daveydet®SR steel

APPLICATION

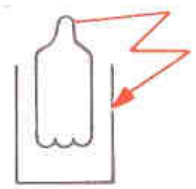
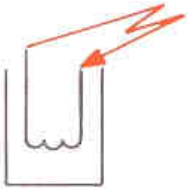
The **daveydet®SR steel** is a high strength electric detonator designed to provide accurate, secure and reliable initiation of all detonator sensitive explosives used in seismic surveys.

CONDITIONS FOR OPERATING(*)

Temperature range	: -20°C to +50°C
Watertightness	: 13 bars (188 PSI)
Watertightness (with wire insulation cut or split)	: 5 bars (72 PSI)

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	**Capacitor Discharge** 2000 pF
Serial resistance 0 ohm	**Serial resistance** 0 ohm
Applied voltage 10 kV	**Applied voltage** 8 kV

FUSEHEAD CARACTERISTICS

Medium Intensity fusehead N57 TS.

Fusehead resistance:	0.32 +/- 0.10 Ohm
No fire current (Io):	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

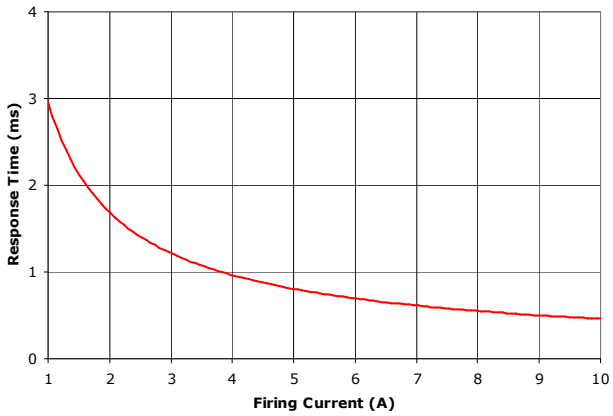
Material	: Aluminium alloy
Output	: #8 cap strength
PETN charge	: 800 mg
Primary charge	: 200 mg

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.

NITRO-BICKFORD®

daveydet®SR steel

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:

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	Ω
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 0.031m³)
** also available in folded wire configuration*

NITRO-BICKFORD

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