Description
Exel™ Connectadet™ non-electric, short delay, trunk line assemblies provide out-of-hole delays in non-electric blast patterns. Used in conjunction Exel™ MS in-hole shock tube detonator assemblies, Exel™ Connectadet™ assemblies provide flexibility in blast design and ease of use. They can be used in quarries, surface coal operations, open pit and underground mines and construction projects to provide accurate surface timing.

Key Benefits
- Eliminate the need for detonating cord trunk lines
- Do not require burying - lower shrapnel damage potential
- Provide excellent, flexible blast control
- Allow easy connection, even with gloves
- Allow pre-blast changes to blast design
- Allow quick and easy hook-up verification
- Don’t tangle - no waste

Features
- Rugged, with abrasion resistant tubing
- New lower energy design
- Accurately timed in eight delays
- Quick and simple to connect; highly visible 6 tube ergonomic connector design

Technical Properties

<table>
<thead>
<tr>
<th>Product</th>
<th>Exel™ Connectadet™</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal tube</td>
<td>Yellow Exel™</td>
</tr>
<tr>
<td>- Outer diameter (mm)</td>
<td>3 mm</td>
</tr>
<tr>
<td>- Nominal tensile strength</td>
<td>300 N at +20 °C</td>
</tr>
<tr>
<td>- Shock wave propagation (m/s)</td>
<td>2000 ±100</td>
</tr>
<tr>
<td>Detonator</td>
<td></td>
</tr>
<tr>
<td>- Lead azide charge surface delay (mg)</td>
<td>260</td>
</tr>
<tr>
<td>- Shell material</td>
<td>Al</td>
</tr>
<tr>
<td>Detonator assembly</td>
<td></td>
</tr>
<tr>
<td>- Standard configuration</td>
<td>Without J-hook</td>
</tr>
<tr>
<td>Nominal delay times</td>
<td>See table below</td>
</tr>
<tr>
<td>Connector Block</td>
<td>Colour coded by surface delay time</td>
</tr>
</tbody>
</table>

Delay Range

<table>
<thead>
<tr>
<th>Nominal Delay Times</th>
<th>Connector Block Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Green</td>
</tr>
<tr>
<td># 17</td>
<td>Yellow</td>
</tr>
<tr>
<td># 25</td>
<td>Red</td>
</tr>
<tr>
<td># 42</td>
<td>White</td>
</tr>
<tr>
<td># 65</td>
<td>Blue</td>
</tr>
<tr>
<td>100</td>
<td>Black</td>
</tr>
<tr>
<td>200</td>
<td>Orange</td>
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</tbody>
</table>

# Standard delay
Recommendations for Use and Initiation

Exel™ Connectadet™ assemblies are unidirectional and can be reliably initiated with:
- an approved blasting machines for shock tube initiation, e.g. Exel™ Start DS2
- Full strength detonators, e.g. Exel™ MS or i-kon™ III
- another Orica shock tube surface delay system

The Exel™ Connectadet™ assembly is not designed to initiate detonating cord. Misfires can result.

Packaging

Exel™ Connectadet™ detonators are packed into bags inside cardboard cases. All units within a case have the same lead length and delay. The box dimensions are 40cm (L) x 28cm (W) x 25cm (H).

<table>
<thead>
<tr>
<th>Length (m)</th>
<th>Dets per bag</th>
<th>Bags per case</th>
<th>Qty per case</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>3.6</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>4.2</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>4.8</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>6.0</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>8.4</td>
<td>10</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>9.0</td>
<td>10</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>10.8</td>
<td>10</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>12.0</td>
<td>10</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>200.0</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Other lengths or delay combinations maybe available by special arrangements. Please ask your local Orica representative for further information.

Storage and Handling

Product Classification

Authorised Name: Exel™ Connectadet™
Proper Shipping Name: Detonator assemblies, non-electric
UN No: 0360
Classification: 1.1B

Exel™ Connectadet™ should be stored in a cool, dry detonator magazine licensed for explosives products. Stacks of cases should be no more than 2 metres high.

Exel™ Connectadet™ may be used in temperatures up to 50 °C. Exel™ Connectadet™ detonators have a shelf life of 2 years.

Disposal

Disposal of explosive materials can be hazardous. Methods for safe disposal of explosives may vary depending on the user's situation. Please contact a local Orica representative for information on safe practices.

Safety

Avoid damage to the shock tube. Never pull so hard as to stretch or break shock tubing. A premature initiation may result.

Exel™ Connectadet™ assemblies provide a high level of safety against initiation by static electricity, electrical stray currents and radio frequency transmissions. The surface initiator is factory assembled in a connector block and no attempt should be made to disassemble it.

Exel™ Connectadet™ assemblies contain sensitive explosives, which can initiate under intense impact, friction or heat. As with all explosives these detonators must be handled and stored with care.

Training

This Technical Data Sheet is for information only. The Exel™ system including the Exel™ Connectadet™ should only be used by personnel who have been properly trained to use this system.

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