Material Overview

**Type 1 High-Performance Elastomer Boots for Advanced Temperature and Chemical Tolerance**

-75° C to +150° C

- Very good resistance to fuels, oils, solvents and heat

Semi-rigid high performance material combines excellent resistance to fuels, oils and solvents with superior performance at extreme temperatures. Rated for 3000 hours continuous operation at +150° C. Material meets the requirements of VG95343 Type 6, BSG 198-5-DE, EN62329-102 and SAE AS5258 Type H. This material is recommended for demanding applications such as military vehicles and petrochemical exploration. Available in standard black or 10 additional color choices listed below. Operating temperature is -75° C to +150° C.

**Mod Code Color Options for Type 1 Material**

<table>
<thead>
<tr>
<th>Mod Code</th>
<th>Color</th>
<th>Similar to (Reference)</th>
<th>Mod Code</th>
<th>Color</th>
<th>Similar to (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>632B</td>
<td>Blue</td>
<td>PANTONE 3005U</td>
<td>632R</td>
<td>Red</td>
<td>PANTONE 1797U</td>
</tr>
<tr>
<td>632E</td>
<td>Grey</td>
<td>FED-STD-595; #36270</td>
<td>632T</td>
<td>Tan</td>
<td>FED-STD-595; #33446</td>
</tr>
<tr>
<td>632G</td>
<td>Green</td>
<td>PANTONE 355U</td>
<td>632W</td>
<td>White</td>
<td>FED-STD-595; #37875</td>
</tr>
<tr>
<td>632P</td>
<td>Purple</td>
<td>FED-STD-595; #37100</td>
<td>632Y</td>
<td>Yellow</td>
<td>PANTONE YELLOW U</td>
</tr>
<tr>
<td>632O</td>
<td>Orange</td>
<td>FED-STD-595; #32300</td>
<td>Standard</td>
<td>Black</td>
<td>FED-STD-595; #37038</td>
</tr>
<tr>
<td>632OLV</td>
<td>Olive Green</td>
<td>FED-STD-595; #14087</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Material Color Options for Type 1 High Performance Elastomer ONLY. Add Optional Color Mod Code to End of Any Type 1 Material Part Number.

**Type 2 Low Smoke Zero Halogen (LSZH) For Regulated Environmental Safety Applications**

- Low Smoke, Zero Halogen
- Meets U.S. and E.U. toxicity requirements
- Qualified to VG95343 Part 28 and 29
- -40° C to +130° C

Halogen-free polyolefin material meets low smoke and toxicity requirements of shipboard, transit and aircraft systems. Oxygen index greater than 30%, smoke index less than 20, and toxicity index under 3 per 100 grams. Material meets requirements of NAVSEA 5617649, VG95343 Part 28 and 29, BSG 198-5-DF, EN62329-101 and SAE AS5258 Type G. Good resistance to oils, fuels and solvents. Temperature rating -40° to +130° C.

**Type 3 Flexible Polyolefin For General Duty Applications**

- General purpose harnessing
- Economical, flexible
- -55° C to +135° C

Economical flexible polyolefin boots fit most standard shrink boot adapters, including M85049 adapters as well as Glenair Series 31 and Series 44 adapters. These self-extinguishing boots meet the requirements of SAE AS5258 Type B. Good resistance to oils and fuels. Available with optional hot melt adhesive lining, these boots provide strain relief and environmental protection to connector/cable transitions. Temperature rating -55° to +135° C. Black color.
**Type 5 Viton® Fluoroelastomer Blend**

- **Excellent resistance to fuels, oils, solvents and heat.**
- -55°C to +150°C
- Material meets specifications for SC-X15111D

Flexible general duty boots combine excellent resistance to fuels, oils and solvents with good performance at higher temperatures. These boots fit most standard boot adapters for circular connectors. Material meets TACOM specifications for SC-X15111D. Viton boots are recommended where higher temperature and chemical resistance characteristics are required. Recommended for applications such as military vehicles and petrochemical exploration. Operating temperature is -55°C to +150°C.

**Type 6 High Performance Elastomer Alloy**

- **Excellent resistance to fuels, oils and solvents**
- -55°C to +135°C
- Meets SC-X15112C Reqrmnt

Flexible general duty boots combine excellent resistance to fuels, oils and solvents with good performance at higher temperatures. These boots fit most standard boot adapters for circular connectors. Material meets TACOM material specifications for SC-X15112C. Elastomer alloy boots are recommended where higher temperature and chemical resistance characteristics are required. Recommended for military and applications such as military vehicles. Operating temperature is -55°C to +135°C.

**Type 7 Flexible Polyolefin**

- **Good resistance to fuels, oils, solvents and heat**
- -55°C to +135°C

Semi-flexible general duty boots combine good resistance to fuels, oils and solvents and high temperature tolerance. These boots fit most standard boot adapters for circular connectors. Material meets the requirements of AS5258 material A. Semi-flexible boots provide excellent cable support. Operating temperature is -55°C to +135°C.

**Type 8 Low Outgassing Fluoropolymer Alloy**

- Meets NASA low out-gassing requirements
- -50°C to +170°C

Semi-rigid halogen-free polyolefin boots meet NASA low out-gassing test requirements and are suitable for high altitude and space applications. Excellent resistance to oils, fuels, solvents, acids and bases. Broad operating temperature of -50°C to +170°C provides excellent high temperature stability and low temperature flexibility. Two-part 779-001 Glenair epoxy recommended.

**Type 9 Low Temp Flexible Polyolefin**

- **Low shrink temperature**
- -40°C to +100°C

Flexible, low temperature heat-shrinkable polyolefin is developed for cable, such as Ethernet and USB cable, susceptible to heat damage from the application of boots with higher minimum shrink temperatures. Resistance to oils, fuels, solvents, acids and bases is fair. Operating temperature is -40°C to +100°C.

**Approvals**

Glenair Series 77 Shrink Boots are currently approved for: Airbus Defense & Space, Bombardier, Gulfstream, TACOM, NAVSEA 5617649, M85049/140 (straight boots, /141 (90 degree boots) and /142 (wide-body transition including T, Y, and 1-to-3).