



## DESCRIPTION

Brinel MF is used in blasting operations where long sequences of delay repetition are desired, such as rings, ditches and trenches. It is easy to use and fast to connect, ensuring safer and quicker operations, as well as less items in stock. It also reduces noise during detonation. Brinel MF is used in open-pit and underground mining, quarrying, construction operations and underwater blasting.

Produced with Thermotube, which contains a different technology that does not use explosives. Unlike conventional shock tubes that produce a shock wave, Thermotube uses a high-temperature pyrotechnic.

## TECHNICAL CHARACTERISTICS

Internal diameter (mm)	1.25 – 1.50
External diameter (mm)	2.96 – 3.24
Tensile strength (kgf)	40
Elongation (%)	128
Propagation velocity (m/s)	1,140 – 1,275
Water resistance	Resistant
Connector	Multi-connector
Length* (m)	4.8 – 9 - 12 – 18 - 21 – 30
Operating temperature (°C)	-40 to +45

\*For other lengths, contact our Customer Service.

## DELAY RANGE

Surface delay range (ms)	0	9	17	25	42
Multi-connector color	White	Green	Yellow	Blue	Red
Blasthole delay (ms)	250 - 500 - 1,000 - 2,500				
Surface delay range (ms)	67	84	100	-	-
Multi-connector color	Orange	Pink	Gray	-	-
Blasthole delay (ms)	250 - 500 - 1,000 - 2,500				

## TRANSPORT INFORMATION

UN 0360  
DETONATOR ASSEMBLIES,  
NON-ELECTRIC FOR BLASTING  
Hazard Class: 1.1B

UN 0361  
DETONATOR ASSEMBLIES,  
NON-ELECTRIC FOR BLASTING  
Hazard Class: 1.4B\*\*

\*\*Contact us for availability.



## APPLICATION AND RECOMMENDED USE

- Open-pit and underground mining, quarrying and construction applications;
- Used for blasting rings, ditches and trenches, as well as underwater applications;
- Recommended initiation: Detonator #8 / Brinel Initiator.

## PACKAGING

Length (m)	Up to 21	30
Units per case (pieces)	100	60
Case dimensions LxWxH (cm)	62 x 31 x 45	
Case material	Cardboard	

## STORAGE AND SHELF LIFE

If kept in its original packaging and stored under appropriate conditions, this product is covered by a 36-month guarantee from the date of manufacture. Products must be used in accordance with applicable regulations.

## MANUFACTURE

- Quatro Barras - PR, Brazil, Enaex Brasil.

**Would you like  
to contact our  
specialists?**

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