

ELECTRIC SUPER™ LP

Electric Millisecond Delay Detonator - New Series

Properties

SDS
#1178

| | |
|--|-----------------------------------|
| Shell Material | Aluminum |
| Shell Length | 60.9 to 83.8 mm 2.4 to 3.3 in |
| Maximum Water Pressure | 60 PSI 8 hrs |
| Shelf Life Maximum | 5 years (from date of production) |
| Maximum Usage Temperature | 66°C (150°F) |
| Net Explosive Content per 100 units | 0.10 kg / 0.22 lbs |

| Delay Period | Nominal Firing Time (msec) | Delay Period | Nominal Firing Time (msec) |
|--------------|----------------------------|--------------|----------------------------|
| 0 | 0 | 7 | 3500 |
| 1 | 500 | 8 | 4000 |
| 2 | 1000 | 9 | 4500 |
| 3 | 1500 | 10 | 5000 |
| 4 | 2000 | 11 | 5500 |
| 5 | 2500 | 12 | 6000 |
| 6 | 3000 | 13 | 6500 |

Hazardous Shipping Description

- Detonator, Electric, 1.4B, UN 0255 EX-2010080268 Kirked



PRODUCT DESCRIPTION

ELECTRIC SUPER LP is a high strength, millisecond delay electric detonator featuring 13 delay periods designed to provide precision and accuracy in all delay periods. The ELECTRIC SUPER LP legwires are HDPE insulated, which offers excellent resistance to cuts, abrasion, oil, low temperature and high humidity. 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 LP have shown impressive improvements in both vibration control and fragmentation.



APPLICATION RECOMMENDATIONS

- Recommended firing current:
 - Series wiring: a minimum of 2 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 1.5 DC per series
- The maximum recommended continuous firing current is 10 amps per detonator.
- **NEVER** use the ELECTIC 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.



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Properties Cont.

Packaging

| Length | | Case Weight | | Wire Configuration | Quantity per | | Product Code |
|--------|----|-------------|-----|--------------------|--------------|---------|--------------|
| m | ft | lb | kg | | Case | NEQ (g) | |
| 4.9 | 16 | 6.1 | 2.8 | Short Fold | 40 | 40 | ECLPxxxx016 |
| 6.1 | 20 | 6.6 | 3.0 | Short Fold | 40 | 40 | ECLPxxxx020 |
| 7.3 | 24 | 6.8 | 3.1 | Short Fold | 40 | 40 | ECLPxxxx024 |
| 9.1 | 30 | 6.6 | 3.0 | Long Fold | 15 | 15 | ECLPxxxx030 |
| 12.2 | 40 | 6.6 | 3.0 | Long Fold | 15 | 15 | ECLPxxxx040 |
| 18.3 | 60 | 6.6 | 3.0 | Long Fold | 10 | 10 | ECLPxxxx060 |
| 24.4 | 80 | 7.7 | 3.5 | Long Fold | 10 | 10 | ECLPxxxx080 |

All ELECTRIC SUPER LP 24' and less, have 22 AGW (0.6 mm) copper wire
 All ELECTRIC SUPER LP 30' and more, have 20 AWG (0.8 mm) copper wire
 xxxx = delay time in milliseconds

Electrical Data

| | |
|-------------------------|-------------|
| No Fire Current | 0.25 amps |
| All Fire Current | 1.00 amps |
| Series Ignition Current | 1.50 amps |
| No Fire Impulse | 2.5 mJ/ohms |
| All Fire Impulse | 5.5 mJ/ohms |

Electrostatic Sensitivity

| | |
|----------------------|--------------------|
| Double Wire to Shell | 10 kV/300 pF/15 mJ |
| Pin to Pin | 10 kV/300 pF/15 mJ |

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

- ELECTIC 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 (5 years), ELECTIC 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.

Case Dimensions

286 x 194 x 127 mm 11¼ x 7⁵/₈ x 5 in

ADDITIONAL INFORMATION – Visit dynonobel.com for Brochures and Case Studies related to this product.

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