

### **D7** DZUS® Pilot Quarter-Turn Fasteners Studs

#### **Material and Finish**

Studs: Steel, zinc plated plus chromate

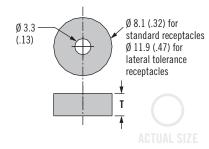
Washer: Neoprene, black

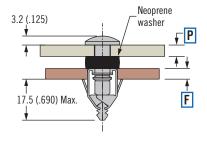
#### **Notes**

Select stud and washer part number from table based on your panel thickness P

### Studs Ø 9.7 (.39) ←32. (.125) 6.1 (.24) No. 2 Phillips recess Ø 6.00 (.236) Stud hole 1.2 (.047)

#### Washer





#### **Part Number**

See table

**D7** 

Order stud and washer separately

#### **Part Number** P Panel Thickness Stud L Stud B T Washer Thickness Stud **Neoprene Washer** Bright chromate Black chromate For standard receptacle For lateral tolerance receptacle 1.3 (.05) to 1.7 (.07) 16 (.63) 7.1 (.28) 4.1 (.16) D7-265-716-191 D7-265-716-190 D7-275-040-400 D7-275-140-400 1.8 (.07) to 2.2 (.09) 16 (.63) 3.6 (.14) D7-265-716-191 D7-265-716-190 D7-275-035-400 7.1 (.28) D7-275-135-400 D7-265-718-191 D7-265-718-190 D7-275-050-400 D7-275-150-400 2.3 (.09) to 2.7 (.11) 17.8 (.70) 8.9 (.35) 5.1 (.20) 4.6 (.18) D7-265-718-190 2.8 (.11) to 3.2 (.12) 17.8 (.70) 8.9 (.35) D7-265-718-191 D7-275-045-400 D7-275-145-400 3.3 (.13) to 3.7 (.15) 17.8 (.70) 8.9 (.35) 4.1 (.16) D7-265-718-191 D7-265-718-190 D7-275-040-400 D7-275-140-400 3.8 (.15) to 4.2 (.17) 17.8 (.70) 8.9 (.35) 3.6 (.14) D7-265-718-191 D7-265-718-190 D7-275-035-400 D7-275-135-400 4.3 (.17) to 4.8 (.19) 20.0 (.79) 10.9 (.43) 5.1 (.20) D7-265-720-191 D7-265-720-190 D7-275-050-400 D7-275-150-400

#### **Material and Finish**

Steel, zinc plated and thermoplastic black

#### **Notes**

Select stud and washer part number from table based on your panel thickness P

#### **Part Number**

See table

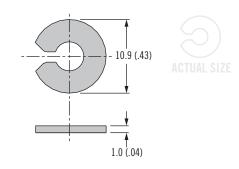
Stud, cup and spring shipped pre-assembled

Order retainer separately

#### **Self-Ejecting Studs** No. 2 Phillips recess Spring Ø 6.0 (.24) and cup 4.6 (.18) Retainer Stud 17.5 (.69) Max. hole

P Panel	Part Number		
Thickness	Black	Bright	
0.5 - 3.0 (.0212)	D7-290-718-191	D7-290-718-190	
2.5 - 5.1 (.1020)	D7-290-720-191	D7-290-720-190	

#### Retainer, Plastic



Part Number				
D7-275-203-040				

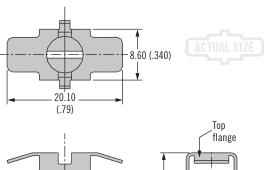




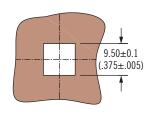
# **D7** *DZUS*® Pilot Quarter-Turn Fasteners Receptacles

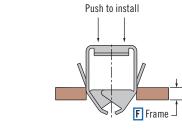


#### Standard



11.9





F Frame	Part Number		
Min.	Max.	Fait Nullinei	
0.63 (.025)	1.24 (.049)	D7-285-101-161	
1.27 (.050)	1.75 (.069)	D7-285-102-161	
1.78 (.070)	2.26 (.089)	D7-285-103-161	

#### **Material and Finish**

Spring steel, zinc phosphate

#### **Notes**

Select receptacle based on frame thickness **F** 

D8

na

D1

D4

D5

D7

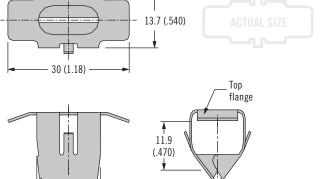
**Part Number** 

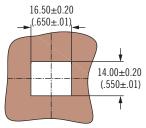
See table

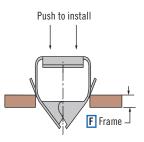
#### **Lateral Tolerance**

(.630)

\_8.60\_ (.340)







F Frame	Part Number			
Min.	Max.	T art Nullinei		
0.63 (.025)	1.24 (.049)	D7-285-201-161		
1.27 (.050)	1.75 (.069)	D7-285-202-161		
1.78 (.070)	2.26 (.089)	D7-285-203-161		
2.29 (.090)	2.77 (.109)	D7-285-204-161		
2.79 (.110)	3.28 (.129)	D7-285-205-161		

#### **Material and Finish**

Spring steel, zinc phosphate

#### **Notes**

Select receptacle based on frame thickness  $\boxed{\mathbf{F}}$ 

#### **Part Number**

See table







### **D7** DZUS® Arrow Quarter-Turn Fasteners

### **Assembly**

#### Surface install

Panel mounted assembly

#### **Material and Finish**

Acetal, black

#### **Performance Details**

Flammability rating: UL94-HB

ASTM E-162 Flame spread Index: 130

### D7 Arrow Installation notes

200 series:

**D7** 

- 1. Press receptacle into outer panel.
- 2. Press stud into receptacle.
- 3. Press and turn stud to latch
- 4. Turn stud 90 degree to unlatch.

#### 2001 series:

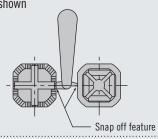
- 1. Separate Stud and receptacle from runner.
- 2. Press receptacle into outer panel.
- 3. Press stud into receptacle.
- 4. Press and turn stud to latch
- 5. Turn stud 90 degree to unlatch

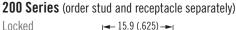
#### **Part Number**

See table

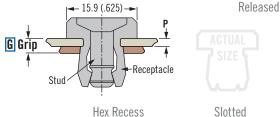
200 Series: Order one receptacle and stud from the same size separately

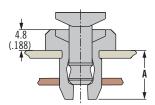
2001 Series: Complete assembly supplied with runner attached as shown

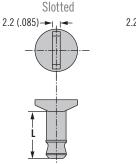




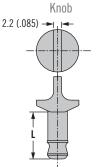
1/8" Hex

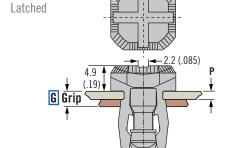




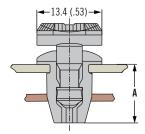


Unlatched



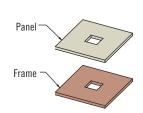


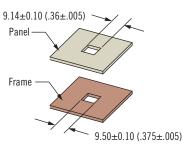




Installation

2001 Series





Series			Receptacle		Stud				
	A	P Panel Thickness		Part Number	G Grip Range		Part Number		
		Min.	Max.		Min.	Max.	Hex recess	Slotted recess	Knob
1 1	12.3 (.48)	0.50 (.020)	1.78 (.070)	D7-200-802-010	2.03 (.080)	5.08 (.200)	D7-200-701-010	D7-200-711-010	D7-200-721-010
	13.7 (.54)	1.80 (.071)	3.10 (.125)	D7-201-802-010	3.43 (.135)	6.35 (.250)	D7-201-701-010	D7-201-711-010	D7-201-721-010
	12.0 (.47)	Complete Assembly							
2001		0.05 (.020)	1.7 (.067)	~	2.5 (.098)	6.7 (.263)		D7-2001-010	





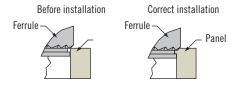
# Installation Guidelines

## 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:

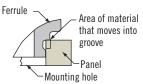
#### Material:

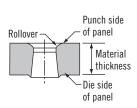
The hardness of the panel material must not exceed *SOUTHCO®* recommendations. If the panel is too hard, the fastener will not install correctly.

#### **Installation Holes:**

Mounting holes may be drilled, punched, or cast.

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





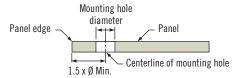
Do not chamfer or debur edge.

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

- Spring-loaded Plungers
- Captive Nuts
- Threaded Inserts
  - 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:

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

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

