

ELECTRIC MATCH CHARACTERISTICS

- There are many manufacturers of electric matches, and there are significant differences in their performance characteristics.

Match Supplier	Product Designation	Match Resistance (ohms) ^(a)	Firing Current (amps) ^(b)	Fire Time (ms) ^(c)	Comp. Mass (mg) ^(d)
Daveyfire	A/N28B	1.6	0.90	1.6	40
	A/N28BR	1.6	0.90	1.8	80
	A/N28F	1.6	2.00	3.1	80
Luna Tech	BGZD	1.6	1.00*	11 ^(e)	10
	Flash	1.0	4.00*	14.4 ^(f)	20
	OXRAL	1.7	0.80	5 ^(e)	40
Martinez Spec.	E-Max	2.5	0.90	1.8	20
	E-Max Mini	0.9	1.00	1.9	6
	Titan	2.7	2.00	4.7	20

- a) Measured to the nearest 0.1 ohm and reported as the average value for 10 electric matches.
- b) The approximate value recommended by the supplier for series firing. When no series firing value was recommended by the supplier [indicated with an asterisk (*)], the authors' estimated value was used.
- c) The average of five test firings, as determined by noting the time interval between application of the firing current and when significant light output was first detected. (ms = millisecond)
- d) The mass of the composition on the tip of one electric match, reported to only 1 significant figure. (mg = milligram)
- e) Even though the photo detector was set to be very sensitive to light, these electric matches produced a slowly increasing light signal. This made it somewhat difficult to determine when first light output occurred.
- f) Even though the times to first light output were quite long, they could be accurately determined because of the rapid rise in the light signal.