



DESCRIPTION

E*Star electronic detonators are designed to provide the precise control necessary to produce accurate and consistent blasting results in a variety of blasting applications in the mining, quarrying and construction industries. The E*Star detonator may be programmed in 1-millisecond increments from 1 millisecond to 10 000 milliseconds using the dedicated programming device called the logger.



BENEFITS

- 100% verification of reliability of connections in initiation network.
- Delay range of 1 - 10 000 ms with an increment of 1 ms.
- Precision of 0,01% of nominal delay time.
- Safe and reliable initiation of up to 1600 units in one blast per one blasting machine.
- Unique ID in each detonator.
- Multiple verification of detonators prior each blast.
- Protection from misuse.
- Combination of copper shell and high initiation strength of ensures reliable initiation of all cap sensitive commercial explosives.

E*Star SYSTEM FUNCTION

E*Star detonators contain capacitor, logic and timing circuit, and pyrotechnic ignition system manufactured by Special Devices Inc. This electronic ignition module is integrated with Austin detonator technology to provide a complete unit. When the capacitor is charged by the blasting machine DBM 1600-2-K, the energy from the internal capacitor is released at the programmed time and squib is initiated. Subsequently, the base charge detonates.

E*Star SYSTEM EQUIPMENT

The system may be operated only by trained and authorized personnel using the dedicated equipment designed specifically for operating E*Star detonators. The currently approved equipment is a LM-1 tester, DLG1600-1-N and DLG1600-100 loggers, and DBM 1600-2K blasting machine. The use of this system requires specific training in use of all components. This training is in addition to the normal, required training that all blasters and blasting personnel have received.



STANDARD TECHNICAL DESCRIPTION

Electric Detonator With Electronic Timing - E*Star

Name	E*Star	
Detonator shell material	copper	
Standard leg wires	copper, iron	
Leg wires insulation material	HDPE	
Producer's mark (shell bottom)	letter V	
Detonator marking	tag/label with unit description	
	shell: printing „Danger, explosive, detonator”	
Primary charge	Dextrinated lead azide	
Secondary charge	720 mg PETN or RDX	
Crimping	triple crimp	
Electrostatic resistance	leg wires / shell	2500 pF / 30 kV
	leg wire / leg wire	2500 pF / 20 kV
Plug	TPE (thermoplastic elastomer)	
Number of delays	programable	
Delay interval	programable 1 - 10 000 ms (increments of 1 ms)	
Hydrostatic pressure resistance	1 MPa / 28 days	
Use in dangerous conditions or environment	no	
Temperature range of application	-30 °C < T < +60 °C	
Shelf life	2 years (-30 °C to 40 °C)	
Accessories	blaster DBM 1600-2-K, logger DLG 1600-1-N, logger DLG 1600-100, tester LM-1	
Transport classification	1.4B	1.4S
UN number	0255	0456
Official authority & and alt. names	CE	name
	ENB/D/141/09	E*Star

PACKAGING

Leg Wires Length (m)	Case Count (pcs)		Wire Configuration	Case Weight ^{*)} (kg)	
	1.4B UN 0255	1.4S UN 0456		netto	brutto
6	100	80 (PE ^{**)}	loop	8/7	10
8	80	80	loop	10	12
10		60	spool	9	11
15		60	spool	13	15
20		60	spool	17	19
25		40	spool	14	16
30		40	spool	17	19
40		32	spool	21	23
60		18	spool	16	18
80		18	spool	20	22
100		9	spool	13	15

*) Informative Value

**) Protective Element


AUSTIN POWDER
INTERNATIONAL

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