

ZONZEN

SPECIALIST OF TEMPERATURE SENSOR

Product Description:

FEP Insulated Thermocouple & Extension Wire (Max. temperature: 200°C)

Technique parameter:

Model explanation

K	-	FEP	-	SSB	-	FEP	-	SSB	-	20	-	S
1		2		3		4		5		6		7

- 1 Calibration: K, J, T, E, N, R, S
- 2 Conductor insulation material: FEP
- 3 Inner shield material: SSB
- 4 Jacket insulation material: FEP
- 5 Outer shield material: SSB
- 6 Wire size: 30AWG, 26AWG, 24AWG, 20AWG, 16AWG...
- 7 'S' means 'Stranded'; 'Blank' means 'Solid'

Order Code

Type	Wire Size(AWG)	Conductor	Calibration			
			Type J	Type K	Type T	Type E
Thermocouple	20	Solid	J-FEP-FEP-20	K-FEP-FEP-20	T-FEP-FEP-20	E-FEP-FEP-20
	20 7/28	Stranded	J-FEP-FEP-20S	K-FEP-FEP-20S	T-FEP-FEP-20S	E-FEP-FEP-20S
	24	Solid	J-FEP-FEP-24	K-FEP-FEP-24	T-FEP-FEP-24	E-FEP-FEP-24
	24 7/32	Stranded	J-FEP-FEP-24S	K-FEP-FEP-24S	T-FEP-FEP-24S	E-FEP-FEP-24S
	30	Solid	J-FEP-FEP-30	K-FEP-FEP-30	T-FEP-FEP-30	E-FEP-FEP-30
Extension	16	Solid	JX-FEP-FEP-16	KX-FEP-FEP-16	TX-FEP-FEP-16	EX-FEP-FEP-16
	20	Solid	JX-FEP-FEP-20	KX-FEP-FEP-20	TX-FEP-FEP-20	EX-FEP-FEP-20
	20 7/28	Stranded	JX-FEP-FEP-20S	KX-FEP-FEP-20S	TX-FEP-FEP-20S	EX-FEP-FEP-20S
	24	Solid	JX-FEP-FEP-24	KX-FEP-FEP-24	TX-FEP-FEP-24	EX-FEP-FEP-24
	24 7/32	Stranded	JX-FEP-FEP-24S	KX-FEP-FEP-24S	TX-FEP-FEP-24S	EX-FEP-FEP-24S

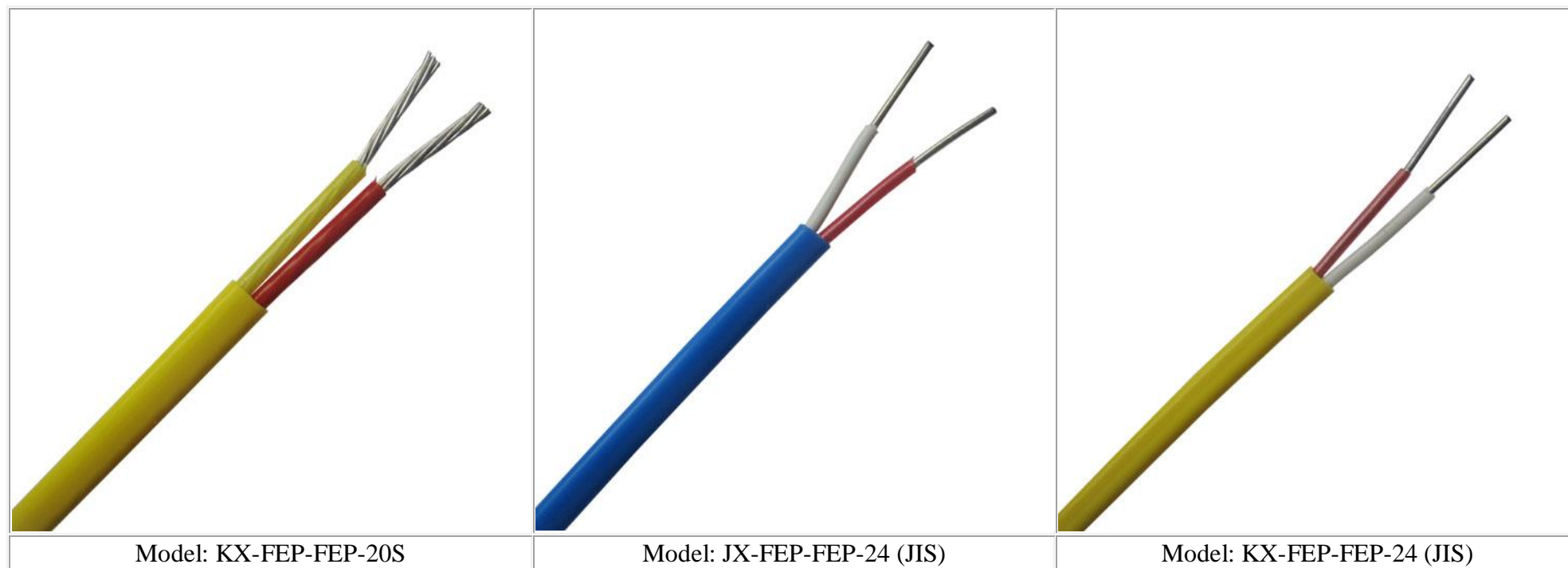
Note: The above order codes represent the more popular constructions. However, other designs are available upon request.

Inner shield

All above thermocouple and extension wire can be finished with a inner shield (Stainless steel-SSB, Tinned plated copper-TCB, Iron plated zinc-IZB and so on). If you need the wire with a inner shield, please add "SSB, TCB or IZB" to the order code, such as "JX-FEP-SSB-FEP-20S", it means Type JX, 20AWG, Stranded, Conductor insulation: FEP, Inner shield: Stainless steel, Jacket insulation: FEP

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, TCB or IZB" to the order code, such as "JX-FEP-FEP-SSB-20S", it means Type JX, 20AWG, Stranded, Conductor insulation: FEP, Jacket insulation: FEP, Outer shield: Stainless steel

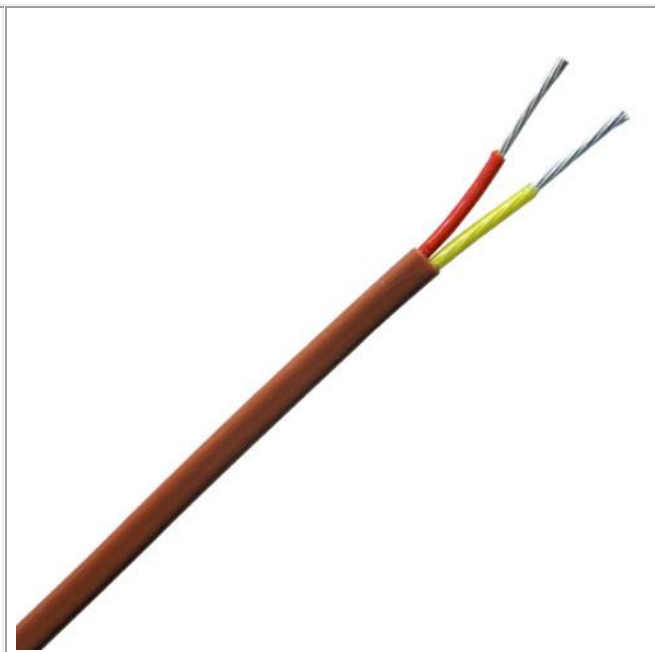




Model: JX-FEP-FEP-20



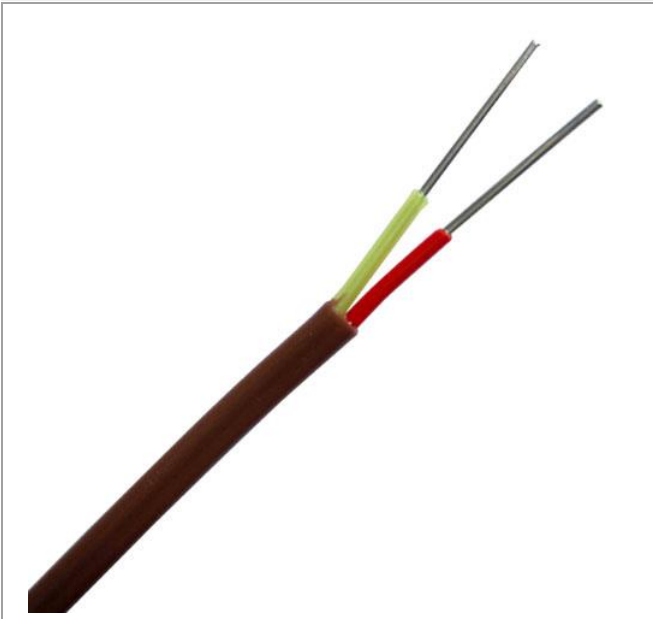
Model: TX-FEP-FEP-20S



Model: K-FEP-FEP-24S



Model: J-FEP-FEP-20



Model: K-FEP-FEP-24



Model: K-FEP-FEP-26

Color Code & Initial Calibration Tolerances for Thermocouple Wire:

Thermocouple Type		ANSI Color Code		Initial Calibration Tolerances		
Wire Alloys	Calibration	+/- Conductor	Overall	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+900°C	± 1% ±1.7°C ±1.7°C ± .5%	±1°C ±1°C ± .4% ± .4%

Color Code & Initial Calibration Tolerances 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	0.20	0.25	2.6×4.8
16	0.20	0.25	2.2×3.9
16 7/24	0.20	0.25	2.4×4.3
20	0.20	0.25	1.7×2.9
20 7/28	0.20	0.25	1.8×3.1
24	0.20	0.25	1.4×2.3
24 7/32	0.20	0.25	1.6×1.7

FEP-FEP Physical Properties:

Characteristics	Insulation	Jacket
Abrasion Resistance	Very good	Very good
Cut Through Resistance	Good	Good
Moisture Resistance	Excellent	Excellent
Solder Iron Resistance	Good	Good
Service Temperature	200°C continuous	200°C continuous
	250°C single	250°C single
Flame Test	Self-extinguishing	Self-extinguishing