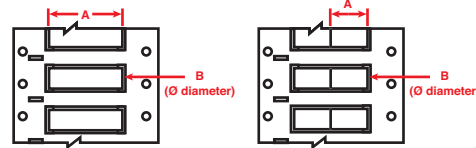


# B33-Series Materials

BradyID.com/bbp33

## PermaSleeve® PS Polyolefin Wire Marking Sleeves (B-342) Standard Military/Industrial Grade. 3:1 Shrink ratio.

- A 3:1 heat shrinkable wire marker sleeve that fits snugly around wires
- Can be used for identification or wire protection
- Fade-resistant and flame-retardant
- Meets the following insulating and physical property specifications:
  - SAE-AMS-DTL-23053/5C (class 1)
  - SAE-AS-81531
  - MIL-STD-202
  - Tested per ASTM E162, ASTM E662



Service temp: -40°F to 267°F  
(short burst max temp: 5 min at 500°F, 24 hrs at 350°F)  
Agency Approvals:

Figure 20

Figure 20-2

| Fits Printer Model  | Diagram   | Catalog #           | Material | Color  | For Wire Gauge (approx.) | For Wire Diameters Inch (mm) Min. Max. | Supplied Diameter B Inch (mm) | Recovered Diameter Inch (mm) | Recovered Wall Thickness Inch (mm) | Sleeves Per Row | Sleeves Per Roll | Rec. Ribbon  |
|---|-----------|---------------------|----------|--------|--------------------------|--|-------------------------------|------------------------------|------------------------------------|-----------------|------------------|--------------|
| <b>3:1 Shrink ratio single-side printable, 2" sleeve width (dimension A):</b>                                 |           |                     |          |        |                          |  |                               |                              |                                    |                 |                  |              |
| BBP33   | Fig. 20   | B33-94-2-342        | B-342    | White  | 28 to 20                 | 0.023 (0.6) - 0.080 (2.0)              | 0.094 (2.4)                   | 0.024 (0.6)                  | .024 (0.6) +/- .003 (0.07)         | 1               | 1000             | B30-R4300    |
| BBP33   | Fig. 20   | B33-125-2-342       | B-342    | White  | 22 to 16                 | 0.046 (1.2) - 1.110 (2.8)              | 0.125 (3.2)                   | 0.047 (1.2)                  | .020 (0.5) +/- .003 (0.07)         | 1               | 1000             | B30-R4300    |
| BBP33   | Fig. 20   | B33-187-2-342       | B-342    | White  | 20 to 10                 | 0.062 (1.6) - 0.150 (3.8)              | 0.187 (4.7)                   | 0.062 (1.6)                  | .020 (0.5) +/- .003 (0.07)         | 1               | 750              | B30-R4300    |
| BBP33   | Fig. 20   | B33-250-2-342       | B-342    | White  | 16 to 8                  | 0.094 (2.4) - 0.215 (5.5)              | 0.250 (6.4)                   | 0.093 (2.4)                  | .025 (0.6) +/- .003 (0.07)         | 1               | 500              | B30-R4300    |
| BBP33   | Fig. 20   | B33-375-2-342       | B-342    | White  | 12 to 4                  | 0.125 (3.2) - 0.320 (8.1)              | 0.375 (9.5)                   | 0.125 (3.1)                  | .025 (0.6) +/- .003 (0.07)         | 1               | 500              | B30-R4300    |
| BBP33   | Fig. 20   | B33-500-2-342       | B-342    | White  | 8 to 1                   | 0.187 (4.8) - 0.450 (11.4)             | 0.500 (12.7)                  | 1.187 (4.7)                  | .025 (0.6) +/- .003 (0.07)         | 1               | 350              | B30-R4300    |
| BBP33   | Fig. 20   | B33-750-2-342       | B-342    | White  | 6 to 4/0                 | 0.250 (6.4) - 0.700 (17.8)             | 0.750 (19.0)                  | 0.250 (6.4)                  | .025 (0.6) +/- .003 (0.07)         | 1               | 250              | B30-R4300    |
| BBP33   | Fig. 20   | B33-1000-2-342      | B-342    | White  | 2 to 0.950 dia           | 0.333 (8.5) - 0.950 (24.1)             | 1.000 (25.4)                  | 0.375 (9.5)                  | .036 (0.9) +/- .003 (0.07)         | 1               | 250              | B30-R4300    |
| BBP33   | Fig. 20   | B33-1500-2-342      | B-342    | White  | n/a                      | 0.500 (12.7) - 1.400 (35.6)            | 1.500 (38.1)                  | 0.500 (12.7)                 | .035 (0.9) +/- .003 (0.07)         | 1               | 150              | B30-R4300    |
| BBP33   | Fig. 20   | B33-94-2-342YL      | B-342    | Yellow | 28 to 20                 | 0.023 (0.6) - 0.080 (2.0)              | 0.094 (2.4)                   | 0.024 (0.6)                  | .024 (0.6) +/- .003 (0.07)         | 1               | 1000             | B30-R4300    |
| BBP33   | Fig. 20   | B33-125-2-342YL     | B-342    | Yellow | 22 to 16                 | 0.046 (1.2) - 1.110 (2.8)              | 0.125 (3.2)                   | 0.047 (1.2)                  | .020 (0.5) +/- .003 (0.07)         | 1               | 1000             | B30-R4300    |
| BBP33   | Fig. 20   | B33-187-2-342YL     | B-342    | Yellow | 20 to 10                 | 0.062 (1.6) - 0.150 (3.8)              | 0.187 (4.7)                   | 0.062 (1.6)                  | .020 (0.5) +/- .003 (0.07)         | 1               | 1000             | B30-R4300    |
| BBP33   | Fig. 20   | B33-250-2-342YL     | B-342    | Yellow | 16 to 8                  | 0.094 (2.4) - 0.215 (5.5)              | 0.250 (6.4)                   | 0.093 (2.4)                  | .025 (0.6) +/- .003 (0.07)         | 1               | 500              | B30-R4300    |
| BBP33   | Fig. 20   | B33-375-2-342YL     | B-342    | Yellow | 12 to 4                  | 0.125 (3.2) - 0.320 (8.1)              | 0.375 (9.5)                   | 0.125 (3.1)                  | .025 (0.6) +/- .003 (0.07)         | 1               | 250              | B30-R4300    |
| BBP33   | Fig. 20   | B33-500-2-342YL     | B-342    | Yellow | 8 to 1                   | 0.187 (4.8) - 0.450 (11.4)             | 0.500 (12.7)                  | 1.187 (4.7)                  | .025 (0.6) +/- .003 (0.07)         | 1               | 500              | B30-R4300    |
| BBP33   | Fig. 20   | B33-750-2-342YL     | B-342    | Yellow | 6 to 4/0                 | 0.250 (6.4) - 0.700 (17.8)             | 0.750 (19.0)                  | 0.250 (6.4)                  | .025 (0.6) +/- .003 (0.07)         | 1               | 350              | B30-R4300    |
| BBP33   | Fig. 20   | B33-1000-2-342YL    | B-342    | Yellow | 2 to 0.950 dia           | 0.333 (8.5) - 0.950 (24.1)             | 1.000 (25.4)                  | 0.375 (9.5)                  | .036 (0.9) +/- .003 (0.07)         | 1               | 250              | B30-R4300    |
| BBP33   | Fig. 20   | B33-1500-2-342YL    | B-342    | Yellow | n/a                      | 0.500 (12.7) - 1.400 (35.6)            | 1.500 (38.1)                  | 0.500 (12.7)                 | .035 (0.9) +/- .003 (0.07)         | 1               | 150              | B30-R4300    |
| BBP33   | Fig. 20   | B33-1500-2-342BK    | B-342    | Black  | n/a                      | 0.500 (12.7) - 1.400 (35.6)            | 1.500 (38.1)                  | 0.500 (12.7)                 | .035 (0.9) +/- .003 (0.07)         | 1               | 150              | B30-R4500-SV |
| <b>3:1 Shrink ratio single-side printable, 1" sleeve width in "2-up pre-cut" configuration (dimension A):</b> |           |                     |          |        |                          |  |                               |                              |                                    |                 |                  |              |
| BBP33   | Fig. 20-2 | B33-94-2-342-2      | B-342    | White  | 28 to 20                 | 0.023 (0.6) - 0.080 (2.0)              | 0.094 (2.4)                   | 0.024 (0.6)                  | .024 (0.6) +/- .003 (0.07)         | 2               | 2000             | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-125-2-342-2     | B-342    | White  | 22 to 16                 | 0.046 (1.2) - 0.111 (2.8)              | 0.125 (3.2)                   | 0.047 (1.2)                  | .020 (0.5) +/- .003 (0.07)         | 2               | 2000             | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-187-2-342-2     | B-342    | White  | 20 to 10                 | 0.062 (1.6) - 0.150 (3.8)              | 0.187 (4.7)                   | 0.062 (1.6)                  | .020 (0.5) +/- .003 (0.07)         | 2               | 1500             | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-250-2-342-2     | B-342    | White  | 16 to 8                  | 0.094 (2.4) - 0.215 (5.5)              | 0.250 (6.4)                   | 0.093 (2.4)                  | .025 (0.6) +/- .003 (0.07)         | 2               | 1000             | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-375-2-342-2     | B-342    | White  | 12 to 4                  | 0.125 (3.2) - 0.320 (8.1)              | 0.375 (9.5)                   | 0.125 (3.1)                  | .025 (0.6) +/- .003 (0.07)         | 2               | 1000             | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-500-2-342-2     | B-342    | White  | 8 to 1                   | 0.187 (4.8) - 0.450 (11.4)             | 0.500 (12.7)                  | 0.119 (3.0)                  | .025 (0.6) +/- .003 (0.07)         | 2               | 700              | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-750-2-342-2     | B-342    | White  | 6 to 4/0                 | 0.250 (6.4) - 0.700 (17.8)             | 0.750 (19.1)                  | 0.250 (6.35)                 | .025 (0.6) +/- .003 (0.07)         | 2               | 500              | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-1000-2-342-2    | B-342    | White  | 2 to 0.950 dia           | 0.333 (8.5) - 0.950 (24.1)             | 1.000 (25.4)                  | 0.375 (9.5)                  | .036 (0.9) +/- .003 (0.07)         | 2               | 500              | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-1500-2-342-2    | B-342    | White  | n/a                      | 0.500 (12.7) - 1.400 (35.6)            | 1.500 (38.1)                  | 0.500 (12.7)                 | .035 (0.9) +/- .003 (0.07)         | 2               | 150              | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-94-2-342YL-2    | B-342    | Yellow | 28 to 20                 | 0.023 (0.6) - 0.080 (2.0)              | 0.094 (2.4)                   | 0.024 (0.6)                  | .024 (0.6) +/- .003 (0.07)         | 2               | 2000             | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-125-2-342YL-2   | B-342    | Yellow | 22 to 16                 | 0.046 (1.2) - 0.111 (2.8)              | 0.125 (3.2)                   | 0.047 (1.2)                  | .020 (0.5) +/- .003 (0.07)         | 2               | 2000             | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-500-2-342YL-2   | B-342    | Yellow | 8 to 1                   | 0.187 (4.8) - 0.450 (11.4)             | 0.500 (12.7)                  | 0.119 (3.0)                  | .025 (0.6) +/- .003 (0.07)         | 2               | 700              | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-750-2-342-YL-2  | B-342    | Yellow | 6 to 4/0                 | 0.250 (6.4) - 0.700 (17.8)             | 0.750 (19.1)                  | 0.250 (6.35)                 | .025 (0.6) +/- .003 (0.07)         | 2               | 500              | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-1000-2-342YL-2  | B-342    | Yellow | 2 to 0.950 dia           | 0.333 (8.5) - 0.950 (24.1)             | 1.000 (25.4)                  | 0.375 (9.5)                  | .036 (0.9) +/- .003 (0.07)         | 2               | 500              | B30-R4300    |
| BBP33   | Fig. 20-2 | B33-1500-2-342-YL-2 | B-342    | Yellow | n/a                      | 0.500 (12.7) - 1.400 (35.6)            | 1.500 (38.1)                  | 0.500 (12.7)                 | .035 (0.9) +/- .003 (0.07)         | 2               | 300              | B30-R4300    |