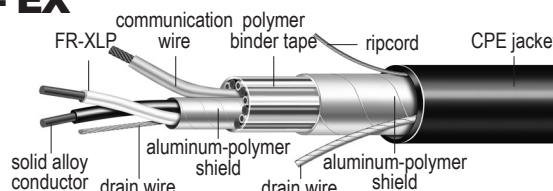


THERMOCOUPLE EXTENSION CABLE - EX

**600 Volt UL Type TC, 90°C
Single & Multiple Pairs
Individual & Overall Shield
FR-XLP or FR-EP Insulation & CPE Jacket
Solid Alloy Conductors**



Catalog Number	ANSI Type	Size AWG	Number of Pairs	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inches	Net Weight Lbs/Mft
HW113 1601E	EX	16	1	25	50	0.30	52
HW113 2004E	EX	20	4	25	55	0.44	96
HW113 2008E	EX	20	8	25	55	0.55	156
HW113 2012E	EX	20	12	25	65	0.66	226

APPLICATION:

Superior flame-retardant cable for use in thermocouple extension applications in caustic environments where protection from electrostatic interference is required. UL listed as Type TC and approved for installation indoors or outdoors, aerially, in conduits, ducts and cable trays. May be installed at temperatures as low as -35°C and used in NEC Class 1, Division 2 hazardous locations.

CONDUCTORS:

Annealed, solid thermocouple extension grade alloys calibrated to standard limits of error per ANSI-MC96.1

INSULATION:

Flame-retardant ethylene propylene rubber (FR-EP) color coded per ANSI-MC96.1. Flame-retardant cross-linked polyethylene per ICEA S-66-524

INDIVIDUAL SHIELD:

Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire

COMMUNICATION WIRE:

Multipair constructions contain a bare copper orange PVC-insulated communication wire

OVERALL SHIELD:

Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire

JACKET:

Sunlight-resistant chlorinated polyethylene (CPE) color coded per ANSI-MC96.1. A ripcord is applied longitudinally under the jacket to facilitate stripping

FLAME TESTS:

- IEEE 383 (70,000 BTU/hr) Flame Test
- IEEE 1202 (70,000 BTU/hr)
- UL Standard 13 (70,000 BTU/hr) Flame Test
- CSA FT4 Flame Test

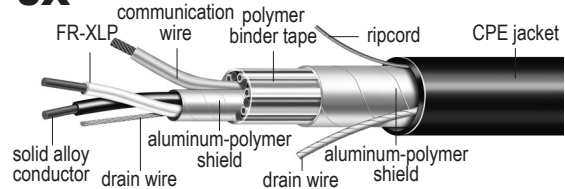
TYPE DESIGNATIONS							
ASA Type	Alloys		Insulation Colors		Jacket Color	Range	Limits of Error
	Positive	Negative	Positive	Negative			
EX	Chromel	Constantan	Purple	Red	Purple	0 to +200	+/- 1.7°C
JX	Iron	Constantan	White	Red	Black	0 to +200	+/- 2.2°C
KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200	+/- 2.2°C
TX	Copper	Constantan	Blue	Red	Blue	0 to +100	+/- 1.0°C

Note: One conductor in each pair is sequentially numbered for identification.

SPECIFICATION
HW113

THERMOCOUPLE EXTENSION CABLE - JX

600 Volt UL Type TC, 90°C
Single & Multiple Pairs
Individual & Overall Shield
FR-XLP or FR-EP Insulation & CPE Jacket
Solid Alloy Conductors



Catalog Number	ANSI Type	Size AWG	Number of Pairs	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inches	Net Weight Lbs/Mft
HW113 1601J	JX	16	1	25	50	0.30	52
HW113 2004J	JX	20	4	25	55	0.44	96
HW113 2008J	JX	20	8	25	55	0.55	156
HW113 2012J	JX	20	12	25	65	0.66	226

APPLICATION:

Superior flame-retardant cable for use in thermocouple extension applications in caustic environments where protection from electrostatic interference is required. UL listed as Type TC and approved for installation indoors or outdoors, aerially, in conduits, ducts and cable trays. May be installed at temperatures as low as -35°C and used in NEC Class 1, Division 2 hazardous locations.

CONDUCTORS:

Annealed, solid thermocouple extension grade alloys calibrated to standard limits of error per ANSI-MC96.1

INSULATION:

Flame-retardant ethylene propylene rubber (FR-EP) color coded per ANSI-MC96.1. Flame-retardant cross-linked polyethylene per ICEA S-66-524

INDIVIDUAL SHIELD:

Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire

COMMUNICATION WIRE:

Multipair constructions contain a bare copper orange PVC-insulated communication wire

OVERALL SHIELD:

Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire

JACKET:

Sunlight-resistant chlorinated polyethylene (CPE) color coded per ANSI-MC96.1. A ripcord is applied longitudinally under the jacket to facilitate stripping

FLAME TESTS:

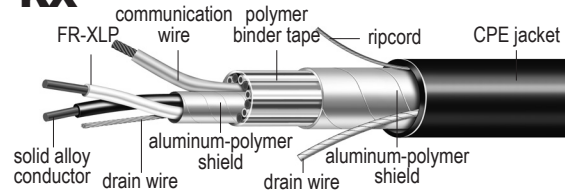
- IEEE 383 (70,000 BTU/hr) Flame Test
- IEEE 1202 (70,000 BTU/hr)
- UL Standard 13 (70,000 BTU/hr) Flame Test
- CSA FT4 Flame Test

TYPE DESIGNATIONS							
ASA Type	Alloys		Insulation Colors		Jacket Color	Range	Limits of Error
	Positive	Negative	Positive	Negative			
EX	Chromel	Constantan	Purple	Red	Purple	0 to +200	+/- 1.7°C
JX	Iron	Constantan	White	Red	Black	0 to +200	+/- 2.2°C
KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200	+/- 2.2°C
TX	Copper	Constantan	Blue	Red	Blue	0 to +100	+/- 1.0°C

Note: One conductor in each pair is sequentially numbered for identification.

THERMOCOUPLE EXTENSION CABLE - KX

**600 Volt UL Type TC, 90°C
Single & Multiple Pairs
Individual & Overall Shield
FR-XLP or FR-EP Insulation & CPE Jacket
Solid Alloy Conductors**



Catalog Number	ANSI Type	Size AWG	Number of Pairs	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inches	Net Weight Lbs/Mft
HW113 1601K	KX	16	1	25	50	0.30	52
HW113 2004K	KX	20	4	25	55	0.44	96
HW113 2008K	KX	20	8	25	55	0.55	156
HW113 2012K	KX	20	12	25	65	0.66	226

APPLICATION:

Superior flame-retardant cable for use in thermocouple extension applications in caustic environments where protection from electrostatic interference is required. UL listed as Type TC and approved for installation indoors or outdoors, aerially, in conduits, ducts and cable trays. May be installed at temperatures as low as -35°C and used in NEC Class 1, Division 2 hazardous locations.

CONDUCTORS:

Annealed, solid thermocouple extension grade alloys calibrated to standard limits of error per ANSI-MC96.1

INSULATION:

Flame-retardant ethylene propylene rubber (FR-EP) color coded per ANSI-MC96.1. Flame-retardant cross-linked polyethylene per ICEA S-66-524

INDIVIDUAL SHIELD:

Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire

COMMUNICATION WIRE:

Multipair constructions contain a bare copper orange PVC-insulated communication wire

OVERALL SHIELD:

Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire

JACKET:

Sunlight-resistant chlorinated polyethylene (CPE) color coded per ANSI-MC96.1. A ripcord is applied longitudinally under the jacket to facilitate stripping

FLAME TESTS:

- IEEE 383 (70,000 BTU/hr) Flame Test
- IEEE 1202 (70,000 BTU/hr)
- UL Standard 13 (70,000 BTU/hr) Flame Test
- CSA FT4 Flame Test

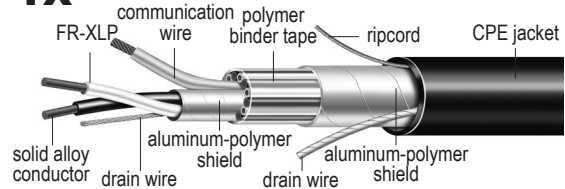
TYPE DESIGNATIONS							
ASA Type	Alloys		Insulation Colors		Jacket Color	Range	Limits of Error
	Positive	Negative	Positive	Negative			
EX	Chromel	Constantan	Purple	Red	Purple	0 to +200	+/- 1.7°C
JX	Iron	Constantan	White	Red	Black	0 to +200	+/- 2.2°C
KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200	+/- 2.2°C
TX	Copper	Constantan	Blue	Red	Blue	0 to +100	+/- 1.0°C

Note: One conductor in each pair is sequentially numbered for identification.

SPECIFICATION
HW113

THERMOCOUPLE EXTENSION CABLE - TX

600 Volt UL Type TC, 90°C
Single & Multiple Pairs
Individual & Overall Shield
FR-XLP or FR-EP Insulation & CPE Jacket
Solid Alloy Conductors



Catalog Number	ANSI Type	Size AWG	Number of Pairs	Insulation Thickness Mils	Jacket Thickness Mils	Overall Diameter Inches	Net Weight Lbs/Mft
HW113 1601T	TX	16	1	25	50	0.30	52
HW113 2004T	TX	20	4	25	55	0.44	96
HW113 2008T	TX	20	8	25	55	0.55	156
HW113 2012T	TX	20	12	25	65	0.66	226

APPLICATION:

Superior flame-retardant cable for use in thermocouple extension applications in caustic environments where protection from electrostatic interference is required. UL listed as Type TC and approved for installation indoors or outdoors, aerially, in conduits, ducts and cable trays. May be installed at temperatures as low as -35°C and used in NEC Class 1, Division 2 hazardous locations.

CONDUCTORS:

Annealed, solid thermocouple extension grade alloys calibrated to standard limits of error per ANSI-MC96.1

INSULATION:

Flame-retardant ethylene propylene rubber (FR-EP) color coded per ANSI-MC96.1. Flame-retardant cross-linked polyethylene per ICEA S-66-524

INDIVIDUAL SHIELD:

Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire

COMMUNICATION WIRE:

Multipair constructions contain a bare copper orange PVC-insulated communication wire

OVERALL SHIELD:

Aluminum-polymer tape providing 100% coverage with a flexible 7-strand tinned copper drain wire

JACKET:

Sunlight-resistant chlorinated polyethylene (CPE) color coded per ANSI-MC96.1. A ripcord is applied longitudinally under the jacket to facilitate stripping

FLAME TESTS:

- IEEE 383 (70,000 BTU/hr) Flame Test
- IEEE 1202 (70,000 BTU/hr)
- UL Standard 13 (70,000 BTU/hr) Flame Test
- CSA FT4 Flame Test

TYPE DESIGNATIONS							
ASA Type	Alloys		Insulation Colors		Jacket Color	Range	Limits of Error
	Positive	Negative	Positive	Negative			
EX	Chromel	Constantan	Purple	Red	Purple	0 to +200	+/- 1.7°C
JX	Iron	Constantan	White	Red	Black	0 to +200	+/- 2.2°C
KX	Chromel	Alumel	Yellow	Red	Yellow	0 to +200	+/- 2.2°C
TX	Copper	Constantan	Blue	Red	Blue	0 to +100	+/- 1.0°C

Note: One conductor in each pair is sequentially numbered for identification.