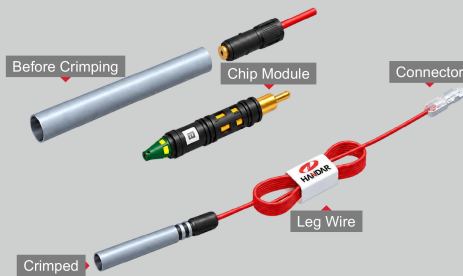


1. Description

The fusehead-free quick-connect industrial electronic detonator is assembled by quickly mating and crimping the connector on the electronic plain detonator to the connector at the end of the leg wire.

Electronic Detonator Structure



The Chip Module is pressed into the plain detonator to form an electronic plain detonator.

Integrated Logger & Blaster



2. Applications

For high-precision blasting in non-coal mines, shaft and tunnel development and tunnel excavation where there is no risk of combustible gas or mine dust explosions.

3. Key Benefits

Superior resistance to static electricity, stray currents and radio-frequency interference; IoT-based intelligent control and authorized firing.
The sealed structure retains the compact size of a plain detonator, making shipping, storage and use more convenient and safer.
The fusehead-free design eliminates dependence on fusehead quality, improving vibration and impact resistance and delay accuracy.
Leg wires and detonator bodies can be stored separately, reducing the space occupied by dangerous goods and simplifying storage and shipping.
Export supply comprises just electronic plain detonators (dangerous goods) and leg wires (non-dangerous goods), facilitating local production.
The absence of a fusehead makes the product more environmentally friendly.

4. Testing Items and Technical Properties

Testing Item	Technical Properties	Testing Item	Technical Properties
Delay Time	16000 ms; minimum delay interval 1 ms.	Anti-Static Performance	No explosion under wire-to-wire or wire-to-shell discharge using a 500 pF capacitor, 5000 Ω series resistor and 25 kV charging voltage.
Delay Accuracy	≤ 200 ms: error within ± 2 ms; 200-1000 ms: relative error within $\pm 1\%$; >1000 ms: relative error within $\pm 0.5\%$.	Water Resistance	Normal initiation after immersion at 0.2 ± 0.02 MPa water pressure for 4 h.
Leg Wire Tensile Strength	Under a static tensile load of 20 kg (196 N) for 5 min, the leg wire core and insulation must not break or suffer damage.	Leg Wire Bending Resistance	At -20°C to 55°C , the leg wire remains conductive after 10 repeated bends, with no damage, brittleness or cracking.
Leg Wire Abrasion Resistance	A 1500 g weight acts vertically on the leg wire insulation, positioned between the abrasive belt and the weight. Abrasion distance: ≥ 60 mm.	Leg Wire Resistance	Resistance per metre of a single conductor: $\leq 1 \Omega$.
Vibration Resistance	Jolt tester: cam speed (60 ± 1) r/min; drop height (150 ± 2) mm; duration 10 min. No explosion, structural loosening or damage during the test; normal initiation afterwards.	Initiation Capacity	Penetrates a 5 mm lead plate; hole diameter ≥ 9 mm.
		Maximum Load per Logger & Blaster	500 standard-type detonators.
		Shelf Life	2 years

5. Recommendations for Use

01	Select industrial electronic detonators with leg wire specifications suited to the blasting conditions.
02	Individually test each electronic detonator before loading it into a blasthole. Use only detonators that pass the test.
03	Avoid rough loading, stemming and forceful pulling to prevent detonator damage and accidents.
04	Set delays and connect detonators strictly according to the blast design. Do not reuse the harness wire used for network connections, as exposed conductors may cause short circuits.
05	Keep the leg wire insulation intact during network connection; exposed conductors may cause short circuits. Do not exceed the specified tensile, compressive or abrasion resistance limits.
06	Check the network with the logger & blaster. Proceed with the firing sequence only after a successful check. If the check fails, resolve the faults indicated by the device, then retest the network. Proceed only when the network passes.

6. Packaging

Boxes per Carton	Units per Box	Units per Carton	Carton Weight (kg, ± 0.5)
16	50	800	9

Note Electronic detonator leg wires are supplied as general cargo in accordance with customer requirements.

7. Storage and Shipping

UN No.	Product Name	Proper Shipping Name	Classification Code
0511	Modular Standard Electronic Detonator Initiating System	Detonators, electronic, for blasting	1.1B

Storage Store in a magazine approved for Class 1.1B explosives or higher.

8. Precautions

01	Handle with care during shipping, storage and use. Do not subject the product to impact, compression, throwing or heating.	04	Network blasting is prohibited during thunderstorms.
02	In case of accidental fire, use only water or a water-based extinguisher. If there is a risk of explosion, evacuate immediately and move nearby personnel to a safe area.	05	Store any detonators remaining after blasting in accordance with the applicable regulations.
03	Do not dismantle electronic detonators without authorization, as this may cause an explosion.	06	For matters not covered here, comply with the relevant national laws, regulations and standards.

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