# Shock★Star MS

PRODUCT INFORMATION BROCHURE

**Shock\*Star MS** series in-hole delays are available in a sequence of 31 delays from instantaneous (0 ms) to 1,000 ms.

They are designed to be used as downhole 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.
- Manufactured with yellow Shock Tube for easy differentiation from surface detonators when inspecting the connected blast pattern.
- High impact protection.

### **DELAY SEQUENCE**

Sequence #	0	1	2	3	4	5	6	7
Nominal delay (ms)	0	25	50	75	100	125	150	175
Sequence #	8	9	10	11	12	13	14	15
Nominal delay (ms)	200	225	250	275	300	325	350	375
Sequence #	16	17	18	19	20	21	22	23
Nominal delay (ms)	400	425	450	475	500	550	600	650
Sequence #	24	25	26	27	28	29	30	X
Nominal delay (ms)	700	750	800	850	900	950	1,000	Х





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### **TECHNICAL DESCRIPTION**

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		
Shelf life (in original, sealed package)	2 years (-30°C to +40°C, R.H. max. 65%)		
Label marking	Delay #, Detonator type, Delay ms, ST length, Data matrix code (traceability)		
Notified body	CE 0589		
Shock Tube Velocity of detonation	2,000 ± 100 m/s		
Shock Tube Color	Yellow		

### **PACKAGING DETAILS**

Shock Tube length (m)	Inner bags per Carton	Units per Carton	Packaging
4.8	1	100	1.4S UN 0500
6	1	90	1.4S UN 0500
9	1	60	1.4S UN 0500
12	1	50	1.4S UN 0500
15	1	40	1.4S UN 0500
18	1	35	1.4S UN 0500
24	1	25	1.4S UN 0500
30	1	24	1.4B UN 0361
36	1	24	1.4B UN 0361
45	1	24	1.4B UN 0361
60	1	18	1.4B UN 0361
80	1	12	1.4B UN 0361

Packaging: Cardboard carton of outer dimension 390x235x295mm

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