

## DEFENSE

### MULTI-APPLICATIONS DETONATING CORDS

Pyroalliance designs and manufactures a complete family of detonating cords dedicated to transmit a pyrotechnic signal, induce an ultra-short time delay or used for structure weakening / breakage.

Those can be made of different metallic materials and various explosive types depending on the application requirements. Pyroalliance has the ability to propose detonating cords with specific plastic coating and/or armoured braiding.

More generally, Pyroalliance delivers complete pyrotechnic chains adapted to its customers' needs. They are designed and manufactured under Pyroalliance design authority.

## MULTI-APPLICATIONS DETONATING CORDS

### Operating mode

Detonating cords are used to propagate a detonation from one end to the other with a typical average speed of ~7000 m/s. Because of this speed, detonating cords are very appropriate for fast transmission of signals. And thanks to the mechanical effects of detonation, those products are also very relevant for weakening or breakage of structures and can appropriately be incorporated into the design of separation solutions.

### Benefits

Many references of detonating cords can be made available that will be selected on the basis of the targeted application and their associated environmental conditions.

Geometrical section can vary in diameter from ~1.5mm to ~5mm for detonating cords with traditional circular section. Flat section is also possible for specific applications.

Depending again on the considered application, detonating cords can be delivered in different conditioning sets from simple straight strands of few centimetres to ~300 meters long rolls.

The metallic envelope can be made of lead or aluminium and the explosive core is most generally made of RDX, HMX or HNS.

For transmission functions, detonating cords are covered by a specific plastic coating and/or armoured braiding to form a transmission line.

### Applications

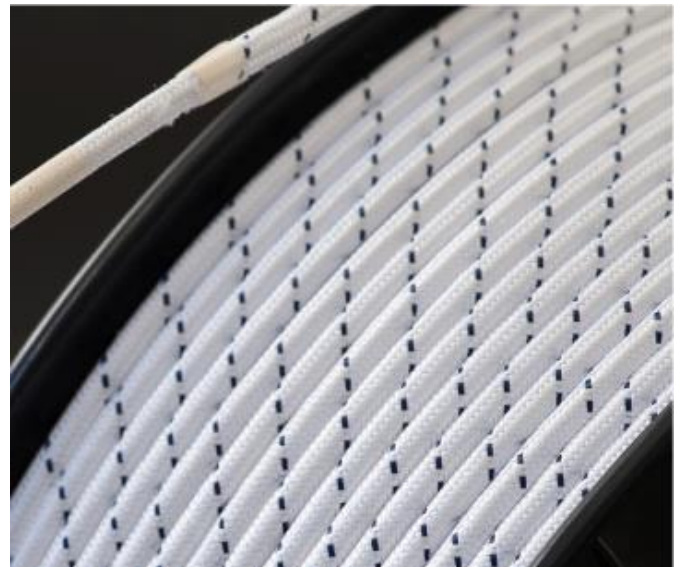
- Detonating transfer lines
- Pyrotechnic delays for military warheads
- Canopy severance
- Frangible joint assembly
- Structure weakening or breakage

### Typical performances and features

Detonating velocity*:	~7000 m/s
External Diameter**:	~Ø 1.5 to ~Ø 5mm
Ignition mode:	Detonation shock
Operating temperature:	Down to ~-80°C Up to ~+100°C
Linear load	~0.5g/m up to ~10g/m Depending module
Reliability	Range of 1-10 <sup>-6</sup>
Bending radius	Down to ~3mm with a ~Ø 1.5 transmission cord

\* Depending on the product envelop

\*\* Please contact us for off the shelf products



Pyroalliance's detonating cords offer multiple coating / braiding options for various military applications

#### Transport regulation:

- UN Number : UN 0288
- Proper shipping name : CHARGES, SHAPED, FLEXIBLE, LINEAR
- Division : 1.1
- Compatibility group : D

Not restricted by ITAR regulation

### For more information

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