



# PRODUCT INFORMATION

## BROCHURE

1.1B

# SHOCK★STAR MS



**Shock★Star MS** series in-hole delays are available in a sequence of 19 delays from instantaneous (0 ms) to 1,000 ms. They are designed to be used as down-hole detonators for the initiation of cast boosters and high explosives. In-hole detonators can be equipped with a T-connector for compatibility with detonating cord initiation or can be initiated by another electric or non-electric detonator.

### BENEFITS

- 720 mg base charge.
- Excellent delay time accuracy ensures greater than 99% probability of in-sequence initiation.
- High impact protection.

## PRODUCT OVERVIEW

### PROPERTIES

Delay Sequence	0	1	2	3	4	5	6	7	8	9
Nominal Delay (ms)	0	25	50	75	100	125	150	175	200	250
Delay Sequence	10	11	12	13	14	15	16	17	18	19
Nominal Delay (ms)	300	350	400	450	500	600	700	800	900	1,000

## STANDARD TECHNICAL DESCRIPTION

Detonator	
Detonator shell material	Aluminum
Base charge	720 mg
Water pressure resistance	0.3 MPa / 7 days
Temperature range for application	from -30°C to +60°C
Label Marking	Delay #, Detonator type, Delay ms, ST length, barcode and batch code (traceability), Emergency number, Product registration number (ANMaC)
Shock Tube	
Velocity of detonation	2,000 ± 100 m/s
Color	Red

## STANDARD PACKAGING

Length (m)	Units/Box
3.0 - 4.2	200
4.8 - 6	150
9	100
12	75
18	50
25	40
30	30

Shock★Star detonators are packaged in cardboard carton of outer dimension 533 x 271 x 277 mm. Other lengths of Shock Tube are possible on demand.

## USE

- Open pit mining
- Underground mining
- Quarries
- Civil projects

## SHELF LIFE, STORAGE & DISPOSAL

- Shelf life is two years from the date of manufacture under suitable storage conditions.
- Recommended conditions: -30°C to +40°C, Relative Humidity max. 65%, in original package.
- Shock★Star MS must be stored in magazines for detonators. Detonators cannot be store in the same magazines as high explosives (packaged emulsions, booster, etc.) and blasting agents (ANFO). These magazines must accomplish the current legal requirements.
- Disposal: According to local regulations. If in doubt consult with the supplier.

Contact your local Austin Powder representative for further information.

**Disclaimer of Warranties and Limitations of Liabilities:** © 2023 Austin Powder Argentina S.A. All rights reserved. All information contained in this document is provided for informational purposes only and is subject to change without notice. Since the Austin Powder Argentina S.A. cannot anticipate or control the conditions under which this information and its products may be used, each user should review the information in the specific context of the intended application. To the maximum extent permitted by law, Austin Powder Argentina S.A. specifically disclaims all warranties express or implied in law, including accuracy, non-infringement, and implied warranties of merchantability or fitness for a particular purpose. Austin Powder Argentina S.A. specifically disclaims and will not be responsible whatsoever for any and all injuries (including death), losses, or damages to persons or property resulting from the use or reliance upon the information in this document.

## TRANSPORT – UN CLASSIFICATION

Shipping Name: DETONATOR ASSEMBLIES, NON-ELECTRIC  
 Class & Division: 1.1B  
 ID Number: UN 0360



**AUSTIN POWDER**

**Our Mission is to improve the world we live in through the safe and responsible use of explosives.**