

EXPLOSIVES

PRODUCT INFORMATION

MAY 2000

RIODET SHORT DELAY DETONATORS

Ridet Short Delay, high precision, high strength detonators are designed for use in the quarry, construction and mining industries. They are available in instantaneous and 1 through 30 periods with 25 ms intervals. These detonators are used worldwide and have exceptional timing accuracy.

Ridet Short Delay detonators are designed to be highly resistant to accidental detonation from stray and induced currents. In addition, short delay detonators are designed to minimize current leakage.

Ridet Short Delay detonators are much higher in output energy than No. 8 strength detonators, thus reducing the need for boosters in many small diameter applications.

PROPERTIES AND SPECIFICATIONS

HIGH OUTPUT STRENGTH: These detonators have a 12 grain (0.8 gram) base charge. This is equal to the highest level of initiating energy available today.

STATIC RESISTANCE: Tests show that the Short Delay caps will pass the USA Military requirements and the European Mining - Safety Agencies requirements. Both of these protection levels are higher than the level achieved with the 6-10 mWs/Ohm detonators of the conventional USA/Canada construction. All leg wires are shunted.

DELAY MARKING: In addition to easy to read delay tags on the cap wires, each detonator is marked with the delay number embossed on the bottom of the cap.

LEG WIRES: The leg wires are coloured pink and turquoise. They are 23 gauge (0.6mm dia.) copper wire with 0.06 Ohm/meter resistance. They are insulated with a 0.4mm thick PVC coating with an OD of 1.35mm - 1.40mm. The wire configurations are as follows:

<u>Wire Length</u>	<u>Wire Configuration</u>
<26m	Figure 8 wire coil, colour pink & turquoise
26m+	Spools duplex wire, colour turquoise

EXPLOSIVES CLASSIFICATION: 4 metre length and greater 1.4B UN 0255
less than 4 metre lengths 1.1B UN 0030

COMPATIBILITY: DO NOT MIX ELECTRIC DETONATORS OF DIFFERENT TYPES OR MANUFACTURE IN THE SAME BLASTING CIRCUIT. ANY MIXING OF DETONATORS SHOULD BE DONE UNDER THE DIRECTION OF THE MANUFACTURER.

Manufactured for ETI by Union Española de Explosivos, S.A.

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PRODUCT INFORMATION

PROPERTIES AND SPECIFICATIONS (CONTINUED)

FIRING CHARACTERISTICS: Bridge Wire Resistance: 0.3 - 0.5 Ohm
 Firing Impulse: 8 - 16 mWs/Ohm
 NO-Fire Current: 0.45 Amp
 Minimum Single Cap Firing: 1.2 Amp
 Minimum Parallel Series: 2.5 Amp

PHYSICAL DATA:

Delay Period	Nominal Firing Time (m/s)	Delay Period	Nominal Firing Time (m/s)	Delay Period	Nominal Firing Time (m/s)
0	3	7	175	14	350
1	25	8	200	15	375
2	50	9	225	16	400
3	75	10	250	17	425
4	100	11	275	18	450
5	125	12	300	19	475
6	150	13	325	20	500
				22	550
				24	600
				26	650
				28	700
				30	750

RESISTANCE VALUES AND PACKAGING:

FIGURE-8 FOLD			
Length m/ft.	Resistance Nominal Ohm	Quantity	
		Caps/Case	Gross Wt. Kg
4.0/13.1	1.0	500	19
4.5/14.8	1.0	500	20
5.0/16.4	1.1	500	21
6.5/21.3	1.3	250	17
7.5/24.6	1.4	250	19
9.5/31.2	1.6	250	22
11.0/36.1	1.8	200	22
12.5/41.0	2.0	200	23
14.0/45.9	2.2	150	20
17.0/55.8	2.5	150	23
18.5/60.7	2.7	100	17
20.0/65.6	2.9	100	19
23.0/75.4	3.3		
24.5/80.4	3.4		
26.0/85.3	3.6		

SPOOL WOUND			
Length m/ft.	Resistance Nominal Ohm	Quantity	
		Caps/Case	Gross Wt. Kg
30.5/100	4.2	60	14
37.0/121.3	4.9	60	23
49.0/160.7	6.4		
61.0/200.1	7.8	45	26
76.5/250.9	9.7	45	26
91.5/300.1	11.5		
122/400.1	15.1		

TRANSPORTATION, STORAGE AND HANDLING:

The Riodet Short Delay Detonators have been classified as Class 1.4B (Class C) and must be transported, stored, handled and used in conformity with all applicable federal, provincial, state and local laws and regulations.

SPECIAL NOTE:

Additional instructions and precautions regarding the use of explosives are described on the product carton or in the case insert booklet, "Prevention of Accidents in the Use of Explosives, Always and Nevers, warnings and instructions adopted by the Institute of Makers of Explosives that is included in each case and carton for recommended safe practices in the transporting, storing and handling and use of these products.

CONTACT YOUR LOCAL ETI REPRESENTATIVE OR DISTRIBUTOR FOR MORE INFORMATION

Because of the nature of blasting, we cannot anticipate all conditions under which this information and ETI products, or other products in combination with ETI products may be used and therefore we will not accept any responsibility for results or for direct, indirect special or consequential damages. All users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products.