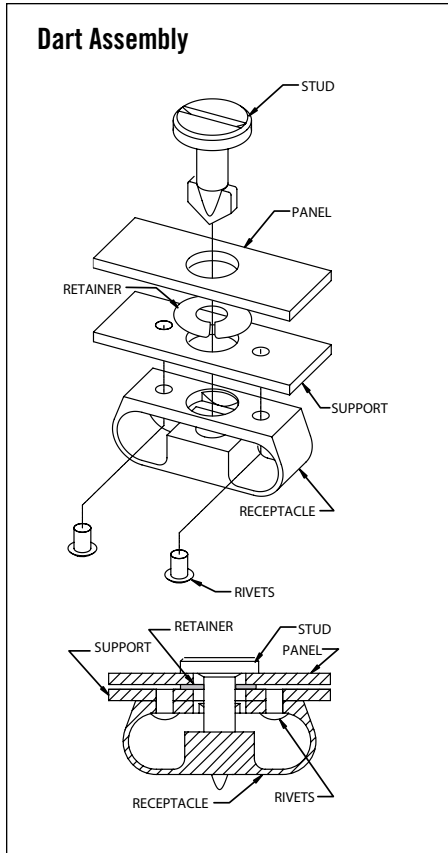


- Lightweight, high strength plastic fastening system
- High cycle life for repeat access



Material & Finish

STUDS: Glass filled Nylon, black
 SPLIT-RETAINER: Acetal Resin, black
 EJECTING SPRING: Stainless Steel
 SELF-EJECTING CUP: Acetal Resin, black
 ALL RECEPTACLES: Acetal Resin, black

Custom colors and head styles are possible on special orders.

Product Strength Guidelines

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

Ultimate Tensile Strength

800N (180 lbf.)

Temperature resistance

-40°C to +90°C (120°F intermittent)

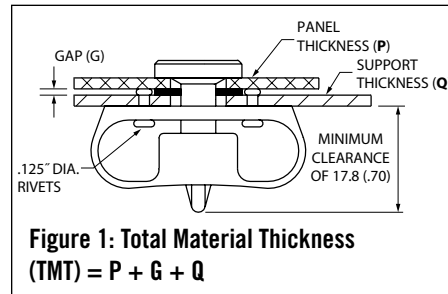
millimeter (inch)

millimeter (inch)

Dimensions without tolerances are for reference only.

Specifying a Dart fastener

1. Select your Receptacle Style (see pages 2-4).
2. Select your Retainer and determine if you will need self ejecting accessories
3. Choose Head style.
4. Calculate (L) using formulas provided with your receptacles. Be sure to account for the thickness of your retainer, spring and self ejecting cup when calculating TMT.
5. To order a self ejecting stud assembly (shipped assembled) add SE to the Part Number. Example: D1-004-050-030 SE. Use Part Numbers below to order the cup and spring separately.



Stud Selection Table

- Use the formulas provided for your receptacle type to calculate TMT.
- Use TMT to find (L) in the stud selection table and complete your Stud Part Number.

For Rivet-On Receptacle:

Example: TMT = .325. Stud Part Number is D1-004-065-010 for a Straight Slot stud.

Stud Head Style PART NUMBERS			
Straight Slot	Slotted Knob	Wing	Hex
D1-004-L-030	D1-444-L-030	D1-125-L-030	D1-166-L-030

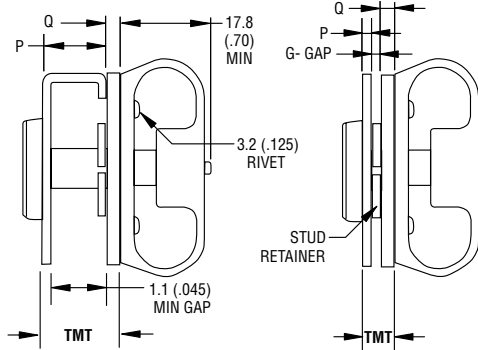
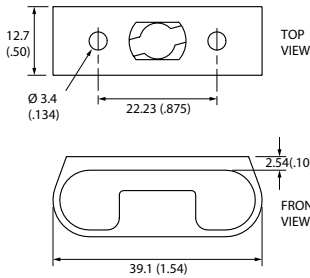
PART NUMBER
Split Retainer
D1-004-000-010

Accessory PART NUMBERS		
Self Ejecting Springs		Self Ejecting Cup
D1-X1135-2S	D1-X1137-2S	D1-X1129

DZUS® Dart D1 Quarter-Turn Receptacles Rivet-On & Mini Snap-In Front Load



Rivet-On



$$TMT = P + Q$$

$$TMT = P + Q + G$$

$$G = 1.1 (.045) \text{ MIN}$$

Notes:

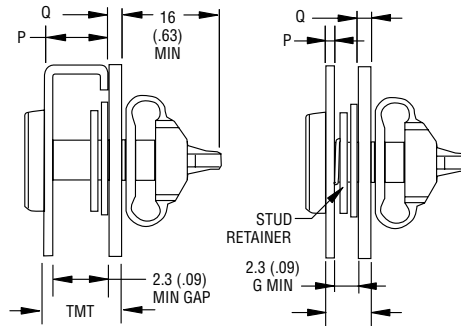
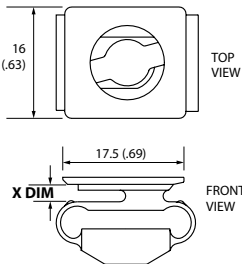
1. Gap Thickness (G) is the stud retainer thickness. This part may be nested into recessed holes.
2. Add 1.1 (.045) for a Split Retainer to your TMT calculation.
3. For use with Self-Ejecting Studs add 2.3 (.090) to your TMT calculation.

Stud Length Selection Table	
TMT	Stud Dim L
2.54 - 3.80 (.100 - .149)	-045
3.81 - 5.07 (.150 - .199)	-050
5.08 - 6.34 (.200 - .249)	-055
6.35 - 7.61 (.250 - .299)	-060
7.62 - 8.88 (.300 - .349)	-065
8.89 - 10.15 (.350 - .399)	-070
10.16 - 11.42 (.400 - .449)	-075
11.43 - 12.69 (.450 - .499)	-080
12.70 - 13.96 (.500 - .549)	-085
13.97 - 15.23 (.550 - .599)	-090
15.24 - 16.50 (.600 - .649)	-095
16.51 - 17.77 (.650 - .699)	-100

Rivet-In Part Number

D1-004-001-010

Mini Snap-In, Front Load



$$TMT = P + Q$$

$$TMT = P + Q + G$$

$$G = 1.3 (.05) + \text{Retainer Thickness}$$

Notes:

1. Gap Thickness (G) is the combined thickness of receptacle top flange 1.1 (.045) and stud retainer thickness. These parts may be nested into recessed holes.
2. Add 1.15 (.045) for Split Retainers to your TMT calculation.
3. For use with Self-Ejecting Studs add 2.3 (.09) to your TMT calculation.

Stud Length Selection Table	
TMT	Stud Dim L
4.13 - 5.39 (.163 - .212)	-045
5.40 - 6.66 (.213 - .262)	-050
6.67 - 7.93 (.263 - .312)	-055
7.94 - 9.20 (.313 - .362)	-060
9.21 - 10.47 (.363 - .412)	-065
10.48 - 11.74 (.413 - .462)	-070
11.75 - 13.01 (.463 - .512)	-075
13.02 - 14.28 (.513 - .562)	-080
14.29 - 15.55 (.563 - .612)	-085
15.56 - 16.82 (.613 - .662)	-090
16.83 - 18.09 (.663 - .712)	-095
18.10 - 19.36 (.713 - .762)	-100

Receptacle Selection Table

Determine the thickness of the support material (Q). Find the Support Thickness Range in the table below to determine your Receptacle Part Number.

Support Thickness Dim Q	Mini Snap-In Front Load PART NUMBERS	X Dim.
0.9-1.25 (.035-.049)	D1-004-911-010	1.7 (.067)
1.3-1.75 (.051-.069)	D1-004-912-010	2.2 (.087)
1.8-2.25 (.071-.089)	D1-004-913-010	2.7 (.106)
2.3-2.75 (.091-.109)	D1-004-914-010	3.2 (.126)
2.8-3.25 (.111-.129)	D1-004-915-010	3.7 (.146)

millimeter (inch)
millimeter (inch)

Dimensions without tolerances are for reference only.

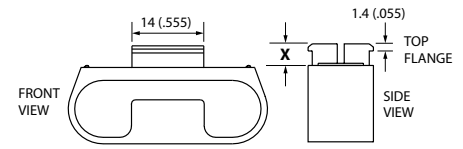
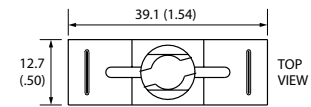
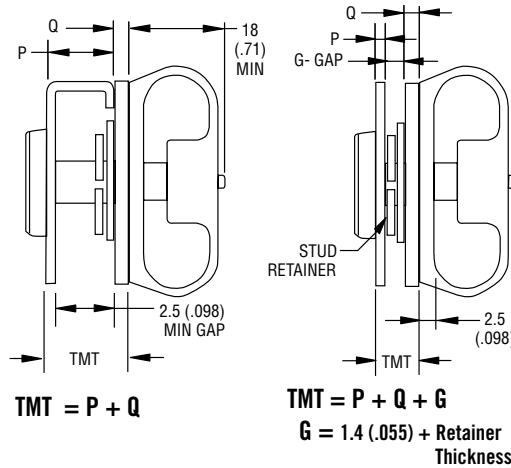
For additional specifying and ordering information, downloadable CAD files, and 3-D solid models visit: www.southco.com or e-mail: info@southco.com



DZUS® Dart D1 Quarter-Turn Receptacles Snap-In Back Load



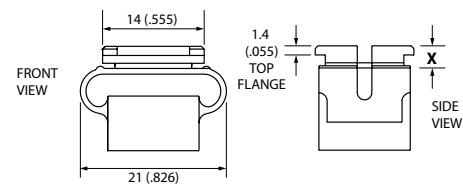
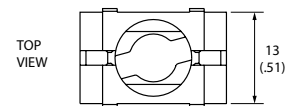
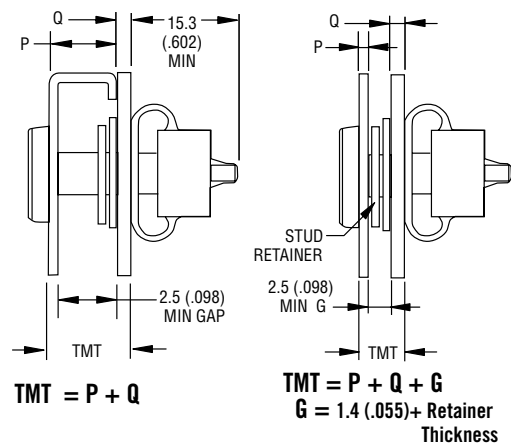
Stud Length Selection Table	
TMT	Stud Dim L
3.81 - 5.07 (.150 - .199)	-050
5.08 - 6.34 (.200 - .249)	-055
6.35 - 7.61 (.250 - .299)	-060
7.62 - 8.88 (.300 - .349)	-065
8.89 - 10.15 (.350 - .399)	-070
10.16 - 11.42 (.400 - .449)	-075
11.43 - 12.69 (.450 - .499)	-080
12.70 - 13.96 (.500 - .549)	-085
13.97 - 15.23 (.550 - .599)	-090
15.24 - 16.50 (.600 - .649)	-095
16.51 - 17.77 (.650 - .699)	-100



- Notes:**
1. Gap Thickness (G) is the combined thickness of receptacle top and stud retainer thickness. These parts may be nested into recessed holes.
 2. Add 1.15 (.045) for Split Retainers to your TMT calculation.
 3. For use with Self-Ejecting Studs add 2.3 (.090) to your TMT calculation.

Support Thickness Ranges Q	Snap-In Back Load PART NUMBERS TMT Ranges	X Dim
0.9 - 1.27 (.035 - .050)	D1-004-002-010	2.75 (.110)
1.63 - 2.0 (.064 - .080)	D1-004-003-010	3.6 (.141)
2.3 - 2.64 (.090 - .104)	D1-004-004-010	4.5 (.177)
3.0 - 3.4 (.119 - .135)	D1-004-005-010	5.0 (.198)
3.65 - 4.0 (.144 - .158)	D1-004-006-010	5.6 (.220)

Stud Length Selection Table	
TMT	Stud Dim L
4.15 - 5.41 (.163 - .213)	-045
5.42 - 6.68 (.213 - .263)	-050
6.69 - 7.95 (.263 - .313)	-055
7.96 - 9.22 (.313 - .363)	-060
9.23 - 10.49 (.363 - .413)	-065
10.50 - 11.76 (.413 - .463)	-070
11.77 - 13.03 (.463 - .513)	-075
13.04 - 14.30 (.513 - .563)	-080
14.31 - 15.57 (.563 - .613)	-085
15.58 - 16.84 (.613 - .663)	-090
16.85 - 18.11 (.663 - .713)	-095
18.12 - 19.38 (.713 - .763)	-100



- Notes:**
1. Gap Thickness (G) is the combined thickness of receptacle top flange 1.15 (.045) and stud retainer thickness. These parts may be nested into recessed holes.
 2. Add 1.15 (.045) for Split Retainers to your TMT calculation.
 3. For use with Self-Ejecting Studs add 2.3 (.090) to your TMT calculation.

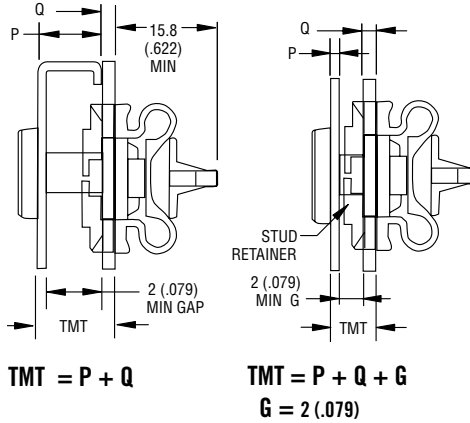
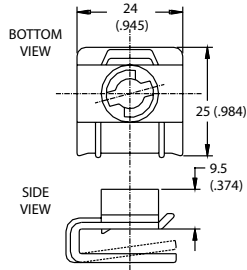
Support Thickness Ranges Q	Mini Snap-In Back Load PART NUMBERS	X Dim.
0.81 - 1.27 (.032 - .050)	D1-004-012-010	3 (.118)
1.29 - 2.54 (.051 - .100)	D1-004-013-010	4.3 (.169)

millimeter (inch)
millimeter
(inch)

Dimensions without tolerances are for reference only.

DZUS® Dart D1 Quarter-Turn Receptacle Clip-On & Stud Installation

Clip-On (Top View)



Notes:

1. Gap Thickness (G) is the thickness of receptacle top flange 2 (.079). This part may be nested into recessed holes.
2. For use with Self-Ejecting Studs add 2.3 (.090) to your TMT calculation.

Stud Length Selection Table	
TMT	Stud Dim L
4.32 - 5.58 (.170 - .219)	-045
5.59 - 6.85 (.220 - .269)	-050
6.86 - 8.12 (.270 - .319)	-055
8.13 - 9.39 (.320 - .369)	-060
9.40 - 10.66 (.370 - .419)	-065
10.67 - 11.93 (.420 - .469)	-070
11.94 - 13.20 (.470 - .519)	-075
13.21 - 14.47 (.520 - .569)	-080
14.48 - 15.74 (.570 - .619)	-085
15.75 - 17.01 (.620 - .669)	-090
17.02 - 18.28 (.670 - .719)	-095
18.29 - 19.55 (.720 - .769)	-100

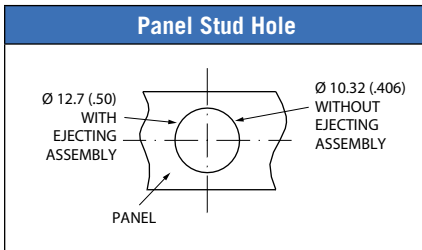
Support Thickness Dim Q	Clip-On Receptacle PART NUMBERS
0.7 - 2.3 (.027 - .090)	D1-004-921-010
2.3 - 3.9 (.090 - .153)	D1-004-922-010
3.9 - 5.5 (.153 - .216)	D1-004-923-010

millimeter (inch)
millimeter
(inch)

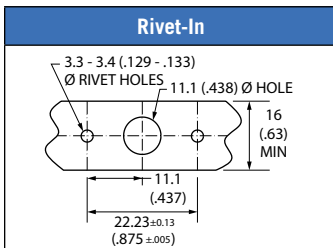
Dimensions without tolerances are for reference only.

Stud Installation

Panel Preparation



Support Panel Preparation



Installation Procedures

Mini Snap-In (Front Load)	Snap-In (Back Load)
<ol style="list-style-type: none"> 1. Place open end of top flange around the hole edge from above and angle the receptacle through the hole. 2. Slide the receptacle back until flange lip snaps into hole. 	<ol style="list-style-type: none"> 1. Angle long notched side of top flange into hole from underside. 2. Push other long side completely through with flat blade screwdriver.

Snap-In Front Load	Snap-In Back Load	Mini Snap-In Back Load	Clip-On
<p>14 ^{+0.2}_{-.000} (.551 ^{+0.008}_{-.000}) SQ</p>	<p>11.3 ^{+0.2}_{-.008} (.445 ^{+0.008}_{-.000}) 16 (.63) MIN 14.3 (.562) MIN 16 (.63) MAX</p>	<p>11.8 ^{+0.2}_{-.000} (.465 ^{+0.008}_{-.000}) 14.3 (.562) MIN 16 (.63) MAX</p>	<p>11 ^{+0.0}_{-.05} (.413 - .433) Ø13 ^{+0.2}_{-.00} (.512 ^{+0.008}_{-.000})</p>