40 HMX LS RIBBON PERFACORD®
Oil and Gas Well Application

Description: HMX explosive core
Shrink resistant braid (yellow)
Nylon jacket (green)

Application: Special production techniques produce HMX ribbon textile detonating cord. This cord is designed using shrinkage resistant components. It is designed for use in RTG (retrievable tubing gun) perforating systems. It can be deployed within the normal temperature operating range for HMX based explosives (see graph) in carrier based systems. Ribbon cord requires a reduced carrier clearance allowing use of a larger designed shaped charge. *Users must satisfy themselves as to a product's suitability for an exposed application.*

<table>
<thead>
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<th>SPECIFICATIONS</th>
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<tr>
<td>Explosive: 40 gr/ft nominal (8.50 g/m)</td>
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<tr>
<td>Core Load: 32 gr/ft min. (6.64 g/m)</td>
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<tr>
<td>Detonation: 7800 m/s nominal (25,590 ft/s)</td>
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<td>Velocity: 7100 m/s min. (23,294 ft/s)</td>
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<tr>
<td>Diameter: 0.218” width max. (5.53 mm)</td>
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<tr>
<td>0.130” height max. (3.30 mm)</td>
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<td>Shrinkage: 1% Max. @ 325°F 24 Hrs</td>
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<td>Jacket Thickness: 0.008” min.</td>
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<td>Lap Joint:</td>
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<td>Sensitive: Yes</td>
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Temperature resistance is based upon the manufacturer's laboratory tests in air at ambient pressure only. No claim, representation, or warranty of any kind is made, expressed or implied, as to the temperature resistance of this product under actual conditions. Users must satisfy themselves as to the product's suitability for a specific application.

*Shrinkage* is defined as core "pull-back" inside the outer jacket.

*Velocity* was tested unconfined, at ambient pressure, and after "cool down".

**Warning: Use of this product by persons who lack adequate training experience and supervision may kill or injure.**
Application Recommendations

This product is not recommended for exposure to well bore fluids.
NEVER use PERFACORD® 40 HMX LS Ribbon in exposed well bore conditions.
ALWAYS cut PERFACORD® 40 HMX LS Ribbon detonating cord with a sharp knife.
NEVER attempt to cut PERFACORD® 40 HMX LS Ribbon detonating cord with a blow from a sharp or blunt object, such as an axe, pipe wrench, or rock.
NEVER saw PERFACORD® 40 HMX LS Ribbon detonating cord; it may explode and kill or injure.
NEVER cut detonating cord with devices that produce metal-to-metal contact, such as scissors, wire cutters, crimpers or similar instruments.

Storing

Detotec PERFACORD® must be shipped, stored, and handled in accordance with all federal, state, provincial and local laws. Shelf life is defined in the latest version of the Institute of Makers of Explosives' Publication SLP-12. Recommended shelf life under proper storage conditions is ten (10) years from date of manufacture. Use older inventory first.

Detotec PERFACORD® must be stored in a cool, dry, well-ventilated licensed storage magazine for maximum shelf life.

Shipping Information

Package Size: 10 9/16" x 10 9/16" x 5 5/16"  4G fiberboard box
Package wt: 10.5 lbs. (4.8 Kg) gross
Contents: 1-500 ft. spool & "Warnings/Instructions/Disclaimer" insert. 500 ft. spools may contain as many as four (4) pieces, totaling 500 ft.(152.4m), with a minimum splice/piece length of 50 ft.

UN Name: Cord, Detonating
UN Num.: 0065
UN Class: 1.1D
Ref. Num.: EX-2005100220
Explosive wt: 2.86 lbs. (1.3 Kg)

DISCLAIMER OF WARRANTIES AND LIMITATIONS OF LIABILITIES

Because these products are used under varying conditions over which Detotec has no control the products described herein are sold by Detotec without warranty, express or implied, including without limitation, any implied warranty of merchantability or fitness for a particular purpose and/or any other warranty. Under no circumstances shall seller be liable for damages for loss of anticipated profits, consequential damages, incidental damages or losses or damages to persons or property arising from the use of its products.

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