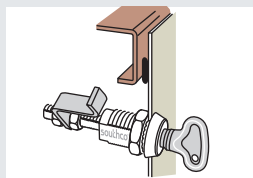
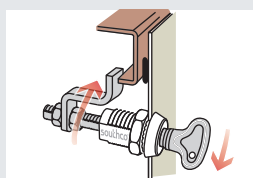


E3 VISE ACTION® Compression Latch

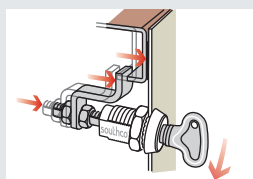
Overview



First 90° turn:
Cam rotates behind frame



The door is now **latched**
against opening



Then as you complete the
half-turn motion, the shaft
and cam compress to pull the
door snugly against the frame
or gasket into the
locked position

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

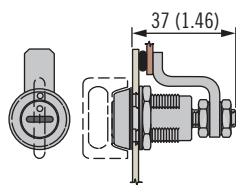


Clear powder
coated

➤ Select one of these three housing styles to fit your access requirements

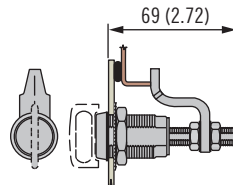
A series of basic housing styles of the **VISE ACTION®** compression latch have been developed to meet specific door configuration and mounting requirements - for depth, thickness, strength, grip dimension, and surface protrusion.

- Right and left hand actuation
- Optional pre-assembled cam for quick installation
- Wide choice of accessories



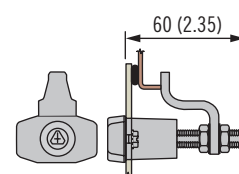
13.5mm Size

- 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

Other options available. For complete details on variety, part numbers, installation and specification, go to



www.southco.com

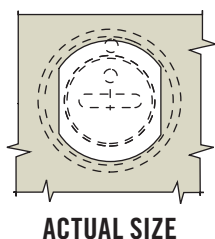
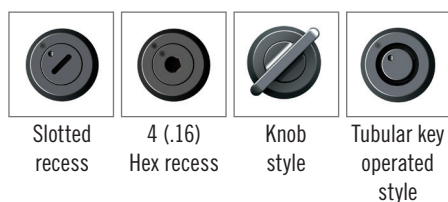
Dimensions in millimeters (inch) unless otherwise stated

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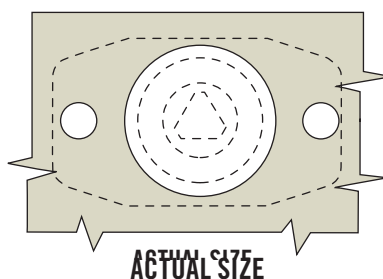
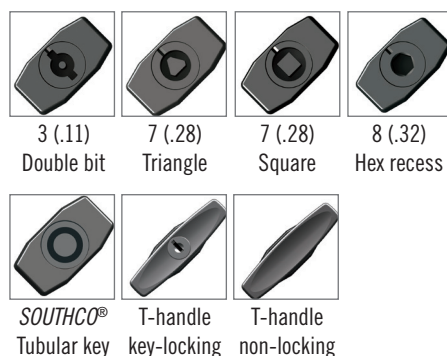
➔ Choose from a wide range of head styles to fit your application and industry requirements

- ➔ 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

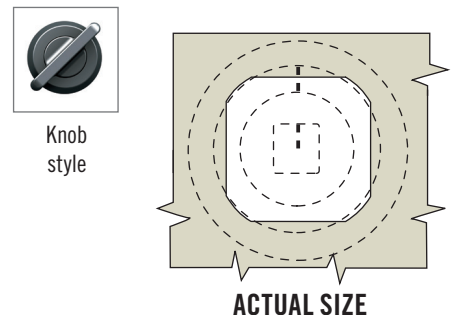
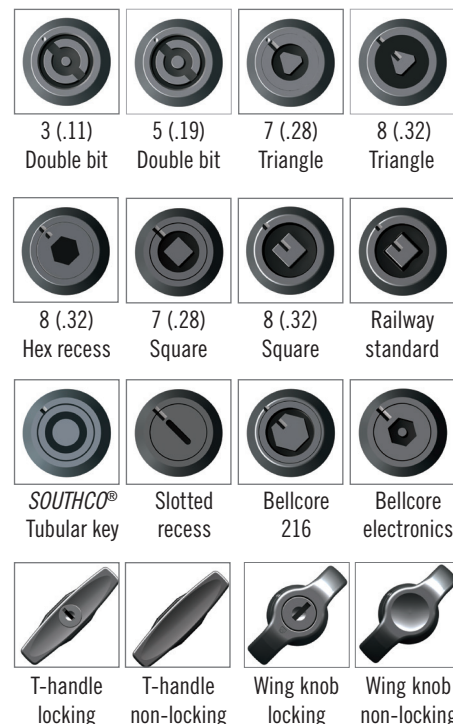
13.5mm single hole door preparation



3-Hole body door preparation



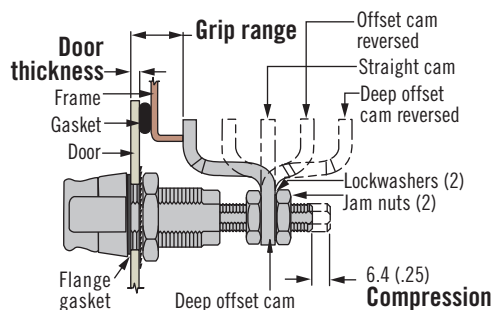
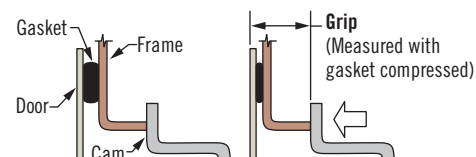
19.1mm single hole body door preparation



➔ Determine your grip options for a perfect fit

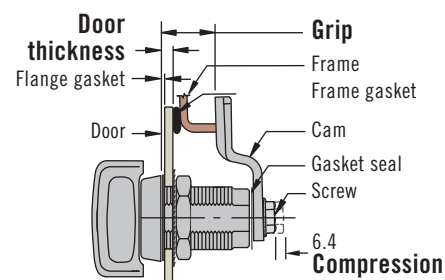
Grip dimension is an important consideration in compression latch applications involving gaskets for environmental or RFI sealing.

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



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

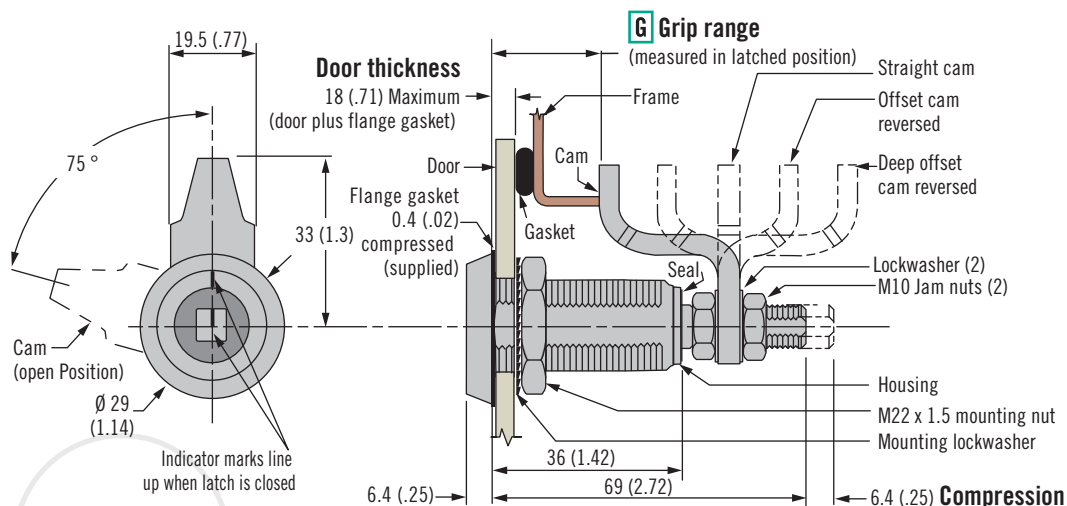
Keys and Accessories

See page 90

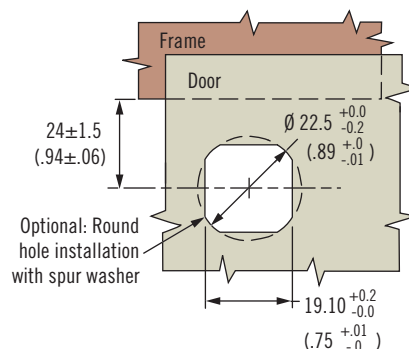
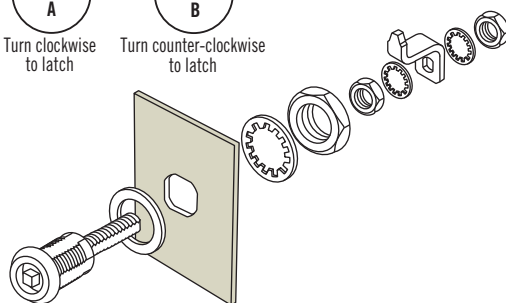
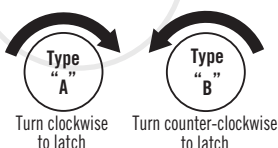
Installation Notes

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

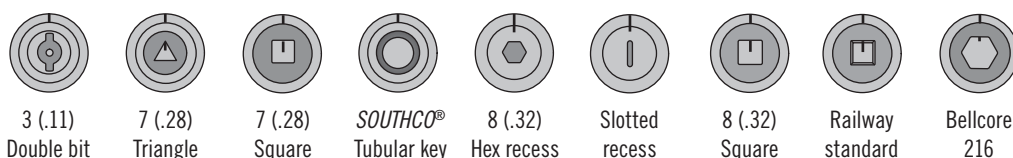
Recommended tightening torque for the mounting nut is 20 N·m (176 in·lbf).



R Rotation



H Head Styles



Part Number Selection

See table

H Head Style	
2 3 (.11) Double bit	9 Slotted recess
3 7 (.28) Triangle	10 8 (.32) Square
4 7 (.28) Square	11 Railway standard
5 SOUTHCO® Tubular key	15 Bellcore 216
6 8 (.32) Hex recess	
R Rotation	
1 Type A clockwise to latch	
22 Type B counter-clockwise to latch	

E3 - R H - G O

G 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

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

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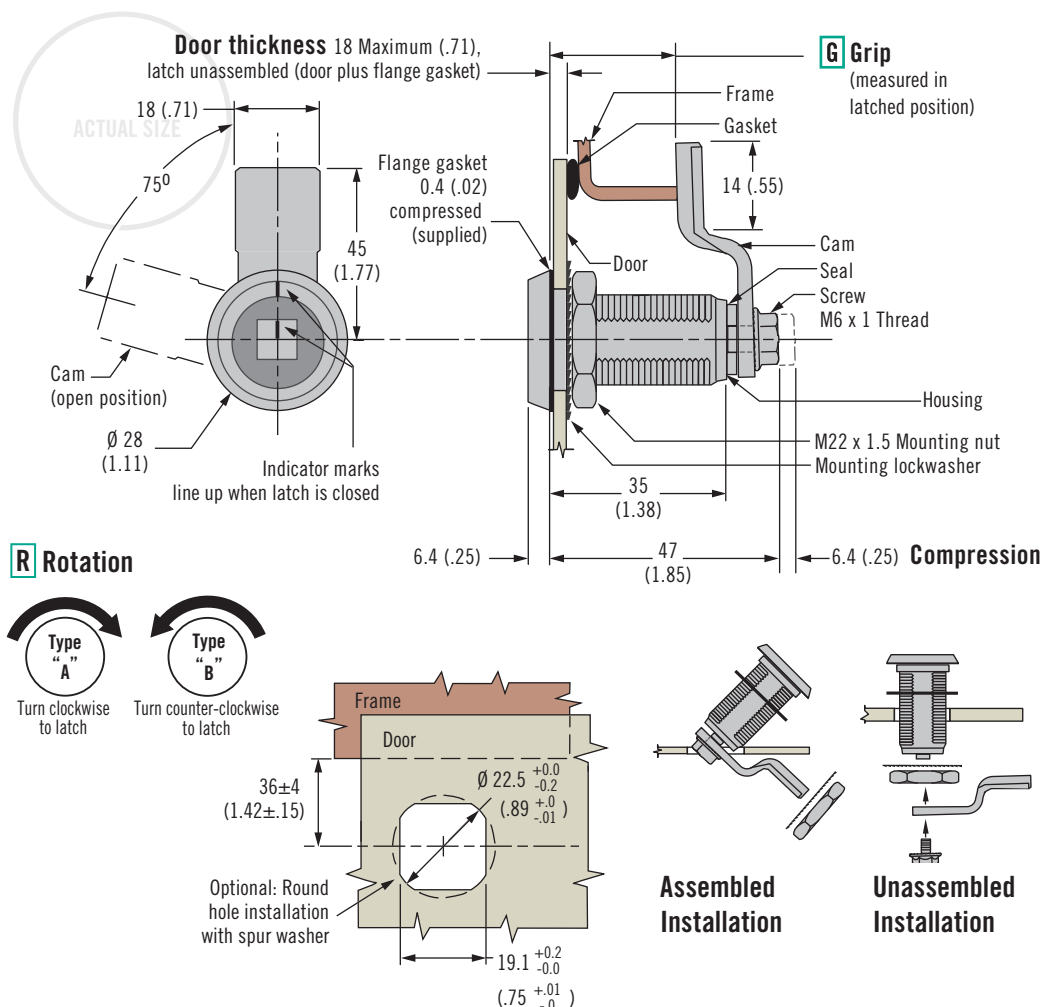
E3 VISE ACTION® Compression Latch

Machined stainless steel housing · Tool operated

Fixed grip · 19.1mm size



79



- 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.

H Head style

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

R Rotation

- 10 Type A clockwise to latch - Latch assembled
- 12 Type A clockwise to latch - Latch unassembled
- 27 Type B counter-clockwise to latch - Latch assembled
- 29 Type B counter-clockwise to latch - Latch unassembled

E3 - R H - G O

G Grip Table

Total Grip	G	Max. Door Thickness for Assembled Latch	Total Grip	G	Max. Door Thickness for Assembled Latch	Total Grip	G	Max. Door Thickness for Assembled Latch	Total Grip	G	Max. Door Thickness for Assembled Latch
20 (.79)	00	1 (.04)	30 (1.18)	05	7 (.28)	40 (1.57)	10	7 (.28)	50 (1.97)	15	7 (.28)
22 (.87)	01	2 (.08)	32 (1.26)	06		42 (1.65)	11		52 (2.05)	16	
24 (.94)	02	4 (.16)	34 (1.34)	07		44 (1.73)	12		54 (2.13)	17	
26 (1.02)	03	5 (.20)	36 (1.42)	08		46 (1.81)	13		56 (2.20)	18	
28 (1.10)	04	6 (.24)	38 (1.50)	09		48 (1.89)	14		58 (2.28)	19	



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

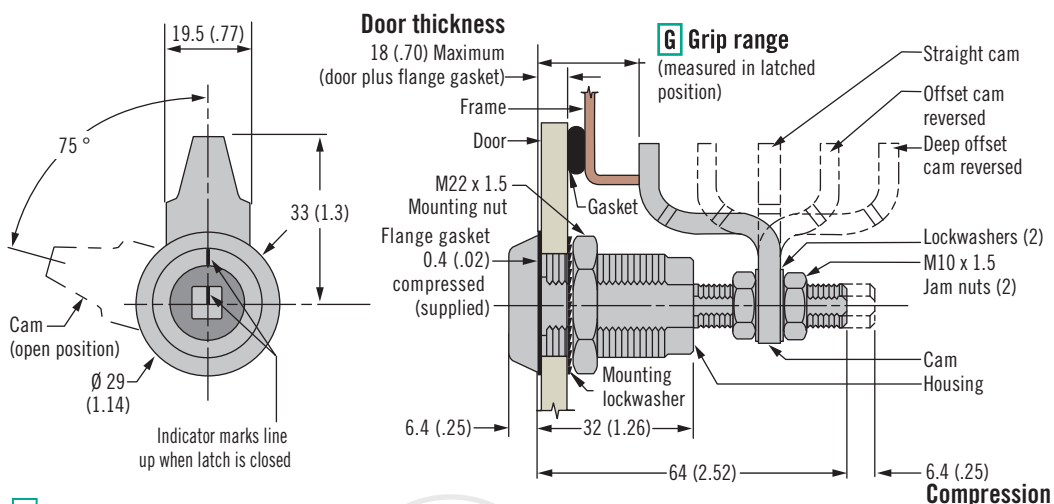
Installation Notes

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

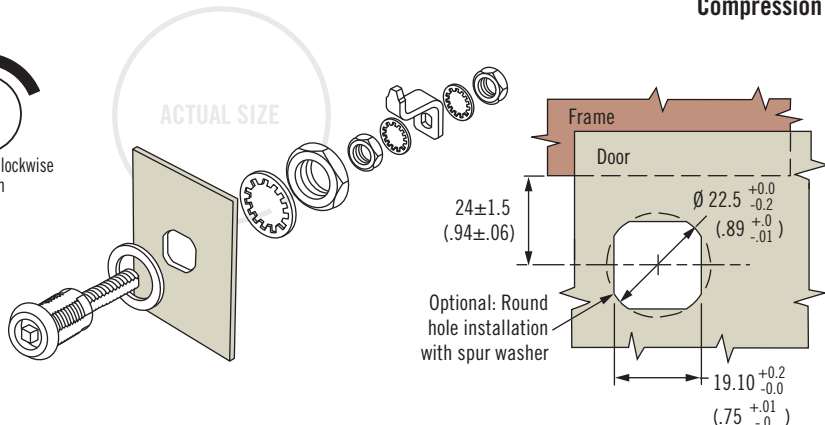
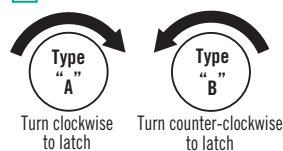
Recommended tightening torque
for the mounting nut is
20 N·m (176 in·lbf).

Keys and Accessories

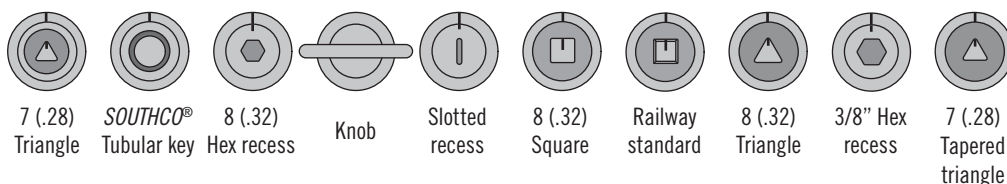
See page 90



R Rotation



H Head Styles



Part Number Selection

See table

E3 - R H - G F			
R Rotation	H Head style	G Grip	F Finish
1 Type A clockwise to latch	3 7 (.28) Triangle	1 11.4 (.45) - 27.2 (1.07)	2 Electropolished
22 Type B counter-clockwise to latch	5 SOUTHCO® Tubular key	66.3 (2.61) - 76.2 (3.00)	12 Electropolished and hand buffed (bright)
	6 8 (.32) Hex recess	25.4 (1.00) - 41.1 (1.62)	
	7 Knob	52.6 (2.07) - 68.3 (2.69)	
	9 Slotted recess	38.9 (1.53) - 54.6 (2.15)	
	10 8 (.32) Square		
	11 Railway standard		
	20 8 (.32) Triangle		
	37 3/8" Hex recess		
	39 7 (.28) Tapered triangle		

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

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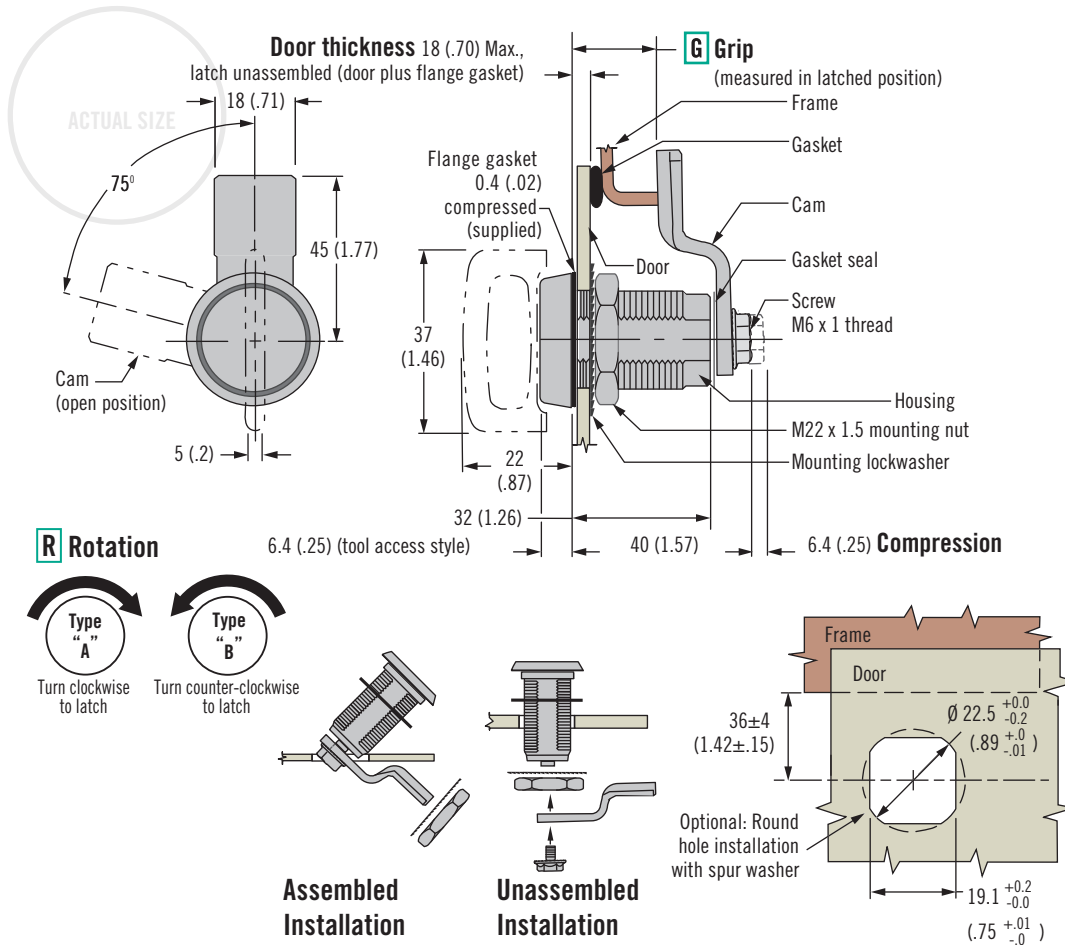
E3 VISE ACTION® Compression Latch

Metal injection molding stainless steel housing · Tool or hand operated

Fixed grip · 19.1mm size



81



- 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.

H Head style

- | | |
|------------------------|-----------------------------|
| 3 7 (.28) Triangle | 10 8 (.32) Square |
| 5 SOUTHCO® Tubular key | 11 Railway standard |
| 6 8 (.32) Hex recess | 20 8 (.32) triangle |
| 7 Knob | 37 3/8" Hex recess |
| 9 Slotted recess | 39 7 (.28) Tapered triangle |

R Rotation

- | |
|--|
| 10 Type A clockwise to latch - Latch assembled |
| 12 Type A clockwise to latch - Latch unassembled |
| 27 Type B counter-clockwise to latch - Latch assembled |
| 29 Type B counter-clockwise to latch - Latch unassembled |

F Finish

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

E3 - R H - G F

G Grip Table

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



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

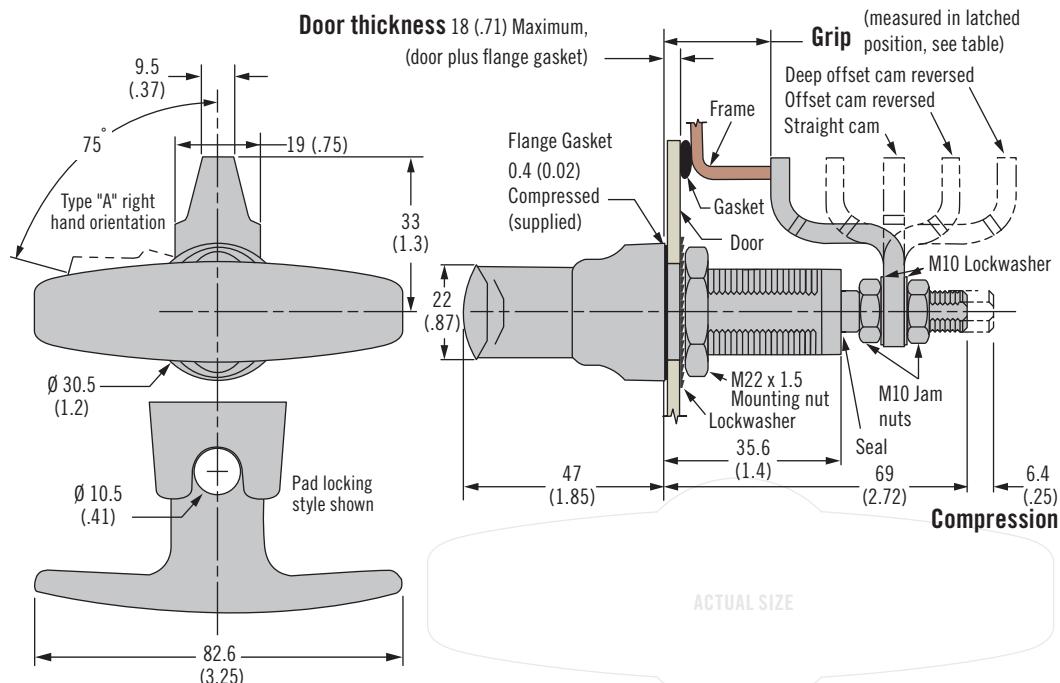
Installation Notes

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).

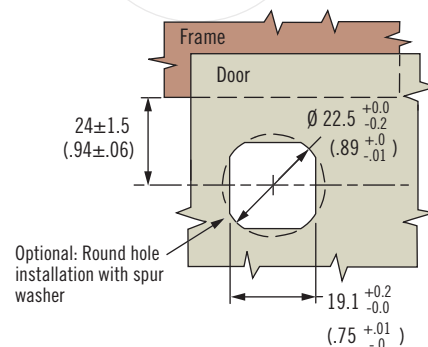
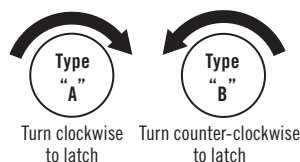
Part Number Selection

See table

Order latch and cam separately



R Rotation



Latch Part Number (no cam)

Cam Part Number Table (order separately from latch)			
Minimum Grip	Maximum Grip	Cam Type	Part Number
16.4 (.64)	32.2 (1.26)	Deep offset cam, forward	E3-28-201-24
71.3 (2.80)	81.2 (3.19)	Deep offset cam, reversed	
30.4 (1.19)	46.1 (1.81)	Offset cam, forward	E3-28-202-24
57.6 (2.26)	73.3 (2.88)	Offset cam, reversed	
43.9 (1.72)	59.6 (2.34)	Straight cam	E3-28-203-24

E3 - R H - 012

- R** Rotation
- 1 Type A clockwise to latch
- 22 Type B counter-clockwise to latch

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

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

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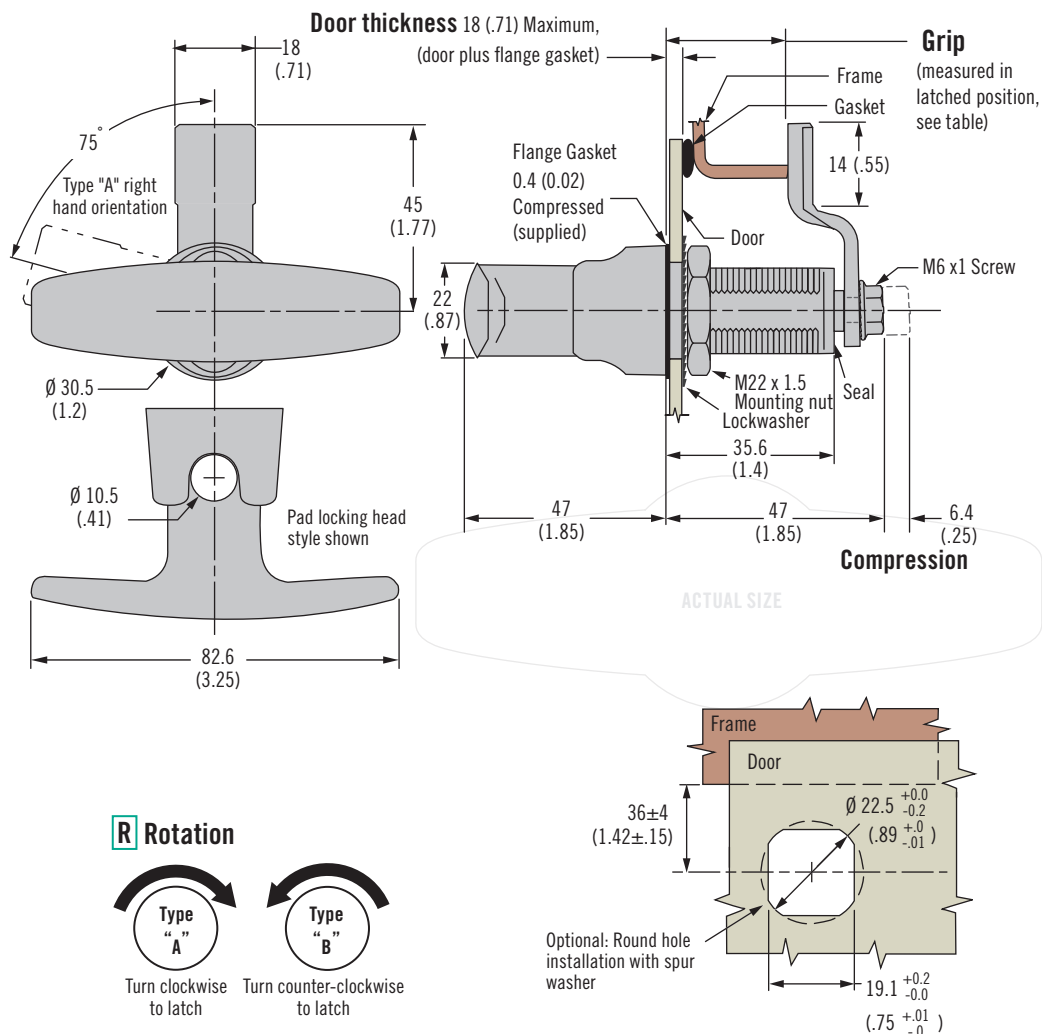
E3 VISE ACTION® Compression Latch

Cast 316 stainless steel housing · Hand operated

Fixed grip · 19.1mm size



81B



- 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).

Latch Part Number (no cam)

E3 - R H - UU12

R Rotation

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

H Head Style

- 1 Non-locking
- 60 Padlocking

Cam Part Number Table (order separately from latch)

Grip	Part Number	Grip	Part Number	Grip	Part Number	Grip	Part Number
20 (.79)	E5-1200-24	30 (1.18)	E5-1205-24	40 (1.57)	E5-1210-24	50 (1.97)	E5-1215-24
22 (.87)	E5-1201-24	32 (1.26)	E5-1206-24	42 (1.65)	E5-1211-24	52 (2.05)	E5-1216-24
24 (.94)	E5-1202-24	34 (1.34)	E5-1207-24	44 (1.73)	E5-1212-24	54 (2.13)	E5-1217-24
26 (1.02)	E5-1203-24	36 (1.42)	E5-1208-24	46 (1.81)	E5-1213-24	56 (2.20)	E5-1218-24
28 (1.10)	E5-1204-24	38 (1.50)	E5-1209-24	48 (1.89)	E5-1214-24	58 (2.28)	E5-1219-24

Part Number Selection

See table
Order latch and cam separately

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



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

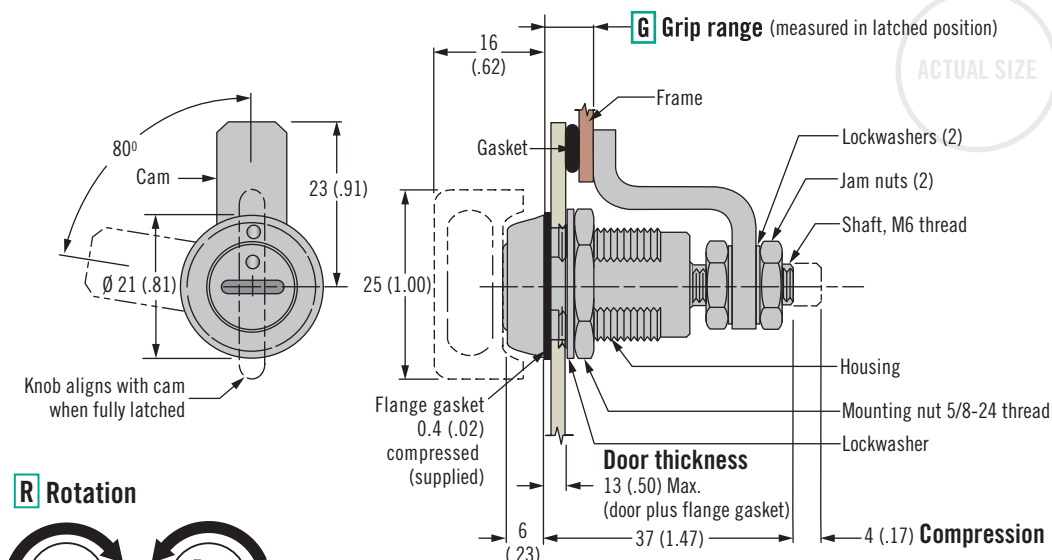
NEMA 4 / IP65 enabled using gasket supplied

Installation Notes

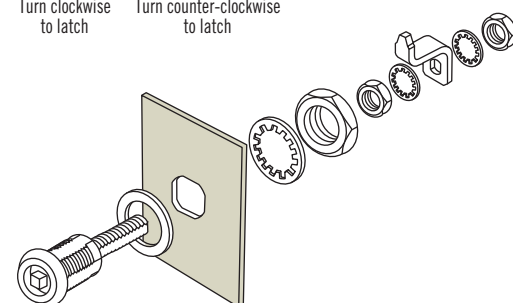
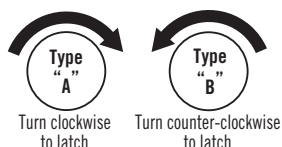
Caution: Position cam so latching function can be achieved comfortably by hand.

Accessories

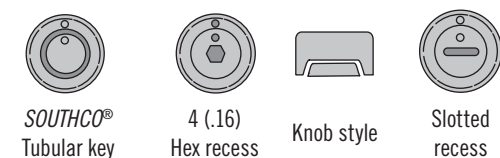
See page 90



R Rotation



H Head Styles



Part Number Selection

See table

H Head style

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

R Rotation

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

F Finish

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

E3 - R H - G F

G Grip	Minimum	Maximum
1	3.2 (.13)	6.4 (.25)
2	6.4 (.25)	9.5 (.37)
3	9.5 (.37)	12.7 (.50)
4	12.7 (.50)	15.9 (.63)
5	15.9 (.63)	19 (.75)
6	19 (.75)	22.2 (.87)
7	22.2 (.87)	25.4 (1)
8	25.4 (1)	28.6 (1.13)

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

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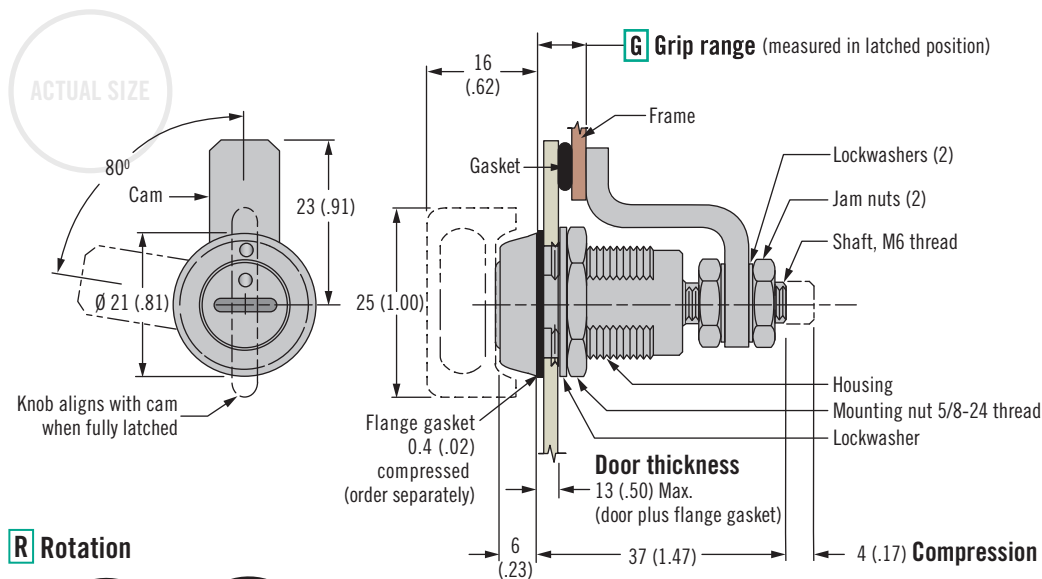
E3 VISE ACTION® Compression Latch

Zinc and plated steel · Tool or hand operated

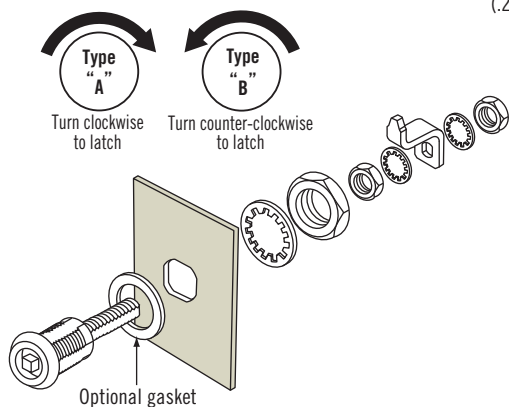
Adjustable grip · 13.5mm size



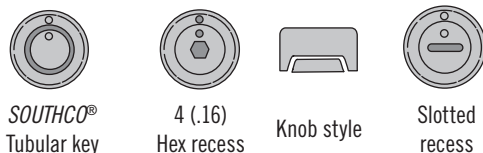
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R Rotation



H Head Styles



H Head style

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

E3 - R H - G F

R Rotation

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

F Finish

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

G Grip	Minimum	Maximum
1	3.2 (.13)	6.4 (.25)
2	6.4 (.25)	9.5 (.37)
3	9.5 (.37)	12.7 (.50)
4	12.7 (.50)	15.9 (.63)
5	15.9 (.63)	19 (.75)
6	19 (.75)	22.2 (.87)
7	22.2 (.87)	25.4 (1)
8	25.4 (1)	28.6 (1.13)

- 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

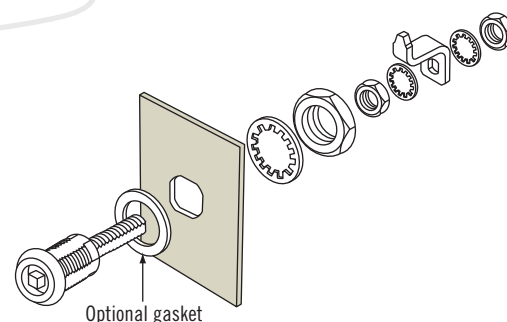
See page 90

Part Number Selection

See table

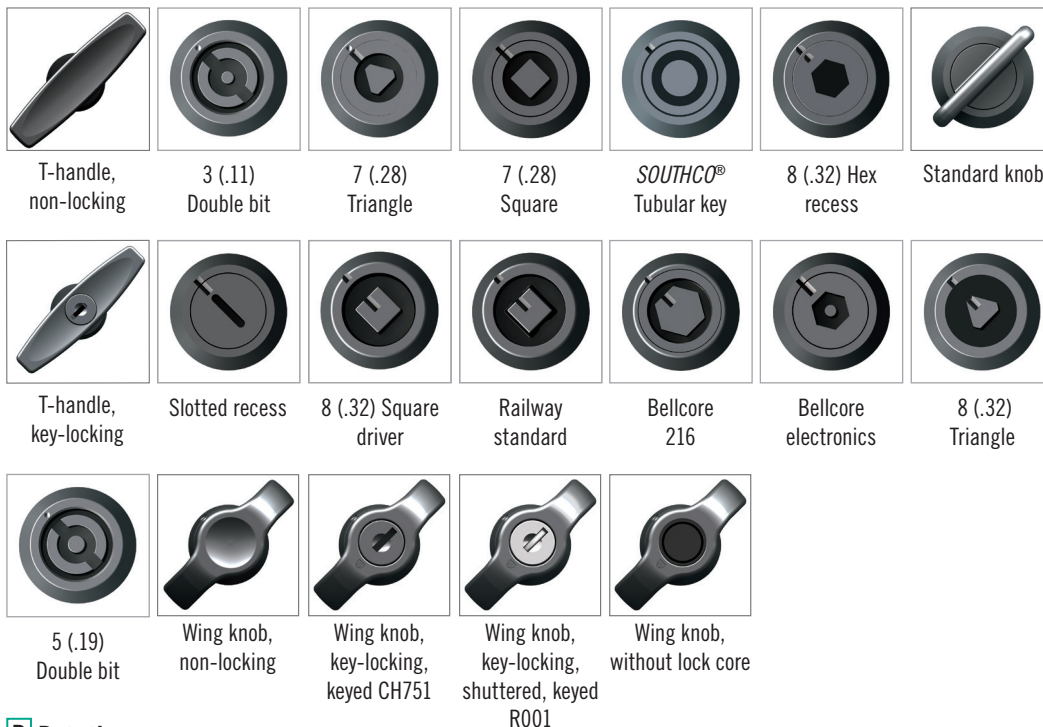
Adjustable grip · 19.1mm size

- See page 90

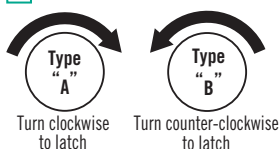


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H Head Styles (other head styles available)



R Rotation



Part Number Selection

See table

E3 - R H - G F

R Rotation

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

H 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 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)

F

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

G Grip	Minimum	Maximum	Cam Type
1	11.4 (.45)	27.2 (1.07)	Deep offset cam, forward
	66.3 (2.61)	76.2 (3.00)	Deep offset cam, reversed
2	25.4 (1)	41.1 (1.62)	Offset cam, forward
	52.6 (2.07)	68.3 (2.69)	Offset cam, reversed
3	38.9 (1.53)	54.6 (2.15)	Straight cam



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.

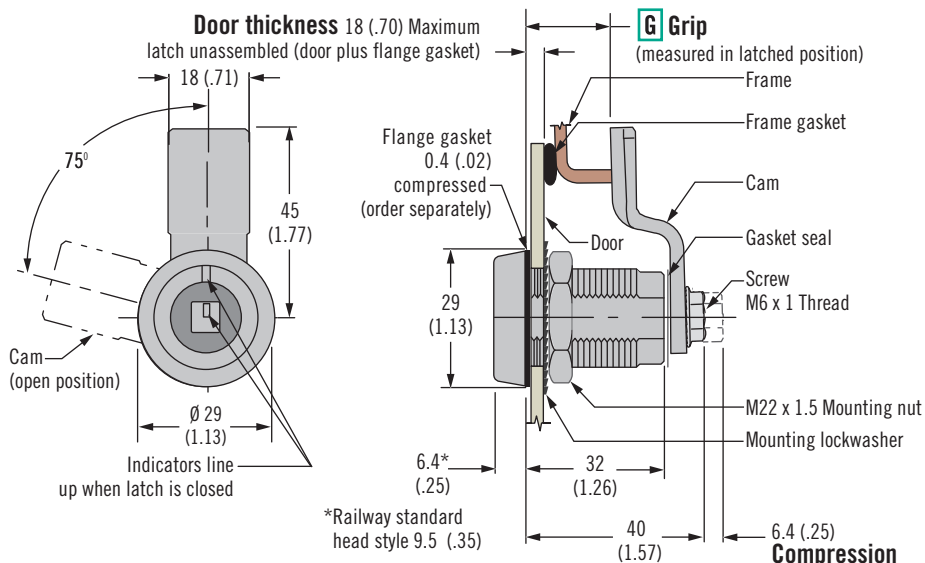
Flange gasket part number: E5-17

Installation Notes

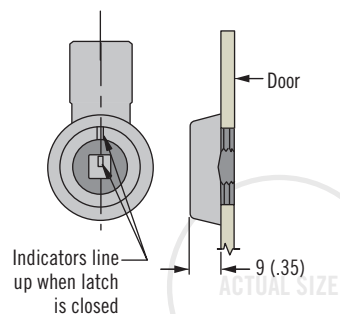
Recommended tightening torque for the mounting nut is 20 N·m (176 in·lbf), and for the mounting screw in 10 N·m (88 in·lbf)

Keys and Accessories

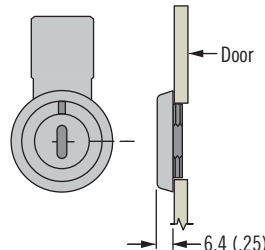
See page 90



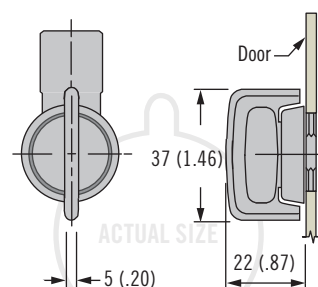
Railway Standard - Bellcore 216



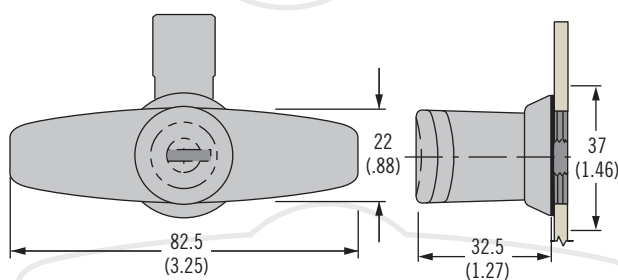
Other Tool Head Styles (slotted recess shown)



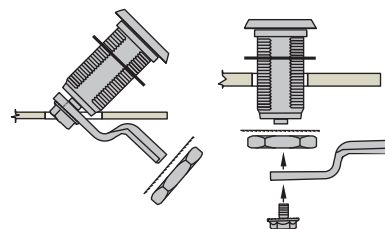
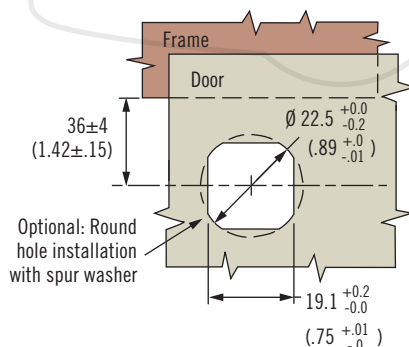
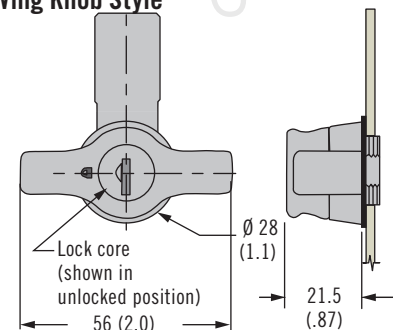
Knob Style



T-Handle Style



Wing Knob Style



Other options available. For complete details on variety, part numbers, installation and specification, go to

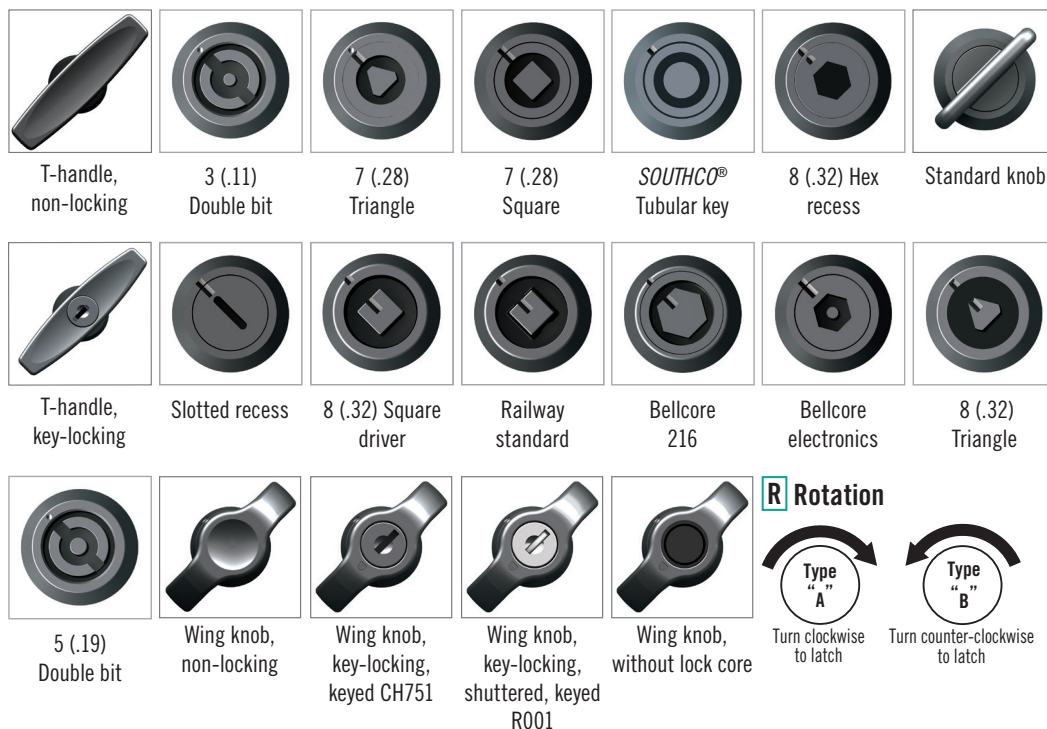


www.southco.com/E3

Dimensions in millimeters (inch) unless otherwise stated

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H Head Styles (other head styles available)



Part Number Selection
See table

E3 - R H - G F

R Rotation

- 10 Type A clockwise to latch - Latch assembled
- 12 Type A clockwise to latch - Latch unassembled
- 27 Type B counter-clockwise to latch - Latch assembled
- 29 Type B counter-clockwise to latch - Latch unassembled

F Finish

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

H 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 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, locking, keyed CH751 (1 overmolded key supplied)
- 58 Wing knob, locking, keyed R001 (1 overmolded key supplied)
- 59 Wing knob (no lock)

G Grip Table

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



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

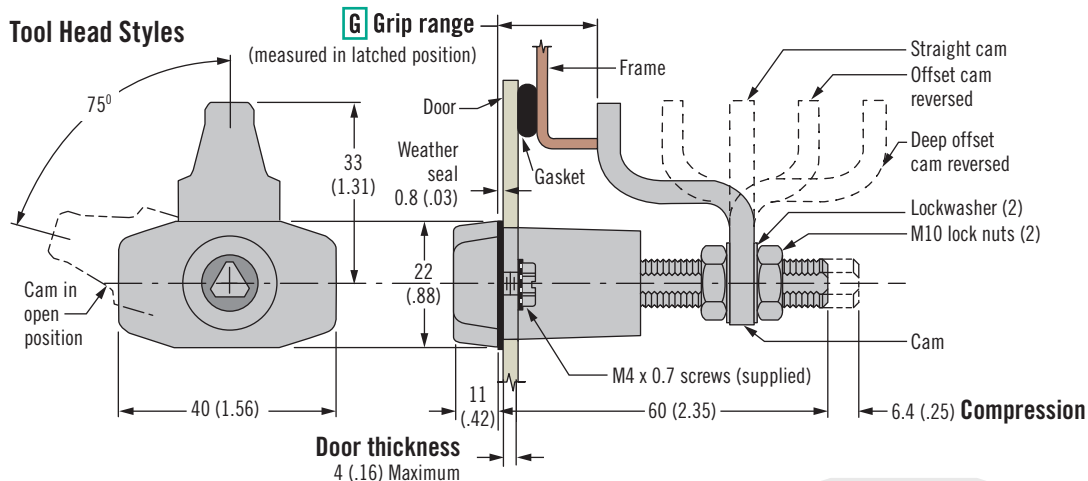
Maximum static load:
450 N (100 lbf)

Installation Notes

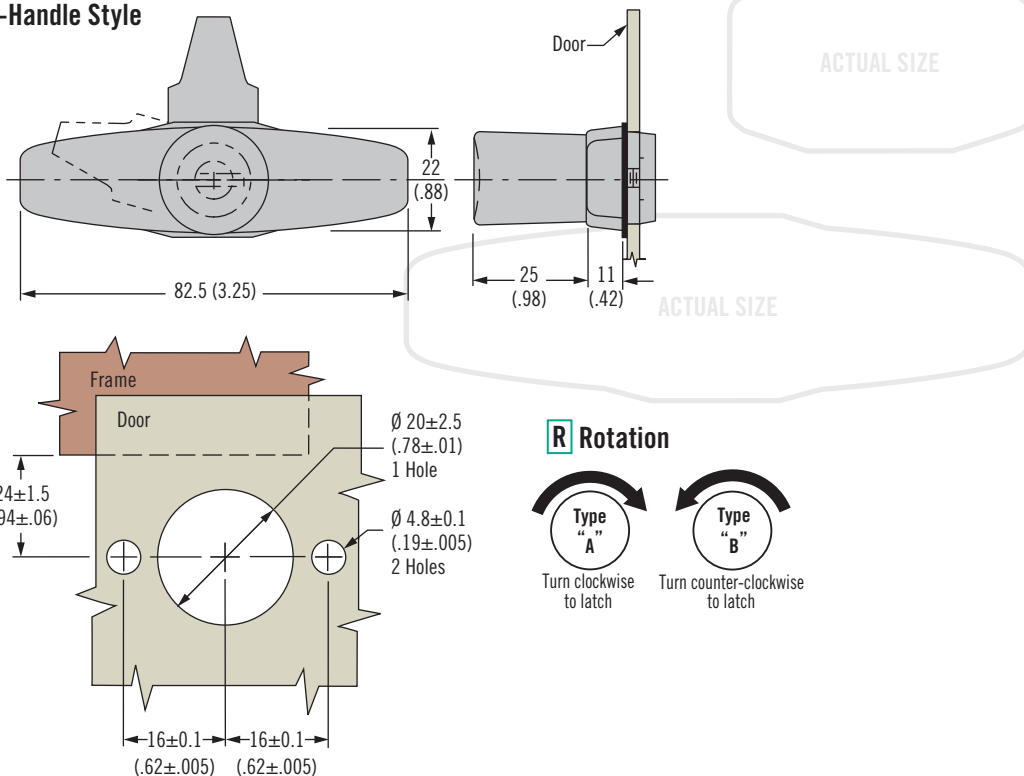
For door thickness greater than 4 (.16) calculate screw length using the following formula:
Door thickness + 6 (.24)

Keys and Accessories

See page 90



T-Handle Style



Part Number Selection

See table

G Grip	Minimum	Maximum	Cam Type
1	7.9 (.31)	23.6 (.93)	Deep offset cam, forward
	62.7 (2.47)	76.2 (3.00)	Deep offset cam, reversed
2	21.8 (.86)	37.3 (1.47)	Offset cam, forward
	49 (1.93)	64.8 (2.55)	Offset cam, reversed
3	35.3 (1.39)	51 (2.00)	Straight cam

H 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
- 8 T-Handle locking keyed CH751 (two flat keys supplied)

F Finish

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

E3 - R H - G F

R Rotation

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



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Dimensions in millimeters (inch) unless otherwise stated

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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

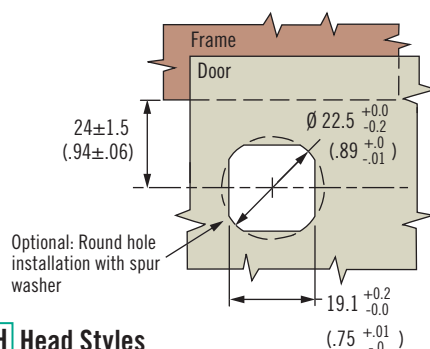
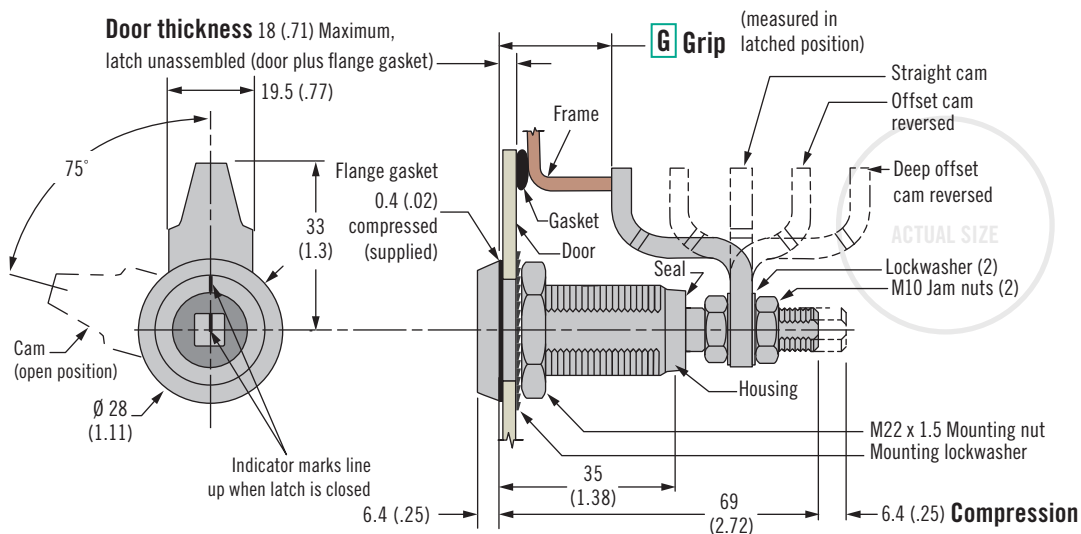
Caution: Position cam so latching
function can be achieved
comfortably by hand.

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.



H Head Styles



7 (.28)
Triangle



7 (.28)
Square



8 (.32)
Hex recess



Slotted
Recess



8 (.32)
Square



Railway
standard

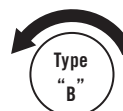


Bellcore
216

R Rotation



Turn clockwise
to latch



Turn counter-clockwise
to latch

E3 - R H - G F				H Head style	
R Rotation	1 Type A clockwise to latch 22 Type B counter-clockwise to latch	F Finish	59 Black Hard Anodized 06 Clear Powder Coat 56 Black Powder Coat 76 Silver Powder Coat	3	7 (.28) Triangle
				4	7 (.28) Square
G Grip	1	Minimum	Maximum	6	8 (.32) Hex recess
				9	Slotted Recess
	2	Minimum	Maximum	10	8 (.32) Square
				11	Railway standard
	3	Minimum	Maximum	15	Bellcore 216

89



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

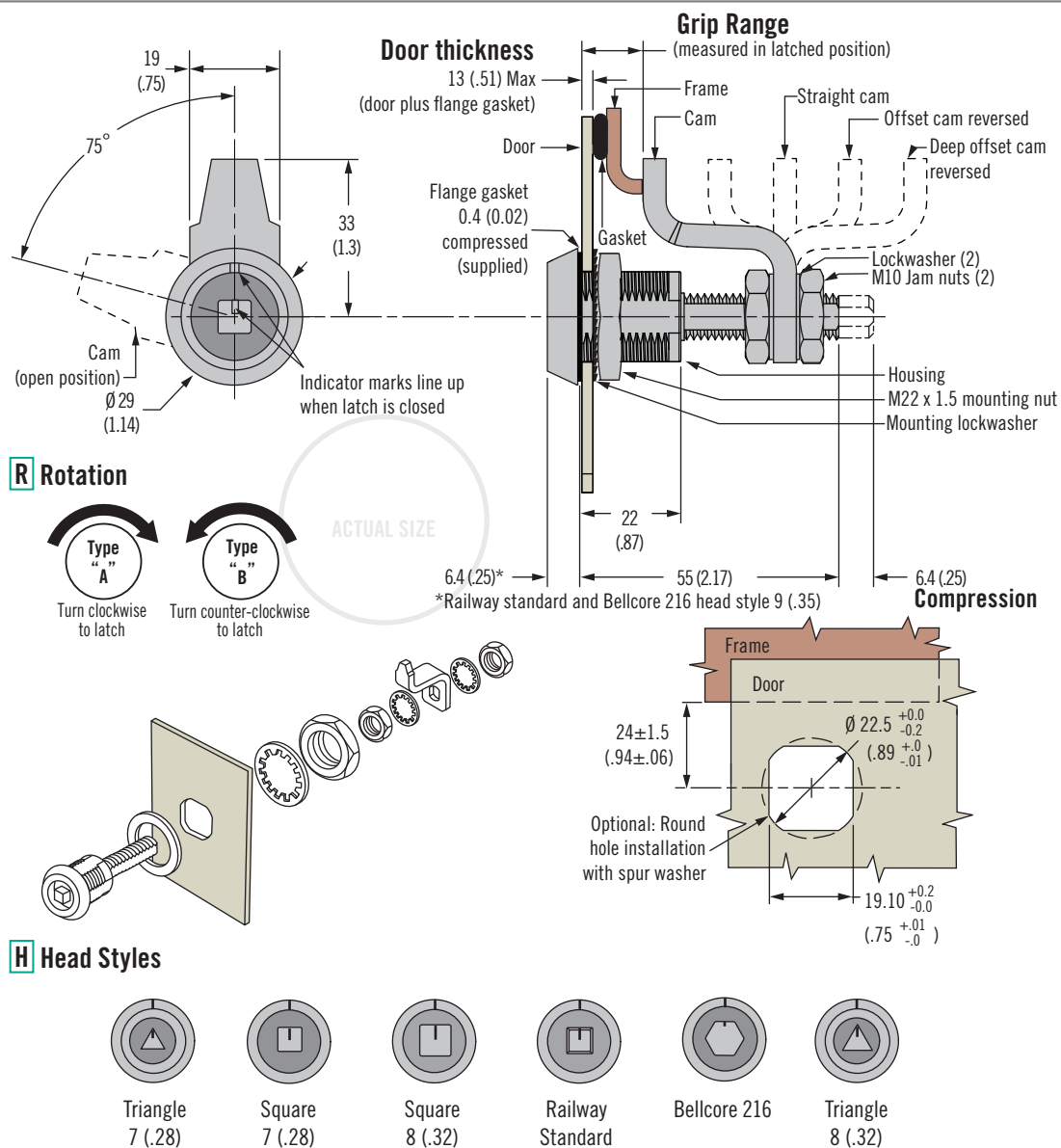
NEMA 4 and IP65 enabled using
gasket supplied

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

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)

Minimum Grip	Maximum Grip	Cam Type	Part Number
3.3 (.13)	19 (.75)	Deep offset cam, forward	E3-28-201-24
58.6 (2.31)	67.5 (2.70)	Deep offset cam, reversed	
17 (.67)	32.7 (1.29)	Offset cam, forward	E3-28-202-24
44.4 (1.75)	60.1 (2.37)	Offset cam, reversed	
30.7 (1.21)	46.4 (1.83)	Straight cam	E3-28-203-24



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Dimensions in millimeters (inch) unless otherwise stated

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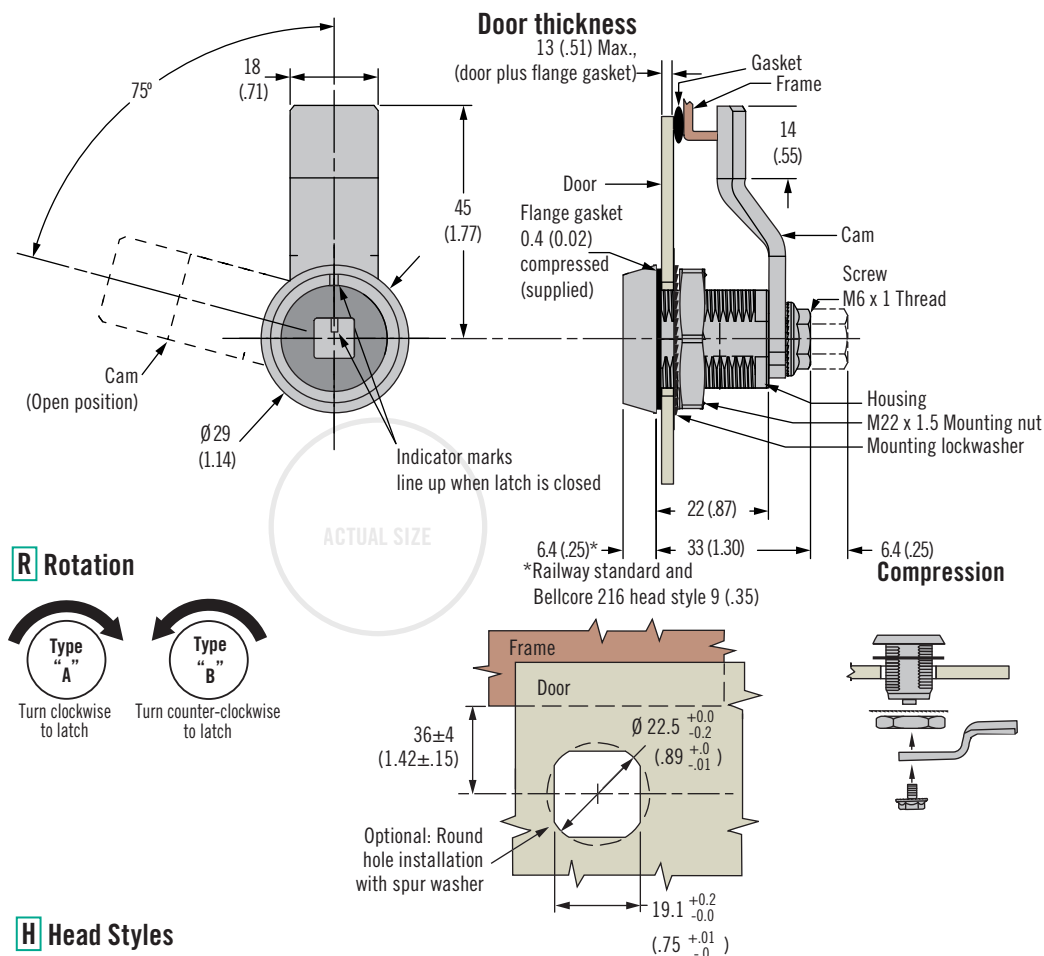
E3 VISE ACTION® Compression Latch

Machined stainless steel housing · Tool operated

Fixed grip · 19.1mm size · Compact



89B



- 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)

Latch Part Number (no cam)

E3 - C R H - UUO

R Rotation

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

H Head style

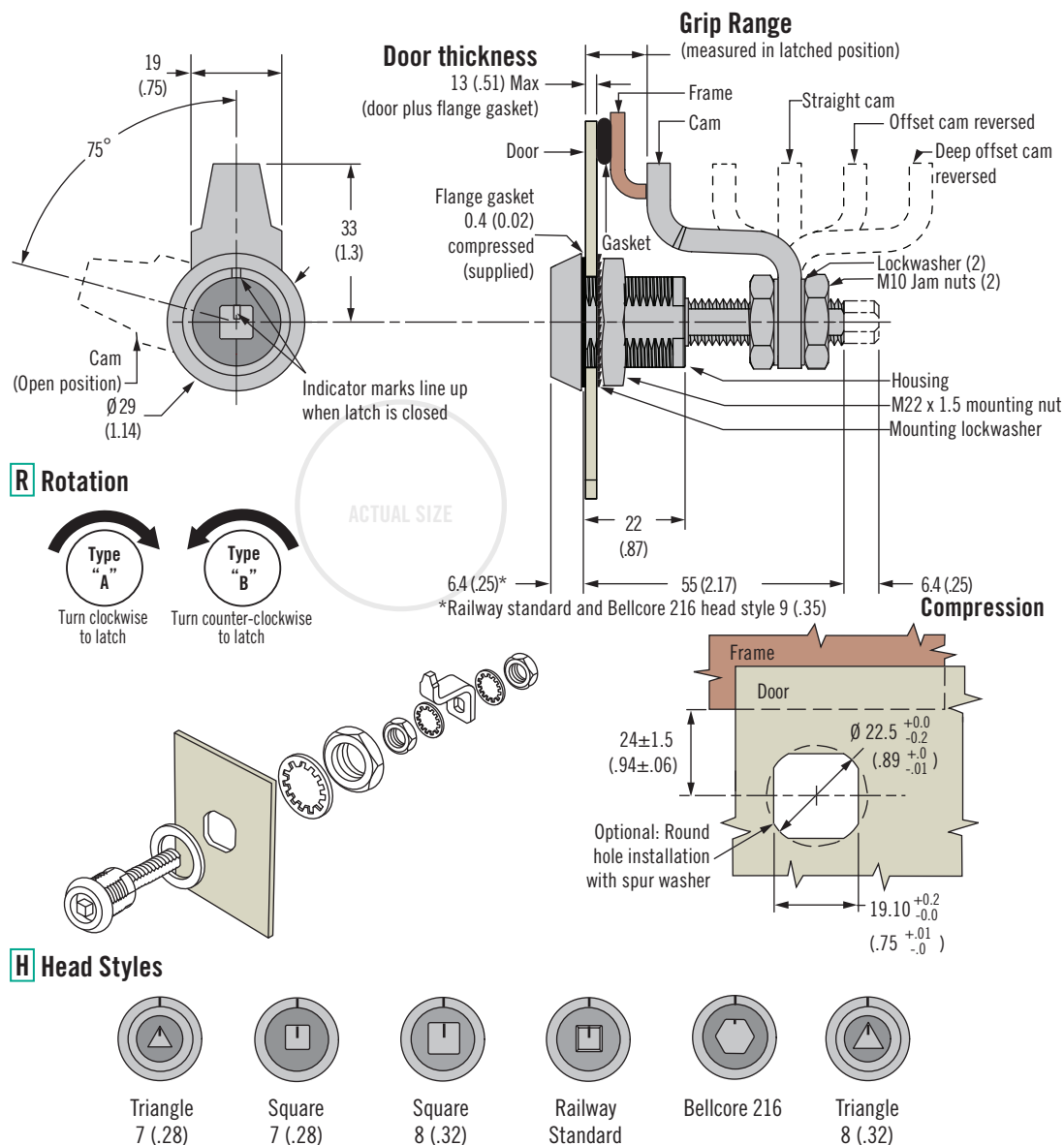
- 3 7 (.28) Triangle
- 4 7 (.28) Square
- 10 8 (.32) Square
- 11 Railway standard
- 15 Bellcore 216
- 20 8 (.32) Triangle

Cam Part Number (order separately from latch)

Grip	Part Number	Grip	Part Number	Grip	Part Number	Grip	Part Number
4 (.16)	E3-28-700-24	14 (.55)	E3-28-705-24	24 (.94)	E3-28-710-24	34 (1.34)	E3-28-715-24
6 (.31)	E3-28-701-24	16 (.63)	E3-28-706-24	26 (1.02)	E3-28-711-24	36 (1.42)	E3-28-716-24
8 (.31)	E3-28-702-24	18 (.71)	E3-28-707-24	28 (1.10)	E3-28-712-24	38 (1.50)	E3-28-717-24
10 (.39)	E3-28-703-24	20 (.79)	E3-28-708-24	30 (1.18)	E3-28-713-24	40 (1.57)	E3-28-718-24
12 (.47)	E3-28-704-24	22 (.87)	E3-28-709-24	32 (1.26)	E3-28-714-24	42 (1.65)	E3-28-719-24

Zinc and plated steel housing · Tool operated
Adjustable grip · 19.1mm size · Compact

- 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).



Order latch and cam separately

E3 - C R H - O F

- | R Rotation | | F Finish | |
|--------------|-----------------------------------|----------|----------------------|
| 1 | Type A clockwise to latch | 1 | Chrome plated |
| 22 | Type B counter-clockwise to latch | 5 | Black powder coated |
| | | 7 | Silver powder coated |
| H Head Style | | | |
| 3 | 7 (.28) Triangle | 15 | Bellcore 216 |
| 4 | 7 (.28) Square | 20 | 8 (.32) Triangle |
| 10 | 8 (.32) Square | | |
| 11 | Railway standard | | |



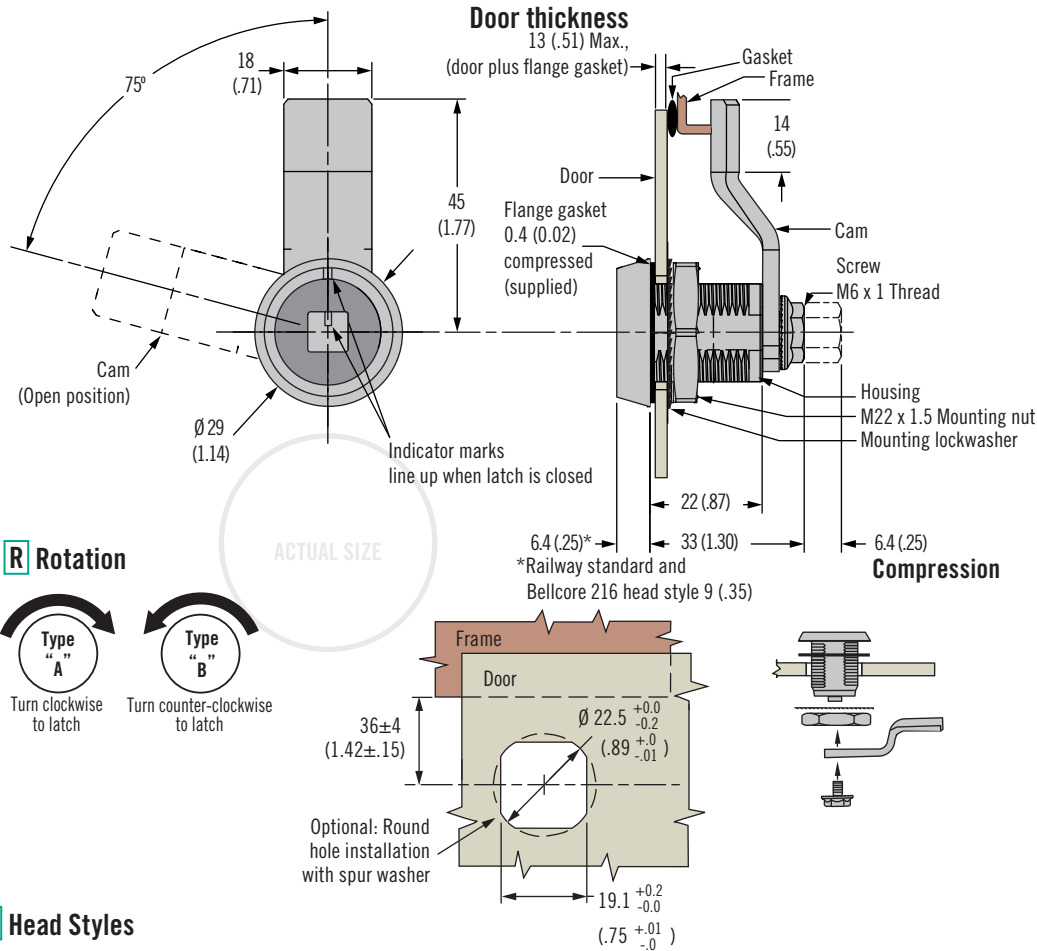
E3 VISE ACTION® Compression Latch

Zinc and plated steel housing. Tool operated

Fixed grip · 19.1mm size · Compact



89D



- 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

Latch Part Number (no cam)

E3 - C R H - UU F

R Rotation

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

H Head style

- 3 7 (.28) Triangle
4 7 (.28) Square
10 8 (.32) Square

- 11 Railway standard
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)

Grip	Part Number	Grip	Part Number	Grip	Part Number	Grip	Part Number
4 (.16)	E5-2500	14 (.55)	E5-2505	24 (.94)	E5-2510	34 (1.34)	E5-2515
6 (.31)	E5-2501	16 (.63)	E5-2506	26 (1.02)	E5-2511	36 (1.42)	E5-2516
8 (.31)	E5-2502	18 (.71)	E5-2507	28 (1.10)	E5-2512	38 (1.50)	E5-2517
10 (.39)	E5-2503	20 (.79)	E5-2508	30 (1.18)	E5-2513	40 (1.57)	E5-2518
12 (.47)	E5-2504	22 (.87)	E5-2509	32 (1.26)	E5-2514	42 (1.65)	E5-2519



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

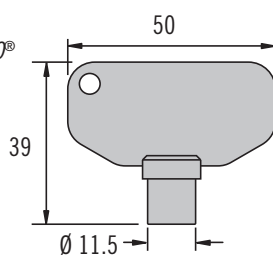
Zinc alloy or nylon

Notes

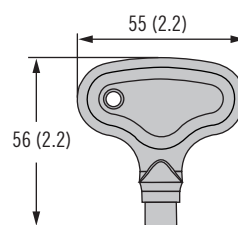
*Does not work with 7mm tapered triangle

Keys - Steel

For latches with *SOUTHCO*®
Tubular key head styles



Keys - Zinc or Nylon



H Head style

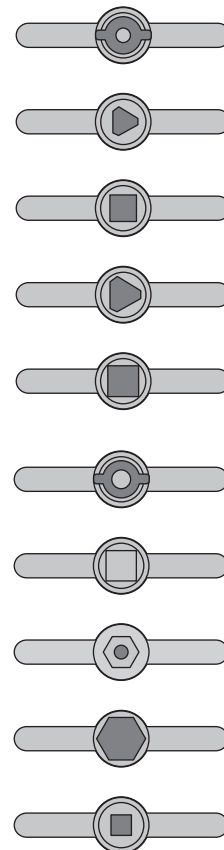
- 2 3 (.11) Double bit
- 3 7 (.28) Triangle*
- 4 7 (.28) Square
- 7 8 (.32) Triangle
- 8 8 (.32) Square recess
- 9 5 (.19) Double bit (nylon only)
- 10 8 (.32) Square male (zinc only)
- 11 Bellcore electronics
- 12 Bellcore 216 (zinc only)
- 14 Railway Standard (zinc only)

F Finish

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

E3 - H - F

Key Styles



- 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

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



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Dimensions in millimeters (inch) unless otherwise stated

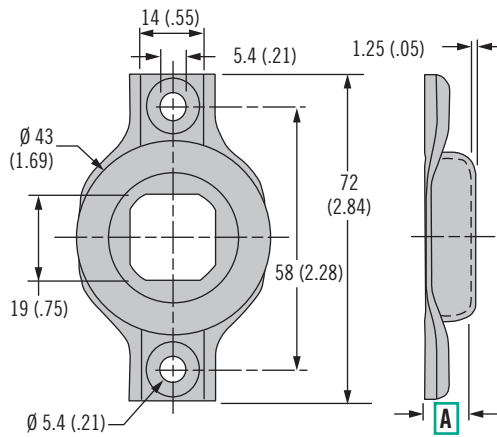
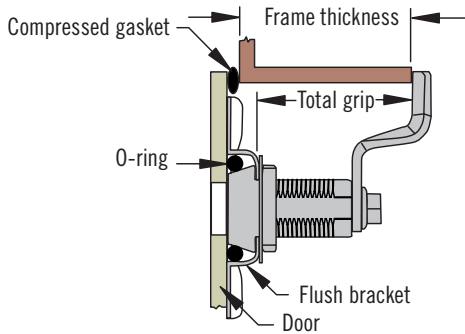
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E3 VISE ACTION® Compression Latch Accessories

Fixed bracket for flush mounting



91

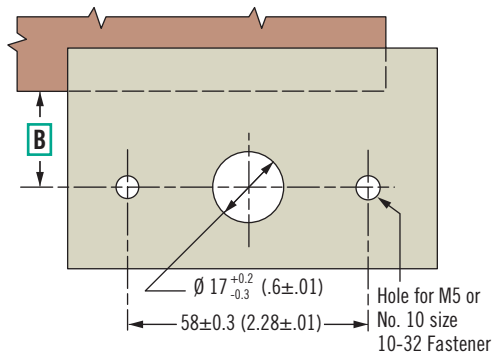


A	Part Number	Material
6.6	E3-77-251-12	Galvanized steel
*9.3	E3-77-252-12	Galvanized steel
6.6	E3-77-251-24	304 Stainless steel
*9.3	E3-77-252-24	304 Stainless steel
* For use with Railway standard or Bellcore 216 style only		

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

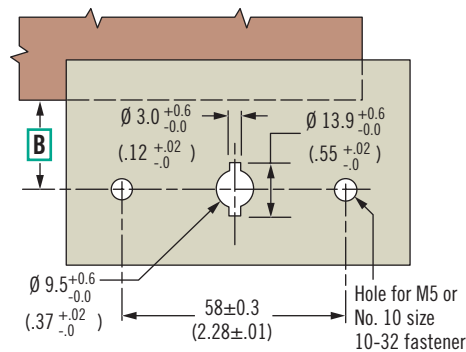
Door preparation

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

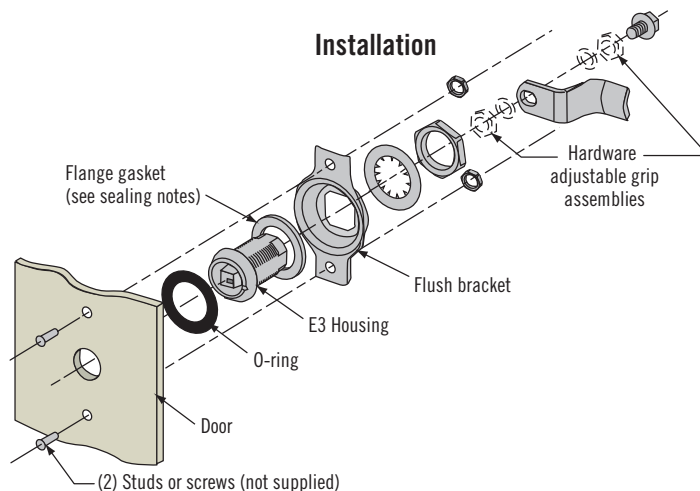


Double bit (key retained style)

Key can only be removed in the latch closed position.



Installation



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



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

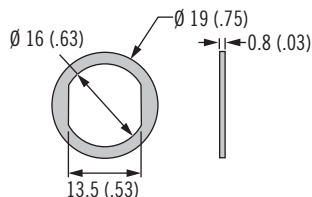
Notes

Spur washer provides for round hole installation in wood and similar materials of low density

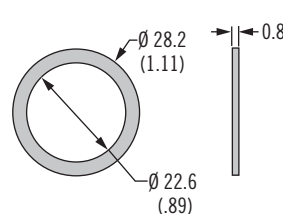
Sealing cover cannot be used with Railway standard or Bellcore 216 styles

Sealing Washers

13.5mm size

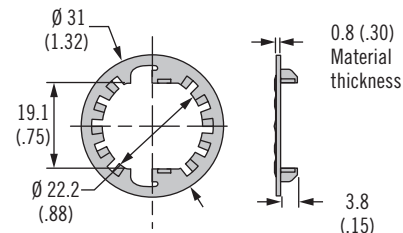


19.1mm size

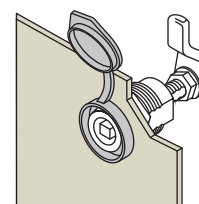
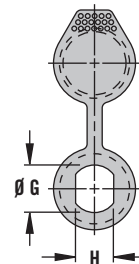
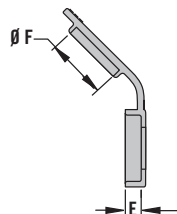
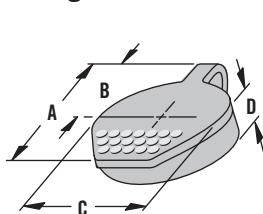


Spur Washer

19.1mm size



Sealing Cover



Latch Installation Hole Size		Dimensions					
Ø G	Distance across flat H	A	B	Ø C	D	E	Ø 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)

Part Number

See 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

Material and Finish

Zinc alloy

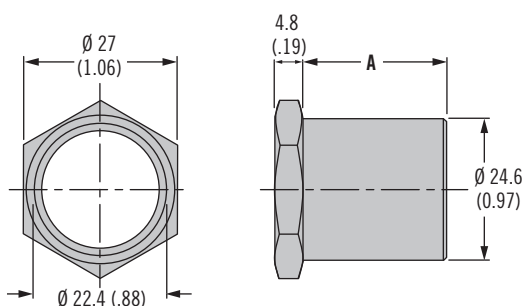
Installation Notes

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

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



A	Part Number
12.7 (.50)	E3-34-263-36
25 (.98)	E3-34-264-36

Dimensions in millimeters (inch) unless otherwise stated

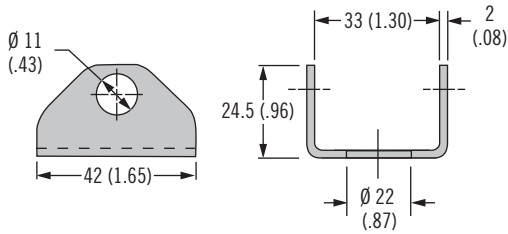
E3 VISE ACTION® Compression Latch Accessories

Padlock brackets · Finger pulls

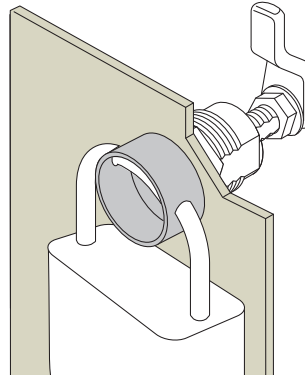
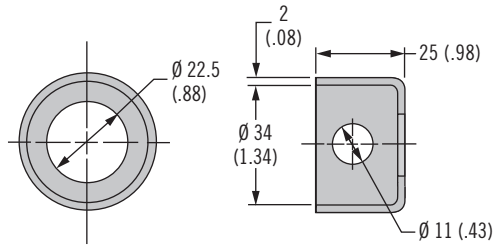


93

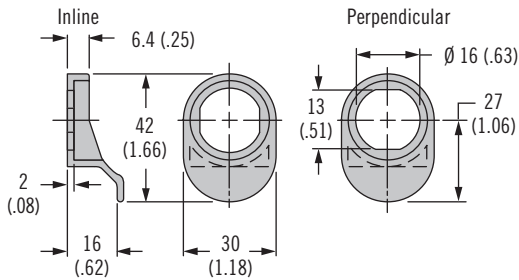
Padlock Bracket (Square)



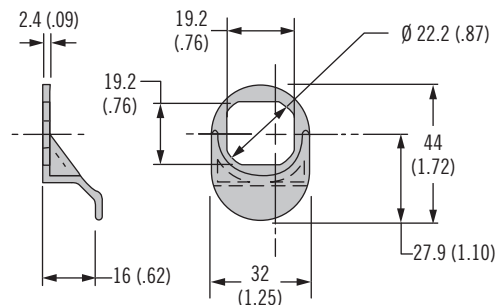
Padlock Bracket (Round)



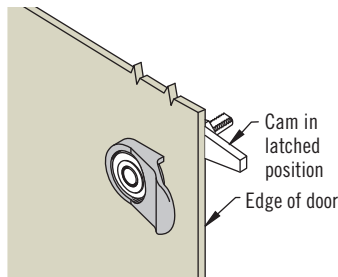
Pull Tab (13.5mm size)



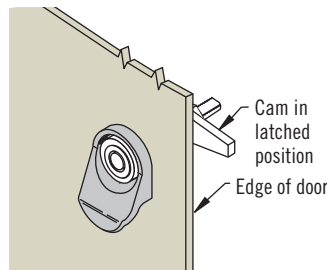
Pull Tab (19.1mm size)



Pull tab in-line with cam



Pull tab perpendicular to cam



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

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

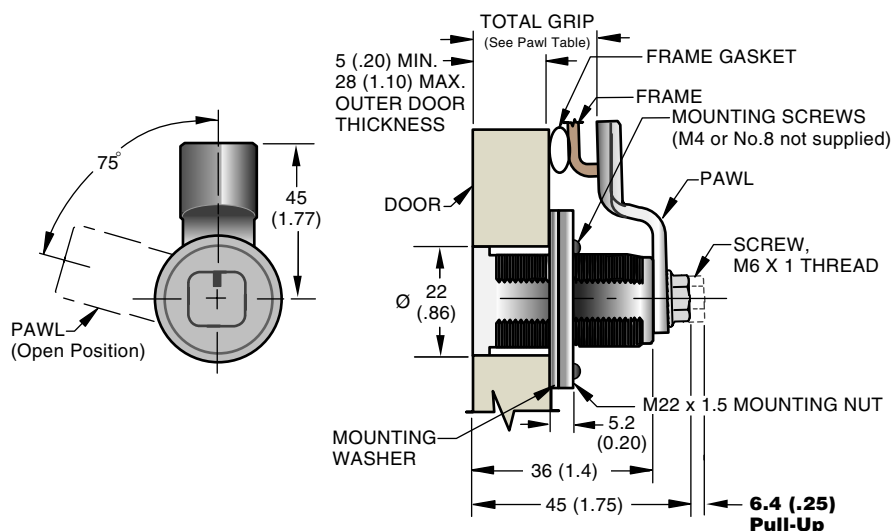
Padlock bracket: For 19.1mm size single hole mount tool operated only

Only unassembled styles can be used with round padlock bracket

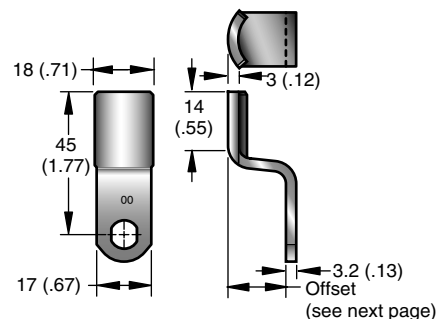
Southco® Compression Latches

Vise Action Series, Flush Design

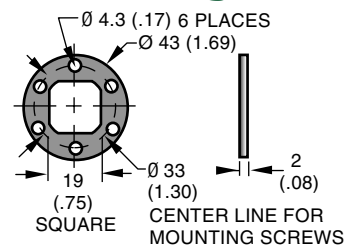
- **Single-hole mount, large size**
- **Latch provides completely flush outer surface**
- **Designed for use in thicker panels such as wood**
- **Seven tool- or key-operated access styles**



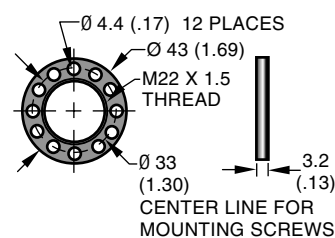
Pawl Detail



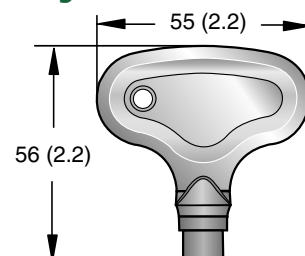
Mounting Washer



Mounting Nut



Key (Order Separately)



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.

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

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

Pawl Type	TOTAL GRIP	Pawl Offset	Pawl Type	TOTAL GRIP	Pawl Offset
XX=00 •	19 (.75)	18 (.71)	XX=10 •	39 (1.53)	2 (.08)
XX=01 •	21 (.83)	16 (.63)	XX=11 •	41 (1.61)	4 (.16)
XX=02 •	23 (.91)	14 (.55)	XX=12 •	43 (1.69)	6 (.24)
XX=03 •	25 (.98)	12 (.47)	XX=13 •	45 (1.77)	8 (.31)
XX=04 •	27 (1.06)	10 (.39)	XX=14	47 (1.85)	10 (.39)
XX=05 •	29 (1.14)	8 (.31)	XX=15	49 (1.93)	12 (.47)
XX=06 •	31 (1.22)	6 (.24)	XX=16	51 (2.01)	14 (.55)
XX=07 •	33 (1.30)	4 (.16)	XX=17	53 (2.09)	16 (.63)
XX=08 •	35 (1.38)	2 (.08)	XX=18	55 (2.17)	18 (.71)
XX=09 •	37 (1.46)	0 (0)	XX=19	57 (2.24)	20 (.79)



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.

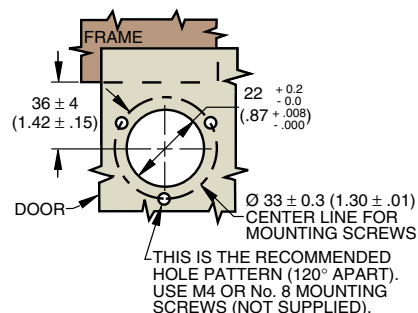
Product Strength Guidelines

(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



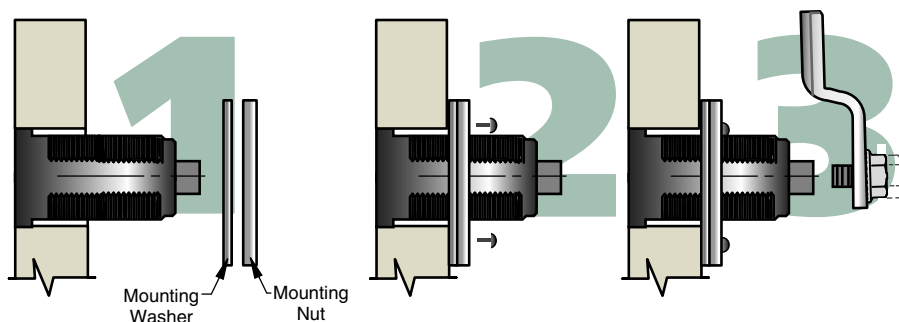
Installation

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).

millimeter (inch)
millimeter
(inch)

Dimensions without tolerances are for reference only.



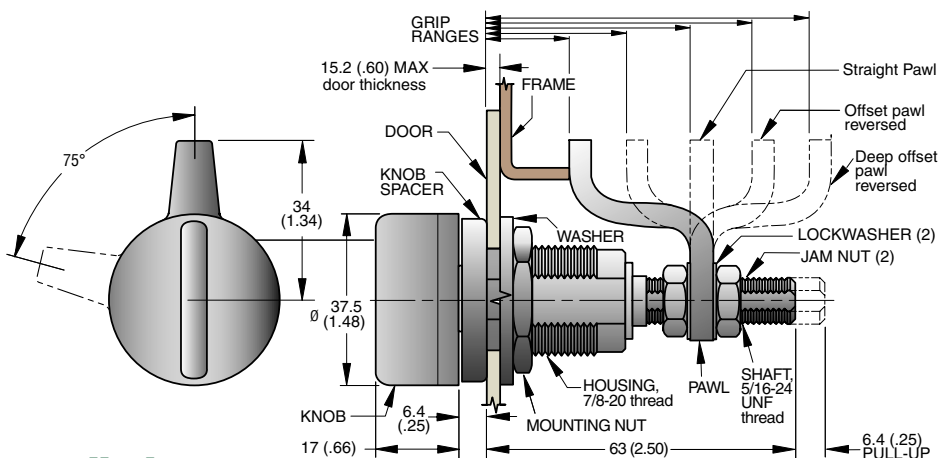
Southco® Compression Latches

Vise Action Series Knob Style

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

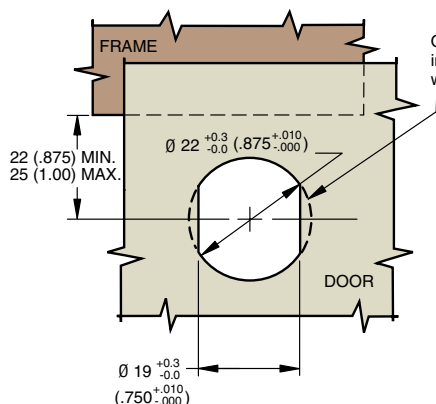


Accessory for this latch. See page 36.

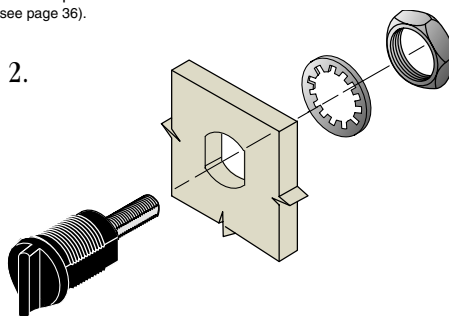


Installation

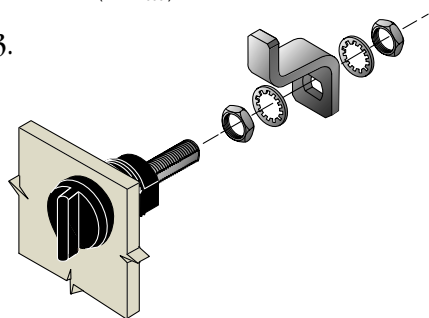
1.



2.

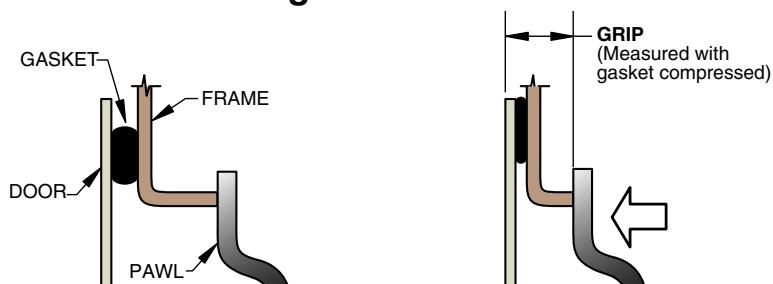


3.



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

For gasketed doors:



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

Material and Finish

HOUSING: Die cast zinc, black powder coated.

SPRING: 302 Stainless steel, natural.

O-RING: Buna-N rubber, black.

PIN: 1008 Steel, zinc plated plus chromate dip.

WASHER and PAWL: 1010 Steel, zinc plate, chromate plus sealer.

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

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

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

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

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

KNOB: Glass filled nylon, black.

KNOB SPACER: Nylon, black.

RETAINER: Polycarbonate, black.

GRIP RANGE		PART NUMBERS
MIN.	MAX.	
10 (.39)	27 (1.06)	E3-10-504-50 * •
24 (.94)	40 (1.57)	E3-10-505-50 * •
36 (1.42)	52.5 (2.06)	E3-10-506-50 ‡ •
49 (1.94)	65.5 (2.57)	E3-10-505-50 * •
63.5 (2.50)	79 (3.11)	E3-10-504-50 * •

Spur Washer listed on page, 36.

* The same pawl (curved forward or reversed) is supplied for both short and long grips.

‡ For intermediate grip, straight pawl is supplied.

Product Strength Guidelines

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

Maximum static load: 445 N (100 lbs.)

Average ultimate load: 890 N (200 lbs.)

millimeter (inch)
millimeter
(inch)

Dimensions without tolerances are for reference only.