Versatility and simplicity in action
Every SOUTHCO® VISE ACTION® Series latch solution starts with the single-turn latching and compressing action that is built into each model. At the heart of it all is our VISE ACTION® design that has proven itself in millions of installations.

Product features
- Suitable for a wide range of load configurations
- Excellent corrosion resistance
- Durable and reliable operation
- Multiple size, material and access configurations
- Compression achieved with minimal manual torque
- Suitable for NEMA 4 / IP65 applications

Match material and finish options for style and functionality requirements

Select one of these three housing styles to fit your access requirements
A series of basic housing styles of the VISE ACTION® compression latch have been developed to meet specific door configuration and mounting requirements - for depth, thickness, strength, grip dimension, and surface protrusion.
- Right and left hand actuation
- Optional pre-assembled cam for quick installation
- Wide choice of accessories

13.5mm Size
- Optimum compression for use in confined space applications

19.1mm Size
- Largest choice of head styles
- Maximum grip range in door to frame spacing
- Minimal protrusion style available

3-Hole Mount
- Simplified round-hole mounting
- Suitable for thick, soft or weak panels

Dimensions in millimeters (inch) unless otherwise stated
Choose from a wide range of head styles to fit your application and industry requirements

Convenient hand operated knob or T-handle styles for easy repetitive access

Tool operated for restricted access, flush mount or low profile clearances, and industry specific standards or requirements

Key operated for added security

Dimensions in millimeters (inch) unless otherwise stated

**Grip dimension is an important consideration in compression latch applications involving gaskets for environmental or RFI sealing.**

**For gasketed doors:**

- **Grip (Measured with gasket compressed)**
- **Gasket**
- **Frame**
- **Door**
- **Cam**

**Adjustable cam designs**
- Maximum flexibility in tolerance or gasket compression
- Cam choice to suit a broad range of grip dimensions

**Fixed cam designs**
- Precise fit and minimum internal protrusion
- Wide cam selection for accurate grip dimension

**Determine your grip options for a perfect fit**

- **3 (.11) Double bit**
- **7 (.28) Triangle**
- **8 (.32) Triangle**

- **13.5mm single hole door preparation**
  - Slotted recess
  - Hex recess
  - Knob style
  - Tubular key operated style

- **3-Hole body door preparation**
  - SOUTHCO® Tubular key
  - T-handle key-locking
  - T-handle non-locking
  - 3 (.11) Double bit
  - 7 (.28) Triangle
  - 7 (.28) Square
  - 8 (.32) Hex recess

- **19.1mm single hole body door preparation**
  - Southco® Tubular key
  - Slotted recess
  - Bellcore 216
  - Bellcore electronics
  - Railway standard
  - 8 (.32) Hex recess
  - 7 (.28) Square
  - 8 (.32) Square

- **ACTUAL SIZE**
- **ACTUAL SIZE**
- **ACTUAL SIZE**
E3 VISE ACTION® Compression Latch
Machined stainless steel housing · Tool operated
Adjustable grip · 19.1mm size

- Consistent pre-set compression
- Easy grip adjustment
- Premium finish and corrosion resistance
- EN 45545-3 E60 Compliant

Material and Finish
Stainless steel (304 and 316 machined)

Performance Details
Maximum static load: 600 N (136 lbf)

Sealing Notes
NEMA 4 and IP65 enabled using gasket supplied

Keys and Accessories
See page 90

Installation Notes
Caution: Position cam so latching function can be achieved comfortably by hand. Recommended tightening torque for the mounting nut is 20 N·m (176 in-lbf).

Part Number Selection
See table

Dimensions in millimeters (inch) unless otherwise stated
E3 VISE ACTION® Compression Latch
Machined stainless steel housing · Tool operated
Fixed grip · 19.1mm size

- Consistent pre-set compression
- Premium finish and corrosion resistance
- Reduced internal protrusion
- EN 45545-3 E60 Compliant

Material and Finish
Stainless steel (304 and 316 machined)

Performance Details
Maximum static load: 450 N (100 lbf)

Sealing Notes
NEMA 4 and IP65 enabled using gasket supplied

Keys and Accessories
See page 90

Installation Notes
Recommended tightening torque for the mounting nut is 20 N·m (176 in·lbf), and for the mounting screw is 10 N·m (88 in·lbf)

Part Number Selection
See table
Select grip from table, if your grip is between two options choose smaller.

### Grip Table

<table>
<thead>
<tr>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 (.79)</td>
<td>00</td>
<td>30 (.118)</td>
<td>05</td>
<td>40 (1.57)</td>
<td>10</td>
</tr>
<tr>
<td>22 (.87)</td>
<td>01</td>
<td>32.5 (1.28)</td>
<td>06</td>
<td>42 (1.65)</td>
<td>11</td>
</tr>
<tr>
<td>24 (.94)</td>
<td>02</td>
<td>34 (.134)</td>
<td>07</td>
<td>44 (1.73)</td>
<td>12</td>
</tr>
<tr>
<td>26 (1.02)</td>
<td>03</td>
<td>36 (1.42)</td>
<td>08</td>
<td>46 (1.81)</td>
<td>13</td>
</tr>
<tr>
<td>28 (1.10)</td>
<td>04</td>
<td>38 (1.50)</td>
<td>09</td>
<td>48 (1.89)</td>
<td>14</td>
</tr>
<tr>
<td>30 (1.18)</td>
<td>05</td>
<td></td>
<td></td>
<td>50 (1.97)</td>
<td>15</td>
</tr>
<tr>
<td>32.5 (1.28)</td>
<td>06</td>
<td></td>
<td></td>
<td>52 (2.05)</td>
<td>16</td>
</tr>
<tr>
<td>34 (.134)</td>
<td>07</td>
<td></td>
<td></td>
<td>54 (2.13)</td>
<td>17</td>
</tr>
<tr>
<td>36 (1.42)</td>
<td>08</td>
<td></td>
<td></td>
<td>56 (2.20)</td>
<td>18</td>
</tr>
<tr>
<td>38 (1.50)</td>
<td>09</td>
<td></td>
<td></td>
<td>58 (2.28)</td>
<td>19</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated

www.southco.com/E3
E3 VISE ACTION® Compression Latch

Metal injection molding stainless steel housing · Tool or hand operated
Adjustable grip · 19.1mm size

- Consistent pre-set compression
- Easy grip adjustment
- Tool or hand operated
- EN 45545-3 E60 Compliant

**Material and Finish**
Stainless steel 316 and 304

**Performance Details**
Maximum static load: 556 N (125 lbf)

**Sealing Notes**
NEMA 4 and IP65 enabled using gasket supplied

**Installation Notes**
Caution: Position cam so latching function can be achieved comfortably by hand.
Recommended tightening torque for the mounting nut is 20 N·m (176 in-lbf).

**Keys and Accessories**
See page 90

---

**Door thickness**
18 (.70) Maximum (door plus flange gasket)

**Grip range**
(measured in latched position)

**径向 cam**
Offset cam reversed
Deep offset cam reversed

**Head Styles**

- 7 (.28) Triangle
- 8 (.32) Hex recess
- Knob
- Slotted recess
- 8 (.32) Square
- Railway standard
- 8 (.32) Triangle
- 3/8” Hex recess
- 7 (.28) Tapered triangle

**Part Number Selection**
See table

**Dimensions in millimeters (inch) unless otherwise stated**
**E3 VISE ACTION® Compression Latch**

Metal injection molding stainless steel housing · Tool or hand operated
Fixed grip · 19.1mm size

- Consistent pre-set compression
- Tool or hand operated
- Reduced internal protrusion
- EN 45545-3 E60 Compliant

**Material and Finish**
Stainless steel 316 and 304

**Performance Details**
Maximum static load: 450 N (100 lbf)

**Sealing Notes**
NEMA 4 / IP65 enabled using gasket supplied

**Installation Notes**
Recommended tightening torque for the mounting nut is 20 N·m (176 in-lbf), and for the mounting screw in 10 N·m (88 in-lbf)

**Keys and Accessories**
See page 90

---

**Part Number Selection**
See table
Select grip from table, if your grip is between two options choose smaller.

---

**Grip Table**

<table>
<thead>
<tr>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 (.59)</td>
<td>00</td>
<td>25 (.98)</td>
<td>05</td>
<td>35 (.138)</td>
<td>10</td>
<td>45 (.177)</td>
<td>15</td>
</tr>
<tr>
<td>17 (.67)</td>
<td>02</td>
<td>27 (.106)</td>
<td>06</td>
<td>37 (.146)</td>
<td>11</td>
<td>47 (.185)</td>
<td>16</td>
</tr>
<tr>
<td>19 (.75)</td>
<td>04</td>
<td>29 (.114)</td>
<td>07</td>
<td>39 (.153)</td>
<td>12</td>
<td>49 (.193)</td>
<td>17</td>
</tr>
<tr>
<td>21 (.83)</td>
<td>06</td>
<td>31 (.122)</td>
<td>08</td>
<td>41 (.161)</td>
<td>13</td>
<td>51 (.201)</td>
<td>18</td>
</tr>
<tr>
<td>23 (.91)</td>
<td>08</td>
<td>33 (.130)</td>
<td>09</td>
<td>43 (.169)</td>
<td>14</td>
<td>53 (.209)</td>
<td>19</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
E3 VISE ACTION® Compression Latch

Metal injection molding stainless steel housing · Tool or hand operated
Adjustable grip · 13.5mm size

- Consistent pre-set compression
- Easy grip adjustment
- Tool or hand operated
- Reduced dimensions
- EN 45545-3 E60 Compliant

Material and Finish
Stainless steel 316 and 304

Performance Details
Maximum static load: 356 N (80 lbf)

Sealing Notes
NEMA 4 / IP65 enabled using gasket supplied

Installation Notes
Caution: Position cam so latching function can be achieved comfortably by hand.

Accessories
See page 90

Part Number Selection
See table

<table>
<thead>
<tr>
<th>Head style</th>
<th>5 Tubular key</th>
<th>6 Hex recess</th>
<th>7 Knob style</th>
<th>9 Slotted recess</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation</td>
<td>Type A clockwise to latch</td>
<td>Type B counter-clockwise to latch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finish</td>
<td>2 Electropolished</td>
<td>12 Electropolished and hand buffed (bright)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated

<table>
<thead>
<tr>
<th>Grip</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.2 (.13)</td>
<td>6.4 (.25)</td>
</tr>
<tr>
<td>2</td>
<td>6.4 (.25)</td>
<td>9.5 (.37)</td>
</tr>
<tr>
<td>3</td>
<td>9.5 (.37)</td>
<td>12.7 (.50)</td>
</tr>
<tr>
<td>4</td>
<td>12.7 (.50)</td>
<td>15.9 (.63)</td>
</tr>
<tr>
<td>5</td>
<td>15.9 (.63)</td>
<td>19 (.75)</td>
</tr>
<tr>
<td>6</td>
<td>19 (.75)</td>
<td>22.2 (.87)</td>
</tr>
<tr>
<td>7</td>
<td>22.2 (.87)</td>
<td>25.4 (1)</td>
</tr>
<tr>
<td>8</td>
<td>25.4 (1)</td>
<td>28.6 (1.13)</td>
</tr>
</tbody>
</table>
E3 VISE ACTION® Compression Latch
Zinc and plated steel · Tool or hand operated
Adjustable grip · 13.5mm size

- Consistent pre-set compression
- Easy grip adjustment
- Tool or hand operated
- Reduced dimensions
- EN 45545-3 E10 Compliant

Material and Finish
Zinc alloy, powder coated and steel, zinc plated

Performance Details
Maximum static load: 330 N (75 lbf)

Sealing Notes
NEMA 4 / IP65 sealing is enabled by using optional flange gasket.
Flange gasket part number: E3-0-30268-02

Installation Notes
Caution: Position cam so latching function can be achieved comfortably by hand.

Accessories
See page 90

Part Number Selection
See table

Other options available. For complete details on variety, part numbers, installation and specification, go to www.southco.com/E3

Dimensions in millimeters (inch) unless otherwise stated
E3 VISE ACTION® Compression Latch
Zinc and plated steel · Tool or hand operated
Adjustable grip · 19.1mm size

- Consistent pre-set compression
- Easy grip adjustment
- Tool operated for security
- EN 45545-3 E10 Compliant

Material and Finish
Zinc alloy, powder coated or chrome plated and steel, zinc plated

Performance Details
Maximum static load: 450 N (100 lbf)

Sealing Notes
NEMA 4 / IP65 sealing is enabled by using optional flange gasket.
Flange gasket part number: E5-17

Installation Notes
Caution: Position cam so latching function can be achieved comfortably by hand.
Recommended tightening torque for the mounting nut is 20 N·m (176 in-lbf).

Keys and Accessories
See page 90

Railway Standard - Bellcore 216
Other Tool Head Styles
(slotted recess shown)
Knob Style

T-Handle Style
Wing Knob Style

Dimensions in millimeters (inch) unless otherwise stated

Other options available. For complete details on variety, part numbers, installation and specification, go to www.southco.com/E3
### Part Number Selection
See table

#### Head Styles (other head styles available)

<table>
<thead>
<tr>
<th>Head Style</th>
<th>Type</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Cam Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-handle, non-locking</td>
<td>1</td>
<td>T-handle, non-locking</td>
<td>11.4 (.45) to 25.4 (1.0)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>3 (.11) Double bit</td>
<td>15</td>
<td>Bellcore 216</td>
<td>11.4 (.45) to 27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>7 (.28) Triangle</td>
<td>16</td>
<td>Bellcore electronics</td>
<td>11.4 (.45) to 27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>7 (.28) Square</td>
<td>20</td>
<td>8 (.32) Triangle</td>
<td>11.4 (.45) to 27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>SOUTHCORE Tubular key</td>
<td>48</td>
<td>5 (.19) Double bit</td>
<td>11.4 (.45) to 27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>8 (.32) Hex recess</td>
<td>51</td>
<td>Wing knob, key-locking, keyed CH751</td>
<td>11.4 (.45) to 27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>Standard knob</td>
<td>58</td>
<td>Wing knob, key-locking, keyed R001</td>
<td>11.4 (.45) to 27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>Slotted recess</td>
<td>59</td>
<td>Wing knob, without lock core</td>
<td>11.4 (.45) to 27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>8 (.32) Square driver</td>
<td>60</td>
<td>Standard knob</td>
<td>11.4 (.45) to 27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>Railway standard</td>
<td>61</td>
<td>Silver powder coated</td>
<td>11.4 (.45) to 27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
</tbody>
</table>

#### Rotation

- **Type A**: Turn clockwise to latch
- **Type B**: Turn counter-clockwise to latch

#### Finish

- 1: Chrome plated
- 5: Black powder coated
- 7: Silver powder coated

Dimensions in millimeters (inch) unless otherwise stated.

Other options available. For complete details on variety, part numbers, installation and specification, go to [www.southco.com/E3](http://www.southco.com/E3)
E3 VISE ACTION® Compression Latch
Zinc and plated steel · Tool or hand operated
Fixed grip · 19.1mm size

- Consistent pre-set compression
- Quick install
- Reduced internal protrusion
- EN 45545-3 E10 Compliant

Material and Finish
Zinc alloy, powder coated or chrome plated and steel plated

Performance Details
Maximum static load: 300 N (67 lbf)

Sealing Notes
NEMA 4 / IP65 sealing is enabled by using optional flange gasket. Flange gasket part number: E5-17

Installation Notes
Recommended tightening torque for the mounting nut is 20 N·m (176 in·lbf), and for the mounting screw in 10 N·m (88 in·lbf)

Keys and Accessories
See page 90

Other options available. For complete details on variety, part numbers, installation and specification, go to www.southco.com/E3

Dimensions in millimeters (inch) unless otherwise stated
### Head Styles (other head styles available)

<table>
<thead>
<tr>
<th>Head Style</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-handle, non-locking</td>
<td><img src="image" alt="T-handle, non-locking" /></td>
</tr>
<tr>
<td>3 (.11) Double bit</td>
<td><img src="image" alt="3 (.11) Double bit" /></td>
</tr>
<tr>
<td>7 (.28) Triangle</td>
<td><img src="image" alt="7 (.28) Triangle" /></td>
</tr>
<tr>
<td>7 (.28) Square</td>
<td><img src="image" alt="7 (.28) Square" /></td>
</tr>
<tr>
<td>SOUTHCO® Tubular key</td>
<td><img src="image" alt="SOUTHCO® Tubular key" /></td>
</tr>
<tr>
<td>8 (.32) Hex recess</td>
<td><img src="image" alt="8 (.32) Hex recess" /></td>
</tr>
<tr>
<td>Standard knob</td>
<td><img src="image" alt="Standard knob" /></td>
</tr>
<tr>
<td>T-handle, key-locking</td>
<td><img src="image" alt="T-handle, key-locking" /></td>
</tr>
<tr>
<td>Slotted recess</td>
<td><img src="image" alt="Slotted recess" /></td>
</tr>
<tr>
<td>8 (.32) Square driver</td>
<td><img src="image" alt="8 (.32) Square driver" /></td>
</tr>
<tr>
<td>Railway standard</td>
<td><img src="image" alt="Railway standard" /></td>
</tr>
<tr>
<td>Bellcore 216</td>
<td><img src="image" alt="Bellcore 216" /></td>
</tr>
<tr>
<td>Bellcore electronics</td>
<td><img src="image" alt="Bellcore electronics" /></td>
</tr>
<tr>
<td>8 (.32) Triangle</td>
<td><img src="image" alt="8 (.32) Triangle" /></td>
</tr>
<tr>
<td>Type A clockwise to latch</td>
<td><img src="image" alt="Type A clockwise to latch" /></td>
</tr>
<tr>
<td>Type A clockwise to latch</td>
<td><img src="image" alt="Type A clockwise to latch" /></td>
</tr>
<tr>
<td>Type B counter-clockwise to latch - Latch assembled</td>
<td><img src="image" alt="Type B counter-clockwise to latch - Latch assembled" /></td>
</tr>
<tr>
<td>Type B counter-clockwise to latch - Latch unassembled</td>
<td><img src="image" alt="Type B counter-clockwise to latch - Latch unassembled" /></td>
</tr>
</tbody>
</table>

### Part Number Selection

See table

### Grip Table

<table>
<thead>
<tr>
<th>Head Style</th>
<th>Finish</th>
<th>Grip</th>
<th>Total Grip</th>
<th>Maximum Door Thickness for Assembled Latch</th>
<th>Total Grip</th>
<th>Maximum Door Thickness for Assembled Latch</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-handle, non-locking</td>
<td>Chrome plated</td>
<td>E3</td>
<td>1</td>
<td>15 (.59)</td>
<td>35 (1.38)</td>
<td></td>
</tr>
<tr>
<td>3 (.11) Double bit</td>
<td>Black powder coated</td>
<td>R</td>
<td>0</td>
<td>17 (.67)</td>
<td>37 (1.46)</td>
<td></td>
</tr>
<tr>
<td>7 (.28) Triangle</td>
<td>Silver powder coated</td>
<td>H</td>
<td>0</td>
<td>19 (.75)</td>
<td>39 (1.53)</td>
<td></td>
</tr>
<tr>
<td>7 (.28) Square</td>
<td></td>
<td>G</td>
<td>0</td>
<td>21 (.83)</td>
<td>41 (1.61)</td>
<td></td>
</tr>
<tr>
<td>SOUTHCO® Tubular key</td>
<td></td>
<td></td>
<td>0</td>
<td>23 (.91)</td>
<td>43 (1.69)</td>
<td></td>
</tr>
<tr>
<td>8 (.32) Hex recess</td>
<td></td>
<td></td>
<td>0</td>
<td>25 (.98)</td>
<td>45 (1.77)</td>
<td></td>
</tr>
<tr>
<td>Standard knob</td>
<td></td>
<td></td>
<td>0</td>
<td>27 (1.06)</td>
<td>47 (1.85)</td>
<td></td>
</tr>
<tr>
<td>T-handle, key-locking</td>
<td></td>
<td></td>
<td>0</td>
<td>29 (1.14)</td>
<td>49 (1.93)</td>
<td></td>
</tr>
<tr>
<td>keyed CH751 (two flat keys supplied)</td>
<td></td>
<td></td>
<td>0</td>
<td>31 (1.22)</td>
<td>51 (2.01)</td>
<td></td>
</tr>
<tr>
<td>Wing knob, locking, keyed CH751 (1 overmolded key supplied)</td>
<td></td>
<td></td>
<td>0</td>
<td>33 (1.30)</td>
<td>53 (2.09)</td>
<td></td>
</tr>
<tr>
<td>Wing knob, non-locking</td>
<td></td>
<td></td>
<td>0</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wing knob, locking, keyed R001 (1 overmolded key supplied)</td>
<td></td>
<td></td>
<td>0</td>
<td>58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wing knob (no lock)</td>
<td></td>
<td></td>
<td>0</td>
<td>59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slotted recess</td>
<td></td>
<td></td>
<td>0</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 (.32) Square driver</td>
<td></td>
<td></td>
<td>0</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railway standard</td>
<td></td>
<td></td>
<td>0</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
E3 VISE ACTION® Compression Latch
Zinc and plated steel · Tool or hand operated
Three hole mount · Adjustable grip · 19.1mm size

- Consistent pre-set compression
- Easy grip adjustment

Material and Finish
Zinc alloy, powder coated or chrome plated and steel, zinc plated

Performance Details
Maximum static load: 450 N (100 lbf)

Installation Notes
For door thickness greater than 4 (.16) calculate screw length using the following formula:
Door thickness + 6 (.24)

Keys and Accessories
See page 90

Part Number Selection
See table

Dimensions in millimeters (inch) unless otherwise stated

<table>
<thead>
<tr>
<th>Grip</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Cam Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.9 (.31)</td>
<td>23.6 (.93)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td></td>
<td>62.7 (2.47)</td>
<td>76.2 (3.00)</td>
<td>Deep offset cam, reversed</td>
</tr>
<tr>
<td>2</td>
<td>21.8 (.86)</td>
<td>37.3 (1.47)</td>
<td>Offset cam, forward</td>
</tr>
<tr>
<td></td>
<td>49 (1.93)</td>
<td>64.8 (2.55)</td>
<td>Offset cam, reversed</td>
</tr>
<tr>
<td>3</td>
<td>35.3 (1.39)</td>
<td>51 (2.00)</td>
<td>Straight cam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H Head style</th>
<th>E3 - R H - G F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 T-handle non-locking</td>
<td></td>
</tr>
<tr>
<td>2 (.11) Double bit</td>
<td></td>
</tr>
<tr>
<td>3 (.28) Triangle</td>
<td></td>
</tr>
<tr>
<td>4 (.28) Square</td>
<td></td>
</tr>
<tr>
<td>5 SOUTHCO® Tubular key</td>
<td></td>
</tr>
<tr>
<td>6 (.32) Hex recess</td>
<td></td>
</tr>
<tr>
<td>8 T-Handle locking keyed</td>
<td></td>
</tr>
<tr>
<td>CH751 (two flat keys supplied)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F Finish</th>
<th>E3 - R H - G F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Chrome plated</td>
<td></td>
</tr>
<tr>
<td>5 Black powder coated</td>
<td></td>
</tr>
<tr>
<td>7 Silver powder coated</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R Rotation</th>
<th>E3 - R H - G F</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Type A clockwise to latch</td>
<td></td>
</tr>
<tr>
<td>23 Type B clockwise to latch</td>
<td></td>
</tr>
</tbody>
</table>
E3  **VISE ACTION**® Compression Latch

Aluminum · Tool Operated · Adjustable grip

19.1mm size

- Light Weight
- Premium finish and corrosion resistance
- Easy grip adjustment
- EN 45545-3 E30 Compliant

**Material and Finish**

Aluminum, Anodized or Powder Coated.

Black hard anodized assembly - Stainless Steel cam and hardware

All other finishes - Steel cam and hardware

**Performance Details**

Maximum static load: 530 N (120 lbf)

Complies with DIN EN 61373 vibration standard

**Sealing Notes**

NEMA 4 and IP65 achieved using gasket supplied

**Installation Notes**

Caution: Position cam so latching function can be achieved comfortably by hand.

Recommended tightening torque for the mounting nut is 20 N·m (176 in-lbf)

Keys and accessories see page 90

**Part Number Selection**

See table.

---

**Head Styles**

- **Type A** clockwise to latch
- **Type B** counter-clockwise to latch

**Finish**

- 3 7 (.28) Triangle
- 4 7 (.28) Square
- 6 8 (.32) Hex recess
- 9 Slotted Recess
- 10 8 (.32) Square
- 11 Railway standard
- 15 Bellcore 216

**Grip**

<table>
<thead>
<tr>
<th>Grip</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Cam Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16.4 (.64)</td>
<td>32.2 (1.26)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td></td>
<td>71.3 (2.80)</td>
<td>81.2 (3.19)</td>
<td>Deep offset cam, reversed</td>
</tr>
<tr>
<td>2</td>
<td>30.4 (1.19)</td>
<td>46.1 (1.81)</td>
<td>Offset cam, forward</td>
</tr>
<tr>
<td></td>
<td>57.6 (2.26)</td>
<td>73.3 (2.88)</td>
<td>Offset cam, reversed</td>
</tr>
<tr>
<td>3</td>
<td>43.9 (1.72)</td>
<td>59.6 (2.34)</td>
<td>Straight cam</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
**E3 VISE ACTION® Compression Latch**

**Aluminum - Tool Operated - Fixed grip**

**19.1mm size**

- Light Weight
- Premium finish and corrosion resistance
- Reduced internal protrusion
- EN 45545-3 E30 Compliant

**Material and Finish**

Aluminum, Anodized or Powder Coated.

Black hard anodized assembly - Stainless Steel cam and hardware

All other finishes - Steel Cam and hardware

**Performance Details**

Maximum static load: 450 N (102 lbf)

Complies with DIN EN 61373 vibration standard

(See www.southco.com for details)

**Sealing Notes**

NEMA 4 and IP65 achieved using gasket supplied

**Installation Notes**

Recommended tightening torque for the mounting nut is 20 N•m (176 in•lbf), and for the mounting screw is 10 N•m (88 in•lbf)

Keys and accessories see page 90

**Part Number Selection**

Select grip from table, if your grip is between two options choose smaller.

**Grip Table**

<table>
<thead>
<tr>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 (0.79)</td>
<td>00 (1.04)</td>
</tr>
<tr>
<td>22 (0.87)</td>
<td>01 (2.08)</td>
</tr>
<tr>
<td>24 (0.94)</td>
<td>02 (4.16)</td>
</tr>
<tr>
<td>26 (1.02)</td>
<td>03 (5.20)</td>
</tr>
<tr>
<td>28 (1.10)</td>
<td>04 (6.24)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 (1.18)</td>
<td>05 (1.17)</td>
</tr>
<tr>
<td>32.5 (1.28)</td>
<td>06 (1.17)</td>
</tr>
<tr>
<td>34.1 (1.34)</td>
<td>07 (1.17)</td>
</tr>
<tr>
<td>36.1 (1.42)</td>
<td>08 (1.17)</td>
</tr>
<tr>
<td>38 (1.50)</td>
<td>09 (1.17)</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
E3 VISE ACTION® Compression Latch
Machined stainless steel housing · Tool operated
Adjustable grip · 19.1mm size · Compact

- Minimal panel intrusion
- Consistent pre-set compression
- Easy grip adjustment
- Premium finish and corrosion resistance
- EN 45545-3 E60 Compliant

Material and Finish
Stainless steel (304 and 316 machined)

Performance Details
Maximum static load: 600 N (136 lbf)

Sealing Notes
NEMA 4 and IP65 enabled using gasket supplied

Keys and Accessories
See page 90

Installation Notes
Caution: Position cam so latching function can be achieved comfortably by hand. Recommended tightening torque for the mounting nut is 20 N·m (176 in-lbf).

Part Number Selection
See table
Order latch and cam separately

Latch Part Number (no cam)
Order latch and cam separately

Cam Part Number Table (order separately from latch)

<table>
<thead>
<tr>
<th>MINIMUM GRIp</th>
<th>MAXIMUM GRIp</th>
<th>Cam Type</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 (13)</td>
<td>19 (.75)</td>
<td>Deep offset cam, forward</td>
<td>E3-28-201-24</td>
</tr>
<tr>
<td>58.6 (2.31)</td>
<td>67.5 (2.70)</td>
<td>Deep offset cam, reversed</td>
<td>E3-28-202-24</td>
</tr>
<tr>
<td>17 (.67)</td>
<td>32.7 (1.29)</td>
<td>Offset cam, forward</td>
<td>E3-28-202-24</td>
</tr>
<tr>
<td>44.4 (1.75)</td>
<td>60.1 (2.37)</td>
<td>Offset cam, reversed</td>
<td>E3-28-203-24</td>
</tr>
<tr>
<td>30.7 (1.21)</td>
<td>46.4 (1.83)</td>
<td>Straight cam</td>
<td>E3-28-203-24</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
E3 VISE ACTION® Compression Latch
Machined stainless steel housing · Tool operated
Fixed grip · 19.1mm size · Compact

- Minimal panel intrusion
- Consistent pre-set compression
- Premium finish and corrosion resistance
- EN 45545-3 E60 Compliant

Material and Finish
Stainless steel (304 and 316 machined)

Performance Details
Maximum static load: 450 N (100 lbf)

Sealing Notes
NEMA 4 and IP65 enabled using gasket supplied

Keys and Accessories
See page 90

Installation Notes
Recommended tightening torque for the mounting nut is 20 N·m (176 in-lbf), and for the mounting screw is 10 N·m (88 in-lbf)

Part Number Selection
See table
Order latch and cam separately.
Select grip from Cam table if your grip is between two options choose the smaller grip

Latch Part Number (no cam)

Cam Part Number (order separately from latch)

Dimensions in millimeters (inch) unless otherwise stated

www.southco.com/E3
E3 VISE ACTION® Compression Latch
Zinc and plated steel housing · Tool operated Adjustable grip · 19.1mm size · Compact

- Minimal panel intrusion
- Consistent pre-set compression
- Easy grip adjustment
- Tool operated for security
- EN 45545-3 E10 Compliant

Material and Finish
Zinc alloy, powder coated or chrome plated and steel, zinc plated

Performance Details
Maximum static load: 450 N (100 lbf)

Sealing Notes
NEMA 4 and IP65 enabled using gasket supplied

Keys and Accessories
See page 90

Installation Notes
Caution: Position cam so latching function can be achieved comfortably by hand. Recommended tightening torque for the mounting nut is 20 N·m (176 in-lbf).

Part Number Selection
See table
Order latch and cam separately

Latch Part Number (no cam)
(Order latch and cam separately)

Cam Part Number Table (order separately from latch)

<table>
<thead>
<tr>
<th>Minimum Grip</th>
<th>Maximum Grip</th>
<th>Part Number</th>
<th>Cam Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 (.13)</td>
<td>19 (.75)</td>
<td>E3-28-201-12</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td>58.6 (2.31)</td>
<td>67.5 (2.67)</td>
<td>E3-28-202-12</td>
<td>Deep offset cam, reversed</td>
</tr>
<tr>
<td>17 (.67)</td>
<td>32.7 (1.29)</td>
<td>E3-28-202-12</td>
<td>Offset cam, forward</td>
</tr>
<tr>
<td>44.4 (1.75)</td>
<td>60.1 (2.37)</td>
<td>E3-28-202-12</td>
<td>Offset cam, reversed</td>
</tr>
<tr>
<td>30.7 (1.21)</td>
<td>46.4 (1.83)</td>
<td>E3-28-203-12</td>
<td>Straight cam</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
**E3 VISE ACTION® Compression Latch**

Zinc and plated steel housing. Tool operated

Fixed grip · 19.1mm size · Compact

- Minimal panel intrusion
- Consistent pre-set compression
- Tool operated for security
- EN 45545-3 E10 Compliant

**Material and Finish**

Zinc alloy, powder coated or chrome plated and steel, zinc plated

**Performance Details**

Maximum static load: 300 N (67 lbf)

**Sealing Notes**

NEMA 4 and IP65 enabled using gasket supplied

**Keys and Accessories**

See page 90

**Installation Notes**

Recommended tightening torque for the mounting nut is 20 N·m (176 in-lbf), and for the mounting screw is 10 N·m (88 in-lbf)

**Part Number Selection**

See table

Order latch and cam separately.

Select grip from Cam table if your grip is between two options choose the smaller grip

---

**Head Styles**

- **H**
  - Triangle 7 (.28)
  - Square 7 (.28)
  - Square 8 (.32)
  - Railway Standard
  - Bellcore 216
  - Triangle 8 (.32)

**Rotation**

- Type A clockwise to latch
- Type B counter-clockwise to latch

**Latch Part Number** (no cam)

- R Rotation
  - 12 Type A clockwise to latch
  - 29 Type B counter-clockwise to latch

**Cam Part Number** (order separately from latch)

<table>
<thead>
<tr>
<th>Grip</th>
<th>Part Number</th>
<th>Grip</th>
<th>Part Number</th>
<th>Grip</th>
<th>Part Number</th>
<th>Grip</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 (.16)</td>
<td>E5-2500</td>
<td>14 (.55)</td>
<td>E5-2505</td>
<td>24 (.94)</td>
<td>E5-2510</td>
<td>34 (.34)</td>
<td>E5-2515</td>
</tr>
<tr>
<td>6 (.31)</td>
<td>E5-2501</td>
<td>16 (.63)</td>
<td>E5-2506</td>
<td>26 (.102)</td>
<td>E5-2511</td>
<td>36 (.42)</td>
<td>E5-2516</td>
</tr>
<tr>
<td>8 (.31)</td>
<td>E5-2502</td>
<td>18 (.71)</td>
<td>E5-2507</td>
<td>28 (.110)</td>
<td>E5-2512</td>
<td>38 (.50)</td>
<td>E5-2517</td>
</tr>
<tr>
<td>10 (.39)</td>
<td>E5-2503</td>
<td>20 (.79)</td>
<td>E5-2508</td>
<td>30 (.18)</td>
<td>E5-2513</td>
<td>40 (.57)</td>
<td>E5-2518</td>
</tr>
<tr>
<td>12 (.47)</td>
<td>E5-2504</td>
<td>22 (.87)</td>
<td>E5-2509</td>
<td>32 (.126)</td>
<td>E5-2514</td>
<td>42 (.65)</td>
<td>E5-2519</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated

www.southco.com/E3
**E3 VISE ACTION® Compression Latch Accessories**

**Keys**

**Material and Finish**
Steel, zinc plated

**Part Number**
Steel tubular key (order separately)
- 13.5mm size E3 latches: E3-26-819-15
- 19.1mm size E3 latches: E3-5-15

**Material and Finish**
- Zinc alloy or nylon

**Notes**
*Does not work with 7mm tapered triangle

**Keys - Steel**
For latches with SOUTHCOR® tubular key head styles

**Keys - Zinc or Nylon**

**Head style**
2 3 (.11) Double bit
3 7 (.28) Triangle*
4 7 (.28) Square
7 8 (.32) Triangle
8 8 (.32) Square recess
9 5 (.19) Double bit (nylon only)
10 8 (.32) Square male (zinc only)
11 Bellcore electronics
12 Bellcore 216 (zinc only)
14 Railway Standard (zinc only)

**Finish**
1 Plated zinc
2 Natural zinc
3 Nylon black

**Key Styles**

<table>
<thead>
<tr>
<th>Key Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3 (.11) Double bit</td>
</tr>
<tr>
<td>3</td>
<td>7 (.28) Triangle</td>
</tr>
<tr>
<td>4</td>
<td>7 (.28) Square</td>
</tr>
<tr>
<td>7</td>
<td>8 (.32) Triangle</td>
</tr>
<tr>
<td>8</td>
<td>8 (.32) Square recess</td>
</tr>
<tr>
<td>9</td>
<td>5 (.19) Double bit</td>
</tr>
<tr>
<td>10</td>
<td>8 (.32) Square male</td>
</tr>
<tr>
<td>11</td>
<td>Bellcore electronics</td>
</tr>
<tr>
<td>12</td>
<td>Bellcore 216</td>
</tr>
<tr>
<td>14</td>
<td>Railway Standard</td>
</tr>
</tbody>
</table>

**Overmolded Keys**
Key CH751:
- Single: PK-10-10-05
- Pair: PK-10-01-05

Key R001:
- Single: PK-10-10-05-KR001
- Pair: PK-10-01-05-KR001

**Flat Keys**
Key CH751:
- Single: PK-10-10-01

Dimensions in millimeters (inch) unless otherwise stated
E3 VISE ACTION® Compression Latch Accessories
Fixed bracket for flush mounting

Material and Finish
Stainless steel or galvanized steel with rubber o-ring

Sealing Notes
Environmental sealing is achieved by using latch with flange gasket (optional or included with latch see pages 78-89) and sealing the mounting screw threads.

Notes
For use with 19.1mm size single hole mount tool operated E3 VISE ACTION® compression latches, see pages 78-81, 84-87, 89

<table>
<thead>
<tr>
<th>A</th>
<th>Part Number</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.6</td>
<td>E3-77-251-12</td>
<td>Galvanized steel</td>
</tr>
<tr>
<td>*9.3</td>
<td>E3-77-252-12</td>
<td>Galvanized steel</td>
</tr>
<tr>
<td>6.6</td>
<td>E3-77-251-24</td>
<td>304 Stainless steel</td>
</tr>
<tr>
<td>*9.3</td>
<td>E3-77-252-24</td>
<td>304 Stainless steel</td>
</tr>
</tbody>
</table>

* For use with Railway standard or Bellcore 216 style only

Door preparation
For B dimensions:
Large adjustable grip 24±1.5 (.94±.06)
Fixed grip 36±4 (1.42±.15)

Double bit (key retained style)
Key can only be removed in the latch closed position.

To calculate the Total Grip, use the following formula: Frame Thickness + Compressed Gasket - A. Use this Total Grip with the appropriate E3 tables in the SOUTHCO® Handbook to determine cam type.

Dimensions in millimeters (inch) unless otherwise stated

www.southco.com/E3
E3 VISE ACTION® Compression Latch Accessories
Sealing & spur washers · Sealing covers · Sleeve nut

Material and Finish
Sealing washers: Neoprene, natural
Spur washer: Steel, zinc plated
Sealing cover: Thermoplastic elastomer, black

Notes
Spur washer provides for round hole installation in wood and similar materials of low density
Sealing cover cannot be used with Railway standard or Bellcore 216 styles

Sealing Washers
13.5mm size
\[ \begin{align*}
\phi 16 (.63) & \quad \phi 19 (.75) \\
13.5 (.53) & \quad .8 (.03)
\end{align*} \]

19.1mm size
\[ \begin{align*}
\phi 22.2 (.88) & \quad \phi 28.2 (1.11) \\
.8 (1.11) & \quad .8 (.03)
\end{align*} \]

Spur Washer
19.1mm size
\[ \begin{align*}
\phi 31 (1.22) & \quad \phi 22.2 (.88) \\
19.1 (.75) & \quad .8 (.03)
\end{align*} \]

Sealing Cover

Latch Installation Hole Size

<table>
<thead>
<tr>
<th>( \phi G )</th>
<th>Distance across flat H</th>
<th>A</th>
<th>B</th>
<th>( \phi C )</th>
<th>D</th>
<th>E</th>
<th>( \phi F )</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 (.63)</td>
<td>13.5 (.53)</td>
<td>40 (1.58)</td>
<td>20 (.85)</td>
<td>29 (1.13)</td>
<td>10.5 (.42)</td>
<td>6.1 (.24)</td>
<td>22.3 (.88)</td>
</tr>
<tr>
<td>22.5 (.88)</td>
<td>19.6 (.77)</td>
<td>47 (1.84)</td>
<td>28 (1.09)</td>
<td>35 (1.38)</td>
<td>11.7 (.46)</td>
<td>6.9 (.27)</td>
<td>28.7 (1.13)</td>
</tr>
</tbody>
</table>

Type
<table>
<thead>
<tr>
<th>Part Number</th>
<th>Adjustment Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sealing washer 13.5mm size</td>
<td>E3-0-30268-02</td>
</tr>
<tr>
<td>Sealing washer 19.1mm size</td>
<td>E5-17</td>
</tr>
<tr>
<td>Spur washer 19.1mm size</td>
<td>90-6-875</td>
</tr>
<tr>
<td>Sealing cover 13.5mm size</td>
<td>90-1</td>
</tr>
<tr>
<td>Sealing cover 19.1mm size</td>
<td>90-3</td>
</tr>
</tbody>
</table>

Sleeve Nut M22 Thread (for 19.1mm size E3 only)

<table>
<thead>
<tr>
<th>( \phi A )</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.7 (.50)</td>
<td>E3-34-263-36</td>
</tr>
<tr>
<td>25 (.98)</td>
<td>E3-34-264-36</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
E3 VISE ACTION® Compression Latch Accessories
Padlock brackets · Finger pulls

Material and Finish
Padlock bracket: Stainless steel, black powder coated
Pull tab: Nylon, black

Sealing Notes
To provide sealing use two flange gaskets and add compressed thickness of each flange gasket and bracket thickness to your door thickness.

Notes
Padlock bracket: For 19.1mm size single hole mount tool operated only
Only unassembled styles can be used with round padlock bracket

<table>
<thead>
<tr>
<th>Type</th>
<th>Part Number</th>
<th>Adjustment Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Padlock bracket square</td>
<td>E3-77-101-31</td>
<td>Add 2 (.08) to door thickness</td>
</tr>
<tr>
<td>Padlock bracket round</td>
<td>E3-77-102-31</td>
<td>Add 2 (.08) to door thickness</td>
</tr>
<tr>
<td>Pull tab 13.5mm size - In-line</td>
<td>E3-27-61</td>
<td>Add 2 (.08) to door thickness</td>
</tr>
<tr>
<td>Pull tab 13.5mm size - Perpendicular</td>
<td>E3-27-62</td>
<td>Add 2 (.08) to door thickness</td>
</tr>
<tr>
<td>Pull tab 19.1mm size</td>
<td>E3-27-1</td>
<td>Add 2.4 (.09) to door thickness</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated

See table

Other options available. For complete details on variety, part numbers, installation and specification, go to www.southco.com/E3
Southco® Compression Latches

Vise Action Series, Flush Design
- Single-hole mount, large size
- Latch provides completely flush outer surface
- Designed for use in thicker panels such as wood
- Seven tool- or key-operated access styles

To determine the proper part number:
1. Choose a head style and finish (see table).
2. Determine the total grip by adding the following items together:
   - Outer door thickness
   - Compressed Frame Gasket
   - Frame thickness
3. Find your total grip in the pawl table. If your grip is between two choices, use the smaller one.
4. Use the 2 digit pawl type code that corresponds to your grip and outer door thickness to complete your latch assembly part number.

<table>
<thead>
<tr>
<th>HEAD STYLE</th>
<th>8 mm Hex Recess</th>
<th>7 mm Triangle</th>
<th>7 mm Square</th>
<th>8 mm Square Driver</th>
<th>10 mm Hex</th>
<th>Railway Standard</th>
<th>8 mm Triangle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bright Chrome</td>
<td>E3-143-XX1•</td>
<td>E3-144-XX1•</td>
<td>E3-1410-XX1•</td>
<td>E3-1418-XX1•</td>
<td>E3-1411-XX1•</td>
<td>E3-1420-XX1•</td>
<td></td>
</tr>
<tr>
<td>Black Powder Coated</td>
<td>E3-146-XX5</td>
<td>E3-143-XX5•</td>
<td>E3-1410-XX5•</td>
<td>E3-1418-XX5•</td>
<td>E3-1411-XX5•</td>
<td>E3-1420-XX5•</td>
<td></td>
</tr>
<tr>
<td>Satin Silver Polyester Powder Coated</td>
<td>E3-146-XX7•</td>
<td>E3-143-XX7•</td>
<td>E3-1410-XX7•</td>
<td>E3-1418-XX7•</td>
<td>E3-1411-XX7•</td>
<td>E3-1420-XX7•</td>
<td></td>
</tr>
<tr>
<td>Keys</td>
<td>E3-3-1•</td>
<td>E3-4-1•</td>
<td>E3-8-1•</td>
<td>10 mm (.375)</td>
<td>RIC Standard (European Railway Standard) Not available from Southco</td>
<td>E3-7-1•</td>
<td></td>
</tr>
</tbody>
</table>

Latches are individually packaged. For layer packaged latches (50 pieces minimum, sold in multiples of 50) add -13 to the part number. Example: E3-1410-XX1-13.
**PAWL TYPE NUMBERS**

<table>
<thead>
<tr>
<th>Pawl Type</th>
<th>TOTAL GRIP</th>
<th>Pawl Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX=00</td>
<td>19 (.75)</td>
<td>18 (.71)</td>
</tr>
<tr>
<td>XX=01</td>
<td>16 (.63)</td>
<td>16 (.63)</td>
</tr>
<tr>
<td>XX=02</td>
<td>14 (.55)</td>
<td>14 (.55)</td>
</tr>
<tr>
<td>XX=03</td>
<td>12 (.47)</td>
<td>12 (.47)</td>
</tr>
<tr>
<td>XX=04</td>
<td>10 (.39)</td>
<td>10 (.39)</td>
</tr>
<tr>
<td>XX=05</td>
<td>8 (.31)</td>
<td>8 (.31)</td>
</tr>
<tr>
<td>XX=06</td>
<td>6 (.24)</td>
<td>6 (.24)</td>
</tr>
<tr>
<td>XX=07</td>
<td>4 (.16)</td>
<td>4 (.16)</td>
</tr>
<tr>
<td>XX=08</td>
<td>2 (.08)</td>
<td>2 (.08)</td>
</tr>
<tr>
<td>XX=09</td>
<td>0 (.0)</td>
<td>0 (.0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pawl Type</th>
<th>TOTAL GRIP</th>
<th>Pawl Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX=10</td>
<td>39 (1.53)</td>
<td>2 (.08)</td>
</tr>
<tr>
<td>XX=11</td>
<td>41 (1.61)</td>
<td>4 (.16)</td>
</tr>
<tr>
<td>XX=12</td>
<td>43 (1.69)</td>
<td>6 (.24)</td>
</tr>
<tr>
<td>XX=13</td>
<td>45 (1.77)</td>
<td>8 (.31)</td>
</tr>
<tr>
<td>XX=14</td>
<td>47 (1.85)</td>
<td>10 (.39)</td>
</tr>
<tr>
<td>XX=15</td>
<td>49 (1.93)</td>
<td>12 (.47)</td>
</tr>
<tr>
<td>XX=16</td>
<td>51 (2.01)</td>
<td>14 (.55)</td>
</tr>
<tr>
<td>XX=17</td>
<td>53 (2.09)</td>
<td>16 (.63)</td>
</tr>
<tr>
<td>XX=18</td>
<td>55 (2.17)</td>
<td>18 (.71)</td>
</tr>
<tr>
<td>XX=19</td>
<td>57 (2.24)</td>
<td>20 (.79)</td>
</tr>
</tbody>
</table>

**Material and Finish**


**Product Strength Guidelines**

(To assist in your product selection; samples are available for your evaluation.)

- Maximum static load: 300 N (79 lbs.)
- Average ultimate load: 700 N (157 lbs.)

These loads apply to latch assemblies only. Retention to the panel is subject to user method of installation and material.

**Panel Preparation**

This is the recommended hole pattern (120° apart). Use M4 or No. 8 mounting screws (not supplied).

**Installation**

1. Insert the latch through the rear of the door. Place the mounting washer then the mounting nut onto the latch.
2. Adjust mounting nut so that the head of the latch is flush with the outside of the door. The holes in the washer and the nut must be aligned. The latch must be aligned to the latching position. Southco recommends using a minimum of three mounting screws in a pattern as shown above.
3. Place pawl on latch shaft and tighten pawl mounting screw while holding the pawl with a 17 (.67) wrench.

Recommended tightening torque for the Pawl Mounting Screw is 10 N•m (88.5 in-lbs).
Southco® Compression Latches

Vise Action Series Knob Style
- Single-hole mount, large size
- Wider flange for mounting in non-metallic materials
- Knob provides quick, unrestricted access

Installation

1. OPTIONAL: Round hole installation with spur washer (see page 36).

2. 

3. 

4. To adjust grip: Measure your grip. Open door. Position pawl on shaft to your grip measurement (with pawl in latched position). Tighten jam nuts hard against lock-washers and pawl using two wrenches.

For gasketed doors:

CAUTION: Set pawl position so that no more than 3.4 N•m (30 in.-lbs.) of torque is required to secure door.

Material and Finish
HOUSING: Die cast zinc, black powder coated.
SPRING: 302 Stainless steel, natural.
O-RING: Buna-N rubber, black.
PIN: 1008 Steel, zinc plated plus chromate dip.
WASHER and PAWL: 1010 Steel, zinc plate, chromate plus sealer.
CAM and SLEEVE: 1075 Case hardened steel, zinc immersion coating.
SHAFT: Low carbon steel, zinc plate, chromate plus sealer.
JAM NUTS: Steel, zinc plate, chromate plus sealer.
LOCKWASHERS: Spring steel, zinc plate, chromate plus sealer.
MOUNTING NUT: Brass, zinc plate, chromate plus sealer.
KNOB: Glass filled nylon, black.
KNOB SPACER: Nylon, black.
RETAINER: Polycarbonate, black.

<table>
<thead>
<tr>
<th>GRIP RANGE</th>
<th>PART NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN.</td>
<td>MAX.</td>
</tr>
<tr>
<td>10 (.39)</td>
<td>27 (1.06)</td>
</tr>
<tr>
<td>24 (.94)</td>
<td>40 (1.57)</td>
</tr>
<tr>
<td>36 (1.42)</td>
<td>52.5 (2.06)</td>
</tr>
<tr>
<td>49 (1.94)</td>
<td>65.5 (2.57)</td>
</tr>
<tr>
<td>63.5 (2.50)</td>
<td>79 (3.11)</td>
</tr>
</tbody>
</table>

Spur Washer listed on page 36.

* The same pawl (curved forward or reversed) is supplied for both short and long grips.
‡ For intermediate grip, straight pawl is supplied.

Product Strength Guidelines
(To assist in your product selection; samples are available for your evaluation.)

Maximum static load: 445 N (100 lbs.)
Average ultimate load: 890 N (200 lbs.)