

# BUSHINGS AND GROMMETS



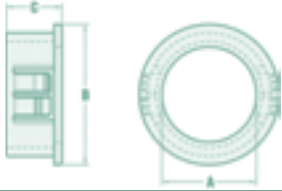


# Snap Bushings



These nylon bushings convert raw-edged holes to smooth, neat, insulated ones. Special locking “fingers” allow the bushings to snap into holes with fingertip pressure. Mechanically protect, insulate, and isolate telecommunications and electrical cables, tubing, hose, rope and utility lines.

SB312-3, SB375-4 and SB437-4 are also available as brass-coloured parts for lamp and lighting applications.



| Part No.   | Mounting Hole Diameter | A<br>Inside Diameter         | B<br>Head Diameter | C<br>Overall Height | Max. Chassis Thickness | Minimum Order Quantity |
|------------|------------------------|------------------------------|--------------------|---------------------|------------------------|------------------------|
| SB250-040* | .250                   | .125                         | .312               | .312                | .040                   | 1,000                  |
| SB250-2*   | .250                   | .125                         | .312               | .312                | .062                   | 1,000                  |
| SB312-3*   | .312                   | .187                         | .375               | .312                | .062                   | 1,000                  |
| SB375-3    | .375                   | .187                         | .468               | .406                | .125                   | 1,000                  |
| SB375-4    | .375                   | .250                         | .468               | .406                | .125                   | 1,000                  |
| SB375-281* | .375                   | .281                         | .468               | .406                | .172                   | 1,000                  |
| SB437-4    | .437                   | .270                         | .531               | .406                | .125                   | 1,000                  |
| SB437-5    | .437                   | .312                         | .531               | .406                | .125                   | 1,000                  |
| SB437-243  | .437                   | .243 <sup>+0.015,-.000</sup> | .531               | .406                | .125                   | 1,000                  |
| SB500-4    | .500                   | .250                         | .578               | .406                | .125                   | 1,000                  |
| SB500-5    | .500                   | .312                         | .578               | .406                | .125                   | 1,000                  |
| SB500-6    | .500                   | .391                         | .578               | .406                | .125                   | 1,000                  |
| SB562-5    | .562                   | .312                         | .656               | .406                | .125                   | 1,000                  |
| SB562-6    | .562                   | .391                         | .656               | .406                | .125                   | 1,000                  |
| SB562-7    | .562                   | .437                         | .656               | .406                | .125                   | 1,000                  |
| SB625-4    | .625                   | .250                         | .718               | .406                | .125                   | 1,000                  |
| SB625-7    | .625                   | .437                         | .718               | .406                | .125                   | 1,000                  |
| SB625-8    | .625                   | .500                         | .718               | .406                | .125                   | 1,000                  |
| SB625-500* | .625                   | .500 <sup>+0.015,-.000</sup> | .703               | .531                | .280                   | 1,000                  |
| SB687-8    | .687                   | .500                         | .781               | .406                | .125                   | 1,000                  |
| SB687-9    | .687                   | .562                         | .781               | .406                | .125                   | 1,000                  |
| SB750-6    | .750                   | .391                         | .843               | .406                | .125                   | 1,000                  |
| SB750-8    | .750                   | .500                         | .843               | .406                | .125                   | 1,000                  |
| SB750-9    | .750                   | .562                         | .843               | .406                | .125                   | 1,000                  |
| SB750-10   | .750                   | .609                         | .843               | .406                | .125                   | 1,000                  |

Standard colour: Black. White and other colours available at premium charge if quantities are sufficient.

Continued

\*Depicts single chassis design.



# Snap Bushings CONTINUED

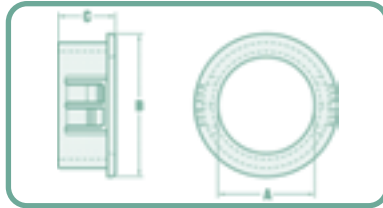
| Part No.          | Mounting Hole Diameter | A Inside Diameter                      | B Head Diameter | C Overall Height | Max. Chassis Thickness | Minimum Order Quantity |
|-------------------|------------------------|--|-----------------|------------------|------------------------|------------------------|
| <b>SB750-625*</b> | .750                   | .625 <sup>+.015</sup> <sub>-.000</sub> | .828            | .531             | .250                   | 1,000                  |
| <b>SB812-9</b>    | .812                   | .562                                   | .890            | .406             | .125                   | 1,000                  |
| <b>SB812-10</b>   | .812                   | .625                                   | .890            | .406             | .125                   | 1,000                  |
| <b>SB875-6</b>    | .875                   | .375                                   | .953            | .453             | .125                   | 1,000                  |
| <b>SB875-7</b>    | .875                   | .437                                   | .953            | .453             | .125                   | 1,000                  |
| <b>SB875-8</b>    | .875                   | .500                                   | .953            | .453             | .125                   | 1,000                  |
| <b>SB875-9</b>    | .875                   | .562                                   | .953            | .453             | .125                   | 1,000                  |
| <b>SB875-10</b>   | .875                   | .625                                   | .953            | .453             | .125                   | 1,000                  |
| <b>SB875-11</b>   | .875                   | .687                                   | .953            | .453             | .125                   | 1,000                  |
| <b>SB1000-12</b>  | 1.000                  | .766                                   | 1.125           | .453             | .125                   | 500                    |
| <b>SB1093-13</b>  | 1.093-1.125            | .812                                   | 1.218           | .453             | .125                   | 500                    |
| <b>SB1093-14</b>  | 1.093-1.125            | .875                                   | 1.218           | .453             | .125                   | 500                    |
| <b>SB1093-15</b>  | 1.093-1.125            | .937                                   | 1.218           | .453             | .125                   | 500                    |
| <b>SB1187-15</b>  | 1.187                  | .937                                   | 1.312           | .453             | .125                   | 500                    |
| <b>SB1250-15</b>  | 1.250                  | .937                                   | 1.359           | .453             | .125                   | 500                    |
| <b>SB1250-16</b>  | 1.250                  | 1.000                                  | 1.310           | .453             | .125                   | 500                    |
| <b>SB1375-14</b>  | 1.375                  | .875                                   | 1.468           | .453             | .125                   | 500                    |
| <b>SB1375-16</b>  | 1.375                  | 1.000                                  | 1.468           | .453             | .125                   | 500                    |
| <b>SB1500-17</b>  | 1.500                  | 1.062                                  | 1.609           | .453             | .125                   | 500                    |
| <b>SB1500-18</b>  | 1.500                  | 1.125                                  | 1.609           | .453             | .125                   | 500                    |
| <b>SB1500-21</b>  | 1.500                  | 1.312                                  | 1.609           | .453             | .125                   | 500                    |
| <b>SB1750-22</b>  | 1.750                  | 1.375                                  | 1.875           | .453             | .125                   | 300                    |
| <b>SB2000-26</b>  | 2.000                  | 1.640                                  | 2.125           | .453             | .125                   | 300                    |
| <b>SB2000-28</b>  | 2.000                  | 1.750                                  | 2.125           | .453             | .125                   | 300                    |
| <b>SB2093-29</b>  | 2.093                  | 1.813                                  | 2.350           | .720             | .250                   | 300                    |
| <b>SB2.25-29</b>  | 2.250                  | 1.860                                  | 2.480           | .720             | .250                   | 100                    |
| <b>SB2.5-31</b>   | 2.500                  | 1.970                                  | 2.660           | .720             | .250                   | 100                    |
| <b>SB3.0-39</b>   | 3.000                  | 2.470                                  | 3.160           | .720             | .250                   | 100                    |
| <b>SB3375-45</b>  | 3.375                  | 2.812                                  | 3.660           | .720             | .250                   | 100                    |
| <b>SB3.5-47</b>   | 3.500                  | 2.940                                  | 3.660           | .720             | .250                   | 100                    |
| <b>SB4.0-55</b>   | 4.000                  | 3.480                                  | 4.170           | .720             | .250                   | 100                    |
| <b>SB5.0-75</b>   | 5.000                  | 4.375                                  | 5.219           | .740             | .250                   | 150                    |
| <b>SB6.0-86</b>   | 6.000                  | 5.375                                  | 6.219           | .740             | .250                   | 130                    |

**Standard colour: Black. White and other colours available at premium charge if quantities are sufficient.**

\*Depicts single chassis design.



## Snap Bushings for Thicker Panels



Has the same application as the snap bushings but can accommodate a thicker panel.

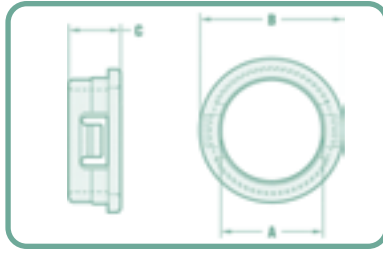
Locking fingers snap into holes with fingertip pressure. Withstands a push-back force of 35 pounds.

| Part No.   | Mounting Hole Diameter | A<br>Inside Diameter | B<br>Head Diameter | C<br>Overall Height | Max. Chassis Thickness | Minimum Order Quantity |
|------------|------------------------|----------------------|--------------------|---------------------|------------------------|------------------------|
| SBT500-6   | .500                   | .391                 | .578               | .562                | .250                   | 1,000                  |
| SBT875-11  | .875                   | .687                 | .953               | .562                | .250                   | 1,000                  |
| SBT1000-12 | 1.000                  | .766                 | 1.125              | .562                | .250                   | 1,000                  |
| SBT1093-15 | 1.093 -1.125           | .937                 | 1.218              | .562                | .250                   | 1,000                  |
| SBT1187-15 | 1.187                  | .937                 | 1.312              | .562                | .250                   | 1,000                  |
| SBT1250-16 | 1.250                  | 1.000                | 1.310              | .562                | .250                   | 500                    |
| SBT1375-16 | 1.375                  | 1.000                | 1.500              | .562                | .250                   | 500                    |
| SBT1500-21 | 1.500                  | 1.312                | 1.620              | .562                | .250                   | 500                    |
| SBT1750-22 | 1.750                  | 1.375                | 1.875              | .562                | .250                   | 500                    |
| SBT2000-26 | 2.000                  | 1.625                | 2.125              | .562                | .250                   | 500                    |

Standard colour: **Black.** White and other colours available at premium charge if quantities are sufficient.



# Shorty Bushings



All the same features as the standard snap bushings but can accommodate a smaller chassis thickness.

Locking fingers securely snap into holes with fingertip pressure.

Ask about our Labkit 2 containing an assortment of shorty and snap bushings for R & D purposes.

| Part No.   | Mounting Hole Diameter | A<br>Inside Diameter | B<br>Head Diameter | C<br>Overall Height | Max. Chassis Thickness | Minimum Order Quantity |
|------------|------------------------|----------------------|--------------------|---------------------|------------------------|------------------------|
| B187-125   | .187                   | .125                 | .250               | .234                | .062                   | 1,000                  |
| B218-125   | .218                   | .125                 | .281               | .234                | .062                   | 1,000                  |
| B281-218   | .281                   | .218                 | .343               | .234                | .062                   | 1,000                  |
| B312-250   | .312                   | .250                 | .375               | .234                | .062                   | 1,000                  |
| B343-218   | .343                   | .218                 | .406               | .250                | .062                   | 1,000                  |
| B375-250   | .375                   | .250                 | .437               | .250                | .062                   | 1,000                  |
| B406-281   | .406                   | .281                 | .468               | .250                | .062                   | 1,000                  |
| B437-312   | .437                   | .312                 | .500               | .250                | .062                   | 1,000                  |
| B468-343   | .468                   | .343                 | .530               | .250                | .062                   | 1,000                  |
| B500-375   | .500                   | .375                 | .562               | .250                | .062                   | 1,000                  |
| B531-406   | .531                   | .406                 | .593               | .250                | .062                   | 1,000                  |
| B593-468   | .593                   | .468                 | .656               | .250                | .062                   | 1,000                  |
| B625-500   | .625                   | .500                 | .703               | .250                | .062                   | 1,000                  |
| B750-625   | .750                   | .625                 | .828               | .250                | .062                   | 1,000                  |
| B781-625   | .781                   | .625                 | .859               | .250                | .062                   | 1,000                  |
| B875-750   | .875                   | .750                 | .937               | .250                | .062                   | 1,000                  |
| B1000-875* | 1.000 +.010<br>-.000   | .879                 | 1.060              | .250                | .062                   | 1,000                  |

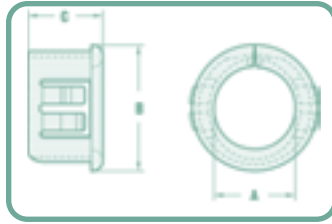
Standard colour: **Black.**

**White and other colours available at premium charge if quantities are sufficient.**

\*UL and CSA approval pending.



## Open/Closed Bushings



A black nylon bushing for side entry and encirclement of pre-assembled harnesses, capillary tubes or other units that have sections larger than the bushing's ID. Can also be assembled into holes that already contain cable or tubing. Fingertip pressure snaps the bushing into the mounting hole, forming a complete circle and insulation barrier against the raw edge of the chassis hole.

| Part No. | Mounting Hole Diameter | A<br>Inside Diameter | B<br>Head Diameter | C<br>Overall Height | Max. Chassis Thickness | Minimum Order Quantity |
|----------|------------------------|----------------------|--------------------|---------------------|------------------------|------------------------|
| OCB375   | .375                   | .265                 | .421               | .390                | .125                   | 1,000                  |
| OCB437   | .437                   | .312                 | .500               | .406                | .125                   | 1,000                  |
| OCB500   | .500                   | .312                 | .562               | .406                | .125                   | 1,000                  |
| OCB562   | .562                   | .390                 | .640               | .406                | .125                   | 1,000                  |
| OCB625   | .625                   | .453                 | .687               | .406                | .125                   | 1,000                  |
| OCB750   | .750                   | .546                 | .796               | .406                | .125                   | 1,000                  |
| OCB875   | .875                   | .671                 | .921               | .406                | .125                   | 1,000                  |
| OCB1000  | 1.000                  | .812                 | 1.047              | .406                | .125                   | 500                    |
| OCB1093  | 1.093                  | .875                 | 1.156              | .406                | .125                   | 1,000                  |
| OCB1250  | 1.250                  | 1.046                | 1.343              | .406                | .125                   | 500                    |
| OCB1375  | 1.375                  | 1.171                | 1.468              | .406                | .125                   | 500                    |
| OCB1500  | 1.500                  | 1.250                | 1.578              | .421                | .125                   | 500                    |

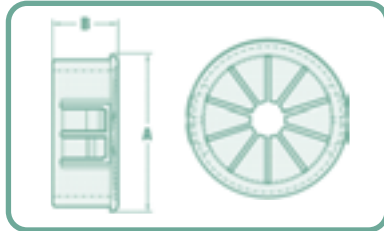
Standard colour: Black. White and other colours available at premium charge if quantities are sufficient.





# Universal Bushings

## UNIVERSAL



These nylon bushings absorb vibration, cushion and insulate cables, tubing, hoses or shafts. They feature flexible shutters which adjust to accommodate and support any shape. Easily locked into mounting hole with simple fingertip pressure.

The Shorty Universal Bushing is ideal for a thinner chassis thickness.

| Part No. | Mounting Hole Diameter | Maximum Inside Diameter | A Head Diameter | B Overall Height | Max. Chassis Thickness | Minimum Order Quantity |
|----------|------------------------|-------------------------|-----------------|------------------|------------------------|------------------------|
| UB500    | .500                   | .312                    | .600            | .385             | .125                   | 1,000                  |
| UB625    | .625                   | .437                    | .718            | .406             | .125                   | 1,000                  |
| UB750    | .750                   | .500                    | .844            | .390             | .125                   | 1,000                  |
| UB812    | .812                   | .500                    | .890            | .390             | .125                   | 1,000                  |
| UB875    | .875                   | .562                    | .937            | .453             | .125                   | 1,000                  |
| UB1000   | 1.000                  | .750                    | 1.063           | .453             | .125                   | 500                    |
| UB1093   | 1.093                  | .812                    | 1.156           | .453             | .125                   | 500                    |
| UB1375   | 1.375                  | 1.000                   | 1.490           | .453             | .125                   | 500                    |
| UB1500   | 1.500                  | 1.062                   | 1.610           | .450             | .125                   | 500                    |

Standard colour: Black. White and other colours available at extra charge if quantities are sufficient.

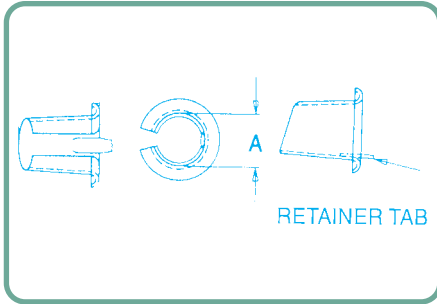
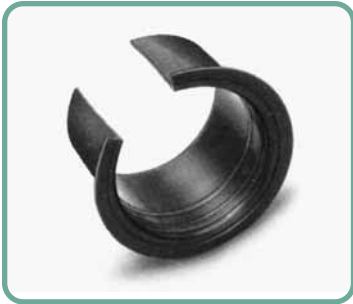
## SHORTY UNIVERSAL

| Part No. | Mounting Hole Diameter | Maximum Inside Diameter | A Head Diameter | B Overall Height | Max. Chassis Thickness | Minimum Order Quantity |
|----------|------------------------|-------------------------|-----------------|------------------|------------------------|------------------------|
| SUB500   | .500                   | .312                    | .600            | .250             | .062                   | 1,000                  |
| SUB625   | .625                   | .437                    | .729            | .250             | .062                   | 1,000                  |
| SUB750   | .750                   | .500                    | .859            | .250             | .062                   | 1,000                  |
| SUB875   | .875                   | .560                    | .937            | .250             | .062                   | 1,000                  |
| SUB1000  | 1.000 +.01 -.00        | .750                    | 1.063           | .453             | .062                   | 1,000                  |

Standard colour: Black. White and other colours available at extra charge if quantities are sufficient.



# Armour (Anti-Short) Bushings



Used at entrance to flexible metallic conduit or armoured cable. Insulates and protects electrical wires from being cut by rough conduit ends. Chamfered lead-in allows for fast installation. Also used in holes through which ropes and steel cables pass, to prevent chafing, cutting or scraping, where bushing space is very limited. Suitable for installation at temperatures as low as -40°F.

| Part No. | Will Fit These Armoured Cables | Fits Cable ID | A Inside Dia. |
|----------|--------------------------------|---------------|---------------|
| AB0      | 14/2, 14/3, 12/2, 12/3         | .29 -.33      | .37           |
| AB1      | 14/4, 6/1, 4/1,                | .33 -.42      | .44           |
| AB2      | 12/4, 10/2, 10/3, 2/1          | .43 -.57      | .57           |
| AB3      | 10/4, 8/2, 8/3, 1/1            | .58 -.72      | .73           |

Minimum order 1000.  
Standard colour: Red.

## BUSHING ASSORTMENT LABKIT



Our labkits are perfect for product design departments, experimental labs and for all prototype work.

**LABKIT 2** is an assortment of bushings with approximately the following quantities and part numbers. (Content may vary.)

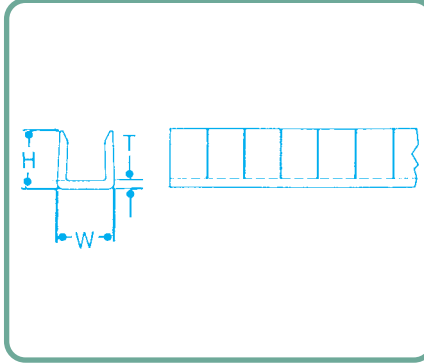
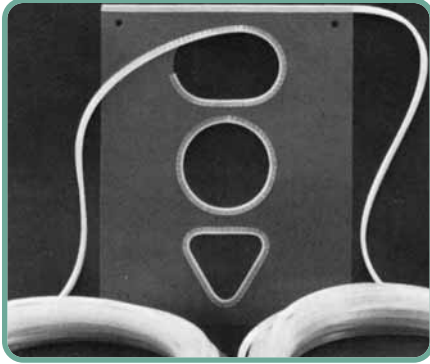
|         |   |
|---------|---|
| 25 each | SB250-2, B312-250, SB375-4, OCB375, SB437-5 |
| 20 each | SBT500-6, UBT500                            |
| 15 each | OCB500, UB625                               |
| 10 each | OCUB625, B875-750, SUB875                   |
| 8 each  | OCUB750, UB875                              |
| 4 each  | SBT1093-15, SB1000-12, SB1375-16            |
| 2 each  | SB1750-22                                   |





# Grommeting

## EXTRUDED SERRATED POLYETHYLENE



Use grommeting to protect tubes, wires and cables from becoming frayed or cut by sharp panel edges. Makes bushings for all sizes and shapes of panel cutouts in sheet metal, glass, wood panels or other sheet-form materials. No tools required—just cut to size and insert. Depending on the panel thickness, grommeting may grip tightly by itself, or it may need a touch of epoxy to keep it in place.

| Part No. | Max. Chassis Thickness | H    | W    | T    |
|----------|------------------------|------|------|------|
| GRPE 40  | .040                   | .190 | .125 | .040 |
| GRPE 52  | .052                   | .190 | .125 | .040 |
| GRPE 62  | .062                   | .200 | .170 | .045 |
| GRPE 85  | .085                   | .200 | .170 | .045 |
| GRPE 100 | .100                   | .220 | .210 | .045 |
| GRPE 125 | .125                   | .220 | .205 | .050 |
| GRPE 187 | .187                   | .270 | .275 | .050 |
| GRPE 250 | .250                   | .280 | .370 | .050 |

Minimum order 1 roll. Sold in rolls of 100 ft. only.  
Standard colour: Natural.

## CONTINUOUS SERRATED NYLON

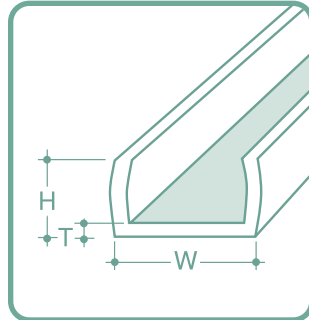
| Part No. | Max. Chassis Thickness | H    | W    | T    |
|----------|------------------------|------|------|------|
| GR 40    | .040                   | .190 | .125 | .040 |
| GR 52    | .052                   | .190 | .125 | .040 |
| GR 62    | .062                   | .200 | .170 | .045 |
| GR 85    | .085                   | .200 | .170 | .045 |
| GR 100   | .100                   | .220 | .210 | .045 |
| GR 125   | .125                   | .220 | .205 | .050 |
| GR 187   | .187                   | .270 | .272 | .050 |
| GR 250   | .250                   | .280 | .370 | .050 |

Minimum order 1 roll. Sold in rolls of 100 ft. only.  
Standard colour: Black or natural white. Specify colour when ordering.



# Grommeting CONTINUED

## EXTRUDED UNSERRATED POLYETHYLENE



| Part No.  | Max. Chassis Thickness | H    | W    | T    |
|-----------|------------------------|------|------|------|
| GRUPE 40  | .040                   | .190 | .125 | .040 |
| GRUPE 52  | .052                   | .190 | .125 | .040 |
| GRUPE 62  | .062                   | .200 | .170 | .045 |
| GRUPE 85  | .085                   | .200 | .170 | .045 |
| GRUPE 100 | .100                   | .220 | .210 | .045 |
| GRUPE 125 | .125                   | .220 | .205 | .050 |
| GRUPE 187 | .187                   | .270 | .275 | .050 |
| GRUPE 250 | .250                   | .280 | .370 | .050 |

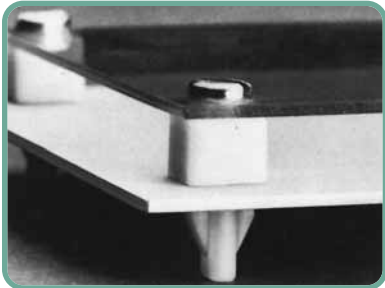
Minimum order 1 roll. Sold in rolls of 100 ft. only.  
Standard colour: Natural.

*Browse our index to get an idea of the range of products we carry.  
And see our line card on page 218.*



## Grommets

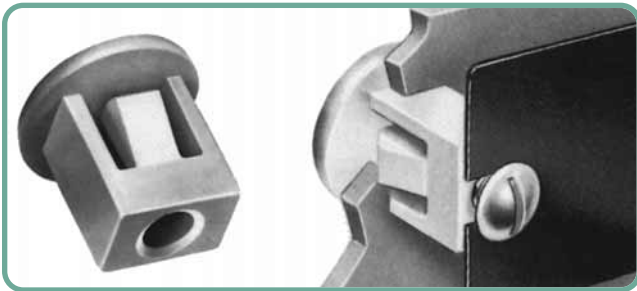
### ENCLOZ<sup>®</sup> SCREW



Front mounted grommets provide added thread engagement and increased bearing area. Non-conductive parts fully encapsulate metal screws, providing electrical insulation and protecting against temperature/moisture transfer and exposed screw points.

Accommodates variations in hole size and panel thicknesses. Panel thickness ranges from .020 to .140 and accepts a #8 or #10 screw.

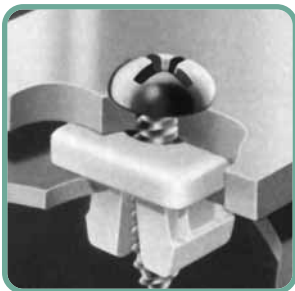
### ENCLOZ<sup>®</sup> REVERSE



Ideal when components are fastened from the opposite side of the panel. Snap-in grommet covers the screw point with an attractive, decorative head.

Accepts a #8 screw.

### PLASTI-GROMMETS<sup>™</sup>

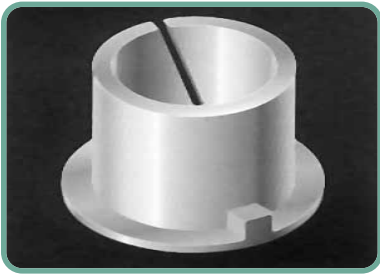


One-piece, non-corrosive nylon, self-retaining blind screw receptacle spreads load over wide area for strength and high load bearing capacity. Front snap-in. Insulate at fastening points, protect against electrolytic action, eliminate cross threading.

Choose from different panel hole sizes, panel thickness ranges, screw sizes, head sizes or prong lengths.



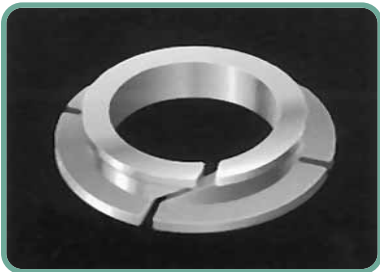
## Bearing Bushings



With positioning key



Without positioning key



Snap-in bearing

These bearing bushings offer easy, fast assembly. The axial slot helps maintain proper fit and compensates for temperature or humidity changes. Bearings perform effectively from  $-40^{\circ}\text{F}$  to  $+200^{\circ}\text{F}$ .

Bearing load ratings up to 8000 PSI and speed ratings up to 2000 feet per minute ensure durability.

Bearings are suitable for a wide range of applications such as vending machines, printers and home appliances.

They are available as a flanged bearing with or without a positioning key or as a snap-in bearing.