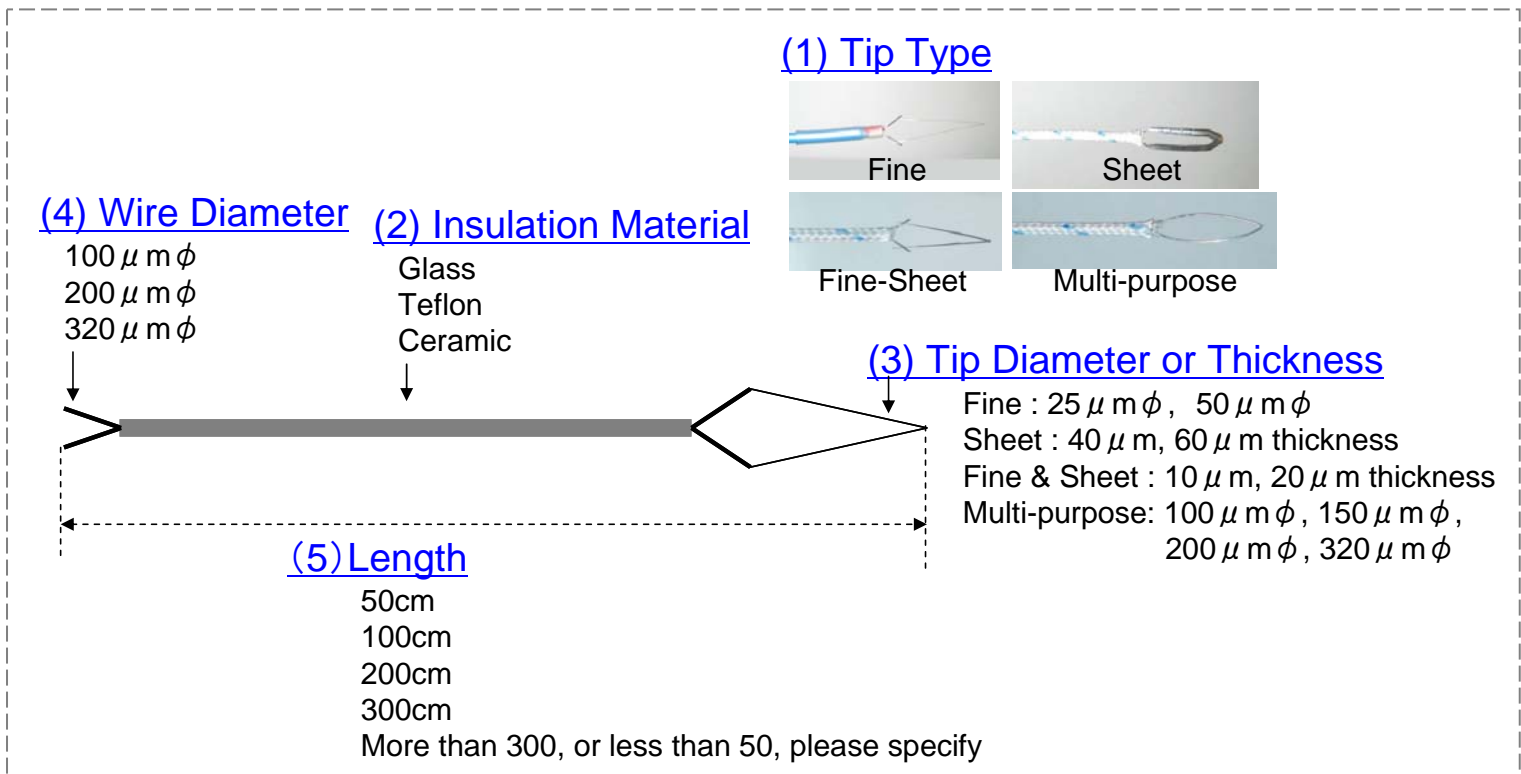


How to select Thermocouple

To decide thermocouple model number, please select following 5 types.

(Example of model number: KFG-25-200-100, KST-40-100-200, KFSG-10-200-300, KMC-200-200-400)



(1)Tip Type

F(fine), **S**(Sheet), **FS**(Fine Sheet), **M**(Multi-purpose),

Ex: **KFG**-25-200-100, **KST**-40-100-200, **KFSG**-10-200-300, **KMC**-200-200-400

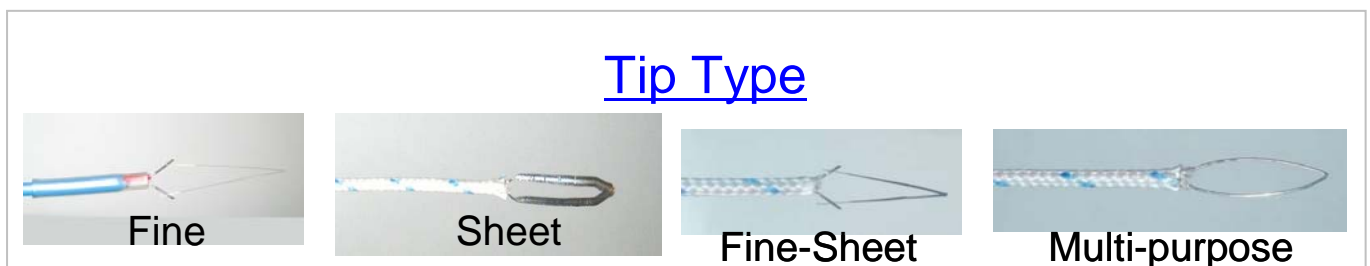
In general, Responsiveness and Strength contradict.

So please choose which feature is more important for your temperature measurement.

Object to be measured	Responsiveness			Strength	
	Very Needed	Needed	No eeded	Needed	No needed
gas	Fine (F)	Fine (F)	Multi-Purpose (M)	Multi-Purpose (M)	Fine (F)
liquid	Fine (F)	Fine (F)	Multi-Purpose (M)	Multi-Purpose (M)	Fine (F)
Surface	Fine&Sheet (FS)	Sheet (S)	Sheet (S)	Sheet (S)	Sheet (S)

※ This is just a guideline. Detail availability is depending on your usage.

※ Please see more detail information or please feel free to contact us.



(2)Insulation Material

G:Glass, T:Teflon, C:Ceramic, (SF):Super Fine (means thin diameter) , (TW):Twist, (IS): Inner Shield, (OS): Outer Shield,

Ex: KFG-25-200-100, KST-40-100-200, KMC-200-200-400, KFT(SF)-25-200-100, KFST(TW)-10-200-300, KFG(IS)-25-320-100 , etc

⊙ In general we recommend glass insulation, if it's less than 400 degrees C, no under clean room nor liquid or chemicals.

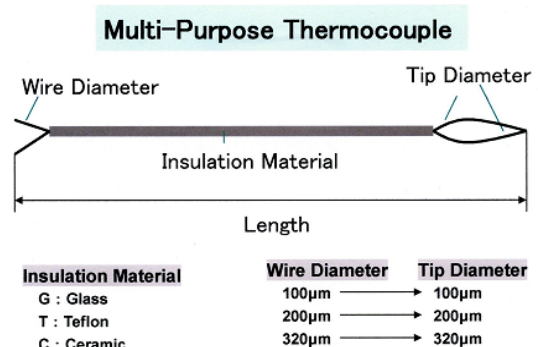
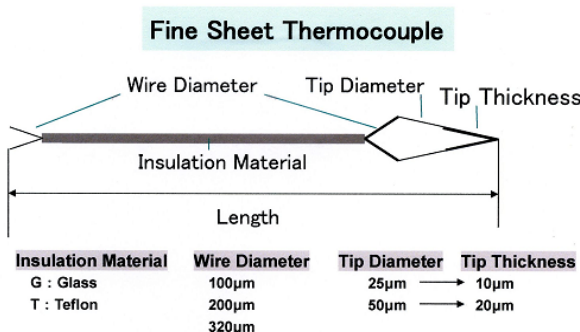
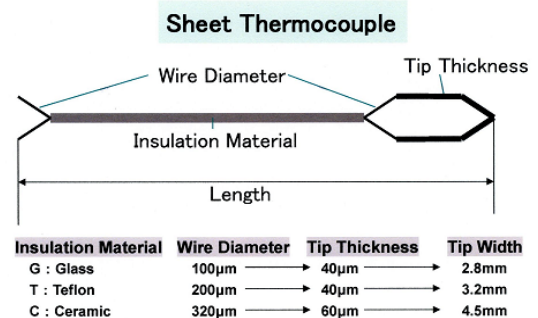
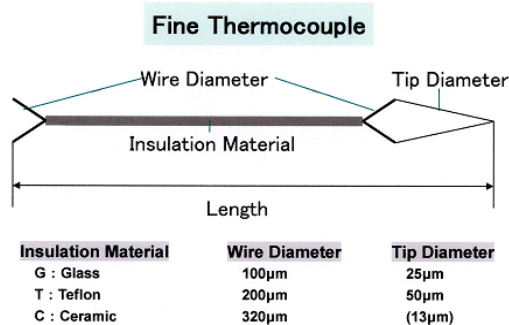
⊙ In case of more than 2 meter, in general we recommend 200 μ m ϕ wire diameter, because of noise and strength countermeasure.

Usage	Heat Resistance		
	Max260°C	Max400°C	More than 400°C
Heat Resistance	Glass (G) / Teflon (T)	Glass (G)	Ceramics (C)
Flexibility	Glass (G) / Teflon (T)	Glass (G)	(Ceramics (C))
Under Clean Room	Teflon (T)	-	-
Under Liquids, Chemicals,	Teflon (T)	-	-
Near to Noise (engine • pump • spark etc)	Shield Glass Shield Teflon Twisted Teflon	Shield Glass	Shield Ceramics

※ This is just a guideline. Detail availability is depending on your usage.
 ※ Please see more detail information or please feel free to contact us.

(3)Tip Diameter or Thickness

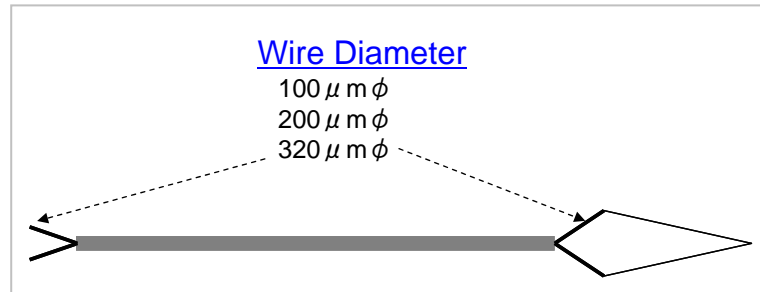
(Fine thermocouple) Tip diameter: 25 micron, 50 micron
 (Multi purpose thermocouples) Tip diameter: 100 micron, 200 micron, 320 micron
 (Sheet thermocouples) Tip thickness: 40 micron, 60 micron
 (Fine Sheet thermocouples) Tip thickness: 10 micron, 20 micron,
 Ex: KFG-25-200-100 , KST-40-100-200, KFSG-10-200-100, KMG-100-100-200, KMT-200-200-300



(4)Wire Diameter

Ex: KFG-25-200-100 , KFG(SF)-50-200-100 , KST-40-100-200, KSG-60-320-400,
KFT(TW)-10-200-100, KFG(OS)-20-320-100, KMG-100-100-200, KMT-200-200-300

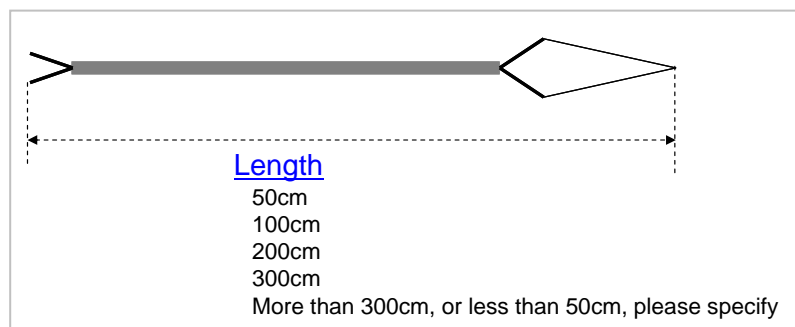
© In general, we recommend $200\ \mu\text{m}\ \phi$ when thermocouple length is more than 2m.



(5)Length

How long length thermocouple is preferable?

Ex: KFG-25-200-100 , KST-40-100-200, KMC-200-200-400, KFG(SF)-25-200-100 ,
100cm, 200cm, 300cm,,,,,etc



ANBE SMT Co.

Tel: +81-(0)45-937-6023, Fax: +81-(0)45-937-6024 E-mail: otoa@anbesmt.co.jp

<http://www.anbesmt.co.jp/english/g1s1.html>

149-18, Nishihassakucho, Midoriku, Yokohama Kanagawa, 226-0024, Japan