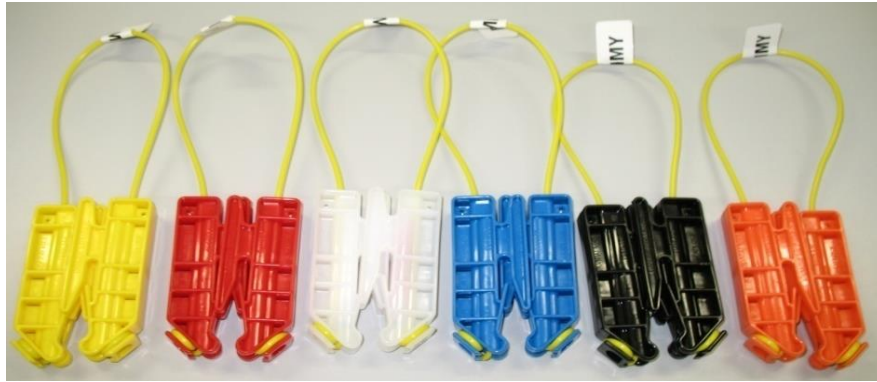


NONEL® MS Connector™

Technical
Information



Description

NONEL MS CONNECTOR units are bi-directional units that consist of a 46cm length of shock tube with a detonator crimped to each end. The detonators are housed in a colour-coded plastic connector block designed to facilitate easy attachment to detonating cord. Colour-coded delay tags prominently display the nominal firing time.

NONEL MS CONNECTOR units are used to provide surface delay time between individual or multiple blastholes for blasting applications in which detonating cord is used as the primary initiation system in today's mining, quarry and construction industries. NONEL MS Connectors are a surface delay detonator series, featuring 6 (six) standard delays.

Features and Benefits

The NONEL MS CONNECTOR is bi-directional providing a redundant two-path initiation system.

- Quick and easy to use
- Easy to disconnect
- Excellent handling characteristics

Properties

| Delay Time (msec) | Connector Block Colour |
|-------------------|------------------------|
| 17 | Yellow |
| 25 | Red |
| 42 | White |
| 67 | Blue |
| 109 | Black |
| 176 | Orange |

Hazardous Shipping Description

Detonator assemblies, Non-electric, 1.1B, UN 0360



Packaging

Packed 200 to a case.

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Application Recommendations

ALWAYS use Primacord® 4 (3.6 g/m; 18 gr/ft) coreload detonating cord or higher with the NONEL MS CONNECTOR detonator.

ALWAYS protect the NONEL MS CONNECTOR block and shock tube from impact or damage. The surface connectors contain detonators and are subject to detonation caused by abuse such as impact. Shock tube which has been cut, ruptured or damaged may cause misfires.

ALWAYS use in-hole delays to minimize the chance of surface cut-offs with NONEL MS CONNECTORS.

ALWAYS trim excess lengths of detonating cord from the NONEL MS CONNECTOR block after connecting each block to the detonating cord. Tails of detonating cord lying across or adjacent to the shock tube between the connector blocks will interfere with the functioning of the assembly and may cause misfires.

ALWAYS store in a cool, dry, well-ventilated magazine for maximum shelf life.

ALWAYS rotate explosive inventory to ensure old stock is used before old.

NEVER connect NONEL MS CONNECTOR units to detonating cord trunklines until all blastholes have been primed and loaded and the blast site has been cleared of personnel and equipment.

NEVER drive any equipment over NONEL MS CONNECTOR blocks, detonating cord or shock tube.

Water Resistance - The NONEL MS Connector series provides high water resistance.

Ground Temperature - The NONEL MS Connector series can be safely used in ground with a temperature range of -40°C to +70°C.

Shelf Life - For maximum shelf life (3 years), NONEL MS Connectors must be stored in a cool, dry, well ventilated magazine. Explosive inventory should be rotated. Avoid using new materials before the old.

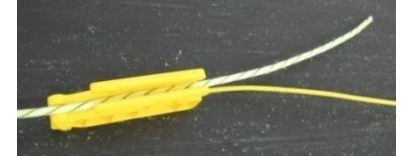
Use Instructions

These instructions apply to detonating cord with a core-load of 3.6 g/m and higher.

First, select the location in the detonating cord trunkline to insert the NONEL MS Connector and cut the detonating cord. Then wrap the cord around the cleats in the following manner:

1. Place the detonating cord in the groove of the connector block, with about 20 cm protruding out the same end of the connector block as the shock tube lead.
2. Wrap the tail of the detonating cord around both cleats of the connector block so that the detonating cord snaps into the securing feature of the connector block.
3. Wrap the tail of the detonating cord around both cleats again, so the cord snaps into the securing feature of the connector block, locking the cord in place.

Repeat the above steps to connect the other end of the detonating cord trunkline to the second connector block. Once both connections are made, cut the detonating cord tails to ensure they do not come in contact with or come near the shock tube lead.



Step 1 > Cord in centre groove



Step 2 > Cord wrapped around one cleat



Step 3 > Cord wrapped around both cleats



Incorrect connection > Cord not in centre groove

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Safe handling, transportation and storage

First Aid – You can find detailed first aid information on the relevant Dyno Nobel Safety Data Sheet. Refer to www.dynonobel.com for more information if required.

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.

Product Disclaimer The explosive products discussed in this document should only be handled by persons with the appropriate technical skills, training and licences. While Dyno Nobel has made every effort to ensure the information in this document is correct, every user is responsible for understanding the safe and correct use of the products. If you need specific technical advice or have any questions, you should contact your Dyno Nobel representative. This information is provided without any warranty, express or implied, regarding its correctness or accuracy and, to the maximum extent permitted by law, Dyno Nobel expressly disclaims any and all liability arising from the use of this document or the information contained herein. It is solely the responsibility of the user to make enquiries, obtain advice and determine the safe conditions for use of the products referred to herein and the user assumes liability for any loss, damage, expense or cost resulting from such use. © DYNO, GROUNDBREAKING PERFORMANCE, NONEL, PRIMACORD and the Loop device are registered trademarks of the Dyno Nobel / Incitec Pivot Group.™ MS CONNECTOR is a trademark of the Dyno Nobel / Incitec Pivot Group. © Dyno Nobel Asia Pacific Pty Limited 2015. Reproduction without permission strictly prohibited.