BELCO Fiberglass Dampers are manufactured to meet the needs of the odor control and corrosive HVAC industries by providing a corrosion-resistant FRP Damper that is used to regulate a gas flow or shut off and isolate a system. The operating conditions for the dampers are designed to match the operating conditions of the duct system. Premium vinyl ester resins are used throughout the damper. Fire-retardant resins are also available for a Class 1 flame spread.

BELCO MANUFACTURING CO., INC. PROVIDES FOUR DAMPER MODELS:

Model 201  
Used to control airflow for balancing a system. Model 201 is less expensive and has a shaft seal, but does not have a blade seal.

Model 202  
Used to control airflow for balancing a system. Model 202 has a shaft seal and full circumferential blade stop.

Model 203  
Used for isolating a system with low leakage. Model 203 has a shaft seal, blade seal, and a full circumferential blade stop. Designed for up to 30°.

Model 204  
Used for isolating a system, and has a PTFE encapsulated O-ring to provide a factory-tested watertight seal. Each model 204 damper is tested watertight before shipping.

Other Damper Types are Available
Please contact BELCO’s sales department at 254-933-9000 or e-mail: sales@belco-mfg.com.

DAMPER NAMES

Dampers are often referred to by many different industry names. The adjacent chart may be used as a guide to determine the BELCO Damper model(s) you require.
BELCO Manufacturing Company, Inc. certifies that the Standard Model 203 & 204 Dampers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air leakage and air performance ratings only.

1.1 Test method per AMCA Standard 500-98
2.1 Air leakage is based on operation between 50°F & 104°F

### LEAKAGE, L/s/m² (ft³/min/ft²)

<table>
<thead>
<tr>
<th>PRESSURE CLASS</th>
<th>LEAKAGE, L/s/m² (ft³/min/ft²)</th>
<th>REQUIRED RATING</th>
<th>EXTENDED RANGE (OPTIONAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25 kPa (1&quot; wg)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1.0 kPa (4&quot; wg)</td>
<td>20.3 (4)</td>
<td>40.6 (8)</td>
<td>55.9 (11)</td>
</tr>
<tr>
<td>2.0 kPa (8&quot; wg)</td>
<td>50.8 (10)</td>
<td>102 (20)</td>
<td>142 (28)</td>
</tr>
<tr>
<td>3.0 kPa (12&quot; wg)</td>
<td>203 (40)</td>
<td>406 (80)</td>
<td>569 (112)</td>
</tr>
</tbody>
</table>

Contact BELCO Manufacturing Company, Inc. for tested leakage rates.

### WARRANTY

BELCO Fiberglass Dampers are warranted for eighteen (18) months from the date of shipment to be free from defects in manufacturing, materials, or workmanship. Liability shall not exceed the purchase price of the damper and, at BELCO’s option, is limited to repair or replacement. BELCO Manufacturing Co., Inc. shall not be liable for any costs incurred either directly or indirectly other than repair or replacement of the product.
**SUGGESTED SPECIFICATION FOR MODEL 203 FRP DAMPERS**

Furnish and install at locations shown on plans, round FRP single-blade fiberglass dampers. Damper frame shall be of one piece construction with a resin rich interior corrosion barrier minimum of 100 mils. A structural lay-up shall consist of alternate layers of chopped strand mat and woven roving to conform to ASME/ANSI RTP-1 and ASTM D3982. The glass to resin ratio shall be a minimum of 35% glass to 65% resin. Wall thickness, flange thickness, drilling pattern and width shall conform to ASTM D3982 Table 1. Exterior surface of the damper shall contain UV inhibitors and a gelcoat, color to match duct system.

**BELCO DAMPERS**

**STANDARD CONSTRUCTION, TYPICAL OF MODEL 203**

Resin System: Fire Retardant (FR Vinyl Ester with MBKP Cure System

Frame: FR Vinyl Ester FRP

Axe: 316 or 316 Stainless Steel

Sizes: See Table Below

Max Operating Temp.: 200°F

External Coating: Gel Coat with UV

Connections: ASTM D 3982

Max System Pressure: 30° wg

SUGGESTED SPECIFICATION FOR MODEL 203 FRP DAMPERS*

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Minimum Diameter</th>
<th>Maximum Diameter</th>
<th>Flange Material</th>
<th>Blade Material</th>
<th>Resin System</th>
<th>Actuator Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot;</td>
<td>1 1/4&quot;</td>
<td>1 1/2&quot;</td>
<td>FRP</td>
<td>FRP</td>
<td>Fire Retardant</td>
<td>Manual or Motorized</td>
</tr>
<tr>
<td>6&quot;</td>
<td>2 1/8&quot;</td>
<td>2 1/8&quot;</td>
<td>FRP</td>
<td>FRP</td>
<td>Fire Retardant</td>
<td>Manual or Motorized</td>
</tr>
<tr>
<td>8&quot;</td>
<td>3 1/8&quot;</td>
<td>3 1/8&quot;</td>
<td>FRP</td>
<td>FRP</td>
<td>Fire Retardant</td>
<td>Manual or Motorized</td>
</tr>
</tbody>
</table>

**CUSTOM CONFIGURATIONS:**

BELCO dampers can be furnished in a variety of custom configurations including: extended length between flanges, unlined flanges, inline dampers, either built into a section of duct or plain-end for field joint by installers.

*Contact BELCO for specifications on other damper models.