

PREMIER

Long Delay Detonators



Product Description : Premier Long Delay Detonator consist of a aluminum shells filled with desired quantity of PETN as base charge and a mixture of NHN on primary charge. On top of the primary charge, a pyrotechnique delay element is placed to provide requisite delay.

The flame from the fuse head initiates the prime charge which in turn detonates the base charge.

The shell is fitted with an electric fuse head having firing precision and consistency. The fuse head assembly is crimped to the detonator shell using PVC plug that offers a good resistance to water ingress. The PVC coated lead wires have very good abration resistance.

Application: For delay blasting in underground tunnels, drifting, shaft sinking etc. The longer delay period allows sufficient time for creation of free face in restricted areas such as tunnels.

Classification:

PESO : Class 6, Division 3

UN No. Class 1.1 B, U N No. 0030

Safety: The cases should be handled carefully not to cause accidental initiation by intense impact, friction or heat.

Never force a detonator into explosives cartridge. Always use a pricker made of non-sparking material to pierce the cartridge while priming.

Never hold the detonator shell while unfurling the mine for use. Always hold the lead mines 5 cms away from the crimped portion to avoid sudden pressure coming on the fuse head assembly.

Do not handle electric detonators while wearing Woolen or Synthetic clothes or in the vicinity of cell phones, walkie – talkie etc.

Always keep the ends of lead wires or blasting cable shunted and open just prior to connections. Disconnect the firing cable from the exploder if circuit requires rechecking.

Do not carry out charging of explosives during an approaching storm or when there is lightening near the blast area.

Do not attempt to fight explosive fire.

Specifications

Shell Material	Aluminium
Shell Length	42 mm to 77 mm
Detonator strength	No.8
Delay Range	0 to 20
Delay Time	25 ms interval between delays
Shelf Life	2 years under recommended storage conditions.
No fire current	180 mA for 300 seconds
Minimum All fire currents	0.8A
Minimum series firing current	1.5 A
Firing Impulse	2.4 mWs / ohm
Fuse head resistant	1.6 to 2.4 ohm
Lead wire material	Galvanised Iron
Lead Wire Colour	Green
Standard lead wire length	3 mtrs & 5 mtrs
Base wire guage / dia	25.5 SWG / 0.487 ± 0.02 mm
Lead wire resistance	0.8 ohms/ mtr
Identification mark	PEL Mark on plug

Delay Timing 300 Ms Interval

Delay No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Delay Timing (ms)	0	300	600	900	1200	1500	1800	2100	2400	2700	3000	3300	3600	3900	4200	4500	4800	5100	5400	5700	6000

Delay Timing 500 Ms Interval

Delay No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Delay Timing (ms)	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000

Packaging

25 Nos are made into a bundle ensuring that all the lead wires ends are shunted and folded within the bundle. Two such bundles are wrapped in a kraft paper to form a packet. Required number of packets are placed in a corrugated fiber board case.

Wire Length

No. of Detonators / case

3 mtr	800
5 mtr	600

Advantages

Large range of delays provide flexibility in designing blasting pattern for large size blasting

Recommendations for use:

Long Delay detonators should only be used by personnel who have adequate knowledge in handling and use of explosives.

Long Delay Detonators contain sensitive components and must be handled with care resistance at all times.

Not to be used in a gaseous environment or where there is danger of coal dust explosion.

While using in a circuit, the total resistance to be monitored to ensure recommended in flow of current.

Do not use 2 manufacturers product in the same blast.



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