

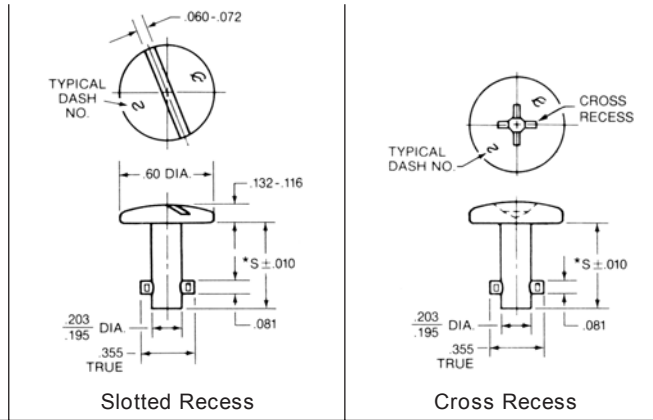
QUICK OPERATING 1/4-TURN FASTENERS 50F SERIES

50F Series. General Purpose Stud Assemblies and Receptacles

Features: Designed for use in agricultural, industrial, and similar environments where a simplified rugged design is desired. • Studs are retained with a snap-in grommet or with optional retaining ring.

- Receptacles install without rivets or special tools.
- Significantly improves assembly rates to provide lower installed costs.

Note: Part numbers shown are basic part numbers only. See ordering information on Page A-41 for required dash numbers.

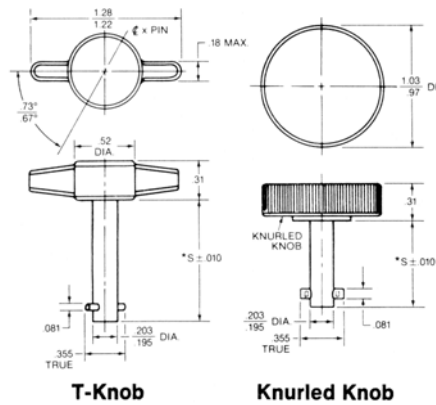


| Material | Part No. | Part No. |
|-------------------------------------|---------------|---------------|
| Stainless Steel (Passivated) | 50S10-[]-1BB | 50S10-[]-4BB |
| Steel (Zinc Plated, Clear Chromate) | 50S10-[]-1AA | — |

Maximum Service Temperature: 450°F., except when plastic snap-in grommets are used. These styles are limited to 250°F .

*S = .429 + (.024 x Dash No.)

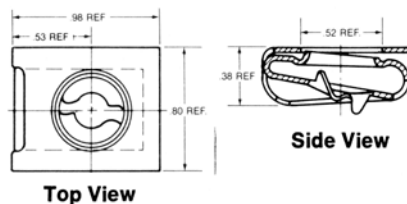
Plastic Knob Styles



| | Basic Part Nos. Maximum Service Temperature: 250°F. Shank Material: Steel (Zinc Plated, Clear Chromate) | | | |
|--------------|---|---------------|---------------|---------------|
| | Black | Red | Grey | Beige |
| T-Knob | 50S10-[]-6AC | 50S10-[]-6AD | 50S10-[]-6AE | 50S10-[]-6AF |
| Knurled Knob | 50S10-[]-7AC | 50S10-[]-7AD | 50S10-[]-7AE | — |

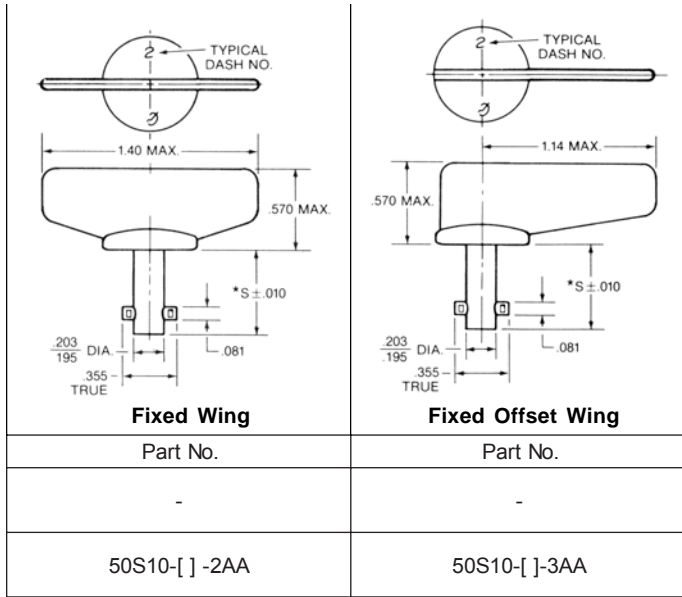
*S = .429 + (.024 x Dash No.)

Clip-on Receptacle



| Part No. | Material/Finish | Weight (per 100 pcs.) (lbs.) | Max Temp. |
|------------|---------------------------------------|------------------------------|-----------|
| 50R4-1-1AA | Steel (Cadmium Plated, Gold Chromate) | 1.95 | 450°F. |

QUICK OPERATING 1/4-TURN FASTENERS 50F SERIES



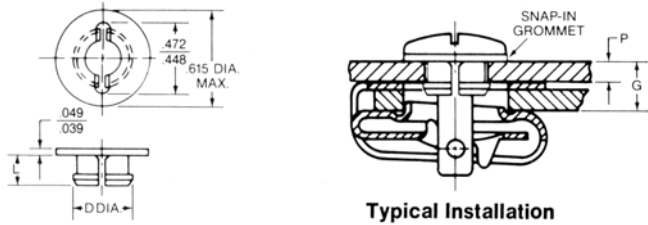
Specifications:

Ultimate Tensile Strength: 200 lbs.
 Stud Grip Increments: 0.236 inch (0.6 mm)
 For optional styles, materials and finishes,
 contact the Camloc Products Division.

A

Plastic Snap-In Grommet

Order separately. Use to captivate stud assembly to panel.
 Eliminate need for retaining ring. Speeds assembly

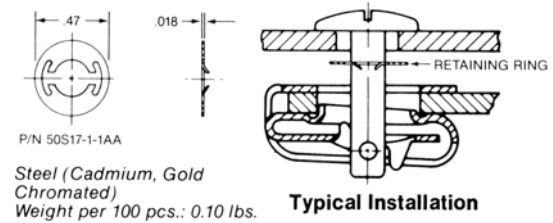


| Part No. | L Ref. | D Dia. Max. | P. Max. | G Min. (see note) | Weight (per 100 pcs.) (lbs.) |
|-------------|--------|-------------|---------|-------------------|------------------------------|
| 50S2-1-1AA | .140 | .348 | .062 | .032 | .035 |
| 50S12-1-1AA | .195 | .390 | .112 | .094 | .040 |
| 50S12-2-1AA | .245 | | .162 | .144 | |
| 50S12-3-1AA | .295 | | .212 | .194 | |
| 50S12-4-1AA | .345 | | .262 | .244 | |

Notes: 1. Grommets will protrude from the back side of panel. Minimum "G" thickness must be observed to prevent grommets from jamming against the receptacle.
 2. Standard grommet color is white.

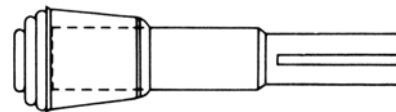
Retaining Ring

Order separately. Use to captivate stud assembly to panel in lieu of snap-in grommet.



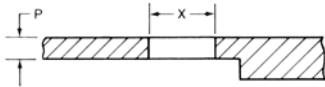
Retaining Ring Installation Tool

P/N T98-1



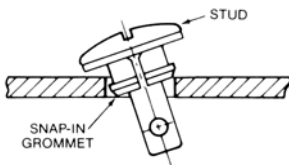
50F Series. Panel Preparation and Installation Data

For Studs used with Snap-in Grommets

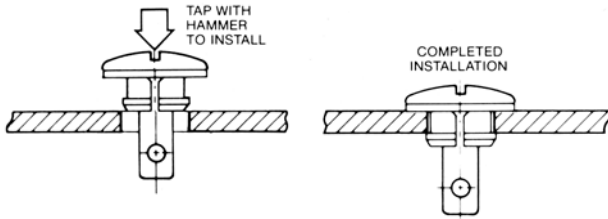


Determine panel thickness "P" and form through hole to corresponding "X" diameter. Panels with thicknesses greater than .262 inch must be back counterbored to a concentric diameter of .438 inch with a maximum remaining material thickness of .262 inch.

| P | X |
|------------|-----------|
| up to .062 | .315-.320 |
| .063-.162 | .350-.355 |
| .163-.262 | .357-.362 |

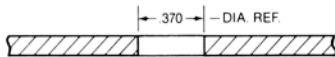


Assemble stud with grommet and insert stud through panel.

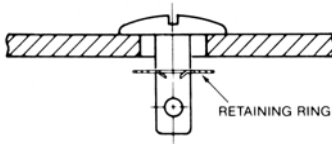


Tap stud with hammer to seat assembly into panel.

For Studs used with Retaining Rings

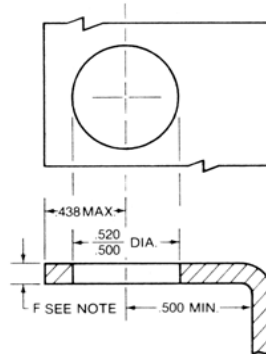


Form through hole to .370 inch diameter.



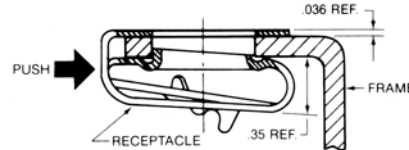
Insert stud through panel and attach retaining ring.

Frame Preparation for Receptacle Installation



Form .500-.520 through hole.

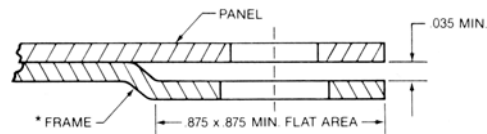
Important Note: Recommended "F" thickness range is .062-.188. The range can be extended to .032 to .219 at the extreme, however, installation problems may be encountered.



Slide receptacle onto frame and locate on through hole.

Recessed Frame

Standard installation (illustrated above) will cause a minimum gap of .035 inch between panel and frame due to receptacle protrusion. To eliminate gap, dimple frame to provide recess as shown.

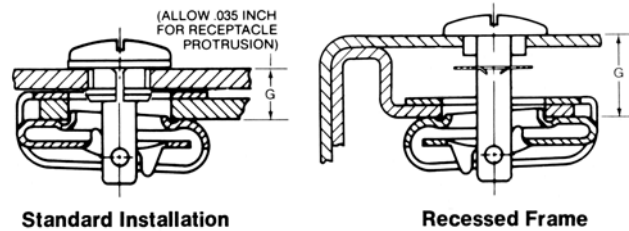


QUICK OPERATING 1/4-TURN FASTENERS 50F SERIES

50F Series. Ordering Information/ Stud Dash Number Selection

To Select Stud Dash Number:

1. Determine "G" total thickness.
Note: Increase "G" to allow for thickness of paint or other finishes, and for the compressed thickness of any gasket.
2. Locate "G" in the table below
3. Then find the corresponding stud dash number in the column designated for the selected retention method.



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How to Order:

Example 1.

(For stud assembly using retaining ring)
 Stud Assembly Used: 50S10-[?]-1AA
 "G" Total Thickness = .155 inch
 Stud Dash Number From Table = -7
 Completed Part Number: 50S10-7-1AA

Example 2.

(For stud assembly using snap-in grommets)
 Stud Assembly Used: 50S10-[?]-1AA
 "G" Total Thickness = .155 inch
 Stud Dash Number From Table = -9
 Completed Part Number: 50S10-9-1AA (plus snap-in grommet selected)

| Stud Dash Number Selection | | |
|----------------------------|---|---|
| *G | Dash Number For Studs Used With Retaining Rings | Dash Numbers For Studs Used With Grommets |
| .055-.078 | - 3 | - 5 |
| .079-.101 | - 4 | - 6 |
| .102-.125 | - 5 | - 7 |
| .126-.149 | - 6 | - 8 |
| .150-.172 | - 7 | - 9 |
| .173-.196 | - 8 | -10 |
| .197-.220 | - 9 | -11 |
| .221-.243 | -10 | -12 |
| .244-.267 | -11 | -13 |
| .268-.291 | -12 | -14 |

- *Notes:** 1. If "G" total thickness is very near the top of the thickness range, selection of the next greater dash number is recommended. For "G" thickness greater than those tabulated, contact Camloc Products Division.
 2. Grip ranges are based on 0.6 mm increments converted to nearest thousandth of an inch.

QUICK OPERATING 1/4-TURN FASTENERS 50F SERIES

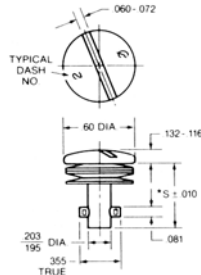
50F Series. Extra Heavy-Duty Stud Assemblies and Receptacles

Features: Rugged simplified design. * Particularly suited for use in adverse industrial and agricultural environments. * Utilizes Belleville washers for high preloads and enhanced vibration resistance.

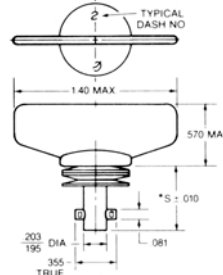
Specifications:

Ultimate Tensile Strength: 800 lbs.
Stud Grip Increments: .0236 inch (0.6 mm).

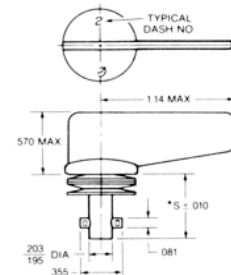
Note: Part numbers shown are basic part numbers only. See ordering information on opposite page for required dash numbers.



Slotted Recess



Fixed Wing



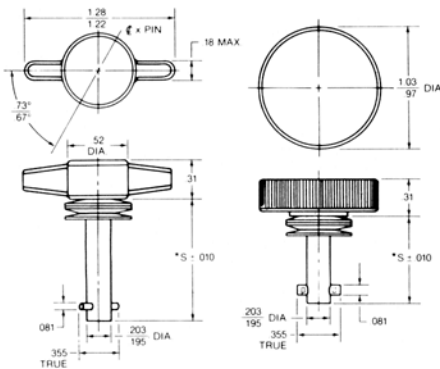
Offset Fixed Wing

| Material | Part No. | Part No. | Part No. |
|---|--------------|--------------|--------------|
| Steel Stud (Zinc Plated, Clear Chromate) Washer (Cadmium Plated, Clear Chromate) | 50S8-[]-1AA | 50S8-[]-2AA | 50S8-[]-3AA |

Maximum Service Temperature:

$*S = .429 + (.0236 \times \text{Dash No.})$

Plastic Knob Styles

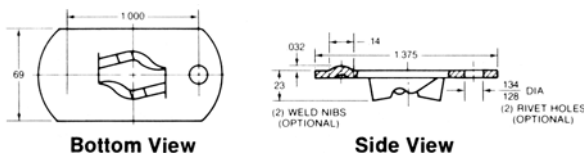


Basic Part Nos.
Shank Material: Steel (Zinc Plated, Clear Chromate)
Washer Material: Steel (Cadmium Plated, Clear Chromate)

| | Black | Red | Grey | Beige |
|--------------|--------------|---------------|--------------|---------------|
| T-Knob | 50S8-[]-6AC | 50S8-[]-6 AD | 50S8-[]-6AE | 50S8-[]-6 AF |
| Knurled Knob | 50S8-[]-AC | 50S8-[]-7AD | 50S8-[]-7AE | - |

$*S = .429 + (.0236 \times \text{Dash No.})$

Receptacles



| Material | Part No. (with rivet holes) | Part No. (with weld nibs) |
|---------------------|-----------------------------|---------------------------|
| Steel (Zinc Plated) | 50R3-1-AA | - |
| Steel (Oil Coated) | - | 50R3-1-2AB |

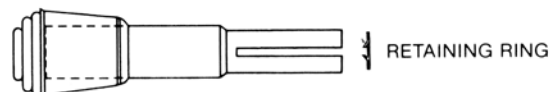
Weight per 100 pcs.: 1.43 lbs.

Snap-on Retaining Ring



| Part No. | Material | Weight (per 100 pcs.) (lbs.) |
|-------------|---------------------------------------|------------------------------|
| 50S17-1-1AA | Steel (Cadmium Plated, Gold Chromate) | 0.10 |

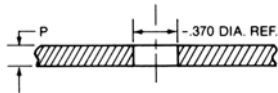
Retaining Ring Installation Tool T98-1



QUICK OPERATING 1/4-TURN FASTENERS 50F SERIES

Panel Preparation and Installation Data

Panel Preparation for Stud Installation.

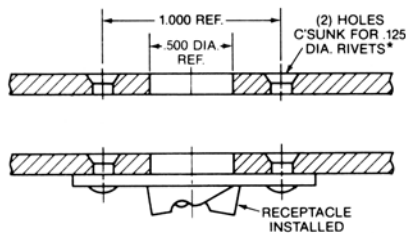


Form .370 Dia. through hole. Insert stud through panel and attach retaining ring.

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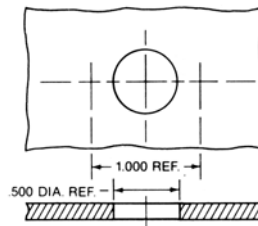
Panel Preparation for Receptacle Installation.

50R3-1-1AA Standard Mount



Drilled and countersunk rivet holes
*Rivets Not Furnished.

50R3-1-2AB Weld Mount

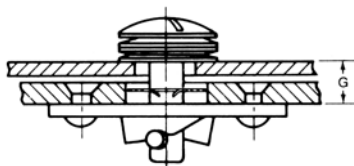


Form .500 inch through hole.
Locate receptacle on center and spot weld in place.

Ordering Information/ Stud Dash Number Selection

To Select Stud Dash Number.

1. Determine "G" thickness.
Note: Increase "G" to allow for thickness of paint or other finishes and for the compressed thickness of any gasket.
2. Locate "G" total thickness from the table below
3. Then find the corresponding stud dash number



How to Order:

Study Assembly Used: 50SB-[?]-1AA
"G" Total Thickness = .246 inch
Stud Dash Number From Table = -10
Complete Part Number: 50S8-10-1AA

| Stud Dash Number Selection | |
|----------------------------|-------------|
| "G" Total Thickness | Dash Number |
| .020-.043 | - 1 |
| .044-.066 | - 2 |
| .067-.090 | - 3 |
| .091-.113 | - 4 |
| .114-.137 | - 5 |
| .138-.161 | - 6 |
| .162-.184 | - 7 |
| .185-.208 | - 8 |
| .209-.231 | - 9 |
| .232-.255 | - 10 |

Important Note: If the total thickness "G" is very near the top of the thickness range, selection of the next greater dash number is recommended. For "G" thickness longer than those tabulated, contact Camloc, Products Division.