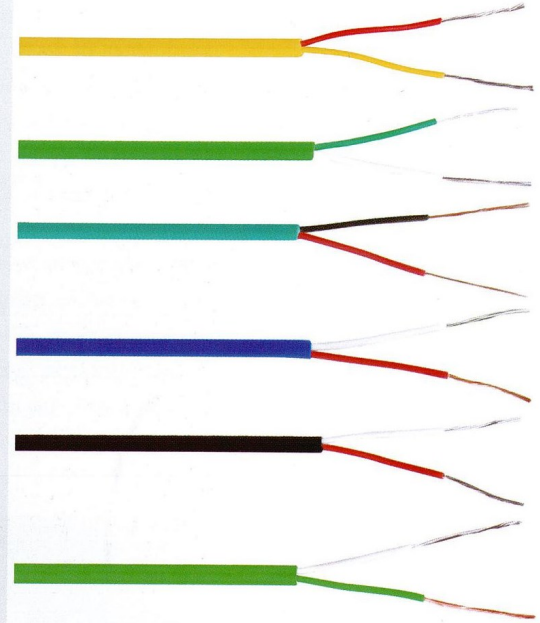


PVC Insulated Thermocouple & Extension Wire (PVC-PVC)

- Specification**
- Conductor calibration: K, J, E, T
 - Conductor insulation: PVC
 - Jacket insulation: PVC
 - Construction: Parallel conductor
 - Max. temp.: 105°C
 - Color code: ANSI, IEC & JIS



Model Explanation K - PVC - SSB - PVC - SSB - 20 S

- ① Calibration: K, J, T, E
- ② Conductor insulation material: PVC
- ③ Inner shield material: SSB
- ④ Jacket insulation material: PVC
- 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	16	Solid	J-PVC-PVC-16	K-PVC-PVC-16	T-PVC-PVC-16	E-PVC-PVC-16
	16 7/24	Stranded	J-PVC-PVC-16S	K-PVC-PVC-16S	T-PVC-PVC-16S	E-PVC-PVC-16S
	20	Solid	J-PVC-PVC-20	K-PVC-PVC-20	T-PVC-PVC-20	E-PVC-PVC-20
	20 7/28	Stranded	J-PVC-PVC-20S	K-PVC-PVC-20S	T-PVC-PVC-20S	E-PVC-PVC-20S
	24	Solid	J-PVC-PVC-24	K-PVC-PVC-24	T-PVC-PVC-24	E-PVC-PVC-24
	24 7/32	Stranded	J-PVC-PVC-24S	K-PVC-PVC-24S	T-PVC-PVC-24S	E-PVC-PVC-24S
Extension	14	Solid	JX-PVC-PVC-14	KX-PVC-PVC-14	TX-PVC-PVC-14	EX-PVC-PVC-14
	16	Solid	JX-PVC-PVC-16	KX-PVC-PVC-16	TX-PVC-PVC-16	EX-PVC-PVC-16
	16 7/24	Stranded	JX-PVC-PVC-16S	KX-PVC-PVC-16S	TX-PVC-PVC-16S	EX-PVC-PVC-16S
	18 7/26	Stranded	JX-PVC-PVC-18S	KX-PVC-PVC-18S	TX-PVC-PVC-18S	EX-PVC-PVC-18S
	20	Solid	JX-PVC-PVC-20	KX-PVC-PVC-20	TX-PVC-PVC-20	EX-PVC-PVC-20
	20 7/28	Stranded	JX-PVC-PVC-20S	KX-PVC-PVC-20S	TX-PVC-PVC-20S	EX-PVC-PVC-20S
	24	Solid	JX-PVC-PVC-24	KX-PVC-PVC-24	TX-PVC-PVC-24	EX-PVC-PVC-24
	24 7/32	Stranded	JX-PVC-PVC-24S	KX-PVC-PVC-24S	TX-PVC-PVC-24S	EX-PVC-PVC-24S

Inner Shield All above thermocouple and extension wire can be finished with an inner shield (Stainless steel-SSB), If you need the wire with an inner shield, please add "SSB" to the order code, such as "JX-PVC-SSB-PVC-20S", it means Type JX, 20AWG, Stranded, Conductor insulation: PVC, Inner shield: Stainless steel, Jacket insulation: PVC.

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 an outer shield, please add "SSB" to the order code, such as "JX-PVC-PVC-SSB-20S", it means Type JX, 20AWG, Stranded, Conductor insulation: PVC, Jacket insulation: PVC, Outer shield: Stainless steel.

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



PVC Insulated Thermocouple & Extension Wire (PVC-PVC)

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	0.38	0.45	3.2×5.6
16	0.38	0.38	2.8×4.9
16 7/24	0.38	0.38	3.0×5.0
20	0.38	0.38	2.3×3.9
20 7/28	0.38	0.38	2.4×4.1
24	0.38	0.38	2.0×3.3
24 7/32	0.38	0.38	2.1×3.5

PVC-PVC Physical Properties

Characteristics	Insulation	Jacket
Abrasion Resistance	Good	Good
Cut Through Resistance	Good	Good
Moisture Resistance	Excellent	Excellent
Solder Iron Resistance	Poor	Poor
Service Temperature	105°C continuous 150°C single	105°C continuous 150°C single
Flame Test	Self-extinguishing	Self-extinguishing