



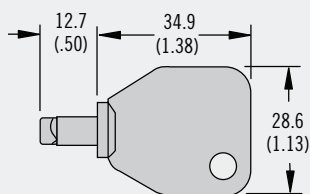
85 DZUS[®] Lion Quarter-Turn Fasteners Studs

Material and Finish

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

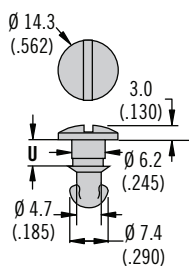
Accessories

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

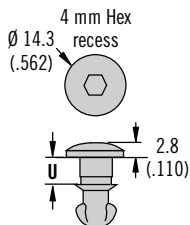


H Head Styles - Tool Actuated

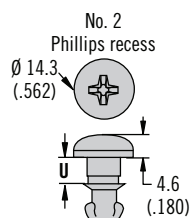
Oval Slot



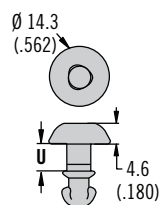
Hex Recess



Phillips Recess



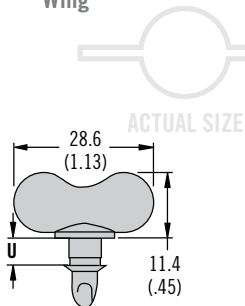
Tool Head Recess



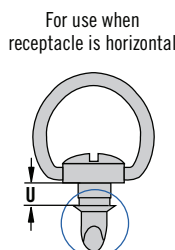
ACTUAL SIZE

H Head Styles - Hand Actuated

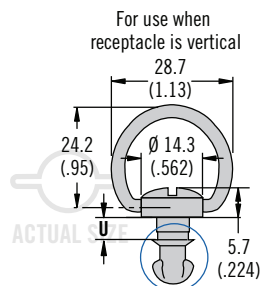
Wing



Bail Style RA



Bail Style RB

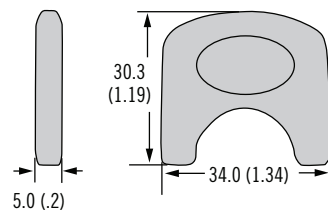
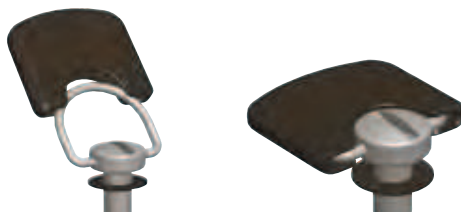


Installation Notes

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 285)

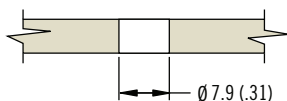
Optional Bail Cover



Bail Cover Part Number
85-5-B-000

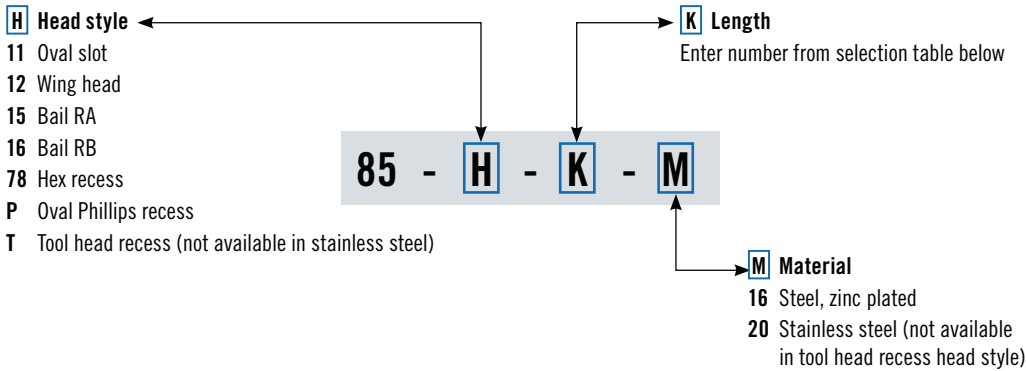
Stud Panel Preparation

Prepare Hole



85 DZUS® Lion Quarter-Turn Fasteners

Stud selection



Part Number Selection

82

85

D8

D1

D4

D7

NY



To select correct fastener:

1. Select receptacle

Choose a receptacle from pages 282 - 284

2. Select retainer and accessories

from page 285 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

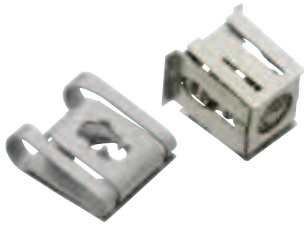
For slotted head style in steel material, completed part number: 85-11-200-16

A complete example can be found on page 271

Notes

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

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)



85 DZUS® Lion Quarter-Turn Fasteners Receptacles

Material and Finish

Steel, zinc immersion coating or stainless steel

82

85

D8

D1

D4

D7

NY

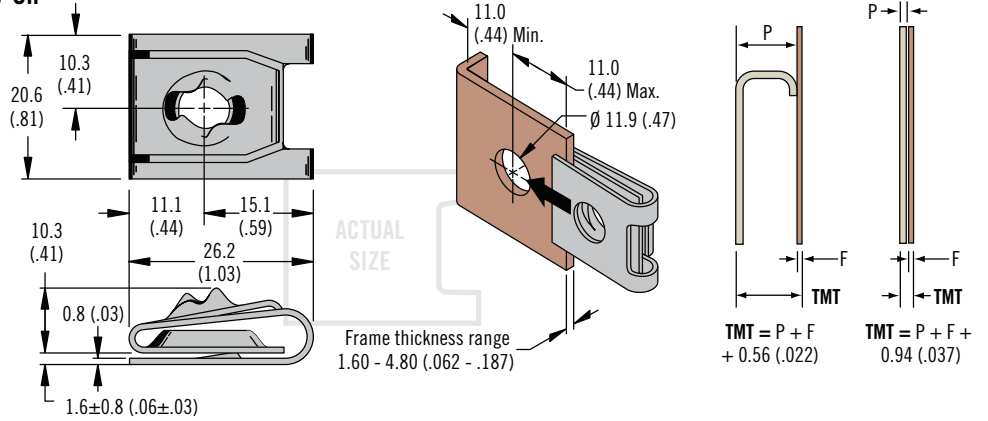
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 281

Clip-On



By Hand



With Screwdriver

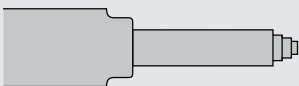


Material	Part Number	Stud Selection Column
Steel	85-47-101-15	C
Stainless steel	85-47-101-20	

Material and Finish

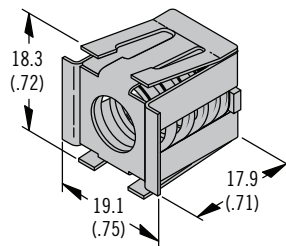
Steel, zinc plated and stainless steel

Installation Tool

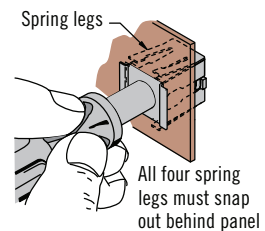
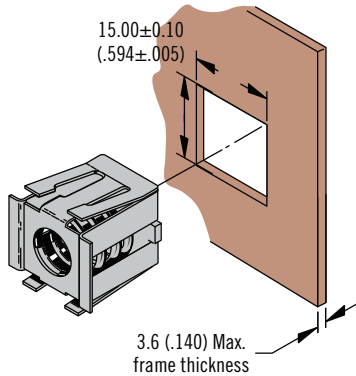
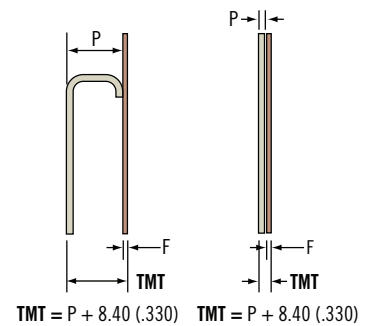


Part Number: 29-8125-309

Snap-In – Front Mount



ACTUAL SIZE



Part Number

See table

Notes

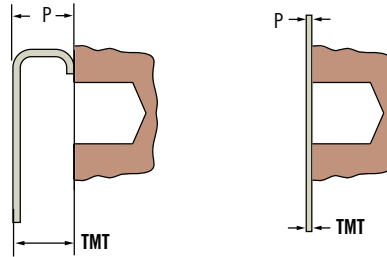
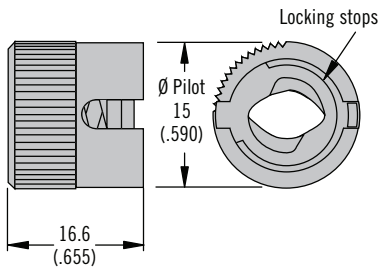
Utilize stud selection column indicated when choosing a stud length from the stud length table on page 281

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

85 DZUS® Lion Quarter-Turn Fasteners Receptacles



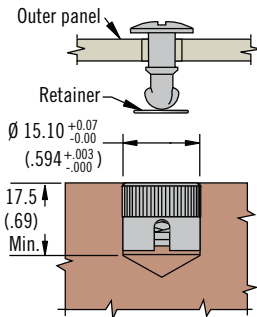
Press-In



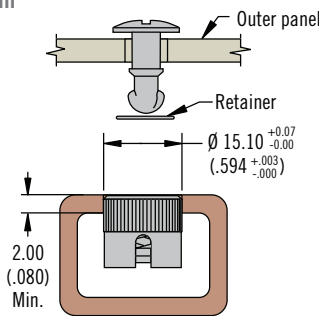
$TMT = P + \text{Gap} - 0.6 (.025)$
(when gap is > retainer thickness)

$TMT = P +$
(Retainer adjustment value)
 $- 0.6 (0.25)$

Solid Install



Blind Install



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

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.

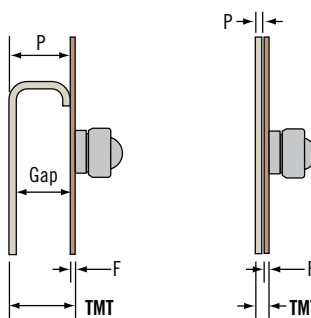
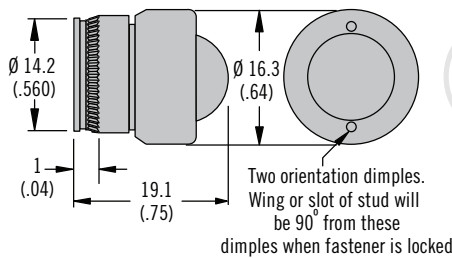
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 281

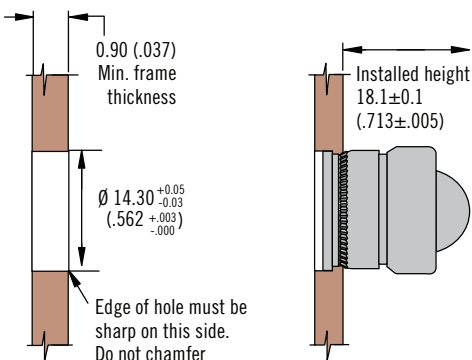
Shielded – Self-Clinching



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



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

Material and Finish

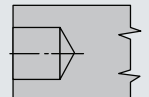
Steel, zinc plated and stainless steel

Installation Notes

For use in low carbon steels, aluminum and stainless steels in the annealed condition that are $R_B 85$ or softer.

See page 497 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 281



85 DZUS® Lion Quarter-Turn Fasteners Receptacles

Material and Finish

Steel, zinc immersion coating or stainless steel

Installation Notes

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

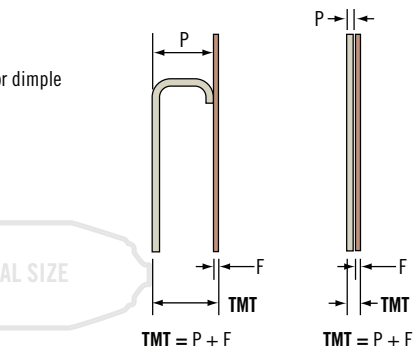
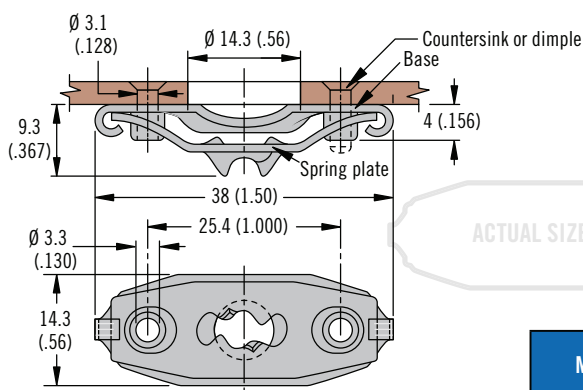
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 281

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

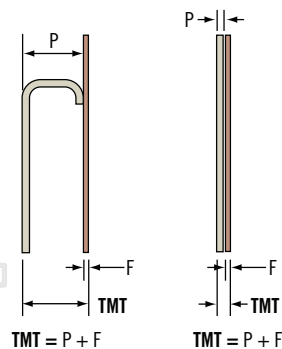
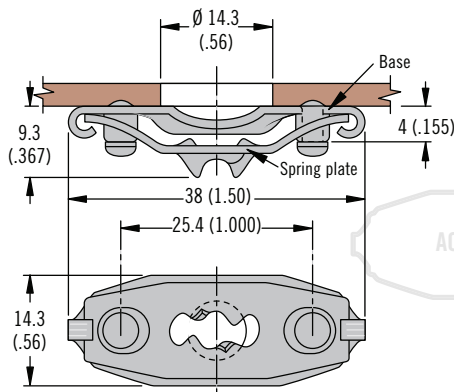
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 281

Weld-On



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

Material and Finish

Steel, zinc immersion coating

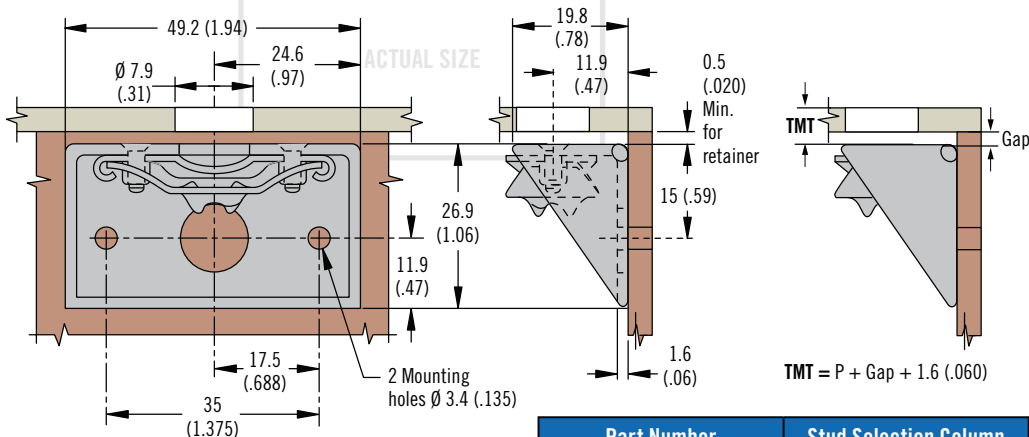
Part Number

See table

Notes

Utilize stud selection column indicated when choosing a stud length from the stud length table on page 281

Side Mount



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

85 DZUS® Lion Quarter-Turn Fasteners

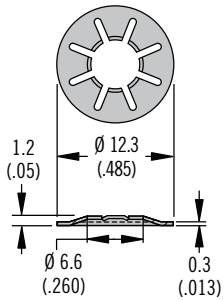
Retainers · Accessories



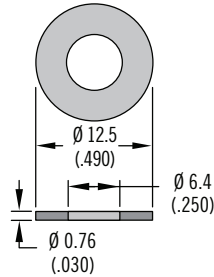
285

Retainers

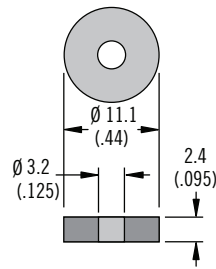
Push-On - Stainless Steel



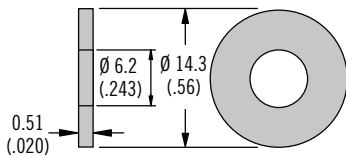
Push-On - Plastic



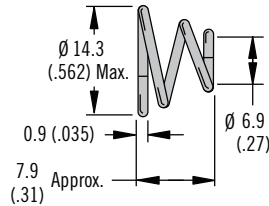
Push-On - Neoprene



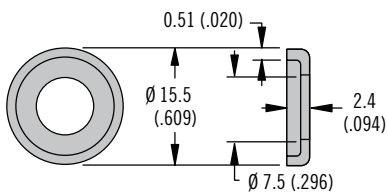
Sealing Washer



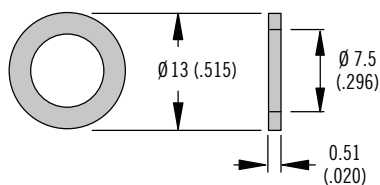
Ejector Spring



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

D1

D4

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 271 for example)