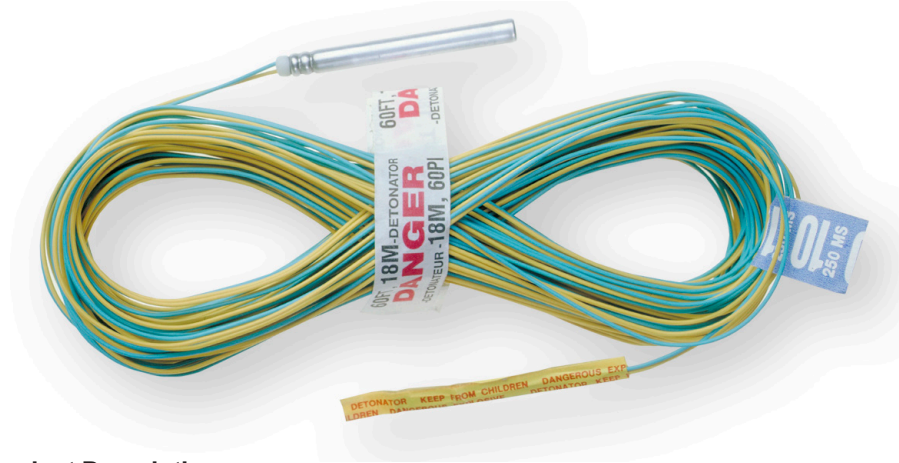


Electric Super™ SP

Technical Information



Electric Millisecond Delay Detonator



Product Description

ELECTRIC SUPER SP is a high strength, millisecond delay electric detonator featuring 26 delay periods designed to provide precision and accuracy in all delay periods. The ELECTRIC SUPER SP legwires are insulated with a superior polyolefin material, which offers excellent resistance to cuts, abrasion, oil, low temperature and high humidity. The Dyno Nobel shunt protects the factory stripped wire ends from corrosion and shields them from stray current. Easy-to-read delay tags display the delay number and nominal firing time of each period near the legwire ends.

Field results with the ELECTRIC SUPER SP have shown impressive improvements in both vibration control and fragmentation.

Recommended firing current:

- Series wiring: a minimum of 3 amps AC or 1.5 amps DC
- Parallel wiring: a minimum of 1 amp AC or DC per detonator
- Series-in-parallel wiring: a minimum of 2 amps AC or DC per series

The maximum recommended continuous firing current is 10 amps per detonator.

Properties

MSDS
#1076

Shell Material	Aluminum Copper also available (custom)
Shell Length (range)	63.5 - 94 mm 2.5 - 3.7 in
Maximum Water Depth	76 m 250 ft
Shelf Life Maximum	3 years (from date of production)
Maximum Usage Temperature	+ 66°C (150°F)
Net Explosive Content per 100 units	0.0885 kg 0.1947 lb

Delay Period	Nominal Firing Time (msec)	Delay Period	Nominal Firing Time (msec)	Delay Period	Nominal Firing Time (msec)
0	9	9	225	18	450
1	25	10	250	19	475
2	50	11	275	20	500
3	75	12	300	22	550
4	100	13	325	24	600
5	125	14	350	26	650
6	150	15	375	28	700
7	175	16	400	30	750
8	200	17	425		

Hazardous Shipping Description

Detonator, Electric, 1.4B, UN 0255 II, EX 9207060D



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Application Recommendations

- **NEVER** use the **ELECTRIC SUPER SP** with other types of Dyno Nobel electric detonators or electric detonators from another manufacturer. Wiring different brand electric detonators together in a blast circuit may result in misfires and is in violation of federal regulations. Even though some types of Dyno Nobel electric detonators are electrically compatible, they should never be planned to be used together as a standard blasting practice. Where special circumstances demand a larger number of standard delay periods, always contact a Dyno Nobel representative for specific recommendations before planning the blast design.
- **NEVER** use electric detonators near radio frequency transmitters unless in accordance with IME SLP 20.

Radio Frequency Hazard Alert

- When blasting with electric detonators, no personal communication equipment of any type should be on the blast site regardless of whether it is on or off. This includes but is not limited to: portable / hand held radios, radio modems, pagers, mobile and cell phones.
- Radio-Frequency (RF) transmitters include but are not limited to: AM and FM radio; television, radar; cellular phones and other devices that are cellular based (i.e., on-board vehicle systems like “On Star”); wireless data acquisition systems; personal data devices such as “Palm Pilots” and “Pocket PCs” with built-in cellular phones or communication systems; Pagers; and Global Positioning Systems (GPS) base stations.
- Refer to the Institute of Makers of Explosives Safety Library Publication #20 for distance / wattage parameters and guidance when using two-way radios and cell phones near electric detonators.

Transportation, Storage and Handling

- ELECTRIC SUPER SP must be transported, stored, handled and used in conformity with all federal, state, provincial and local laws and regulations.
- For maximum shelf life (3 years), ELECTRIC SUPER SP must be stored in a cool, dry, well ventilated magazine. Explosive inventory should be rotated. Avoid using new materials before the old. For recommended good practices in transporting, storing, handling and using this product, see the booklet “Prevention of Accidents in the Use of Explosive Materials” packed inside each case and the Safety Library

Publications of the Institute of Makers of Explosives.

- The disposable shipping tray is not part of the legal shipping package and is used only to prevent “relative motion” while in transit. If the tray is not used, it is mandatory that all explosives shipments are properly blocked and braced.

Packaging

Legwire Length		Nominal Resistance (ohms) copper wire	Quantity per	
m	ft		carton or case ^c	case or shipping tray
4	12	1.92 ^a	25	250
5	16	2.03 ^a	25	250
7	24	2.25 ^a	25	250
9	30	2.40 ^a	15	150
12	40	2.66 ^a	10	100
18	60	3.19 ^a	8	80
25	85	3.85 ^b	10	40

• Length rounded to nearest whole meter.

^a #21 AWG, single kirked ^b #21 AWG, duplex spooled ^c 10 shipping cases per disposable shipping tray
NOTE: Products are available in a variety of wire lengths. Custom lengths are subject to surcharge and may require longer than usual lead times. Check with your Dyno Nobel representative should you have any questions.

Legwire material	Legwire color
Copper wire (single)	Turquoise & Yellow
Copper wire (duplex)	Turquoise
Copper-clad Iron (single)	Both Orange

Case Dimensions

4 - 18 m	26 ½ x 16 x 10 cm	10 ¾ x 6 ¼ x 3 ⅞ in
25 m	52 x 41 x 17 cm	20 ¾ x 16 ¼ x 6 ½ in

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