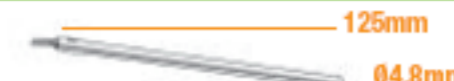





Grant temperature probes: summary of specifications			Thermistors			Thermocouples			Platinum Resistance			
Typical application	Probe	Probe ref.	standard (U)	high precision (UU)	mini (SU)	type J	type K	type T	Pt100 2-wire (P2)	Pt100 4-wire (P4)	Pt1000 2-wire (P6)	Pt1000 4-wire (P8)


General purpose: Robust, stainless steel with rounded end, fast response

Monitoring temperature of air, vapours, liquids, powders, fridges, freezers, food, etc.		CS	VL, F, A	VL, F, A		N, M, Q, FG	N, M, Q, FG	N, M, Q, FG	VL, F, A	C, D	VL, F, A	C, D
		CT	VL, F, A	VL, F, A		N, M, Q, FG	N, M, Q, FG	N, M, Q, FG	VL, F, A	C, D	VL, F, A	C, D
		CM	VS, F	VS, F		N, M, Q	N, M, Q	N, M, Q	VS, F		VS, F	
Delrin handle		CH	VS, F	VS, F		N, M, Q	N, M, Q	N, M, Q	VS, F		VS, F	


General purpose: Exposed junction thermocouples (conductors exposed and welded at tip), fast response, low cost

Air, vapours, liquids, powders, fridges, freezers, food, etc.		TH				N, M	N, M	N, M				
---	---	----	--	--	--	------	------	------	--	--	--	--




Surface temperature: Sensor mounted on either copper (EU) or stainless steel base (EUS)

Monitoring temperature of radiators, pipes, pumps, motors, etc.		EU	VS, VL, F	VS, VL, F		N, M, Q	N, M, Q	N, M, Q	VS, VL, F			
		EUS	VS, VL, F	VS, VL, F		N, M, Q	N, M, Q	N, M, Q	VS, VL, F			



Room temperature: Sensor assembly mounted on aluminium bracket. Removable plastic globe to allow for the effect of radiant heat

Monitoring radiant and air temperature		AG	VS, VL, F	VS, VL, F		N, M, Q	N, M, Q	N, M, Q				
--	--	----	-----------	-----------	--	---------	---------	---------	--	--	--	--

Specialised miniature – hypodermic and catheter probes

Hypodermic probe with handle – used in zoological, veterinary, botanical, entomology, micro-climate research		DS			VS, VL, F	N, M, Q	N, M, Q	N, M, Q				
		DM			VS, VL, F	N, M, Q	N, M, Q	N, M, Q				
Catheter probe (sensor at end of flexible nylon tubing) – used in incubation, crystallisation etc.		FF	VS, VL, F, A	VS, VL, F, A		N, M, Q	N, M, Q	N, M, Q				

Insertion (solid): Stainless steel sheath with pointed end for easy insertion into/withdrawal from solid material

For soil, frozen food, ice, etc.		HS	VL, F, A	VL, F, A		N, M, Q, FG	N, M, Q, FG	N, M, Q, FG	VL, F, A	C, D	VL, F, A	C, D
		CMP	VS, F	VS, F		N, M, Q	N, M, Q	N, M, Q	VS, F		VS, F	

Insertion (soft): Sensor sealed into smooth, flexible, translucent PVC tubing smoothly fused onto cable

Delicate applications requiring flexible soft insertion		REC	VL	VL								
		REC-small	VS	VS								
For ear		EAR	VS	VS								

Accuracy	±0.2°C	±0.1°C	±0.2°C	±1.5°C	±1.5°C	±0.5°C	±0.3°C	±0.3°C	±0.3°C	±0.3°C
Operating range	-50 to +150°C	-50 to +150°C	-50 to +120°C	-25 to +250°C	-25 to +250°C	-25 to +250°C	-50 to +250°C	-50 to +250°C	-50 to +250°C	-50 to +250°C

VL, F, A, N, M, etc = suitable cable types (see separate key below)

Cables for Grant temperature probes		Cable operating range (°C)	Max. Ø (mm)	Max length (m)	Connector supplied	
					bare-ended	thermocouple plug
Cable for thermistors and 2-wire Pt100 and 2-wire Pt1000						
VL	PVC large coaxial, general purpose, water resistant, flexible	+10 to +105	3.1	500	●	X
VS	PVC small coaxial, lightweight, waterproof, flexible	-10 to +105	2.0	5	●	X
F	PTFE coaxial, good mechanical strength & flexibility, resistant to oils, acids, etc	-50 to +250	2.4	500	●	X
A	Polyethylene 2-core, low temperature, heavy duty waterproof	-20 to +80	4.0	300	●	X
Cable for 4-wire Pt100 and 4-wire Pt1000						
C	PVC 4-core insulated, general purpose, water resistant, flexible	-10 to +105	3.5	100	●	X
D	PTFE 4-core insulated, good mechanical strength & flexibility, resistant to oils, acids etc	-50 to +250	3.8	100	●	X
Cable for thermocouples						
N	PTFE flat 2-core, good mechanical strength & flexibility, resistant to oils, acids, etc.	-50 to +250	2.1	50	●	optional
M	PTFE twisted 2-core, good mechanical strength & flexibility, resistant to oils, acids, etc	-50 to +250	2.0	15	●	optional
Q	PTFE round 2-core, good mechanical strength & flexibility, resistant to oils, acids, etc	-50 to +250	2.25	50	●	optional
FG	High temperature	to +400°C max	3.0	-	●	optional