

TECHNICAL DATA SHEET

FANEL UV

Generic Name by SUCAMEC: NON-ELECTRIC DETONATOR

DESCRIPTION AND COMPOSITION:

FANEL UV is an effective initiation system for being used in underground mining, surface mining and civil work, which offers synchronization benefits without risk, by removing any possibility of wrong connections. It is especially manufactured to work under a strong UV radiation exposure.

It is made of the following components:

- Delay Detonator: It is a Detonator No. 12 containing inside a very sensitive primary explosive, a secondary high explosive one and a delay element based on its serial number, which allows it to be detonated at different time intervals. For this purpose, two scales are offered to the market: short term (MS) and long term (LP).
- Fanel Hose UV or Shock Tube: It is manufactured with high
 mechanical resistance thermoplastic materials, and uniformly
 coated inside with a reactive substance that when activated
 carries a shock wave, with the enough pressure and temperature
 as to initiate the Delay Detonator.



One of its ends is ultrasonically sealed and the other end is assembled to the Delay Detonator. The color of the Fanel Hose UV allows to identify Fanel UV delay time scale, so: For the short period the Fanel Hose UV is orange (MS); for the long period the Fanel Hose UV is yellow (LP).

- Label: It indicates the serial number and delay time in milliseconds or seconds. Additionally, we have a bar code that allows the traceability of the product.
- "J-Type" Plastic Connector: This is a plastic block, specially designed for facilitating connection and ensuring contact between the Fanel Hose UV and the Detonating Cord.

Additionally, the color of the plastic connector allows to identify Fanel UV delay time period, so:

- For short period, the "J-type" plastic connector is red.
- For long period, the "J-type" plastic connector is blue.

TYPES AND USES:

In order to satisfy the needs of both the national and international market, FAMESA EXPLOSIVOS S.A.C. offers two types based on the delay time:

- FANEL UV Short period (MS).
- FANEL UV Long period (LP).

FANEL UV is a blasting accessory with improved traction and abrasion characteristics for the Fanel Hose UV making it suitable for all surface mining, underground mining and civil work applications; reaching high efficiency, safety and increased productivity.

The handling temperature range of FANEL UV is from 0°C to 40°C. For different temperatures it is recommended to contact the Technical Assistance area.

TECHNICAL CHARACTERISTICS:



DELAY DETONATOR

	UNIT	FANEL UV
Diameter	mm	7.3
Length	mm	60 / 68 / 88 / 92
Esopo Test, Drilling Diameter	mm	Min. 11.0
Trauzi Volume	cm ³	Min. 34.0
Resistance to Impact 2 kg/1m		It does not detonate

FANEL HOSE UV

		UNIT	FANEL UV	
Material			Flexible and great mechanical resistance thermoplastic	
Diameter		mm	3.3 ± 0.2	
Length		m	Variable	
Color	Short Time		Orange	
	Long Period		Yellow	
Wave velocity		m/s	2 000 ± 200	

LABEL

	UNIT	FANEL UV
Material		Plastic
Font color		Black
Background color		White

• "J-TYPE" PLASTIC CONNECTOR

		FANEL UV
Material		 Plastic
Color	Short Time	 Red
	Long Period	 Blue

The values expressed are results at normal conditions (20°C and 1 atm.)

DELAY NOMINAL TIME SCALE

STANDARD SERIES	UNIVERSAL SERIES	
SHORT TIME	SHORT TIME	



SERIES NUMBER	DELAY TIME (ms)			
0	0			
1	25			
2	50			
3	75			
4	100			
5	125			
6	150			
7	175			
8	200			
9	225			
10	250			
11	300			
12	350			
13	400			
14	450			
15	500			
16	600			
17	700			
18	800			
19	900			
20	1000			

SERIES NUMBER	DELAY TIME (ms)
0	0
1	25
2	50
3	75
4	100
5	125
6	150
7	175
8	200
9	250
10	300
11	350
12	400
13	450
14	500
15	600
16	700
17	800
18	900
19	1000
20	1100
21	1200

	LONG PERIOD			
SERIES NUMBER	DELAY TIME (s)			
1	0.5			
2	1.0			
3	1.5			
4	2.0			
5	2.5			
6	3.0			
7	3.5			
8	4.0			
9	4.5			
10	5.0			
11	5.6			
12	6.2			
13	6.8			
14	7.4			
15	8.0			
16	8.6			

	LONG PERIOD			
SERIES NUMBER	DELAY TIME (s)			
0	0			
1	0.2			
2	0.4			
3	0.6			
4	1.0			
5	1.4			
6	1.8			
7	2.4			
8	3.0			
9	3.8			
10	4.6			
11	5.5			
12	6.4			
13	7.4			
14	8.5			
15	9.6			

PACKAGING:

Packaging 1.1B



	BOX MATERIAL	BOX CAPACITY (Pcs.)	PERIOD	NET WEIGHT (kg)	GROSS WEIGHT (kg)	OUTER DIMENSIONS (cm)
FANEL UV 4,0 m	Cardboard	150	Short	5.9	6.7	56,0 x 30,5 x 18,0
			Long	6.6	7.4	
FANEL UV 4,2 m	Cardboard 150	450	Short	6.2	7.0	56,0 x 30,5 x 18,0
		150	Long	6.8	7.6	
FANEL UV 4,8 m	Cardboard 150	150	Short	6.7	7.5	56,0 x 30,5 x 18,0
		150	Long	7.5	8.3	

TRANSPORT:

Class: 1 Division: 1.1B UN No. 0360



STORAGE AND WARRANTY:

FANEL UV must be stored in powder magazines at **temperatures between 0°C and 30°C**, located in safe, well ventilated, dry areas, protected from rain and heat. Also, the explosive inventory should be rotated, avoiding the use of new materials before using old ones. And it must be stored according to the current compatibility table of the relevant authority.

FANEL UV stored in its original packaging and under the above-mentioned temperature conditions has a **guarantee of 12 months** after its date of production.

WARNING:

FAMESA EXPLOSIVOS S.A.C. has safe products, but they may become dangerous elements in inexperienced hands.

The purchaser or user must comply with the corresponding regulations at the time of transportation, storage and use, as well as duly train all personnel in charge of loading and handling, providing mechanical aids for loads over 25 kg per person.

FAMESA EXPLOSIVOS S.A.C. assumes no liability for transport, storage and/or improper use of its products.

The information and recommendation described in this document do not necessarily cover all product applications nor the different conditions under which it is being used. These are based on the experience, research and tests done by Famesa Explosivos S.A.C., who does not guarantee favorable results nor assume any responsibility, expressed or implied, in relation to the use of these suggestions. This product may be changed without prior notice.