

**SERIES**  
**8130S**

## Tray Cable Instrumentation, TC-ER/CIC/MTW/WTTC

### Direct Burial, Sun Res, XLPE

Fixed application, multiple triads, shielded



### Use

Shielded UL Listed multiple pairs cables built for the uses specified by ANSI/NFPA 79, articles 336, 392, 501 of the ANSI/NFPA 70 "National Electrical Code" (NEC) and by CSA C22.1 (CE Code). They are cables suitable for use in Hazardous Locations in Class I, Division 2 and being certified Type TC-ER (Exposed Run) they can be installed in industrial plants for connections between cable trays and equipment without the use of conduits/tubings. These cables are oil resistant, sun resistant and can be used in the presence of humidity even buried (they are certified Direct Burial according to UL 1277); they are also certified Flexible Motor Supply Cable for variable speed drives and Wind Turbine Tray Cable (WTTC) for wind turbine applications.

Information. An additional UL certified cut-to-length service is carried out on request ("Processed Wire").

### Technical data

Characteristics	Value/property
Conductor	Flexible copper strand, class 5
Insulation	Special XLPE (type XHHW-2)
Conductor distinction	Numbered black, white and red triads
Fillers	Central or side fillers, if any
Shield on triads	Aluminum/polyester, coverage 100% + Drain wire
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Jacket	PVC compound, oil-resistant, black color. Metric marking.
Temperature range	+90°C (dry and wet conditions) -40°C (fixed); -5°C (not fixed)
Voltage rating	600 V (TC/CIC/MTW), 1000 V (WTTC), 600/1000 V (IEC)
Test voltage	6000 V
Bending radius	6 x cable outer diameter (fixed) 20 x cable outer diameter (not fixed)
Standards of construction	UL/CSA approvals: (UL) Type TC-ER (18 AWG-1000 kcmil), MTW, WTTC, Dir Bur, Sun Res, Oil Res I, Oil Res II, c(UL) TC-ER (18 AWG-1000 kcmil), CIC (18 AWG-4/0 AWG), Dir Bur, Sun Res, Oil Res; Class 1, Div.2 NEC Art. 336, 392, 501; CSA C22.1 Tab.19; UL 1277, UL 1063, UL 2277, CSA C22.2 No.230-09 e No. 239-09   Flame res.: FT4/IEEE UL 1685   UV res.: UNI EN ISO 4892-3 (gray), UNI EN ISO 4892-2 (black)   Other: Low Voltage Directive (LVD) 2014/35/EU
Standards of use	NFPA 79, NFPA 70 (NEC), UL 508a, CSA C22.1 (CE Code), CSA C22.2 No.286

### Marking

TEKIMA 8130S – CE (4X(3X1,5)) mm<sup>2</sup> 600/1000 V - (UL) E361258 TC-ER (4X(3X16)) AWG DIR BUR SUN RES OIL RES 600V XHHW-2 90°C Dry / 90°C Wet FT4/IEEE 1202 or WTTC or FLEXIBLE MOTOR SUPPLY CABLE 1000V 90°C Dry or MTW 600V c(UL) CONTROL CABLE CIC/TC-ER DIR BUR SUN RES OIL RES 600V 90°C Dry / 90°C Wet XLPE SHIELDED FT4 – (prod.reference) = (metric) =

### Coding and dimensions

Code	Number of conductors	Size [AWG]	Size [mm <sup>2</sup> ]	Diameter [mm (inch)]	Weight [kg/km (lb/mft)]
CV013100_8130S_□□	1 X 3	18	1	8,4 (0.331)	96 (64)
CV023100_8130S_□□	2 X 3	18	1	15,0 (0.591)	237 (159)
CV033100_8130S_□□	3 X 3	18	1	16,0 (0.630)	289 (194)
CV043100_8130S_□□	4 X 3	18	1	17,5 (0.689)	357 (240)
CV063100_8130S_□□	6 X 3	18	1	22,3 (0.878)	564 (379)
CV083100_8130S_□□	8 X 3	18	1	26,0 (1.024)	766 (515)
CV103100_8130S_□□	10 X 3	18	1	28,1 (1.106)	775 (520)
CV123100_8130S_□□	12 X 3	18	1	29,0 (1.142)	880 (592)
CV163100_8130S_□□	16 X 3	18	1	32,1 (1.264)	1129 (759)
CV203100_8130S_□□	20 X 3	18	1	36,2 (1.425)	1429 (960)
CV243100_8130S_□□	24 X 3	18	1	39,3 (1.547)	1570 (1055)
CV013150_8130S_□□	1 X 3	16	1,5	9,1 (0.358)	117 (78)
CV023150_8130S_□□	2 X 3	16	1,5	16,3 (0.642)	286 (192)

Code	Number of conductors	Size [AWG]	Size [mm <sup>2</sup> ]	Diameter [mm (inch)]	Weight [kg/km (lb/mft)]
CV033150_8130S_□□	3 X 3	16	1,5	17,4 (0.685)	354 (238)
CV043150_8130S_□□	4 X 3	16	1,5	19,1 (0.752)	441 (296)
CV063150_8130S_□□	6 X 3	16	1,5	24,2 (0.953)	692 (465)
CV083150_8130S_□□	8 X 3	16	1,5	28,3 (1.114)	947 (636)
CV103150_8130S_□□	10 X 3	16	1,5	30,6 (1.205)	966 (649)
CV123150_8130S_□□	12 X 3	16	1,5	31,6 (1.244)	1106 (743)
CV163150_8130S_□□	16 X 3	16	1,5	35,1 (1.382)	1429 (960)
CV203150_8130S_□□	20 X 3	16	1,5	39,6 (1.559)	1810 (1217)
CV243150_8130S_□□	24 X 3	16	1,5	44,5 (1.752)	2184 (1468)

## Code composition

