**ELECTRIC DETONATOR**

**Technical Datasheet**

daveydet® SR steel

### APPLICATION

The daveydet® SR steel is a high strength electric detonator designed to provide accurate, secure and reliable initiation of all detonator sensitive explosives used in seismic surveys.

### CONDITIONS FOR OPERATING

- Temperature range: -20°C to +50°C
- Watertightness: 13 bars (188 PSI)
- Watertightness: 5 bars (72 PSI)

(with wire insulation cut or split)

### ELECTROSTATIC DISCHARGE RESISTANCE

Compliant to EN 13763-1 (class II).
Ahead of IAGC requirements (MIL - STD - 1512)

### FUSEHEAD CHARACTERISTICS

- Medium Intensity fusehead N57 TS.
- Fusehead resistance: 0.32 +/- 0.10 Ohm
- No fire current (I0): 0.6 A
- All fire current (I1): 2 A
- Max no fire energy (W0): 8 mJ/Ω
- Min fire energy (W1): 16 mJ/Ω
- Min firing current for 5 detonators fired in series: 2.5 A

### DETONATOR CONSTRUCTION

- Material: Aluminium alloy
- Output: #8 cap strength
- PETN charge: 800 mg
- Primary charge: 200 mg

### LEAD WIRE

- Material: galvanized steel
- Diameter steel wire: 0.6 mm (AWG 23)
- Electrical resistance: 0.35 Ω/m of duplex wire
- Insulation diameter: 1.45 mm
- Insulation: HDPE pink/green
- Tensile strength: 240 N (64 lbs)
- Abrasion resistance: compliant to EN13763-4(class II)
- Wire length*: 10, 15m, 20m, 30m, 40m, 50m.
- Wire configuration: spooled

(*Contact us for specific applications)

### FIRING TIME

Less than 1 ms for a 5 A firing current.
RECOMMENDATIONS FOR USE

daveydet®SR steel Electric Detonators incorporate sensitive elements within the detonator. These elements can be initiated by heavy impact, friction or intense heat. Detonators should only be used by personnel who have been properly trained in safe and correct handling procedures.

daveydet®SR steel Electric Detonators should be properly connected using tight and insulated connection in order to avoid earth leakage or shorting. Circuits should be tested with an approved ohmmeter for resistance and continuity before connecting to an exploder.

SERIAL FIRING CAPACITY

Exploder of maximum ohmic value ≥ 80 Ω must be used.
In case of pattern shot, maximum detonator quantity must comply with the table below:

<table>
<thead>
<tr>
<th>Number of det</th>
<th>Wire length in meter</th>
<th>Total resistance of the detonator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10</td>
<td>8.1</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>11.9</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>15.7</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>23.3</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>30.9</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>38.5</td>
</tr>
</tbody>
</table>

For larger pattern shot, daveydet®SR copper electric detonator is recommended

CONDITIONS FOR STORAGE & TRANSPORT

Temperature range: -40°C to +70°C / -40 to +158°F
Shelf life: 2 years.

CE TYPE AND TRANSPORT CLASSIFICATION

CE type test number: 0080.EXP.97.0069 C1
Transport classification: 1.4S
UN-number: 0456

PACKAGING

<table>
<thead>
<tr>
<th>Wire Length</th>
<th>Quantity/case</th>
<th>Gross Weight</th>
<th>Explosive net weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>meter</td>
<td>Pieces</td>
<td>kg</td>
<td>g</td>
</tr>
<tr>
<td>10 m*</td>
<td>100</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>15 m</td>
<td>100</td>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td>20 m</td>
<td>100</td>
<td>17</td>
<td>100</td>
</tr>
<tr>
<td>30 m</td>
<td>80</td>
<td>20.5</td>
<td>80</td>
</tr>
<tr>
<td>40 m</td>
<td>64</td>
<td>21.5</td>
<td>64</td>
</tr>
<tr>
<td>50 m</td>
<td>56</td>
<td>23.5</td>
<td>56</td>
</tr>
</tbody>
</table>

Box size: 445 x 230 x 300 mm (volume 0.031m³)

* also available in folded wire configuration

The indications and recommendations contained in this document are based on manufacturer’s research and tests to this date. The manufacturer cannot anticipate all of the possible applications for its products. Therefore, the products described hereby are sold under the only warranty to be in conformity with the specifications stated in this document and to be in compliance with the agreements granted by the French Ministry of Industry.

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