# Pneumatic Toggle Clamps

## Sizing and Application Chart

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Page MC-PTC-#</td>
<td></td>
<td>0 to 1000 [0 to 225]</td>
<td>1000 to 2000 [225 to 450]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000 to 3000 [450 to 675]</td>
<td>3000 to 5000 [675 to 1125]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5000 to 7000 [1125 to 1750]</td>
<td>7000 to 10000 [1750 to 2250]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10000+ [2250+ to 3500]</td>
<td>0 to 50 [0 to 1.97]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 to 75 [1.97 to 2.95]</td>
<td>75 to 100 [2.95 to 3.94]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 to 125 [3.94 to 4.92]</td>
<td>125 to 150 [4.92 to 5.91]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>150 to 175 [5.91 to 6.89]</td>
<td>175 to 200 [6.89 to 7.87]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 to 225 [7.87 to 8.86]</td>
<td>225 to 250 [8.86 to 9.84]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 to 300 [9.84 to 11.81]</td>
<td>300+ [11.81+ to 15.75]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 to 40 [0.78 to 1.57]</td>
<td>40 to 60 [1.57 to 2.36]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60 to 80 [2.36 to 3.15]</td>
<td>80 to 100 [3.15 to 3.94]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 to 120 [3.94 to 4.72]</td>
<td>120 to 140 [4.72 to 5.49]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>140 to 160 [5.49 to 6.25]</td>
<td>160 to 180 [6.25 to 7.02]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>180 to 200 [7.02 to 7.79]</td>
<td>200 to 225 [7.79 to 8.56]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>225 to 250 [8.56 to 9.33]</td>
<td>250 to 300 [9.33 to 10.1]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>300 to 400 [10.1 to 10.98]</td>
<td>400+ [10.98+ to 13.86]</td>
</tr>
</tbody>
</table>

## Dimensions

- **Max. Holding Capacity**
- **Max. Exerting Force at 5bar [72PSI]**

- **Overall Height**: mm [inch]
- **Overall Length**: mm [inch]
- **Overall Width**: mm [inch]

## Suitable Applications

- **Series**: MC-PTC-#
- **Pressures**: 0 to 1000 [0 to 225], 1000 to 2000 [225 to 450], 2000 to 3000 [450 to 675], 3000 to 5000 [675 to 1125], 5000 to 7000 [1125 to 1750], 7000 to 10000 [1750 to 2250], 10000+ [2250+ to 3500]

## Environment

- **Duty Cycle**: Normal, Harsh/Dirty

## Process Areas

- Welding
- Assembly
- Light Machining
- U-Bar Version
- Solid Arm Version

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Dimensions and technical information are subject to change without notice.
## Pneumatic Toggle Clamps

### Sizing and Application Chart

<table>
<thead>
<tr>
<th>Overall Height mm [inch]</th>
<th>Overall Length mm [inch]</th>
<th>Overall Width mm [inch]</th>
<th>Suitable Application Areas</th>
<th>Service Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 50 [0 to 1.97]</td>
<td>0 to 50 [0 to 1.97]</td>
<td>0 to 50 [0 to 1.97]</td>
<td>Welding</td>
<td>Normal</td>
</tr>
<tr>
<td>50 to 75 [1.97 to 2.95]</td>
<td>50 to 75 [1.97 to 2.95]</td>
<td>50 to 75 [1.97 to 2.95]</td>
<td>Assembly</td>
<td>Normal</td>
</tr>
<tr>
<td>75 to 100 [2.95 to 3.94]</td>
<td>75 to 100 [2.95 to 3.94]</td>
<td>75 to 100 [2.95 to 3.94]</td>
<td>Light Machining</td>
<td>Normal</td>
</tr>
<tr>
<td>100 to 125 [3.94 to 4.92]</td>
<td>100 to 125 [3.94 to 4.92]</td>
<td>100 to 125 [3.94 to 4.92]</td>
<td>Duty Cycle</td>
<td>Normal</td>
</tr>
<tr>
<td>125 to 150 [4.92 to 5.91]</td>
<td>125 to 150 [4.92 to 5.91]</td>
<td>125 to 150 [4.92 to 5.91]</td>
<td>Accommodates Workpiece Variation</td>
<td>Normal</td>
</tr>
<tr>
<td>150 to 175 [5.91 to 6.89]</td>
<td>150 to 175 [5.91 to 6.89]</td>
<td>150 to 175 [5.91 to 6.89]</td>
<td>U-Bar Version</td>
<td>Normal</td>
</tr>
<tr>
<td>175 to 200 [6.89 to 7.87]</td>
<td>175 to 200 [6.89 to 7.87]</td>
<td>175 to 200 [6.89 to 7.87]</td>
<td>Solid Arm Version</td>
<td>Normal</td>
</tr>
<tr>
<td>200 to 225 [7.87 to 8.86]</td>
<td>200 to 225 [7.87 to 8.86]</td>
<td>200 to 225 [7.87 to 8.86]</td>
<td>Normal</td>
<td>Poor/Low</td>
</tr>
<tr>
<td>225 to 250 [8.86 to 9.84]</td>
<td>225 to 250 [8.86 to 9.84]</td>
<td>225 to 250 [8.86 to 9.84]</td>
<td>Not Recommended</td>
<td>Poor/Low</td>
</tr>
<tr>
<td>250 to 275 [9.84 to 10.83]</td>
<td>250 to 275 [9.84 to 10.83]</td>
<td>250 to 275 [9.84 to 10.83]</td>
<td>Not Recommended</td>
<td>Not Recommended</td>
</tr>
</tbody>
</table>

Legend:
- **Excellent/High**
- **Fair/Medium**
- **Poor/Low**
- **Not Recommended**

Dimensions and technical information are subject to change without notice.
**812 SERIES**

Pneumatic Toggle Clamps | Product Overview

**Features:**
- Smallest of the pneumatic hold down series
- Pneumatic version of Model 201-U

**Applications:**
- Assembly
- Welding

**Also Available:**
- See page MC-ACC-1 for spindle accessories
- See page MC-PSC-40 for sensing options
- High temperature version available upon request as Model 812-U-HT

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**812-U**

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Technical Information | Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Inner (lb)</th>
<th>Outer (lb)</th>
<th>Inner (N)</th>
<th>Outer (N)</th>
<th>Weight (kg)</th>
<th>Bore Size (mm)</th>
<th>Air Consumption† (dm³)</th>
<th>Port Size</th>
<th>Spindle Accessory</th>
<th>Flanged Washers</th>
</tr>
</thead>
<tbody>
<tr>
<td>812-U</td>
<td>100</td>
<td>440</td>
<td>55</td>
<td>245</td>
<td>136</td>
<td>613</td>
<td>92</td>
<td>413</td>
<td>0.46</td>
<td>0.21</td>
</tr>
</tbody>
</table>

†Per double stroke at 5bar [72PSI]

**Max. Operating Temp:** -23°C to 74°C [-10°F to 165°F]

**Optional Sensors:** 810156, 810158

**Replacement Clamp Assembly:** 812-U-LC

**Replacement Cylinder Assembly:** 812CYL

In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.
Note:
Model 812-U requires either 810156 or 810158 sensors. Two (2) sensors are required if detecting both open and closed positions. These sensors use 810156-1 (included with sensors) band clamp to mount the sensor to the cylinder wall.
**802 SERIES**

Pneumatic Toggle Clamps  |  Product Overview

**Features:**
- Pneumatic version of Model 202-U
- Sensor ready for T-slot or round sensors

**Applications:**
- Assembly
- Welding

**Also Available:**
- See page MC-ACC-1 for spindle accessories
- See page MC-PSC-40 for sensing options
- High temperature version available upon request, add **–HT** to model number. Example: 802-U–HT

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**Technical Information | Holding Capacities**

<table>
<thead>
<tr>
<th>Model</th>
<th>Inner</th>
<th>Outer</th>
<th>Inner</th>
<th>Outer</th>
<th>Weight</th>
<th>Bore Size</th>
<th>Air Consumption†</th>
<th>Port Size</th>
<th>Spindle Accessory</th>
<th>Flanged Washers</th>
</tr>
</thead>
<tbody>
<tr>
<td>802-U</td>
<td>200 lbf</td>
<td>890 N</td>
<td>200 lbf</td>
<td>890 N</td>
<td>890 N</td>
<td>0,69 kg</td>
<td>0,0006 dm³ [ft³]</td>
<td>1/8 NPT G-1/8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>802-UE</td>
<td>110 lbf</td>
<td>490 N</td>
<td>110 lbf</td>
<td>490 N</td>
<td>490 N</td>
<td>[0.79]</td>
<td>0,02</td>
<td>202208-M</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

†Per double stroke at 5bar [72PSI]

**Max Cylinder Pressure:** 10bar [145psig]*
**Max Operating Temp:** -10°C to 90°C [-14°F to 194°F]
**Replacement Seal Kit:** 802550-20-1-00
**Replacement Clamp Assembly:** 802-U-LC
**Replacement Cylinder Assembly:** 802CYL

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp's holding capacity. See Technical Appendix for details.

**Sensor Accessories**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>810169</td>
<td>Round Reed Switch with Quick Connect</td>
</tr>
<tr>
<td>8EA-109-1</td>
<td>T-slot Reed Switch with Quick Connect</td>
</tr>
<tr>
<td>CABL-010</td>
<td>Quick Disconnect 2M Extension Cable</td>
</tr>
<tr>
<td>CABL-013</td>
<td>Quick Disconnect 5M Extension Cable</td>
</tr>
</tbody>
</table>

See Pneumatic Accessories section for more options
807 SERIES
Pneumatic Toggle Clamps | Product Overview

Features:
• Pneumatic version of Series 207 manual clamps
• Sensor ready for round or T-slot sensors.
• Built-in flow restriction eliminates need for external flow controls

Applications:
• Assembly
• Welding

Also Available:
See page MC-ACC-1 for spindle accessories
See page MC-PSC-40 for sensing options
High temperature version available upon request, add –HT to model number. Example: 807-U–HT

Technical Information | Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Holding Capacity</th>
<th>Maximum Exerting Force @ 5bar [72PSI]</th>
<th>Accessories (Supplied)</th>
</tr>
</thead>
</table>

†Per double stroke at 5bar [72PSI]

Max Cylinder Pressure: 10bar [145psig]*
Max Operating Temp: -10°C to 90°C [-14°F to 194°F]
Replacement Seal Kit: 802450-32-1-00
Replacement Clamp Assembly: 807-U-LC, 807-S-LC
Replacement Cylinder Assembly: 807CYL
*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix for details.

Sensor Accessories
Round Reed Switch with Quick Disconnect 810169
T-slot Reed Switch with Quick Disconnect 8EA-109-1
Quick Disconnect 2M Extension Cable CABL-010
Quick Disconnect 5M Extension Cable CABL-013

See Pneumatic Accessories section for more options
807 SERIES
Pneumatic Toggle Clamps | Dimensions

807-U
807-UE

807-S
807-SE

Dimensions and technical information are subject to change without notice.

MC-PTC | 8
810 SERIES

Pneumatic Toggle Clamps | Product Overview

Features:
• Pneumatic version of Series 210 manual clamps
• Sensor ready for round or T-slot style sensors
• Built-in flow restriction eliminates need for external flow controls

Applications:
• Assembly
• Welding

Also Available:
See page MC-ACC-1 for spindle accessories
See page MC-PSC-40 for sensing options

Technical Information | Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Holding Capacity</th>
<th>Maximum Exerting Force @ 5bar [72PSI]</th>
<th>Accessories (Supplied)</th>
</tr>
</thead>
<tbody>
<tr>
<td>810-U</td>
<td>[600 lbf] 2670 N</td>
<td>[856 lbf] 3834 N</td>
<td>Port Size</td>
</tr>
<tr>
<td>810-S</td>
<td>[3340 N] 750 lbf</td>
<td>[8143 N] 702 lbf</td>
<td>1/8 NPT</td>
</tr>
<tr>
<td>810-SE</td>
<td>[2220 N] 500 lbf</td>
<td>[3143 N] 702 lbf</td>
<td>1/8 NPT</td>
</tr>
</tbody>
</table>

†Per double stroke at 5bar [72PSI]

Max Cylinder Pressure: 10bar [145psig]*
Max Operating Temp: -10°C to 90°C [-14°F to 194°F]
Replacement Seal Kit: 810450-40-1-00
Replacement Clamp Assembly: 810-U-LC, 810-S-LC
Replacement Cylinder Assembly: 810CYL

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity.

Sensor Accessories

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Sensor Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>810169</td>
<td>Round Reed Switch with Quick Disconnect</td>
</tr>
<tr>
<td>8EA-109-1</td>
<td>T-slot Reed Switch with Quick Disconnect</td>
</tr>
<tr>
<td>CABL-010</td>
<td>Quick Disconnect 2M Extension Cable</td>
</tr>
<tr>
<td>CABL-013</td>
<td>Quick Disconnect 5M Extension Cable</td>
</tr>
</tbody>
</table>

See Pneumatic Accessories section for more options

Dimensions and technical information are subject to change without notice
810 SERIES

Pneumatic Toggle Clamps | Dimensions

Dimensions and technical information are subject to change without notice
846 SERIES

Pneumatic Toggle Clamps | Product Overview

**Features:**
- Similar in size to 807 but with higher holding capacity
- Large, solid clamping arm is easily modified to suit application requirements
- Sensor ready for round or T-slot style sensors

**Applications:**
- Assembly
- Welding

**Also Available:**
See page MC-PSC-40 for sensing options

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**Technical Information | Holding Capacities**

<table>
<thead>
<tr>
<th>Model</th>
<th>Inner</th>
<th>Outer</th>
<th>Inner</th>
<th>Outer</th>
<th>Weight</th>
<th>Bore Size</th>
<th>Air Consumption†</th>
<th>Port Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>846</td>
<td>[750 lbf]</td>
<td>3340 N</td>
<td>[520 lbf]</td>
<td>2310 N</td>
<td>[786 lbf]</td>
<td>3520 N</td>
<td>[491 lbf]</td>
<td>2200 N</td>
</tr>
</tbody>
</table>

|† | This item is available upon request. |

**Max Cylinder Pressure:** 10bar [145psig]*
**Max Operating Temp:** -10°C to 90°C [-14°F to 194°F]
**Replacement Seal Kit:** 810450-40-1-00
**Replacement Clamp Assembly:** 846-LC
**Replacement Cylinder Assembly:** 846CYL

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.

**Sensor Accessories**
- Round Reed Switch with Quick Disconnect 810169
- T-slot Reed Switch with Quick Disconnect 8EA-109-1
- Quick Disconnect 2M Extension Cable CABL-010
- Quick Disconnect 5M Extension Cable CABL-013

See Pneumatic Accessories section for more options
8007 SERIES
Pneumatic Toggle Clamps | Product Overview

Features:
• Hardened pins and bushing at all pivot points for long life cycle
• Solid clamping bar may be modified to suit application requirements
• Sensor ready for round or T-slot style sensors

Applications:
• Assembly
• Welding

Also Available:
See page MC-PSC-40 for sensing options

Technical Information | Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Exerting Force @ 5bar [72PSI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>8007-E</td>
<td>830</td>
</tr>
<tr>
<td>8007-EHL</td>
<td>606</td>
</tr>
<tr>
<td>8007-EHR</td>
<td>8007</td>
</tr>
</tbody>
</table>

†Per double stroke at 5bar [72PSI]

Max Cylinder Pressure: 10bar [145psi]*
Max Operating Temp: -10°C to 90°C [-14°F to 194°F]
Replacement Clamp Assembly: 8007-LC
*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.

Sensor Accessories

<table>
<thead>
<tr>
<th>Sensor Accessories</th>
<th>Item Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round Reed Switch with Quick Disconnect</td>
<td>810169</td>
</tr>
<tr>
<td>T-slot Reed Switch with Quick Disconnect</td>
<td>8EA-109-1</td>
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<td>CABL-010</td>
</tr>
<tr>
<td>Quick Disconnect 5M Extension Cable</td>
<td>CABL-013</td>
</tr>
</tbody>
</table>

See Pneumatic Accessories section for more options

Dimensions and technical information are subject to change without notice
8007 SERIES

Pneumatic Toggle Clamps | Dimensions

Dimensions and technical information are subject to change without notice.
# Features:
- Pneumatic version of Series 247 manual clamps
- Switch ready for Ø4mm or 6,5mmX5mm sensors
- Built-in flow restriction eliminates need for external flow controls

## Applications:
- Assembly
- Welding

## Also Available:
See page MC-ACC-1 for spindle accessories
See page MC-PSC-40 for sensing options

## Technical Information | Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Holding Capacity</th>
<th>Max. Exerting Force @ 5bar [72PSI]</th>
<th>Accessories (Supplied)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inner</td>
<td>Outer</td>
<td>Inner</td>
</tr>
</tbody>
</table>

†Per double stroke at 5bar [72PSI]

**Max Cylinder Pressure:** 10bar [145psig]*
**Max Operating Temp:** -10°C to 90°C [-14°F to 194°F]
**Replacement Seal Kit:** 847450-50-1-00
**Replacement Clamp Assembly:** 847-U-LC, 847-S-LC
**Replacement Cylinder Assembly:** 847Cyl

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.

## Sensor Accessories
- Round Reed Switch with Quick Disconnect: 810169
- T-slot Reed Switch with Quick Disconnect: 8EA-109-1
- Quick Disconnect 2M Extension Cable: CABL-010
- Quick Disconnect 5M Extension Cable: CABL-013

See Pneumatic Accessories section for more options

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**Dimensions and technical information are subject to change without notice**
Dimensions and technical information are subject to change without notice
858 SERIES
Pneumatic Toggle Clamps | Product Overview

Features:
• Hardened pins and bushing at all pivot points for long lifecycle
• Large, solid clamping arm is easily modified to suit application requirements
• Sensor ready for round or T-slot style sensors

Applications:
• Assembly
• Welding

Also Available:
See page MC-PSC-40 for sensing options

Technical Information | Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Inner</th>
<th>Outer</th>
<th>Max. Exerting Force Inner</th>
<th>Outer</th>
<th>Weight</th>
<th>Bore Size</th>
<th>Air Consumption†</th>
<th>Port Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>858</td>
<td>17800 N</td>
<td>8900 N</td>
<td>6857 N</td>
<td>3585 N</td>
<td>7.31kg</td>
<td>63</td>
<td>[0.109] dm³ [ft³]</td>
<td>1/4 NPT</td>
</tr>
<tr>
<td>858-E</td>
<td>[4,000 lbf]</td>
<td>[2,000 lbf]</td>
<td>[1,530 lbf]</td>
<td>[800 lbf]</td>
<td>[16.11lb]</td>
<td>63</td>
<td>[3.08]</td>
<td>G-1/4</td>
</tr>
</tbody>
</table>

†Per double stroke at 5bar [72PSI]

Max Cylinder Pressure: 10bar [145psig]*
Max Operating Temp: -10°C to 90°C [-14°F to 194°F]
Replacement Seal Kit: 850450-63-1-00
Replacement Clamp Assembly: 858-LC
Replacement Cylinder Assembly: 858CYL

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.

Sensor Accessories | Item Number
Round Reed Switch with Quick Disconnect | 810169
T-slot Reed Switch with Quick Disconnect | 8EA-109-1
Quick Disconnect 2M Extension Cable | CABL-010
Quick Disconnect 5M Extension Cable | CABL-013

See Pneumatic Accessories section for more options
Dimensions and technical information are subject to change without notice.
8021, 8071 SERIES

Pneumatic Toggle Clamps | Product Overview

Features:
- Enclosed clamp for dirty environments such as spot and MIG welding
- Non-pivoting cylinder can be hard-piped into fixtures
- Sensor ready for round or T-slot style sensors

Applications:
- Assembly
- Welding

Also Available:
- See page MC-ACC-1 for spindle accessories
- See page MC-PSC-40 for sensing options

Technical Information | Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Holding Capacity</th>
<th>Max. Exerting Force @ 5bar [72PSI]</th>
<th>Accessories (Supplied)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inner</td>
<td>Outer</td>
<td>Inner</td>
</tr>
</tbody>
</table>

This item is available upon request. †Per double stroke at 5bar [72PSI]

Max Cylinder Pressure: 10bar [145psig]*
Max Operating Temp: -10°C to 90°C [-14°F to 194°F]
Replacement Seal Kit: 8021: 802450-32-1-00
8071: 810450-40-1-00

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.

Sensor Accessories | Item Number
--- | ---
Round Reed Switch with Quick Disconnect | 810169
T-slot Reed Switch with Quick Disconnect | 8EA-109-1
Quick Disconnect 2M Extension Cable | CABL-010
Quick Disconnect 5M Extension Cable | CABL-013

See Pneumatic Accessories section for more options

Dimensions and technical information are subject to change without notice
## 8021, 8071 SERIES

Pneumatic Toggle Clamps | Dimensions | -UE

### Dimensions and Technical Information

Dimensions and technical information are subject to change without notice.

#### Models

<table>
<thead>
<tr>
<th>Model</th>
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<td>[2.81]</td>
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<td>[5.12]</td>
<td>[10.74]</td>
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<td>8071-UE</td>
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<td>272,9</td>
<td>69</td>
<td>[0.40]</td>
<td>10,1</td>
<td>5/16</td>
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</tbody>
</table>
817, 827 SERIES

Pneumatic Toggle Clamps | Product Overview

Features:
• Dual mounting surfaces for maximum flexibility
• Sensor ready for round or T-slot style sensors
• Built-in flow restriction eliminates need for external flow controls

Applications:
• Assembly
• Welding

Also Available:
See page MC-ACC-1 for spindle accessories
See page MC-PSC-40 for sensing options

817-U 817-UE
817-S 817-SE
827-U 827-UE
827-S 827-SE

Technical Information | Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Inner Weight</th>
<th>Outer Weight</th>
<th>Inner Weight</th>
<th>Outer Weight</th>
<th>Bore Size</th>
<th>Air Consumption†</th>
<th>Port Size</th>
<th>Spindle Accessory</th>
<th>Flanged Washers</th>
<th>Bolt Retainer</th>
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<tbody>
<tr>
<td>817-U</td>
<td>[375 lbf] 1,05kg</td>
<td>[790 lbf] 2,31lb</td>
<td>[369 lbf] 1,26</td>
<td>[225 lbf] 0,42</td>
<td>1/8NPT G-1/8</td>
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<td>225208-M</td>
<td>507107</td>
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<tr>
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<td>200 N</td>
<td>1648 N</td>
<td>1005 N</td>
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<td>1600 N</td>
<td>1608 N</td>
<td>1005 N</td>
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<td>1470 N</td>
<td>1257 N</td>
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<td>[0.029]</td>
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</table>

†Per double stroke at 5bar [72PSI]

Max Cylinder Pressure: 10bar [145psig]*
Max Operating Temp: -10°C to 90°C [-14°F to 194°F]
Replacement Seal Kit: 817: 802450-32-1-00
827: 810450-40-1-00
Replacement Clamp Assembly: 817-U-LC, 817-S-LC, 827-U-LC, 827-S-LC
Replacement Cylinder Assembly: 817: 807Cyl, 827: 810Cyl

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.

Sensor Accessories
Round Reed Switch with Quick Disconnect 810169
T-slot Reed Switch with Quick Disconnect 8EA-109-1
Quick Disconnect 2M Extension Cable CABL-010
Quick Disconnect 5M Extension Cable CABL-013

See Pneumatic Accessories section for more options
817, 827 SERIES

Pneumatic Toggle Clamps | Dimensions | -U/-UE/-S/-SE

**Mounting Options:**
Use two bolts in the “side” mounting holes, to secure mounting bracket, when “top” mounting.

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
<th>B</th>
<th>B2</th>
<th>B3</th>
<th>C</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
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<tr>
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<td>[0.44]</td>
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<td>[1.00]</td>
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<td>62</td>
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<td>31.8</td>
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<th>L3</th>
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<td>[2.35]</td>
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<td>7.9</td>
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Dimensions and technical information are subject to change without notice
## 868 SERIES

### Features:
- Hardened pins and bushing at all pivot points for long lifecycle
- Large, solid clamping arm is easily modified to suit application requirements
- Sensor ready for round or T-slot style sensors

### Applications:
- Assembly
- Welding

### Also Available:
See page MC-PSC-40 for sensing options

---

### Technical Information | Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Holding Capacity</th>
<th>Max. Exerting Force @ 5bar [72PSI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>868</td>
<td>[4000 lbf] [17800 N]</td>
<td>[2400 lbf] [10675 N]</td>
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<tr>
<td>868-E</td>
<td>[1704 lbf] [7637 N]</td>
<td>[800 lbf] [3585 N]</td>
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</table>

### Specifications:
- **Model**: 868, 868-E
- **Inner Diameter**: [4000 lbf] [17800 N]
- **Outer Diameter**: [2400 lbf] [10675 N]
- **Input Pressure**: 10bar [145psig]*
- **Operating Temperature**: -10°C to 90°C [-14°F to 194°F]
- **Replacement Seal Kit**: 850450-63-1-00
- **Replacement Clamp Assembly**: 868-LC
- **Replacement Cylinder Assembly**: 868CYL

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.

**Sensor Accessories**
- Round Reed Switch with Quick Disconnect 810169
- T-slot Reed Switch with Quick Disconnect 8EA-109-1
- Quick Disconnect 2M Extension Cable CABL-010
- Quick Disconnect 5M Extension Cable CABL-013

See Pneumatic Accessories section for more options
**803 SERIES**

Pneumatic Toggle Clamps | Product Overview

**Features:**
- Pneumatic version of Model 603 manual straight line action clamp
- Sensor ready for round or T-slot style sensors

**Applications:**
- Assembly
- Welding

**Also Available:**
- See page MC-ACC-1 for spindle accessories
- See page MC-PSC-40 for sensing options
- High temperature version available
- Upon Request, add –HT to model number. Example: 803-U-HT

**803**

803-ME

---

**Technical Information | Holding Capacities | Dimensions**

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Holding Capacity</th>
<th>Maximum Exerting Force @ 5bar [72PSI]</th>
<th>Plunger Travel</th>
<th>Plunger Thread</th>
<th>Weight</th>
<th>Bore Size</th>
<th>Air Consumption† dm³ [ft³]</th>
<th>Port Size</th>
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<tr>
<td>803</td>
<td>600 lbf</td>
<td>2670 N</td>
<td>0.75</td>
<td>M8</td>
<td>19.1</td>
<td>0.84kg</td>
<td>0.015</td>
<td>1/8 NPT</td>
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<tr>
<td>803-ME</td>
<td>675 lbf</td>
<td>3015 N</td>
<td>1.26</td>
<td>32</td>
<td>0.42</td>
<td>0.005</td>
<td>G-1/8</td>
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</table>

†Per double stroke at 5bar [72PSI]

**Max Cylinder Pressure:** 10bar [145psig]

**Max Operating Temp:** -10°C to 90°C [-14°F to 194°F]

**Replacement Seal Kit:** 802450-32-1-00

**Replacement Clamp Assembly:** 803-LC, 803-M-LC

**Replacement Cylinder Assembly:** 807CYL

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.*

**Sensor Accessories**
- Round Reed Switch with Qk Disconnect 810169
- T-slot Reed Switch with Qk Disconnect 8EA-109-1
- Quick Disconnect 2M Extension Cable CABL-010
- Quick Disconnect 5M Extension Cable CABL-013

See Pneumatic Accessories section for more options

---

Dimensions and technical information are subject to change without notice.
8031 SERIES

Pneumatic Toggle Clamps | Product Overview

Features:
- Fully enclosed straight line action clamp for the dirtiest environments
- Compact design with high holding capacity
- Sensor ready for round style sensors

Applications:
- Assembly
- Welding

Also Available:
- See page MC-ACC-1 for spindle accessories
- See page MC-PSC-40 for sensing options

Technical Information | Holding Capacities | Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Holding Capacity</th>
<th>Maximum Exerting Force @ 5bar [72PSI]</th>
<th>Plunger Travel</th>
<th>Plunger Thread</th>
<th>Weight</th>
<th>Bore Size</th>
<th>Air Consumption†</th>
<th>Port Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>8031</td>
<td>[2000 lbf] 8900 N</td>
<td>[731 lbf] 3285 N</td>
<td>[0.75] 19,1 M8</td>
<td>[1.17lb] 2,58kg</td>
<td>[1.26] 32</td>
<td>[0.006] 0,18</td>
<td>1/8 NPT</td>
<td></td>
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</table>

Max Cylinder Pressure: 10bar [145psig]*
Max Operating Temp: -10°C to 90°C [-14°F to 194°F]

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp's holding capacity. See Technical Appendix Section for details.

Sensor Accessories
- Round Reed Switch with Quick Disconnect 810169
- Quick Disconnect 2M Extension Cable CABL-010
- Quick Disconnect 5M Extension Cable CABL-013

See Pneumatic Accessories section for more options

Dimensions and technical information are subject to change without notice
# 830 SERIES

Pneumatic Toggle Clamps | Product Overview

**Features:**
- Pneumatic version of Model 630 manual straight line action clamp
- Sensor ready for round or T-slot style sensors
- Built-in flow restriction eliminates need for external flow controls

**Applications:**
- Assembly
- Welding

**Also Available:**
- See page MC-ACC-1 for spindle accessories
- See page MC-PSC-40 for sensing options

## Technical Information | Holding Capacities | Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Holding Capacity</th>
<th>Maximum Exerting Force @ 5bar [72PSI]</th>
<th>Plunger Travel</th>
<th>Plunger Thread</th>
<th>Weight</th>
<th>Bore Size</th>
<th>Air Consumption†</th>
<th>Port Size</th>
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</thead>
<tbody>
<tr>
<td>830</td>
<td>[2500 lbf]</td>
<td>[800 lbf]</td>
<td>[0.75]</td>
<td>3/8-16</td>
<td>2.79kg</td>
<td>[1.57]</td>
<td>0.029</td>
<td>1/8 NPT</td>
</tr>
<tr>
<td>830-ME</td>
<td>11100 N</td>
<td>3582 N</td>
<td>19,1</td>
<td>M10</td>
<td>40</td>
<td>0.83</td>
<td>G-1/8</td>
<td></td>
</tr>
</tbody>
</table>

†Per double stroke at 5bar [72PSI]

**Max Cylinder Pressure:** 10bar [145psig]
**Max Operating Temp:** -10°C to 90°C [-14°F to 194°F]
**Replacement Seal Kit:** 810450-40-1-00
**Replacement Clamp Assembly:** 830-LC, 830-M-LC
**Replacement Cylinder Assembly:** 810CYL

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.

**Sensor Accessories**
- Round Reed Switch with Quick Disconnect
- T-slot Reed Switch with Quick Disconnect
- Quick Disconnect 2M Extension Cable
- Quick Disconnect 5M Extension Cable

See Pneumatic Accessories section for more options

### Item Number
- 810169
- 8EA-109-1
- CABL-010
- CABL-013

*Dimensions and technical information are subject to change without notice*
### Technical Information | Holding Capacities | Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Holding Capacity</th>
<th>Maximum Exerting Force @ 5bar [72PSI]</th>
<th>Plunger Travel</th>
<th>Plunger Thread</th>
<th>Weight</th>
<th>Bore Size</th>
<th>Air Consumption†</th>
<th>Port Size</th>
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</thead>
<tbody>
<tr>
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<td>1232 lbf [5522 N]</td>
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<td>63</td>
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<td>M16 G-1/4</td>
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<td>7.56</td>
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<td>3.08</td>
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</table>

This item is available upon request. †Per double stroke at 5bar [72PSI]

**Max Cylinder Pressure:** 10bar [145psig]

**Max Operating Temp:** -10°C to 90°C [-14°F to 194°F]

**Replacement Seal Kit:** 850450-63-1-00

**Replacement Clamp Assembly:** 850-LC, 850-M-LC

**Replacement Cylinder Assembly:** 868CYL

*In no case should the inlet pressure be high enough to create an exerting force that exceeds the clamp’s holding capacity. See Technical Appendix Section for details.

#### Sensor Accessories

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<th>Item Number</th>
<th>Description</th>
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<tbody>
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<td>Round Reed Switch with Quick Disconnect</td>
</tr>
<tr>
<td>8EA-109-1</td>
<td>T-slot Reed Switch with Quick Disconnect</td>
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<td>CABL-010</td>
<td>Quick Disconnect 2M Extension Cable</td>
</tr>
<tr>
<td>CABL-013</td>
<td>Quick Disconnect 5M Extension Cable</td>
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</tbody>
</table>

See Pneumatic Accessories section for more options.
800, 1200 SERIES

Pneumatic Toggle Clamps | Product Overview

Features:
- Low profile and compact for mounting in tight spaces
- Uniform clamping force throughout full stroke
- Accommodates variable workpiece thickness
- Single acting - air advance, spring return

Applications:
- Assembly
- Welding
- Light machining

How it Works:
1. Clamp arm retracts fully for loading and unloading.
2. Clamp arm moves straight forward.
3. Clamp arm pivots down to hold workpiece.

Technical Information | Holding Capacities | Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Inlet Pressure bar [PSI]</th>
<th>Exerting Force</th>
<th>Max. Pressure at Max. Mechanical Advantage† bar [PSI]</th>
<th>Clamping Range</th>
<th>Weight</th>
<th>Port Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>800</td>
<td>[70~150]</td>
<td>4,8~10,3</td>
<td>[850<del>1500 lb] 3780</del>6670N</td>
<td>[0.09] 2,3</td>
<td>[2.50lb] 1,13kg</td>
<td>1/4 NPT</td>
</tr>
<tr>
<td>800-E</td>
<td>[650<del>1200 lb] 2890</del>5340N</td>
<td>[750<del>1600 lb] 3340</del>7120N</td>
<td>[0.16] 4,0</td>
<td>[0.25] 6,4</td>
<td>[4.00lb] 1,81kg</td>
<td></td>
</tr>
<tr>
<td>1200①</td>
<td>[550<del>1200 lb] 2450</del>5340N</td>
<td>[850~1500 lbf]</td>
<td>[0.38] 9,6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

① This item is available upon request

Note: For use with pneumatic power only. This is a single acting device (air clamp, spring return), a 3-way air valve required for control.

Repair Kits: 800-00, 1200-00

Dimensions and technical information are subject to change without notice.