



1. Thermocouple Alloys
2. Insulated Thermocouple Alloy Wires
3. Individual Aluminum/Mylar Shielded Pairs with Tinned Copper Drain Wire
4. Polypropylene Fillers
5. Polyester Separator Tape
6. Overall Aluminum/Mylar Shield with Tinned Copper Drain Wire
7. FR PVC Outer Protective Jacket

OVERVIEW

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

VOLTAGE: 300 V

Optional: 600V

PRODUCT CONSTRUCTION

Insulation: - XLPE (RW90 rated) rated: 90° C wet/ 105° C dry

Shielding (foil-free edge): - ISOS (standard) - OS (optional)

Jacket: - FR PVC (see Colour Coding for standard colours) rated: 90° C to -40° C

Available in: - Composite constructions

- Custom insulation/jacket colours - Extension cables for type E, J, K, N, R, S and T thermocouple alloys

CERTIFICATIONS/COMPLIANCES

CSA C22.2 NO. 230, Tray Cables (TC)

CSA C22.2 NO. 239, Control & Instrumentation Cables (Type CIC)

CSA C22.2 NO. 38, Thermoset Insulated Wires & Cables (XLPE)

CSA FT4, UL 1685 FT4, Vertical Tray Flame Test rated

IEEE 383 & 1202 (70,000 BTU/hr), Vertical Flame Test rated

ICEA T-30-520 (70,000 BTU/hr), Vertical Flame Test rated

XLPE (RW90 rated), 90° C wet/ 105° C dry

UV sunlight resistant "SUN RES" (all colours)

Direct burial rated

-40° C cold bend/impact rated

Rated for use in hazardous locations:

Class 1 Zone 0 (Intrinsically Safe cables only)

Class I Zone 2 (Div 2)

TC-BCD gas groups rated

COLOUR 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

DIMENSIONS

NUMBER OF PAIRS	CONDUCTOR SIZE (AWG/MCM)	NOMINAL DIAMETER OVERALL CABLE (IN/MM)	CABLE WEIGHT (LBS/1000FT)/(KG/KM)	MAX. PULLING TENSION (PULLING EYE) (LB/KG)	MIN. BEND RADIUS (PULL) (IN/MM)
1	16	0.337 / 8.56	52 / 78	41 / 19	6.1 / 154
2	16	0.498 / 12.65	117 / 174	82 / 37	9 / 228
4	16	0.612 / 15.55	183 / 273	165 / 75	11 / 280
6	16	0.731 / 18.58	262 / 390	247 / 112	13.2 / 334
8	16	0.793 / 20.15	322 / 480	330 / 150	14.3 / 363
12	16	1.007 / 25.57	493 / 733	494 / 224	18.1 / 460
24	16	1.387 / 35.23	890 / 1324	989 / 449	25 / 634
1	18	0.315 / 8	43 / 64	26 / 12	5.7 / 144
2	18	0.462 / 11.73	96 / 143	52 / 24	8.3 / 211
4	18	0.568 / 14.43	147 / 218	104 / 47	10.2 / 260
6	18	0.676 / 17.17	207 / 308	156 / 71	12.2 / 309
8	18	0.732 / 18.6	253 / 377	208 / 94	13.2 / 335
12	18	0.929 / 23.6	386 / 575	312 / 142	16.7 / 425
24	18	1.274 / 32.36	685 / 1019	624 / 283	22.9 / 583
1	20	0.299 / 7.59	38 / 56	16 / 7	5.4 / 137
2	20	0.435 / 11.06	83 / 124	32 / 15	7.8 / 199
4	20	0.506 / 12.85	112 / 167	64 / 29	9.1 / 231
6	20	0.636 / 16.15	176 / 261	96 / 44	11.4 / 291
8	20	0.688 / 17.47	212 / 316	128 / 58	12.4 / 314
12	20	0.833 / 21.16	293 / 436	192 / 87	15 / 381
24	20	1.192 / 30.28	568 / 845	384 / 174	21.5 / 545