

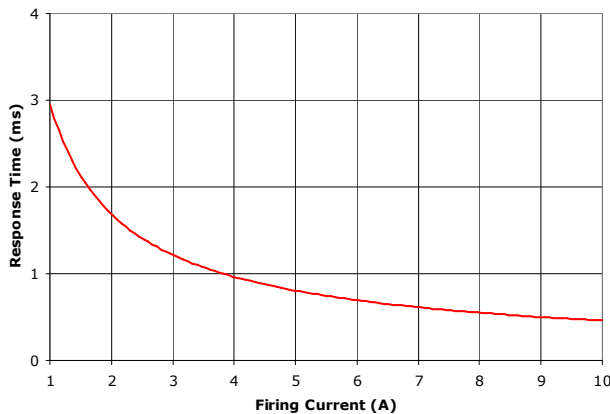
APPLICATION

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

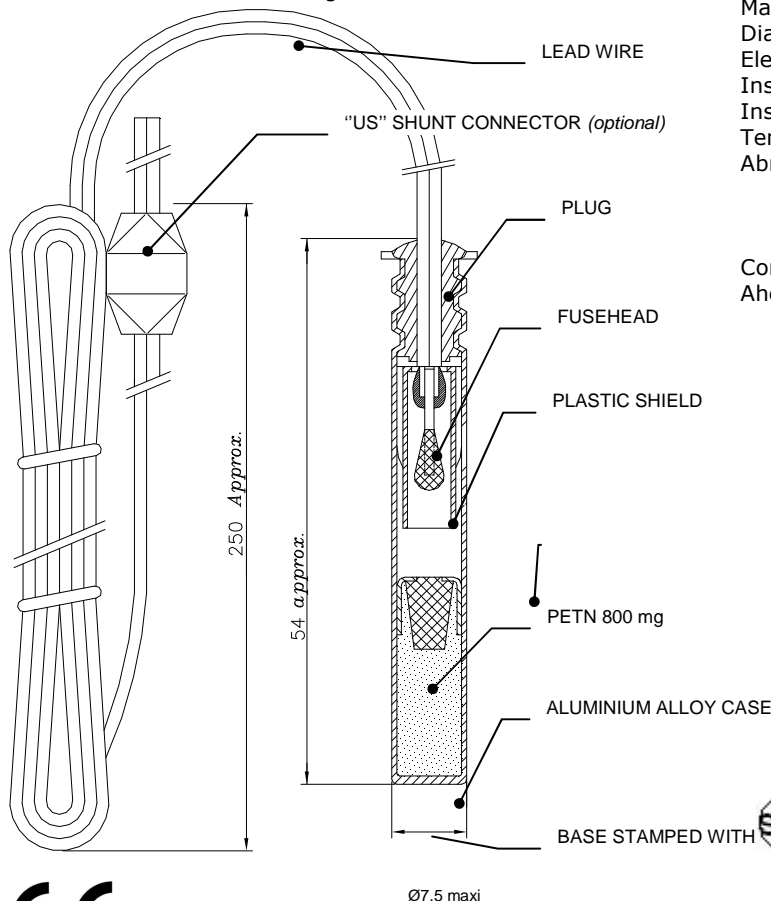
CONDITIONS FOR OPERATING^(*)

Temperature range : -20°C to +50°C
Watertightness (folded) : 7 bars (101 psi)
Watertightness (spooled) : 13 bars (188 psi)

FIRING TIME



Less than 1 ms for a 5 A firing current.



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

Folded version (3, 5, 8, 10 m):

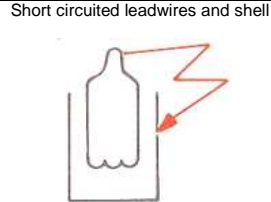
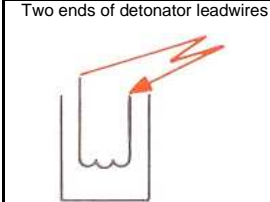
Material : copper
Diameter wire : 0.51 mm (AWG 24)
Electrical resistance : 0.17 Ω/m of duplex wire
Insulation diameter : 1.25 mm
Insulation : PVC pink /green
Tensile strength : 100 N (27 lbs)
Abrasion resistance : compliant to EN13763-4(class I)

On spool version (10, 15, 20, 30, 40, 50 m):

Material : copper
Diameter wire : 0.7 mm (AWG 21)
Electrical resistance : 0.095 Ω/m of duplex wire
Insulation diameter : 1.45 mm
Insulation : HDPE pink /green
Tensile strength : 230 N (62 lbs)
Abrasion resistance : compliant to EN13763-4(class II)

ELECTROSTATIC DISCHARGE RESISTANCE

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

Short circuited leadwires and shell	Two ends of detonator leadwires
	
Capacitor Discharge 2000 pF Applied voltage 11 kV	Capacitor Discharge 2000 pF Applied voltage 5 kV

**DETONATOR
EXPLOSIVE
DANGER**

BLACK SILK SCREEN MARKING



RECOMMENDATIONS FOR USE

daveydet®SR copper 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 copper 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.

CONDITIONS FOR STORAGE & TRANSPORT

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

CE TYPE AND TRANSPORT CLASSIFICATION

CE type test number : 0080.EXP.97.0069 C1
Transport classification : 1.1B – 1.4S
UN-number : 0030 - 0456

PACKAGING

Wire Length	Quantity/case (pieces)		Gross Weight (kg)		Explosive net Weight (g)	
	1.1 B	1.4 S	1.1 B	1.4 S	1.1 B	1.4 S
3m	600	400	17	14.5	600	400
5m	360	240	16	14.5	360	240
8m	240	160	16.5	15	240	160
10 m*	NA	100	NA	13	NA	100
15 m	NA	100	NA	17	NA	100
20 m	NA	100	NA	22	NA	100
30 m	NA	80	NA	25	NA	80
40 m	NA	64	NA	27	NA	64
50 m	NA	56	NA	28.5	NA	56

Box size: 445 x 230 x 300 mm (volume 0.031m³)
* Folded or on spool both available

Total resistance of the detonator		
Wire length	Cu Ø 0,51 mm folded Ω	Cu Ø 0,7mm spooled Ω
3 m	0,96	NA
5 m	1,3	NA
8 m	1,8	NA
10 m	2,15	1,4
15 m	NA	1,9
20 m	NA	2,35
30 m	NA	3,3
40 m	NA	4,25
50 m	NA	5,2