **Technical Information**

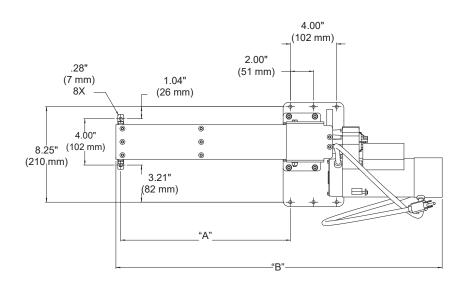
- · System capacity:
  - of 375 lbs. (170 kg) per cylinder for Heavy-Duty
  - 1,500 lbs. (680 kg) max. capacity on Heavy-Duty
- System ships fully charged and ready-to-install
- Smooth, quiet operation
- · Highly refined white hydraulic fluid
- Powder-coated housing finish



Manual Specifications			
Stroke Inch (mm)	"A" Inch (mm)	"B" Inch (mm)	
6 (152)	15.75 (400)	20.91 (531)	
8 (203)	15.75 (400)	20.91 (531)	
10 (254)	19.80 (503)	24.97 (634)	
12 (305)	19.80 (503)	24.97 (634)	
20 (508)	27.92 (709)	33.09 (804)	



**Heavy-Duty Manual** 



**Heavy-Duty Electric** 

Electric Specifications			
Stroke Inch (mm)	"A" Inch (mm)	"B" Inch (mm)	
6 (152)	14.65 (372)	28.48 (723)	
8 (203)	14.65 (372)	28.48 (723)	
10 (254)	18.71 (475)	32.54 (827)	
12 (305)	18.71 (475)	32.54 (827)	
20 (508)	26.85 (682)	40.35 (1025)	

## Telescopic Leg System (T.L.A.)

#### **Advantages**

- Provides optimum form & function
- Easy-to-clean, smooth, extrusion surface just hose down
- · Steady, quiet, height adjustability
- · OEMs integrate columns into custom applications

#### **General Description**

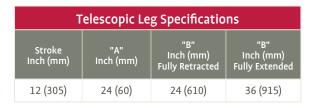
- Two-piece anodized aluminum extrusions
- · Easy and quick installation

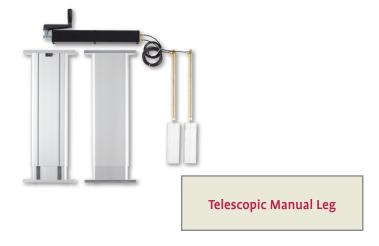
#### **Technical Information**

- Extruded aluminum with clear matte anodized finish
- Standard column height is 24" (610 mm); maximum adjustment range is 12" (305 mm)
- System height fully retracted is 24" (610 mm)
- System height fully extended is 36" (914 mm)
- For additional column heights and available stokes, please contact Bucher North America Sales at +1 (616) 458-1306
- System capacity:
  - ° 250 lbs. (113 kg) or 375 lbs. (170 kg ) per column
  - 500 lbs. (227 kg) per set of two columns
  - 750 lbs. (340 kg) per set of two columns for HD
- Designed to be used with B1C cylinders
- Manual (hand crank) or electric actuation



Telescopic Electric Leg

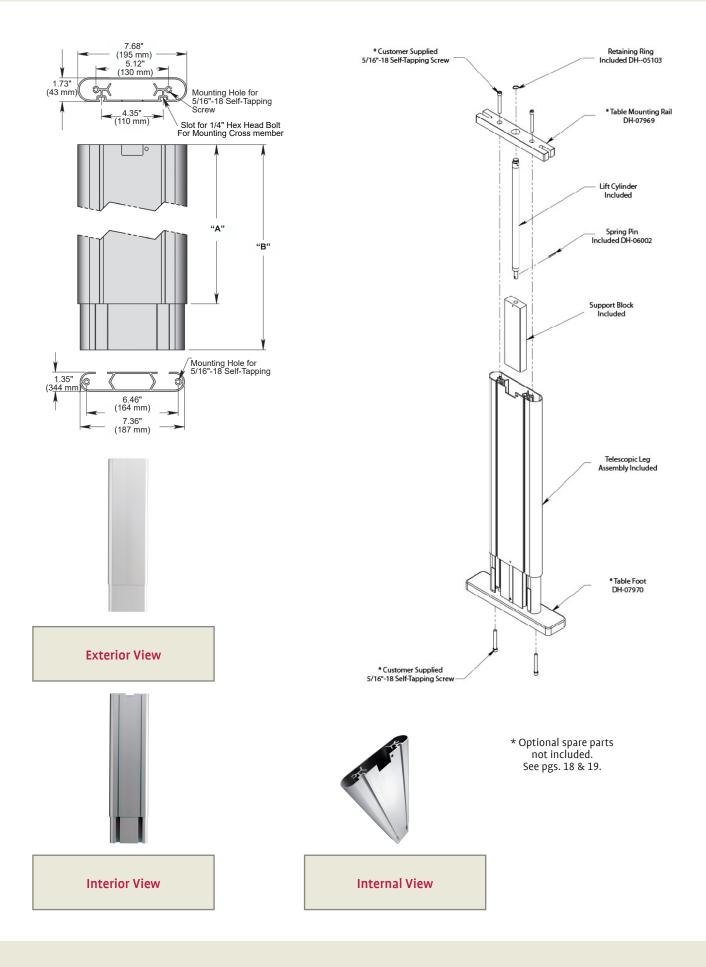








## Dyna-Lift®





## Internal Extrusion Mount System (S6... & H6...)

#### **Advantages**

· Internally mounted cylinder neatly hides away unwanted outside obstructions - no external hardware

#### **General Description**

• Perfect application for OEM's and custom machine builders

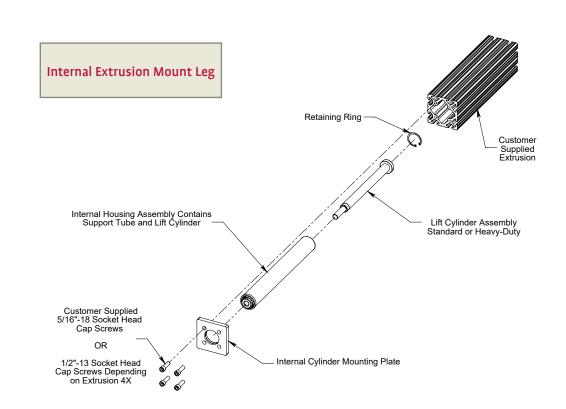
#### **Technical Information**

- Adjustment ranges available in: 6", 8", 10", and 12" stroke
- Lifting capacity up to 1,500 lbs. on Heavy-Duty
- Single acting cylinders, power up and gravity down
  Approximately 30 lbs. of weight per cylinder needed to retract properly
- Manual with hand crank or electric actuation available
- Internal cylinder mount available for:
  - 80/20 extrusions 3030
  - 80/20 extrusions 8080
  - Bosch extrusions 80mm
  - Bosch extrusions 90mm











# **External Extrusion Mount System**

#### **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

#### **General Description**

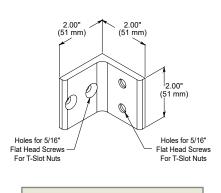
- Retrofit the "D" style cylinder to many different size extrusions via the "L" bracket
- "L" bracket universally fits different sizes of extrusion via the T-Slot
- Tighten down bracket to T-Slot with an Allen wrench

#### **Technical Information**

- Adjustment ranges available in: 6", 8", 10", 12", 16" and 20" stroke
- Lifting capacity up to 1,500 lbs.
- Single acting cylinders, power up and gravity down.
- Approximately 30 lbs. of weight per cylinder needed to retract properly
- Manual hand crank or electric actuation available



Optional "L" Bracket easily mounts Standard & Heavy-Duty Systems for external extrusion applications.



"L" Bracket



**External Extrusion Mount Leg** 



# **System Selection Guide**

### Ex. 4E-D1A-12-S

4 E - D	Α
---------	---

				A
# of Cyl.		Cylinder Body Type	Cylinder / Pump Fitting Type	Live End Rod Type
1 2 3 4 5 6 8	M = Manual Crank Drive N = No Motor / Handle E = 115 VAC* (60 Hertz) 2 = 220 VAC* (50 Hertz) 3 = 12 VDC 4 = 24 VDC 5 = 115 VAC* High Speed P = Programmable Switch *AC motors include a rocker switch; DC motors do not.	Retaining Ring Groove Retaining Ring Groove Retaining Ring Groove (Cylinder Tube End)  B = 90° 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 = Inline 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.  (See pg. 5 for typical cylinder configurations)  E = Internal Mount Other  3 = Internal Mount for 3" x 3" Extrusion with 1" Support Sleeve, Foot Glide, Internal Bushing and End Cap  8 = Internal Mount for 90 mm x 80 mm Extrusion with 1" Support Sleeve, Foot Glide, Internal Bushing and End Cap  (See pg. 10 for internal mount cylinders)	1 = Straight / Straight  2 = 90° / Straight  3 = Straight / 90°  4 = 90° / 90°  5 = 180° / Straight  6 = 180° / 90°  7 = Straight Velocity Fuse / Straight  8 = Straight Velocity Fuse / 90°	Guided "D" Rod End Options  A = 3/8" Adapter w/ 3/8" Foot Glide  B = 3/8" Adapter w/ 1/2" Caster  D = 1/2" Adapter w/ 1/2" Foot Glide  E = 1/2" Adapter w/o Foot Glide  F = 3/8" SS Adapter, 3/8" SS Foot Glide w/ SS Piston Rod  G = 1/2" SS Adapter, 1/2" SS Foot Glide w/ SS Piston Rod  Unguided Rod End Options  A = Straight Rod End  B = Retainer Ring Rod End  C = Clevis Rod End  D = Threaded Rod End

- 1 2 - S

<b>–</b> [1] [2]	<u> </u>	
Cylinder Adjustment Range Inches (mm)	Standard or Custom	Optional Tubing Lengths
06 (156) 08 (203) 10 (254) 12 (305) 16 (406) **STD Only** 20 (508) **4-Post HD Only**	S = Standard  H = Heavy-Duty 1,500 lb. Capacity  T = Telescopic Leg System (w/ B1C Leg Cylinder only)  T12 = Telescopic Leg System (w/ mounting rails and feet)  M = Mobile Battery Operated  S62B = Standard, Internal Mount, Bosch Extrusion  S62E = Standard, Internal Mount, 80/20 Extrusion  H62B = Heavy-Duty, Internal Mount, Bosch Extrusion  H62E = Heavy-Duty, Internal Mount, 80/20 Extrusion	Specify Tube Length from Pump to Cylinder  Cyl. # 1  Cyl. # 2  Cyl. # 3  Cyl. # 4  Cyl. # 5  Cyl. # 6  Standard Tube Lengths  2 cyl. = 96".60"  4 cyl. = 96".96".60"  6 cyl. = 120".120".120".96".96".96"  Recommended  Tube Length is 24" min. and 144" max.

### Parts & Accessories









**DL Gear Motor 115 VAC** #DH-07000

**DL Gear Motor 24 VDC** #DH-07005

**Standard Caster** #DH-17203

**Heavy-Duty Caster** #DH-17206









3/8" CS STD Foot Glide #DH-17200

3/8" SS STD Foot Glide #DH-17208

1/2" CS HD Foot Glide #DH-17202

1/2" SS HD Foot Glide #DH-17207



#### **Standard Adapters**

3/8" rod x 3/8" THD CS #DC-03000 3/8" rod x 3/8" THD SS #DC-03002 3/8" rod x 1/2" THD CS #DC-03004 3/8" rod x 1/2" THD SS #DC-03006

Heavy-Duty Adapters 1/2" rod x 3/8" THD CS #DC-03001 1/2" rod x 3/8" THD SS #DC-03003 1/2" rod x 1/2" THD CS #DC-03005 1/2" rod x 1/2" THD SS #DC-03012









#### **SAE Straight Fitting** STD #DH-04111 HD #DH-04113

SAE 90° Fitting STD #DH-04202 HD #DH-04203



NPT 90° Fitting STD #DH-04200 HD #DH-04201

### **Parts & Accessories**







180º Heavy-Duty Fitting #DH-04112



"L" Bracket #DH-08000



Heavy-Duty Handle #DH-06517







THE STATE OF THE S

STD Retractable Handle #DH-17100

Programmable Switch
Designated Motors Only
#DH-08414

Foot Pedal #DH-08405

Rocker Switch #DH-08400



**T.L.A Column**Contact Bucher NA. Sales



Standard Recharge Kit #DH-16000



Heavy-Duty Recharge Kit #DH-16002



Friction Modifier Kit #DH-16001



**Seal Kits 2- & 4-Post** #DH-16100 #DH-16101



Fill & Plug Pump #DP-10010



Power Cords 230 VAC #DH-08419 115 VAC #DH-08420



STD & HD Tubing STD #DH-04600 HD #DH-04650



# **Quick Ship Program**

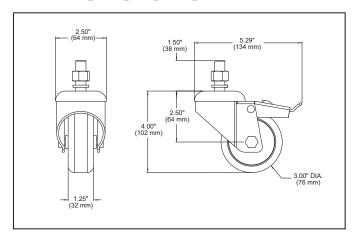
- Advantages
   Standard systems
- Ships typically in 1 to 5 business days

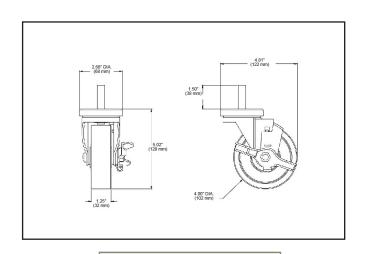
Standard Manual Systems			
Description	Model #	Shipping Dimensions Inch.	Shipping Weight Lbs.
4-Cylinder, 06" Stroke	4M-DIA-06-S	27x9x7	20
4-Cylinder, 08" Stroke	4M-DIA-08-S	27x9x7	23
4-Cylinder, 10" Stroke	4M-DIA-10-S	37x9x8	27
4-Cylinder, 12" Stroke	4M-DIA-12-S	37x9x8	30
4-Cylinder, 16" Stroke	4M-DIA-16-S	37x9x8	35



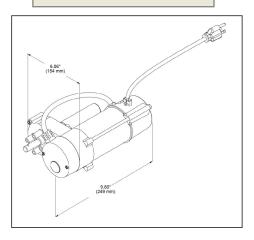
Standard Electric Systems			
Description	Model #	Shipping Dimensions Inch.	Shipping Weight Lbs.
4-Cylinder, 06" Stroke	4E-DIA-06-S	37x9x8	35
4-Cylinder, 08" Stroke	4E-DIA-08-S	37x9x8	37
4-Cylinder, 10" Stroke	4E-DIA-10-S	37x9x8	40
4-Cylinder, 12" Stroke	4E-DIA-12-S	37x9x8	42
4-Cylinder, 16" Stroke	4E-DIA-16-S	44x9x8	48

### **Dimensions**



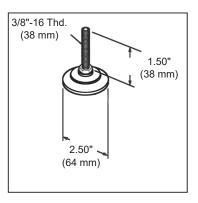


#### **Standard Caster**



**AC Motor** 

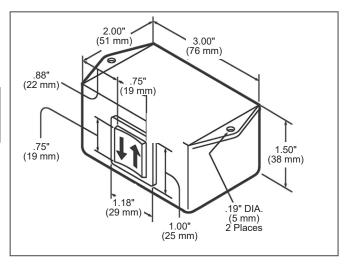
#### **Heavy-Duty Caster**

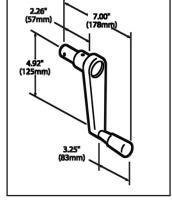


**Foot Glide 4-Post Standard System** 

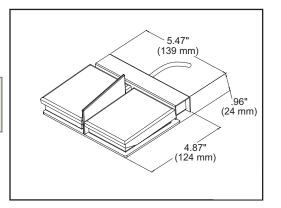
### **Dimensions**

Rocker Switch Housing Standard w/ AC Electric System

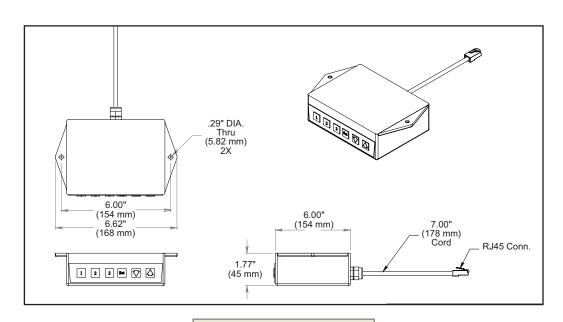




Foot Pedal
Option w/ Electric System



Retractable Folding Handle Standard w/ Manual System



Programmable Switch Designated Motors Only

Please consult Bucher North America Sales with specific requirements.









Industrial Ergonomics 612-532-6774

jeff@Industrial-Ergonomics.com



