

# PRODUCT INFO SHEET

Nanmac Corporation

Quality • Performance • Solutions

## Spring-Loaded Ribbon Thermocouples

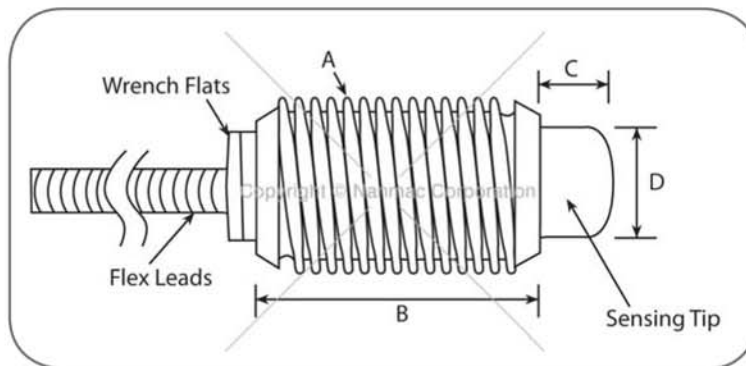
### B9 Series

This spring-loaded thermocouple is designed for threaded blind-hole measurements, surfaces subject to vibration/oscillation, and any application where positive contact for good measurement is required. The sensing tip of this device consists of a thin ribbon thermocouple element overlapped onto a phenolic rod. This rod is spring-loaded within the threaded stainless steel thermowell body. Thus, the sensing tip can be depressed up to an 1/8 inch while it continuously maintains good thermal contact to the object whose temperature is being measured. The combination of the thin ribbon thermocouple and low thermal conductivity of the phenoc rod yield response times in the low 200 milliseconds. This combination also provides temperature measurements without conduction errors. The true temperature of the test item is monitored.

All units come with a Delrin locking element (slug), which when used resists loosening due to vibration. However, this limits the upper temperature limit to 300 degrees Fahrenheit. The Delrin slug can easily be removed with a pair of pliers, increasing the upper temperature limit to 450 degrees Fahrenheit. There are several other techniques one can use to resist vibration. Contact an engineer to discuss these options. Also, if higher temperatures are required please provide us with your particular requirement.

#### NOTES:

- Low millisecond response times in contact applications.
- Temperature rating to 450 degrees Fahrenheit.
- No conduction errors
- Self-locking Delrin plug
- Choice of thermocouple types J, K, E & T
- All units come with 48 inches of teflon insulated lead wire.



#### Specifications

Part No.	Thread Size (in.)	Thread Length (in.)	Rod Length (in.)	Rod Dia. (in.)	Force (lbs.) Initial - Final
B9-1(*)	1/4-28	1	3/16	0.090	1.0 - 4.0
B9-2(*)	3/8-16	1-1/8	3/16	0.187	2.8 - 7.2
B9-3(*)	1/2-13	1-1/4	1/4	0.248	2.7 - 9.3
B9-4(*)	5/8-11	1-1/2	5/16	0.310	10.5 - 25.5

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