



AUSTIN POWDER

A TRADITION OF SAFETY, STRENGTH AND SERVICE.

Shock★Star® Dual-Delays

Non-Electric, Millisecond Delay Detonators

DESCRIPTION

Shock★Star Dual-Delays combine In-Hole Delays and Quick-Relay Connectors in one product. This combination offers convenience for storage and inventorying of one product instead of two and often reduces space requirements for transportation. Connecting of blast patterns is generally faster with Dual-Delays as fewer connections are required in total. Additionally, fewer individual products used in the blast pattern reduces clutter at connection points and makes visual inspections easier. For millisecond delay blasting, Dual-Delays are available in a variety of delay configurations.


BENEFITS

- 900 mg base charge of PETN to ensure strong initiation energy under even the most extreme conditions (in-hole detonator only).
- Delay composition encased in a zinc jacket to prevent performance loss due to transient pressure from nearby detonating holes.
- Equipped with a tear-proof color-coded delay tag that lists DSC, delay time, delay period and length of the detonator.
- Manufactured with bright yellow shock tube for high visibility.
- Surface connector has eight tube capacity and is color-coded to surface delay time.



Shock★Star Dual-Delays

LENGTH, DELAY & PACKAGING

 Dual-Delay Detonators (DDD)				
Length		Coil Style	Quantity	NEQ Grams
(ft)	(m)			
12	3.7	Fast 8	70	105
16	4.9	Fast 8	70	105
20	6.1	Fast 8	60	90
24	7.3	Fast 8	60	90
30 *	9.2	Fast 8	60	90
40	12.2	Fast 8	50	75
50	15.3	Fast 8	40	60
60 *	18.3	Fast 8	40	60
80	24.4	Fast 8 X	30	45
100	30.5	Fast 8 X	20	30
120	36.6	Fast 8 X	20	30
140	42.7	Fast 8 X	20	30
160	48.8	Spool	8	12
225	68.6	Spool	8	12
*NOTE: For 30 Ft and 60 Ft Detonators produced after 10-3-2011				
30	9.2	Fast 8	50	75
60	18.3	Fast 8	30	45

<i>Available Delay Configurations</i>		
17/350	25/350	42/350
17/375	25/375	42/375
17/450	25/450	42/450
17/475	25/475	42/475
17/500	25/500	42/500
17/700	25/700	42/700
Long Period (LP) – 200/5000		



For more information and service locations in your area, please contact Austin Powder Company's headquarters:

Austin Powder Company
25800 Science Park Drive
Cleveland, Ohio, USA 44122

Phone: 1-800-321-0752
Fax: 1-216-464-4418
Web: www.austinpowder.com
Email: info@austinpowder.com

STORAGE

Store in accordance with all applicable local, state, provincial and federal laws.

SHELF LIFE

For optimum accuracy, use within three years from date of manufacture under good storage conditions.

UN CLASSIFICATION

Shipping Name: Detonator Assemblies, Non-Electric
Class & Division: 1.4B
ID Number: UN 0361

DOT REFERENCE NUMBERS

EX-2012070728
EX-2012081112

All Shock★Star non-electric detonators are manufactured by Austin Star Detonator Co., Brownsville, TX.

Disclaimer of Warranties and Limitations of Liabilities

"Products described in this bulletin are sold by Austin Powder Company without warranty; express, implied or statutory or as to MERCHANTABILITY, except as expressly stated in Austin Powder's straight bill of lading. Under no circumstances shall seller be liable for loss of anticipated profits, consequential damages or incidental damages."