

Thermocouples and Probes — continued

Industrial Mineral Insulated Probes  
Type N



- Suitable for applications up to 1200°C
- In vacuum or controlled atmospheres, type-N sensors can be used in excess of 1200°C
- Excellent long-term stability, reliability and high temperature performance
- Lifetime many times that of K-type equivalents at elevated temperatures
- Particularly suitable for industrial applications
- Probes can be bent to enable fitting in awkward locations



Mineral-insulated, metal-sheathed probes using type N (Nirosil/Nisil), a base metal thermocouple which offers significant advantages over type K. The thermocouple junction is located at the tip and insulated from the sheath.

Sheath material	Nickel-chromium-silicon
Max. temperature	1200°C
Pot seal	M8 1.0mm thread, L = 25mm
Pot temperature	200°C max.
Leads	PTFE insulated, L = 100mm

Mftrs. List No. NMI/3 150(IEC) = 707-9072, NMI/3 250(IEC) = 707-9084, NMI/3 500(IEC) = 707-9096

SEN293

Probe Dia. (mm)	Probe L (mm)	Mftrs. List No.	Order Code	1+	10+	25+
3.0	150	NMI/3 150 (IEC)	707-9072			
3.0	250	NMI/3 250 (IEC)	707-9084			
3.0	500	NMI/3 500 (IEC)	707-9096			

Heavy Duty Thermocouples



- Low-cost, heavy-duty, stainless steel thermocouples for a variety of applications up to 350°C
- Probes have grounded junctions for fast response
- 2 metre leads of rugged, stainless steel braided, fibreglass



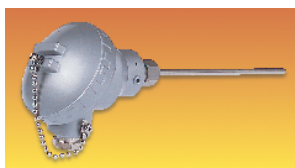
Probe L = 150, Dia = 4.76, Lead L = 2m 7/0.2

Mftrs. List Nos. J-HD-150X(IEC) = 707-9436, K-HD-150X(IEC) = 707-9448

SEN181

	Order Code	1+	10+	25+
Type J	707-9436			
Type K	707-9448			

Industrial Probes with Terminal Head  
Type K



- Type K mineral-insulated thermocouple probes
- Strong 6mm diameter stainless steel stem withstands high pressures
- Waterproof terminal head gives IP67 protection
- Thermocouple junction located at tip is insulated from the sheath



The terminal head contains terminal block allowing connection to the measuring instrument via an M20 cable gland.

Sheath material	310 stainless steel
Terminal head	Die cast aluminium, epoxy coated. Screwed lid with retaining chain
	IP67 rated
Temperature range	-40°C to +1100°C

FOR SUITABLE COMPRESSION GLAND SEE ORDER CODE 254-654

SEN158

Probe Length	Mftrs. List No.	Order Code	1+	5+	10+	25+
150mm	K-150-KNE (IEC)	707-9667				
300mm	K-300-KNE (IEC)	707-9679				
400mm	K-400-KNE (IEC)	707-9680				

Industrial Process Probes – Type K



Probes: Dia. = 6, L = 100, 150  
Mounting: ½" BSPP male thread  
Lagging extension: Dia. = 12.7, L = 75



- Accurate rugged construction
- Terminal head can accommodate DIN form transmitter or DIN terminal blocks
- Sensor is thermocouple type K to IEC 584-3, insulated from sheath
- Suitable for a wide range of industrial applications
- Wide temperature range: -100°C to +1,100°C
- All stainless steel below aluminium head ● IP67 rated
- DIN terminal block is made of high temperature green plastic and has 2 terminals

This industrial thermocouple is mounted into the process via ½" BSPP male thread below which the probe length is measured. Above the thread hexagon is a stainless steel lagging extension. The sensor has a fitted aluminium terminal head with a captive threaded cover.

FOR SUITABLE THERMOCOUPLE 4 – 20MA TRANSMITTER, SEE ORDER CODE 615-687

SEN345

Probe Length	Mftrs. List No.	Order Code	1+	5+	10+
100mm	010012TD	725-5603			
150mm	010013TD	725-5615			
Terminal Block	HT-055	725-5627			

Adjustable Bayonet Thermocouple  
Types J and K



- Adjustable bayonet thermocouples designed primarily for the plastics and packaging industry, but recommended wherever spring loaded contact is required

- Thermocouple junction is housed in a rugged stainless steel tip
- Supplied with 2 metres of stainless steel braided lead fitted with a 170mm spring with adjustable fixing cap
- Separate bayonet adaptor locates via a ½" BSP male thread
- Fixing cap of the thermocouple is fitted to the adaptor to ensure secure spring loaded contact
- Suitable for temperatures up to 350°C

SEN3

	Mftrs. List No.	Order Code	1+	10+	25+	100+
Type J	J-ABT-2 (IEC)	707-9801				
Type K	K-ABT-2 (IEC)	707-9813				
Adaptor		152-239				

Handheld Probes – Type K  
Fixed Probes



Insertion  
Overall L = 200  
Probe L = 105  
Dia = 3.3  
Lead L = 2m



Surface, disc  
Overall L = 195, Probe L = 80, Dia = 4.7, Lead L = 1.5m

Surface, coil  
Overall L = 220, Probe L = 108, Dia = 7.9, Lead L = 1.5m

Air  
Overall L = 187, Probe L = 74, Dia = 4.7, Lead = 1.5m

- Hand-held type K thermocouple probes with stainless steel sheath
- Fitted with coiled PVC lead terminated with miniature thermocouple plug