TECHNICAL DATA SHEET
PMAGRIP - BGGV - Flange
Straight

IP68, polyamide flange for flexible non-metallic conduit

Applications:
• For cable protection systems in a wide range of applications

Features & Benefits:
• Very high impact resistance
• Vibration-proof connection to PMA conduits
• High conduit pull-out strength
• Available with special flange sealing for chemical requirement (FGO4/01)
• Very good chemical properties

Ingress protection:
• On conduit side:
  IP66, IP68 & IP69 (EN/IEC 60529)

Materials:
• Fitting body: high-grade, specially formulated polyamide 6
• Flange sealing FGO4: made from EPDM
• Flange sealing FGO4/01: made from NBR

Compatible with:
• PMAFLEX Pro Conduits
• PMAFLEX Multilayer Conduits
• PMAFLEX Conduits
• PMA Smart Line Conduits

Conforms to:
• EN 45545-2 HL3 (R22 & R23)
• NFPA 130
• UL 94 (V0)
• UL 1696 (UL file E80294)

Weathering resistance:
• Very good UV resistance and weathering characteristics

Colour:
• Black

Chemical properties:
• Please refer to www.pma.ch (Technical Information / Chemical Resistance)

Environmental properties:
• Free from halogens and cadmium
• RoHS and REACH compliant
# Product selection:

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Conduit size</th>
<th>Dimensions in mm (nom.)</th>
<th>Weight</th>
<th>Packing unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BGGV-56</td>
<td>BGGV-56/01</td>
<td>56</td>
<td>42.0</td>
<td>97.0</td>
</tr>
<tr>
<td>BGGV-70</td>
<td>BGGV-70/01</td>
<td>70</td>
<td>48.0</td>
<td>114.0</td>
</tr>
<tr>
<td>BGGV-95</td>
<td>BGGV-95/01</td>
<td>95</td>
<td>53.0</td>
<td>146.0</td>
</tr>
</tbody>
</table>

Our customer service dept. or local distribution partner will be pleased to help you concerning product availability and lead time.

Can be used outdoors with flange seal FGO4 for standard applications where water proofness and weathering resistance are required. For indoor applications the flanges are available with a special flange seal FGO4/01 for contact with substances like fuels, mineral oils, emulsions etc. Please add "/01" to the order number.

Example:
- BGGV-70 (with FGO4) standard for indoor and outdoor applications
- BGGV-70/01 (with FGO4/01) optional for indoor applications with special chemical requirements
- For applications over 70°C, we recommend the use of an additional internal conduit sleeve support (BES) to ensure longterm sealing performances.

[Diagram of product dimensions]

[Diagram of flange seal configurations]
### Mechanical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Test parameters</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile modulus</td>
<td>1'200 ... 3'700 N/mm²</td>
<td></td>
<td>ISO 527</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>45 ... 65 N/mm²</td>
<td></td>
<td>ISO 527</td>
</tr>
<tr>
<td>Notched bar impact test</td>
<td>4 ... 20 kJ/m²</td>
<td></td>
<td>ISO 180/1C</td>
</tr>
</tbody>
</table>

**Vibration and shock standard**

Cat. 2

**Thermal properties:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Test parameters</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous application temperature</td>
<td>-50 ... +105 °C</td>
<td></td>
<td>PMA DO 9.21-4510</td>
</tr>
<tr>
<td>Upper application temperature</td>
<td>+120 °C</td>
<td>(20'000 h)</td>
<td>PMA DO 9.21-4360</td>
</tr>
<tr>
<td>Short-term</td>
<td>+160 °C</td>
<td>(168 h)</td>
<td>PMA DO 9.21-4360</td>
</tr>
</tbody>
</table>

**Fire safety properties:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Test parameters</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire performance</td>
<td>non flame-propagating</td>
<td></td>
<td>IEC EN 61386-1</td>
</tr>
<tr>
<td>Flame class</td>
<td>V0</td>
<td></td>
<td>UL 94</td>
</tr>
<tr>
<td>Oxygen index</td>
<td>&gt;32 %</td>
<td></td>
<td>EN ISO 4589-2</td>
</tr>
<tr>
<td>Smoke density</td>
<td>&lt;150 Ds max.</td>
<td></td>
<td>EN ISO 5659-2 (25 kW/m²)</td>
</tr>
<tr>
<td>Toxicity</td>
<td>&lt;0.75 CIT₆₈</td>
<td></td>
<td>NF X 70-100-1/-2: (600°C)</td>
</tr>
</tbody>
</table>

**Fire performance NFPA 130:**

- Flammability                    | compliant      |                | ASTM E 162  |
- Smoke density                   | compliant      |                | ASTM E 662  |

**Heat and visible smoke**

<table>
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<tr>
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<th>Test parameters</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke emission toxicity</td>
<td>compliant</td>
<td></td>
<td>Bombardier SMP 800-C</td>
</tr>
<tr>
<td>Smoke emission toxicity</td>
<td>compliant</td>
<td></td>
<td>Boeing BSS 7239</td>
</tr>
</tbody>
</table>

### Content of delivery:
- Flange
- Flange sealing (FGO4 or FGO4/01)
- Conduit gasket (NVN3)

### Assembly instructions:
- Threaded bore holes for mounting screws should be sealed separately during mounting (commercial sealing solvents).
- For information about the flange seal please see data sheet:
  - No. 50020 for FGO4
  - No. 50025 for FGO4/01
- Please consider the appropriate assembly instructions on www.pma.ch