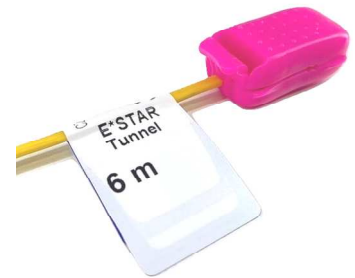




## PRODUCT INFORMATION BROCHURE

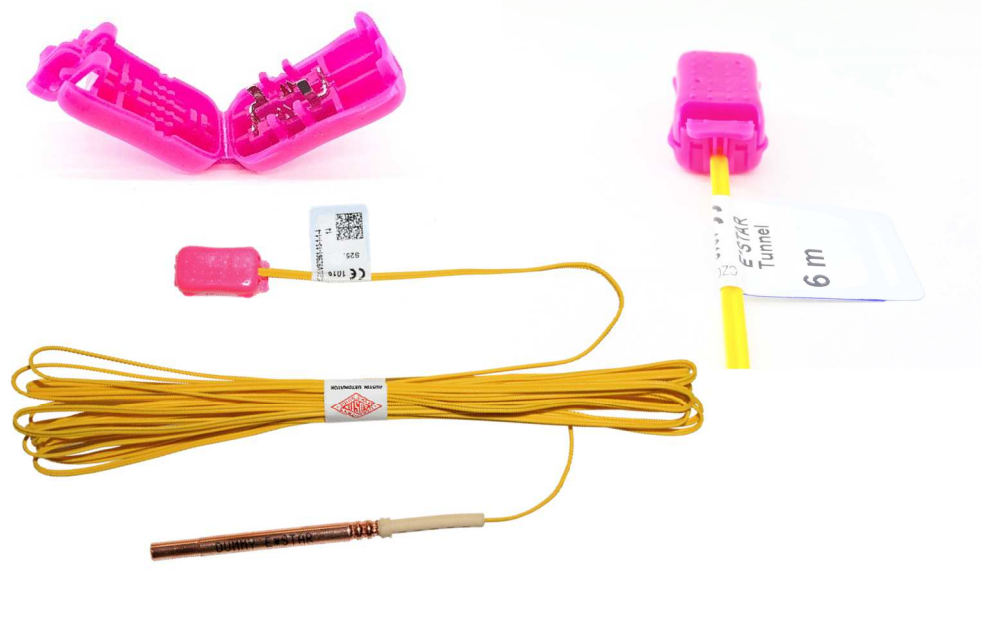
**E\*STAR Tunnel** has been developed for rapid tunnel blasting deployment with the aim of reducing post-blast plastic residue in the muck pile.

The wires and the E\*STAR Tunnel connector will ensure the highest level of safety and security on the blast site. The neon colors of the wires and connectors allow for quick detection of the E\*STAR Tunnel detonators, even in a low-light underground environment. E\*STAR Tunnel retains all the features and benefits of the E\*STAR detonator, including the control equipment required for operating the system.



### FEATURES & BENEFITS

- E\*STAR Logger 2 for multiple ways of programming
- Touchless tagging (RFID Technology)
- Neon colors of wires/connectors
- Bus-line or Daisy-Chaining connection
- Duplex Bus-line for easy connection making
- 100% verification of the blast
- Simple procedure from loading holes to initiation of the blast
- Significant reduction of plastic residue in the muck pile



**AUSTIN POWDER**

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### STANDARD TECHNICAL DESCRIPTION

Shell material	Copper
Leg Wires	Zinc coated steel
Bus-line	Copper
Leg wire color	Yellow
Bus-line color	Lime green
Connector color	Pink
Base charge	720 mg
Water pressure resistance	0.3 MPa / 48 hours
Temperature range for application	from -30 °C to +60 °C
Shelf life (storage conditions)	5 years (-30 °C to +40 °C)
Label marking	Product name, Wire length, Data matrix code (traceability), Detonator serial number (for RFID labels)
Notified body	CE 1019
Delay interval	Programmable 1 – 20,000 ms (increments of 1 ms)

### STANDARD PACKAGING DETAILS

Wire length (m)	Wire length (ft)	Packaging 1.1B UN 0511 (pcs)	Packaging 1.4B UN 0512 (pcs)	Packaging 1.4S UN 0513 (pcs)
6	20	80	48	48
9	30	56	40	40
12	40	40	32	32

E★STAR detonators are packaged in cardboard box of outer dimension 385 x 296 x 210 mm / 15.16 x 11.65 x 8.27 in.

Other wire lengths are possible on demand.

### BUS-LINE

Wire length (m)	Wire length (ft)	Units per box
400	1,300	4

Bus-line is packaged in cardboard box of outer dimension 490 x 245 x 160 mm / 19.29 x 9.65 x 6.30 in.

Contact your local Austin Powder representative for further information.

#### Disclaimer of Warranties and Limitations of Liabilities

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It is solely the responsibility of the product user to determine the safe conditions for use of the products referred to herein. Use of any products by a user is at the user's sole risk.

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