

Dynadet™-C2-25ms / Dynadet™-C2-250ms Sweden



Description

The electric detonator Dynadet™-C2 range includes different delay series and serves to initiate commercial explosives.

Dynadet™-C2 detonators are manufactured in Gyttorp, Sweden (SE001) and use the NPED technology (Non Primary Explosives Detonator). NPED detonators use a patented deflagration to detonation process and therefore do not need primary explosives for initiation of the base charge. The detonator is free of lead acid and provides the highest degree of safety against impact during handling.

The delay series offers 20 (25 ms) and 19 (250 ms) intervals and provide flexibility to control the firing sequence.

The detonators are delivered with an attached connecting sleeve for simple and safe coupling. The insulation on the detonator leads is made of polyethylene providing good resistance against friction and cutting damage while being environmentally friendly.

Application

Dynadet™-C2 is used for initiation of commercial explosives in quarrying and construction works.

Recommendations for Use

- Never use instantaneous electric detonators (with 0 ms delay) with the Dynadet™-C2-25ms series or with the Dynadet™-C2-250ms series.
- Not to be used in a gaseous environment or where there is danger of coal dust explosion.
- To prevent the possibility of detonating cord tail cut off when using detonating cord and Orica Dynadet™-C2 electric detonators the following tie up method is recommended.

Roll the starter tail of detonating cord into a loop approx. 20 cm in diameter and secure with shot firing tape. Secure and tape the electric detonator inside the loop with the detonator facing the taped joint and in the direction of the detonating cord connected to the shot.



Technical Properties

Product	Dynadet™-C2-25ms / Dynadet™-C2-250ms
Shell	Aluminium
Base Charge	PETN / RDX
Output strength	REF. DET. #3
Type of sensitivity	Class 2 (U)
Fusehead resistance (Ω)	0.4 - 0.8
No-fire-impulse (mJ/ Ω)	≤8
All-fire-impulse (mJ/ Ω)	≥16
No-fire-current (A)	≤0.45
All-fire current (A)	≥1.5
Max. hydrostatic pressure	3 bar / 7 days
Wire	
Wire covering	PE
Wire colours: Dynadet™-C2-25ms Dynadet™-C2-250ms	yellow / green yellow / red
Wire type	Steel
Wire diameter (mm)	0.70
Insulation diameter (mm)	1.60 ±0.05
Tensile strength (N)	min. 125
Pull-out strength (N)*	min. 40
Wire ends	Fixed connecting sleeve
Wire length (m): Dynadet™-C2-25ms Dynadet™-C2-250ms	3, 4, 5, 6 4, 6

*Testing according to EN13763.7

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Delay Range Dynadet™-C2-25ms

Delay #	Nominal Delay Time (ms)	Max. Std. Deviation (ms)	Delay #	Nominal Delay Time (ms)	Max. Std. Deviation (ms)
1	25	8.3	11	275	8.3
2	50		12	300	
3	75		13	325	
4	100		14	350	
5	125		15	375	
6	150		16	400	
7	175		17	425	
8	200	8.3	18	450	8.3
9	225		19	475	
10	250		20	500	

Dynadet™-C2-250ms

Delay #	Nominal Delay Time (ms)	Max. Std. Deviation (ms)	Delay #	Nominal Delay Time (ms)	Max. Std. Deviation (ms)	
1	250	83.3	11	2750	83.3	
2	500		12	3000		
3	750		13	3250		
4	1000		14	3500		
5	1250		15	3750		
6	1500		16	4000		
7	1750		17	4250		
8	2000		18	4500		
9	2250					
10	2500			20		5000

Packaging

Dynadet™-C2 electric detonators are available in the following packaging:

Dynadet™-C2-25ms

1.1B

Leg wire length m	Total Resistance Ω	No. of detonators per bag	No. of detonators per box	Gross weight per box kg	Net weight per box kg	Net explosive weight per box kg
3 (Fe)	2.3 ±0.3	10	300	12.0	10.5	0.282
4 (Fe)	2.9 ±0.4	10	250	12.3	11.0	0.235
6 (Fe)	4.1 ±0.4	10	170	12.1	10.7	0.160

1.4S

Leg wire length m	Total Resistance Ω	No. of detonators per bag	No. of detonators per box	Gross weight per box kg	Net weight per box kg	Net explosive weight per box kg
3 (Fe)	2.3 ±0.3	10	250	13.0	9.3	0.235
4 (Fe)	2.9 ±0.4	10	200	12.2	8.8	0.188
5 (Fe)	3.5 ±0.4	10	200	14.2	10.8	0.188
6 (Fe)	4.1 ±0.4	10	170	12.1	10.7	0.160

Dynadet™-C2-250ms

1.4S

Leg wire length m	Total Resistance Ω	No. of detonators per bag	No. of detonators per box	Gross weight per box kg	Net weight per box kg	Net explosive weight per box kg
4 (Fe)	2.9 ±0.4	10	200	12.2	8.8	0.188
6 (Fe)	4.1 ±0.4	10	170	12.1	10.7	0.160

Other lengths maybe available upon request. Please contact your local Orica representative for further information.

Storage and Handling

Product Classification

Authorized Name	EC Type Certificate
Dynadet™-C2-25ms	0589.EXP.2782/18
Dynadet™-C2-250ms	

Proper Shipping Name: Detonators, electric

UN No.: 0030 0456

Classification: 1.1B 1.4S

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Dynadet™-C2 electric detonators should be stored in a suitably licensed magazine for Class 1.1B or 1.4S explosives.

Detonators are best stored at ambient temperatures of 0 °C to 40 °C.

Dynadet™-C2 electric detonators have a storage life of 2 years in stable, temperate conditions.

Dynadet™-C2 may be used at temperatures from -25 °C to a maximum of 50 °C. If your application requires you to operate outside this temperature range please contact your local Orica Account Manager.

Disposal

Disposal of explosive materials can be hazardous. Methods of safe disposal of explosives may vary depending on the user's situation. Please contact an Orica Technical Representative for information on safe practices.

Safety

Always follow requirements for protection against hazardous electrical sources when using Dynadet™-C2 detonators. Care should be taken not to cause initiation by intense impact, friction or heat.

Training

This Technical Data Sheet is for information only. Electric detonators must only be used by personnel who have been properly trained to use this product.

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