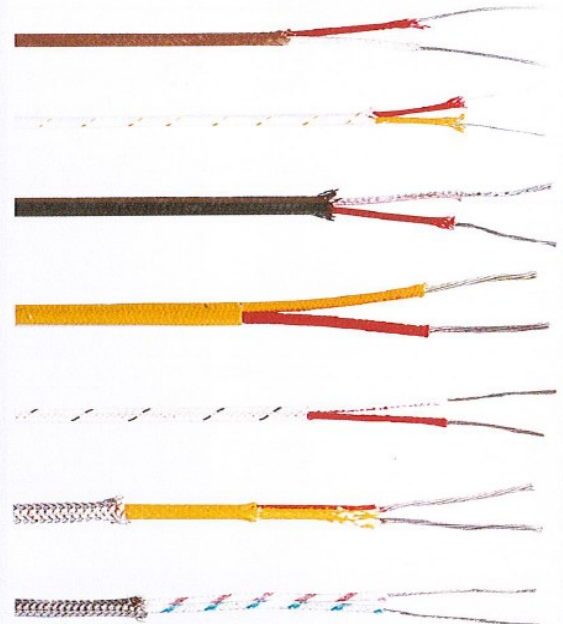


EBCHQ

Fiberglass Braided Insulated Thermocouple & Extension Wire(FB-FB)

- Specification**
- Conductor calibration: K, J, E, T
 - Conductor insulation: Fiberglass
 - Jacket insulation: Fiberglass
 - Construction: Parallel conductor
 - Max. temp. : 480°C
 - Color code: ANSI, IEC & JIS



Model Explanation K - FB - SSB - FB - SSB - 20 S

- ① Calibration: K, J, T, E
- ② Conductor insulation material: Fiberglass
- ③ Inner shield material: SSB
- ④ Jacket insulation material: Fiberglass
- ⑤ Outer shield material: SSB
- ⑥ Wire size (AWG)
- ⑦ "S" means "Stranded"; "Blank" means "Solid"

Order Code

Wire Grade	Wire Size (AWG)	Wire Type	Calibration			
			Type J	Type K	Type T	Type E
Thermocouple	14	Solid	J-FB-FB-14	K-FB-FB-14	T-FB-FB-14	E-FB-FB-14
	16	Solid	J-FB-FB-16	K-FB-FB-16	T-FB-FB-16	E-FB-FB-16
	20	Solid	J-FB-FB-20	K-FB-FB-20	T-FB-FB-20	E-FB-FB-20
	20 7/28	Stranded	J-FB-FB-20S	K-FB-FB-20S	T-FB-FB-20S	E-FB-FB-20S
	24	Solid	J-FB-FB-24	K-FB-FB-24	T-FB-FB-24	E-FB-FB-24
	24 7/32	Stranded	J-FB-FB-24S	K-FB-FB-24S	T-FB-FB-24S	E-FB-FB-24S
Extension	16	Solid	JX-FB-FB-16	KX-FB-FB-16	TX-FB-FB-16	EX-FB-FB-16
	20	Solid	JX-FB-FB-20	KX-FB-FB-20	TX-FB-FB-20	EX-FB-FB-20
	20 7/28	Stranded	JX-FB-FB-20S	KX-FB-FB-20S	TX-FB-FB-20S	EX-FB-FB-20S
	24	Solid	JX-FB-FB-24	KX-FB-FB-24	TX-FB-FB-24	EX-FB-FB-24
	24 7/32	Stranded	JX-FB-FB-24S	KX-FB-FB-24S	TX-FB-FB-24S	EX-FB-FB-24S

Outer Shield All above thermocouple and extension wire also can be finished with a metal outer shield to give added protection from abrasion and mechanical damage. If you need the wire with a outer shield, please add "SSB" to the order code, such as "JX-FB-FB-SSB-20S", it means Type JX, 20AWG, Stranded, Conductor insulation: Fiberglass, Jacket insulation: Fiberglass, Outer shield: Stainless steel.

Note: The above order codes represent the more popular constructions. However, other designs are available upon request.



Fiberglass Braided Insulated Thermocouple & Extension Wire(FB-FB)

Color Code & Initial Calibration Tolerance for Thermocouple Wire

Thermocouple Type		ANSI Color Code		Initial Calibration Tolerances		
Wire Alloys	Calibration	Conductor (+/-)	Jacket	Temperature Range	Standard Limits	Special Limits
Iron(+) vs. Constantan(-)	J	White/Red	Brown	0°C to +285°C 285°C to +750°C	±2.2°C ± .75%	±1.1°C ± .4%
Chromel(+) vs. Alumel(-)	K	Yellow/Red	Brown	-200°C to -110°C -110°C to 0°C 0°C to +285°C 285°C to +1250°C	± 2% ±2.2°C ±2.2°C ± .75%	±1.1°C ± .4%
Copper(+) vs. Constantan(-)	T	Blue/Red	Brown	-200°C to -65°C -65°C to +130°C 130°C to +350°C	± 1.5% ±1°C ± .75%	± .8% ± .5°C ± .4%
Chromel(+) vs. Constantan(-)	E	Purple/Red	Brown	-200°C to -170°C -170°C to +250°C 250°C to +340°C 340°C to +900°C	± 1% ±1.7°C ±1.7°C ± .5%	±1°C ±1°C ± .4% ± .4%

Color Code & Initial Calibration Tolerance for Extension Wire

Extension Type		ANSI Color Code		Initial Calibration Tolerances		
Wire Alloys	Calibration	Conductor (+/-)	Jacket	Temperature Range	Standard Limits	Special Limits
Iron(+) vs. Constantan(-)	JX	White/Red	Black	0°C to +200°C	±2.2°C	±1.1°C
Chromel(+) vs. Alumel(-)	KX	Yellow/Red	Yellow	0°C to +200°C	±2.2°C	±1.1°C
Copper(+) vs. Constantan(-)	TX	Blue/Red	Blue	-60°C to +100°C	±1.1°C	± .5°C
Chromel(+) vs. Constantan(-)	EX	Purple/Red	Purple	0°C to +200°C	±1.7°C	±1.1°C

Nominal Insulation Thickness

Wire Size (AWG)	Conductor Insulation Thickness (mm)	Jacket Insulation Thickness (mm)	Outer Diameter (mm)
14	0.18	0.25	2.5×4.6
16	0.18	0.25	2.2×3.8
16 7/24	0.18	0.25	2.4×4.3
20	0.15	0.15	1.4×2.5
20 7/28	0.15	0.15	1.5×2.7
24	0.15	0.15	1.0×1.7
24 7/32	0.15	0.15	1.2×2.1

FB-FB Physical Properties

Characteristics	Insulation	Jacket
Abrasion Resistance	Good	Good
Cut Through Resistance	Very good	Excellent
Moisture Resistance	Good	Good
Solder Iron Resistance	Excellent	Excellent
Service Temperature	480°C continuous 537°C single	480°C continuous 537°C single
Flame Test	Non-flammable	Non-flammable