

# Prevention- EM QUIK SLEEVE



## Problem:

Bearing damaged by electrical corrosion – current passing through the bearing causes fluting and pitting

## Solution:

INSULATED SLEEVES – Thermoplastic Polymer Alloy

Advantages:

1. Cost
2. Availability
3. Machinability
4. Resistance to Environmental Attack
5. Good Thermal and Electrical Resistance
6. Good Impact Resistance
7. Special Sizes can be made to order in 1-3 Days

## INVENTORY AVAILABLE

| Part #         | Bearing      | O.D.  | I.D.  | Width | Part #         | Bearing      | O.D.   | I.D.   | Width |
|----------------|--------------|-------|-------|-------|----------------|--------------|--------|--------|-------|
| <b>018898B</b> | 202/ /6003   | 1.629 | 1.329 | .787  | <b>018977B</b> | 220/317/6024 | 7.338  | 7.038  | 1.929 |
| <b>018904B</b> | 203/         | 1.825 | 1.525 | .630  | <b>018981B</b> | 221/318      | 7.731  | 7.431  | 2.008 |
| <b>018908B</b> | /302/6004    | 1.904 | 1.604 | .669  | <b>018986B</b> | 222/319/6026 | 8.125  | 7.825  | 2.087 |
| <b>018912B</b> | 204/303/6005 | 2.101 | 1.801 | .709  | <b>018991B</b> | 224/320      | 8.716  | 8.416  | 2.244 |
| <b>018916B</b> | 205/304      | 2.298 | 1.998 | .748  | <b>019010B</b> | 226/         | 9.307  | 9.007  | 2.750 |
| <b>018920B</b> | 206/305/6007 | 2.692 | 2.392 | .906  | <b>019012B</b> | 228/         | 10.093 | 9.793  | 2.750 |
| <b>018924B</b> | 207/306      | 3.085 | 2.785 | .984  | <b>019014B</b> | 230/         | 10.882 | 10.582 | 3.150 |
| <b>018928B</b> | 208/307/6010 | 3.400 | 3.101 | 1.024 | <b>019016B</b> | /321         | 9.109  | 8.809  | 3.540 |
| <b>018932B</b> | 209/         | 3.597 | 3.297 | 0.945 | <b>018996B</b> | /322         | 9.700  | 9.400  | 2.362 |
| <b>018936B</b> | 210/308/6011 | 3.794 | 3.494 | 1.142 | <b>018998B</b> | /324         | 10.488 | 10.188 | 2.756 |
| <b>018940B</b> | 211/309/6011 | 4.188 | 3.888 | 1.221 | <b>019017B</b> | /326         | 11.275 | 10.975 | 3.540 |
| <b>018944B</b> | 212/310/6014 | 4.582 | 4.282 | 1.299 | <b>019019B</b> | /328         | 12.062 | 11.762 | 3.900 |
| <b>018948B</b> | 213/311      | 4.975 | 4.675 | 1.457 | <b>019022B</b> | 236/330      | 12.850 | 12.550 | 4.300 |
| <b>018952B</b> | 214/ /6016   | 5.172 | 4.872 | 1.260 | <b>019024B</b> | /332         | 13.636 | 13.336 | 4.300 |
| <b>018957B</b> | 215/312/6017 | 5.369 | 5.069 | 1.535 | <b>019034B</b> | 232/         | 11.668 | 11.368 | 3.000 |
| <b>018961B</b> | 216/313/6018 | 5.763 | 5.463 | 1.614 | <b>019036B</b> | 234/         | 12.455 | 12.155 | 3.100 |
| <b>018965B</b> | 217/314/6020 | 6.157 | 5.857 | 1.693 | <b>019038B</b> | 236/         | 12.849 | 12.549 | 3.100 |
| <b>018969B</b> | 218/315/6021 | 6.550 | 6.250 | 1.772 | <b>019040B</b> | 238/         | 13.636 | 13.336 | 4.300 |
| <b>018973B</b> | 219/316/6022 | 6.944 | 6.644 | 1.850 | <b>019042B</b> | 240/         | 14.473 | 14.173 | 3.900 |

## RECOMMENDED INSTALLATION INSTRUCTIONS INSULATED SLEEVES

1. Obtain proper sleeve for bearing housing.
  - A. Sleeve will be .250" larger than I.D. of bearing housing, unless special size.
2. Chuck housing in lathe or mill.
  - A. Alignment is critical, check face (within .003") and diameter (within .001").
  - B. Be sure not to squeeze end bell too tight or fit will egg when removed.
3. Bore end bell sleeve fit .250 surface finish, glue will seat into rough surface – for a better hold.
  - A. Make housing bore .004" to .010" diameter clearance over sleeve O.D.
    1. Up to a 6" Ø > bore .004" to .006" oversize.
    2. Over 6" Ø > bore .006" to .010 oversize.
    3. Note: Glue needs this clearance to work properly.
  - B. Face bottom of bore .065" deeper beyond original face.
  - C. Clean all metal dust, oil, chips and loose debris from bore crown 8060 Safety Solvent – cleans and degreases.
4. Installing Sleeve
  - A. Install end bell insulator washer in housing first
  - B. Clean O.D. of bearing sleeve. Try not to touch after cleaning.  
Use: Crown 8060 Safety Solvent.
  - C. Mix fast cure epoxy, apply a thin coat to I.D. of housing bore, and O.D. of sleeve.  
Cut bristles on paint brush short – mix glue with brush.  
Use: Loctite Poxy-Pak, Item #81120 / or # 1166731.
  - D. Insert BRG sleeve, in bearing bore. Clean up excess glue.
  - E. Allow epoxy to set (15 min.). See instruction on back of Poxy-Pak.
  - F. Face excess width of sleeve off
  - G. Bore sleeve to proper size for specified bearing. Cutting forces – low.
  - H. If a retainer is used, be sure to insulate it.
5. Sleeve, out of round - You can tap in with soft hammer. !USE CAUTION!
6. Don't heat or cool – Glue will thicken FAST!
7. Generally insulate O.D.E bearing to break current flow. Load is usually lighter. Both sides may require insulating or even coupler!
8. Test sleeve for ground: MEGOHMS 1000 INFINITY = GOOD  
It could go as low as 3 MEGOHMS and work ok – Depends on application.
9. As glue dries it ill MEG. Better. Check after 1 hour.
10. Dielectric strength of poly – 1000 V/ MIL.