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

Select material and finish options for style and functionality requirements
Variety of materials and finishes to complement your application.

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

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

13.5mm single hole door preparation

- Slotted recess
- 4 (.16)
- Knob style
- Tubular key operated style

3-Hole body door preparation

- 3 (.11)
- Double bit
- 7 (.28)
- Triangle
- 7 (.28)
- Square
- 8 (.32)
- Hex recess

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)

Grip range

For adjustable cam designs:

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

For 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

---

**Head Styles**

1. 3 (.11) Double bit
2. 7 (.28) Triangle
3. 7 (.28) Square
4. SOUTHCO® Tubular key
5. SOUTHCO® Tubular key
6. 8 (.32) Hex recess
7. 8 (.32) Square
8. Slotted recess
9. Slotted recess
10. Railway standard
11. Bellcore 216

**Grip**

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

**Grip Range**
(6.4 (.25) Compression)

- Straight cam
- Offset cam reversed
- Deep offset cam reversed
- Housing
- M22 x 1.5 mounting nut
- Mounting lockwasher

**Head Style**

1. Type A clockwise to latch
2. Type B counter-clockwise to latch

**Grip**

1. 16.4 (.64) 32.2 (1.26) Deep offset cam, forward
2. 71.3 (2.80) 81.2 (3.19) Deep offset cam, reversed
3. 30.4 (1.19) 46.1 (1.81) Offset cam, forward
4. 57.6 (2.26) 73.3 (2.88) Offset cam, reversed
5. 43.9 (1.72) 59.6 (2.34) Straight cam

---

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.

<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>20 (.79)</td>
<td>00</td>
<td>30 (1.18)</td>
<td>05</td>
<td>40 (1.57)</td>
<td>10</td>
<td>50 (1.97)</td>
<td>15</td>
</tr>
<tr>
<td>22 (.87)</td>
<td>01</td>
<td>32 (1.26)</td>
<td>06</td>
<td>42 (1.65)</td>
<td>11</td>
<td>52 (2.05)</td>
<td>16</td>
</tr>
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<td>24 (.94)</td>
<td>02</td>
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<td>07</td>
<td>44 (1.73)</td>
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<td>54 (2.13)</td>
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</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>
<td>56 (2.20)</td>
<td>18</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>
<td>58 (2.28)</td>
<td>19</td>
</tr>
</tbody>
</table>

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

- Consistent pre-set compression
- Premium finish and corrosion resistance
- IP69K Compliant
- Easy Clean
- Conform to DIN EN 1672-2

Material and Finish
Stainless Steel 316

Performance Details
Adjustable Grip - Maximum static load: 600N (136 lbf)
Fixed Grip - Maximum static load: 450N (100 lbf)

Keys
Use Southco key E3-17-1 only

Installation Notes
Recommended tightening torque for the mounting nut is 20 N·m (176 in·lb).

Accessories
Replacement flange gasket:
Part number: E5-17-101

Part Number Selection
See table
Order latch and cam separately

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

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

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.

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>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
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</thead>
<tbody>
<tr>
<td>15 (.59)</td>
<td>00 Use unassembled</td>
<td>25 (.98)</td>
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<td>35 (1.38)</td>
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<td>45 (1.77)</td>
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<td>17 (.67)</td>
<td>01 Use unassembled</td>
<td>27 (1.06)</td>
<td>06</td>
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<td>11</td>
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<td>16</td>
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<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>
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<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>
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<td>25 (.98)</td>
<td>05</td>
<td>25 (.98)</td>
<td>05</td>
<td>35 (1.38)</td>
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<td>45 (1.77)</td>
<td>15</td>
</tr>
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<td>27 (1.06)</td>
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<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>29 (1.14)</td>
<td>07</td>
<td>29 (1.14)</td>
<td>07</td>
<td>39 (1.53)</td>
<td>12</td>
<td>49 (1.93)</td>
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<td>31 (1.22)</td>
<td>08</td>
<td>31 (1.22)</td>
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<td>41 (1.61)</td>
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<td>33 (1.30)</td>
<td>09</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>

www.southco.com/E3
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)

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>16.4 (.64)</td>
<td>32.2 (1.26)</td>
<td>Deep offset cam, forward</td>
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</tr>
<tr>
<td>71.3 (2.80)</td>
<td>81.2 (3.19)</td>
<td>Deep offset cam, reversed</td>
<td></td>
</tr>
<tr>
<td>30.4 (1.19)</td>
<td>46.1 (1.81)</td>
<td>Offset cam, forward</td>
<td></td>
</tr>
<tr>
<td>57.6 (2.26)</td>
<td>73.3 (2.88)</td>
<td>Offset cam, reversed</td>
<td></td>
</tr>
<tr>
<td>43.9 (1.72)</td>
<td>59.6 (2.34)</td>
<td>Straight cam</td>
<td>E3-28-203-24</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated

www.southco.com/E3
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)

E3 - R H - UU12

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>
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<tr>
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<td>50 (1.97)</td>
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<td>22 (.87)</td>
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<td>32 (1.26)</td>
<td>ES-1206-24</td>
<td>42 (1.65)</td>
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<td>52 (2.05)</td>
<td>ES-1216-24</td>
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<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>28 (1.10)</td>
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<td>ES-1214-24</td>
<td>58 (2.28)</td>
<td>ES-1219-24</td>
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</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**

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

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

**H Head Styles**

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

**R Rotation**

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

**F Finish**

- 2 Electropolished
- 12 Electropolished and hand buffed (bright)

**Head style**

1. **5 SOUTHCO® Tubular key**
2. **6 Hex recess**
3. **7 Knob style**
4. **9 Slotted**

**Part Number**

- **E3 - R - H - G - F**

**Grip**

<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>
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<td>6.4 (.25)</td>
<td>9.5 (.37)</td>
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<td>9.5 (.37)</td>
<td>12.7 (.50)</td>
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<td>4</td>
<td>12.7 (.50)</td>
<td>15.9 (.63)</td>
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<td>15.9 (.63)</td>
<td>19 (.75)</td>
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<tr>
<td>6</td>
<td>19 (.75)</td>
<td>22.2 (.87)</td>
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<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

Part Number Selection
See 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

*Railway standard head style 9.5 (.35)*

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
### Head Styles (other head styles available)

- **T-handle, non-locking**
  - 3 (.11) Double bit
  - 7 (.28) Triangle
  - 7 (.28) Square
  - SOUTHCO® Tubular key
  - 8 (.32) Hex recess
  - Standard knob

- **T-handle, key-locking**
  - Slotted recess
  - 8 (.32) Square driver
  - Railway standard
  - Bellcore 216
  - Bellcore electronics
  - 8 (.32) Triangle

- **Wing knob, non-locking**
  - 5 (.19) Double bit

- **Wing knob, key-locking**
  - 8 (.32) Square driver
  - Railway standard
  - Bellcore 216
  - Bellcore electronics
  - 8 (.32) Triangle

- **Wing knob, key-locking, shuttered**
  - R001

### Rotation

<table>
<thead>
<tr>
<th>Type</th>
<th>Rotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Type A clockwise to latch</td>
</tr>
<tr>
<td>B</td>
<td>Type B counter-clockwise to latch</td>
</tr>
</tbody>
</table>

### 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
- **15** Bellcore 216
- **16** Bellcore electronics
- **20** 8 (.32) Triangle
- **48** 5 (.19) Double bit
- **50** Wing knob, non-locking
- **51** Wing knob, key-locking, keyed CH751 (1 overmolded key supplied)
- **58** Wing knob, key-locking, keyed R001 (1 overmolded key supplied)
- **59** Wing knob (no lock)

### 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.

See table for Part Number Selection.

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

Other options available. For complete details on variety, part numbers, installation and specification, go to www.southco.com/E3
**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="image1" alt="Image" /></td>
</tr>
<tr>
<td>3 (.11) Double bit</td>
<td><img src="image2" alt="Image" /></td>
</tr>
<tr>
<td>7 (.28) Triangle</td>
<td><img src="image3" alt="Image" /></td>
</tr>
<tr>
<td>7 (.28) Squared</td>
<td><img src="image4" alt="Image" /></td>
</tr>
<tr>
<td>SOUTHCO® Tubular key</td>
<td><img src="image5" alt="Image" /></td>
</tr>
<tr>
<td>8 (.32) Hex recess</td>
<td><img src="image6" alt="Image" /></td>
</tr>
<tr>
<td>Standard knob</td>
<td><img src="image7" alt="Image" /></td>
</tr>
<tr>
<td>T-handle, key-locking</td>
<td><img src="image8" alt="Image" /></td>
</tr>
<tr>
<td>Slotted recess</td>
<td><img src="image9" alt="Image" /></td>
</tr>
<tr>
<td>8 (.32) Square driver</td>
<td><img src="image10" alt="Image" /></td>
</tr>
<tr>
<td>Railway standard</td>
<td><img src="image11" alt="Image" /></td>
</tr>
<tr>
<td>Bellcore 216</td>
<td><img src="image12" alt="Image" /></td>
</tr>
<tr>
<td>Bellcore electronics</td>
<td><img src="image13" alt="Image" /></td>
</tr>
<tr>
<td>8 (.32) Triangle</td>
<td><img src="image14" alt="Image" /></td>
</tr>
</tbody>
</table>

**Part Number Selection**

See table

**Head Style**

<table>
<thead>
<tr>
<th>Number</th>
<th>Style</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>T-handle, non-locking</td>
<td><img src="image15" alt="Image" /></td>
</tr>
<tr>
<td>2</td>
<td>3 (.11) Double bit</td>
<td><img src="image16" alt="Image" /></td>
</tr>
<tr>
<td>3</td>
<td>7 (.28) Triangle</td>
<td><img src="image17" alt="Image" /></td>
</tr>
<tr>
<td>4</td>
<td>7 (.28) Square</td>
<td><img src="image18" alt="Image" /></td>
</tr>
<tr>
<td>5</td>
<td>SOUTHCO® Tubular key</td>
<td><img src="image19" alt="Image" /></td>
</tr>
<tr>
<td>6</td>
<td>8 (.32) Hex recess</td>
<td><img src="image20" alt="Image" /></td>
</tr>
<tr>
<td>7</td>
<td>Standard knob</td>
<td><img src="image21" alt="Image" /></td>
</tr>
<tr>
<td>8</td>
<td>T-handle, key-locking</td>
<td><img src="image22" alt="Image" /></td>
</tr>
<tr>
<td>9</td>
<td>Slotted recess</td>
<td><img src="image23" alt="Image" /></td>
</tr>
<tr>
<td>10</td>
<td>8 (.32) Square driver</td>
<td><img src="image24" alt="Image" /></td>
</tr>
<tr>
<td>11</td>
<td>Railway standard</td>
<td><img src="image25" alt="Image" /></td>
</tr>
</tbody>
</table>

**Finish**

1. Chrome plated
2. Black powder coated
3. Silver powder coated

**Grip Table**

<table>
<thead>
<tr>
<th>Total Grip</th>
<th>Maximum Door Thickness for Assembled Latch</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 (0.59)</td>
<td>00 Use unassembled</td>
</tr>
<tr>
<td>17 (0.67)</td>
<td>01 Use unassembled</td>
</tr>
<tr>
<td>19 (0.75)</td>
<td>02 1.04</td>
</tr>
<tr>
<td>21 (0.83)</td>
<td>03 2.08</td>
</tr>
<tr>
<td>23 (0.91)</td>
<td>04 4.16</td>
</tr>
<tr>
<td>25 (0.98)</td>
<td>05 5.20</td>
</tr>
<tr>
<td>27 (1.06)</td>
<td>06 6.24</td>
</tr>
<tr>
<td>29 (1.14)</td>
<td>07 7.28</td>
</tr>
<tr>
<td>31 (1.22)</td>
<td>08 7.28</td>
</tr>
<tr>
<td>33 (1.30)</td>
<td>09 7.28</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

### Tool Head Styles

<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>51.0 (2.00)</td>
<td>Straight cam</td>
</tr>
</tbody>
</table>

### Grip range
(measured in latched position)

- 33 (1.31)
- 22 (.87)
- 11 (.42)

### Door thickness
4 (.16) Maximum

### T-Handle Style

**Head style**
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. T-Handle locking keyed

**Rotation**
1. Type A clockwise to latch

**Finish**
1. Chrome plated
5. Black powder coated
7. Silver powder coated

Dimensions in millimeters (inch) unless otherwise stated
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.

Dimensions in millimeters (inch) unless otherwise stated

E3 - R - H - G - F

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

www.southco.com/E3
**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 8 (.32)
- Bellcore 216

**Rotation**

- Type A clockwise to latch - Latch assembled
- Type A clockwise to latch - Latch unassembled
- Type B counter-clockwise to latch - Latch assembled
- Type B counter-clockwise to latch - Latch unassembled

**Finish**

- Black Hard Anodized 59
- Clear Powder Coat 06
- Black Powder Coat 56
- Silver Powder Coat 76
- Railway standard 11
- Bellcore 216

**Head style**

- Triangle 3 7 (.28)
- Square 4 7 (.28)
- Hex recess 8 (.32)
- Slotted recess 9
- Square 10 8 (.32)
- Square 11 8 (.32)
- 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>
</tr>
</thead>
<tbody>
<tr>
<td>20 (.79)</td>
<td>00 1.04 (0.04)</td>
</tr>
<tr>
<td>22 (.87)</td>
<td>01 2.08 (0.08)</td>
</tr>
<tr>
<td>24 (.94)</td>
<td>02 4.16 (0.16)</td>
</tr>
<tr>
<td>26 (1.02)</td>
<td>03 5.20 (0.20)</td>
</tr>
<tr>
<td>28 (1.10)</td>
<td>04 6.24 (0.24)</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 1.57 (0.05)</td>
</tr>
<tr>
<td>32.5 (1.28)</td>
<td>06 1.65 (0.06)</td>
</tr>
<tr>
<td>34 (1.34)</td>
<td>07 1.73 (0.07)</td>
</tr>
<tr>
<td>36 (1.42)</td>
<td>08 1.81 (0.08)</td>
</tr>
<tr>
<td>38 (1.50)</td>
<td>09 1.89 (0.09)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 (1.57)</td>
<td>10 2.02 (0.20)</td>
</tr>
<tr>
<td>42 (1.65)</td>
<td>11 2.10 (0.21)</td>
</tr>
<tr>
<td>44 (1.73)</td>
<td>12 2.18 (0.22)</td>
</tr>
<tr>
<td>46 (1.81)</td>
<td>13 2.26 (0.23)</td>
</tr>
<tr>
<td>48 (1.89)</td>
<td>14 2.34 (0.24)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Grip</th>
<th>Max. Door Thickness for Assembled Latch</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 (1.97)</td>
<td>15 2.42 (0.24)</td>
</tr>
<tr>
<td>52 (2.05)</td>
<td>16 2.50 (0.25)</td>
</tr>
<tr>
<td>54 (2.13)</td>
<td>17 2.58 (0.26)</td>
</tr>
<tr>
<td>56 (2.20)</td>
<td>18 2.66 (0.27)</td>
</tr>
<tr>
<td>58 (2.28)</td>
<td>19 2.74 (0.28)</td>
</tr>
</tbody>
</table>

**Grip**

- 18 Maximum (.71), latch unassembled (door plus flange gasket)
- 18 (.71)
- 14 (.55)
- 6.4 (.25)
- 47 (1.85)
- 6.4 (.25)
- 7 (.28) 7 (.28) 8 (.32) Slotted 8 (.32) Railway Bellcore Triangle Square Hex recess Recess Square standard 216
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)

H Head Style (no cam)

E3 - C R H - 00

R Rotation

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

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>66.5 (2.62)</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)

---

**Head Styles**

<table>
<thead>
<tr>
<th>Head Style</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangle</td>
<td>E3-28-700-24</td>
</tr>
<tr>
<td>Square</td>
<td>E3-28-701-24</td>
</tr>
<tr>
<td>7 (.28)</td>
<td>E3-28-702-24</td>
</tr>
<tr>
<td>8 (.32)</td>
<td>E3-28-703-24</td>
</tr>
<tr>
<td>10 (.39)</td>
<td>E3-28-704-24</td>
</tr>
<tr>
<td>12 (.47)</td>
<td>E3-28-705-24</td>
</tr>
<tr>
<td>14 (.55)</td>
<td>E3-28-706-24</td>
</tr>
<tr>
<td>16 (.63)</td>
<td>E3-28-707-24</td>
</tr>
<tr>
<td>18 (.71)</td>
<td>E3-28-708-24</td>
</tr>
<tr>
<td>20 (.79)</td>
<td>E3-28-709-24</td>
</tr>
<tr>
<td>22 (.87)</td>
<td>E3-28-710-24</td>
</tr>
<tr>
<td>24 (.94)</td>
<td>E3-28-711-24</td>
</tr>
<tr>
<td>26 (1.02)</td>
<td>E3-28-712-24</td>
</tr>
<tr>
<td>28 (1.10)</td>
<td>E3-28-713-24</td>
</tr>
<tr>
<td>30 (1.18)</td>
<td>E3-28-714-24</td>
</tr>
</tbody>
</table>

### Latch Part Number (no cam)

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Head Style</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>T12</td>
<td>3 (7.28) Triangle</td>
<td>E3-28-700-24</td>
</tr>
<tr>
<td>29</td>
<td>4 (7.28) Square</td>
<td>E3-28-701-24</td>
</tr>
<tr>
<td></td>
<td>11 Railway standard</td>
<td>E3-28-702-24</td>
</tr>
<tr>
<td></td>
<td>15 Bellcore 216</td>
<td>E3-28-703-24</td>
</tr>
<tr>
<td></td>
<td>20 8 (.32) Triangle</td>
<td>E3-28-704-24</td>
</tr>
</tbody>
</table>

**Cam Part Number (order separately from 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>
<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>
<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>
<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
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)
E3 - C R H - O F

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>66.5 (2.62)</td>
<td>E3-28-201-12</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

www.southco.com/E3
**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**

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

**Rotation**

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

---

**Latch Part Number (no cam)**

**E3 - C**

**R** Rotation

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

**H** Head style

- **3** 7 (.28) Triangle
- **4** 7 (.28) Square
- **10** 8 (.32) Square
- **15** Bellcore 216
- **20** 8 (.32) Triangle

**F** Finish

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

---

**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
**E3 VISE ACTION® Compression Latch Accessories**

**Keys and Flush Cup**

### Material and Finish
- **Steel, zinc plated**

### Part Number
- **Steel tubular key (order separately)**
  - 13.5mm size E3 latches: E3-26-19-15
  - 19.1mm size E3 latches: E3-5-15

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

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

---

### Keys - Zinc or Nylon

![Keys - Zinc or Nylon Diagram]

**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
- 11 Bellcore electronics
- 12 Bellcore 216
- 14 Railway Standard

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

**Keys - Steel**

For latches with SOUTHCRO®

**Tubular key head styles**

---

### Flush Cup

![Flush Cup Diagram]

**M Mounting Style**
- 0 MS Studs
- 1 Through hole

**D Depth**
- 1 19mm (for wingknob head style)
- 2 4mm (for tool head style)

**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

Compressed gasket
Frame thickness
0-ring
Flush bracket
Door

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

* For use with Railway standard or Bellcore 216 style only

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

A

Using this Total Grip with the appropriate E3 tables in the SOUTHCO® Handbook to determine cam type.

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

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
\[ \theta 16 (.63) \]
\[ \theta 19 (.75) \]
\[ 0.8 (.03) \]
\[ 13.5 (.53) \]

19.1mm size
\[ \theta 19 (.75) \]
\[ \theta 28.2 (1.11) \]
\[ 1 (.04) \]
\[ 20.5 (.81) \]

Spur Washer
19.1mm size
\[ \theta 22.2 (.88) \]
\[ 19.1 (.75) \]
\[ 0.8 (.30) \]

Sealing Cover

Latch Installation Hole Size
\[ \theta G \] Distance across flat H | A | B | \( \theta C \) | D | E | \( \theta F \)
--- | --- | --- | --- | --- | --- | ---
16 (.63) | 13.5 (.53) | 40 (1.58) | 20 (.85) | 29 (1.13) | 10.5 (.42) | 6.1 (.24) | 22.3 (.88)
22.5 (.88) | 19.6 (.77) | 47 (1.84) | 28 (1.09) | 35 (1.38) | 11.7 (.46) | 6.9 (.27) | 28.7 (1.13)

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

www.southco.com/E3
**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

---

**Part Number**
See table

---

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

---

<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>

---

*Other options available. For complete details on variety, part numbers, installation and specification, go to [www.southco.com/E3](http://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>E3-144-XX5•</td>
<td>E3-1410-XX5•</td>
<td>E3-1418-XX5•</td>
<td>E3-1411-XX5•</td>
<td>E3-1420-XX5•</td>
</tr>
<tr>
<td>Satin Silver Polyester Powder Coated</td>
<td>E3-146-XX7•</td>
<td>E3-143-XX7•</td>
<td>E3-144-XX7•</td>
<td>E3-1410-XX7•</td>
<td>E3-1418-XX7•</td>
<td>E3-1411-XX7•</td>
<td>E3-1420-XX7•</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>RIC Standard (European Railway Standard) Not available from Southco</td>
<td></td>
<td>E3-7-1•</td>
</tr>
</tbody>
</table>

Mounting Nut
- Ø 4.4 (.17) 12 PLACES
- Ø 43 (1.69)
- CENTER LINE FOR MOUNTING SCREWS

Mounting Washer
- Ø 4.3 (.17) 6 PLACES
- Ø 43 (1.69)
- CENTER LINE FOR MOUNTING SCREWS

Key (Order Separately)
- 55 (2.2)
- 56 (2.2)

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.

Latches are individually packaged. For layer packaged latches (50 pieces minimum, sold in multiples of 50) add -13 to the part number.

- Products identified with this symbol are stocked subject to prior sale in one or more of our global locations. If unavailable from our facility nearest you, allow for shipping time from another facility.
### Compression Latches

**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

**Center Line for Mounting Screws**
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 latch 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).

---

**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>21 (.83)</td>
<td>16 (.63)</td>
</tr>
<tr>
<td>XX=02 •</td>
<td>23 (.91)</td>
<td>14 (.55)</td>
</tr>
<tr>
<td>XX=03 •</td>
<td>25 (.98)</td>
<td>12 (.47)</td>
</tr>
<tr>
<td>XX=04 •</td>
<td>27 (1.06)</td>
<td>10 (.39)</td>
</tr>
<tr>
<td>XX=05 •</td>
<td>29 (1.14)</td>
<td>8 (.31)</td>
</tr>
<tr>
<td>XX=06 •</td>
<td>31 (1.22)</td>
<td>6 (.24)</td>
</tr>
<tr>
<td>XX=07 •</td>
<td>33 (1.30)</td>
<td>4 (.16)</td>
</tr>
<tr>
<td>XX=08 •</td>
<td>35 (1.38)</td>
<td>2 (.08)</td>
</tr>
<tr>
<td>XX=09 •</td>
<td>37 (1.46)</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>

- Products identified with this symbol are stocked subject to prior sale in one or more of our global locations. If unavailable from our facility nearest you, allow for shipping time from another facility.
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, chrome plus sealer.

CAM and SLEEVE: 1075 Case hardened steel, zinc immersion coating.

SHAFT: Low carbon steel, zinc plate, chrome plus sealer.

JAM NUTS: Steel, zinc plate, chrome plus sealer.

LOCKWASHERS: Spring steel, zinc plate, chrome plus sealer.

MOUNTING NUT: Brass, zinc plate, chrome plus sealer.

KNOB: Glass filled nylon, black.

KNOB SPACER: Nylon, black.

RETAINER: Polycarbonate, black.

Grip Strength Guidelines

Maximum static load: 445 N (100 lbs.)

Average ultimate load: 890 N (200 lbs.)

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.

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.

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.)

<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>

Dimensions without tolerances are for reference only.

Accessory for this latch. Please see page 36.