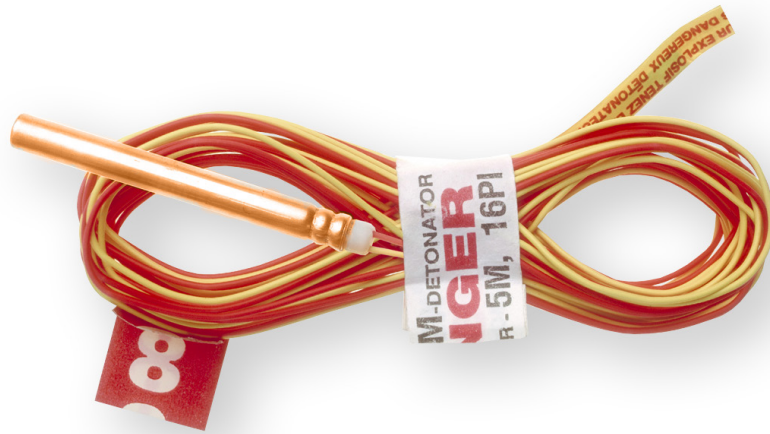


# ELECTRIC SUPER™ LP

Technical  
Information



## Electric Long Period Delay Detonator



### Product Description

ELECTRIC SUPER LP is a high strength, long period delay electric detonator featuring 19 delay periods designed to provide precision and accuracy in all delay periods with no overlap. ELECTRIC SUPER LP 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 near the legwire ends.

ELECTRIC SUPER LP detonators are specifically designed to provide the long delay times necessary for improved relief and fragmentation in underground mining (non-coal) and construction applications such as drift development, raise, shafts, slopes and tunnels. ELECTRIC SUPER LP can also be used for certain surface blasting applications in which long period delays are advantageous.

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

SDS  
#1076

<b>Shell Material</b>	Copper
<b>Shell Length (range)</b>	73.6 - 96.5 mm 2.9 - 3.8 in
<b>Legwire Material</b>	Copper wire (single)
<b>Legwire Color</b>	Red & Yellow
<b>Maximum Water Depth</b>	76 m (250 ft)
<b>Shelf Life Maximum</b>	3 years (from date of production)
<b>Maximum Usage Temperature</b>	+ 66°C (150°F)
<b>Net Explosive Content</b>	0.0885 kg per 100 units
	0.1947 lb

Delay Period	Nominal Firing Time (msec)	Delay Period	Nominal Firing Time (msec)	Delay Period	Nominal Firing Time (msec)
1	25	7	1200	13	2900
2	200	8	1400	14	3300
3	400	9	1600	15	3800
4	600	10	1900	16	4400
5	800	11	2200	17	5100
6	1000	12	2500		

### Hazardous Shipping Description

Detonator, Electric, 1.4B, UN 0255 PG II  
EX 1992070060D



# ELECTRIC SUPER™ LP

## Technical Information



### Application Recommendations

- **NEVER** use the ELECTRIC SUPER LP 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 LP 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 LP 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		Part Number	Wire Configuration	Nominal Resistance (ohms) <sup>a</sup>	Quantity per	
m	ft				Carton	Tray <sup>b</sup>
4	12	9300012**H	Kirked	1.92	25	250
5	16	9300016**H	Kirked	2.03	25	250
6	20	9300020**H	Kirked	2.14	25	250

Length rounded to nearest whole meter.

<sup>a</sup> #21 AWG, single kirked

<sup>b</sup> 10 shipping cases per disposable shipping tray

\*\* Delay period (use 0 first if less than period 10)

NOTE: Custom lengths, available upon request, are subject to a surcharge and require longer lead times. Check with your Dyno Nobel representative should you have any questions.

### Case Dimensions

26 ½ x 16 x 10 cm

10 ¾ x 6 ¼ x 3 ⅞ in

**Product Disclaimer** Dyno Nobel Inc. and its subsidiaries disclaim any warranties with respect to this product, the safety or suitability thereof, or the results to be obtained, whether express or implied, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND/OR OTHER WARRANTY. Buyers and users assume all risk, responsibility and liability whatsoever from any and all injuries (including death), losses, or damages to persons or property arising from the use of this product. Under no circumstances shall Dyno Nobel Inc. or any of its subsidiaries be liable for special, consequential or incidental damages or for anticipated loss of profits.

### Dyno Nobel Inc.

2795 East Cottonwood Parkway, Suite 500, Salt Lake City, Utah 84121 USA  
Phone 800-732-7534 Fax 801-328-6452 Web www.dynonobel.com

**DYNO**  
Dyno Nobel

Groundbreaking Performance™