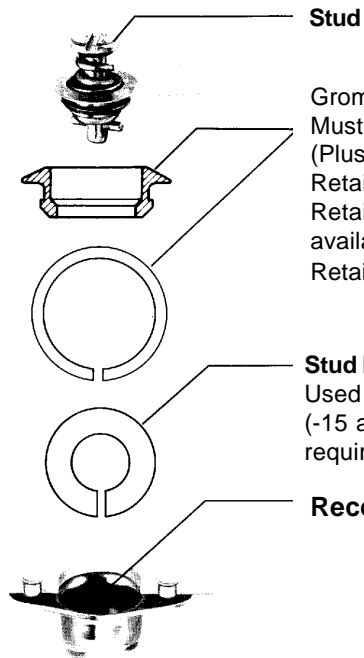
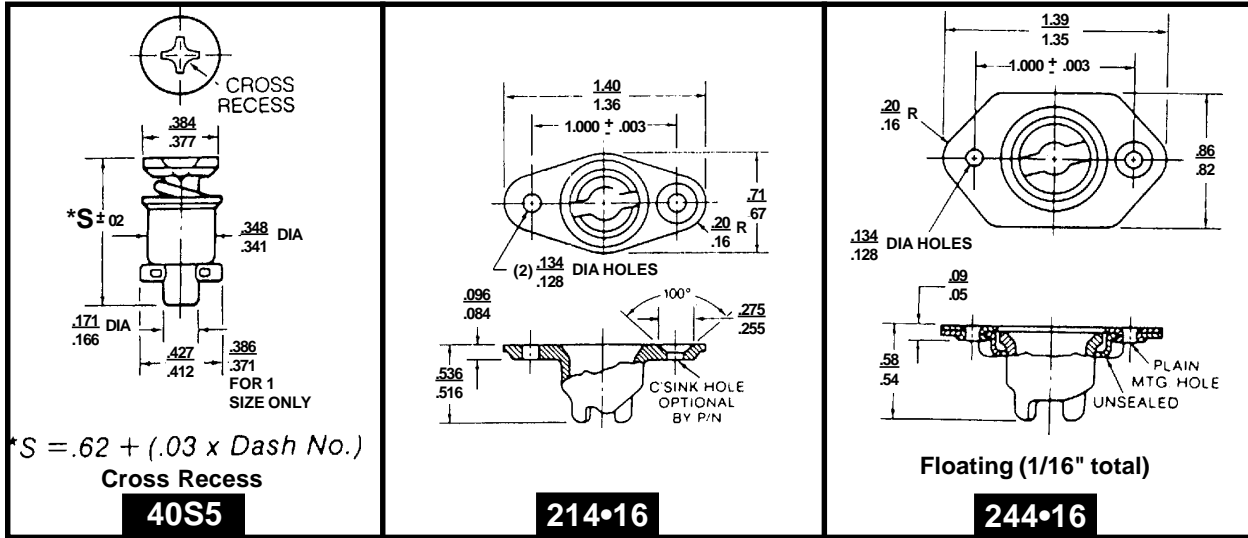


| Stud Series | Stud Diameter | Grommet                  | Stud Retaining Split Ring | Working Strength<br>Ultimate Strength |
|-------------|---------------|--------------------------|---------------------------|---------------------------------------|
| 4002        | .171<br>.166  | required in<br>top panel | -16 and up<br>(4002SW)    | 700 LB<br>1050 LB                     |



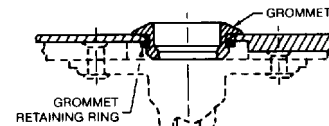
**Stud**

Grommet and Grommet Retaining Ring (R4G)  
 Must be installed in top of panel  
 (Plus Flush Version shown for Ring  
 Retained Grommets). Flare  
 Retained Grommets are also  
 available which do not use a  
 Retaining Ring (see p56).

**Stud Retaining Ring**

Used for long studs (-16 or greater). Shorter studs  
 (-15 and under) are self-captivating and do not  
 require retaining rings.

**Receptacle**



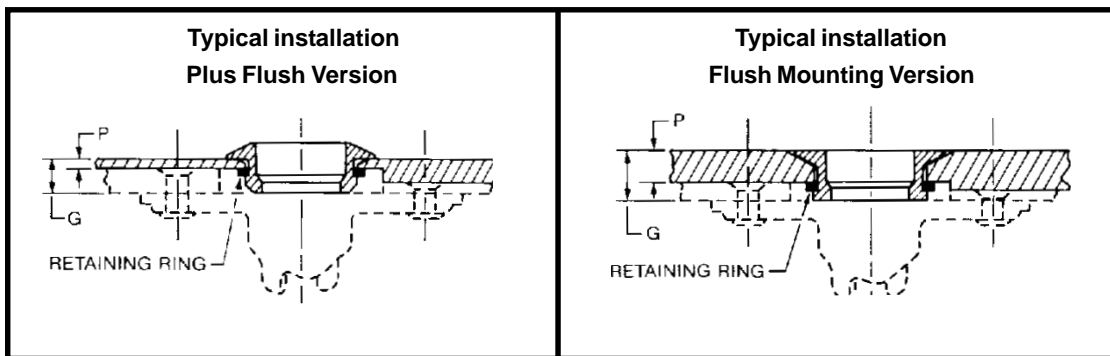
**Grommet and  
 Grommet Retaining Ring  
 shown installed in panel**

**To determine stud part number:**

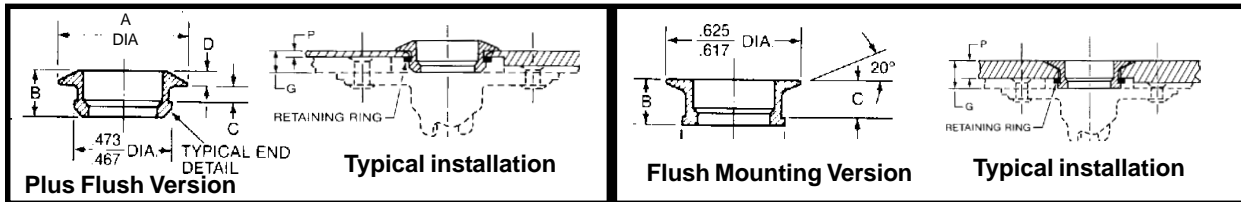
- 1.) Select receptacle to be used: illustrations on previous page.
- 2.) Determine "G" thickness per illustration below (also following page). Note: add maximum "D" dimension to "G" when using plus flush grommets (i.e. 4002•N2, 4002•N, 4002•O, 4002•N3, 4002P3, 4002P4)
- 3.) See following table to determine stud dash number: read stud dash no. under receptacle type
- 4.) -or- measure existing stud and read length from **chart below**.

| <b>STUD SELECTION</b>          |               |               |                                |               |               |
|--------------------------------|---------------|---------------|--------------------------------|---------------|---------------|
| <b>"G"<br/>Total Thickness</b> | <b>214•16</b> | <b>244•16</b> | <b>"G"<br/>Total Thickness</b> | <b>214•16</b> | <b>244•16</b> |
| .081 - .110                    | 2             | 3             | .441 - .470                    | 14            | 15            |
| .111 - .140                    | 3             | 4             | .471 - .500                    | 15            | 16            |
| .141 - .170                    | 4             | 5             | .501 - .520                    | 16            | 17            |
| .171 - .200                    | 5             | 6             | .531 - .560                    | 17            | 18            |
| .201 - .230                    | 6             | 7             | .561 - .590                    | 18            | 19            |
| .231 - .260                    | 7             | 8             | .591 - .620                    | 19            | 20            |
| .261 - .290                    | 8             | 9             | .621 - .650                    | 20            | 21            |
| .291 - .320                    | 9             | 10            | .651 - .680                    | 21            | 22            |
| .321 - .350                    | 10            | 11            | .681 - .710                    | 22            | 23            |
| .351 - .380                    | 11            | 12            | .711 - .740                    | 23            | 24            |
| .381 - .410                    | 12            | 13            | .741 - .770                    | 24            | 25            |
| .411 - .440                    | 13            | 14            | .771 - .800                    | 25            | 26            |

| <b>40S5 STUD LENGTHS (from previous page)</b> |            |               |            |               |            |
|---|------------|---------------|------------|---------------|------------|
| STUD DASH NO.                                 | "S" LENGTH | STUD DASH NO. | "S" LENGTH | STUD DASH NO. | "S" LENGTH |
| 1   | .650       | 8             | .860       | 15            | 1.07       |
| 2   | .680       | 9             | .890       | 16            | 1.10       |
| 3   | .710       | 10            | .920       | 17            | 1.13       |
| 4   | .740       | 11            | .950       | 18            | 1.16       |
| 5   | .770       | 12            | .980       | 19            | 1.19       |
| 6   | .800       | 13            | 1.01       | 20            | 1.22       |
| 7   | .830       | 14            | 1.04       | 21            | 1.25       |



# RING RETAINED GROMMETS



**Ring Retained Grommets (see illustrations above)**

| PART NO. STYLE        | P (MAX) | A            | B            | C            | D            | G (MINIMUM) |
|-----------------------|---------|--------------|--------------|--------------|--------------|-------------|
| 4002•N2<br>plus flush | .025    | .625<br>.617 | .201<br>.193 | .082<br>.074 | .069<br>.063 | .053        |
| 4002•N<br>plus flush  | .065    | .625<br>.617 | .201<br>.193 | .122<br>.114 | .029<br>.023 | .091        |
| 4002•0<br>plus flush  | .094    | .625<br>.617 | .202<br>.192 | .157<br>.137 | .029<br>.023 | .116        |
| 4002•N3<br>plus flush | .078    | .876<br>.867 | .252<br>.244 | .128<br>.120 | .054<br>.048 | .150        |
| 4002•G<br>flush       | .074    | N/A          | .191<br>.183 | .132<br>.124 | N/A          | .090        |
| 4002•H<br>flush       | .117    | N/A          | .201<br>.193 | .173<br>.167 | N/A          | .150        |

# FLARE RETAINED GROMMETS

Flare retained grommets will accommodate relatively thick panels often eliminating the need for back counterboring. Flared grommets should also be specified when axial grommet movement must be restricted. Please note that part numbers shown following are basic part numbers only. See table for "P" panel thickness, "L" dimension and required grommet length dash number callout. **All dimensions are inches.**

| Panel Thickness, (P) | Grommet Length, (L) | Grommet Dash No. | Notes   | Panel Thickness, (P) | Grommet Length, (L) | Grommet Dash No. | Notes |
|----------------------|---------------------|------------------|---------|----------------------|---------------------|------------------|-------|
| .040 - .069          | .109 - .116         | 040              | P3 only | .156 - .219          | .260 - .270         | 190              |       |
| .040 - .069          | .145 - .156         | 040              | P3 only | .220 - .281          | .328 - .358         | 250              |       |
| .070 - .099          | .142 - .149         | 070              | P3 only | .282 - .343          | .391 - .421         | 312              |       |
| .070 - .099          | .155 - .166         | 070              | P2 only | .344 - .432          | .478 - .483         | 400              |       |
| .100 - .129          | .172 - .176         | 100              |         | .405 - .469          | .516 - .546         | 437              |       |
| .130 - .159          | .201 - .205         | 130              |         | .468 - .532          | .578 - .608         | 500              |       |
| .160 - .189          | .230 - .234         | 160              |         |                      |                     |                  |       |

