

WIRE & CABLE

220°F (105°C)

CALIBRATION: ANSI Type J

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-P/ALPTW-24F-JX	W-P/ALPTW-24F-JJX	24 STRANDED	0.848
W-P/ALPTW-24-JX	W-P/ALPTW-24-JJX	24 SOLID	0.928
W-P/ALPTW-20F-JX	W-P/ALPTW-20F-JJX	20 STRANDED	0.335
W-P/ALPTW-20-JX	W-P/ALPTW-20-JJX	20 SOLID	0.367
W-P/ALPTW-18-JX	W-P/ALPTW-18-JJX	18 SOLID	0.234

CALIBRATION: ANSI Type K

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-P/ALPTW-24F-KX	W-P/ALPTW-24F-KKX	24 STRANDED	1.361
W-P/ALPTW-24-KX	W-P/ALPTW-24-KKX	24 SOLID	1.490
W-P/ALPTW-20F-KX	W-P/ALPTW-20F-KKX	20 STRANDED	0.538
W-P/ALPTW-20-KX	W-P/ALPTW-20-KKX	20 SOLID	0.589
W-P/ALPTW-18-KX	W-P/ALPTW-18-KKX	18 SOLID	0.376

CALIBRATION: ANSI Type T

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-P/ALPTW-24F-TX	W-P/ALPTW-24F-TTX	24 STRANDED	0.701
W-P/ALPTW-24-TX	W-P/ALPTW-24-TTX	24 SOLID	0.768
W-P/ALPTW-20F-TX	W-P/ALPTW-20F-TTX	20 STRANDED	0.277
W-P/ALPTW-20-TX	W-P/ALPTW-20-TTX	20 SOLID	0.304
W-P/ALPTW-18-TX	W-P/ALPTW-18-TTX	18 SOLID	0.194

CALIBRATION: ANSI Type E

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-P/ALPTW-24F-EX	W-P/ALPTW-24F-EEX	24 STRANDED	1.639
W-P/ALPTW-24-EX	W-P/ALPTW-24-EEX	24 SOLID	1.795
W-P/ALPTW-20F-EX	W-P/ALPTW-20F-EEX	20 STRANDED	0.648
W-P/ALPTW-20-EX	W-P/ALPTW-20-EEX	20 SOLID	0.709
W-P/ALPTW-18-EX	W-P/ALPTW-18-EEX	18 SOLID	0.453

CALIBRATION: ANSI Type N

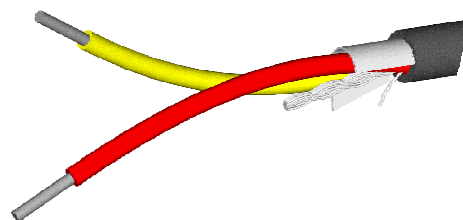
ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-P/P-24F-NX	W-P/P-24F-NNX	24 STRANDED	1.808
W-P/P-24-NX	W-P/P-24-NNX	24 SOLID	1.980
W-P/P-20F-NX	W-P/P-20F-NNX	20 STRANDED	0.715
W-P/P-20-NX	W-P/P-20-NNX	20 SOLID	0.783
W-P/P-18-NX	W-P/P-18-NNX	18 SOLID	0.500

CALIBRATION: ANSI Type SX/RX

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-P/ALPTW-24F-SX		24 STRANDED	0.091
W-P/ALPTW-24-SX		24 SOLID	0.100
W-P/ALPTW-20F-SX		20 STRANDED	0.036
W-P/ALPTW-20-SX		20 SOLID	0.040
W-P/ALPTW-18-SX		18 SOLID	0.025

CALIBRATION: ANSI Type BX

ORDERING CODE		CONDUCTOR SIZE (AWG)	NOMINAL LOOP RESISTANCE (2)
STANDARD	SPECIAL (1)		
W-P/ALPTW-24F-BX		24 STRANDED	0.227
W-P/ALPTW-24-BX		24 SOLID	0.248
W-P/ALPTW-20F-BX		20 STRANDED	0.090
W-P/ALPTW-20-BX		20 SOLID	0.098
W-P/ALPTW-18-BX		18 SOLID	0.063



PVC INSULATED SHIELDED TYPE W-P/ALPTW (THERMOCOUPLE EXTENSION GRADE)

PVC INSULATION

Individual conductors are insulated with a flexible polyvinyl chloride. Conductors are twisted with a polyester backed aluminum tape shield applied with a bare stranded copper drain wire. A polyvinyl chloride jacket is extruded over the shielded pair. Nominal insulation thickness, 15 to 20 mils.

PERFORMANCE FEATURES

- Flexible, easy to strip
- Good abrasion and chemical resistance
- Twisted and shielded construction eliminates most problems associated with noise interference

APPLICATIONS

- Low cost general extension wire
- Petro Chemical Plants
- Laboratories and Test Facilities

CALIBRATION	COLOR CODE (ANSI)			COLOR CODE (IEC)*		
	POSITIVE	NEGATIVE	OVERALL	POSITIVE	NEGATIVE	OVERALL
TYPE JX	WHITE	RED	BLACK	BLACK	WHITE	BLACK
TYPE KX	YELLOW	RED	YELLOW	GREEN	WHITE	GREEN
TYPE TX	BLUE	RED	BLUE	BROWN	WHITE	BROWN
TYPE EX	PURPLE	RED	PURPLE	PURPLE	WHITE	PURPLE
TYPE NX	ORANGE	RED	ORANGE	PINK	WHITE	PINK
TYPE SX/RX	BLACK	RED	GREEN	ORANGE	WHITE	ORANGE
BX	GRAY	RED	GRAY	RED	GRAY	GRAY

* Add (-IEC) to the end of the ordering code for IEC color coded insulation and jacketed wire.
Example: W-P/ALPTW-20-J-IEC

INITIAL CALIBRATION TOLERANCES Per ANSI MC96.1 and ASTM E230 (°F)					
TEMPERATURE RANGE	STANDARD		SPECIAL		
	CALIBRATION	TOLERANCE	CALIBRATION	TOLERANCE	TOLERANCE
32 to 400°F	TYPE JX	±4.0°F	TYPE JJX		±2.0°F
32 to 400°F	TYPE KX	±4.0°F	TYPE KKX		±2.0°F
32 to 212°F	TYPE TX	±1.8°F	TYPE TTX		±0.9°F
32 to 400°F	TYPE EX	±3.0°F	TYPE EEX		±1.8°F
32 to 400°F	TYPE NX	±4.0°F	TYPE NNX		±2.0°F
32 to 400°F	TYPE SX, RX*	±9.0°F			
32 to 212°F	TYPE BX**	±6.7°F			

* Type S and R thermocouples utilize the same extension wire.

** Copper versus copper can be used as extension wire for type B thermocouples if transition temperature is at or below 212°F for a maximum error of 6.7°F. Above 212°F, PCLW30-6 alloy (or equivalent) should be used as the positive extension wire with copper as the negative extension wire. (Note: PCLW30-6 or equivalent can also be used in the 122°F to 212°F temperature range, which will reduce the error to -0/+4°F.)

CONDUCTOR SIZE (AWG)	INSULATION THICKNESS	JACKET THICKNESS	NOMINAL DIMENSIONS	APPROX. SHIPPING WT. lbs/1000 Ft. (Kg)
24 STRANDED	.015	.020	.148	14 lbs (6.4 Kg)
24 SOLID	.015	.020	.140	13 lbs (5.9 Kg)
20 STRANDED	.015	.020	.176	24 lbs (10.9 Kg)
20 SOLID	.015	.020	.164	22 lbs (10.0 Kg)
18 SOLID	.015	.020	.200	30 lbs (13.6 Kg)

Notes:

- Meets or exceeds Special Initial Calibration Tolerances per ANSI MC96.1-1982 and ASTM E230-1993.
- Nominal resistance in OHMS per double feet at 68°F (20°C).



TEMPERATURE MEASUREMENT DESIGNER'S GUIDE
WWW.THERMO-ELECTRIC-DIRECT.COM

SECTION WIRE PVC INSULATED SHIELDED WIRE

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