

## FIRELINE® 13/60 HMX LS

### Oil Field Detonating Cord

#### Properties

SDS  
#1121

<b>Explosive Core Load</b>	13 g/m (60 gr/ft) nominal 11.5 g/m (54 gr/ft) minimum
<b>Detonation Velocity</b>	6800 m/s (22,304ft/s) nominal 6400 m/s (20,992 ft/s) minimum
<b>Shrinkage</b>	1% maximum @ 163°C (325°F) in 24 hrs
<b>Jacket Thickness</b>	0.254 mm (0.010 in) nominal
<b>Dimensions</b>	4.62 mm (0.182 in) nominal ±0.20 mm (0.008 in)
<b>Lap Joint Sensitive</b>	Yes
<b>Product Code</b>	A574010
<b>Cord Components</b>	HMX explosive core (white) Shrink resistant braid (yellow/gold) Nylon jacket (green)

- **Temperature resistance** is based upon the manufacturer's laboratory tests in air, at ambient pressure only.
- **Shrinkage** is defined as the overall decrease in length.
- **Velocity** was tested unconfined, at ambient pressure, and after "cool down."



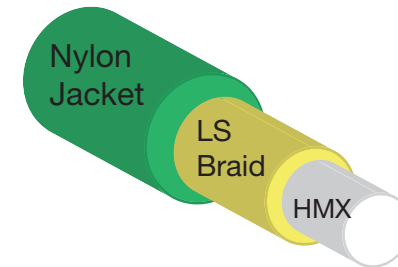
#### Hazardous Shipping Description

Cord, Detonating, 1.1D, UN 0065 II EX 1992020035

**Alternative packaging: FIREPAK® 1.4D air cargo shipping containers**

Product Code A574015

Cord, Detonating, 1.4D UN 0289 EX 2007060067

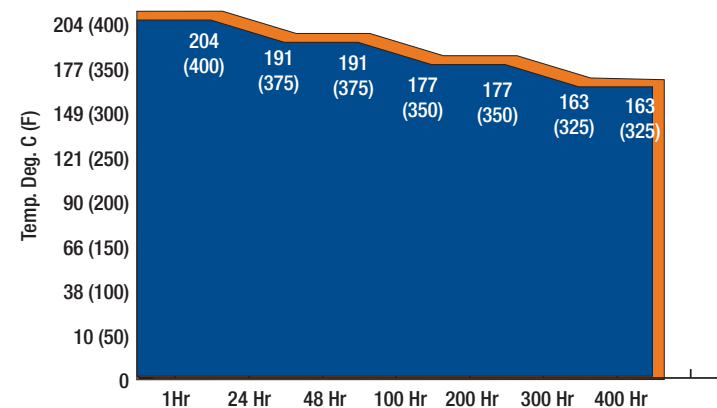


#### Product Description

FIRELINE 13/60 HMX LS is designed to be used with a tubing or wireline conveyed perforating system used within time and temperature limits (see graph below). This product has been successfully used in carrier-based perforating systems within HMX time and temperature operating ranges (see graph) where the jacket is protected from pressure and/or fluids. Nylon jacket limitations will not normally permit this product to be used in exposed applications within HMX application ranges.

#### Temperature Range

The temperatures listed are maximum values. DO NOT EXCEED.



**ADDITIONAL INFORMATION** – Visit [dynonobel.com](http://dynonobel.com) for Brochures and Case Studies related to this product.

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## FIRELINE® 13/60 HMX LS

### Oil Field Detonating Cord

#### Transportation, Storage and Handling

- For maximum shelf-life, detonating cord must be stored in cool, dry, well-ventilated magazines. Explosives inventory should be rotated. Use older inventory first. Recommended shelf life, under proper storage conditions, is ten (10) years from date of manufacture.
- FIRELINE 13/60 HMX LS detonating cords must be transported, stored, handled and used in conformity with all federal, state, provincial and local laws and regulations.

#### Application Recommendations

- **This product is not recommended for exposure to well bore fluids.**
- **ALWAYS** cut FIRELINE 13/60 HMX LS detonating cord with a sharp knife.
- **NEVER** attempt to cut FIRELINE 13/60 HMX LS detonating cord with a blow from a sharp or blunt object, such as an axe, pipe wrench, or rock.
- **NEVER** saw FIRELINE 13/60 HMX LS 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.

#### Packaging

Package	Gross Weight		Net Weight		Explosive Weight			Length/Spool*	
	kg	lbs	kg	lbs	kg	lbs		m	ft
<b>Fiberboard box</b>	4.1	9.0	3.9	8.5	1.9	4.3	1	152	500
<b>Airpack Box</b>	17.1	37.6	3.9	8.5	1.9	4.3	1	152	500

\* Weights represent nominal values

\* All weights are approximate

\* ±2%; 152m spools may contain as many as 3 pieces, totally 152 m, with a minimum splice/ piece length of 8 m (25 ft).

X-Ray services are also available for high profile applications requiring an extra level of assurance. Product Code: A574011.

For 1.1D Detonating Cord marked every meter, use Product Code A574010BZ

For 1.4D Detonating Cord marked every meter, use Product Code A574015BZ

## CE 1395

#### Case Dimensions

Fiberboard: 26 x 26 x 14 cm / 10.25 x 10.25 x 5.5 in

Airpack: 74.3 x 44.1 x 68.27 cm / 29.25 x 17.375 x 26.875 in

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