



- High vibration solution.
- Broadest 1/4 turn grip range.

This is the series that started it all. Excellent product that delivers predictable clamping force and is well suited for high vibration applications. High load strength, cycle life and a broad grip range make the standard line an excellent choice.

- High tensile and shear strength.
- Variety of actuation styles and sizes.

Excellent choice for applications in these industries.

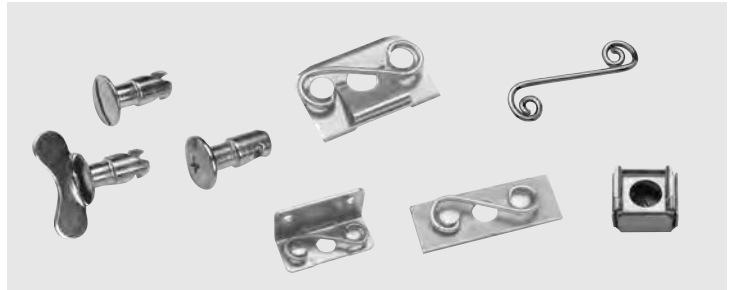
- Off-highway vehicles
- HVAC
- Lighting
- Motorcycles

- Tool driven.
- Economical choice for high volume applications.

The rapier line is manufactured on automated equipment to exacting standards. The result is an economical fastener for volume applications. A wide variety of stud diameters and receptacles allows the rapier line to be easily engineered into a large range of application environments.

DZUS[®] 1/4 TURN FASTENERS

STANDARD LINE



PANEX[®] LINE

STAINLESS AVAILABLE



RAPIER[®] LINE



QUICK ACCESS, 1/4 TURN FASTENERS

HOW TO SELECT A SOUTHCO[®] QUARTER-TURN FASTENER

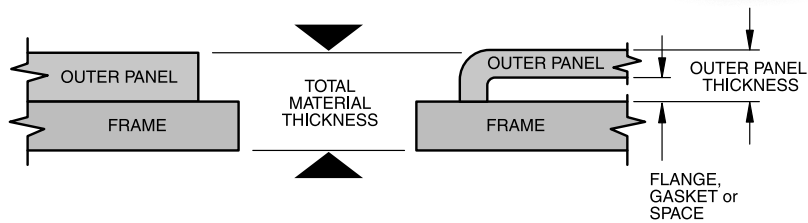
- Interactive product configuration at www.clancey.com.

Online
Configuration.
www.clancey.com

1. Select a receptacle (note frame thickness limitations).
2. Select a stud.

Small
Medium
Large

- a) Measure your outer panel-thickness or total material thickness.
Note: Receptacle selection will determine which measurement you will use.



- b) If there is an adjustment formula under receptacle, apply the adjustment formula to your measurement.
- c) If you are using the wear washer or ejector spring option, apply the adjustment to your measurement.
- d) Choose a head style and use your adjusted measurement to select a stud which will work in your application.

3. Select a retainer.

Small
Medium
Large

4. Order your components.

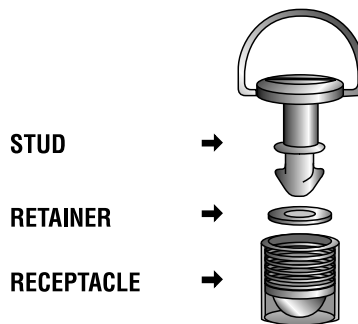
Required

- Stud
- Retainer
- Receptacle

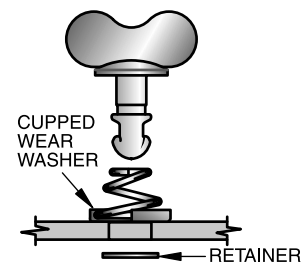
Optional

- Wear washer
- Ejector spring
- Tools

STANDARD ASSEMBLY



STUD EJECTOR



PLEASE NOTE:

Quarter-turn fastener assemblies have narrow tolerance ranges. If tolerance control is a problem, please consider a fast-lead screw assembly.

- 5 receptacle styles.
- Stainless steel options available.

SMALL SERIES, RECEPTACLES

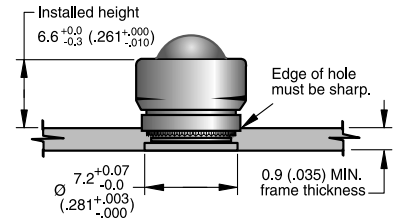
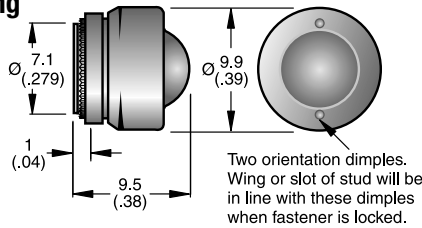
SHIELDED PRESS-IN FOR SHEET METAL

PART NUMBER
81-35-311-55

- Provides RF/EMI shielding

STUD SELECTION

- Use column II in stud selection table.
- Use constant 1.3 mm (.050") for frame thickness if frame thickness is less than 1.3 mm (.050").



NOTE: For use in low carbon steels, aluminum and stainless steels in the annealed condition that are R_B85 or less.

Material:

Shell: Steel
Spring: Stainless steel

TOOL PART NUMBER
54-0-5466-11

PRESS-IN FOR BLIND APPLICATIONS AND SOLID MATERIALS

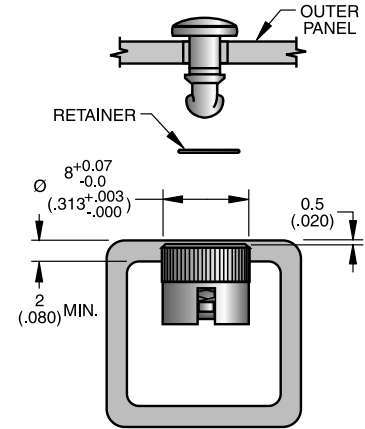
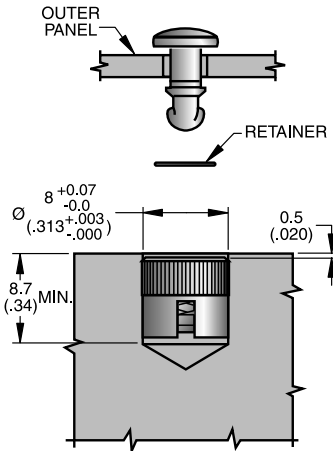
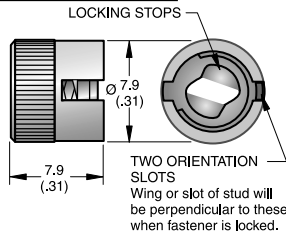
PART NUMBER
81-35-308-55

STUD SELECTION

- Determine outer panel thickness.
- Use column I in stud selection table.

Material:

Shell: Steel
Spring: Stainless steel



FOR ULTRASONIC INSTALLATION IN THERMOPLASTICS

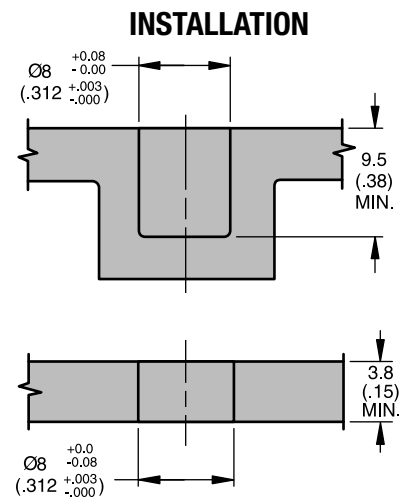
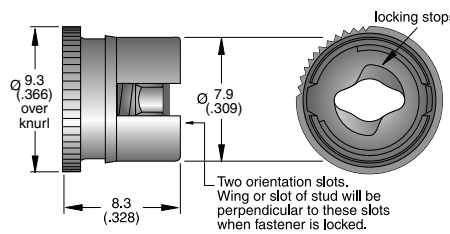
PART NUMBER
81-35-310-55

STUD SELECTION

- Determine total material thickness.
- Use column I in stud selection table.

Material:

Shell: Steel
Spring: Stainless steel



QUICK ACCESS FASTENERS

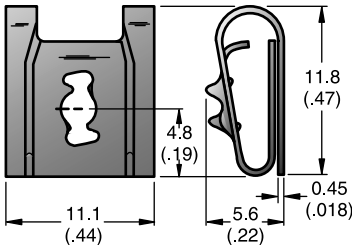
1/4-TURN ASSEMBLIES

CAD
POWERED

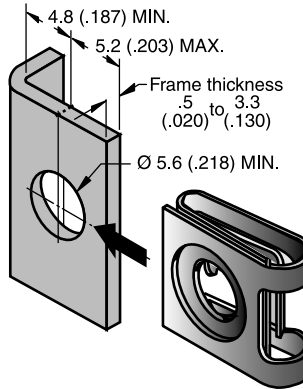
southco[®]
AUTHORIZED DISTRIBUTOR

SMALL SERIES, RECEPTACLES

STAINLESS
STEEL
AVAILABLE



PANEL PREPARATION



CLIP-ON STYLE

Part Description	PART NUMBER
1064 STEEL, DACROTIZED†	81-47-101-15
17-7 PH stainless steel	81-47-101-20

STUD SELECTION

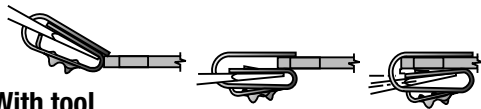
- Determine total material thickness.
- Use column II in stud selection table.

TO INSTALL

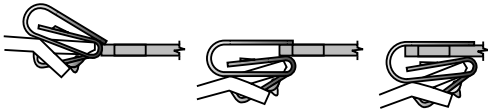
By hand



With screwdriver



With tool



INSTALLATION TOOL

PART NUMBER
29-81-101-10

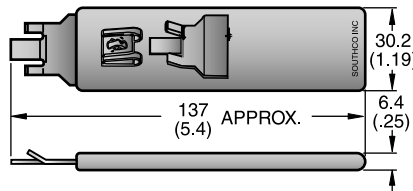


Figure I

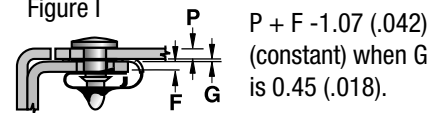
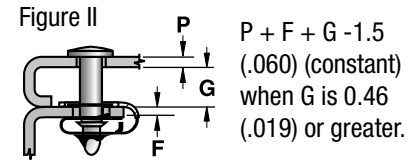
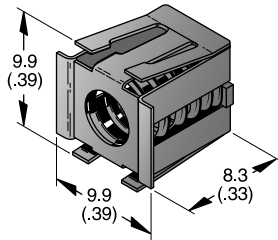


Figure II

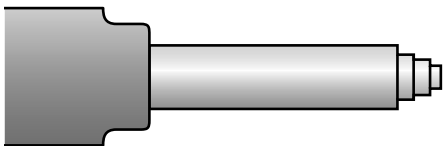


SNAP-IN STYLE

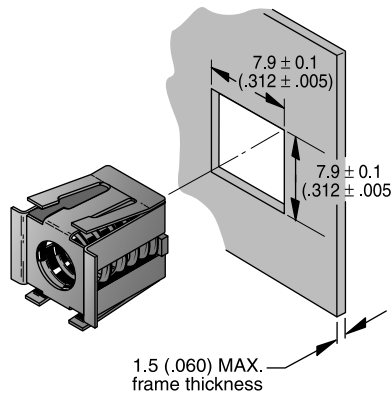
PART NUMBER
81-35-309-56



INSTALLATION TOOL



PART NUMBER
29-8125-309



STUD SELECTION

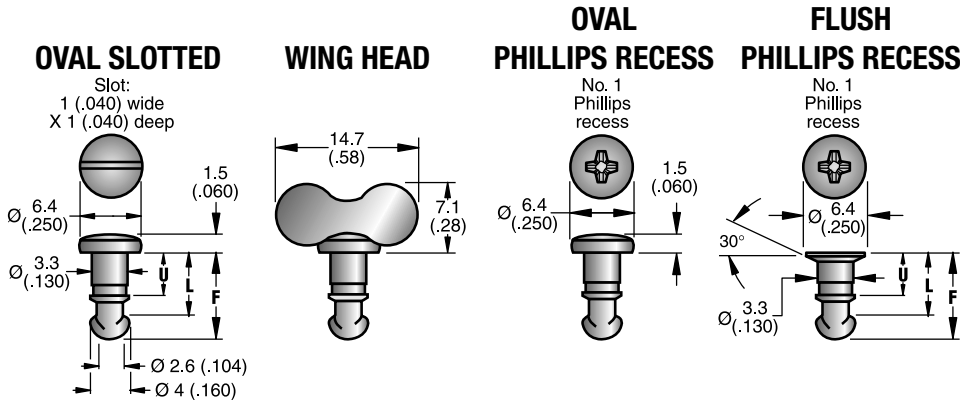
- Add 1.5 mm (.060") to outer panel thickness.
- Use column II in stud selection table.

Material:

Housing and retainer: 301 stainless steel
 Receptacle: 1010 steel, zinc plate
 Spring: 302 stainless steel, passivated

- Interactive configuration at www.clancey.com
- Quick access fastener assembly.
- 4 head styles.
- 5 receptacle styles.
- For limited space applications.

SMALL SERIES, STUD SELECTION TABLE



OVAL SLOTTED



WING HEAD



OVAL PHILLIPS RECESS



FLUSH PHILLIPS RECESS



I		II		STUD PART NUMBER				DIMENSIONS		
FOR: Press-in Part No. 81-35-308-55 and Ultrasonic Part No. 81-35-310-55		FOR: ALL OTHER RECEPTACLES		Zinc plate, chromate plus sealer		Case hardened and zinc plate chromate plus sealer.		U	L	F
Outer Panel Thickness		Total Material Thickness		OVAL SLOTTED	WING HEAD	OVAL PHILLIPS RECESS	FLUSH PHILLIPS RECESS			
MIN.	MAX.	MIN.	MAX.							
1 (.040)	1.5 (.059)	2.3 (.090)	2.8 (.109)	81-11-100-16	81-12-100-16	81-18-100-16	81-19-100-16	4.9 (.193)	7.2 (.285)	9.8 (.385)
1.5 (.060)	2 (.079)	2.8 (.110)	3.3 (.129)	81-11-120-16	81-12-120-16	81-18-120-16	81-19-120-16	5.4 (.213)	7.8 (.305)	10.3 (.405)
2 (.080)	2.5 (.099)	3.3 (.130)	3.8 (.149)	81-11-140-16	81-12-140-16	81-18-140-16	81-19-140-16	5.9 (.233)	8.3 (.325)	10.8 (.425)
2.5 (.100)	3 (.119)	3.8 (.150)	4.3 (.169)	81-11-160-16	81-12-160-16	81-18-160-16	81-19-160-16	6.4 (.253)	8.8 (.345)	11.3 (.445)
3 (.120)	3.5 (.139)	4.3 (.170)	4.8 (.189)	81-11-180-16	81-12-180-16	81-18-180-16	81-19-180-16	6.9 (.273)	9.3 (.365)	11.8 (.465)
3.6 (.140)	4.1 (.159)	4.8 (.190)	5.3 (.209)	81-11-200-16	81-12-200-16	81-18-200-16	81-19-200-16	7.4 (.293)	9.8 (.385)	12.3 (.485)
4.1 (.160)	4.6 (.179)	5.3 (.210)	5.8 (.229)	81-11-220-16	81-12-220-16	81-18-220-16	81-19-220-16	8 (.313)	10.3 (.405)	12.8 (.505)
4.6 (.180)	5.1 (.199)	5.8 (.230)	6.3 (.249)	81-11-240-16	81-12-240-16	81-18-240-16	81-19-240-16	8.5 (.333)	10.8 (.425)	13.3 (.525)
5.1 (.200)	5.6 (.219)	6.4 (.250)	6.9 (.269)	81-11-260-16	81-12-260-16	81-18-260-16	81-19-260-16	9 (.353)	11.0 (.445)	13.8 (.545)
5.6 (.220)	6.1 (.239)	6.9 (.270)	7.4 (.289)	81-11-280-16	81-12-280-16	81-18-280-16	81-19-280-16	9.5 (.373)	11.8 (.465)	14.4 (.565)
6.1 (.240)	6.6 (.259)	7.4 (.290)	7.9 (.309)	81-11-300-16	81-12-300-16	81-18-300-16	81-19-300-16	10 (.393)	12.3 (.485)	14.9 (.585)
6.6 (.260)	7.1 (.279)	7.9 (.310)	8.4 (.329)	81-11-320-16	81-12-320-16	81-18-320-16	81-19-320-16	10.5 (.413)	12.8 (.505)	15.4 (.605)

QUICK ACCESS, 1/4 TURN FASTENERS

QUICK ACCESS FASTENERS

1/4-TURN ASSEMBLIES

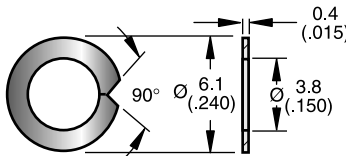
CAD
POWERED

southco[®]
AUTHORIZED DISTRIBUTOR

SMALL SERIES, RETAINERS

STAINLESS STEEL AVAILABLE

SPLIT RING



Stainless Steel
PUSH-ON

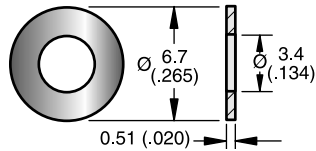
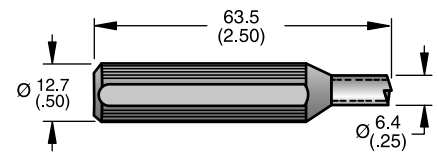
PART NUMBER
81-32-101-20

PART NUMBER
81-0-15129-11

RETAINER

TOOL

INSTALLATION TOOL

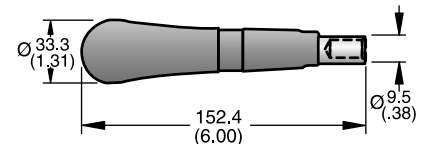


Nylon, Black

PART NUMBER
81-32-301-12

PART NUMBER
81-0-18173-11

INSTALLATION TOOL

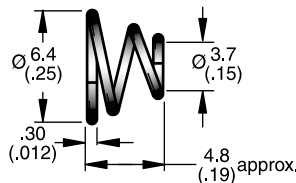


SMALL SERIES, ACCESSORIES

Adjustment

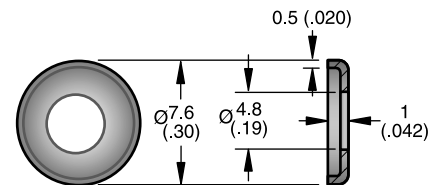
- Wear washer and ejector spring add .8 mm (.032") to outer panel or total material thickness.
- Wear washer add .5 mm (.020") to outer panel or total material thickness.

EJECTOR SPRING



Stainless Steel

WEAR WASHER



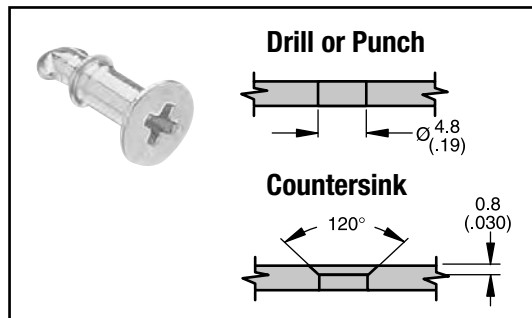
Nylon

EJECTOR SPRING	WEAR WASHER	
	Black	Natural
81-41-102-24	81-46-101-41	81-46-101-39

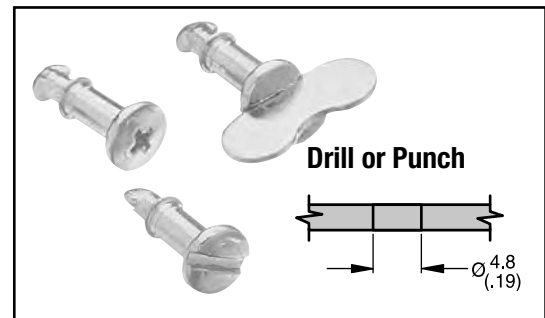
* Accessories cannot be used with flush phillips head style.

SMALL SERIES, PANEL PREPARATION

FOR FLUSH-HEAD STYLE

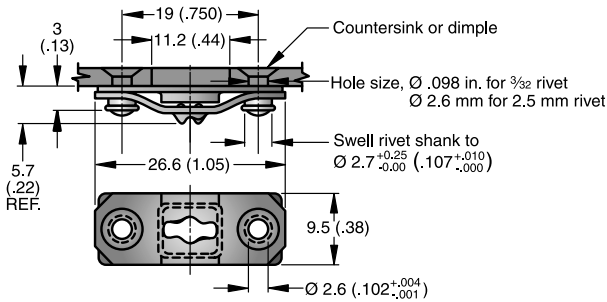


FOR ABOVE-SURFACE STYLES



MEDIUM SERIES, RECEPTACLES

FOR RIVETING - WITH BASE



PART NUMBER
82-35-302-15

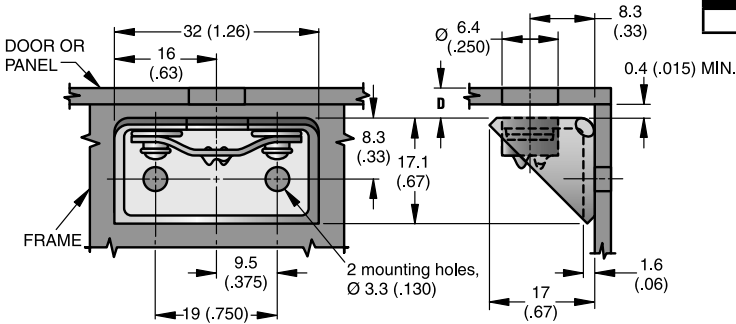
STUD SELECTION

- Determine total material thickness.
- Use column IV in stud selection table.

Material:

Spring: 1064 steel
Bracket: 1010 steel

SIDE MOUNT



PART NUMBER
82-45-101-15

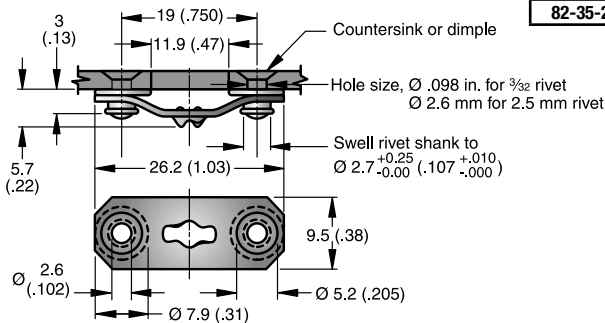
STUD SELECTION

- Calculate $D + 1.5 \text{ mm } (.060\text{'})$.
- Use column IV in stud selection table.

Material:

Spring: 1064 steel
Bracket: 1010 steel

FOR RIVETING - WITHOUT BASE



PART NUMBER	
Steel	Stainless Steel
82-35-295-15	82-35-295-20

STUD SELECTION

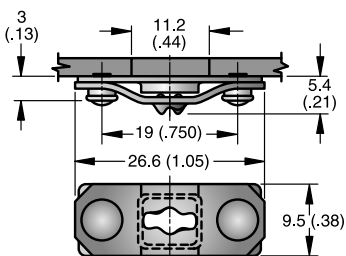
- Determine total material thickness.
- Use column IV in stud selection table.

Material:

Spring: 1064 steel or 17-7 stainless
Eyellet: Steel or 302 stainless

STAINLESS
STEEL
AVAILABLE

FOR WELDING



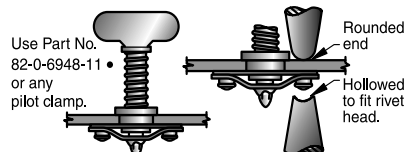
PART NUMBER
82-35-303-15

STUD SELECTION

- Determine total material thickness.
- Use column IV in stud selection table.

Material:

Spring: 1064 steel
Base: 1010 steel
Weld studs: Steel, copper plate



QUICK ACCESS FASTENERS

1/4-TURN ASSEMBLIES

CAD
POWERED

southco
AUTHORIZED DISTRIBUTOR

MEDIUM SERIES, RECEPTACLES

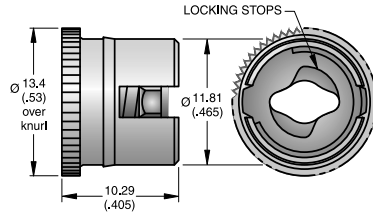
**FOR ULTRASONIC INSTALLATION
IN THERMOPLASTICS**

PART NUMBER
82-35-302-15

Material:

Shell: Steel

Spring: Stainless steel



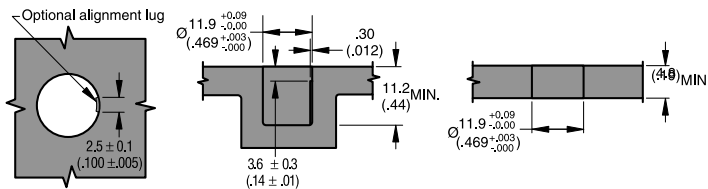
STUD SELECTION

- Determine outer panel thickness.
- Use column II in stud selection table.

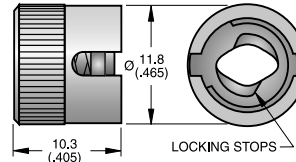
PANEL PREPARATION

Blind Hole Application

Through Hole Application



**PRESS-IN FOR BLIND APPLICATIONS AND
SOLID MATERIALS**

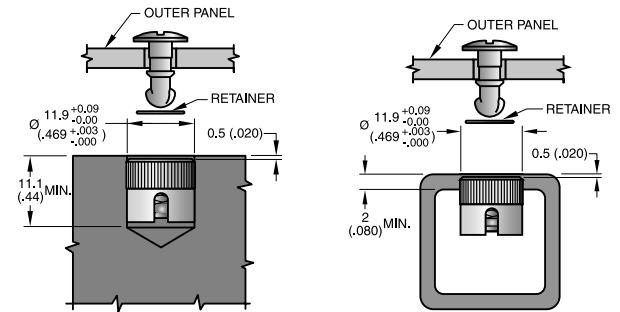


PART NUMBER	
with 90 locking stops	82-35-308-55
without 90 locking stops	82-35-313-55

Material: Shell: Steel Spring: Stainless steel

STUD SELECTION

- Calculate $D + 1.5 \text{ mm } (.060\text{'})$.
- Use column IV in stud selection table.



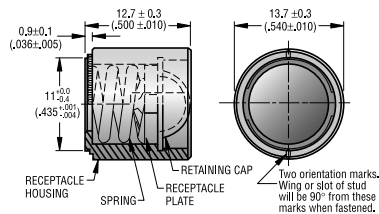
SHIELDED PRESS-IN

PART NUMBER
82-35-315-55

Material:

Shell: Steel

Spring: Stainless steel



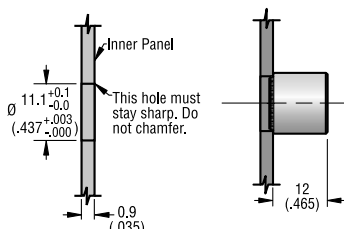
STUD SELECTION

- Determine total material thickness.
- Substitute 1.3 mm (.051") for frame thickness if thickness is less than 1.3 mm (.051").
- Use column III in stud selection table.

PANEL PREPARATION

1. Drill or punch hole in inner panel.

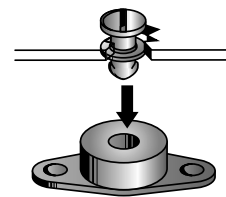
2. Press receptacle into hole until the shoulder on the receptacle bottoms out on the panel's surface.



*Note: for inner panels less than 1.3 (.051) thick, the retainer will create a slight gap between the panels. For proper stud selection in these cases, assume the inner panel thickness as 1.3 (.051).

VIBRATION ISOLATING

PART NUMBER
82-35-306-10



STUD SELECTION

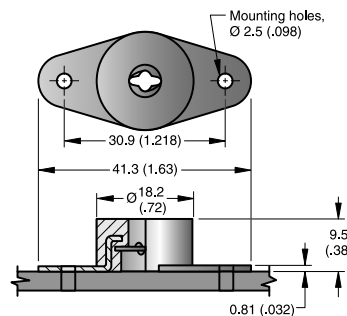
- Determine outer panel thickness.
- Use column I in stud selection table.

Material:

Receptacle: Steel

Plate: Aluminum

Boss: Neoprene



MEDIUM SERIES, RECEPTACLES

Try this part in
your application
Please call for samples.

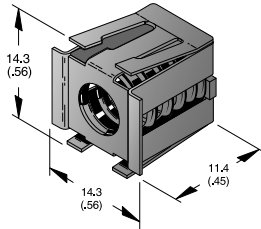
800-747-7405

SNAP-IN STYLE

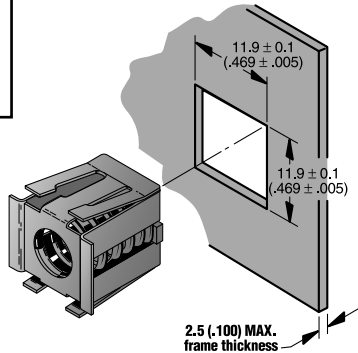
PART NUMBER
82-35-309-56

STUD SELECTION

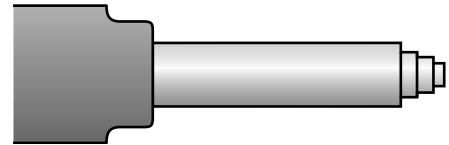
- Calculate outer panel thickness + 5.08 mm (.200").
- Use column IV in stud selection table.



PANEL PREPARATION



INSTALLATION TOOL



PART NUMBER
29-8125-309

Material:
Housing and retainer: Stainless
Receptacle: Steel
Spring: Stainless

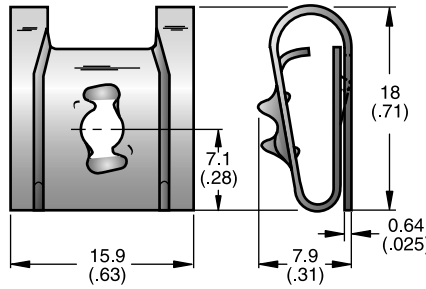
CLIP-ON STYLE

PART NUMBER

Steel	82-47-113-15
Stainless Steel	82-47-113-20

STUD SELECTION

- Enter result in column IV of stud selection table.



PANEL PREPARATION

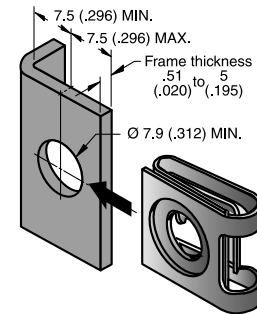
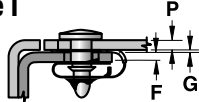
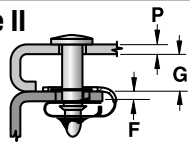


Figure I



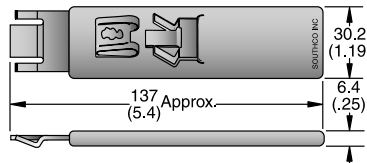
$P + F + 1.40 (.055)$ (constant) when G is $0.64 (.025)$.

Figure II

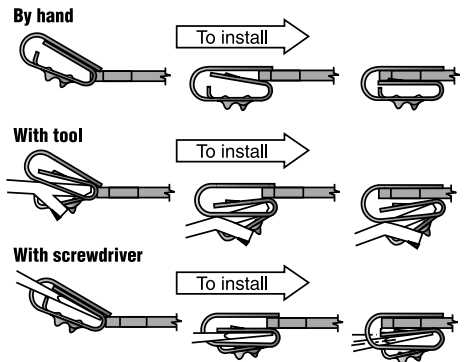


$P + F + G + 0.76 (.030)$ (constant) when G is $0.65 (.026)$ or greater.

INSTALLATION TOOL



PART NUMBER
29-82-101-10



QUICK ACCESS, 1/4 TURN FASTENERS

QUICK ACCESS FASTENERS

1/4-TURN ASSEMBLIES

CAD
POWERED

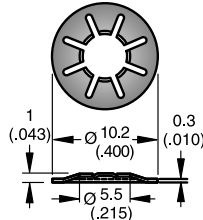
southco[®]
AUTHORIZED DISTRIBUTOR

MEDIUM SERIES, RETAINERS

STAINLESS
STEEL
AVAILABLE

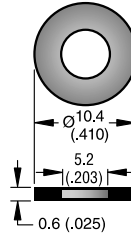
PART NUMBER
82-32-201-20

304 Stainless Steel,
passivated.



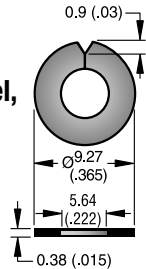
PART NUMBER
82-32-301-12

Nylon, black.



PART NUMBER
82-32-101-20

302 Stainless Steel,
passivated.



INSTALLATION TOOL

PART NUMBER
82-0-22542-11

INSTALLATION TOOL

PART NUMBER
82-0-7595-11

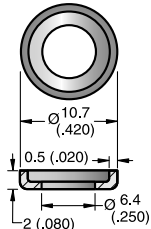
MEDIUM SERIES, ACCESSORIES

NYLON WEAR WASHERS

CUPPED

PART NUMBER

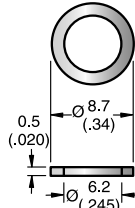
82-46-103-39
Black
82-46-101-39
Natural



FLAT

PART NUMBER

82-46-103-39
Natural



Adjustment

- Add .5 mm (.020") to your outer panel thickness or total material thickness.

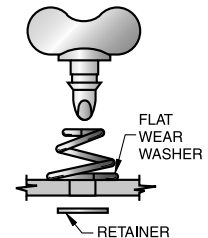
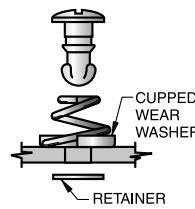
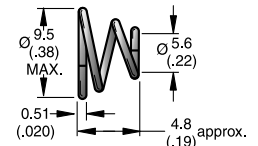
EJECTOR SPRING

NON-CORROSIVE

PART NUMBER

43-13-1-24

302 Stainless steel,
passivated.



Adjustment

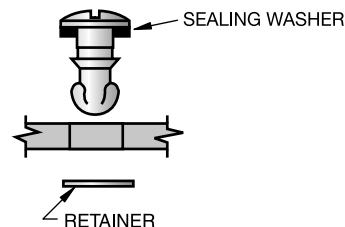
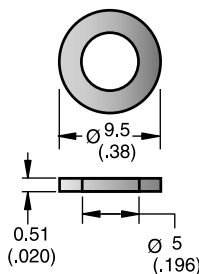
- When using an ejector spring and wear washer add 1 mm (.040") to your outer panel thickness or total material thickness.

SEALING WASHERS

PART NUMBER

82-43-201-38

Nitrile fibre core rubber, black.



Adjustment

- Add .5 mm (.020") to your outer panel thickness or total material thickness.

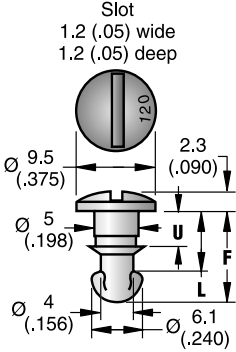
QUICK ACCESS, 1/4 TURN FASTENERS

- Interactive configurator at www.clancey.com
- 9 head styles.
- Spring loaded fully retractable assemblies are available.
- Stainless steel available in many styles.

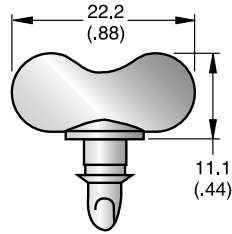
**MEDIUM SERIES,
 STUD SELECTION TABLE**



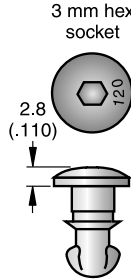
OVAL SLOTTED



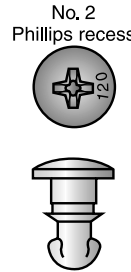
WING HEAD



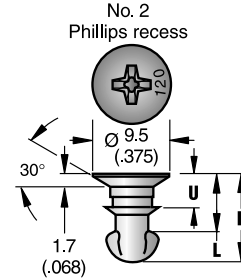
HEX SOCKET



OVAL PHILLIPS



FLUSH PHILLIPS

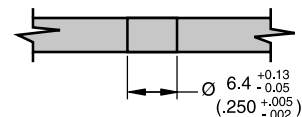


I		II		III		IV		STUD PART NUMBER			
FOR: Part No. 82-35-306-10		FOR: Press-in Part Nos. 82-35-308-55, 82-35-313-55 and Ultrasonic Part No. 82-35-310-55		FOR: Part No. 82-35-315-55		FOR: ALL OTHER RECEPTACLES		Zinc plate, chromate plus sealer			
OUTER PANEL THICKNESS		OUTER PANEL THICKNESS		TOTAL MATERIAL THICKNESS		TOTAL MATERIAL THICKNESS		OV AL SLOTTED	WING HEAD	HEX SOCKET	OV AL PHILLIPS RECESS
MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.				
0.7 (.026)	1.2 (.045)	—	—	—	—	2.3 (.090)	2.8 (.109)	82-11-100-16	82-12-100-16	—	82-19-100-16
1.2 (.046)	1.7 (.065)	—	—	—	—	2.8 (.110)	3.3 (.129)	82-11-120-16	82-12-120-16	82-78-120-16	82-19-120-16
1.7 (.066)	2.2 (.085)	—	—	—	—	3.3 (.130)	3.8 (.149)	82-11-140-16	82-12-140-16	82-78-140-16	82-19-140-16
2.2 (.086)	2.7 (.105)	0 (.000)	0.5 (.019)	1.3 (.050)	1.8 (.069)	3.8 (.150)	4.3 (.169)	82-11-160-16	82-12-160-16	82-78-160-16	82-19-160-16
2.7 (.106)	3.2 (.125)	0.5 (.020)	1 (.039)	1.8 (.070)	2.3 (.089)	4.3 (.170)	4.8 (.189)	82-11-180-16	82-12-180-16	82-78-180-16	82-19-180-16
3.2 (.126)	3.7 (.145)	1 (.040)	1.5 (.059)	2.3 (.090)	2.8 (.109)	4.8 (.190)	5.3 (.209)	82-11-200-16	82-12-200-16	82-78-200-16	82-19-200-16
3.7 (.146)	4.2 (.165)	1.5 (.060)	2 (.079)	2.8 (.110)	3.3 (.129)	5.3 (.210)	5.8 (.229)	82-11-220-16	82-12-220-16	82-78-220-16	82-19-220-16
4.2 (.166)	4.7 (.185)	2 (.080)	2.5 (.099)	3.3 (.130)	3.8 (.149)	5.8 (.230)	6.3 (.249)	82-11-240-16	82-12-240-16	82-78-240-16	82-19-240-16
4.7 (.186)	5.2 (.205)	2.5 (.100)	3 (.119)	3.8 (.150)	4.3 (.169)	6.4 (.250)	6.9 (.269)	82-11-260-16	82-12-260-16	82-78-260-16	82-19-260-16
5.2 (.206)	5.7 (.225)	3 (.120)	3.5 (.139)	4.3 (.170)	4.8 (.189)	6.9 (.270)	7.4 (.289)	82-11-280-16	82-12-280-16	82-78-280-16	82-19-280-16
5.7 (.226)	6.2 (.245)	3.6 (.140)	4.1 (.159)	4.8 (.190)	5.3 (.209)	7.4 (.290)	7.9 (.309)	82-11-300-16	82-12-300-16	82-78-300-16	82-19-300-16
—	—	4.1 (.160)	4.6 (.179)	5.3 (.210)	5.8 (.229)	7.9 (.310)	8.4 (.329)	82-11-320-16	82-12-320-16	82-78-320-16	82-19-320-16
—	—	4.6 (.180)	5.1 (.199)	5.8 (.230)	6.3 (.249)	8.4 (.330)	8.9 (.349)	82-11-340-16	82-12-340-16	82-78-340-16	82-19-340-16
—	—	5.1 (.200)	5.6 (.219)	6.4 (.250)	6.9 (.269)	8.9 (.350)	9.4 (.369)	82-11-360-16	82-12-360-16	82-78-360-16	82-19-360-16
—	—	5.6 (.220)	6.1 (.239)	6.9 (.270)	7.4 (.289)	9.4 (.370)	9.9 (.389)	82-11-380-16	82-12-380-16	82-78-380-16	82-19-380-16
—	—	6.1 (.240)	6.6 (.259)	7.4 (.290)	7.9 (.309)	9.9 (.390)	10.4 (.409)	82-11-400-16	82-12-400-16	82-78-400-16	82-19-400-16
—	—	6.6 (.260)	7.1 (.279)	7.9 (.310)	8.4 (.329)	10.4 (.410)	10.9 (.429)	82-11-420-16	82-12-420-16	82-78-420-16	82-19-420-16
—	—	7.1 (.280)	7.6 (.299)	8.4 (.330)	8.9 (.349)	10.9 (.430)	11.4 (.449)	82-11-440-16	82-12-440-16	82-78-440-16	82-19-440-16
—	—	7.6 (.300)	8.1 (.319)	8.9 (.350)	9.4 (.369)	11.4 (.450)	11.9 (.469)	82-11-460-16	82-12-460-16	82-78-460-16	82-19-460-16
—	—	8.1 (.320)	8.6 (.339)	9.4 (.370)	9.9 (.389)	11.9 (.470)	12.4 (.489)	82-11-480-16	82-12-480-16	82-78-480-16	82-19-480-16
—	—	8.6 (.340)	9.1 (.359)	9.9 (.390)	10.4 (.409)	12.5 (.490)	12.9 (.509)	82-11-500-16	82-12-500-16	82-78-500-16	82-19-500-16
—	—	9.1 (.360)	9.6 (.379)	10.4 (.410)	10.9 (.429)	13 (.510)	13.5 (.529)	82-11-520-16	82-12-520-16	82-78-520-16	82-19-520-16
—	—	9.6 (.380)	10.1 (.399)	10.9 (.430)	11.4 (.449)	13.5 (.530)	14 (.549)	82-11-540-16	82-12-540-16	82-78-540-16	82-19-540-16
—	—	10.2 (.400)	10.7 (.419)	11.4 (.450)	11.9 (.469)	14 (.550)	14.5 (.569)	82-11-560-16	82-12-560-16	82-78-560-16	82-19-560-16
—	—	10.7 (.420)	11.2 (.439)	11.9 (.470)	12.4 (.489)	14.5 (.570)	15 (.589)	82-11-580-16	82-12-580-16	82-78-580-16	82-19-580-16

Low profile head styles are available in stainless steel: change suffix from -15 to -20.
www.clancey.com

PANEL PREPARATION - ABOVE SURFACE STYLES

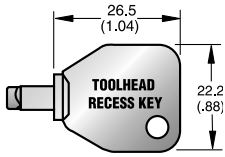
Drill or Punch



QUICK ACCESS, 1/4 TURN FASTENERS

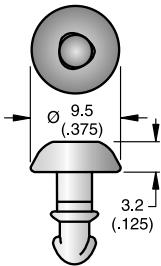
QUICK ACCESS FASTENERS

1/4-TURN ASSEMBLIES

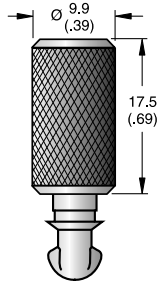


PART NUMBER
29-90-214-10

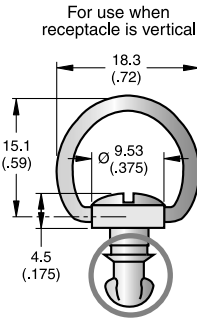
TOOLHEAD RECESS



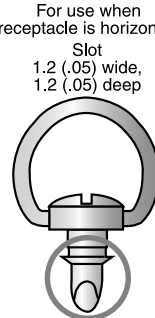
KNURLED HEAD



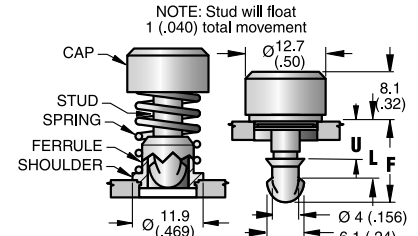
BAIL STYLE RB



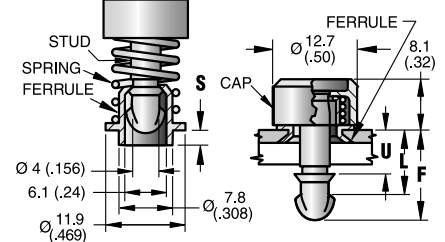
BAIL STYLE RA



PRESS-IN STUD ASSEMBLY

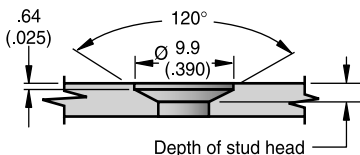


FLARE-IN STUD ASSEMBLY



STUD PART NUMBER					STUD ASSEMBLIES				DIMENSIONS		
Zinc plate, chromate plus sealer.					PRESS-IN STYLE		FLARE-IN STYLE		U	L	F REF.
FLUSH PHILLIPS RECESS	TOOLHEAD RECESS	KNURLED HEAD	BAIL STYLE RB	BAIL STYLE RA							
					BRIGHT	BLACK	I S = 1.5 (.058)	II S = 2.6 (.104)			
82-28-100-16	82-T-100	82-13-100-16	—	—	82-56-105-60	82-56-105-50	—	—	3.2 (.127)	6.2 (.245)	10 (.395)
82-28-120-16	82-T-120	82-13-120-16	82-16-120-16	82-15-120-16	82-56-125-60	82-56-125-50	82-56-121-60	82-56-122-60	3.7 (.147)	6.7 (.265)	10.5 (.415)
82-28-140-16	82-T-140	82-13-140-16	82-16-140-16	82-15-140-16	82-56-145-60	82-56-145-50	82-56-141-60	82-56-142-60	4.2 (.167)	7.2 (.285)	11.1 (.435)
82-28-160-16	82-T-160	82-13-160-16	82-16-160-16	82-15-160-16	82-56-165-60	82-56-165-50	82-56-161-60	82-56-162-60	4.8 (.187)	7.8 (.305)	11.6 (.455)
82-28-180-16	82-T-180	82-13-180-16	82-16-180-16	82-15-180-16	82-56-185-60	82-56-185-50	82-56-181-60	82-56-182-60	5.3 (.207)	8.3 (.325)	12.1 (.475)
82-28-200-16	82-T-200	82-13-200-16	82-16-200-16	82-15-200-16	82-56-205-60	82-56-205-50	82-56-201-60	82-56-202-60	5.8 (.227)	8.8 (.345)	12.6 (.495)
82-28-220-16	82-T-220	82-13-220-16	82-16-220-16	82-15-220-16	82-56-225-60	82-56-225-50	82-56-221-60	82-56-222-60	6.3 (.247)	9.3 (.365)	13.1 (.515)
82-28-240-16	82-T-240	82-13-240-16	82-16-240-16	82-15-240-16	82-56-245-60	82-56-245-50	82-56-241-60	82-56-242-60	6.8 (.267)	9.8 (.385)	13.6 (.535)
82-28-260-16	82-T-260	82-13-260-16	82-16-260-16	82-15-260-16	82-56-265-60	82-56-265-50	82-56-261-60	82-56-262-60	7.3 (.287)	10.3 (.405)	14.1 (.555)
82-28-280-16	82-T-280	82-13-280-16	82-16-280-16	82-15-280-16	82-56-285-60	82-56-285-50	82-56-281-60	82-56-282-60	7.8 (.307)	10.8 (.425)	14.6 (.575)
82-28-300-16	82-T-300	82-13-300-16	82-16-300-16	82-15-300-16	82-56-305-60	82-56-305-50	82-56-301-60	82-56-302-60	8.3 (.327)	11.3 (.445)	15.1 (.595)
82-28-320-16	82-T-320	82-13-320-16	82-16-320-16	82-15-320-16	82-56-325-60	82-56-325-50	82-56-321-60	82-56-322-60	8.8 (.347)	11.8 (.465)	15.6 (.615)
82-28-340-16	82-T-340	82-13-340-16	82-16-340-16	82-15-340-16	82-56-345-60	82-56-345-50	82-56-341-60	82-56-342-60	9.3 (.367)	12.3 (.485)	16.1 (.635)
82-28-360-16	82-T-360	82-13-360-16	82-16-360-16	82-15-360-16	82-56-365-60	82-56-365-50	82-56-361-60	82-56-362-60	9.8 (.387)	12.8 (.505)	16.6 (.655)
82-28-380-16	82-T-380	82-13-380-16	82-16-380-16	82-15-380-16	82-56-385-60	82-56-385-50	82-56-381-60	82-56-382-60	10.3 (.407)	13.3 (.525)	17.2 (.675)
82-28-400-16	82-T-400	82-13-400-16	82-16-400-16	82-15-400-16	82-56-405-60	82-56-405-50	82-56-401-60	82-56-402-60	10.9 (.427)	13.8 (.545)	17.7 (.695)
82-28-420-16	82-T-420	82-13-420-16	82-16-420-16	82-15-420-16	82-56-425-60	82-56-425-50	—	—	11.4 (.447)	14.4 (.565)	18.2 (.715)
82-28-440-16	82-T-440	82-13-440-16	82-16-440-16	82-15-440-16	82-56-445-60	82-56-445-50	—	—	11.9 (.467)	14.9 (.585)	18.7 (.735)
82-28-460-16	82-T-460	82-13-460-16	82-16-460-16	82-15-460-16	82-56-465-60	82-56-465-50	—	—	12.4 (.487)	15.4 (.605)	19.2 (.755)
82-28-480-16	82-T-480	82-13-480-16	82-16-480-16	82-15-480-16	82-56-485-60	82-56-485-50	—	—	12.9 (.507)	15.9 (.625)	19.7 (.775)
82-28-500-16	82-T-500	82-13-500-16	82-16-500-16	82-15-500-16	82-56-505-60	82-56-505-50	—	—	13.4 (.527)	16.4 (.645)	20.2 (.795)
82-28-520-16	82-T-520	82-13-520-16	82-16-520-16	82-15-520-16	82-56-525-60	82-56-525-50	—	—	13.9 (.547)	16.9 (.665)	20.7 (.815)
82-28-540-16	82-T-540	82-13-540-16	82-16-540-16	82-15-540-16	82-56-545-60	82-56-545-50	—	—	14.4 (.567)	17.4 (.685)	21.2 (.835)
82-28-560-16	82-T-560	82-13-560-16	82-16-560-16	82-15-560-16	82-56-565-60	82-56-565-50	—	—	14.9 (.587)	17.9 (.705)	21.7 (.855)
82-28-580-16	82-T-580	82-13-580-16	82-16-580-16	82-15-580-16	82-56-585-60	82-56-585-50	—	—	15.4 (.607)	18.4 (.725)	22.2 (.875)

PANEL PREPARATION - FLUSH HEAD STYLE - When outer panel is 1.3 mm (.050") or greater



LARGE SERIES, RECEPTACLES

SNAP-IN STYLE

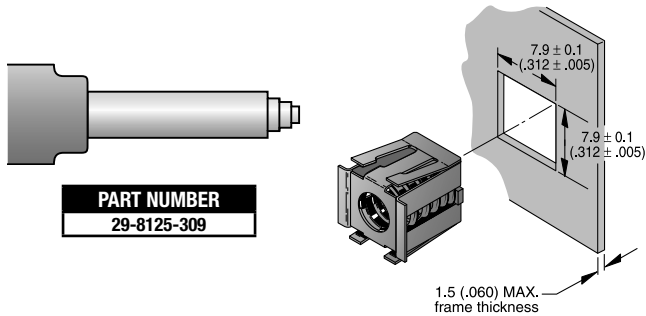
PART NUMBER
85-35-309-56

Material: See medium size.

STUD SELECTION

- Calculate outer panel thickness + 8.4 mm (.330").
- Use column III in stud selection table.

PANEL PREPARATION



SHIELDED PRESS-IN FOR SHEET METAL

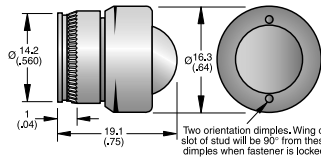
PART NUMBER
85-35-311-55

- Provides RFI-EMI shielding

STUD SELECTION

- Calculate total material thickness.
- Use column II in stud selection table.
- Substitute 1.4 mm (.055") if frame thickness is less than 1.4 mm (.055").

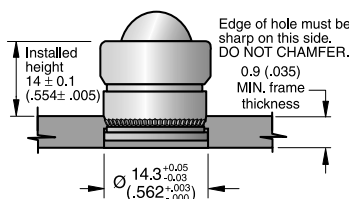
Material:
Shell: Steel
Spring: Stainless steel



INSTALLATION TOOL

PART NUMBER
90-2825-11

PANEL PREPARATION



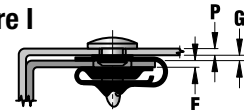
CLIP-ON STYLE

PART NUMBER	
Steel	85-47-101-15
Stainless Steel	85-47-101-20

STUD SELECTION

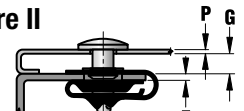
- Calculate as follows.
- Use column III in stud selection table.

Figure I



$P + F + 0.94 (.037)$ (constant)
when G is 1.32 (.052).

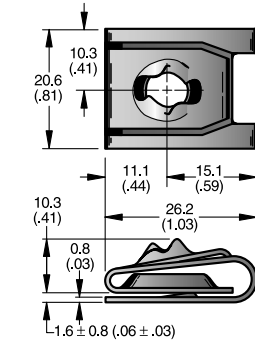
Figure II



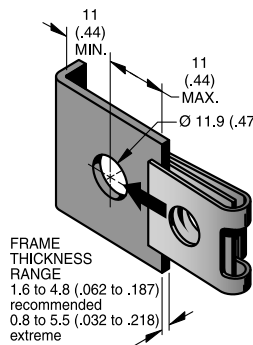
$P + F + G - 0.38 (.015)$ (constant)
when G is 1.33 (.053) or greater.

INSTALLATION TOOL

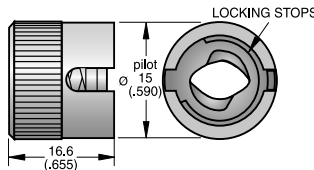
PART NUMBER
29-85-101-10



PANEL PREPARATION



PRESS-IN FOR BLIND APPLICATIONS AND SOLID MATERIALS

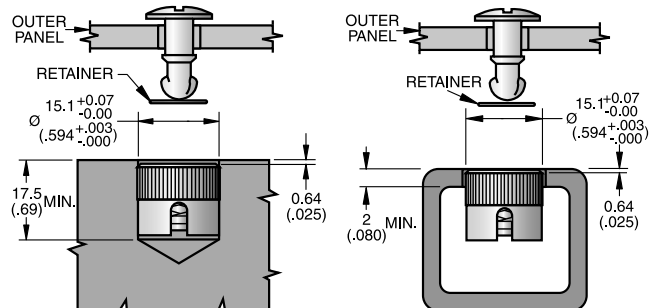


PART NUMBER	
with 90 locking stops	85-35-308-55
without 90 locking stops	85-35-313-55

Material: Shell: Steel Spring: Stainless steel.

STUD SELECTION

- Calculate outer panel thickness.
- Use column I in stud selection table.



QUICK ACCESS FASTENERS

1/4-TURN ASSEMBLIES

CAD
POWERED

southco[®]
AUTHORIZED DISTRIBUTOR

LARGE SERIES, LEAF SPRING RECEPTACLES

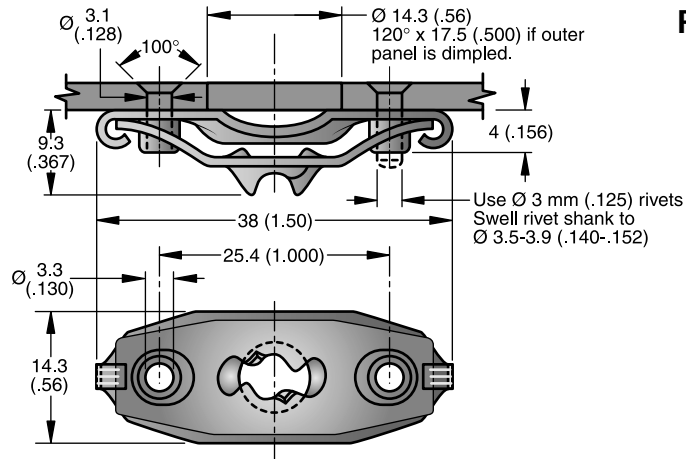
STAINLESS
STEEL
AVAILABLE

FOR RIVETING

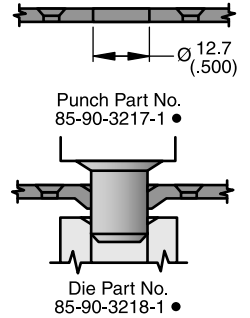
PART NUMBER	
Steel	Stainless Steel
85-35-295-15	85-35-295-20

STUD SELECTION

- Calculate total material thickness.
- Use column III in stud selection table.



PANEL PREPARATION



FOR WELDING

Material:

PART NUMBER
85-35-296-15

Spring: 1064 Steel

Base: 1010 steel

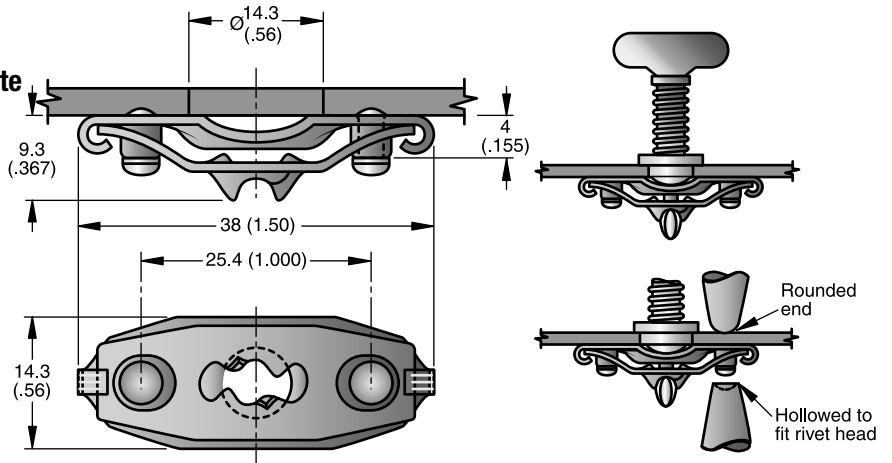
Rivet: Steel, copper plate

STUD SELECTION

- Calculate total material thickness.
- Use column III in stud selection table.

CLAMPING TOOL

PART NUMBER
85-90-3278-11



SIDE MOUNT

Material:

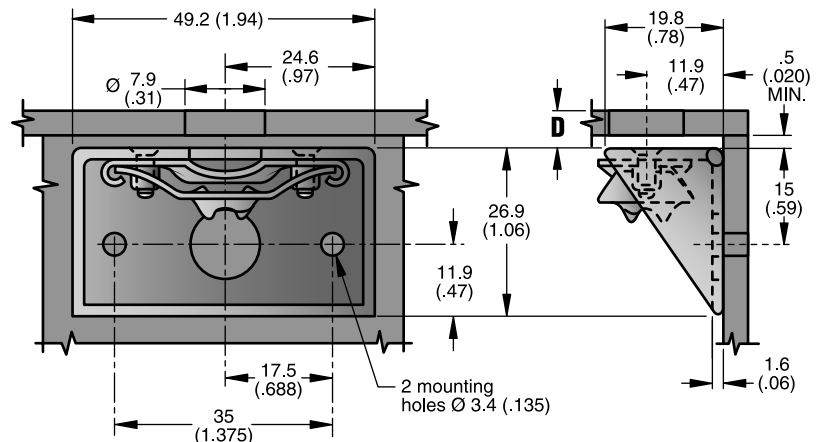
PART NUMBER
85-45-101-15

Spring: 1064 steel

Bracket: 1010 steel

STUD SELECTION

- Calculate $D + 1.6 \text{ mm } (.062\text{'})$.
- Use column III in stud selection table.



QUICK ACCESS, 1/4 TURN FASTENERS

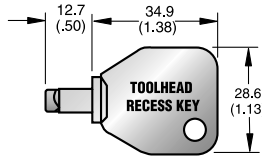
QUICK ACCESS FASTENERS

1/4-TURN ASSEMBLIES

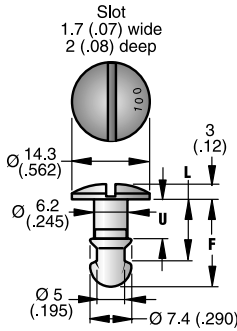
LARGE SERIES, STUD SELECTION TABLE



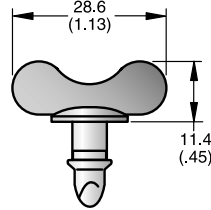
PART NUMBER
29-90-215-10



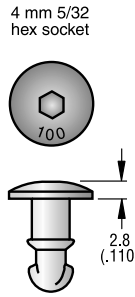
OVAL SLOTTED



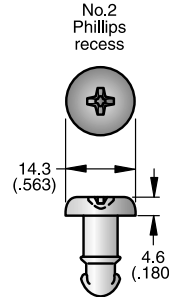
WING HEAD



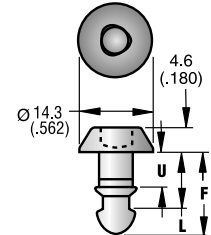
HEX SOCKET



PHILLIPS RECESS



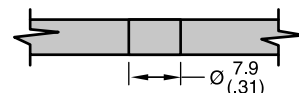
TOOLHEAD RECESS



I		II		III		STUD PART NUMBERS				
FOR: PART NOS. 85-35-308-55 85-35-313-55		FOR: PART NOS. 85-35-311-55		FOR: ALL OTHER RECEPTACLES*		Zinc plate, chromate plus sealer		Zinc plated plus bright chromate dip		
OUTER PANEL THICKNESS‡		TOTAL MATERIAL THICKNESS‡		TOTAL MATERIAL THICKNESS‡		OVAL SLOTTED	WING HEAD	HEX SOCKET	PHILLIPS RECESS	TOOLHEAD RECESS
MIN.	MAX.	MIN.	MAX.	MIN.	MAX.					
				2.3 (.090)	2.8 (.109)	85-11-100-16	85-12-100-16	85-78-100-16	85-P-100	85-T-100
				2.8 (.110)	3.3 (.129)	85-11-120-16	85-12-120-16	85-78-120-16	85-P-120	85-T-120
				3.3 (.130)	3.8 (.149)	85-11-140-16	85-12-140-16	85-78-140-16	85-P-140	85-T-140
				3.8 (.150)	4.3 (.169)	85-11-160-16	85-12-160-16	85-78-160-16	85-P-160	85-T-160
				4.3 (.170)	4.8 (.189)	85-11-180-16	85-12-180-16	85-78-180-16	85-P-180	85-T-180
				4.8 (.190)	5.3 (.209)	85-11-200-16	85-12-200-16	85-78-200-16	85-P-200	85-T-200
				5.3 (.210)	5.8 (.229)	85-11-220-16	85-12-220-16	85-78-220-16	85-P-220	85-T-220
		1.3 (.050)	1.8 (.069)	5.8 (.230)	6.3 (.249)	85-11-240-16	85-12-240-16	85-78-240-16	85-P-240	85-T-240
0.4 (.015)	0.9 (.034)	1.8 (.070)	2.3 (.089)	6.4 (.250)	6.9 (.269)	85-11-260-16	85-12-260-16	85-78-260-16	85-P-260	85-T-260
0.9 (.035)	1.4 (.054)	2.3 (.090)	2.8 (.109)	6.9 (.270)	7.4 (.289)	85-11-280-16	85-12-280-16	85-78-280-16	85-P-280	85-T-280
1.4 (.055)	1.9 (.074)	2.8 (.110)	3.3 (.129)	7.4 (.290)	7.9 (.309)	85-11-300-16	85-12-300-16	85-78-300-16	85-P-300	85-T-300
1.9 (.075)	2.4 (.094)	3.3 (.130)	3.8 (.149)	7.9 (.310)	8.4 (.329)	85-11-320-16	85-12-320-16	85-78-320-16	85-P-320	85-T-320
2.4 (.095)	2.9 (.114)	3.8 (.150)	4.3 (.169)	8.4 (.330)	8.9 (.349)	85-11-340-16	85-12-340-16	85-78-340-16	85-P-340	85-T-340
2.9 (.115)	3.4 (.134)	4.3 (.170)	4.8 (.189)	8.9 (.350)	9.4 (.369)	85-11-360-16	85-12-360-16	85-78-360-16	85-P-360	85-T-360
3.4 (.135)	3.9 (.154)	4.8 (.190)	5.3 (.209)	9.4 (.370)	9.9 (.389)	85-11-380-16	85-12-380-16	85-78-380-16	85-P-380	85-T-380
3.9 (.155)	4.4 (.174)	5.3 (.210)	5.8 (.229)	9.9 (.390)	10.4 (.409)	85-11-400-16	85-12-400-16	85-78-400-16	85-P-400	85-T-400
4.4 (.175)	4.9 (.194)	5.8 (.230)	6.3 (.249)	10.4 (.410)	10.9 (.429)	85-11-420-16	85-12-420-16	85-78-420-16	85-P-420	85-T-420
5 (.195)	5.5 (.214)	6.4 (.250)	6.9 (.269)	10.9 (.430)	11.4 (.449)	85-11-440-16	85-12-440-16	85-78-440-16	85-P-440	85-T-440
5.5 (.215)	6 (.234)	6.9 (.270)	7.4 (.289)	11.4 (.450)	11.9 (.469)	85-11-460-16	85-12-460-16	85-78-460-16	85-P-460	85-T-460
6 (.235)	6.5 (.254)	7.4 (.290)	7.9 (.309)	11.9 (.470)	12.4 (.489)	85-11-480-16	85-12-480-16	85-78-480-16	85-P-480	85-T-480
6.5 (.255)	7 (.274)	7.9 (.310)	8.4 (.329)	12.5 (.490)	12.9 (.509)	85-11-500-16	85-12-500-16	85-78-500-16	85-P-500	85-T-500
7 (.275)	7.5 (.294)	8.4 (.330)	8.9 (.349)	13 (.510)	13.5 (.529)	85-11-520-16	85-12-520-16	85-78-520-16	85-P-520	85-T-520
7.5 (.295)	8 (.314)	8.9 (.350)	9.4 (.369)	13.5 (.530)	14 (.549)	85-11-540-16	85-12-540-16	85-78-540-16	85-P-540	85-T-540
8 (.315)	8.5 (.334)	9.4 (.370)	9.9 (.389)	14 (.550)	14.5 (.569)	85-11-560-16	85-12-560-16	85-78-560-16	85-P-560	85-T-560
8.5 (.335)	9 (.354)	9.9 (.390)	10.4 (.409)	14.5 (.570)	15 (.589)	85-11-580-16	85-12-580-16	85-78-580-16	85-P-580	85-T-580

PANEL PREPARATION - ALL STUD STYLES

Low profile head styles are available in stainless steel: change suffix from -15 to -20.
www.clancey.com



QUICK ACCESS, 1/4 TURN FASTENERS

QUICK ACCESS FASTENERS

1/4-TURN ASSEMBLIES

CAD
POWERED

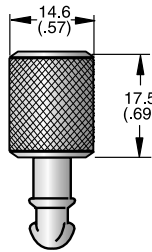
southco
AUTHORIZED DISTRIBUTOR

LARGE SERIES, RETAINERS

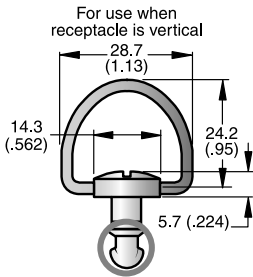
• Interactive configurator at www.clancey.com.

STAINLESS
STEEL
AVAILABLE

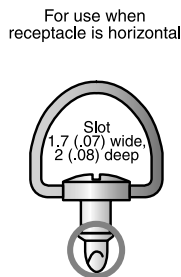
KNURLED HEAD



BAIL STYLE RB



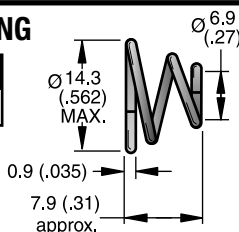
BAIL STYLE RA



STUD PART NUMBERS			DIMENSIONS		
Zinc plate, chromate plus sealer					
KNURLED HEAD	BAIL STYLE RB	BAIL STYLE RA	U	L	F REF.
85-13-100-16	85-16-100-16	85-15-100-16	5.2 (.205)	9.1 (.360)	13.8 (.545)
85-13-120-16	85-16-120-16	85-15-120-16	5.7 (.225)	9.7 (.380)	14.4 (.565)
85-13-140-16	85-16-140-16	85-15-140-16	6.2 (.245)	10.2 (.400)	14.9 (.585)
85-13-160-16	85-16-160-16	85-15-160-16	6.7 (.265)	10.7 (.420)	15.4 (.605)
85-13-180-16	85-16-180-16	85-15-180-16	7.2 (.285)	11.2 (.440)	15.9 (.625)
85-13-200-16	85-16-200-16	85-15-200-16	7.8 (.305)	11.7 (.460)	16.4 (.645)
85-13-220-16	85-16-220-16	85-15-220-16	8.3 (.325)	12.2 (.480)	16.9 (.665)
85-13-240-16	85-16-240-16	85-15-240-16	8.8 (.345)	12.7 (.500)	17.4 (.685)
85-13-260-16	85-16-260-16	85-15-260-16	9.3 (.365)	13.2 (.520)	17.9 (.705)
85-13-280-16	85-16-280-16	85-15-280-16	9.8 (.385)	13.7 (.540)	18.4 (.725)
85-13-300-16	85-16-300-16	85-15-300-16	10.3 (.405)	14.2 (.560)	18.9 (.745)
85-13-320-16	85-16-320-16	85-15-320-16	10.8 (.425)	14.7 (.580)	19.4 (.765)
85-13-340-16	85-16-340-16	85-15-340-16	11.3 (.445)	15.2 (.600)	19.9 (.785)
85-13-360-16	85-16-360-16	85-15-360-16	11.8 (.465)	15.8 (.620)	20.5 (.805)
85-13-380-16	85-16-380-16	85-15-380-16	12.3 (.485)	16.3 (.640)	21 (.825)
85-13-400-16	85-16-400-16	85-15-400-16	12.8 (.505)	16.8 (.660)	21.5 (.845)
85-13-420-16	85-16-420-16	85-15-420-16	13.3 (.525)	17.3 (.680)	22 (.865)
85-13-440-16	85-16-440-16	85-15-440-16	13.8 (.545)	17.8 (.700)	22.5 (.885)
85-13-460-16	85-16-460-16	85-15-460-16	14.4 (.565)	18.3 (.720)	23 (.905)
85-13-480-16	85-16-480-16	85-15-480-16	14.9 (.585)	18.8 (.740)	23.5 (.925)
85-13-500-16	85-16-500-16	85-15-500-16	15.4 (.605)	19.3 (.760)	24 (.945)
85-13-520-16	85-16-520-16	85-15-520-16	15.9 (.625)	19.8 (.780)	24.5 (.965)
85-13-540-16	85-16-540-16	85-15-540-16	16.4 (.645)	20.3 (.800)	25 (.985)
85-13-560-16	85-16-560-16	85-15-560-16	16.9 (.665)	20.8 (.820)	25.5 (1.005)
85-13-580-16	85-16-580-16	85-15-580-16	17.4 (.685)	21.3 (.840)	26 (1.025)

EJECTOR SPRING

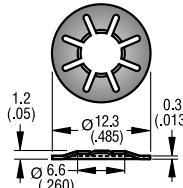
PART NUMBER
14-18-150-24



• When using an ejector spring and wear washer add 1.5 mm (.060") to your outer panel thickness or total material thickness.

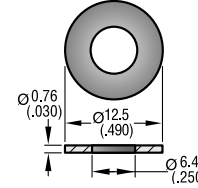
Stainless

PART NUMBER
85-34-201-20



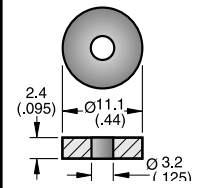
Nylon

PART NUMBER
85-34-301-12



Neopreme

PART NUMBER
85-33-101-27



Use installation tool

Install by hand

PART NUMBER
85-0-22543-11

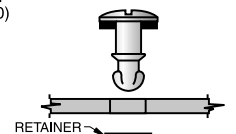
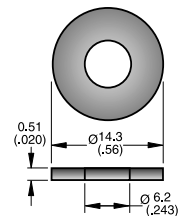
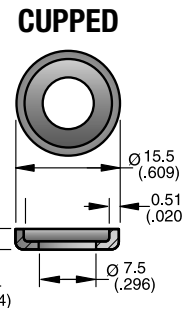
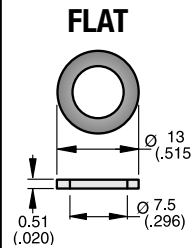
LARGE SERIES, ACCESSORIES

NYLON WEAR WASHERS

PART NUMBER	
Flat Natural	85-46-103-39
Cupped Natural	85-46-101-39
Cupped Black	85-46-101-41

SEALING WASHER

PART NUMBER
85-43-201-38



Adjustment

• When using a wear washer or sealing washer add .51 mm (.020") to your outer panel thickness or total material thickness.

Adjustment

• When using an ejector spring and wear washer add 1.5 mm (.060") to your outer panel thickness or total material thickness.

QUICK ACCESS, 1/4 TURN FASTENERS



- Lightweight, high strength plastic system.
- Economical cost and installation.
- High cycle life.

DART[®] 1/4 FASTENERS

How to order DART[®] fasteners:

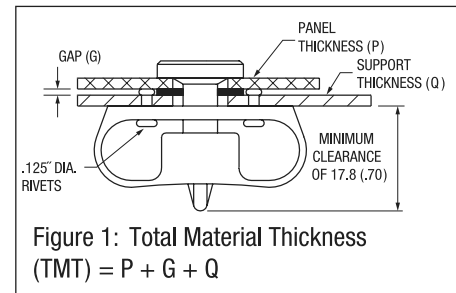
- ① Select receptacle on following page.
 - ② Determine if you will use the retainer (recommended) or spring eject accessories (optional).
 - ③ Choose your stud head style.
 - ④ Determine “-LLL.” Using formulas next to receptacles on following page. Account for -retainer, spring and cup when calculating total material thickness (TMT) – see figure 1 below.
 - ⑤ Input “LLL” into your stud part number for ordering.
- ② Retainer and accessories.



PART NUMBER	Accessory PART NUMBERS		
	Self Ejecting Springs		Self Ejecting Cup
	D1-X1135-2S	D1-X1137-2S	D1-X1129
Split Retainer D1-004-000-010			
ADJUSTMENT = .045" (1.1)	WHEN "LLL" = .045-.070	WHEN "LLL" = .075-.100	ADJUSTMENT = .090" (2.3)

④ TMT calculation

Use TMT to determine “LLL” for receptacle chosen



③ Select head style.

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

TMT EXAMPLE

P Outer panel	=	.060"
G Gap	=	.080"
Q Support (frame)	=	.060"
using cup spring	=	.130"
		.330"

Use TMT to determine “LLL” on following page.

Note: Retainer falls in gap.

QUICK ACCESS FASTENERS

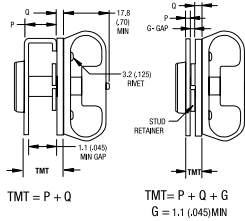
1/4-TURN ASSEMBLIES

CAD
POWERED

southco[®]
AUTHORIZED DISTRIBUTOR

RIVET-ON RECEPTACLE

Rivet-In
PART NUMBER **D1-004-001-010**

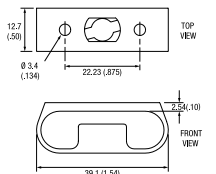


Stud Length Selection

TMT	Stud Dim. "LLL"
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 - 11.44 (.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

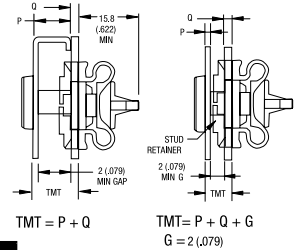
NOTES:

- Gap thickness (G) is the stud retainer thickness. This part may be nested into recessed holes.
- Add 1.1 (0.45) for a Split Retainer to your TMT calibration.
- For use with Self-Ejecting Studs add 2.3 (.090) to your TMT calculation.



CLIP-ON RECEPTACLE

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 (1.53 - 2.16)	D1-004-923-010

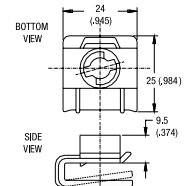


Stud Length Selection

TMT	Stud Dim. "LLL"
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

NOTES:

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



NON-CORROSIVE

SNAP-IN FRONT LOAD

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 (0.67)
1.3-1.75 (.051-.069)	D1-004-912-010	2.2 (0.87)
1.8-2.25 (.035-.049)	D1-004-913-010	2.7 (1.06)
2.3-2.75 (.091-.109)	D1-004-914-010	3.2 (1.26)
2.8-3.25 (.111-.129)	D1-004-915-010	3.7 (1.45)

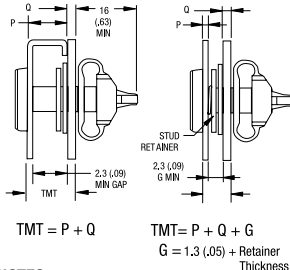


Receptacle Selection Table

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

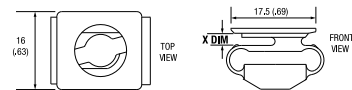
Stud Length Selection

TMT	Stud Dim. "LLL"
4.13 - 5.39 (.169 - .220")	-045
5.40 - 6.66 (.220 - .272")	-050
6.67 - 7.93 (.272 - .324")	-055
7.94 - 9.20 (.324 - .376")	-060
9.21 - 10.47 (.376 - .427")	-065
10.48 - 11.47 (.427 - .468")	-070
11.48 - 13.01 (.468 - .531")	-075
13.02 - 14.28 (.531 - .583")	-080
14.39 - 15.55 (.583 - .635")	-085
15.56 - 16.82 (.635 - .687")	-090
16.83 - 18.09 (.687 - .738")	-095
18.10 - 19.36 (.738 - .790")	-100



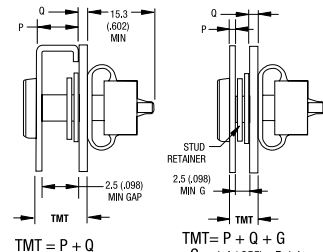
NOTES:

- Gap thickness (G) is the combined thickness of receptacle top flange 1.1 (0.45) and stud retainer thickness. These parts may be nested into recessed holes.
- Add 1.15 (0.45) for Split Retainer to your TMT calibration.
- For use with Self-Ejecting Studs add 2.3 (.09) to your TMT calculation.



SNAP-IN BACK LOAD

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 (1.69)

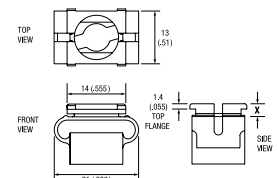


Stud Length Selection

TMT	Stud Dim. "LLL"
4.15 - 5.41 (.169 - .221")	-045
5.42 - 6.68 (.221 - .273")	-050
6.69 - 7.95 (.273 - .324")	-055
7.96 - 9.22 (.324 - .376")	-060
9.23 - 10.49 (.376 - .428")	-065
10.50 - 11.76 (.428 - .480")	-070
11.77 - 13.03 (.480 - .532")	-075
13.04 - 14.30 (.532 - .587")	-080
14.31 - 15.57 (.587 - .636")	-085
15.58 - 16.84 (.636 - .761")	-090
16.85 - 18.11 (.761 - .739")	-095
18.12 - 19.38 (.739 - .791")	-100

NOTES:

- Gap thickness (G) is the combined thickness of receptacle top flange 1.15 (0.45) and stud retainer thickness. These parts may be nested into recessed holes.
- Add 1.15 (0.45) for Split Retainer to your TMT calibration.
- For use with Self-Ejecting Studs add 2.3 (.09) to your TMT calculation.



QUICK ACCESS, 1/4 TURN FASTENERS

- Economical 1/4 turn fastener with highly desired “Push-to-Close” action.
- Available in black or bright.
- Neoprene washer absorbs vibration.
- Lateral tolerance receptacle helps with panel deflection and tolerance stack-up.
- Can be customized for volume applications.
- No tools required for assembly.

HOW TO ORDER:

**Step 1 –
Select Receptacle**

Both receptacles provide the same strength values. Use the Standard Receptacle in normal cases. The Lateral Tolerance Receptacle eases stud alignment. choose either to fit support panel thickness.

Receptacles



Standard



Lateral Tolerance

**Step 2 –
Select Stud**

A choice of two stud styles is offered: standard studs and self ejecting. To complete the stud assembly a separate retainer and washer must be specified at time of order.

Studs



Standard

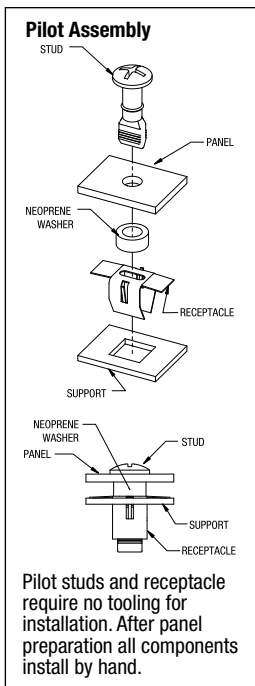


Self-Ejecting

PILOT[®] 1/4 TURN FASTENER



HOW IT WORKS



Typical Assembly

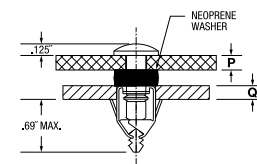
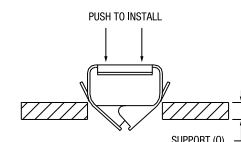
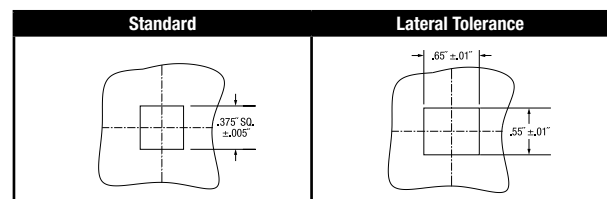


Figure 1:
P = Panel Thickness
Q = Support Thickness

Receptacle Installation



Panel Preparation



We are happy to provide samples of this, or any part in our offering to assist in your application development. You may request online 24/7 at www.clancey.com, or call our customer service team at 800-747-7405. We are ready to help.

QUICK ACCESS, 1/4 TURN FASTENERS

QUICK ACCESS FASTENERS

1/4-TURN ASSEMBLIES

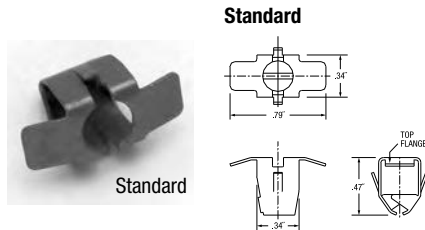
CAD
POWERED

southco
AUTHORIZED DISTRIBUTOR

Step

Receptacle selection

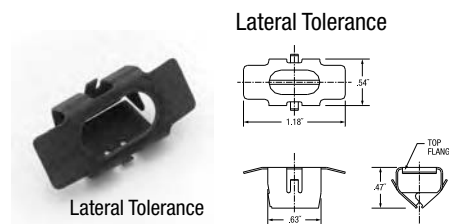
STANDARD RECEPTACLE



Support Thickness (Q)	Part Number
.025" to .049"	D7-285-101-161
.050" to .069"	D7-285-102-161
.070" to .089"	D7-285-103-161

LATERAL TOLERANCE RECEPTACLE

- Provides ± .200" of lateral tolerance.



Support Thickness (Q)	Part Number
.025" to .049"	D7-285-201-161
.050" to .069"	D7-285-202-161
.070" to .089"	D7-285-203-161
.090" to .109"	D7-285-204-161
.110" to .129"	D7-285-205-161

Material & Finish

Material: Spring steel
Finish: Zinc phosphate

Step

Pilot® Stud selection

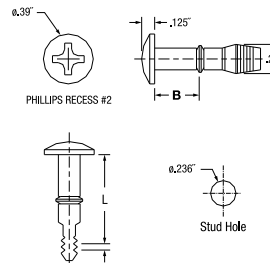
STANDARD STUD & WASHER

Standard Studs



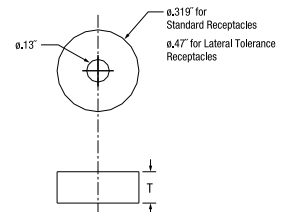
Stud Selection

- Select stud and washer part numbers from the tables at right based on your panel thickness (P).
- Typical washer compression .040" to .080"



Material: Case hardened steel
Finish: Zinc plate with black or bright chromate

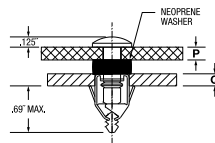
Washer



Material: Neoprene rubber
Finish: Black

NOTE: Order both stud & washer (2) part numbers.

Stud & Washer Selection



P = Panel thickness
Q = Support thickness

P Panel Thickness	Stud Dim. L	Stud Dim. B	Washer Thickness T	Part Numbers			
				Stud		Washer	
				Black Chromate	Bright Chromate	For Std. Recep.	For Lat. Tol. Recep.
.050" to .069"	.63"	.28"	.16"	D7-265-716-191	D7-265-716-190	D7-275-040-400	D7-275-140-400
.070" to .089"	.63"	.28"	.14"	D7-265-716-191	D7-265-716-190	D7-275-035-400	D7-275-135-400
.090" to .109"	.70"	.35"	.20"	D7-265-718-191	D7-265-718-190	D7-275-050-400	D7-275-150-400
.110" to .129"	.70"	.35"	.18"	D7-265-718-191	D7-265-718-190	D7-275-045-400	D7-275-145-400
.130" to .149"	.70"	.35"	.16"	D7-265-718-191	D7-265-718-190	D7-275-040-400	D7-275-140-400
.150" to .169"	.70"	.35"	.14"	D7-265-718-191	D7-265-718-190	D7-275-035-400	D7-275-135-400
.170" to .189"	.79"	.43"	.20"	D7-265-720-191	D7-265-720-190	D7-275-050-400	D7-275-150-400

SELF-EJECT STUD

Self-Ejecting Studs



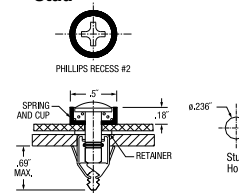
The ejecting assembly locks into the receptacle with a push on the stud. The eject spring provides locking tension that allows greater material thickness tolerance. A quarter turn releases the assembly. The ejecting stud assembly has a reduced gap between panel and support and can be used with either the square hole or lateral tolerance receptacles.

Material & Finish

Material: Case hardened steel with zinc plate with black or bright chrome
Cup: Black thermoplastic
Spring: Stainless steel
Retainer: Acetal copolymer

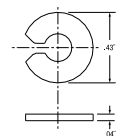
NOTE: Order both stud & retainer (2) part numbers.

Stud



Material: Case hardened steel
Finish: Zinc plate with black or clear chromate

Retainer (Required)



PART NUMBER
D7-275-203-040

Panel Thickness	PART NUMBERS	
	Black	Bright
.020" - .120"	D7-290-718-191	D7-290-718-190
.100" - .200"	D7-290-720-191	D7-290-720-190

NYLATCH[®] 1/4 TURN FASTENER

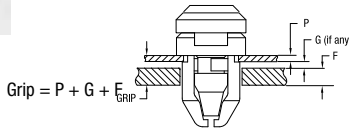
NON-CORROSIVE

- Economical choice - low installed cost.
- Slotted or wing head option.
- Non-corrosive, non-conductive.



Fastener Length Selection

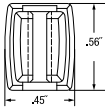
1. Calculate the Grip of your application. Grip is comprised of the removable panel thickness (P), support panel thickness (F) and any gap (G) caused panel lip, washer or gasket used between panels; see Figure 1.



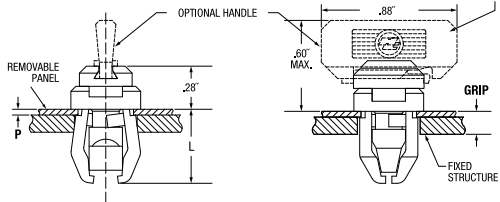
Material & Color

Polycarbonate or Polysulfone:
Black, White or Natural
UL94-V2 rated

Latched Position



Unlatched Position



Length Selection

Grip	P Max.	Length	L Max.
.059" to .148"	.042"	-1	.50"
.076" to .165"	.057"	-2	.51"
.118" to .207"	.098"	-3	.55"
.182" to .271"	.162"	-4	.62"

Nylatch Quarter-Turn Part Numbers:

NY-N6-XX-YY

- Material & Color**
- 20 = Black Polycarbonate
 - 10 = White Polycarbonate
 - 30 = Black Polysulfone
 - 31 = Natural Polysulfone

Length (See chart above)

Basic Part Number

Optional Wing Handle for N6 Fasteners:

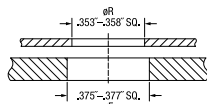
NY-H6-YY

Color - Use selection codes listed for NY-N6, above.

Basic Part Number

Panel Preparation

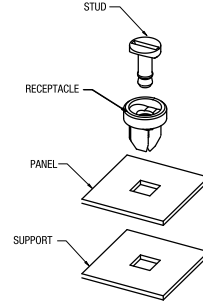
For the Nylatch Quarter-Turn Panel Fastener, panel prep involves the stamping of a square hole in both the removable and support panels. The hole in the removable panel (øR) is slightly smaller than the one in the support panel (øF) to allow for fastener captivation.



ARROW 1/4 TURN FASTENER

NON-CORROSIVE

- 3 head styles.
- Prongs expand 4 directions.
- Non-corrosive, non-conductive.



Material & Color

Material: Acetal copolymer resin
Color: Black

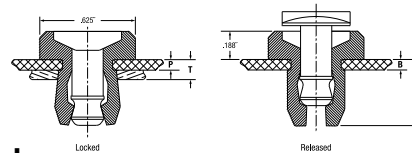
Fastener Selection

1. Choose the receptacle that fits your panel thickness "P".
2. Verify that the combined thickness of your panel and support "T" is within listed limits.
3. Choose a stud head style. Then select the part number, tabulated at bottom right, which corresponds to either the 200 or 201 series receptacle selected.

Studs

Hex Recess	Slotted	Knob

For Use With Receptacle Series	Head Style	L Dimension	Stud Part Number
200	Hex	.50"	D7-200-701-010
	Slotted	.50"	D7-200-711-010
	Knob	.50"	D7-200-721-010
201	Hex	.55"	D7-201-701-010
	Slotted	.55"	D7-201-711-010
	Knob	.55"	D7-201-721-010



Receptacles

Panel Thickness P	Panel Plus Support T	Receptacle Undercut B	Length Under Head H	Receptacle Part Number
.020" to .070"	.080" to .200"	.070"	.48"	D7-200-802-010
.071" to .125"	.135" to .250"	.125"	.54"	D7-201-802-010

Panel Preparation

Top Panel: .360" SQ. +.005"
Bottom Panel: .375" SQ. +.005"

Installation Procedure

Arrow studs and receptacles are packed separately. The receptacle is easily snapped into a square hole from the front panel and becomes self-retained. The stud is then pushed into the receptacle until it snaps in place.

QUICK ACCESS FASTENERS

FAST-LEAD CAPTIVE SCREWS

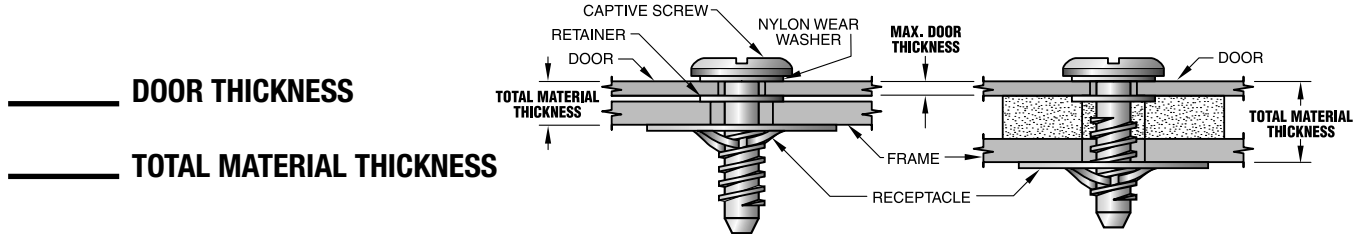
CAD
POWERED

southco[®]
AUTHORIZED DISTRIBUTOR

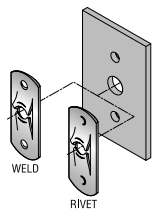
• Product configurator at www.clancey.com

HOW TO SELECT FAST-LEAD CAPTIVE SCREWS – ALL SIZES

1. Choose a size: Small (09), Medium (12), or Large (17).
2. Determine panel configuration with dimensions.

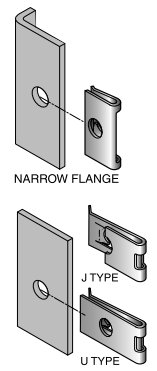


3. Choose a receptacle. Note: availability of styles differs with size (See pages 200, 202, 204)



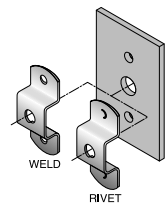
FLAT TYPE

- Small envelope
- Available either rivet type or weld type
- Anywhere in frame



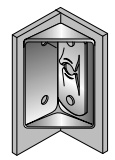
CLIP-ON TYPE

- Simple installation
- Ideal for near edge mounting



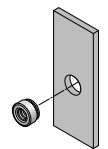
SADDLE TYPE

- Permits multiple screw assemblies on the same door while allowing one screw to fully retract from receptacle
- Rivet or weld type



SIDE-MOUNT TYPE

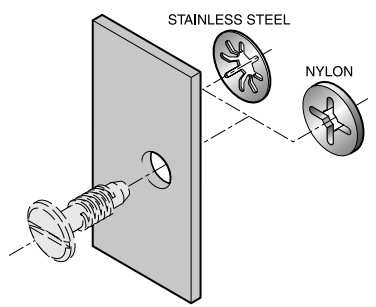
- Permits mounting to plane surface perpendicular to door surface



PRESS-IN TYPE

- Simple installation
- Small envelope
- For metal panels only

4. Choose a retainer. (See pages 200, 202, 204)



5. Determine constant.

Screw size	Retainer type	RECEPTACLE TYPE				
		Flat	Clip	Saddle	Side	Press-in
09 (Small)	Stainless	.30 (.012)	1.0 (.032)	4.5 (.177)	—	-1.3 (-.050)
	Nylon	1.1 (.043)	1.6 (.063)	5.3 (.208)	—	-0.5 (-.020)
12 (Med.)	Stainless	.38 (.015)	1.1 (.045)	4 (.156)	1.5 (.060)	-1.3 (-.050)
	Nylon	1.4 (.054)	2.0 (.079)	5.31 (.210)	1.5 (.060)	-0.5 (-.020)
17 (Large)	Stainless	.38 (.015)	2.2 (.086)	—	1.5 (.060)	—
	Nylon	1.9 (.076)	3.5 (.137)	—	1.5 (.060)	—

6. Add constant to total material thickness from above.

_____ + _____ = _____ ENTER IN COLUMN I

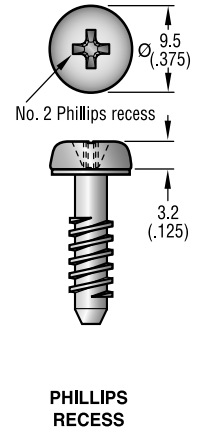
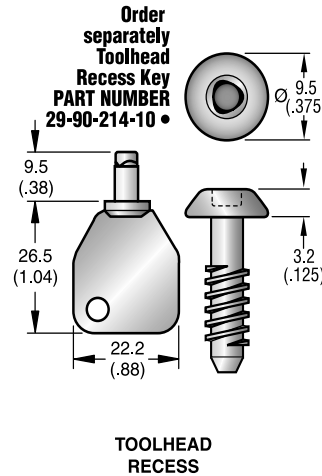
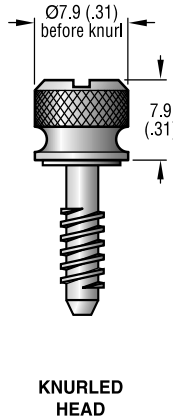
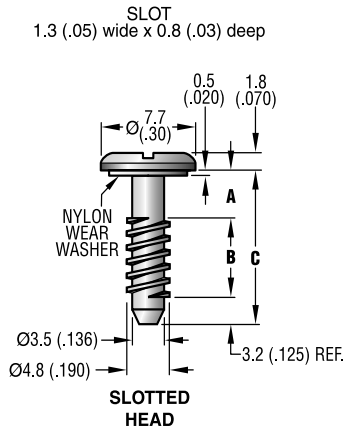
7. Check your outer panel door thickness. (Must not exceed amount in column II)
8. Choose your head style and finish.
9. Order 3 parts: screw, retainer and receptacle.
10. Order installation tools (recommended).

QUICK ACCESS FASTENERS, FAST-LEAD CAPTIVE SCREWS

QUICK ACCESS FASTENERS FAST-LEAD CAPTIVE SCREWS

- Product configurator at www.clancey.com.
- For limited space applications.
- Four head styles.
- Four receptacle styles.
- Vibration resistant.

FAST-LEAD CAPTIVE SCREWS, SMALL SIZE



COL. I		COL. II	SCREW ASSEMBLY PART NUMBERS				DIMENSIONS		
Range of total thickness to be fastened		MAX. thickness of outer panel	Low carbon steel, case hardened, zinc plate, chromate plus sealer				A	B (For full screw retraction, "B" must be less than inner panel thickness plus receptacle height)	C
MIN.	MAX.		SLOTTED	KNURLED	TOOLHEAD RECESS	PHILLIPS			
1.3 (.050)	3.2 (.125)	0.9 (.035)	09-11-102-11	09-13-102-11	09-T-102	09-P-102	2.5 (.100)	5 (.197)	10.7 (.422)
2.5 (.100)	3.2 (.125)	2.2 (.085)	09-11-103-11	09-13-103-11	09-T-103	09-P-103	3.8 (.150)	3.7 (.147)	
1.3 (.050)	6.4 (.250)	0.9 (.035)	09-11-202-11	09-13-202-11	09-T-202	09-P-202	2.5 (.100)	8.2 (.322)	13.9 (.547)
2.5 (.100)	6.4 (.250)	2.2 (.085)	09-11-203-11	09-13-203-11	09-T-203	09-P-203	3.8 (.150)	6.9 (.272)	
3.8 (.150)	6.4 (.250)	3.4 (.135)	09-11-204-11	09-13-204-11	09-T-204	09-P-204	5.1 (.200)	5.6 (.222)	
5.1 (.200)	6.4 (.250)	4.7 (.185)	09-11-205-11	09-13-205-11	09-T-205	09-P-205	6.4 (.250)	4.4 (.172)	
1.3 (.050)	9.5 (.375)	0.9 (.035)	09-11-302-11	09-13-302-11	09-T-302	09-P-302	2.5 (.100)	11.4 (.447)	17.1 (.672)
2.5 (.100)	9.5 (.375)	2.2 (.085)	09-11-303-11	09-13-303-11	09-T-303	09-P-303	3.8 (.150)	10.1 (.397)	
3.8 (.150)	9.5 (.375)	3.4 (.135)	09-11-304-11	09-13-304-11	09-T-304	09-P-304	5.1 (.200)	8.8 (.347)	
5.1 (.200)	9.5 (.375)	4.7 (.185)	09-11-305-11	09-13-305-11	09-T-305	09-P-305	6.4 (.250)	7.3 (.297)	
7.6 (.300)	9.5 (.375)	7.2 (.285)	09-11-307-11	09-13-307-11	09-T-307	09-P-307	8.9 (.350)	5 (.197)	

For stainless steel screw (slotted, and knurled ONLY): Replace last 2 digits of part number with "26". Example: 09-11-102-26
Longer screws and black finish available. Please call for information.



QUICK ACCESS FASTENERS, FAST-LEAD CAPTIVE SCREWS

QUICK ACCESS FASTENERS

FAST-LEAD CAPTIVE SCREWS

CAD
POWERED

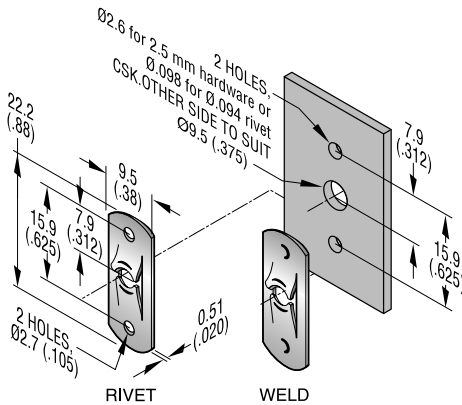
southco
AUTHORIZED DISTRIBUTOR

FAST-LEAD CAPTIVE SCREWS, RECEPTACLES, SMALL SIZE

- 4 styles, 5 mounting options.
- Stainless steel options.

STAINLESS
STEEL
AVAILABLE

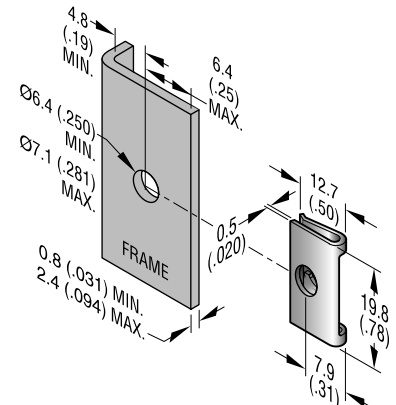
FLAT TYPE



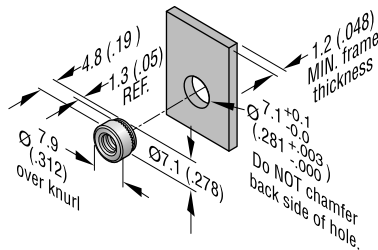
FLAT RECEPTACLE PART NUMBERS		
TYPE	MATERIAL AND FINISH	PART NUMBERS
RIVET	Spring steel, DACROSEALED†	09-41-101-11
	302 Stainless steel, passivated	09-41-101-24
WELD	302 Stainless steel, passivated	09-41-103-24

CLIP-ON RECEPTACLE PART NUMBERS	
MATERIAL AND FINISH	PART NUMBERS
Spring steel, DACROSEALED†	09-43-101-11
17-7PH Stainless steel, passivated	09-43-101-24

CLIP-ON



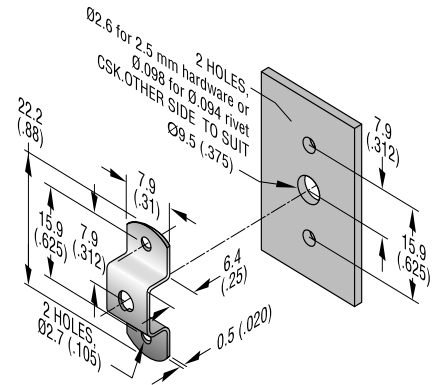
PRESS-IN



PRESS-IN RECEPTACLE PART NUMBER	
Low carbon steel, case hardened and zinc plate, chromate plus sealer.	
09-44-101-11	

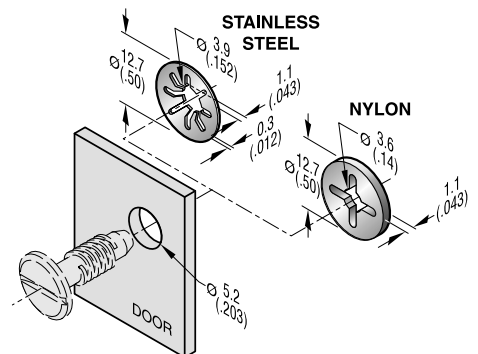
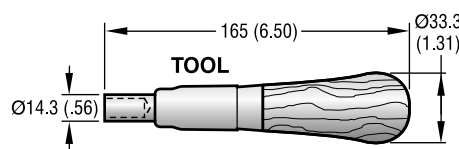
SADDLE-TYPE RECEPTACLE PART NUMBERS	
MATERIAL AND FINISH	PART NUMBERS
Spring steel, DACROSEALED†	09-42-101-11
17-7PH Stainless steel, passivated	09-42-101-24

SADDLE TYPE



RETAINERS, SMALL SIZE

RETAINER PART NUMBERS		TOOL PART NUMBER
302 Stainless steel, passivated	Nylon, black	
09-6-1	09-49-102-42	12-0-20980-11

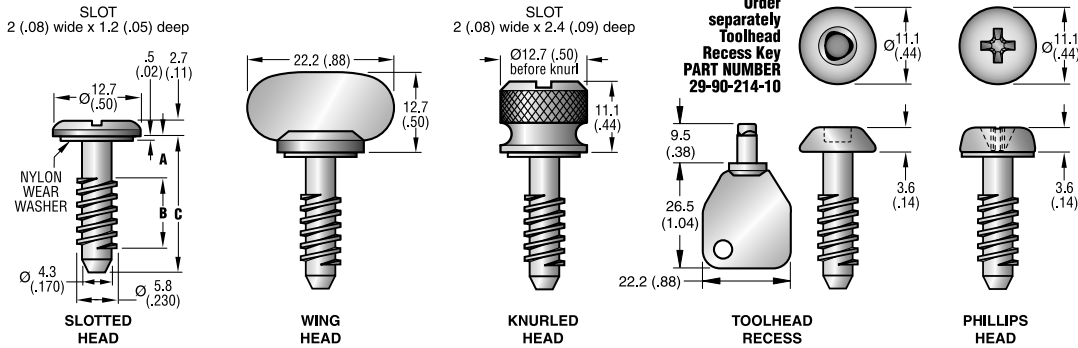


QUICK ACCESS FASTENERS, FAST-LEAD CAPTIVE SCREWS

QUICK ACCESS FASTENERS FAST-LEAD CAPTIVE SCREWS

- Product configurator at www.clancey.com.
- Widest range of configurations.
- Five head styles.
- Five receptacle styles.
- Vibration resistant.

FAST-LEAD CAPTIVE SCREWS, MEDIUM SIZE



COL. I		COL. II	SCREW ASSEMBLY PART NUMBERS					DIMENSIONS		
Range of total thickness to be fastened		MAX. thickness of outer panel	Low carbon steel, case hardened, zinc plate, chromate plus sealer					A	B (For full screw retraction, "B" must be less than inner panel thickness plus receptacle height)	C
MIN.	MAX.		SLOTTED	WING	KNURLED	TOOLHEAD RECESS	PHILLIPS			
1.3 (.050)	3.2 (.125)	0.6 (.025)	12-11-102-11	12-12-102-11	12-13-102-11	12-T-102	12-P-102	2.5 (.100)	5.8 (.228)	12.3 (.486)
2.5 (.100)	3.2 (.125)	1.9 (.075)	12-11-103-11	12-12-103-11	12-13-103-11	12-T-103	12-P-103	3.8 (.150)	4.5 (.178)	
1.3 (.050)	6.4 (.250)	0.6 (.025)	12-11-202-11	12-12-202-11	12-13-202-11	12-T-202	12-P-202	2.5 (.100)	9 (.353)	15.5 (.611)
2.5 (.100)	6.4 (.250)	1.9 (.075)	12-11-203-11	12-12-203-11	12-13-203-11	12-T-203	12-P-203	3.8 (.150)	7.7 (.303)	
3.8 (.150)	6.4 (.250)	3.2 (.125)	12-11-204-11	12-12-204-11	12-13-204-11	12-T-204	12-P-204	5.1 (.200)	6.4 (.253)	
5.1 (.200)	6.4 (.250)	4.5 (.175)	12-11-205-11	12-12-205-11	12-13-205-11	12-T-205	12-P-205	6.4 (.250)	5.2 (.203)	
1.3 (.050)	9.5 (.375)	0.6 (.025)	12-11-302-11	12-12-302-11	12-13-302-11	12-T-302	12-P-302	2.5 (.100)	12.1 (.478)	18.7 (.736)
2.5 (.100)	9.5 (.375)	1.9 (.075)	12-11-303-11	12-12-303-11	12-13-303-11	12-T-303	12-P-303	3.8 (.150)	10.9 (.428)	
3.8 (.150)	9.5 (.375)	3.2 (.125)	12-11-304-11	12-12-304-11	12-13-304-11	12-T-304	12-P-304	5.1 (.200)	9.6 (.378)	
5.1 (.200)	9.5 (.375)	4.5 (.175)	12-11-305-11	12-12-305-11	12-13-305-11	12-T-305	12-P-305	6.4 (.250)	8.3 (.328)	
7.6 (.300)	9.5 (.375)	7 (.275)	12-11-307-11	12-12-307-11	12-13-307-11	12-T-307	12-P-307	8.9 (.350)	5.8 (.228)	
2.5 (.100)	12.7 (.500)	1.9 (.075)	12-11-403-11	12-12-403-11	12-13-403-11	12-T-403	12-P-403	3.8 (.150)	14.1 (.553)	21.9 (.861)
3.8 (.150)	12.7 (.500)	3.2 (.125)	12-11-404-11	12-12-404-11	12-13-404-11	12-T-404	12-P-404	5.1 (.200)	12.8 (.503)	
5.1 (.200)	12.7 (.500)	4.5 (.175)	12-11-405-11	12-12-405-11	12-13-405-11	12-T-405	12-P-405	6.4 (.250)	11.5 (.453)	
7.6 (.300)	12.7 (.500)	7 (.275)	12-11-407-11	12-12-407-11	12-13-407-11	12-T-407	12-P-407	8.9 (.350)	9 (.353)	
10.2 (.400)	12.7 (.500)	9.5 (.375)	12-11-409-11	12-12-409-11	12-13-409-11	12-T-409	12-P-409	11.4 (.450)	6.4 (.253)	
2.5 (.100)	15.9 (.625)	1.9 (.075)	12-11-503-11	12-12-503-11	12-13-503-11	12-T-503	12-P-503	3.8 (.150)	17.2 (.678)	25 (.986)
3.8 (.150)	15.9 (.625)	3.2 (.125)	12-11-504-11	12-12-504-11	12-13-504-11	12-T-504	12-P-504	5.1 (.200)	16 (.628)	
5.1 (.200)	15.9 (.625)	4.5 (.175)	12-11-505-11	12-12-505-11	12-13-505-11	12-T-505	12-P-505	6.4 (.250)	14.7 (.578)	
7.6 (.300)	15.9 (.625)	7 (.275)	12-11-507-11	12-12-507-11	12-13-507-11	12-T-507	12-P-507	8.9 (.350)	12.1 (.478)	
10.2 (.400)	15.9 (.625)	9.5 (.375)	12-11-509-11	12-12-509-11	12-13-509-11	12-T-509	12-P-509	11.4 (.450)	9.6 (.378)	
12.7 (.500)	15.9 (.625)	12.1 (.475)	12-11-511-11	12-12-511-11	12-13-511-11	12-T-511	12-P-511	14 (.550)	7.1 (.278)	
2.5 (.100)	19.1 (.750)	1.9 (.075)	12-11-603-11	12-12-603-11	12-13-603-11	12-T-603	12-P-603	3.8 (.150)	20.4 (.803)	28.2 (1.111)
3.8 (.150)	19.1 (.750)	3.2 (.125)	12-11-604-11	12-12-604-11	12-13-604-11	12-T-604	12-P-604	5.1 (.200)	19.1 (.753)	
5.1 (.200)	19.1 (.750)	4.5 (.175)	12-11-605-11	12-12-605-11	12-13-605-11	12-T-605	12-P-605	6.4 (.250)	17.9 (.703)	
7.6 (.300)	19.1 (.750)	7 (.275)	12-11-607-11	12-12-607-11	12-13-607-11	12-T-607	12-P-607	8.9 (.350)	15.3 (.603)	
10.2 (.400)	19.1 (.750)	9.5 (.375)	12-11-609-11	12-12-609-11	12-13-609-11	12-T-609	12-P-609	11.4 (.450)	12.8 (.503)	
12.7 (.500)	19.1 (.750)	12.1 (.475)	12-11-611-11	12-12-611-11	12-13-611-11	12-T-611	12-P-611	14 (.550)	10.2 (.403)	
15.3 (.600)	19.1 (.750)	14.6 (.575)	12-11-613-11	12-12-613-11	12-13-613-11	12-T-613	12-P-613	16.5 (.650)	7.7 (.303)	
17.8 (.700)	19.1 (.750)	17.2 (.675)	12-11-615-11	12-12-615-11	12-13-615-11	12-T-615	12-P-615	19.1 (.750)	5.2 (.203)	

Slotted, wing and knurled headstyles are available in stainless steel.
Longer screws and black finish available. Please call for information.



QUICK ACCESS FASTENERS

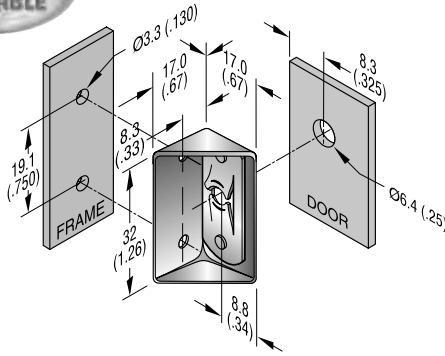
FAST-LEAD CAPTIVE SCREWS

FAST-LEAD CAPTIVE SCREWS, RECEPTACLES, MEDIUM SIZE

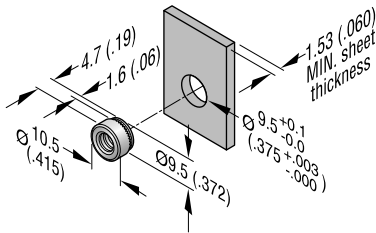
- 5 styles, 9 mounting options.
- Stainless steel options.

STAINLESS
STEEL
AVAILABLE

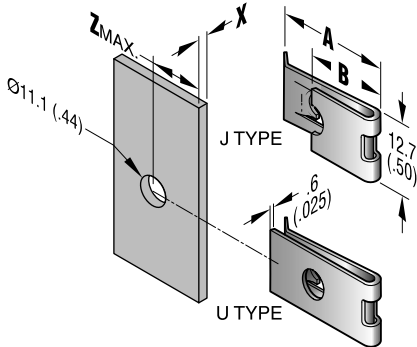
SIDE MOUNT



PRESS-IN



CLIP-ON



RETAINERS, MEDIUM SIZE

SIDE MOUNT RECEPTACLE PART NUMBER			
Receptacle: Steel, dacrotized † Bracket: Steel, zinc plate, Rivet: Aluminum			
12-90-101-10			

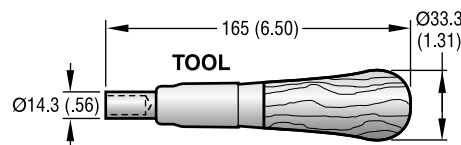
FLAT RECEPTACLE PART NUMBERS					
TYPE	MATERIAL AND FINISH	D	E	ØH	PART NUMBERS
RIVET	1064 Steel, DACROSEALED†	19.1 (.750)	9.5 (.375)	2.7 (.105)	12-11015-13
		19.1 (.750)	9.5 (.375)	3.4 (.135)	12-11020-11
	302 Stainless steel, passivated	19.1 (.750)	9.5 (.375)	2.7 (.105)	12-11015-14
		19.1 (.750)	9.5 (.375)	3.4 (.135)	12-11020-13
WELD		—	—	—	12-11016-11

PRESS-IN RECEPTACLE PART NUMBER			
Low carbon steel, case hardened and zinc plate, chromate plus sealer.			
12-44-101-11			

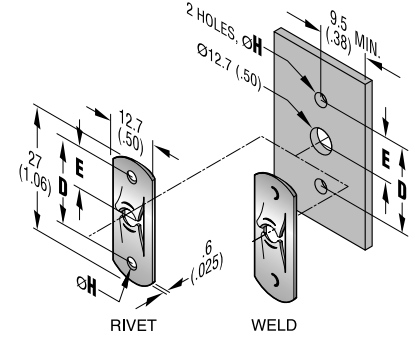
SADDLE RECEPTACLE PART NUMBERS					
TYPE	MATERIAL AND FINISH	D	E	ØH	PART NUMBERS
RIVET	1070 Steel, DACROSEALED†	19.1 (.750)	9.5 (.375)	3.4 (.135)	12-11043-11
	302 Stainless steel, passivated	19.1 (.750)	9.5 (.375)	3.4 (.135)	12-11043-12
WELD		—	—	—	12-11044-12

CLIP-ON RECEPTACLE PART NUMBERS						
TYPE	Material and Finish	X	A	B	Z max.	PART NUMBERS
J	1064 Steel, DACROSEALED†	.8 (.031)-2.8 (.109)	24.8 (.98)	14.9 (.59)	12.7 (.50)	12-11025-11
		.8 (.031)-2.8 (.109)	25.9 (1.02)	14.9 (.59)	12.7 (.50)	12-11017-11
2.8 (.109)-4.1 (.161)		25.9 (1.02)	14.9 (.59)	11.9 (.47)	12-11027-11	
4.1 (.161)-5.5 (.213)		24.8 (.98)	14.9 (.59)	11.1 (.44)	12-11029-11	
5.4 (.213)-6.7 (.265)		24.5 (.97)	13.4 (.53)	11.1 (.44)	12-11031-11	
17-7 PH Stainless steel, passivated		.8 (.031)-2.8 (.109)	25.9 (1.02)	14.9 (.59)	12.7 (.50)	12-11017-12
Narrow flange	1064 Steel, DACROSEALED†	.8 (.031)-2.8 (.109)	—	—	6.4 (.25)	12-11050-27

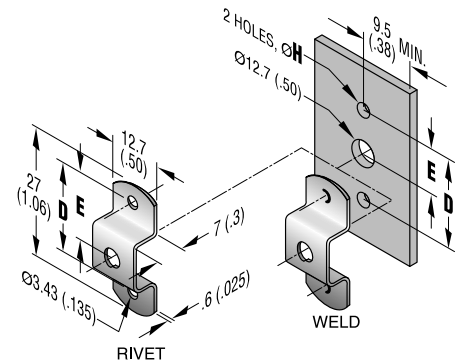
RETAINER PART NUMBERS		TOOL PART NUMBER
304 Stainless steel, passivated	Nylon, black	
12-6-1	12-11064-42	12-0-20980-11



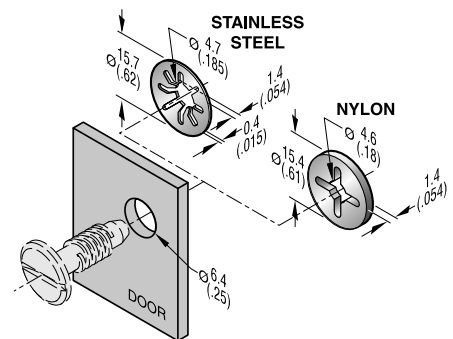
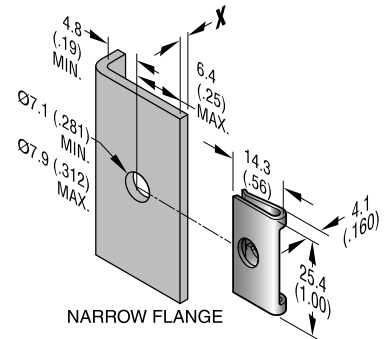
FLAT TYPE



SADDLE TYPE



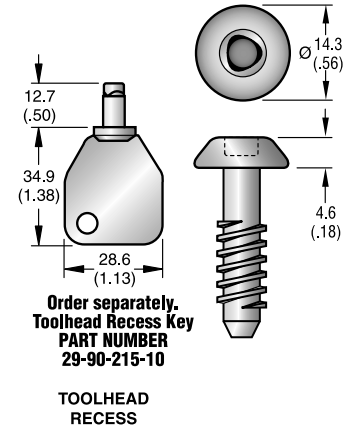
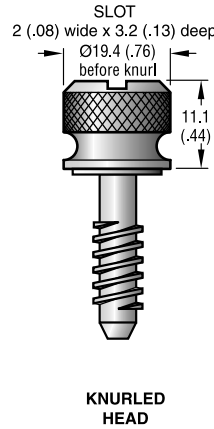
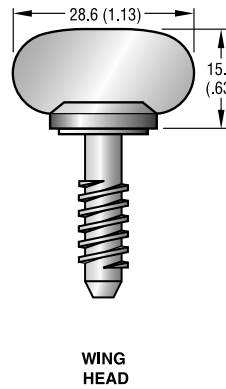
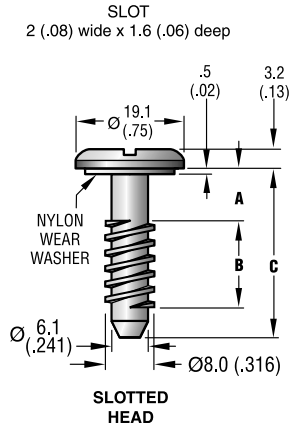
CLIP-ON



QUICK ACCESS FASTENERS FAST-LEAD CAPTIVE SCREWS

- Product configurator at www.clancey.com.
- Robust assembly.
- Four head styles.
- Three receptacle styles.
- Vibration resistant.

FAST-LEAD CAPTIVE SCREWS, LARGE SIZE



Order separately.
Toolhead Recess Key
PART NUMBER
29-90-215-10

COL. I		COL. II	SCREW ASSEMBLY PART NUMBERS				DIMENSIONS		
Range of total thickness to be fastened		MAX. thickness of outer panel	Low carbon steel, case hardened, zinc plate, chromate plus sealer				A	B	C
MIN.	MAX.		SLOTTED	WING	KNURLED	TOOLHEAD RECESS			
2.5 (.100)	6.4 (.250)	3.1 (.120)	17-11-104-11	17-12-104-11	17-13-104-11	17-T-104	5.1 (.200)	9.1 (.360)	19.1 (.751)
5.1 (.200)	6.4 (.250)	5.6 (.220)	17-11-106-11	17-12-106-11	17-13-106-11	17-T-106	7.6 (.300)	6.6 (.260)	
2.5 (.100)	9.5 (.375)	3.1 (.120)	17-11-204-11	17-12-204-11	17-13-204-11	17-T-204	5.1 (.200)	12.3 (.485)	22.3 (.876)
5.1 (.200)	9.5 (.375)	5.6 (.220)	17-11-206-11	17-12-206-11	17-13-206-11	17-T-206	7.6 (.300)	9.8 (.385)	
7.6 (.300)	9.5 (.375)	8.1 (.320)	17-11-208-11	17-12-208-11	17-13-208-11	17-T-208	10.2 (.400)	7.2 (.285)	
2.5 (.100)	12.7 (.500)	3.1 (.120)	17-11-304-11	17-12-304-11	17-13-304-11	17-T-304	5.1 (.200)	15.5 (.610)	25.4 (1.001)
5.1 (.200)	12.7 (.500)	5.6 (.220)	17-11-306-11	17-12-306-11	17-13-306-11	17-T-306	7.6 (.300)	13 (.510)	
7.6 (.300)	12.7 (.500)	8.1 (.320)	17-11-308-11	17-12-308-11	17-13-308-11	17-T-308	10.2 (.400)	10.4 (.410)	
10.2 (.400)	12.7 (.500)	10.7 (.420)	17-11-310-11	17-12-310-11	17-13-310-11	17-T-310	12.7 (.500)	7.9 (.310)	
2.5 (.100)	15.9 (.625)	3.1 (.120)	17-11-404-11	17-12-404-11	17-13-404-11	17-T-404	5.1 (.200)	18.7 (.735)	28.6 (1.126)
5.1 (.200)	15.9 (.625)	5.6 (.220)	17-11-406-11	17-12-406-11	17-13-406-11	17-T-406	7.6 (.300)	16.1 (.635)	
7.6 (.300)	15.9 (.625)	8.1 (.320)	17-11-408-11	17-12-408-11	17-13-408-11	17-T-408	10.2 (.400)	13.6 (.535)	
10.2 (.400)	15.9 (.625)	10.7 (.420)	17-11-410-11	17-12-410-11	17-13-410-11	17-T-410	12.7 (.500)	11.1 (.435)	
12.7 (.500)	15.9 (.625)	13.2 (.520)	17-11-412-11	17-12-412-11	17-13-412-11	17-T-412	15.2 (.600)	8.5 (.335)	
15.2 (.600)	15.9 (.625)	15.8 (.620)	17-11-414-11	17-12-414-11	17-13-414-11	17-T-414	17.8 (.700)	6 (.235)	

Slotted, wing and knurled headstyles are available in stainless steel. Please call for information.
Longer screws and black finish available. Please call for information.

Try this part in your application
Please call for samples.
800-747-7405

For detailed material specifications and product strength guidelines.
www.clancey.com

QUICK ACCESS FASTENERS, FAST-LEAD CAPTIVE SCREWS

QUICK ACCESS FASTENERS

FAST-LEAD CAPTIVE SCREWS

CAD
POWERED

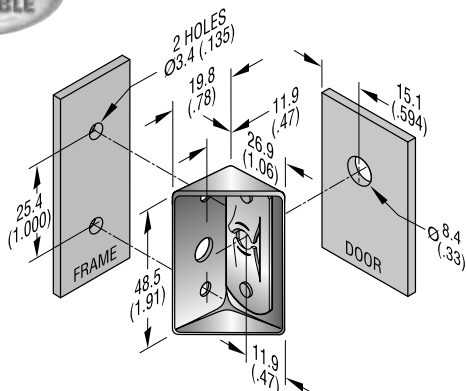
southco
AUTHORIZED DISTRIBUTOR

FAST-LEAD CAPTIVE SCREWS, RECEPTACLES, LARGE SIZE

- 3 styles, 4 mounting options.
- Stainless steel options.

STAINLESS
STEEL
AVAILABLE

SIDE MOUNT



SIDE MOUNT RECEPTACLE PART NUMBER

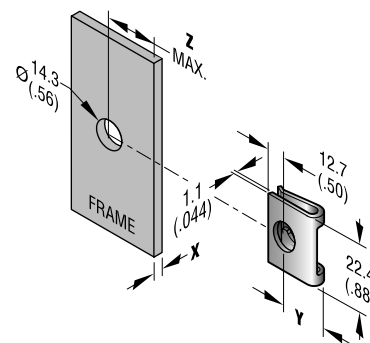
Receptacle: Steel, dactroized † Bracket: Steel, zinc plate Rivet: Aluminum

17-90-101-10

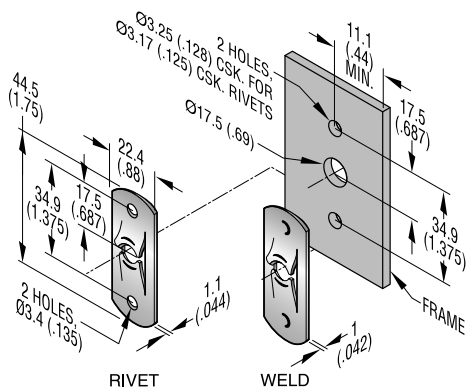
CLIP-ON RECEPTACLE PART NUMBERS

THICKNESS X	Y	Z MAX.	PART NUMBERS
1.1 (.045) – 2.4 (.093)	15.7 (.62)	15.0 (.59)	17-10017-11
2.4 (.093) – 3.6 (.142)	14.7 (.58)	14.2 (.56)	17-10027-11
3.6 (.142) – 4.9 (.191)	13.7 (.54)	14.2 (.56)	17-10029-11
4.9 (.191) – 6.1 (.240)	13.5 (.53)	13.5 (.53)	17-10031-11
6.1 (.240) – 7.3 (.289)	13.0 (.51)	12.7 (.50)	17-10033-11

CLIP-ON



FLAT TYPE



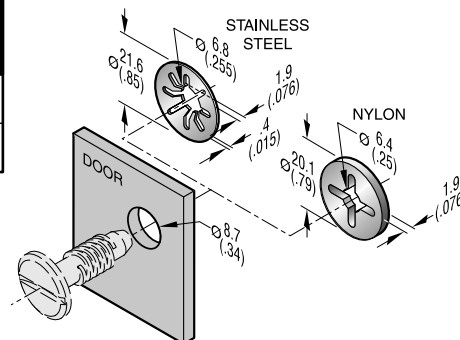
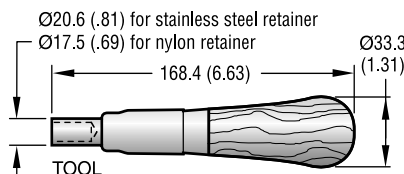
FLAT RECEPTACLE PART NUMBERS

TYPE	MATERIAL AND FINISH	PART NUMBERS
RIVET	1064 Steel, DACROSEALD †	17-10015-13
	304 Stainless steel, passivated	17-10015-14
WELD	304 Stainless steel, passivated	17-10016-11

RETAINERS LARGE SIZE

STAINLESS
STEEL
AVAILABLE

RETAINER STYLE	RETAINER PART NUMBERS	TOOL PART NUMBERS
302 Stainless steel, passivated	17-6-1	17-0-24585-11
Nylon, black	17-10054-42	17-0-21333-11

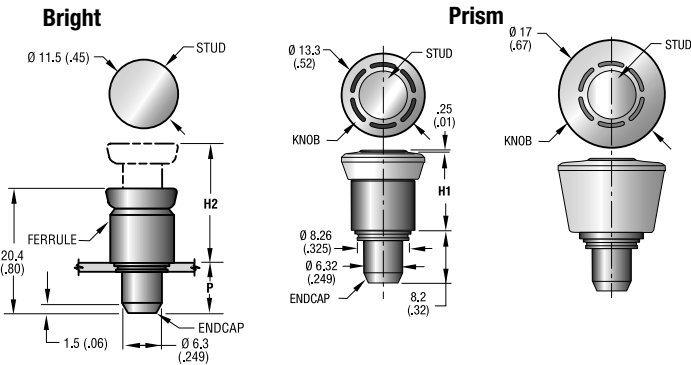


QUICK ACCESS FASTENERS, FAST-LEAD CAPTIVE SCREWS

EXPANDED RANGE

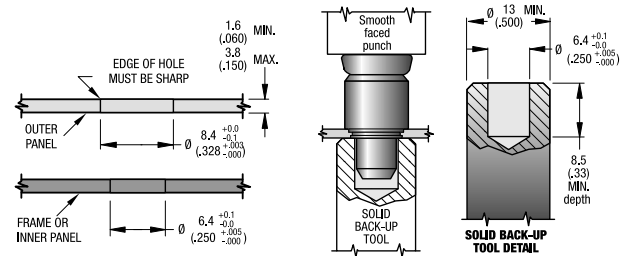
- Traditional bright or new overmolded "Prism" series head styles.
- Overmolded available in 5 standard colors with custom colors available.
- With or without hold open feature.
- Presses into panels from .060" - .150" thick.

PRESS-IN STYLE



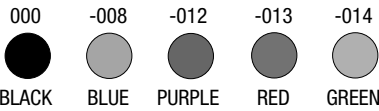
NSF

Panel Preparation and Installation



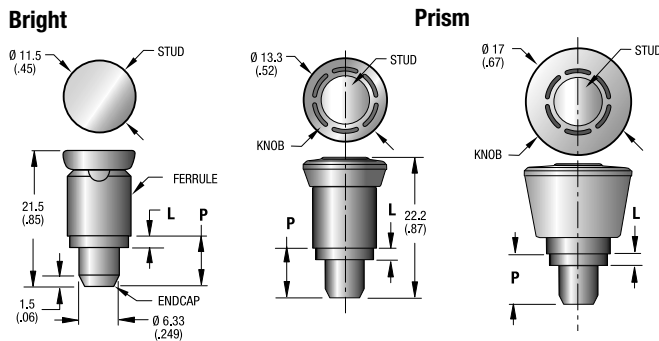
Add color in place of "-000" (see below)

Panel Thickness	P	Knob Style	PART NUMBERS		H1 Closed	H2 Open	
			Hold Open	Without Hold Open			
1.52 (.06)	3.81 (0.15)	8.2 (0.32)	Bright	56-61-15	56-60-15	12.2 (.48)	19.3 (.76)
			Color - Small	56-161-000	56-160-000	13 (.51)	20 (.79)
			Color - Large	56-261-000	56-260-000	13 (.51)	20 (.79)



To see these colors - visit www.clancey.com

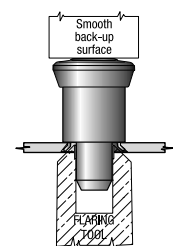
FLARE-IN STYLE



- For panels .060" - .185" thick.

NSF

Installation

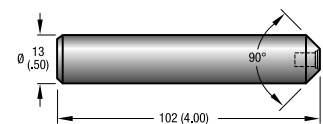
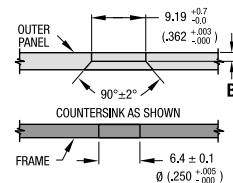


PART NUMBER
56-7-TOOL

Add color in place of "-000" (see above)

Outer Panel Thickness	P	Knob Style	PART NUMBERS		H1 Closed	H2 Open	B	L	
			Hold Open	Without Hold Open					
1.52 (.06)	3.17 (.125)	7.9 (.31)	Bright	56-71-1-15	56-70-1-15	13.7 (.54)	19.8 (.78)	0.41 (.016)	1.78 (.07")
			Color - Small	56-171-1-000	56-170-1-000	14.5 (.57)	20.5 (.81)		
			Color - Large	56-271-1-000	56-270-1-000	14.5 (.57)	20.5 (.81)		
3.17 (.125)	4.7 (.185)	9.4 (.37)	Bright	56-71-2-15	56-70-2-15	12.2 (.48)	18.2 (.72)	1.52 (.06)	3.3 (.13)
			Color - Small	56-171-2-000	56-170-2-000	12.9 (.51)	19 (.75)		
			Color - Large	56-271-2-000	56-270-2-000	12.9 (.51)	19 (.75)		

Panel Preparation



QUICK ACCESS FASTENERS, SPRING LOADED PLUNGERS

QUICK ACCESS FASTENERS SPRING LOADED PLUNGERS

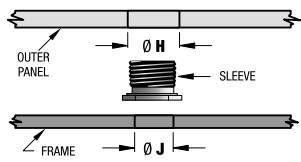
THREAD-IN STYLE



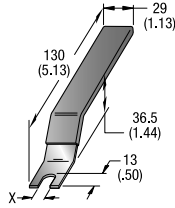
- Large knob with positive purchase.
- Two sizes.
- Easy installation – no press required.
- For panels .025" - .125" thick.

For detailed material specifications and product strength guidelines.
www.clancey.com

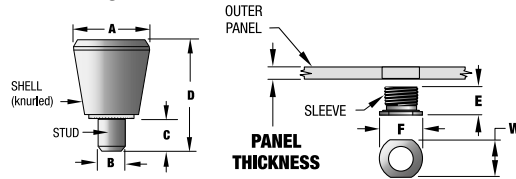
Panel Preparation and Installation



Installation Tool



Bright

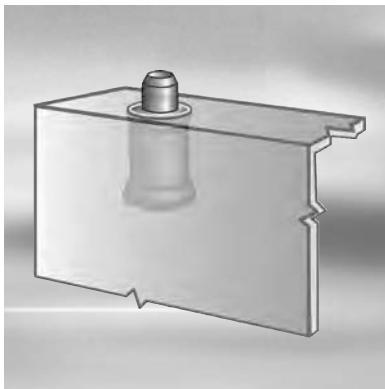


Series	Installation				Sleeve Thread Size	TOOL PART NUMBER	X (Tool)
	Panel Thickness		Ø H ±0.08 (±0.03)	Ø J +0.08 -0.03 (+0.003 -.001)			
	MIN.	MAX.					
300	0.64 (.025)	1.52 (0.60)	7.14 (.281)	4.78 (.250)	M7 X 1	56-0-22041-03	7.1 (.28)
400	0.79 (0.31)	3.18 (.125)	9.12 (.359)	6.35 (.250)	M9 X 1	56-0-22041-04	9.5 (.38)

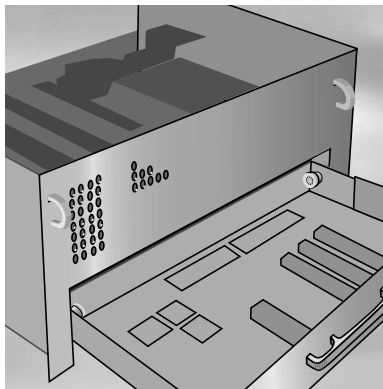
Series	Dimensions							PART NUMBERS	
	A	B	C	D	E	F	W	With hold-open feature	Without hold-open feature
300	13.5 (.53)	4.7 (.183)	6.5 (.25)	20 (.78)	6 (.22)	9 (.34)	7 (.28)	56-10-301-20	56-99-196-20
400	17.5 (.69)	6.3 (.245)	8 (.31)	26 (1.03)	7 (.28)	11.2 (.44)	9.4 (.37)	56-10-401-20	56-99-197-20

QUICK ACCESS FASTENERS, SPRING LOADED PLUNGERS

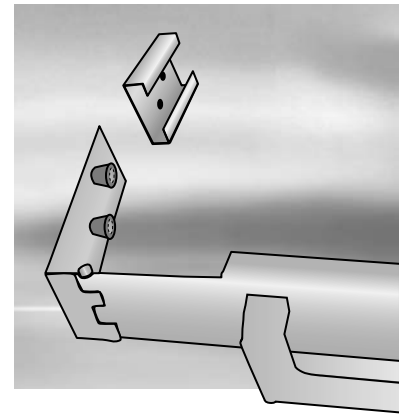
Potential Applications:



Retractable Hinge



Positioning/Secondary Catch



Quick Installation

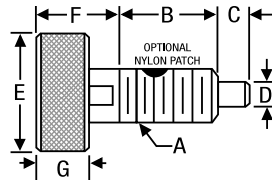
QUICK ACCESS FASTENERS SPRING LOADED PLUNGERS

- Knurled knob allows easy grip.
- Locking or non-locking models.
- Nylon patch option allows firm thread engagement.
- Also available in brass or 316 stainless (please call).

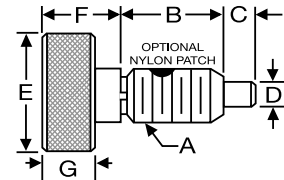
KNOB STYLE

STAINLESS
STEEL
AVAILABLE

Locking (Positive Hold Open)



Non-Locking (Automatic Return)



PART NUMBERS				THREAD SIZE "A"	THREAD LENGTH "B"	NOSE LENGTH "C"	NOSE DIAMETER "D"	KNOB DIAMETER "E"	KNOB HUB LENGTH "F"	KNURLED WIDTH "G"
STEEL, YELLOW ZINC		303 STAINLESS								
LOCKING	NON-LOCKING	LOCKING	NON-LOCKING							
SLP-KL000	SLP-KNL00	SLP-KL005	SLP-KNL05	10 - 32	.400"	.090"	.104"	.375"	.250"	.188"
SLP-KL010	SLP-KNL10	SLP-KL015	SLP-KNL15	1/4 - 20	.500"	.125"	.123"	.500"	.312"	.188"
SLP-KL020	SLP-KNL20	SLP-KL025	SLP-KNL25	5/16 - 18	.630"	.190"	.154"	.625"	.375"	.250"
SLP-KL030	SLP-KNL30	SLP-KL035	SLP-KNL35	3/8 - 16	.750"	.220"	.185"	.750"	.500"	.312"
SLP-KL040	SLP-KNL40	SLP-KL045	SLP-KNL45	1/2 - 13	.875"	.250"	.248"	1.00"	.625"	.375"
SLP-KL050	SLP-KNL50	SLP-KL055	SLP-KNL55	5/8 - 11	1.00"	.325"	.312"	1.25"	.750"	.438"
SLP-KL060	SLP-KNL60	SLP-KL065	SLP-KNL65	3/4 - 10	1.20"	.450"	.375"	1.50"	.813"	.500"

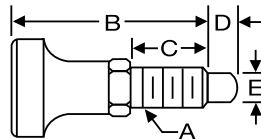
NOTE: Add "- NP" to the end of the part number for optional nylon patch.

- Clean delrin knob with tapered undercut for easy pull.
- Locking or non-locking models.
- Nylon patch option allows firm thread engagement.

DELRIN KNOB STYLE



Non-Locking



(Automatic Return)

Locking



(Positive Hold Open)

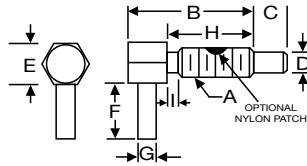
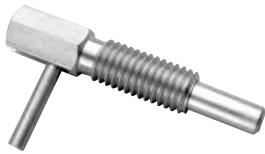
PART NUMBERS				THREAD SIZE "A"	BODY LENGTH "B"	THREAD LENGTH "D"	NOSE LENGTH "C"	NOSE DIAMETER "D"
STEEL, BLACK OXIDE		303 STAINLESS						
LOCKING	NON-LOCKING	LOCKING	NON-LOCKING					
SLP-DKL20	SLP-DKN20	SLP-DKL25	SLP-DKN25	1/4 - 20	.970"	.625"	.125"	.160"
SLP-DKL30	SLP-DKN30	SLP-DKL35	SLP-DKN35	3/8 - 16	1.40"	.750"	.180"	.250"
SLP-DKL50	SLP-DKN50	SLP-DKL55	SLP-DKN55	1/2 - 13	1.90"	1.00"	.312"	.312"

NOTE: Add "- NP" to the end of the part number for optional nylon patch. (not illustrated)

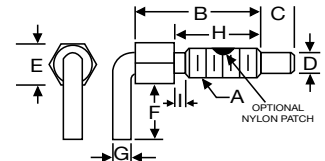
QUICK ACCESS FASTENERS SPRING LOADED PLUNGERS

L-HANDLE STYLE

- L-Handle can swing 360° in space restricted applications.
- Locking or non-locking.
- Also available in 316 stainless or with a nylon nose (please call).



Locking Version



Non-Locking Version

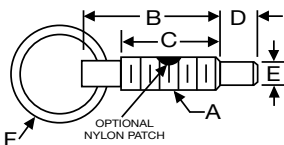
PART NUMBERS				THREAD SIZE "A"	BODY LENGTH "B"	NOSE LENGTH "C"	NOSE DIAMETER "D"	HEX SIZE "E"	HANDLE LENGTH "F"	HANDLE DIAMETER "G"	THREAD LENGTH "H"	THREAD RELIEF "I"
STEEL, CLEAR ZINC		303 STAINLESS										
LOCKING	NON-LOCKING	LOCKING	NON-LOCKING									
SLP-LHL00	SLP-LHN00	SLP-LHL05	SLP-LHN05	1/4 - 20	.750"	.200"	.160"	.250"	.400"	.090"	.500"	-
SLP-LHL10	SLP-LHN10	SLP-LHL15	SLP-LHN15	1/4 - 20	1.25"	.375"	.160"	.250"	.500"	.090"	.800"	-
SLP-LHL20	SLP-LHN20	SLP-LHL25	SLP-LHN25	3/8 - 16	1.13"	.300"	.250"	.375"	.563"	.140"	.750"	.125"
SLP-LHL30	SLP-LHN30	SLP-LHL35	SLP-LHN35	3/8 - 16	2.00"	.563"	.250"	.375"	.750"	.140"	1.31"	.125"
SLP-LHL40	SLP-LHN40	SLP-LHL45	SLP-LHN45	1/2 - 13	1.50"	.400"	.312"	.500"	.750"	.187"	1.00"	.125"
SLP-LHL50	SLP-LHN50	SLP-LHL55	SLP-LHN55	1/2 - 13	2.11"	.750"	.312"	.500"	1.00"	.187"	1.25"	.125"
SLP-LHL60	SLP-LHN60	SLP-LHL65	SLP-LHN65	5/8 - 11	1.88"	.500"	.375"	.625"	.875"	.187"	1.25"	.125"
SLP-LHL70	SLP-LHN70	SLP-LHL75	SLP-LHN75	5/8 - 11	3.05"	1.00"	.375"	.625"	1.00"	.187"	2.00"	.125"

NOTE: Add "-- NP" to the end of the part number for optional nylon patch.

RING PULL STYLE

- Economical and easy to use.
- Non-locking "stubby" version has compact body.

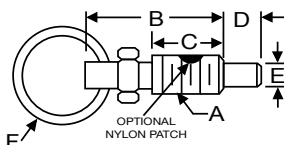
Locking



Locking version (Positive hold open)

PART NUMBERS		THREAD SIZE "A"	BODY LENGTH "B"	THREAD LENGTH "C"	NOSE LENGTH "D"	NOSE DIAMETER "E"	RING DIAMETER "F"
STEEL, NICKEL PLATE	303 STAINLESS						
LOCKING	LOCKING						
SLP-RL250	SLP-RL255	1/4 - 20	1.14"	.800"	.250"	.155"	.875"
SLP-RL380	SLP-RL385	3/8 - 16	1.68"	1.20"	.375"	.233"	.875"
SLP-RL500	SLP-RL505	1/2 - 13	2.00"	1.40"	.500"	.312"	1.00"
SLP-RL580	SLP-RL585	5/8 - 11	3.35"	2.27"	.550"	.312"	1.25"
SLP-RL750	SLP-RL755	3/4 - 10	4.06"	2.69"	.650"	.430"	1.38"
SLP-RL100	SLP-RL105	1 - 8	4.63"	3.25"	.900"	.680"	1.38"

Non-Locking



Non-locking version (Automatic return)

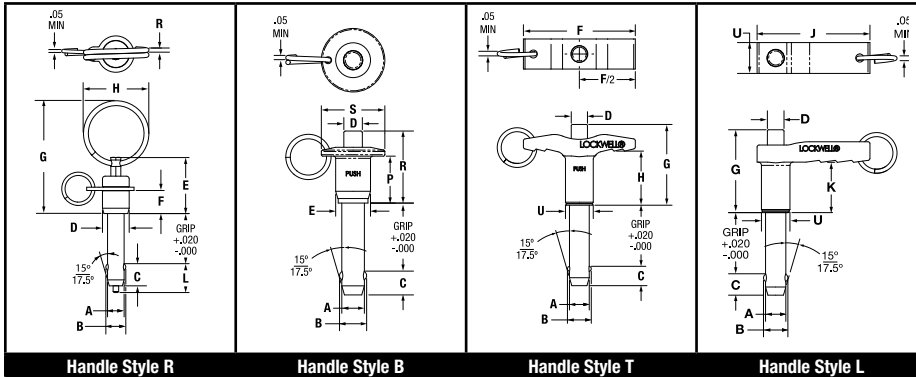
PART NUMBERS		THREAD SIZE "A"	BODY LENGTH "B"	THREAD LENGTH "C"	NOSE LENGTH "D"	NOSE DIAMETER "E"	RING DIAMETER "F"
STEEL, NICKEL PLATE	303 STAINLESS						
NON-LOCKING	NON-LOCKING						
SLP-RN250	SLP-RN255	1/4 - 20	.570"	.312"	.190"	.160"	.750"
SLP-RN380	SLP-RN385	3/8 - 16	.820"	.440"	.280"	.250"	.750"
SLP-RN500	SLP-RN505	1/2 - 13	1.06"	.563"	.375"	.310"	1.00"
SLP-RN580	SLP-RN585	5/8 - 11	1.31"	.690"	.440"	.380"	1.00"
SLP-RN750	SLP-RN755	3/4 - 10	1.50"	.875"	.500"	.437"	1.13"
SLP-RN100	SLP-RN105	1 - 8	1.75"	1.00"	.630"	.500"	1.13"

NOTE: Add "-- NP" to the end of the part number for optional nylon patch.



LOCKWELL[®] SINGLE ACTING PINS

- Push center button to retract the balls and remove the pin.
- 2 or 4 ball configurations.
- Military and aerospace grade available.
- 2 pin materials, 4 handle styles.



Material Note:

“C” = CRES is stronger than
 “S” = 4130 alloy steel
 See www.clancey.com for
 specific tensile and shear
 strength information for all
 shank sizes.

Grip Length:

This is the load bearing area on the
 Lockwell quick-release pin and is
 measured from shoulder to the
 tangent point where the ball
 intersects the shank diameter.

Grip length for Lockwell pins is
 always specified in thousandth-inch
 increments, e.g., 500 equals 1/2"
 grip length.

Dimensions

Shank DIA.		Dimensions																	
Size	Code ¹	A Min.	A Max.	B ±.005	C Max.	D Min.	E Min.	F Max.	G Max.	H Min.	J Max.	K Min.	L Min.	M Max.	N Min.	R Max.	S Min.	T Min.	U Min.
3/16	3	.1885	.1870	.220	.260	.250	.310	1.815	1.270	.800	1.800	.760	.730	1.450	1.060	.830	.720	.105	.380
1/4	4	.2485	.2470	.289	.290	.250	.310	1.815	1.270	.800	1.800	.760	.780	1.500	1.060	.890	.720	.105	.380
5/16	5	.3110	.3095	.375	.330	.250	.410	1.815	1.270	.800	1.800	.760	.830	1.650	1.060	.930	.810	.105	.380
3/8	6	.3735	.3720	.440	.365	.300	.450	2.065	1.450	.850	2.030	.850	.940	1.650	1.060	1.040	.875	.134	.510
7/16	7	.4360	.4345	.509	.380	.300	.550	2.065	1.470	.850	2.030	.850	.980	1.850	1.090	1.160	.940	.134	.510
1/2	8	.4985	.4970	.594	.460	.435	.600	2.345	1.600	.885	2.360	.850	1.140	1.850	1.160	1.190	1.300	.200	.630
9/16	9	.5610	.5595	.666	.510	.435	.680	2.345	1.600	.885	2.360	.850	1.140	2.030	1.160	1.410	1.340	.200	.630
5/8	10	.6235	.6220	.750	.580	.450	.750	3.100	1.700	.980	3.070	.905	1.400	2.250	1.240	1.500	1.530	.231	.810
3/4	12	.7485	.7470	.887	.670	.570	.865	3.100	1.720	1.030	3.070	.980	1.625	2.650	1.640	1.680	1.790	.231	.810
7/8	14	.8735	.8720	1.046	.760	.700	.980	3.520	2.170	1.310	3.700	1.200	1.875	3.000	1.640	1.985	2.120	.231	1.120
1	16	.9985	.9970	1.219	.890	.750	1.175	3.520	2.170	1.310	3.700	1.200	2.000	3.100	1.640	2.140	2.210	.231	1.180

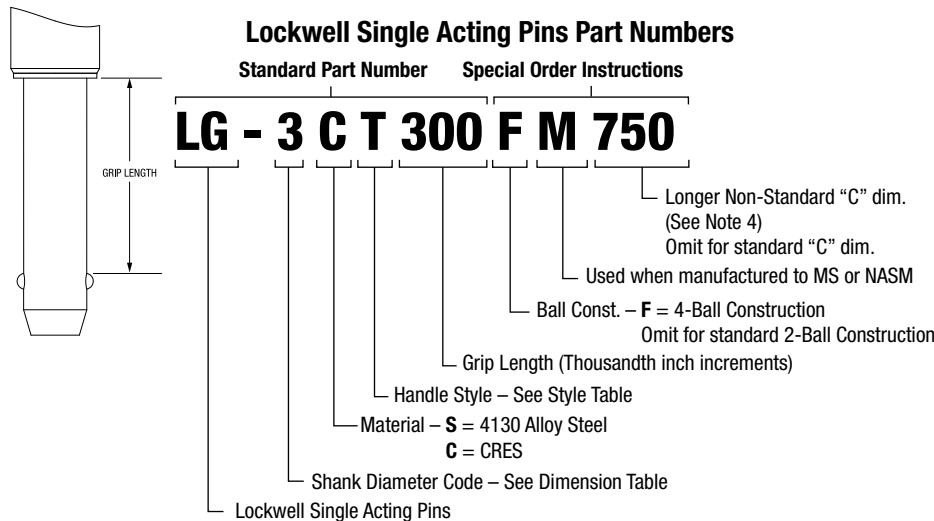
Note:

1. Use to complete part number.

Single Acting Notes:

1. All pins can be ordered to the procurement specifications NASM 23460, and/or NAS 1332 and are QPL listed on NASM 17984 thru 17987 and NAS 1333 through 1346. Commercial grade pins are also available.
2. Attaching links standard on all pins.
3. Button “B” handle available in aluminum (A) or CRES (“C”) on pins with CRES shank.
4. If greater “C” dimension is necessary add length in thousandth of an inch after “F” letter. Example: LG3CT300F750 (.750 = .750 inch)
5. Pins are identified per AMS-STD-130 and applicable specification.
6. Single acting pins are available in metric sizes. Specify when ordering.
7. Custom lengths require a 25 piece minimum order quantity. Contact Southco customer service or your local Southco Representative for pricing and leadtimes.

All dimensions on this page are in inches.



QUICK ACCESS FASTENERS BALL DETENT PINS

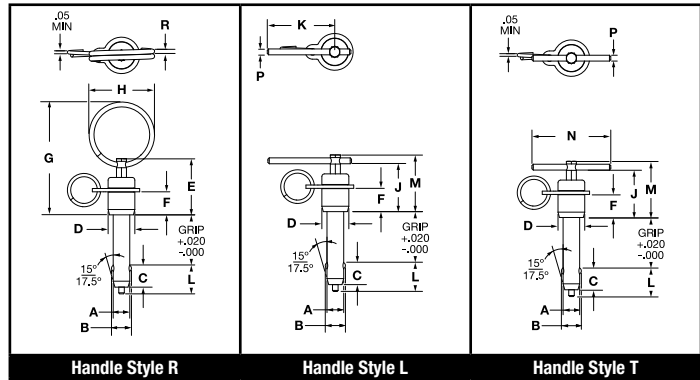
CAD
POWERED

southco
AUTHORIZED DISTRIBUTOR

LOCKWELL® DOUBLE ACTING PINS



- “Push In”, or “Pull Out” to retract the balls and remove the pin.
- 2 or 4 ball configurations.
- Military and aerospace grade available.
- 2 pin materials, 3 handle styles.



Material Note:

“C” = CRES is stronger than
“S” = 4130 alloy steel
See www.clancey.com for specific tensile and shear strength information for all shank sizes.

Grip Length:

This is the load bearing area on the Lockwell quick-release pin and is measured from shoulder to the tangent point where the ball intersects the shank diameter.

Grip length for Lockwell pins is always specified in thousandth-inch increments, e.g., .500 equals 1/2" grip length.

Dimensions

Shank DIA.		Dimensions															
Size	Code ¹	A Min.	A Max.	B ±.005	C Max.	D Max.	E Min.	F Max.	G Max.	H Max.	J Min.	K Max.	L Max.	M Max.	N Min.	P Min.	R Max.
3/16	3	.1885	.1870	.220	.410	.450	.935	.480	1.945	1.125	.780	1.300	.50	1.030	1.375	.105	.080
1/4	4	.2485	.2470	.289	.410	.450	.935	.480	1.945	1.125	.780	1.300	.50	1.030	1.375	.105	.080
5/16	5	.3110	.3095	.375	.440	.505	.935	.480	1.945	1.125	.780	1.300	.55	1.030	1.375	.105	.080
3/8	6	.3735	.3720	.440	.510	.630	1.000	.540	2.025	1.125	.830	1.500	.64	1.090	1.875	.134	.080
7/16	7	.4360	.4345	.509	.510	.630	1.000	.540	2.025	1.125	.830	1.500	.64	1.090	1.875	.134	.080
1/2	8	.4985	.4970	.594	.590	.755	1.070	.540	2.060	1.125	.880	1.655	.75	1.270	2.125	.200	.080
9/16	9	.5610	.5595	.666	.660	.755	1.070	.540	2.060	1.125	.880	1.655	.82	1.270	2.125	.200	.080
5/8	10	.6235	.6220	.750	.750	.870	1.250	.575	2.550	1.500	1.000	1.810	.93	1.465	2.375	.231	.120
3/4	12	.7485	.7470	.887	.790	.960	1.250	.595	2.550	1.500	1.000	1.810	.97	1.465	2.375	.231	.120
7/8	14	.8735	.8720	1.046	.950	1.150	1.500	.730	2.770	1.500	1.180	2.250	1.18	1.640	2.750	.231	.120
1	16	.9985	.9970	1.219	1.100	1.280	1.700	.865	2.950	1.500	1.320	2.250	1.35	1.830	2.750	.231	.120

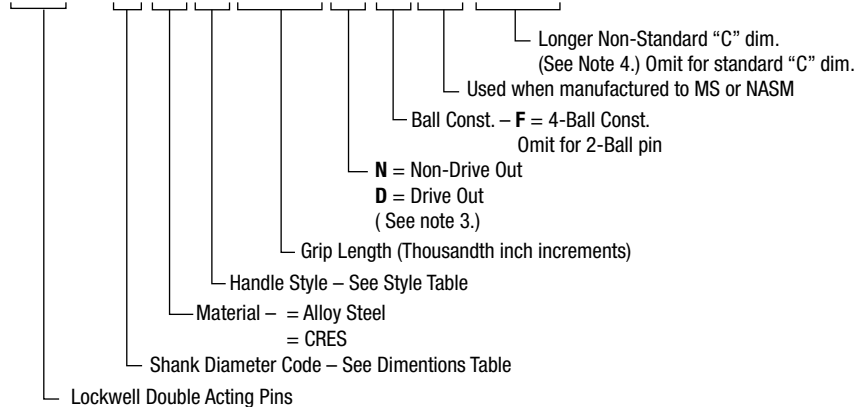
Note:

1. Use to complete part number.

Lockwell Double Acting Pins Part Numbers

Special Order Instructions

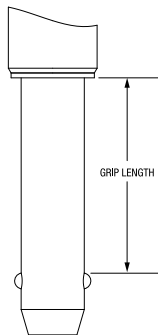
LH - 3 C T 300 D F M 750



Double Acting Notes:

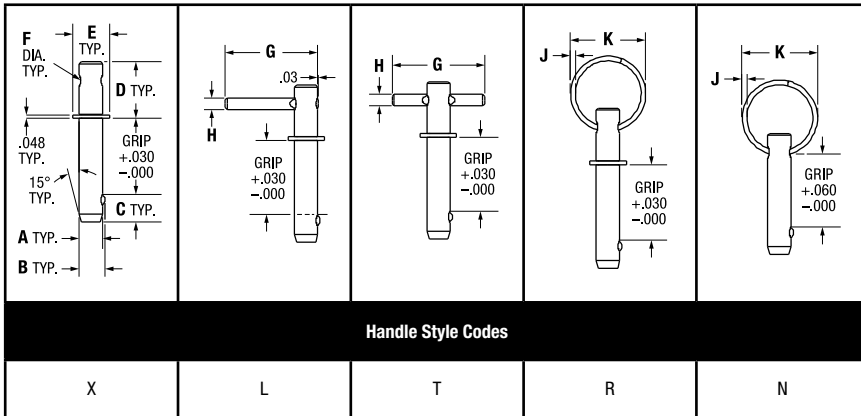
1. All pins can be ordered to the procurement specifications NASM 23460 and are QPL listed on NASM 17988 thru NASM 17990 and NAS 1353 thru 1366. Commercial grade pins are also available.
2. Attaching links standard on all pins.
3. Double acting pins are available with a drive-out feature. This feature is employed where removal of pin is necessary while in a shear loaded condition. To order drive-out, see part number example.
4. If greater “C” dimension is necessary add length in thousandth of an inch after “F” letter. Example: LG3CT300F750 (750 = .750 inch)
5. Pins are identified per AMS-STD-130 and applicable specification.
6. Double acting pins are available in metric sizes. Specify when ordering.
7. Custom lengths require a 25 piece minimum order quantity. Contact Clancey for pricing and leadtimes.

All dimensions on this page are in inches.



- Commercial grade single ball detent pins.
- Ball retracts when pushed or pulled against a hard surface.
- 3 pin materials, five head styles.

LOCKWELL[®] DETENT PINS



For detailed material specifications and product strength guidelines.
www.clancey.com

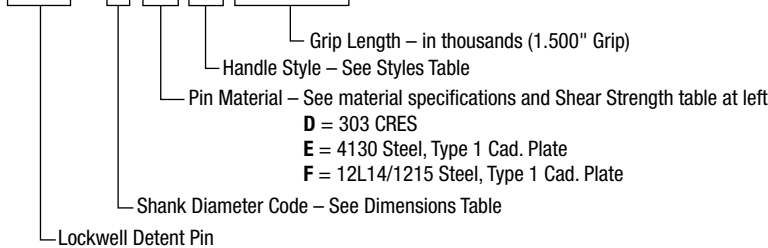
Dimensions

Shank DIA.		Dimensions									
Size	Code ¹	A +.0000 -.003	B ±.010	C Max.	D +.020 -.030	E Max.	F DIA.	G	H DIA.	J DIA.	K ±.060
3/16	3	.188	.200	.200	.750	.339	.096	1.25	.093	.062	.875
1/4	4	.250	.286	.312	.750	.401	.128	1.25	.125	.062	.875
5/16	5	.313	.358	.375	.750	.464	.159	1.25	.156	.062	.875
3/8	6	.375	.426	.500	.750	.589	.159	1.75	.156	.062	.875
7/16	7	.438	.496	.562	1.000	.652	.159	1.75	.156	.062	.875
1/2	8	.500	.570	.625	1.062	.714	.191	2.00	.188	.105	1.040
9/16	9	.563	.642	.687	1.062	.776	.191	2.00	.188	.105	1.040
5/8	10	.625	.710	.750	1.125	.870	.253	2.25	.250	.105	1.040
3/4	12	.750	.856	.937	1.375	.994	.253	2.25	.250	.105	1.290
7/8	14	.875	.996	1.000	1.500	1.009	.379	2.50	.375	.105	1.290
1	16	1.00	1.140	1.250	1.500	1.244	.379	2.50	.375	.105	1.290

Note:
 1. Use to complete part number.

Lockwell Industrial/Commercial Part Numbers

LR - * D T 1500



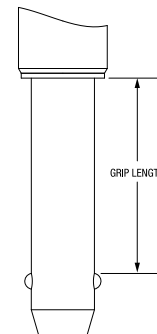
Material Note:

"D" 303 CRES and "F" 12L14 steel are similar in shear strength. "E" 4130 steel is stronger in sheer. All materials have equal tensile strength due to ball detent construction. For specific information visit www.clancey.com

Grip Length:

This is the load bearing area on the Lockwell quick-release pin and is measured from shoulder to the tangent point where the ball intersects the shank diameter.

Grip length for Lockwell pins is always specified in thousandth-inch increments, e.g., 500 equals 1/2" grip length.



QUICK ACCESS FASTENERS PIN ACCESSORIES

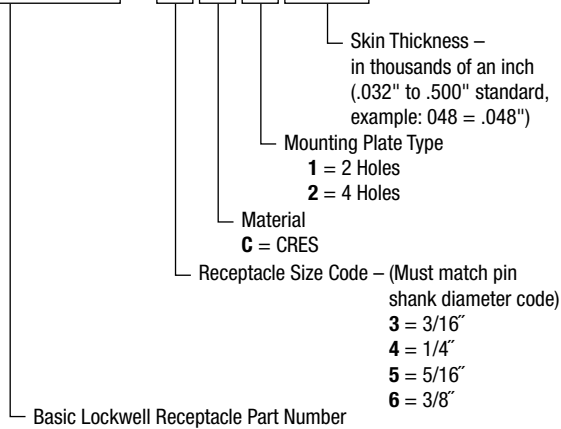
LOCKWELL[®] PIN RECEPTACLES



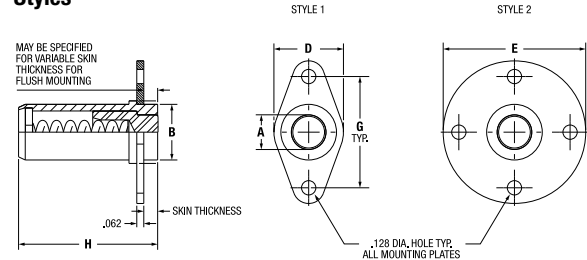
- Spring loaded.
- Dust / weather sealed.
- Ideal for blind applications.
- Variable skin thickness.
- 2 mounting patterns.

Lockwell Receptacle Part Numbers

LW-1981 - * C * ***



Styles



Dimensions

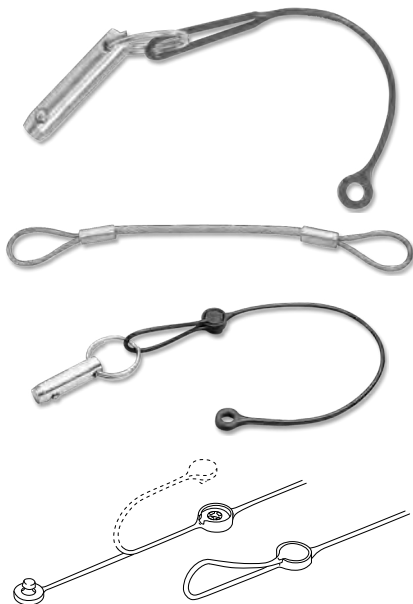
Choose a receptacle size that matches your pin shank diameter. Use the same size code for your receptacle as your pin.

Pin Shank Dia.	Receptacle Size Code ¹	Dimensions					
		A Dia. +.001 - .000	B Dia. +.001 - .004	D	E Dia.	G	H
3/16	3	.190	.375	.625	1.281	1.000	1.25
1/4	4	.250	.375	.625	1.281	1.000	1.25
5/16	5	.312	.500	.625	1.281	1.000	1.25
3/8	6	.375	.625	.750	1.406	1.125	1.31

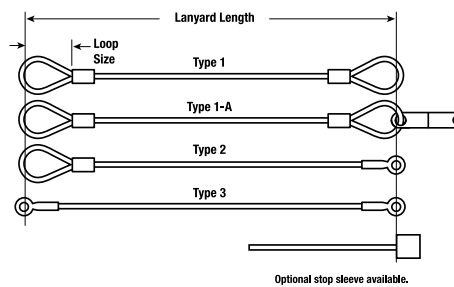
Note:

1. Use to complete part number.

LANYARDS

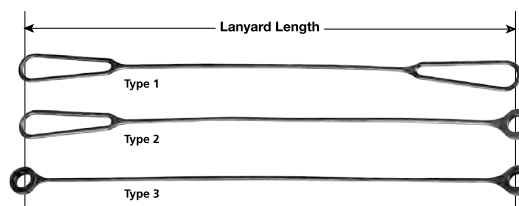


- Too many combinations to list them all.
- Quick turn around and competitive pricing.



Material Options:

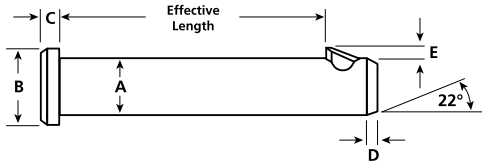
Molded nylon
steel cable
stainless cable
coated cables
chain
100's of end-fitting combinations.



Please call us for a quote on your design.

QUICK ACCESS FASTENERS ASSEMBLY PINS

- Patented ramped end allows easy insertion. yet prevents back-out.
- Eliminates other components.
- Ideal for blind or restricted access applications.



SLIC PINS™



SLIC PIN™ SPECS

Basic Shank Diameter	Effective Length	Shank Diameter A	Head Diameter B	Head Height C	Chamfer D	Approx. Wedge Height E
3/16	as required	.181 - .186	.31	.06	.040 x 22°	.035
1/4	as required	.243 - .248	.37	.09	.055 x 22°	.049
5/16	as required	.306 - .311	.43	.09	.065 x 22°	.049
3/8	as required	.368 - .373	.50	.12	.070 x 22°	.075
7/16	as required	.431 - .436	.56	.15	.080 x 22°	.075
1/2	as required	.491 - .496	.62	.15	.090 x 22°	.083
5/8	as required	.616 - .621	.81	.20	.120 x 22°	.083
3/4	as required	.741 - .746	.93	.25	.115 x 22°	.083

Unless otherwise noted, all dimensions are for reference only.

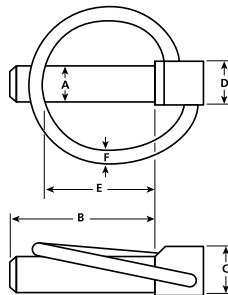


Strong spring-loaded plunger features easy insertion ramp. Vertical face at rear prevents backing out.

- No tools required.
- Call for samples, and we'll create your part number.
- Easy to customize.

- Over-center "Flip" of the ring locks the pin securely in place.
- Several sizes including a thicker wire diameter for heavy duty application.
- Economical choice.
- Excellent corrosion resistance.

LYNCH PINS



PART NUMBER	Pin Diameter "A"	Shank Length "B"	Head Width "C"	Head Width "D"	Capture Length "E"	Wire Diameter "F"
77-100	.188"	1.25"	.500"	.348"	1.00"	.118"
77-200	.188"	1.56"	.500"	.348"	1.31"	.138"
77-400	.250"	1.75"	.500"	.348"	1.38"	.138"
77-600	.313"	1.75"	.500"	.406"	1.38"	.138"
77-810	.438"	1.75"	.563"	.438"	1.38"	.138"
77-820	.438"	1.94"	.594"	.500"	1.69"	.138"
77-300	.438"	1.94"	.594"	.500"	1.50"	.197"

Material:

Low carbon steel

Finish:

Zinc plated and yellow chromate dipped.

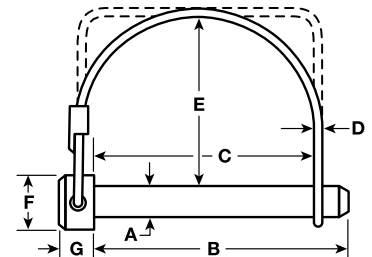
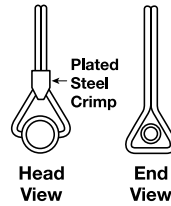
QUICK ACCESS FASTENERS

ASSEMBLY PINS

WIRE LOCK PINS



- Pin and cotter in one.
- Flipping action secures the pin.
- Round and square resigs.



Material:
Low carbon steel -Pin
MB spring wire - loop

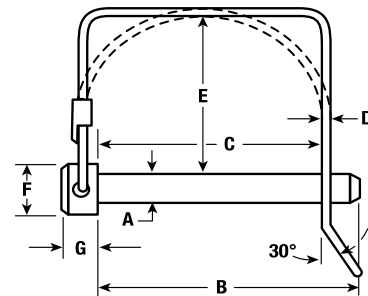
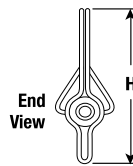
Finish:
Zinc plated

PART NUMBER	Pin Diameter "A"	Pin Length "B"	Effective Length "C"	Wire Diameter "D"	Loop Clearance "E"	Head Diameter "F"	Head Height "G"	Wire Loop Shape
77-WL-10R	.243"	2.00"	1.75"	.091"	1.63"	.562"	.312"	Round
77-WL-30S	.306"	2.75"	2.50"	.091"	1.75"	.625"	.312"	Square
77-WL-30R	.306"	2.75"	2.50"	.091"	2.00"	.625"	.312"	Round
77-WL-70S	.368"	2.50"	2.25"	.091"	1.50"	.625"	.312"	Square

TAB LOCK PINS



- Extended tab on wire form allows easy operation.



Material:
Low carbon steel -Pin
MB spring wire - loop

Finish:
Zinc plated

PART NUMBER	Pin Diameter "A"	Pin Length "B"	Effective Length "C"	Wire Diameter "D"	Loop Clearance "E"	Head Diameter "F"	Head Height "G"	Overall Height "A"	Wire Loop Shape
77-TL-10R	.243"	2.00"	1.75"	.091"	1.63"	.562"	.312"	2.75"	Round
77-TL-80S	.368"	2.75"	2.25"	.091"	1.50"	.625"	.312"	2.75"	Square