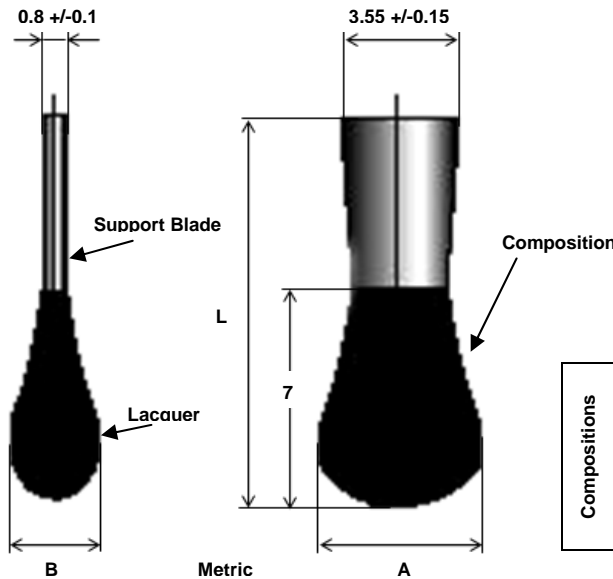


## Data Sheet 100

# Daveyfire N Series Electric Fusehead & Igniter.



		Dimensions (mm.) +/-1		
		L	A	B
Compositions	B	12	3.8	3
	BR	12.7	4.4	3.8
	F	12	4	3
	FR	12.7	4.4	3.8

Our Electro Explosive Devices are constructed on the basis of a patented and original fusehead design.

The robust structure provides excellent resistance to mechanical damage from vibration and shock.

The bridgewire is soldered very securely and for a considerable length and constitutes to the integrity of the fusehead.

As a result of a very carefully controlled manufacturing process, the resistance is very consistent and the device is very reliable.

This Data Sheet is valid for all fusehead types and Electric Igniters, Ref SA2000 & SA2001

## Characteristics

The quoted resistance is only for the fusehead itself, and testing through any leadwire attached will add to the resistance. The test current is specified as no greater than 10mA. Any current applied above this level but below the specified all-fire conditions must be considered to be potentially destructive. In certain cases where a very long duration or repetitive test current is applied the test current must be reduced.

The information and specifications listed here are all considered to be nominal and represent our current production; however the products and specifications are subject to change. Please feel free to contact us for verifications and further information on special applications.

## Electrical

Fuseheads	N28B	N28BR	N28F	N28FR	M28F	N32B	N32BR	N32F	N38B	N38BR	N48B	N55B	N75B	N80B	N120B
Bridgewire Ø (µ)	28µ Ni/Cr	28µ Ni/Cr	28µ Ni/Cr	28µ Ni/Cr	28µ Ni/Cr	32µ Ni/Cr	32µ Ni/Cr	32µ Ni/Cr	38µ Ni/Cr	38µ Ni/Cr	48µ Ni/Cr	55µ Ni/Cr	75µ Cu/Ni	80µ Ni/Cr	120µ Cu/Ni
Resistance (Ω)	1.3-1.9	1.3-1.9	1.3-1.9	1.3-1.9	1.3-1.9	1-1.4	1-1.4	1-1.4	0.75-1.05	0.75-1.05	0.4-0.6	0.35-0.55	0.09-0.15	0.15-0.21	0.03-0.06
No-fire Current 10sec/A (1)	0.2	0.2	0.4	0.4	0.4	0.25	0.25	0.45	0.3	0.3	0.45	0.6	1.8	1.25	4.2
All-fire Current 40ms/A (2)	0.37	0.37	1	1	1	0.45	0.45	1.2	0.55	0.55	0.85	1	3.6	2	7
Max. No-fire Energy mJ/Ω	0.55	0.55	1.5	1.5	1.5	1	1	2	1.5	1.5	4.5	8	65	35	400
Min. All-fire Energy mJ/Ω	1.1	1.1	6	6	6	1.35	1.35	10	3.5	3.5	10	14.5	130	65	800
Recommended Fire Current – A (3)	≥ 0.90	≥ 0.90	≥ 2.00	≥ 2.00	≥ 2.00	≥ 1.10	≥ 1.10	≥ 2.30	≥ 1.35	≥ 1.35	≥ 1.80	≥ 2.00	≥ 7.00	≥ 4.00	≥ 15.00
Max. Test Current - mA	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Self Ignition Temp. C/F	180/356	180/356	300/572	300/572	300/572	180/356	180/356	300/572	180/356	180/356	180/356	180/356	180/356	180/356	180/356
Output Energy - J	60	150	80	200	50	60	150	80	60	150	60	60	60	60	60

**Function Time (+/-0.3):** 1.7ms w/1Amp | 1.2ms w/2Amp | 0.75ms w/3Amp.

- (1) **No-fire:** Highest current which will not activate the fusehead. Less than 1% initiation with a 95% confidence level. Performing test with NFC will destroy the device.
- (2) **All-fire:** Minimum current which will activate the fusehead. Higher than 99.9% initiation with a 95% confidence level.
- (3) **Recommended current** for in series firing

## Mechanical

### Size

See drawing.

### Weight, without leads, Nom.

100/150 mg.

### Body construction

Fusehead body is resin-impregnated fiberboard laminated with insulator layer and copper sheet. The bridgewire is soldered to the laminated.

The electric leakage resistance prior to soldering is not less than 50 M $\Omega$  with 250 Vdc

### Lead wire

Length: any size, per specifications.

Wire gage: 21-26awg.  
Standard is 24awg.

Solid copper or tinned copper, duplex or single conductor, no shunts unless requested.

### Wire Insulation

High-density polyethylene or PVC, any color

### Attachment to body

Lead free soldered - 2 lb. pull strength

### Shroud

HDPE permanent sleeve or removable silicon sleeve over fusehead.

## Environment

### Temperature resistance test

Thermally stable @ 302°F/  
150°C for 24 hours

## Quality

### Circuit test

100% for resistance on fuse-heads

### Ignition test

All-fire and no-fire levels are tested

### Lot inspection

For each batch

## Chemical

### Ignition compound

LMNR  
Nitrocellulose lacquer

## Freight Classification

### Shipping name

Igniter, Electric

### Hazard classification

UN 0454 - Class 1.4 S

## Shelf Life

In good storage condition; 2 to 3 years from manufacturing date.

## Safety

### Maximum explosive weight NEQ

50/60 mg.


### Warning

This is a potentially hazardous product. Reference should be made to the Material Safety Data Sheet (MSDS) included in every shipment of this product. This product may only be handled by those fully familiar and trained to handle such product and only in accordance with any Federal, State and local ordinances.

Fuseheads/electric igniters are pyrotechnic material. They may be ignited, in addition to their normal mode of function, by flame, heat, electrostatic discharge, impact and friction. The resulting flame, particles and heat are dangerous and can cause severe injury and possible loss of property if fired under unprotected conditions. They may ignite after exposure to a temperature exceeding 165°F/74°C, or any current exceeding the maximum specified test current, or if they are cut or otherwise damaged.

If your company does not have a proper training and safety program, it is essential that one be established before explosives items are handled or used. For more information, please contact:

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