Technical Data

Product Introduction

D1-G E-glass direct rovings or single-end continuous rovings are designed for use in filament winding, pultrusion and weaving applications in polyester, vinyl ester or epoxy resin systems.

Product Description

All direct roving is manufactured to meet ISO 9001 standards. These direct rovings are produced by pulling individual fibers directly from the bushing and then winding them onto a roving package ready for shipment. The uniform distribution of a proprietary sizing system assures an excellent resin-to-glass binding through uniform distribution of the binding agent. A direct roving process represents the optimum technology in forming glass fiber and results in maximum strand integrity.

Packaging

Pallet height, cm (in) 95 (37) or 119 (47)
Pallet length, cm (in) 112 (44)
Pallet width, cm (in) 112 (44)
Number of layers: 3 or 4
48-roll pallet weight, kg (lb) 888 (1958)
64-roll pallet weight, kg (lb) 1184 (2610)

Doff dimensions

Doff height*, cm (in) 26 (10)
Doff weight*, kg (lb) 18.5 (40.8)
Doff diameter, cm (in) 27 (10.6)
Doffs/layers 16
Doffs/pallet 48 or 64
Doffs are wrapped in plastic bags, then packed in bulk-packed.

*300, 600, 735, 4000, 4400 & 4800 TEX

Direct Roving

Doff height, cm (in) 13 (5)
Doff weight, kg (lb) 16.5 (36.4)

Storage

Unless otherwise specified, it is recommended to store glass fiber products in a cool, dry area.

Features

Excellent processing

D1-G roving have even tension and excellent integrity, which means a smooth run out through the package. The product will run out at various speeds. In addition, the product has low fuzz and good abrasion resistant properties that will result in smoother parts, less cleanup, improved production efficiencies and reduced costs.

Fast wetting properties

D1-G roving allow fast, uniform wet out of the strand in resin systems. Fast wet out should allow you to optimize part fabrication time, increasing productivity and improving your competitive position in the market.

Application flexibility

D1-G roving is available in a variety of TEX values. The products allow you to meet the various demands of parts used in different applications, thus increasing your competitive ability in the market.

Customer Benefits

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Features | Customer Benefits
---|---
Multi-compatible size | D1-G roving silane based sizing is designed to have excellent adhesion with polyester, vinyl ester and epoxy resin systems. Multi-compatibility allows a change in the resin system without the need for the time consuming effort of changing the glass in the creel.
Superior composites properties | D1-G roving is designed to provide composites with superior physical and chemical properties.

### Product data

<table>
<thead>
<tr>
<th>ID Number</th>
<th>Filament diameter (Microns)</th>
<th>Linear Density (TEX, yds/lb)</th>
<th>Compatible resin</th>
<th>%Organic solid (LOI)</th>
<th>Tensile strength (N/TEX)</th>
<th>%Moisture content</th>
<th>Applicable process</th>
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</thead>
<tbody>
<tr>
<td>D1-030-G</td>
<td>14</td>
<td>275/1804</td>
<td>UP, VE, EP</td>
<td>0.55±0.15</td>
<td>≥0.35</td>
<td>≤ 0.10</td>
<td>FW, Pultrusion, Weaving</td>
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<td>D1-041-G</td>
<td>14</td>
<td>415/1200</td>
<td>UP, VE, EP</td>
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<td>600/827</td>
<td>UP, VE, EP</td>
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<td>D1-073-G</td>
<td>17</td>
<td>735/675</td>
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<td>1200/413</td>
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<tr>
<td>D1-200-G</td>
<td>22</td>
<td>2000/250</td>
<td>UP, VE, EP</td>
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<td>≥0.35</td>
<td>≤ 0.10</td>
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<tr>
<td>D1-220-G</td>
<td>23</td>
<td>2200/225</td>
<td>UP, VE, EP</td>
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<tr>
<td>D1-240-G</td>
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<td>2400/207</td>
<td>UP, VE, EP</td>
<td>0.55±0.15</td>
<td>≥0.35</td>
<td>≤ 0.10</td>
<td>FW, Pultrusion, Weaving</td>
</tr>
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<td>D1-400-G</td>
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<td>4000/124</td>
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<td>≥0.35</td>
<td>≤ 0.10</td>
<td>FW, Pultrusion, Weaving</td>
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<tr>
<td>D1-440-G</td>
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<td>4400/113</td>
<td>UP, VE, EP</td>
<td>0.55±0.15</td>
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<td>D1-480-G</td>
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<td>≥0.35</td>
<td>≤ 0.10</td>
<td>FW, Pultrusion, Weaving</td>
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Special products are available according to customers’ requirements.
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