

### APPLICATION

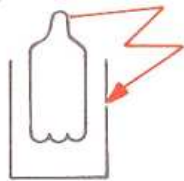
The **daveydet<sup>®</sup> SR steel** is a high strength electric detonator designed to provide accurate, secure and reliable initiation of all detonator sensitive explosives used in seismic surveys.

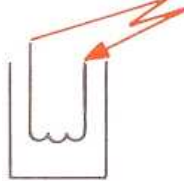
### CONDITIONS FOR OPERATING<sup>(\*)</sup>

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)

Short circuited leadwires and shell	
	
<b>Capacitor Discharge</b>	2000 pF
<b>Serial resistance</b>	0 ohm
<b>Applied voltage</b>	10 kV

Two ends of detonator leadwires	
	
<b>Capacitor Discharge</b>	2000 pF
<b>Serial resistance</b>	0 ohm
<b>Applied voltage</b>	8 kV

### FUSEHEAD CHARACTERISTICS

Medium Intensity fusehead N57 TS.  
 Fusehead resistance: 0.32 +/- 0.10 Ohm  
 No fire current (I<sub>0</sub>): 0.6 A  
 All fire current (I<sub>1</sub>): 2 A  
 Max no fire energy (W<sub>0</sub>): 8 mJ/Ω  
 Min fire energy (W<sub>1</sub>): 16 mJ/Ω  
 Min firing current for 5 detonators fired in series : 2.5 A

### DETONATOR CONSTRUCTION

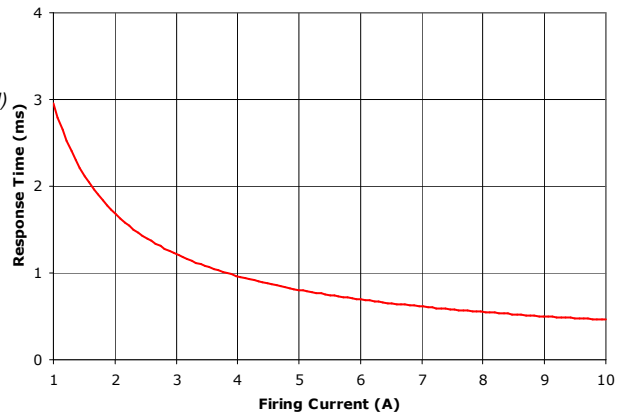
Material : Aluminium alloy  
 Output : #8 cap strength  
 PETN charge : 800 mg  
 Primary charge : 200 mg

### LEAD WIRE

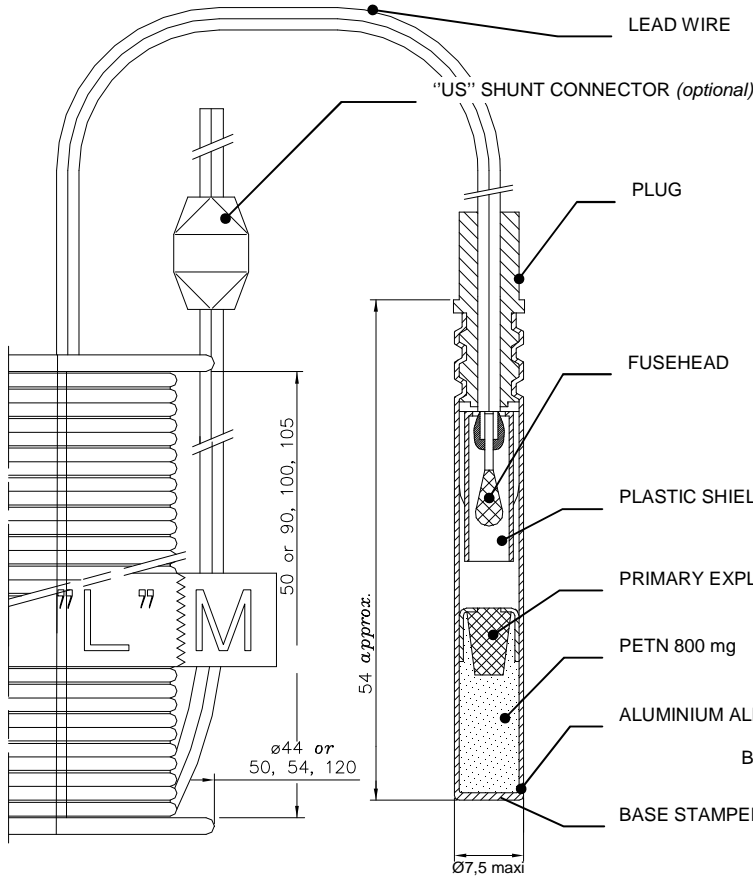
Material : galvanized steel  
 Diameter steel wire : 0.6 mm (AWG 23)  
 Electrical resistance : 0.35 Ω/m of duplex wire  
 Insulation diameter : 1.45 mm  
 Insulation : HDPE pink /green  
 Tensile strength : 240 N (64 lbs)  
 Abrasion resistance : compliant to EN13763-4(class II)  
 Wire length<sup>(\*)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

<sup>(\*)</sup> Contact us for specific applications

### FIRING TIME



Less than 1 ms for a 5 A firing current.



**DETONATOR  
 EXPLOSIVE  
 DANGER**

## 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  $\geq 80 \Omega$  must be used.

In case of pattern shot, maximum detonator quantity must comply with the table below:

daveydet®SR steel detonator						
Blaster serial firing capability with a 30 ohms firing line						
Number of det	Wire length in meter					
	10	15	20	30	40	50
1	✓	✓	✓	✓	✓	✓
2	✓	✓	✓	✓		
3	✓	✓	✓			
4	✓	✓				
5	✓					
6	✓					
7	✓					
8						

Total resistance of the detonator	
Length	$\Omega$
10	8.1
15	11.9
20	15.7
30	23.3
40	30.9
50	38.5

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

Wire Length	Quantity/case	Gross Weight	Explosive net weight
meter	Pieces	kg	g
10 m*	100	10	100
15 m	100	13	100
20 m	100	17	100
30 m	80	20.5	80
40 m	64	21.5	64
50 m	56	23.5	56

Box size: 445 x 230 x 300 mm (volume 0.031m<sup>3</sup>)  
 \* 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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