ELECTROMECHANICAL LINEAR ACTUATOR

PRODUCT INFORMATION
CMLA SERIES

Your First Choice
In Motion Technology
CMLA is the newest addition to the Duff Norton Linear Actuator line and incorporates the latest in design techniques, manufacturing methods drawing on more than 100 years of experience in motion control applications. CMLA is designed to run faster, last longer and is the flagship series of linear actuators for Duff Norton and its global partners at Columbus McKinnon.

Featuring an innovative and patented* design the cast aluminum construction houses a variable configured linear actuator covering the 2,200 N (500 lbs) to 8,900 N (2,000 lbs) capacity ranges. Pairings of speed, capacity and optional features expand the boundaries of applications and overall performance making CMLA the most comprehensive linear actuator available on the market today.

Lightweight, high strength corrosion resistant materials were a cornerstone in the CMLA design consideration. The aluminum and stainless steel construction along with IP66S ingress protection provides a watertight low maintenance envelope suitable for most environmental applications.

An advanced array of flexible design options and features have been incorporated to make the design engineering function easier. CMLA is unlike any other linear actuator as it offers a performance standard and life cycle dependability that will minimize down time and reduce total equipment cost.

The patented* onboard CMLA electronic controls bring a new dimension to the linear actuator application and will usher in an era of exciting new developments in motion control from Duff Norton.

“**The most comprehensive linear actuator available on the market today**”

- **Load**
  4 convenient model sizes ranging from 2,200 N (500 lbs) to 8,900 N (2,000 lbs)

- **Low Maintenance**
  Sealed bearings and high quality lubricants

- **Faster lifting speeds**
  The precision ball screw and gear sets offers unmatched load speed

- **Service Life**
  Hardened gears, screws and lifting nuts provide longer life than most competitor offerings

- **Operating Temperature**
  From -4F (-20C) to 150F (65C)

- **IP66S Protection**
  External envelope is sealed and protected against moisture and dust ingress

**NOTE**: IP66s does not mean that the CMLA is impervious to water penetration. The rating denotes protection against water spray when the unit is not running. High usage and exposure to wet or humid environments can lead to water accumulation over time. In such environmental applications it is advised that the CMLA actuators are installed with the tube at a downward angle or shielded if possible.

*Patent pending*
Clevis Ends
Machined stainless steel for corrosion resistance
Adjustable to 90°

Translating Tube
Corrosion resistant translating tubes for smoother operation and better sealing protection

Outer Tube
Unique hexagonal, anodized aluminum outer tube

Brake
Optional*1 electric brake to prevent back driving

Motor
Proprietary motor design to optimize size and efficiency

Trapezoid Screw or Precision Ball Screw
Trapezoid Screw - A self locking screw and bronze lifting nut for positive load control
Precision Ball Screw - A high efficiency ball screw and nut for increased load speeds

Anti-Rotational Collar
Hex shaped collar with a close tolerance fit inside the outer tube ensures the inner tube will extend and retract with an unattached load, and helps enhance load stability.

Clutch
A safety clutch comes standard*2 on all CMLA models to prevent overload damage.

Integrated Control Unit
Patented*3 circuitry to manage operating voltage, fully adjustable limits, position feedback capable*4 and electric brake functions.

Adjustable Clevis
Rotates 90° for added design flexibility

NOTE
Duff-Norton has made every effort to ensure that the information contained in the publication is accurate and reliable. Determining the suitability of our products for specific applications is the user’s responsibility.

WARNING
The equipment shown in this catalog is intended for industrial use only and should not be used to lift, support, or otherwise transport people unless you have written statement from Duff-Norton, which authorizes the specific actuator used in your applications as suitable for moving people.

IP66S STANDARD
Dust Tight - No ingress of dust; complete protection against contact
Powerful Water Jets - Water projected in powerful jets (12.5mm nozzle) against the enclosure from any direction shall have no harmful effects. 100 liters per minute at 100 kPa at a distance of 3 meters

*1 Brake is required on all Ball Screw Models
*2 Clutch not available on 1000# quad speed 2.07:1 ratio
*3 Patent pending
*4 Requires external display
SERIES CMLA A
500 lbs (2200 N)

DESIGN: Ball screw or trapezoidal screw
TEMPERATURE RANGE: -4ºF to 150ºF (-20ºC to 65ºC)
ENVIRONMENT: IP66S protection standard

FEATURES & BENEFITS

- Tensile and compressive dynamic loads up to 500 lbs (2200 N)
- Lifting speeds up to 38 mm/sec (90 in/min) at rated load
- Standard stroke lengths: 100 mm (3.9 in), 150 mm (5.9 in), 300 mm (11.8 in), 450 mm (17.7 in), 600 mm (23.6 in)
- Safety clutch standard

OPTIONS

- Ball screw or trapezoidal screw
- 115 VAC or 230 VAC motors
- Electric brake - standard on ball screw models
- Potentiometer feedback
- Adjustable limit switches
DIMENSIONS

Note: Wiring to change for models that don’t end in PCB. Contact Duff-Norton for more information.

PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>CMLA A</th>
<th>Motor Type</th>
<th>Maximum Dynamic Load (N lbs)</th>
<th>Maximum Static Load (N lbs)</th>
<th>Screw Type</th>
<th>Gear Ratio</th>
<th>Motor Power (Volts)</th>
<th>Lifting Speed (mm/s (in/s))</th>
<th>Duty Cycle (m/hr (in/hr))</th>
<th>Capacitor Rating (mfd)</th>
<th>Capacitor Model #</th>
<th>Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AC</td>
<td>2200 (500)</td>
<td>3336 (750)</td>
<td>Trapezoid</td>
<td>11.5:1</td>
<td>115</td>
<td>18.0 (0.71)</td>
<td>20.6 (810)</td>
<td>35</td>
<td>SK6405-7-13</td>
<td>21 lb (9.5 kg)</td>
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<tr>
<td></td>
<td>AC</td>
<td>2200 (500)</td>
<td>3336 (750)</td>
<td>Trapezoid</td>
<td>11.5:1</td>
<td>230</td>
<td>18.0 (0.71)</td>
<td>20.6 (810)</td>
<td>10</td>
<td>SK6405-7-10</td>
<td>1.3 lb (0.6 kg)</td>
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<tr>
<td></td>
<td>AC</td>
<td>2200 (500)</td>
<td>3336 (750)</td>
<td>Ball</td>
<td>6.5:1</td>
<td>115</td>
<td>38.1 (1.5)</td>
<td>30.5 (1200)</td>
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<td>SK6405-7-13</td>
<td>21 lb (9.5 kg)</td>
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<tr>
<td></td>
<td>AC</td>
<td>2200 (500)</td>
<td>3336 (750)</td>
<td>Ball</td>
<td>6.5:1</td>
<td>230</td>
<td>38.1 (1.5)</td>
<td>30.5 (1200)</td>
<td>10</td>
<td>SK6405-7-10</td>
<td>1.3 lb (0.6 kg)</td>
</tr>
</tbody>
</table>

Note: 1. The correct capacitor mfd should be used for each model or the cylinder will not perform as rated. Capacitor ordered separately.
2. Order Hard Start Kit 192036494 for applications where high starting torque is required (low temperature, high starting load)

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Models</th>
<th>Motor Type</th>
<th>Maximum Dynamic Load (N lbs)</th>
<th>Maximum Static Load (N lbs)</th>
<th>Screw Type</th>
<th>Gear Ratio</th>
<th>Motor Power (Volts)</th>
<th>Lifting Speed (mm/s (in/s))</th>
<th>Duty Cycle (m/hr (in/hr))</th>
<th>Capacitor Rating (mfd)</th>
<th>Capacitor Model #</th>
<th>Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>A T R 1 1 5 C</td>
<td>AC</td>
<td>2200 (500)</td>
<td>3336 (750)</td>
<td>Trapezoid</td>
<td>11.5:1</td>
<td>115</td>
<td>18.0 (0.71)</td>
<td>20.6 (810)</td>
<td>35</td>
<td>SK6405-7-13</td>
<td>21 lb (9.5 kg)</td>
</tr>
<tr>
<td>A K U 0 6 5 C</td>
<td>AC</td>
<td>2200 (500)</td>
<td>3336 (750)</td>
<td>Trapezoid</td>
<td>11.5:1</td>
<td>230</td>
<td>18.0 (0.71)</td>
<td>20.6 (810)</td>
<td>10</td>
<td>SK6405-7-10</td>
<td>1.3 lb (0.6 kg)</td>
</tr>
</tbody>
</table>

Motor

- 115 VAC/1 PH/60 Hz: 1 1 5
- 230 VAC/1 PH/60 Hz: 2 3 0

Brake

- No Brake: X

Stroke mm (in)

- 100 mm (3.9 in): 1 0 0
- 150 mm (5.9 in): 1 5 0
- 300 mm (11.8 in): 3 0 0
- 450 mm (17.7 in): 4 5 0
- 600 mm (23.6 in): 6 0 0

Other Features/Options

- POT - Potentiometer Only - 5K potentiometer signal to customer controls; not valid with brake option; use PCX with brake.
- CBO - Brake Rectifier Only - With internal rectifier for brake.
- PCB - Printed Circuit Board - For internal adjustable limit switches and brake control.
- XXX - No Potentiometer/No Brake - Not valid with brake option; use CBO with brake.
- PCX - Potentiometer Feedback and Brake Rectifier - 5K potentiometer signal to customer controls & internal rectifier for brake.

Cable Length (Note: PCB option only available with standard 0.76m Cord Length)

- 0.76 m (30 in) Standard
- 1 m (39 in): 1
- 2 m (79 in): 2
- 3 m (118 in): 3
- 5 m (197 in): 5
SERIES CMLA B
1000 lbs (4500 N)

DESIGN: Ball screw or trapezoidal screw
TEMPERATURE RANGE: -4°F to 150°F (-20ºC to 65ºC)
ENVIRONMENT: IP66S protection standard

FEATURES & BENEFITS

- Tensile and compressive dynamic loads up to 1000 lbs (4500 N)
- Lifting speeds up to 28 mm/sec (67 in/min) at rated load
- Standard stroke lengths: 100 mm (3.9 in), 150 mm (5.9 in), 300 mm (11.8 in), 450 mm (17.7 in), 600 mm (23.6 in)
- Safety clutch standard (not available on quad speed 2.1:1 ratio)

OPTIONS

- Ball screw or trapezoidal screw
- 115 VAC or 230 VAC motors
- Electric brake - standard on ball screw models
- Potentiometer feedback
- Adjustable limit switches
### DIMENSIONS

![Diagram of CMLA B motor](image)

#### PRODUCT INFORMATION

**CMLA B**

<table>
<thead>
<tr>
<th>Motor Type</th>
<th>AC</th>
<th>AC</th>
<th>AC</th>
<th>AC</th>
<th>AC</th>
<th>AC</th>
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<tbody>
<tr>
<td>Maximum Dynamic Load N (lbs)</td>
<td>4500 (1000)</td>
<td>4500 (1000)</td>
<td>4500 (1000)</td>
<td>4500 (1000)</td>
<td>1112 (250)§</td>
<td>1112 (250)§</td>
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<tr>
<td>Maximum Static Load N (lbs)</td>
<td>6672 (1500)</td>
<td>6672 (1500)</td>
<td>6672 (1500)</td>
<td>6672 (1500)</td>
<td>6672 (1500)</td>
<td>6672 (1500)</td>
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<tr>
<td>Screw Type</td>
<td>Trapezoid</td>
<td>Trapezoid</td>
<td>Ball</td>
<td>Ball</td>
<td>Ball</td>
<td>Ball</td>
</tr>
<tr>
<td>Gear Ratio</td>
<td>14.2</td>
<td>14.2</td>
<td>8.1</td>
<td>8.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Motor Power</td>
<td>Volts</td>
<td>115</td>
<td>230</td>
<td>115</td>
<td>230</td>
<td>115</td>
</tr>
<tr>
<td>Amperage</td>
<td>7</td>
<td>3.4</td>
<td>7</td>
<td>3.4</td>
<td>7</td>
<td>3.4</td>
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<tr>
<td>Lifting Speed mm/s (in/s)</td>
<td>14.2 (0.56)</td>
<td>14.2 (0.56)</td>
<td>28.5 (1.12)</td>
<td>28.5 (1.12)</td>
<td>109.2 (4.3)</td>
<td>109.2 (4.3)</td>
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<tr>
<td>Duty Cycle m/hr (in/hr)</td>
<td>9.1 (360)</td>
<td>9.1 (360)</td>
<td>15.2 (600)</td>
<td>15.2 (600)</td>
<td>58.5 (2300)</td>
<td>58.5 (2300)</td>
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<td>Capacitor Rating mfd</td>
<td>50</td>
<td>12.5</td>
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<td>Capacitor Model #</td>
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<td>192002120</td>
<td>SK6405-7-15</td>
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<td>SK6405-7-15</td>
<td>192002120</td>
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<tr>
<td>Shipping Weight</td>
<td>22 lb (10 kg) + 1.3 lb (0.6 kg) per 50 mm of travel</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

§ Quad Speed - Lower ratio reduces rated load to 250 lbs. No clutch

Note: 1. The correct capacitor mfd should be used for each model or the cylinder will not perform as rated.

2. Order Hard Start Kit 192036494 for applications where high starting torque is required (low temperature, high starting load)

#### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Models</th>
<th>B T R 1 4 2 C</th>
<th>B K U 8 0 7 C</th>
<th>B K U 0 2 1 X</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMLA 4,500 N: Trapazoid Screw: 14.2:1 Ratio: Standard Clutch</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMLA 4,500 N: Ball Screw: 8.07:1 Ratio: Standard Clutch</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMLA 1,112 N: Ball Screw: 2.1:1 Ratio: No Clutch</td>
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</table>

<table>
<thead>
<tr>
<th>Motor</th>
<th>115 VAC/1 PH/60 Hz</th>
<th>230 VAC/1 PH/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1 5</td>
<td>2 3 0</td>
<td></td>
</tr>
</tbody>
</table>

| Brake | B | X |

<table>
<thead>
<tr>
<th>Stroke mm (in)</th>
<th>100 mm (3.9 in)</th>
<th>150 mm (5.9 in)</th>
<th>300 mm (11.8 in)</th>
<th>450 mm (17.7 in)</th>
<th>600 mm (23.6 in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 0 0</td>
<td>1 5 0</td>
<td>3 0 0</td>
<td>4 5 0</td>
<td>6 0 0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Features/Options</th>
<th>POT - Potentiometer Only - 5K potentiometer signal to customer controls; not valid with brake option; use PCX with brake.</th>
<th>CBO - Brake Rectifier Only - With internal rectifier for brake.</th>
<th>PCB - Printed Circuit Board - For internal adjustable limit switches and brake control.</th>
<th>XXX - No Potentiometer/No Brake - Not valid with brake option; use CBO with brake.</th>
<th>PCX - Potentiometer Feedback and Brake Rectifier - 5K potentiometer signal to customer controls &amp; internal rectifier for brake.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PO</td>
<td>CT</td>
<td>CB</td>
<td>PC</td>
<td>PX</td>
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</table>

<table>
<thead>
<tr>
<th>Cable Length (Note: PCB option only available with standard 0.76m Cord Length)</th>
<th>0.76 m (30 in) Standard</th>
<th>1 m (39 in)</th>
<th>2 m (79 in)</th>
<th>3 m (118 in)</th>
<th>5 m (197 in)</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td></td>
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</table>

§ Quad Speed - Lower ratio reduces rate load to 250lbs no clutch
SERIES CMLA C
1500 lbs (6700 N)

DESIGN:
Ball screw or trapezoidal screw

TEMPERATURE RANGE:
-4°F to 150°F (-20°C to 65°C)

ENVIRONMENT:
IP66S protection standard

FEATURES & BENEFITS
- Tensile and compressive dynamic loads up to 1500 lbs (6700 N)
- Lifting speeds up to 36 mm/sec (87 in/min) at rated load
- Standard stroke lengths: 100 mm (3.9 in), 150 mm (5.9 in), 300 mm (11.8 in), 450 mm (17.7 in), 600 mm (23.6 in), 750 mm (29.5 in)
- Safety clutch standard

OPTIONS
- Ball screw or trapezoidal screw
- 115 VAC or 230 VAC motors
- Electric brake - standard on ball screw models
- Potentiometer feedback
- Adjustable limit switches
Note: Wiring to change for models that don't end in PCB. Contact Duff-Norton for more information.

**PRODUCT INFORMATION**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Motor Type</td>
<td>AC AC AC AC AC AC</td>
<td>Maximum Dynamic Load N (lbs)</td>
<td>6700 (1500)</td>
<td>6700 (1500)</td>
<td>6700 (1500)</td>
<td>6700 (1500)</td>
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<td>Maximum Static Load N (lbs)</td>
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<td>10,008 (2250)</td>
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<tr>
<td>Screw Type</td>
<td>Trapezoid</td>
<td>Trapezoid</td>
<td>Ball</td>
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<td>Ball</td>
</tr>
<tr>
<td>Gear Ratio</td>
<td>17.2</td>
<td>17.2</td>
<td>14.0</td>
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<td>6.9</td>
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<td>Motor Power</td>
<td>Volts</td>
<td>115</td>
<td>230</td>
<td>115</td>
<td>230</td>
<td>115</td>
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<td>Amperage</td>
<td>Amps</td>
<td>8</td>
<td>4</td>
<td>8.3</td>
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<td>8.3</td>
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<tr>
<td>Lifting Speed</td>
<td>mm/s (in/s)</td>
<td>18.8 (0.74)</td>
<td>18.8 (0.74)</td>
<td>36.8 (1.45)</td>
<td>36.8 (1.45)</td>
<td>73.7 (2.9)</td>
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<td>Duty Cycle</td>
<td>m/hr (in/hr)</td>
<td>12.7 (500)</td>
<td>12.7 (500)</td>
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<td>22.9 (900)</td>
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<tr>
<td>Shipping Weight</td>
<td>24 lb (10.9 kg)</td>
<td>1.3 lb (0.6 kg) per 50 mm of travel</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

§ Double Speed - Lower ratio reduces rated load to 750 lbs.
Note: 1. The correct capacitor mfd should be used for each model or the cylinder will not perform as rated.
2. Order Hard Start Kit 192036494 for applications where high starting torque is required (low temperature, high starting load)

**ORDERING INFORMATION**

Motor
- 115 VAC/1 PH/60 Hz
- 230 VAC/1 PH/60 Hz

Brake
- No Brake
- Brake

Stroke (mm in)
- 100 mm (3.9 in)
- 150 mm (5.9 in)
- 300 mm (11.8 in)
- 450 mm (17.7 in)
- 600 mm (23.6 in)
- 750 mm (29.5 in)

Other Features/Options
- POT - Potentiometer Only - 5K potentiometer signal to customer controls; not valid with brake option; use PCX with brake.
- CBO - Brake Rectifier Only - With internal rectifier for brake.
- PCB - Printed Circuit Board - For internal adjustable limit switches and brake control.
- XXX - No Potentiometer/No Brake - Not valid with brake option; use CBO with brake.
- PCX - Potentiometer Feedback and Brake Rectifier - 5K potentiometer signal to customer controls & internal rectifier for brake.

Cable Length (Note: PCB option only available with standard 0.76m Cord Length)
- 0.76 m (30 in) Standard
- 1 m (39 in)
- 2 m (79 in)
- 3 m (118 in)
- 5 m (197 in)

§ Double Speed - Lower ratio reduces rate load to 750 lbs
SERIES CMLA D
2000 lbs (8900 N)

DESIGN: Ball screw
TEMPERATURE RANGE: -4°F to 150°F (-20°C to 65°C)
ENVIRONMENT: IP66S protection standard

FEATURES & BENEFITS
- Tensile and compressive dynamic loads up to 2000 lbs (8900 N)
- Lifting speeds up to 50 mm/sec (120 in/min) at rated load
- Standard stroke lengths: 100 mm (3.9 in), 150 mm (5.9 in), 300 mm (11.8 in), 450 mm (17.7 in), 600 mm (23.6 in), 750 mm (29.5 in)
- Safety clutch standard
- Standard 230/460 3-phase motor
- 3-phase AC brake standard

OPTIONS
- Potentiometer feedback
DIMENSIONS

Motor wire diagram for PCB option
Note: Wiring to change for models that don’t end in PCB. Contact Duff-Norton for more information.

PRODUCT INFORMATION

CMLA D

<table>
<thead>
<tr>
<th>Models</th>
<th>4 6 0 B</th>
<th>D K U 1 1 0 C</th>
<th>4 6 0 B</th>
<th>CMLA 8,900 N: Ball Screw: 11.0:1 Ratio: Standard Clutch</th>
<th>CMLA 4,500 N: Ball Screw: 5.4:1 Ratio: Standard Clutch</th>
<th>CMLA 3,336 N: Ball Screw: 2.7:1 Ratio: Standard Clutch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Type</td>
<td>AC AC AC</td>
<td>AC AC AC</td>
<td>AC AC AC</td>
<td>§ Double Speed - Lower ratio reduces rated load to 1,000 lbs.</td>
<td>† Quad Speed - Lower ratio reduces rated load to 500 lbs.</td>
<td>§ Double Speed - Lower ratio reduces rated load to 1,000 lbs.</td>
</tr>
<tr>
<td>Maximum Dynamic Load</td>
<td>N (lbs)</td>
<td>8900 (2000)</td>
<td>4500 (1000)§</td>
<td>2200 (500)†</td>
<td>§ Double Speed - Lower ratio reduces rated load to 1,000 lbs.</td>
<td>§ Double Speed - Lower ratio reduces rated load to 1,000 lbs.</td>
</tr>
<tr>
<td>Maximum Static Load</td>
<td>N (lbs)</td>
<td>13,344 (3000)</td>
<td>13,344 (3000)</td>
<td>13,344 (3000)</td>
<td>§ Double Speed - Lower ratio reduces rated load to 1,000 lbs.</td>
<td>§ Double Speed - Lower ratio reduces rated load to 1,000 lbs.</td>
</tr>
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<tr>
<td>Lifting Speed</td>
<td>mm/s (in/s)</td>
<td>50.8 (2.0)</td>
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<td>203.2 (8.0)</td>
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</tr>
<tr>
<td>Duty Cycle</td>
<td>m/hr (in/hr)</td>
<td>101.6 (4000)</td>
<td>203 (8000)</td>
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</tr>
<tr>
<td>Shipping Weight</td>
<td>39 lb (17.7 kg) + 1.3 lb (0.6 kg) per 50 mm of travel</td>
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ORDERING INFORMATION

Models

<table>
<thead>
<tr>
<th>Models</th>
<th>4 6 0 B</th>
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<th>CMLA 8,900 N: Ball Screw: 11.0:1 Ratio: Standard Clutch</th>
<th>CMLA 4,500 N: Ball Screw: 5.4:1 Ratio: Standard Clutch</th>
<th>CMLA 3,336 N: Ball Screw: 2.7:1 Ratio: Standard Clutch</th>
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<td>N (lbs)</td>
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<td>4500 (1000)§</td>
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ORDERING INFORMATION

Motor

230/460 VAC/1 PH/60 Hz 4 6 0

Stroke mm (in)

100 mm (3.9 in) 1 0 0
150 mm (5.9 in) 1 5 0
300 mm (11.8 in) 3 0 0
450 mm (17.7 in) 4 5 0
600 mm (23.6 in) 6 0 0
750 mm (29.5 in) 7 5 0

Other Features/Options

POT - Potentiometer Only - 5K potentiometer signal to customer controls; not valid with brake option.
XXX - No Potentiometer/No Brake - Not valid with brake option.

Cable Length (Note: PCB option only available with standard 0.76m Cord Length)

0.76 m (30 in) Standard 4 6 0
1 m (39 in) 1
2 m (79 in) 2
3 m (118 in) 3
5 m (197 in) 5

§ Double Speed - Lower ratio reduces rated load to 1,000 lbs.
† Quad Speed - Lower ratio reduces rated load to 500 lbs.