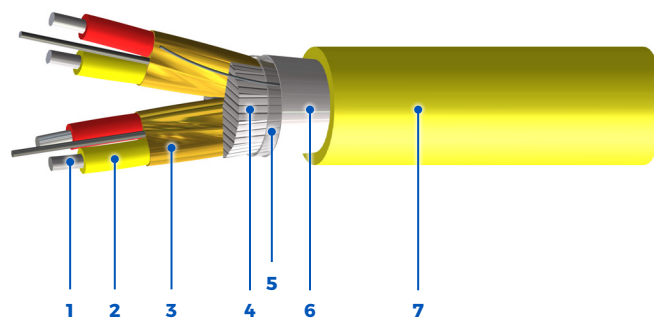


UL Type PLTC / ITC Tray Thermocouple Extension, 300 V

Shawflex Thermocouple Extension cables offer advantages in cost and mechanical properties when used for connections between thermocouples and instruments.

Standards:

PLTC /
ITC-ER



1 – Thermocouple Alloys

2 – FR PVC Insulated
Thermocouple Alloy Wires

3 – Individual Aluminum/Mylar
Shielded Pairs with Tin-coated
Copper Drain Wire

4 – Polypropylene Fillers

5 – Polyester Separator Tape

6 – Overall Aluminum/Mylar
Shield with Tin-coated Copper
Drain Wire

7 – FR PVC Outer
Protective Jacket

Product Construction

Insulation:

- FR PVC Insulation rated: 60°C wet/ 105°C dry
- XLPE rated (optional)
- VW-1 rated (optional)

Shielding (foil-free edge):

- ISOS (standard)
- OS (optional)

Jacket:

- FR PVC yellow (standard) dependent on requested thermocouple alloy rated: 90°C to -40°C
- Thermoset CPE (optional)
- Thermoplastic CPE (optional)
- Thermoplastic LSZH (optional)

Available in:

- Composite constructions
- Custom insulation/ jacket colors
- PLTC/ITC-ER with CPE jackets

- Extension cables for type E, J, K, N, R, S and T thermocouple alloys

Certification/Compliances

- UL 13, Power Limited Tray Cable (PLTC)
- UL 2250, Instrumentation Tray Cable (ITC)
- UL 83, Thermoplastic Insulated Wires and Cables
- IEEE 1202/383 (70,000 BTU/hr), Vertical Flame Test rated (optional)
- UL 1685 / FT4, Vertical Tray Flame Test rated (optional)
- ICEA T-30-520 (70,000 BTU/hr), Vertical Flame Test rated
- UV sunlight resistant "SUN RES" (all colors)
- -40°C cold bend rated
- Rated for use in hazardous locations:
 - Class I Zone 2 (Div 2)
 - Class II Zone 22 (Div 2)

300 V

Voltage

UL Type PLTC / ITC

Thermocouple
Extension

Color Coding

- | | | | |
|---------------|------------|---------|---------------|
| • Type EX: | (+) Purple | (-) Red | Purple jacket |
| • Type JX: | (+) White | (-) Red | Black jacket |
| • Type KX: | (+) Yellow | (-) Red | Yellow jacket |
| • Type NX: | (+) Orange | (-) Red | Orange jacket |
| • Type RX/SX: | (+) Black | (-) Red | Green jacket |
| • Type TX: | (+) Blue | (-) Red | Blue jacket |

UL Type PLTC / ITC Unarmored Tray Thermocouple Extension, 300 V

PART NUMBER	NUMBER OF PAIRS	CONDUCTOR SIZE	NOMINAL DIAMETER OVERALL CABLE	CABLE WEIGHT	MAX PULLING TENSION (PULLING EYE)	MIN BEND RADIUS (PULL)
		(AWG/kcmil)	(in/mm)	(lbs/1000ft) (kg/km)	(lb/kg)	(in/mm)
7P021U160147700	1	16	0.257 / 6.5	40 / 60	41 / 19	4.6 / 118
7P022U160247700	2	16	0.389 / 9.9	91 / 135	82 / 37	7 / 178
7P022U160447700	4	16	0.472 / 12.0	145 / 216	165 / 75	8.5 / 216
7P022U160647700	6	16	0.561 / 14.2	206 / 307	247 / 112	10.1 / 256
7P022U160847700	8	16	0.607 / 15.4	257 / 383	330 / 150	10.9 / 277
7P022U161247700	12	16	0.756 / 19.2	381 / 567	494 / 224	13.6 / 346
7P022U162447700	24	16	1.059 / 26.9	720 / 1071	989 / 449	19.1 / 484
7P021U180147700	1	18	0.235 / 6.0	32 / 47	26 / 12	4.2 / 107
7P022U180247700	2	18	0.353 / 9.0	72 / 106	52 / 24	6.4 / 161
7P022U180447700	4	18	0.428 / 10.9	112 / 166	104 / 47	7.7 / 196
7P022U180647700	6	18	0.505 / 12.8	156 / 232	156 / 71	9.1 / 231
7P022U180847700	8	18	0.546 / 13.9	193 / 287	208 / 94	9.8 / 249
7P022U181247700	12	18	0.679 / 17.2	283 / 422	312 / 142	12.2 / 310
7P022U182447700	24	18	0.946 / 24.0	532 / 791	624 / 283	17 / 433