



82 DZUS® Performance Quarter-Turn Fasteners Studs

82

Material and Finish

Studs: Steel, zinc plated and chromate or stainless steel
Bail cover: ABS, black

85

Accessories

Tool head recess key:
Part number: 29-90-214-10

D8

D9

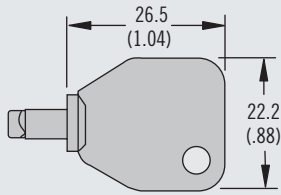
D1

D4

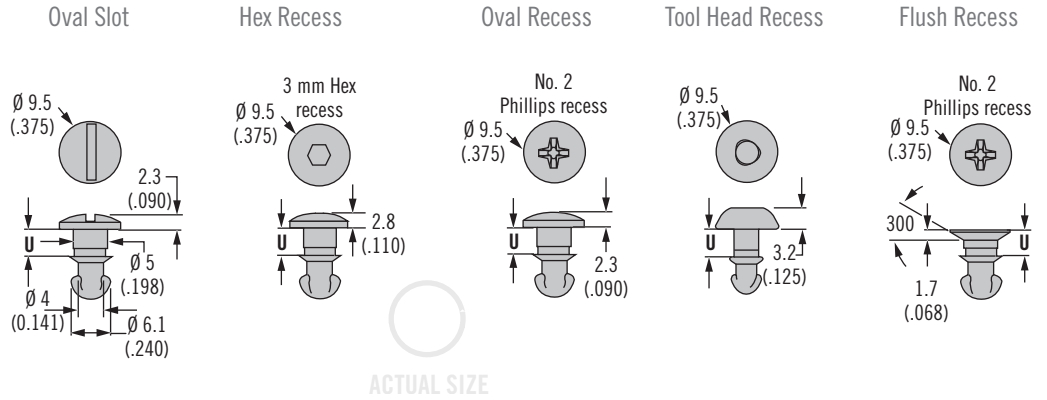
D5

D7

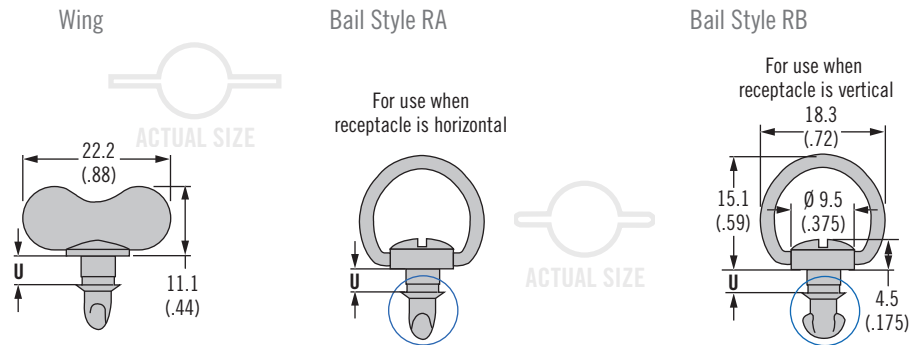
NY



H Head Styles - Tool Actuated



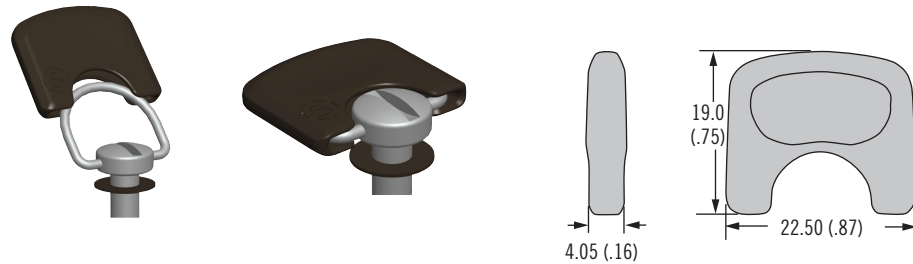
H Head Styles - Hand Actuated



Installation Notes

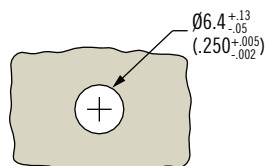
Bail cover:
A retainer must be fitted under the stud head to fit flush with surface
Retainer part number 82-32-301-12 (see page 443)

Optional Bail Cover



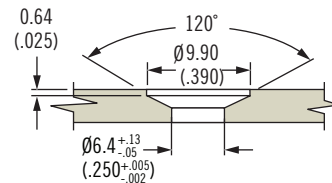
Bail Cover Part Number
82-2-B-000

Stud Panel Preparation



Flush Head Styles

(when outer panel is 1.3 (.050) or greater)

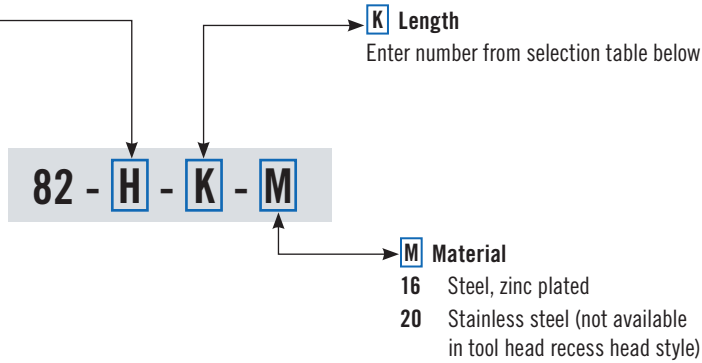


82 DZUS® Lion Quarter-Turn Fasteners

Stud selection



- H** Head style
- 11 Oval slot
 - 12 Wing head
 - 15 Bail RA
 - 16 Bail RB
 - 19 Oval Phillips recess
 - 28 Flush Phillips recess
 - 78 Hex recess
 - T Tool head recess
(not available in stainless steel)



Part Number Selection

82

85

D8

D9

D1

D4

D5

D7

NY



To select correct fastener:

1. Select receptacle

Choose a receptacle from pages 438-442

2. Select retainer and accessories

from page 443 and note any adjustment values

3. Specify stud length

Calculate the total material thickness (TMT) using the formula given for the receptacle selected. Find the range of TMT using the stud length selection table (left) using the column (A, B, C, or D) given for the receptacle selected, find **K**

4. Complete the stud part number

by specifying the head style **H**, stud length **K**, and material **M**

Example:

For rivet-on with base receptacle 82-35-302-15 use column D

For TMT value calculated as 5.2 (.206), K = 200

For slotted head style in steel material, completed part number: 82-11-200-16

A complete example can be found on page 435

Notes

Stainless steel material may require a higher minimum order quantity. Contact Southco for details.

Stud Length Table									
A		B		C		D		K	U
TMT Range For: 82-35-306-10		TMT Range For: 82-35-308-55 82-35-310-55		TMT Range For: 82-35-315-55		TMT Range For: All Other Receptacles			
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
0.7 (.026)	1.2 (.045)	~	~	~	~	2.3 (.090)	2.8 (.110)	100	3.2 (.127)
1.2 (.045)	1.7 (.065)	~	~	~	~	2.8 (.110)	3.3 (.130)	120	3.7 (.147)
1.7 (.065)	2.2 (.085)	~	~	~	~	3.3 (.130)	3.8 (.150)	140	4.2 (.167)
2.2 (.085)	2.7 (.105)	0 (0)	0.5 (.019)	1.3 (.050)	1.8 (.070)	3.8 (.150)	4.3 (.170)	160	4.7 (.187)
2.7 (.105)	3.2 (.125)	0.5 (.019)	1 (.039)	1.8 (.070)	2.3 (.090)	4.3 (.170)	4.8 (.190)	180	5.3 (.207)
3.2 (.125)	3.7 (.145)	1 (.039)	1.5 (.059)	2.3 (.090)	2.8 (.110)	4.8 (.190)	5.3 (.210)	200	5.8 (.227)
3.7 (.145)	4.2 (.165)	1.5 (.059)	2 (.079)	2.8 (.110)	3.3 (.130)	5.3 (.210)	5.8 (.230)	220	6.3 (.247)
4.2 (.165)	4.7 (.185)	2 (.079)	2.5 (.099)	3.3 (.130)	3.8 (.150)	5.8 (.230)	6.3 (.250)	240	6.8 (.267)
4.7 (.185)	5.2 (.205)	2.5 (.099)	3 (.119)	3.8 (.150)	4.3 (.170)	6.4 (.250)	6.9 (.270)	260	7.3 (.287)
5.2 (.205)	5.7 (.225)	3 (.119)	3.5 (.139)	4.3 (.170)	4.8 (.190)	6.9 (.270)	7.4 (.290)	280	7.8 (.307)
5.7 (.225)	6.2 (.245)	3.5 (.139)	4.1 (.159)	4.8 (.190)	5.3 (.210)	7.4 (.290)	7.9 (.310)	300	8.3 (.327)
~	~	4.1 (.159)	4.6 (.179)	5.3 (.210)	5.8 (.230)	7.9 (.310)	8.4 (.330)	320	8.8 (.347)
~	~	4.6 (.179)	5.1 (.199)	5.8 (.230)	6.3 (.250)	8.4 (.330)	8.9 (.350)	340	9.3 (.367)
~	~	5.1 (.199)	5.6 (.219)	6.3 (.250)	6.8 (.270)	8.9 (.350)	9.4 (.370)	360	9.8 (.387)
~	~	5.6 (.219)	6.1 (.239)	6.8 (.270)	7.3 (.290)	9.4 (.370)	9.9 (.390)	380	10.3 (.407)
~	~	6.1 (.239)	6.6 (.259)	7.3 (.290)	7.8 (.310)	9.9 (.390)	10.4 (.410)	400	10.8 (.427)
~	~	6.6 (.259)	7.1 (.279)	7.8 (.310)	8.3 (.330)	10.4 (.410)	10.9 (.430)	420	11.4 (.447)
~	~	7.1 (.279)	7.6 (.299)	8.3 (.330)	8.8 (.350)	10.9 (.430)	11.4 (.450)	440	11.9 (.467)
~	~	7.6 (.299)	8.1 (.319)	8.8 (.350)	9.3 (.370)	11.4 (.450)	11.9 (.470)	460	12.4 (.487)
~	~	8.1 (.319)	8.6 (.339)	9.3 (.370)	9.8 (.390)	11.9 (.470)	12.4 (.490)	480	12.9 (.507)
~	~	8.6 (.339)	9.1 (.359)	9.8 (.390)	10.3 (.410)	12.5 (.490)	12.9 (.510)	500	13.4 (.527)
~	~	9.1 (.359)	9.6 (.379)	10.3 (.410)	10.8 (.430)	13 (.510)	13.5 (.530)	520	13.9 (.547)
~	~	9.6 (.379)	10.1 (.399)	10.8 (.430)	11.3 (.450)	13.5 (.530)	14 (.550)	540	14.4 (.567)
~	~	10.1 (.399)	10.6 (.419)	11.3 (.450)	11.8 (.470)	14 (.550)	14.5 (.570)	560	14.9 (.587)
~	~	10.6 (.419)	11.1 (.439)	11.8 (.470)	12.3 (.490)	14.5 (.570)	15 (.590)	580	15.4 (.607)



82 DZUS[®] Lion Quarter-Turn Fasteners Receptacles

Material and Finish

Steel, zinc immersion coating

Installation Notes

Install with $\varnothing 2.5$ (3/32) rivets, spring plate must float freely after riveting

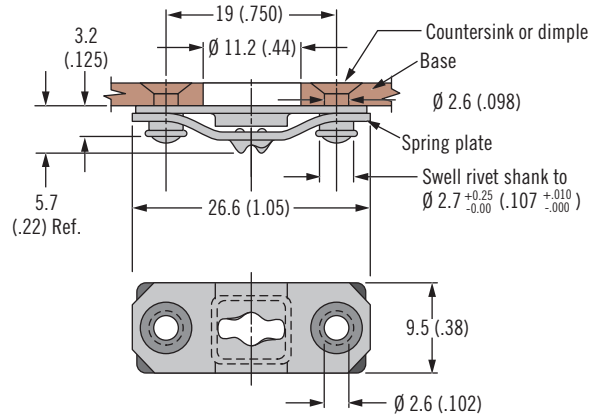
Part Number

See table

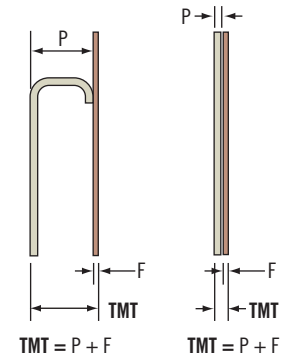
Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437

Rivet-On With Base



ACTUAL SIZE



Part Number	Stud Selection Column
82-35-302-15	D

Material and Finish

Steel, zinc immersion coating or stainless steel

Installation Notes

Install with $\varnothing 2.5$ (3/32) rivets, spring plate must float freely after riveting

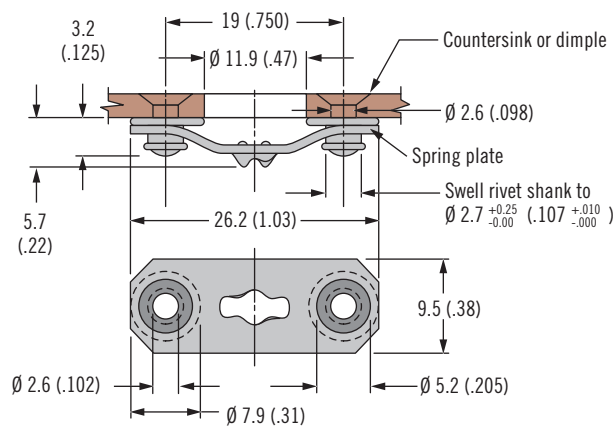
Part Number

See table

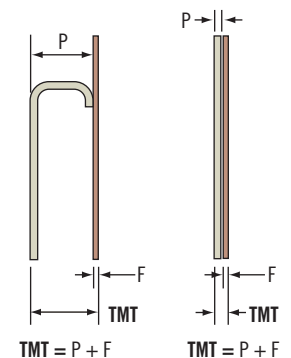
Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437

Rivet-On Without Base



ACTUAL SIZE

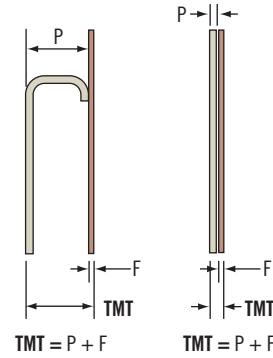
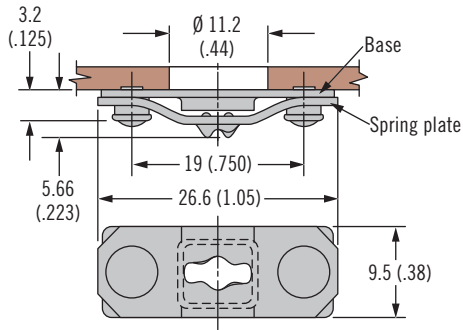


Material	Part Number	Stud Selection Column
Steel	82-35-295-15	D
Stainless steel	82-35-295-20	

82 DZUS® Lion Quarter-Turn Fasteners Receptacles



Weld-On



ACTUAL SIZE

Part Number	Stud Selection Column
82-35-303-15	D

Material and Finish

Steel, zinc immersion coating

Installation Notes

Spring plate must float freely after welding

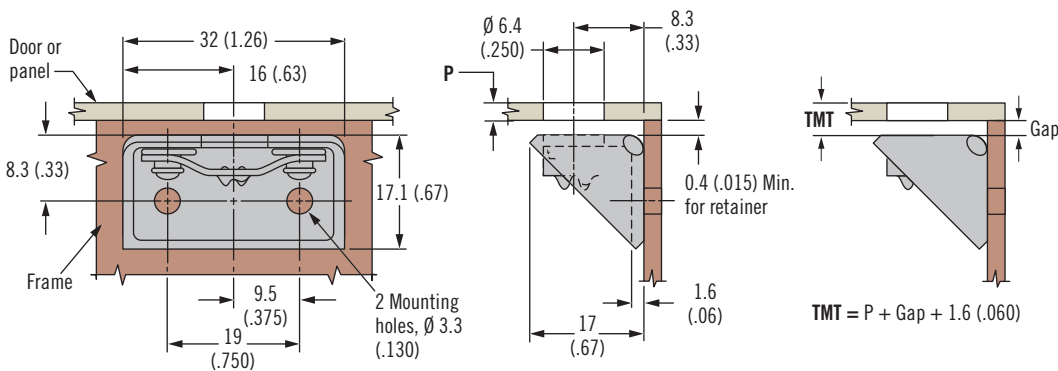
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437

Side Mount



ACTUAL SIZE

Part Number	Stud Selection Column
82-45-101-15	D

Material and Finish

Steel, zinc immersion coating

Installation Notes

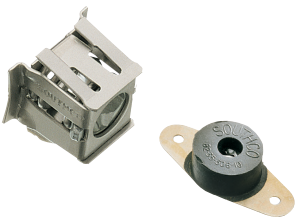
Install with Ø 2.5 (3/32) rivets

Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437



82 DZUS[®] Lion Quarter-Turn Fasteners Receptacles

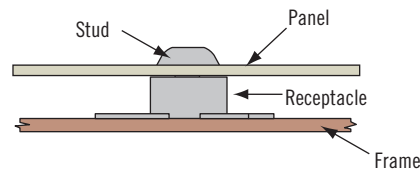
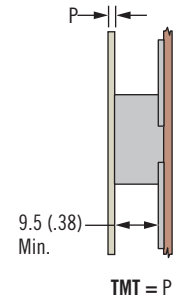
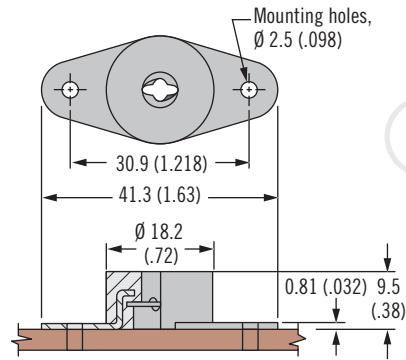
Material and Finish

Steel, zinc plated and neoprene

Installation Notes

Install with \varnothing 2.5 (3/32) rivets

Vibration Isolating



Part Number	Stud Selection Column
82-35-306-10	A

Part Number

See table

Notes

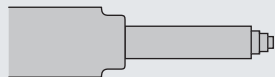
Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437

Material and Finish

Steel, zinc plated and stainless steel

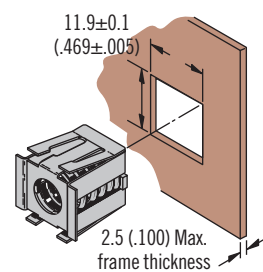
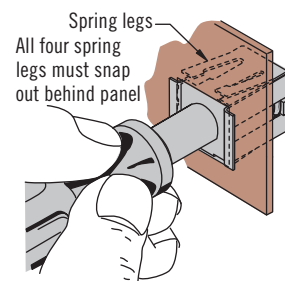
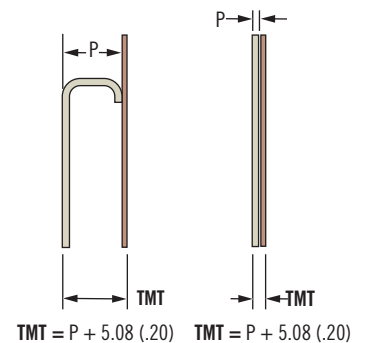
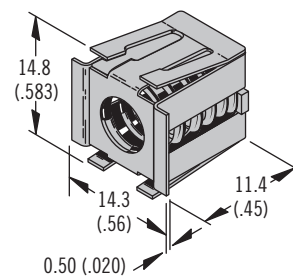
Installation Notes

Installation Tool



Part Number: 29-8125-309

Snap-In - Front Mount



Part Number

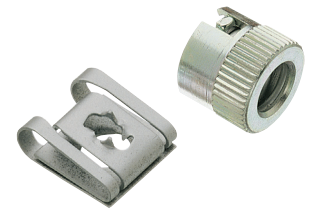
See table

Notes

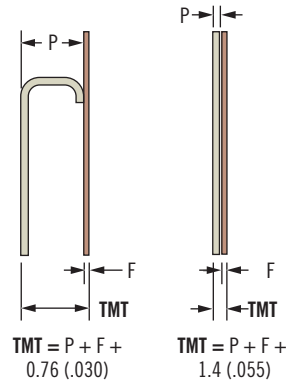
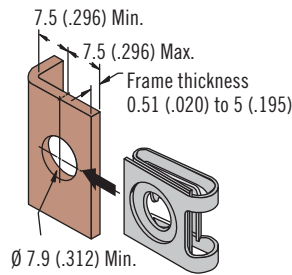
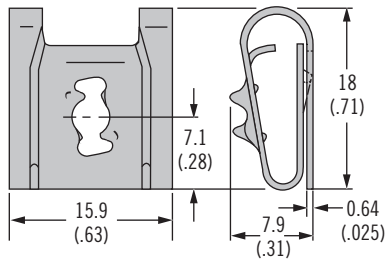
Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437

Part Number	Stud Selection Column
82-35-309-56	D

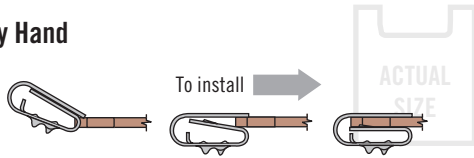
82 DZUS® Lion Quarter-Turn Fasteners Receptacles



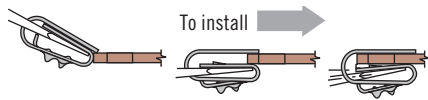
Clip-On



By Hand



With Screwdriver



Material	Part Number	Stud Selection Column
Steel	82-47-113-15	D
Stainless steel	82-47-113-20	

Material and Finish

Steel, zinc immersion coating or stainless steel

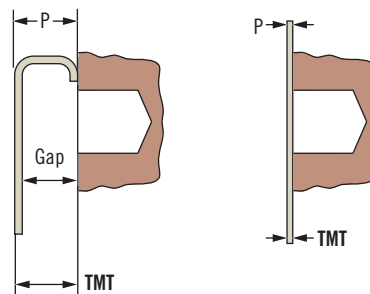
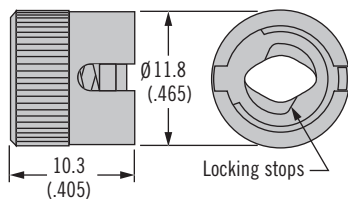
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437

Press-In

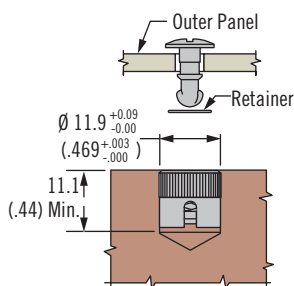


$$TMT = P + \text{Gap} - 0.5 (.020)$$

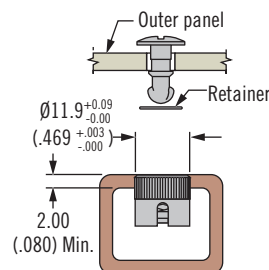
(when gap is > retainer thickness)

$$TMT = P + (\text{Retainer adjustment value}) - 0.5 (.020)$$

Solid Install



Blind Install



Part Number	Stud Selection Column
82-35-308-55	B

Material and Finish

Steel, zinc plated and stainless steel

Installation Notes

Press receptacle flush to frame

Notes

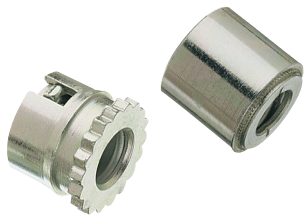
Receptacle shown installed flush to the frame. To eliminate the gap between the frame and outer panel, install to a depth \geq the thickness of the selected retainer. This depth should be added to the TMT.

Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437



82 DZUS® Lion Quarter-Turn Fasteners

Receptacles · Self-clinching

Material and Finish

Steel, zinc plated and stainless steel

82

Installation Notes

Press receptacle flush to frame

85

Notes

Receptacle shown installed flush to the frame. To eliminate the gap between the frame and outer panel, install to a depth \geq the thickness of the selected retainer. This depth should be added to the TMT.

D8

D9

D1

D4

D5

Part Number

See table

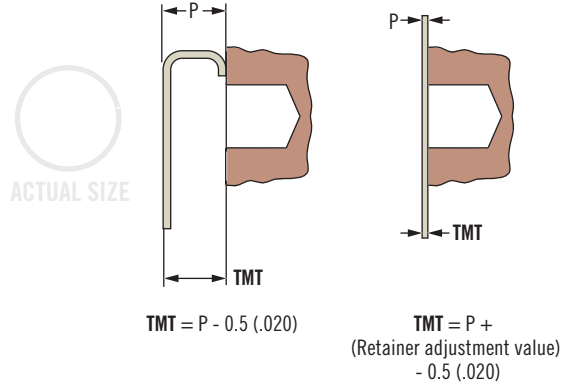
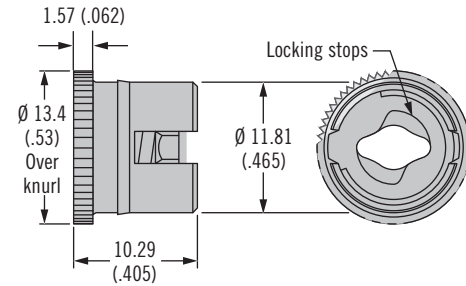
D7

NY

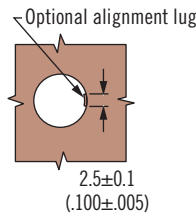
Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437

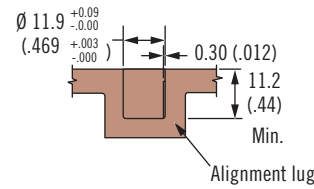
Ultrasonic For Thermoplastics



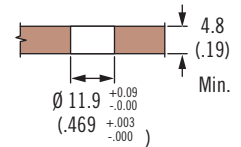
Installation



Blind Hole Installation



Thru Hole Installation



Part Number	Stud Selection Column
82-35-310-55	B

Material and Finish

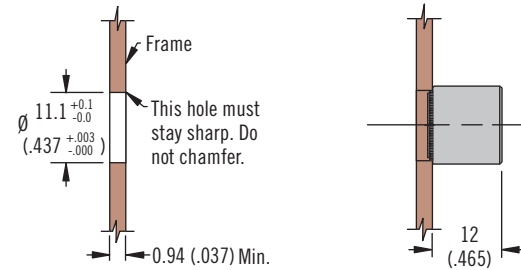
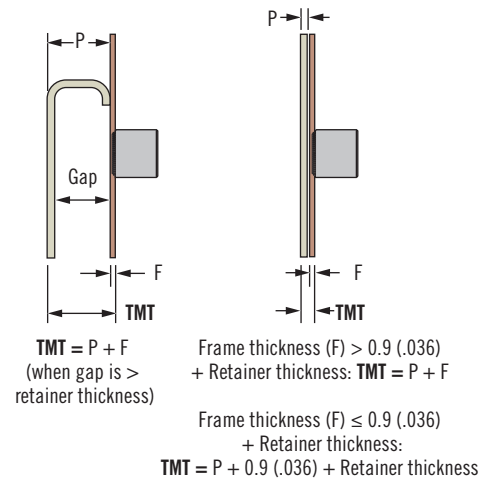
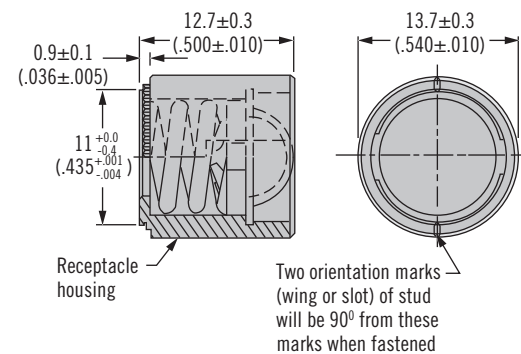
Steel, zinc plated and stainless steel

Installation Notes

For use in low carbon steels, aluminum and stainless steels in the annealed condition that are RB85 or softer

See page 627 for installation guidelines

Shielded – Self-Clinching



Part Number

See table

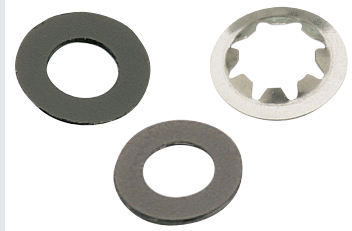
Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 437

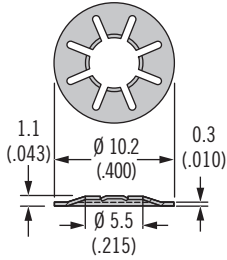
Part Number	Stud Selection Column
82-35-315-55	C

82 DZUS® Lion Quarter-Turn Fasteners

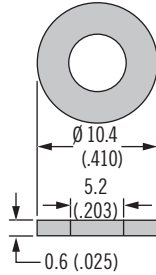
Retainers · Accessories



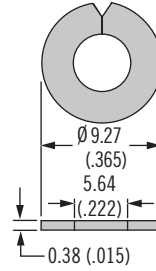
Retainer Push-On



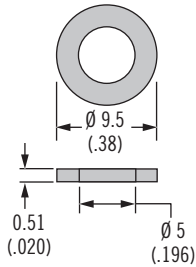
Retainer Push-On Plastic



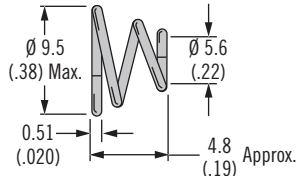
Retainer Split



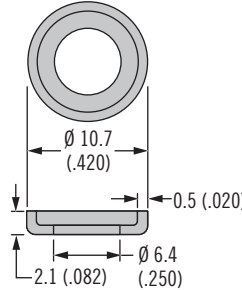
Sealing Washer



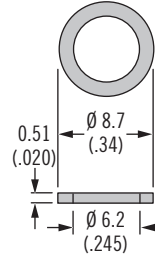
Ejector Spring



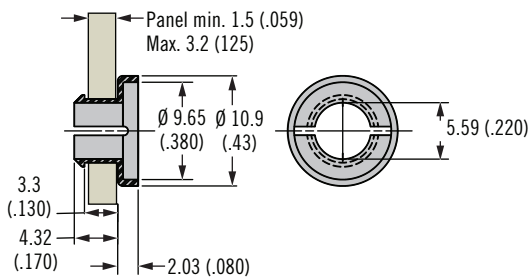
Cupped Washer



Flat Wear Washer



Snap-In Retainer

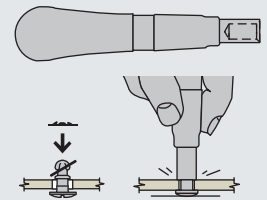


Material and Finish

See table

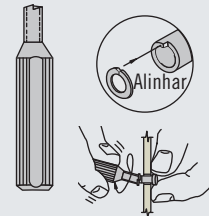
Installation Notes

For standard retainers:



Part Number: 82-0-22542-11

For split retainers:



Part Number: 82-0-7595-11

Notes

For snap-in retainer:

Min. stud **K** = 180 when using snap-in retainer (see page 437 for **K** reference).

Install stud into retainer before inserting into panel

Type	Part Number	Material	Adjustment Value
Push-on retainer	82-32-201-20	Stainless steel	Add 0.25 (.010)
Push-on plastic retainer	82-32-301-12	Nylon, black	Add 0.64 (.025)
Split retainer	82-32-101-20	Stainless steel	Add 0.38 (.015)
Sealing washer	82-43-201-38	Neoprene nitrile rubber, black	Add 0.51 (.020)
Ejector spring	43-13-1-24	Stainless steel	Add 0.51 (.020)
Cupped washer	82-46-101-39	Nylon, white	Add 0.51 (.020)
	82-46-101-41	Nylon, black	
Flat wear washer	82-46-103-39	Nylon, white	Add 0.51 (.020)
Snap-in retainer	82-32-401-41	Nylon, black	Add 0.51 (.020)

Part Number

See table

Notes

Adjustment value:

When using accessories the components increase TMT

Add the adjustment value to your outer panel thickness (P) when calculating TMT (see page 435 for example)

82
85
D8
D9
D1
D4
D5
D7
NY
↓
↙ ↘



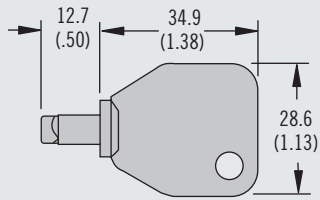
85 DZUS® Lion Quarter-Turn Fasteners Studs

Material and Finish

Studs: Steel, zinc plated or stainless steel
 Bail cover: ABS, black

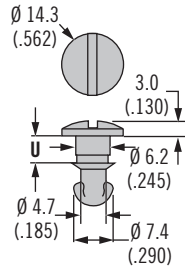
Accessories

Tool head recess key:
 Part number: 29-90-215-10

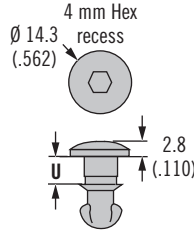


H Head Styles - Tool Actuated

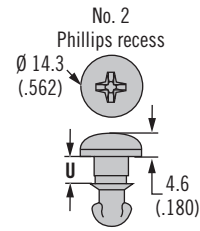
Oval Slot



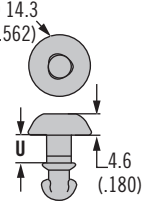
Hex Recess



Phillips Recess

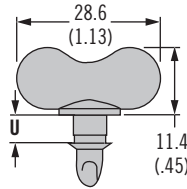
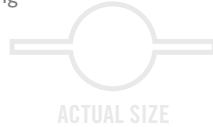


Tool Head Recess



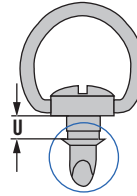
H Head Styles - Hand Actuated

Wing



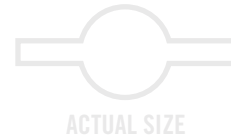
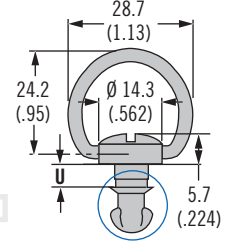
Bail Style RA

For use when receptacle is horizontal



Bail Style RB

For use when receptacle is vertical

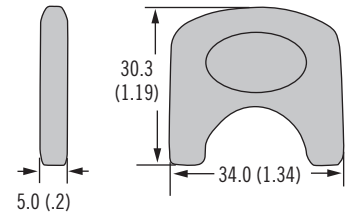
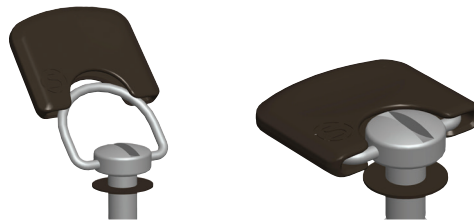


Installation Notes

Bail cover:
 A wear washer must be fitted under the stud head to fit flush with surface

Wear washer part number
 85-34-301-12 (see page 449)

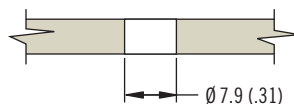
Optional Bail Cover



Bail Cover Part Number
85-5-B-000

Stud Panel Preparation

Prepare Hole

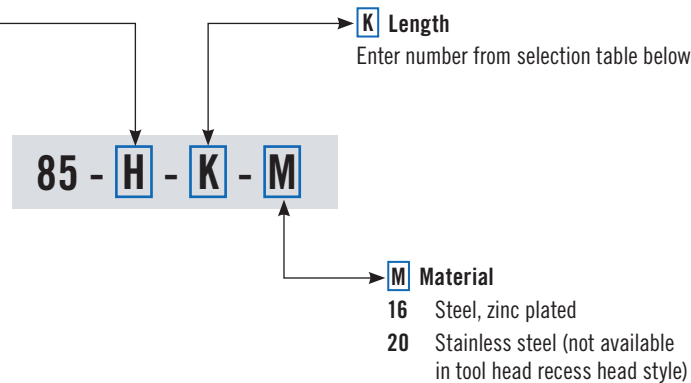


85 DZUS® Lion Quarter-Turn Fasteners

Stud selection



- H** Head style
- 11 Oval slot
 - 12 Wing head
 - 15 Bail RA
 - 16 Bail RB
 - 78 Hex recess
 - P Oval Phillips recess
 - T Tool head recess (not available in stainless steel)



Stud Length Table							
A		B		C		K	U
TMT Range For: 85-35-308-55		TMT Range For: 85-35-311-55		TMT Range For: All other receptacles			
Min.	Max.	Min.	Max.	Min.	Max.		
~	~	~	~	2.3 (.090)	2.8 (.110)	100	5.2 (.205)
~	~	~	~	2.8 (.110)	3.3 (.130)	120	5.7 (.225)
~	~	~	~	3.3 (.130)	3.8 (.150)	140	6.2 (.245)
~	~	~	~	3.8 (.150)	4.3 (.170)	160	6.7 (.265)
~	~	~	~	4.3 (.170)	4.8 (.190)	180	7.2 (.285)
~	~	~	~	4.8 (.190)	5.3 (.210)	200	7.7 (.305)
~	~	~	~	5.3 (.210)	5.8 (.230)	220	8.3 (.325)
~	~	1.3 (.050)	1.8 (.070)	5.8 (.230)	6.3 (.250)	240	8.8 (.345)
0.4 (.015)	0.9 (.035)	1.8 (.070)	2.3 (.090)	6.4 (.250)	6.9 (.270)	260	9.3 (.365)
0.9 (.035)	1.4 (.055)	2.3 (.090)	2.8 (.110)	6.9 (.270)	7.4 (.290)	280	9.8 (.385)
1.4 (.055)	1.9 (.075)	2.8 (.110)	3.3 (.130)	7.4 (.290)	7.9 (.310)	300	10.3 (.405)
1.9 (.075)	2.4 (.095)	3.3 (.130)	3.8 (.150)	7.9 (.310)	8.4 (.330)	320	10.8 (.425)
2.4 (.095)	2.9 (.115)	3.8 (.150)	4.3 (.170)	8.4 (.330)	8.9 (.350)	340	11.3 (.445)
2.9 (.115)	3.4 (.135)	4.3 (.170)	4.8 (.190)	8.9 (.350)	9.4 (.370)	360	11.8 (.465)
3.4 (.135)	3.9 (.155)	4.8 (.190)	5.3 (.210)	9.4 (.370)	9.9 (.390)	380	12.3 (.485)
3.9 (.155)	4.4 (.175)	5.3 (.210)	5.8 (.230)	9.9 (.390)	10.4 (.410)	400	12.8 (.505)
4.4 (.175)	4.9 (.195)	5.8 (.230)	6.3 (.250)	10.4 (.410)	10.9 (.430)	420	13.3 (.525)
5 (.195)	5.5 (.215)	6.4 (.250)	6.9 (.270)	10.9 (.430)	11.4 (.450)	440	13.8 (.545)
5.5 (.215)	6 (.235)	6.9 (.270)	7.4 (.290)	11.4 (.450)	11.9 (.470)	460	14.4 (.565)
6 (.235)	6.5 (.255)	7.4 (.290)	7.9 (.310)	11.9 (.470)	12.4 (.490)	480	14.9 (.585)
6.5 (.255)	7 (.275)	7.9 (.310)	8.4 (.330)	12.5 (.490)	12.9 (.510)	500	15.4 (.605)
7 (.275)	7.5 (.295)	8.4 (.330)	8.9 (.350)	13 (.510)	13.5 (.530)	520	15.9 (.625)
7.5 (.295)	8 (.315)	8.9 (.350)	9.4 (.370)	13.5 (.530)	14 (.550)	540	16.4 (.645)
8 (.315)	8.5 (.335)	9.4 (.370)	9.9 (.390)	14 (.550)	14.5 (.570)	560	16.9 (.665)
8.5 (.335)	9 (.355)	9.9 (.390)	10.4 (.410)	14.5 (.570)	15 (.590)	580	17.4 (.685)

Part Number Selection

82

85

D8

D9

D1

D4

D5

D7

NY



To select correct fastener:

1. Select receptacle

Choose a receptacle from page 446-448

2. Select retainer and accessories

from page 449 and note any adjustment values

3. Specify stud length

Calculate the total material thickness (TMT) using the formula given for the receptacle selected. Find the range of TMT using the stud length selection table (left) using the column (A, B or C) given for the receptacle selected, find **K**

4. Complete the stud part number

by specifying the head style **H**, stud length **K**, and material **M**

Example:

For rivet-on with base receptacle 85-35-295-15 use column C

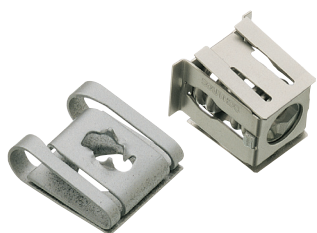
For TMT value calculated as 5.2 (.206), K = 200

For slotted head style in steel material, completed part number: 85-11-200-16

A complete example can be found on page 435

Notes

Stainless steel material may require a higher minimum order quantity. Contact Southco for details.



85 DZUS® Lion Quarter-Turn Fasteners Receptacles

Material and Finish

Steel, zinc immersion coating or stainless steel

82

85

D8

D9

D1

D4

D5

D7

NY

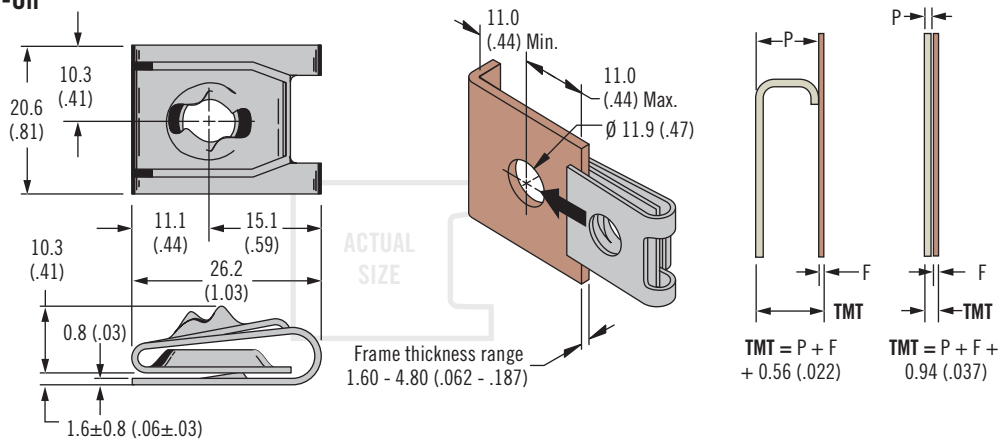
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 445

Clip-On



By Hand



With Screwdriver

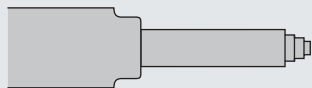


Material	Part Number	Stud Selection Column
Steel	85-47-101-15	C
Stainless steel	85-47-101-20	

Material and Finish

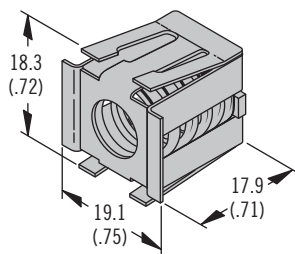
Steel, zinc plated and stainless steel

Installation Tool

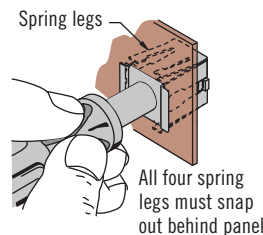
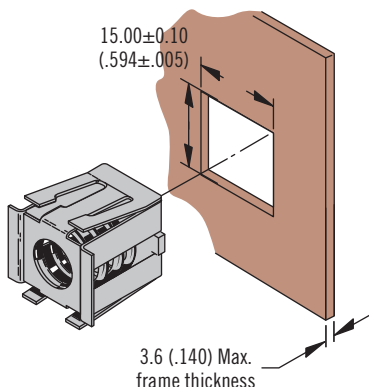
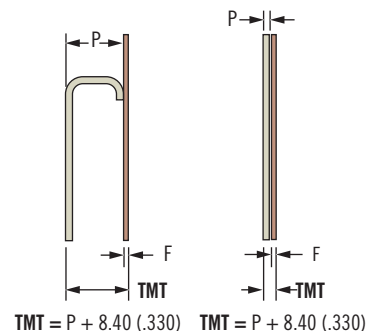


Part Number: 29-8125-309

Snap-In – Front Mount



ACTUAL SIZE



Part Number	Stud Selection Column
85-35-309-56	C

Part Number

See table

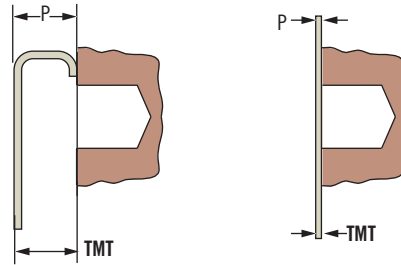
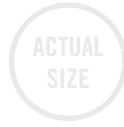
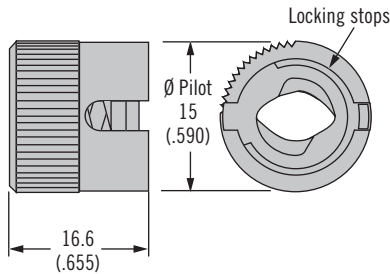
Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 445

85 DZUS® Lion Quarter-Turn Fasteners Receptacles



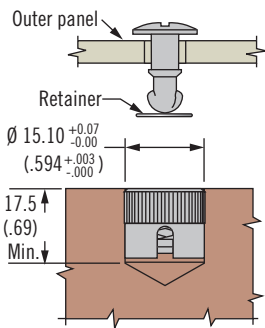
Press-In



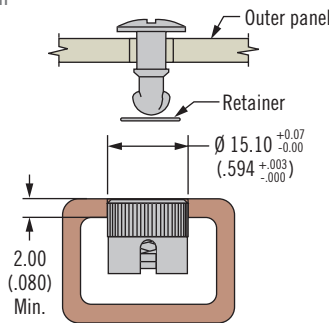
$TMT = P + \text{Gap} - 0.6 (.025)$
(when gap is > retainer thickness)

$TMT = P +$
(Retainer adjustment value)
 $- 0.6 (.025)$

Solid Install



Blind Install



Material and Finish

Steel, zinc plated and stainless steel

Installation Notes

Press receptacle flush to frame

Notes

Receptacle shown installed flush to the frame. To eliminate the gap between the frame and outer panel, install to a depth \geq the thickness of the selected retainer. This depth should be added to the TMT.

Part Number

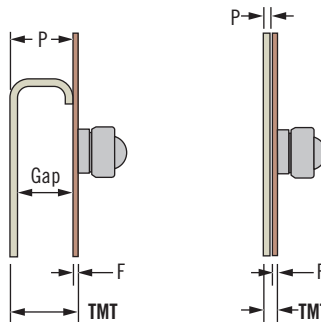
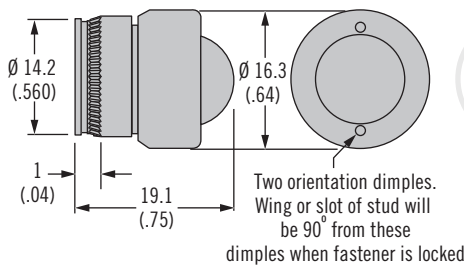
See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 445

Part Number	Stud Selection Column
85-35-308-55	A

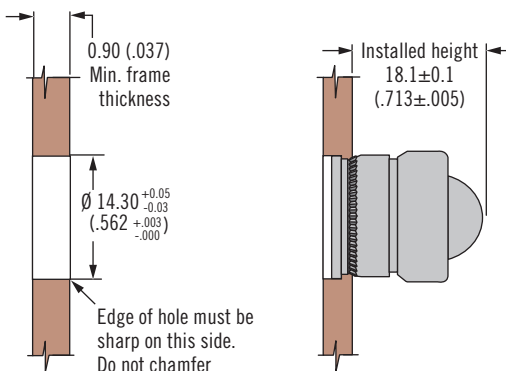
Shielded – Self-Clinching



$TMT = P + F$
(when gap is > retainer thickness)

Frame thickness (F) > 0.9 (.036)
+ Retainer thickness: $TMT = P + F$

Frame thickness (F) \geq 0.9 (.036)
+ Retainer thickness:
 $TMT = P + 0.9 (.036) + \text{Retainer thickness}$



Material and Finish

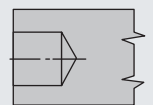
Steel, zinc plated and stainless steel

Installation Notes

For use in low carbon steels, aluminum and stainless steels in the annealed condition that are R₈₅ or softer.

See page 627 for installation guidelines

Installation Tool



Part number: 90-2825-11

Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 445

Part Number	Stud Selection Column
85-35-311-55	B



85 DZUS® Lion Quarter-Turn Fasteners Receptacles

Material and Finish

Steel, zinc immersion coating or stainless steel

82

Installation Notes

Install with $\varnothing 3$ (.125) rivets, spring must float freely after riveting

85

D8

D9

Part Number

See table

D1

Notes

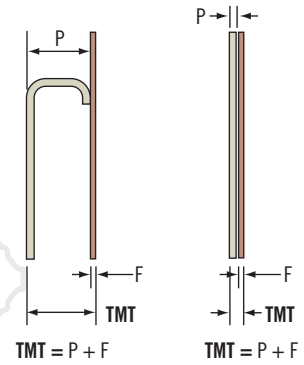
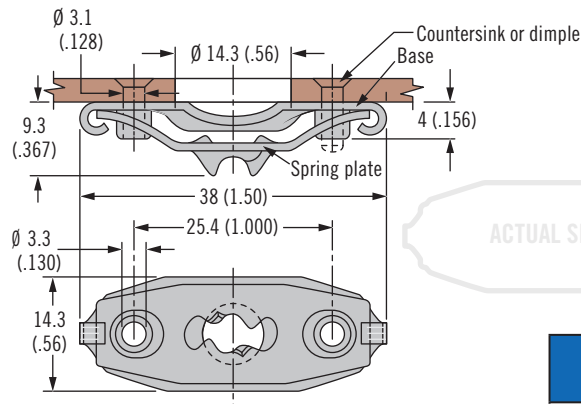
Utilize stud selection column indicated when choosing a stud length from the stud length table on page 445

D4

D5

D7

Rivet-On With Base



Material	Part Number	Stud Selection Column
Steel	85-35-295-15	C
Stainless steel	85-35-295-20	

Material and Finish

Steel, zinc immersion coating

Installation Notes

Spring must float freely after welding

NY

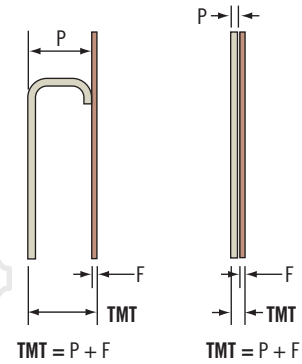
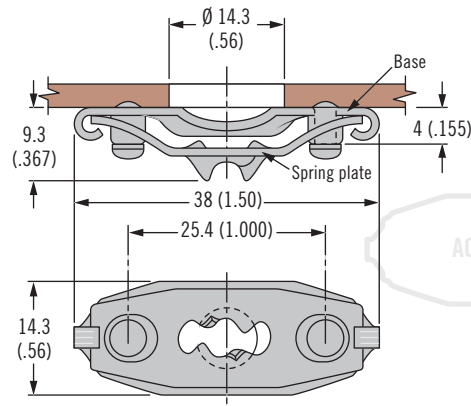
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 445

Weld-On



Part Number	Stud Selection Column
85-35-296-15	C

Material and Finish

Steel, zinc immersion coating

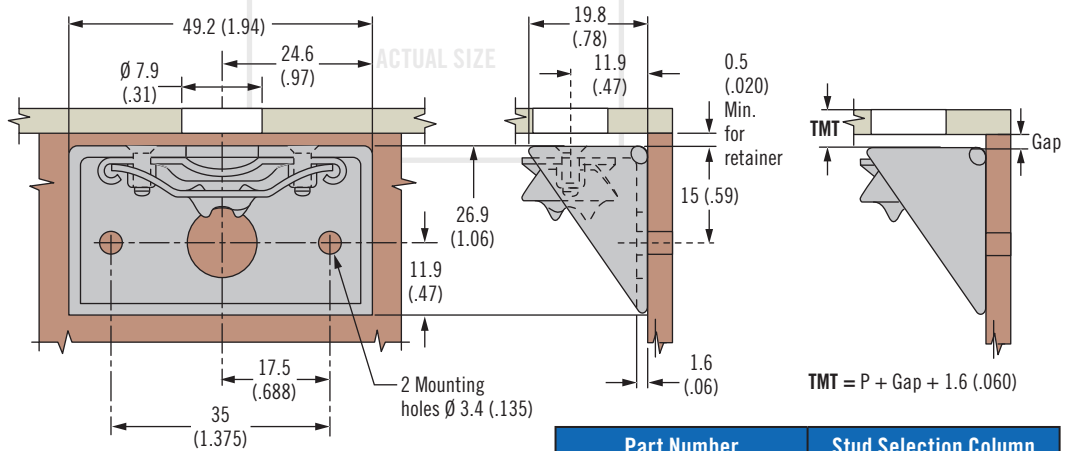
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 445

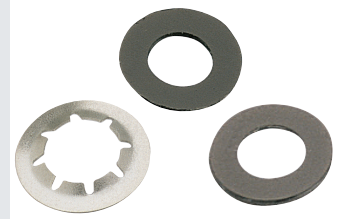
Side Mount



Part Number	Stud Selection Column
85-45-101-15	C

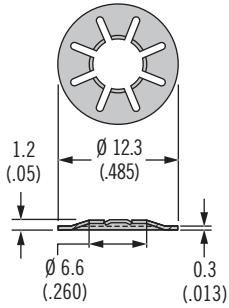
85 DZUS® Lion Quarter-Turn Fasteners

Retainers · Accessories

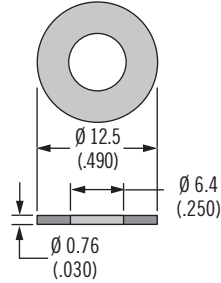


Retainers

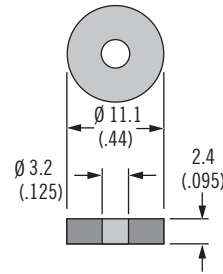
Push-On - Stainless Steel



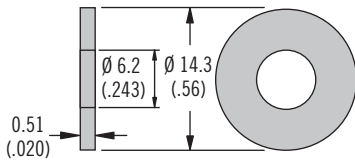
Push-On - Plastic



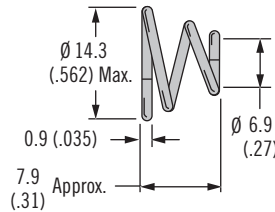
Push-On - Neoprene



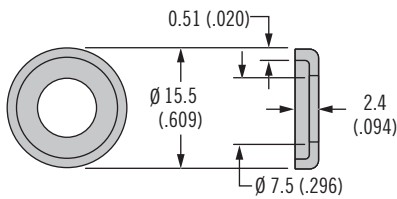
Sealing Washer



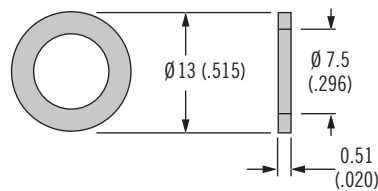
Ejector Spring



Cupped Washer



Flat Wear Washer



Material and Finish

See table

Installation Notes

For standard retainers use tool



Part number 85-0-22543-11

82

85

D8

D9

D1

D4

D5

D7

NY



Type	Part Number	Material	Adjustment Value
Push-on - Stainless steel	85-34-201-20	Stainless steel	Add 0.33 (.013)
Push-on - Plastic	85-34-301-12	Nylon, black	Add 0.76 (.030)
Push-on - Neoprene	85-33-101-27	Neoprene, black	Add 1.22 (.048)
Sealing washer	85-43-201-38	Neoprene nitrile rubber, black	Add 0.51 (.020)
Ejector spring	14-18-150-24	Stainless steel	Add 1.00 (.039)
Cupped washer	85-46-101-39	Nylon, white	Add 0.51 (.020)
	85-46-101-41	Nylon, black	
Flat wear washer	85-46-103-39	Nylon, white	Add 0.51 (.020)

Part Number

See table

Adjustment value:

When using accessories the components add thickness

Add the adjustment value to your outer panel thickness (P) when calculating TMT (see page 435 for example)

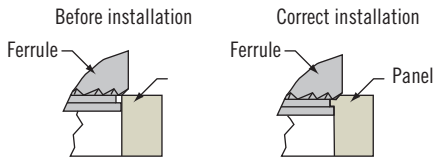
Installation Guidelines

for *SOUTHCO*[®] Self-Clinching products

Self-clinching product installation is offered on these *SOUTHCO*[®] products, making them easy-to-use captive panel fasteners:

- Captive Screws
- Receptacles for Quarter-turn Fasteners
- Receptacles for Fast-lead Thread Screws

When pressed into a properly prepared hole, self-clinching captive fasteners cold-flow (move) the panel material into the retaining groove of the fastener. This material then retains the fastener in the panel.

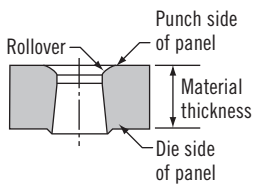
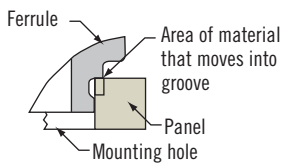


Successful press-in installations depend on:

Material:

The hardness of the panel material must not exceed *SOUTHCO*[®] recommendations. If the panel is too hard, the fastener will not install correctly.

Installation Holes:



Mounting holes may be drilled, punched, or cast.

- Hole edge: the top hole edge must be sharp but with no broken edges.

Do not chamfer or debur edge.

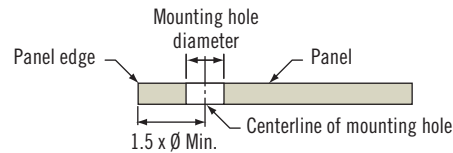
- Punched holes: use a punch and die with a small clearance to minimize the rollover and fracture angle.
- Hole diameter: measure the hole diameter at the panel surface on the side on which the fastener will be installed. The diameter must be within *SOUTHCO*[®] specifications for that product.

- If the hole is too large, not enough material will flow into the retaining groove and the fastener may not be retained adequately.
- If the hole is too small, the fastener will not fit and installation may become difficult and unsafe.
- Hole distance from the edge of panel: the minimum recommended

- Spring-loaded Plungers
- Captive Nuts
- Threaded Inserts

distance is 1.5 x the diameter of the mounting hole, unless otherwise indicated.

- Installing too close to the edge will cause the material to flow in the opposite direction, deforming the edge of the panel. To install closer to the edge, you may need to restrain the panel edge.



Panel Thickness:

The thickness of the panel at the mounting hole location must meet or exceed Southco's stated minimum recommendations.

If the material is too thin, panel deformation and/or damage to the fastener may result.

Installation is fast and easy if you follow these tips:

How to install: Use the recommended force where noted and a proper back-up tool.

- use any parallel-acting press
- use a punch whose diameter is larger than the head of the fastener

Installation Force: Proper installation requires an even distribution of adequate force. It does not depend on the distance the fastener is pressed into the panel.

- Southco does not recommend using a hammer. The impact force does not provide an even distribution of force to allow the panel material to completely flow into the fastener's retaining groove.
- Installation force varies from application to application, depending on the criteria noted above.

- On parts without a collar to provide a hard stop, press-in until the edge of the knurl is just barely visible.

When to Install:

Installation is recommended after plating or finishing has been applied to the panel.

The hole diameter must meet specifications before finish or plating is applied.

- Do not over-install parts. This interrupts the material and will reduce the retention strength.

