

**BRP Manufacturing Company**

637 North Jackson Street Lima, Ohio 45801

Toll free: 800-858-0482

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www.brpmfg.com

**Specification Sheet**

|                 |   |
|-----------------|---|
| <b>Material</b> | <b>Nitrile Rubber Sheet, Peroxide Cure</b>  |
| BRP Style       | BG618 – Style 5368  |
| Finish          | Smooth (nylon available)  |
| ASTM Callout    | ASTM D2000 2BG618EO14EO34F16Z1Z2Z3Z4, Z1 = BRP Style 5368, Z2 Peroxide Cure Nitrile, Z3 = Compression Set 35% Max. (D395, 100°C), Z4 = Conforms to WH 45351EZ and GE A12C11E7 |

**Basic Requirements**

| Requirement          | Condition           | Specification Requirements |
|----------------------|---------------------|----------------------------|
| Hardness, Original   | ASTM D2240          | 65±5                       |
| Tensile, Original    | ASTM D412 – PSI Min | 1,800                      |
| Elongation, Original | ASTM D412 – %       | 270                        |

**Heat Aged, Test Method D 573, 70 h @ 100°C**

|                   |        |           |
|-------------------|--------|-----------|
| Tensile Change    | PSI    | -20 % Max |
| Elongation Change | %      | -25 % Max |
| Hardness Change   | Points | ± 10      |

**Oil immersion, Test Method D471, IRM 903 Oil, 70 h @ 100°C**

|               |       |     |
|---------------|-------|-----|
| Volume Change | % Max | +40 |
|---------------|-------|-----|

**Compression Set, Test Method ASTM D395 S, max, % 70 h @ 100C**

|                 |   |         |
|-----------------|---|---------|
| Compression Set | % | 50% Max |
|-----------------|---|---------|

**Additional Requirements****Heat Resistance, D573, 70 hours @ 100°C (Gr5)**

|                                     |        |          |
|-------------------------------------|--------|----------|
| Change in hardness, max, points     | Points | ± 15     |
| Change in tensile strength, max, %  | %      | -20% Max |
| Change in ultimate elongation, max, | Points | -40% Max |

**Compression Set, Test Method D395 Method B, 22 h @ 100°C, max. % (Z)**

|                 |       |         |
|-----------------|-------|---------|
| Compression Set | % Max | 35% Max |
|-----------------|-------|---------|

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**Oil Resistance, Test Method D471 NO 1 Oil, 70 h @ 100 C° (EO14)**

|                                       |        |           |
|---------------------------------------|--------|-----------|
| Change in hardness, max, points       | Points | -5 to +15 |
| Change in tensile strength, max, %    | %      | -25       |
| Change in ultimate elongation, max, % | %      | -45       |
| Change in volume, %                   | %      | -10 to +5 |

**Oil Resistance, Test Method D471 NO 3 Oil, 70 h @ 100 C° (EO34)**

|                                       |        |          |
|---------------------------------------|--------|----------|
| Change in hardness, max, points       | Points | 0 to -15 |
| Change in tensile strength, max, %    | %      | -45      |
| Change in ultimate elongation, max, % | %      | -45      |
| Change in volume, %                   | %      | 0 to +35 |

**Low Temperature Brittleness, Test Method D2137 Method A, 9.3.3 non brittle after 3 mins. @ -35° C**

|  |  |      |
|--|--|------|
|  |  | Pass |
|--|--|------|

Also tested and conforms to EO15, EO35

Operating Temperature Range -20° - 212° F