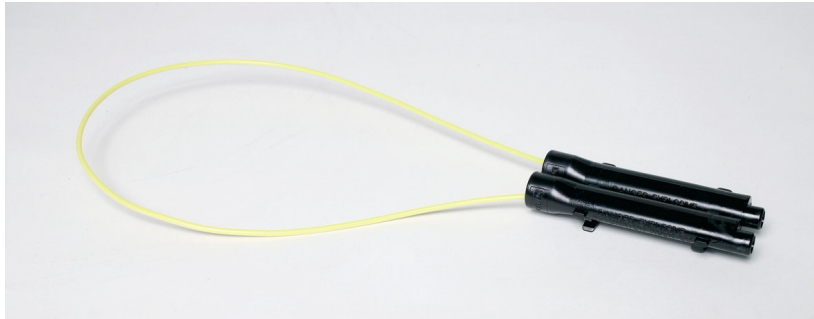


# NONEL<sup>®</sup> MS Connector

Technical  
Information



## Description

NONEL<sup>®</sup> MS Connectors are a surface delay detonator series, featuring 6 (six) standard delays.

## Application

The MS Connector series provides an excellent surface delay system appropriate for mining and construction applications. The MS Connector is used on the surface in combination with detonating cord to provide millisecond surface delay timing.

## Features & Benefits

- The MS Connector is bi-directional providing a redundant two-path initiation system. It is quick and easy to use and can be readily disconnected when required.
- The MS Connector detonator is fully enclosed in a unique plastic connector block, which has been designed to significantly reduce shrapnel output.
- The Dyno Nobel NONEL shock tube exhibits excellent handling characteristics.

## Properties

**Explosives Class: 1.1B**

**U.N. No: 0360**

Length (mm)

650

NONEL tube colour

Yellow

NONEL tube diameter (mm)

3.0 (STD)

NONEL tube VOD (m/sec)

2100 ± 300

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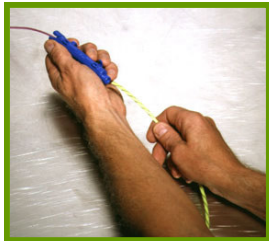
# NONEL<sup>®</sup> MS Connector

Technical  
Information

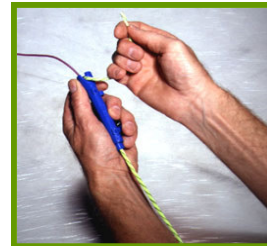


## Application of NONEL MS Connector

The NONEL MS Connector Series is used to provide surface delays when using detonating cord trunk lines. The following example demonstrates how detonating cord is hooked into a NONEL MS Connector.



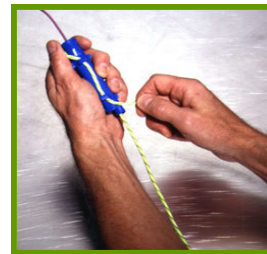
1. Select the location in the trunk line to insert the NONEL MS Connector and cleanly cut the detonating cord. The cut end of the detonating cord is inserted in the funnel shaped hole at the end of the plastic block. It is marked with an arrow and the word 'IN'.



3. Bend back the free end of the detonating cord and lock it into the notch on the end of the plastic block.



2. Push approximately 150mm of the free end of the detonating cord through the block.



4. Secure the free end of the detonating cord under the two retaining clips on the side of the plastic block. This provides a locking mechanism and ensures that the free end of the detonating cord cannot interfere with the outgoing NONEL tube. Once the detonating cord is secured in the first connector block, the other end of the detonating cord trunk line is connected and secured in the same manner to the other plastic block on the NONEL MS Connector unit.

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## Recommendations

**Use** - Once all holes have been tied into the trunk line, locate the MS Connector closest to the hole being delayed. The end of the detonating cord is fed through the end of the connector block and securely fastened in the locking notch and retaining clips. MS Connectors are only recommended for use with 3.6 g/m and 5 g/m detonating cord.

**Water Resistance** - The MS Connector series provides excellent water resistance.

**Temperature Range** - The MS Connector series can be safely used for temperatures ranging between -40°C and +70°C.

**Shelf Life** - The recommended storage life in original packaging is two (2) years under ideal conditions. Accuracy of NONEL delay detonators may deteriorate with age and stocks should be rotated regularly.

## Packaging

**Units per case** 200

Designation	Delay time (Milliseconds)	Colour code
MS Connector 17	17	Yellow
MS Connector 25	25	Red
MS Connector 42	42	White
MS Connector 67	67	Blue
MS Connector 109	109	Black
MS Connector 176	176	Orange

## Safe handling, transportation & storage

**First Aid** - Detailed first aid information regarding this product is contained on the relevant Dyno Nobel Material Safety Data Sheet.

**Safety** - All explosives are classified as dangerous goods and can cause personal injury and damage to property if used incorrectly.

**Transportation and Storage** - All explosives must be handled, transported and stored in accordance with all relevant regulations. Stock should be rotated such that older product is used first.

The information and suggestions contained in this document concern explosive products that should only be dealt with by persons having the appropriate technical skills, training and licence. The results obtained from the use of such products depend to a large degree on the conditions under which the products are stored, transported and used.

While Dyno Nobel makes every effort to ensure the details contained in the document are as accurate as possible, the conditions under which the products are used are not within its control. Each user is responsible for being aware of the details in the document and the product applications in the specific context of the intended use. If technical advice is required in the specific application of the products then you should contact Dyno Nobel for assistance.

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