



PRODUCT INFORMATION BROCHURE

E★STAR TUNNEL



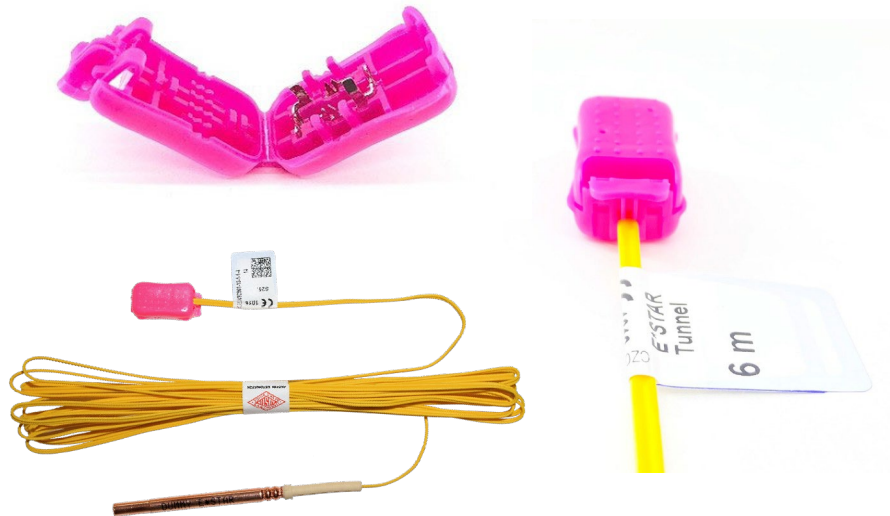
E★STAR Tunnel has been developed for rapid tunnel blasting deployment with the aim of reducing post-blast plastic residue in the muck pile.

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.

PRODUCT OVERVIEW

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



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)
4	13	120	-	-
6	20	100	48	48
7,5	25	80	40	40
9	30	60	40	40
12	40	48	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	Wire
400	1,300	4	Duplex Cu 2 x 0.6 mm

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.

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