

Extension and compensation cables for thermocouples

Structure:

Conductor:

Fe/Cu-NiJ, Cu/Cu-NiT, Ni-Cr/Cu-NiE,
Ni-Cr/Ni-Al, Ni-Cr-Si/Si-Ni, etc.

Insulation:

FEP, PVC;
Glass fiber enameled with silicon
rubber

Screen:

Stanned copper wire

Sheath:

FEP,PVC, glass fiber enameled with
silicon rubber , glass fiber and metallic
braid



Characteristics :

Executed in conformity with SR HD 446.3

S1, CEI 584-3

Working temperature:

PVC: -25....+70°C

FEP: -25....+200 °C

Glass fiber enameled with silicon rubber:
-25...+180 °C

Applications

Used for electrical connections between the open ends of the thermocouples, measuring apparatus and temperature's control.

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	Type	Materials	Tolerance class		Cable temperature range	Conductor construction nr. x mm
			1	2		
Extension	JX	Fe / Cu-NiJ	JX1: $\pm 85 \mu\text{V} (\pm 1,5 \text{ }^\circ\text{C})$	JX2: $\pm 140 \mu\text{V} (\pm 1,5 \text{ }^\circ\text{C})$	-25 ÷ 200 °C	0,32
	TX	Cu / Cu-Ni T	TX1: $\pm 30 \mu\text{V} (\pm 0,5 \text{ }^\circ\text{C})$	TX2: $\pm 60 \mu\text{V} (\pm 1,0 \text{ }^\circ\text{C})$	-25 ÷ 100 °C	0,5
	EX	Ni-Cr / Cu-Ni E	EX1: $\pm 120 \mu\text{V} (\pm 1,5 \text{ }^\circ\text{C})$	EX2: $\pm 200 \mu\text{V} (\pm 2,5 \text{ }^\circ\text{C})$	-25 ÷ 200 °C	1
	KX	Ni-Cr / Ni Alloy	KX1: $\pm 60 \mu\text{V} (\pm 1,5 \text{ }^\circ\text{C})$	KX2: $\pm 100 \mu\text{V} (\pm 2,5 \text{ }^\circ\text{C})$	-25 ÷ 200 °C	1,38
	NX	Ni-Cr-Si / Si-Ni	NX1: $\pm 60 \mu\text{V} (\pm 1,5 \text{ }^\circ\text{C})$	NX2: $\pm 100 \mu\text{V} (\pm 2,5 \text{ }^\circ\text{C})$	-25 ÷ 200 °C	5 x 0,32
	KCA	Fe / Cu-Ni	-	$\pm 100 \mu\text{V} (\pm 2,5 \text{ }^\circ\text{C})$	0 ÷ 150 °C	7 x 0,32
Compensation	KCB	Cu / Cu-Ni	-	$\pm 100 \mu\text{V} (\pm 2,5 \text{ }^\circ\text{C})$	0 ÷ 100 °C	13 x 0,32
	NC	Ni-Cr-Si / Ni-Si	-	$\pm 100 \mu\text{V} (\pm 2,5 \text{ }^\circ\text{C})$	0 ÷ 150 °C	19 x 0,32
	RCA	Cu / Cu-Ni R	-	$\pm 30 \mu\text{V} (\pm 2,5 \text{ }^\circ\text{C})$	0 ÷ 100 °C	32 x 0,32
	RCB	Cu / Cu-Ni R	-	$\pm 60 \mu\text{V} (\pm 5,0 \text{ }^\circ\text{C})$	0 ÷ 200 °C	
	SCA	Cu / Cu-Ni S	-	$\pm 30 \mu\text{V} (\pm 2,5 \text{ }^\circ\text{C})$	0 ÷ 100 °C	
	SCB	Cu / Cu-Ni S	-	$\pm 60 \mu\text{V} (\pm 5,0 \text{ }^\circ\text{C})$	0 ÷ 200 °C	
	BC	Cu / Cu Alloy	-	$\pm 40 \mu\text{V} (\pm 2,5 \text{ }^\circ\text{C})$	0 ÷ 150 °C	

Symbol:

Y = PVC

6Y = FEP / PFA

Fs = fiberglass braiding

FsCs = fiberglass braiding impregnated with silicone rubber

e.g. 1: KX 6YEE6Y 2 x 1mm

K = thermocouple type K

X = extension cable

6Y = FEP insulation

E = copper screen

6Y = FEP sheath

2 = single pair

1mm = conductor diameter

e.g.2: RCA 6YFsE 2 x (32x0,32mm)

R = thermocouple type R

C = compensating cable

A = alloy type

6Y = FEP insulation

Fs = fiberglass braiding

E = copper braiding

2 = single pair

32x0,32mm = construction of stranded conductor