# ShockStar Dual Delay

PRODUCT INFORMATION BROCHURE

**SHOCKSTAR DUAL DELAY** detonators combine in-hole SHOCKSTAR TS detonator (9,000 ms delay) and SHOCKSTAR SURFACE connector (100 ms delay).

Connection of the detonators in series allows reducing the amount of explosive per one delay time and consequently reducing the blast vibrations.



### **BENEFITS**

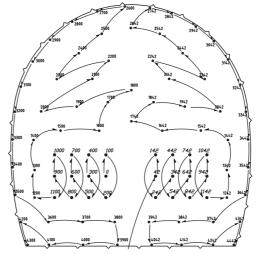
- 720 mg base charge.
- Manufactured with bright yellow shock tube for high visibility.
- Better control of blast vibration.
- High impact protection.

### **PROPERTIES**

Delay sequence

SHOCKSTAR DUAL DELAY							
	SHOCKSTA	R SURFACE	SHOCKSTAR TS				
Nominal delay time (ms)		100	9,000				

Other timing combinations are possible on demand.



Blast timing design proposal



Austin Detonator s.r.o., Jasenice 712, 755 01 Vsetín, Czech Republic Phone: +420 571 404 001 | Fax: +420 571 404 002 | Email: marketing.info@austin.cz | austin.cz



# ShockStar Dual Delay

PRODUCT INFORMATION BROCHURE

### STANDARD TECHNICAL DESCRIPTION

DETONATOR				
Detonator shell material	Aluminum			
Base charge	720 mg / 120 mg			
Water pressure resistance	0.3 MPa / 7 days			
Temperature range for application	from -30 °C to +60 °C			
Shelf life (storage conditions)	2 years (-30 °C to +40 °C, R.H. max. 65%) in original, sealed package			
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			
Color	Yellow			

### STANDARD PACKAGING DETAILS

Shock tube	Packaging 1.1B UN 0360			Packaging 1.4S UN 0500		
length (m)	Units / Bag	No. of Bags	Units / Box	Units / Bag	No. of Bags	Units / Box
6	10	8	80	10	5	50
9	10	6	60	10	4	40

SHOCKSTAR DUAL DELAY detonators are packaged in cardboard carton of outer dimension 390x235x295 mm. Other lengths of shock tube and delay combinations are possible on demand.

Contact your local Austin Powder representative for further information.

#### Disclaimer of Warranties and Limitations of Liabilities

The data set forth in this Product Information Brochure (PIB) are based on the product test procedures of Austin Detonator s.r.o. in use at the time of publication of this PIB. Specifications, test values and information are exclusively non-binding preliminary information and are not guaranteed; the actual data may differ for various reasons (e.g. temperature, humidity, pressure). Technical inaccuracies or typographical errors and the right to amend the PIB at any time without notice shall be reserved. Austin Detonator s.r.o. does not assume any liability, covenants, guaranties or warranties with respect to the completeness, accuracy, reliability, suitability or availability of the product and the information of the PIB.

Any liability for damages of any kind (such as direct or indirect, incidental or consequential damages, losses or expenses), directly or indirectly related for any reason to this PIB or the use of the products is excluded. The customer is (even when making decisions based on the information in the PIB) solely responsible for the proper use of the potentially dangerous products that, accordingly, may only be used by trained personnel and in compliance with applicable law. To the entire legal relationship between their customers and Austin Detonator s.r.o. their (Austin's) general terms and conditions (they can be downloaded from the homepage www.austin.cz) shall apply.



Austin Detonator s.r.o., Jasenice 712, 755 01 Vsetín, Czech Republic Phone: +420 571 404 001 | Fax: +420 571 404 002 | Email: marketing.info@austin.cz | austin.cz

