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

Variety of materials and finishes to complement your application.

Die-cast zinc latch bodies standard finishes:

- Chrome plated
- Black powder coated
- Silver powder coated

Stainless steel latch bodies are made by metal injection molding or precise machining.

Aluminum latch bodies standard finishes:

- Black powder coated
- Silver powder coated
- Black hard anodized
- Clear powder coated

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

www.southco.com
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

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

For gasketed doors:

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

Dimensions in millimeters (inch) unless otherwise stated
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

Other options available. For complete details on variety, part numbers, installation and specification, go to www.southco.com/E3
**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 (1.04)</td>
<td>30 (1.18)</td>
<td>05 (1.71)</td>
<td>40 (1.57)</td>
<td>10 (1.85)</td>
</tr>
<tr>
<td>22 (.87)</td>
<td>01 (1.08)</td>
<td>32 (1.26)</td>
<td>06 (1.87)</td>
<td>42 (1.65)</td>
<td>11 (1.89)</td>
</tr>
<tr>
<td>24 (.94)</td>
<td>02 (1.16)</td>
<td>34 (1.34)</td>
<td>07 (1.89)</td>
<td>44 (1.73)</td>
<td>12 (1.91)</td>
</tr>
<tr>
<td>26 (1.02)</td>
<td>03 (1.20)</td>
<td>36 (1.42)</td>
<td>08 (1.93)</td>
<td>46 (1.81)</td>
<td>13 (1.96)</td>
</tr>
<tr>
<td>28 (1.10)</td>
<td>04 (1.24)</td>
<td>38 (1.50)</td>
<td>09 (1.99)</td>
<td>48 (1.89)</td>
<td>14 (2.03)</td>
</tr>
<tr>
<td>7 (.28)</td>
<td></td>
<td>7 (.28)</td>
<td></td>
<td>7 (.28)</td>
<td></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 · 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

Keys and Accessories
See page 90

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 Use unassembled</td>
<td>25 (.98)</td>
<td>05</td>
<td>35 (1.38)</td>
<td>10</td>
<td>45 (1.77)</td>
<td>15</td>
</tr>
<tr>
<td>17 (.67)</td>
<td>01 Use unassembled</td>
<td>27 (1.06)</td>
<td>06</td>
<td>37 (1.46)</td>
<td>11</td>
<td>47 (1.85)</td>
<td>16</td>
</tr>
<tr>
<td>19 (.75)</td>
<td>02</td>
<td>29 (1.14)</td>
<td>07</td>
<td>39 (1.53)</td>
<td>12</td>
<td>49 (1.93)</td>
<td>17</td>
</tr>
<tr>
<td>21 (.83)</td>
<td>03</td>
<td>31 (1.22)</td>
<td>08</td>
<td>41 (1.61)</td>
<td>13</td>
<td>51 (2.01)</td>
<td>18</td>
</tr>
<tr>
<td>23 (.91)</td>
<td>04</td>
<td>33 (1.30)</td>
<td>09</td>
<td>43 (1.69)</td>
<td>14</td>
<td>53 (2.09)</td>
<td>19</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
E3 VISE ACTION® Compression Latch
Cast 316 stainless steel housing · Hand 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

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

Part Number Selection
See table
Order latch and cam separately

Latch Part Number (no cam)

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**

Cast 316 stainless steel housing · Hand operated
Fixed grip · 19.1mm size

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

**Material and Finish**
Stainless steel

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

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

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

**Part Number Selection**
See table
Order latch and cam separately

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

---

**Latch Part Number** (no cam)

**R Rotation**
- Type "A" clockwise to latch
- Type "B" counter-clockwise to latch

**H Head Style**
- 1 Non-locking
- 60 Padlocking

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**Cam Part Number Table** (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>20 (.79)</td>
<td>ES-1200-24</td>
<td>30 (1.18)</td>
<td>ES-1205-24</td>
<td>40 (1.57)</td>
<td>ES-1210-24</td>
<td>50 (1.97)</td>
<td>ES-1215-24</td>
</tr>
<tr>
<td>22 (.87)</td>
<td>ES-1201-24</td>
<td>32 (1.26)</td>
<td>ES-1206-24</td>
<td>42 (1.65)</td>
<td>ES-1211-24</td>
<td>52 (2.05)</td>
<td>ES-1216-24</td>
</tr>
<tr>
<td>24 (.94)</td>
<td>ES-1202-24</td>
<td>34 (1.34)</td>
<td>ES-1207-24</td>
<td>44 (1.73)</td>
<td>ES-1212-24</td>
<td>54 (2.13)</td>
<td>ES-1217-24</td>
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<td>26 (1.02)</td>
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<td>36 (1.42)</td>
<td>ES-1208-24</td>
<td>46 (1.81)</td>
<td>ES-1213-24</td>
<td>56 (2.20)</td>
<td>ES-1218-24</td>
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<td>28 (1.10)</td>
<td>ES-1204-24</td>
<td>38 (1.50)</td>
<td>ES-1209-24</td>
<td>48 (1.89)</td>
<td>ES-1214-24</td>
<td>58 (2.28)</td>
<td>ES-1219-24</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>R Rotation</th>
<th>F Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A clockwise to latch</td>
<td>Electropolished</td>
</tr>
<tr>
<td>Type B counter-clockwise to latch</td>
<td>Electropolished and hand buffed (bright)</td>
</tr>
</tbody>
</table>

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

<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>

Dimensions in millimeters (inch) unless otherwise stated
**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

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**Head Styles**

- **SOUTHCO® Tubular key**
- **4 (.16)** Hex recess
- **Knob style**
- **Slotted recess**

**Rotation**

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

**Finish**

- **1** Chrome plated
- **2** Black powder coated
- **7** Silver powder coated

**Head style**

- **5** SOUTHCO® Tubular key
- **6** Hex recess
- **7** Knob style
- **9** Slotted recess

**Rotation**

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

**Part Number Selection**

See table

---

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

- **Grip range**
  - **16 (.62)**

**Frame**

- **Housing**
- **Mounting nut 5/8-24 thread**
- **Lockwasher**

**Door thickness**

- **13 (.50) Max. (door plus flange gasket)**
  - **4 (.17) Compression**

**Flange gasket**

- **0.4 (.02) compressed (order separately)**

**Housing**

- **Lockwashers (2)**
- **Jam nuts (2)**
- **Shaft, M6 thread**

**Door**

- **Ø 16 (.63)**
  - **+0.2**
  - **-0.0**

**Frame**

- **Door**
- **Ø 21 (.81)**

**Shaft**

- **M6 thread**

**Mounting**

- **Nuts (2)**
- **Jam nuts (2)**

**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

---

**Grip Range**

<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>

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

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

<table>
<thead>
<tr>
<th>Style</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-handle, non-locking</td>
<td>T-handle, key-locking</td>
<td>Slotted recess</td>
<td>3 (.11) Double bit</td>
<td>7 (.28) Square</td>
<td>SOUTHCO® Tubular key</td>
<td>8 (.32) Hex recess</td>
<td>Standard knob</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Rotation**

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

**Head Styles**

- 1 T-handle, non-locking
- 2 3 (.11) Double bit
- 3 7 (.28) Triangle
- 4 7 (.28) Square
- 5 SOUTHCO® Tubular key
- 6 8 (.32) Hex recess
- 7 Standard knob
- 8 T-handle, key-locking keyed CH751 (two flat keys supplied)
- 9 Slotted recess
- 10 8 (.32) Square driver
- 11 Railway standard

**Finish**

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

**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>11.4 (.45)</td>
<td>27.2 (1.07)</td>
<td>Deep offset cam, forward</td>
</tr>
<tr>
<td></td>
<td>66.3 (2.61)</td>
<td>76.2 (3.00)</td>
<td>Deep offset cam, reversed</td>
</tr>
<tr>
<td>2</td>
<td>25.4 (1)</td>
<td>41.1 (1.62)</td>
<td>Offset cam, forward</td>
</tr>
<tr>
<td></td>
<td>52.6 (2.07)</td>
<td>68.3 (2.69)</td>
<td>Offset cam, reversed</td>
</tr>
<tr>
<td>3</td>
<td>38.9 (1.53)</td>
<td>54.6 (2.15)</td>
<td>Straight cam</td>
</tr>
</tbody>
</table>

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
**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

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

<table>
<thead>
<tr>
<th>Style</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-handle, non-locking</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>3 (.11) Double bit</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>7 (.28) Triangle</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>7 (.28) Square</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>SOUTHCO Tubular key</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
<tr>
<td>8 (.32) Hex recess</td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td>Standard knob</td>
<td><img src="image7.png" alt="Image" /></td>
</tr>
<tr>
<td>T-handle, key-locking</td>
<td><img src="image8.png" alt="Image" /></td>
</tr>
<tr>
<td>Slotted recess</td>
<td><img src="image9.png" alt="Image" /></td>
</tr>
<tr>
<td>8 (.32) Square driver</td>
<td><img src="image10.png" alt="Image" /></td>
</tr>
<tr>
<td>Railway standard</td>
<td><img src="image11.png" alt="Image" /></td>
</tr>
<tr>
<td>Bellcore 216</td>
<td><img src="image12.png" alt="Image" /></td>
</tr>
<tr>
<td>Bellcore electronics</td>
<td><img src="image13.png" alt="Image" /></td>
</tr>
<tr>
<td>8 (.32) Triangle</td>
<td><img src="image14.png" alt="Image" /></td>
</tr>
<tr>
<td>Type A clockwise to latch - Latch assembled</td>
<td><img src="image15.png" alt="Image" /></td>
</tr>
<tr>
<td>Type A clockwise to latch - Latch unassembled</td>
<td><img src="image16.png" alt="Image" /></td>
</tr>
<tr>
<td>Type B counter-clockwise to latch - Latch assembled</td>
<td><img src="image17.png" alt="Image" /></td>
</tr>
<tr>
<td>Type B counter-clockwise to latch - Latch unassembled</td>
<td><img src="image18.png" alt="Image" /></td>
</tr>
</tbody>
</table>

### Finish

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chrome plated</td>
<td>1</td>
</tr>
<tr>
<td>Black powder coated</td>
<td>5</td>
</tr>
<tr>
<td>Silver powder coated</td>
<td>7</td>
</tr>
</tbody>
</table>

### Grip Table

<table>
<thead>
<tr>
<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>15 (.59)</td>
<td>00 Use unassembled</td>
<td>35 (1.38)</td>
<td>10</td>
</tr>
<tr>
<td>17 (.67)</td>
<td>01 Use unassembled</td>
<td>37 (1.46)</td>
<td>11</td>
</tr>
<tr>
<td>19 (.75)</td>
<td>02 1 (.04)</td>
<td>39 (1.53)</td>
<td>12</td>
</tr>
<tr>
<td>21 (.83)</td>
<td>03 2 (.08)</td>
<td>41 (1.61)</td>
<td>13</td>
</tr>
<tr>
<td>23 (.91)</td>
<td>04 4 (.16)</td>
<td>43 (1.69)</td>
<td>14</td>
</tr>
<tr>
<td>25 (.98)</td>
<td>05 5 (.20)</td>
<td>45 (1.77)</td>
<td>15</td>
</tr>
<tr>
<td>27 (1.06)</td>
<td>06 6 (.24)</td>
<td>47 (1.85)</td>
<td>16</td>
</tr>
<tr>
<td>29 (1.14)</td>
<td>07</td>
<td>49 (1.93)</td>
<td>17</td>
</tr>
<tr>
<td>31 (1.22)</td>
<td>08 7 (.28)</td>
<td>51 (2.01)</td>
<td>18</td>
</tr>
<tr>
<td>33 (1.30)</td>
<td>09</td>
<td>53 (2.09)</td>
<td>19</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated

www.southco.com/E3
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

<table>
<thead>
<tr>
<th>Grip</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Cam Type</th>
<th>Head style</th>
<th>Finish</th>
<th>Rotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.9 (.31)</td>
<td>23.6 (.93)</td>
<td>Deep offset cam, forward</td>
<td>1 T-handle non-locking</td>
<td>1 Chrome plated</td>
<td>3 Type A clockwise to latch</td>
</tr>
<tr>
<td></td>
<td>62.7 (2.47)</td>
<td>76.2 (3.00)</td>
<td>Deep offset cam, reversed</td>
<td>2 Double bit</td>
<td>5 Black powder coated</td>
<td>23 Type B counter-clockwise to latch</td>
</tr>
<tr>
<td>2</td>
<td>21.8 (.86)</td>
<td>37.3 (1.47)</td>
<td>Offset cam, forward</td>
<td>3 Triangle</td>
<td>7 Silver powder coated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>49 (1.93)</td>
<td>64.8 (2.55)</td>
<td>Offset cam, reversed</td>
<td>4 Square</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>35.3 (1.39)</td>
<td>51 (2.00)</td>
<td>Straight cam</td>
<td>5 Southco® Tubular key</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6 Hex recess</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8 T-handle locking keyed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
**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·lb)

**Part Number Selection**
See 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.

**Head Styles**
- Triangle 7 (.28)
- Square 7 (.28)
- Hex recess 8 (.32)
- Slotted Recess 8 (.32)
- Railway standard 52 (.20)
- Bellcore 216

**Finish**
- Black Hard Anodized 59
- Clear Powder Coat 06
- Black Powder Coat 56
- Silver Powder Coat 76
- Railway standard 15
- Bellcore 216

**Dimensions in millimeters (inch) unless otherwise stated**

---

**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 (1.18)</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 (1.34)</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 (1.56)</td>
<td>09</td>
<td>48 (1.89)</td>
<td>14</td>
</tr>
<tr>
<td>30 (1.18)</td>
<td></td>
<td>40 (1.57)</td>
<td></td>
<td>50 (1.97)</td>
<td>15</td>
</tr>
<tr>
<td>32.5 (1.28)</td>
<td></td>
<td>42 (1.65)</td>
<td></td>
<td>52 (2.05)</td>
<td>16</td>
</tr>
<tr>
<td>34 (1.34)</td>
<td></td>
<td>44 (1.73)</td>
<td></td>
<td>54 (2.13)</td>
<td>17</td>
</tr>
<tr>
<td>36 (1.42)</td>
<td></td>
<td>46 (1.81)</td>
<td></td>
<td>56 (2.20)</td>
<td>18</td>
</tr>
<tr>
<td>38 (1.56)</td>
<td></td>
<td>48 (1.89)</td>
<td></td>
<td>58 (2.28)</td>
<td>19</td>
</tr>
</tbody>
</table>

---

**www.southco.com/E3**
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

<table>
<thead>
<tr>
<th>Head Style</th>
<th>Minimum Grip</th>
<th>Maximum Grip</th>
<th>Cam Type</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Triangle</td>
<td>7 (.28)</td>
<td></td>
<td></td>
<td>E3-28-201-24</td>
</tr>
<tr>
<td>4 Square</td>
<td>7 (.28)</td>
<td></td>
<td></td>
<td>E3-28-201-24</td>
</tr>
<tr>
<td>10 Square</td>
<td>8 (.32)</td>
<td></td>
<td></td>
<td>E3-28-201-24</td>
</tr>
<tr>
<td>11 Railway</td>
<td></td>
<td></td>
<td></td>
<td>E3-28-201-24</td>
</tr>
<tr>
<td>15 Bellcore</td>
<td></td>
<td></td>
<td></td>
<td>E3-28-201-24</td>
</tr>
<tr>
<td>20 Triangle</td>
<td>8 (.32)</td>
<td></td>
<td></td>
<td>E3-28-201-24</td>
</tr>
</tbody>
</table>

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>E3-28-202-24</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 (1.67)</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>E3-28-202-24</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)

---

**Head Styles**

<table>
<thead>
<tr>
<th>Style</th>
<th>Diameter (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangle</td>
<td>7 (.28)</td>
</tr>
<tr>
<td>Square</td>
<td>7 (.28)</td>
</tr>
<tr>
<td>Square</td>
<td>8 (.32)</td>
</tr>
<tr>
<td>Railway Standard</td>
<td>10 (.39)</td>
</tr>
<tr>
<td>Bellcore 216</td>
<td>11 (.47)</td>
</tr>
<tr>
<td>Triangle</td>
<td>8 (.32)</td>
</tr>
</tbody>
</table>

**Part Number Selection**

- **Head Style**
  - 3 Triangle 7 (.28)
  - 4 Square 7 (.28)
  - 10 Square 8 (.32)
  - 11 Railway Standard 10 (.39)
  - 15 Bellcore 216 11 (.47)
  - 20 Triangle 8 (.32)

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

<table>
<thead>
<tr>
<th>Grip</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 (.16)</td>
<td>E3-28-700-24</td>
</tr>
<tr>
<td>6 (.31)</td>
<td>E3-28-701-24</td>
</tr>
<tr>
<td>8 (.31)</td>
<td>E3-28-702-24</td>
</tr>
<tr>
<td>10 (.39)</td>
<td>E3-28-703-24</td>
</tr>
<tr>
<td>12 (.47)</td>
<td>E3-28-704-24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grip</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 (.55)</td>
<td>E3-28-705-24</td>
</tr>
<tr>
<td>16 (.63)</td>
<td>E3-28-706-24</td>
</tr>
<tr>
<td>18 (.71)</td>
<td>E3-28-707-24</td>
</tr>
<tr>
<td>20 (.79)</td>
<td>E3-28-708-24</td>
</tr>
<tr>
<td>22 (.87)</td>
<td>E3-28-709-24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grip</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 (.94)</td>
<td>E3-28-710-24</td>
</tr>
<tr>
<td>26 (1.02)</td>
<td>E3-28-711-24</td>
</tr>
<tr>
<td>28 (1.10)</td>
<td>E3-28-712-24</td>
</tr>
<tr>
<td>30 (1.18)</td>
<td>E3-28-713-24</td>
</tr>
<tr>
<td>32 (1.26)</td>
<td>E3-28-714-24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grip</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>34 (1.34)</td>
<td>E3-28-715-24</td>
</tr>
<tr>
<td>36 (1.42)</td>
<td>E3-28-716-24</td>
</tr>
<tr>
<td>38 (1.50)</td>
<td>E3-28-717-24</td>
</tr>
<tr>
<td>40 (1.57)</td>
<td>E3-28-718-24</td>
</tr>
<tr>
<td>42 (1.65)</td>
<td>E3-28-719-24</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated

[www.southco.com/E3](http://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 Deep offset cam, forward</td>
<td></td>
</tr>
<tr>
<td>58.6 (2.31)</td>
<td>67.5 (2.70)</td>
<td>E3-28-202-12 Deep offset cam, reversed</td>
<td></td>
</tr>
<tr>
<td>17 (.67)</td>
<td>32.7 (1.29)</td>
<td>E3-28-201-12 Offset cam, forward</td>
<td></td>
</tr>
<tr>
<td>44.4 (1.75)</td>
<td>60.1 (2.37)</td>
<td>E3-28-202-12 Offset cam, reversed</td>
<td></td>
</tr>
<tr>
<td>30.7 (1.21)</td>
<td>46.4 (1.83)</td>
<td>E3-28-203-12 Straight cam</td>
<td></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

<table>
<thead>
<tr>
<th>Head Style</th>
<th>Grip</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangle</td>
<td>7 (.28)</td>
<td>E5-2500</td>
</tr>
<tr>
<td>Square</td>
<td>7 (.28)</td>
<td>E5-2501</td>
</tr>
<tr>
<td>Square</td>
<td>8 (.32)</td>
<td>E5-2502</td>
</tr>
<tr>
<td>Railway Standard</td>
<td>11</td>
<td>E5-2503</td>
</tr>
<tr>
<td>Bellcore 216</td>
<td>15</td>
<td>E5-2504</td>
</tr>
<tr>
<td>Triangle</td>
<td>8 (.32)</td>
<td>E5-2505</td>
</tr>
</tbody>
</table>

### 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>
</tr>
</thead>
<tbody>
<tr>
<td>4 (.16)</td>
<td>E5-2506</td>
<td>14 (.55)</td>
<td>E5-2507</td>
<td>24 (.94)</td>
<td>E5-2508</td>
</tr>
<tr>
<td>6 (.31)</td>
<td>E5-2509</td>
<td>16 (.63)</td>
<td>E5-2510</td>
<td>26 (.102)</td>
<td>E5-2511</td>
</tr>
<tr>
<td>8 (.31)</td>
<td>E5-2512</td>
<td>18 (.71)</td>
<td>E5-2513</td>
<td>28 (.110)</td>
<td>E5-2514</td>
</tr>
<tr>
<td>10 (.39)</td>
<td>E5-2515</td>
<td>20 (.79)</td>
<td>E5-2516</td>
<td>30 (.118)</td>
<td>E5-2517</td>
</tr>
<tr>
<td>12 (.47)</td>
<td>E5-2518</td>
<td>22 (.87)</td>
<td>E5-2519</td>
<td>32 (.126)</td>
<td>E5-2520</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 SOUTHCO® 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
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

**Part Number**
Overmolded key CH751:
- Single: PK-10-10-05
- Pair: PK-10-01-05

Overmolded key R001:
- Single: PK-10-10-05-KR001
- Pair: PK-10-01-05-KR001

Flat key
- Pair: PK-10-01

**Overmolded Keys**
- Key CH751: PK-10-10-05
- Key R001: PK-10-10-05-KR001

**Flat Keys**
- Key CH751: PK-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.

Installation
Hardware adjustable grip assemblies
E3 Housing
O-ring
Flush bracket
(2) Studs or screws (not supplied)
Dimensions in millimeters (inch) unless otherwise stated

To calculate the Total Grip, use the following formula:
Frame Thickness + Compressed Gasket - A.

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

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
Ø 16 (.63) 13.5 (.53) 40 (1.58) 20 (0.85) 29 (1.13) 10.5 (.42) 6.1 (.24) 22.3 (.88)

19.1mm size
Ø 19 (.75) 1.9 (.08) 19.6 (.77) 47 (1.84) 28 (1.09) 35 (1.38) 11.7 (.46) 6.9 (.27) 28.7 (1.13)

Spur Washer
19.1mm size
Ø 19.1 (.75) 1.9 (.08) 19.6 (.77) 47 (1.84) 28 (1.09) 35 (1.38) 11.7 (.46) 6.9 (.27) 28.7 (1.13)

Sealing Cover

Latch Installation Hole Size

<table>
<thead>
<tr>
<th>Ø G Distance across flat H</th>
<th>A</th>
<th>B</th>
<th>Ø C</th>
<th>D</th>
<th>E</th>
<th>Ø F</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 (.63)</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>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
Part Number
Adjustment Formula
Sealing washer 13.5mm size
E3-0-30268-02
Add 0.4 (.02) to door thickness
Sealing washer 19.1mm size
E5-17
Add 0.4 (.02) to door thickness
Spur washer 19.1mm size
90-6-875
Add 0.8 (.03) to door thickness
Sealing cover 13.5mm size
90-1
Add 2.3 (.09) to door thickness
Sealing cover 19.1mm size
90-3
Add 2.3 (.09) to door thickness

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

Part Number
See table

Material and Finish
Zinc alloy

Installation Notes
For use in double skin doors. Produce standard panel cutout in outer door and for the inner door produce 25 (.98) hole for sleeve nut.

Part Number
See 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
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) Hex Recess (Not available from Southco)</td>
<td></td>
<td>RIC Standard (European Railway Standard) Not available from Southco</td>
<td>E3-7-1•</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>
<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>
<td>XX=10 •</td>
<td>39 (1.53)</td>
<td>2 (.08)</td>
</tr>
<tr>
<td>XX=01 •</td>
<td>21 (.83)</td>
<td>16 (.63)</td>
<td>XX=11 •</td>
<td>41 (1.61)</td>
<td>4 (.16)</td>
</tr>
<tr>
<td>XX=02 •</td>
<td>23 (.91)</td>
<td>14 (.55)</td>
<td>XX=12 •</td>
<td>43 (1.69)</td>
<td>6 (.24)</td>
</tr>
<tr>
<td>XX=03 •</td>
<td>25 (.98)</td>
<td>12 (.47)</td>
<td>XX=13 •</td>
<td>45 (1.77)</td>
<td>8 (.31)</td>
</tr>
<tr>
<td>XX=04 •</td>
<td>27 (1.06)</td>
<td>10 (.39)</td>
<td>XX=14 •</td>
<td>47 (1.85)</td>
<td>10 (.39)</td>
</tr>
<tr>
<td>XX=05 •</td>
<td>29 (1.14)</td>
<td>8 (.31)</td>
<td>XX=15 •</td>
<td>49 (1.93)</td>
<td>12 (.47)</td>
</tr>
<tr>
<td>XX=06 •</td>
<td>31 (1.22)</td>
<td>6 (.24)</td>
<td>XX=16 •</td>
<td>51 (2.01)</td>
<td>14 (.55)</td>
</tr>
<tr>
<td>XX=07 •</td>
<td>33 (1.30)</td>
<td>4 (.16)</td>
<td>XX=17 •</td>
<td>53 (2.09)</td>
<td>16 (.63)</td>
</tr>
<tr>
<td>XX=08 •</td>
<td>35 (1.38)</td>
<td>2 (.08)</td>
<td>XX=18 •</td>
<td>55 (2.17)</td>
<td>18 (.71)</td>
</tr>
<tr>
<td>XX=09 •</td>
<td>37 (1.46)</td>
<td>0 (0)</td>
<td>XX=19 •</td>
<td>57 (2.24)</td>
<td>20 (.79)</td>
</tr>
</tbody>
</table>

### Material and Finish

- **Housing and Cap:** Die-cast zinc, bright chrome plated or powder coated, see table.
- **Retainer and Spring:** 302 Stainless steel, natural.
- **O-Ring:** Buna-N rubber, natural.
- **Cam and Sleeve:** 1075 Case hardened steel, zinc immersion coating.
- **Shaft and Screw:** Low carbon steel, zinc plate, chromate plus sealer.
- **Pin:** 1008 Steel, zinc plated plus chromate dip.
- **Mounting Washer, Mounting Nut and Pawl:** 1010 steel, zinc plate, chromate plus sealer.

### Product Strength Guidelines

- 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.

### 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).

**Dimensions without tolerances are for reference only.**
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.

KNOB: Glass filled nylon, black.

KNOB SPACER: Nylon, black.

RETAINER: Polycarbonate, black.

Product Strength Guidelines

Maximum static load: 445 N (100 lbs.)

Average ultimate load: 890 N (200 lbs.)

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.

Dimensions without tolerances are for reference only.

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