

**SERIES
8110S**

Tray Cable Instrumentation, TC-ER-HL/CIC/MTW/WTTC/AWM Direct Burial, Sun Res, Hazardous Locations



"UL Listed", posa fissa, schermati a coppie - Fixed application, multiple pairs, shielded



Impiego - Use

Cavi UL Listed schermati a coppie costruiti per gli usi specificati dall'ANSI/NFPA 79, dagli articoli 336, 392, 501 del ANSI/NFPA 70 "National Electrical Code" (NEC) e dal CSA C22.1 (CE Code). Per applicazioni in Hazardous Locations, la versione TC-ER è idonea all'impiego in Class I, Division 2 mentre la versione TC-ER-HL* è idonea all'impiego in Class I, Division 1. I cavi identificati con Type TC-ER (Exposed Run) possono essere installati negli impianti industriali per le connessioni tra le canaline posa cavi (cable tray) e l'apparecchiatura senza l'impiego di condotti metallici (metal conduits) o cavi armati Type MC (Metal Clad Cable); tale tipo di connessioni viene definito Open Wiring. I cavi Type TC-ER / MTW devono rispondere ai requisiti di resistenza all'impatto richiesti per i cavi Type MC, sono oil resistant, sun resistant e possono essere utilizzati in presenza di umidità anche interrati (sono certificati Direct Burial secondo UL 1277). Questi cavi sono certificati anche Flexible Motor Supply Cable per azionamenti a velocità variabile e Wind Turbine Tray Cable (WTTC) per applicazioni eoliche.

Shielded UL Listed multiple pairs cables built for the uses specified by ANSI/NFPA 79, by Art. 336, 392, 501 of ANSI/NFPA 70 "National Electrical Code" (NEC) and by CSA C22.1 (CE Code). For applications in Hazardous Locations, the TC-ER version is suitable for use in Class I, Division 2 while the TC-ER-HL version is suitable for use in Class I, Division 1. The cables identified with Type TC-ER (Exposed Run) can be installed in the industrial plants for the connections between the cable trays and the equipment without the employment of metal conduits or reinforced cables MC type (Metal Clad Cable); this type of connection is called Open Wiring. The TC-ER / MTW type cables must comply with the impact resistance requirements required for MC type cables, they are oil resistant, sun resistant and can be used in the presence of humidity also buried (they are certified Direct Burial according UL 1277). These cables are also certified Flexible Motor Supply Cable for variable speed drives and Wind Turbine Tray Cable (WTTC) for wind turbine applications.*

Informazione. Si effettua, su richiesta, un servizio aggiuntivo di taglio a misura certificato UL ("Processed Wire").

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

* Importante. La versione TC-ER-HL per installazioni in Hazardous Locations Class I, Division 1 è su specifica richiesta.

* Important. The TC-ER-HL version for installations in Hazardous Locations Class I, Division 1 is upon specific request.

Marcatura - Marking

TEKIMA 8110S - CE (4X(2X1)) mm² (UL) E361258 TC-ER-HL (4X(2X16)) AWG DIR BUR SUN RES OIL RES I OIL RES II 600V 90°C Dry / 75°C Wet FT4/IEEE 1202 or WTTC or FLEXIBLE MOTOR SUPPLY CABLE 1000V 90°C Dry or MTW "FLEXING" 600V or AWM 21179 90°C 1000V c(UL) CONTROL CABLE CIC/TC-ER DIR BUR SUN RES OIL RES I OIL RES II 600V 90°C Dry / 75°C Wet PVC SHIELDED FT4 or AWM I/II A/B 90°C 1000V FT1 16 AWG - (prod.reference) = (metric) =

Dati tecnici - Technical data

Caratteristica - Characteristics	Valore/proprietà - Value/property
Conduttore Conductor	Trefolo flessibile in rame, classe 5 Flexible copper strand, class 5
Isolamento Insulation	TKblend®-R
Distinzione conduttori Conductor distinction	Neri e bianchi a coppie, numerati Numbered black and white pairs
Riempitivi Fillers	Eventuali riempitivi centrali o laterali Central or side fillers, if any
Schermatura sulle coppie Shield on pairs	Alluminio/poliestere, ricopertura 100% + Drain wire Aluminum/polyester, coverage 100% + Drain wire
Schermatura Shield	Alluminio/poliestere, ricopertura 100% + Drain wire Aluminum/polyester, coverage 100% + Drain wire
Guaina Jacket	Mescola di PVC antiolio, colore nero oppure, su richiesta, grigio RAL 7001. Filo taglia guaina. Marcatura metrica. PVC compound, oil-resistant, black color or, on request, RAL 7001 gray. Rip cord. Metric marking.
Temperatura di esercizio Temperature range	+90°C (dry conditions), +75°C (wet conditions) -40°C (posa fissa); -5°C (mobile) -40°C (fixed); -5°C (not fixed)
Tensione nominale Voltage rating	600 V (TC/CIC/MTW), 1000 V (AWM/WTTC), 600/1000 V (IEC)
Spark test	6000 V
Raggio di curvatura Bending radius	6 volte diametro esterno del cavo (20 volte diametro esterno del cavo per movimentazioni non continue) 6 x cable outer diameter (20 x cable outer diameter for non-cyclical mobile uses)
Riferimenti normativi costruttivi Standards of construction	UL/CSA approvals: (UL) Type TC-ER-HL* (18 AWG-1000 kcmil), MTW, WTTC, Dir Bur, Sun Res, Oil Res I, Oil Res II, c(UL) Type CIC/TC-ER (18 AWG-4/0 AWG), Dir Bur, Sun Res, Oil Res I, cURus AWM Style 21179, AWM I/II A/B; Class 1, Div.1* or Div.2 NEC Art. 336, 392, 501; CSA C22.1 Tab.19; UL 1581, UL 758, UL 1277, UL 1063, UL 2277, CSA C22.2 No.230-09 e No. 239-09 Flame res.: FT1, FT4, IEC 60332-1-2, IEC 60332-3-24 UV res.: UNI EN ISO 4892-3 (grigio/gray), UNI EN ISO 4892-2 (nero/black) Other: Low Voltage Directive (LVD) 2014/35/EU
Riferimenti normativi d'impiego Standards of use	NFPA 79, NFPA 70 (NEC), CSA C22.1 (CE Code), CSA C22.2 No.286, Style 21179

Codifiche e dimensioni - Coding and dimensions

Codice Code	Numero di conduttori Number of conductors	Sezione Size [mm ²]	Sezione Size [AWG]	Diametro Diameter [mm (inch)]	Peso Weight [kg/km (lb/mft)]
CV012100_8110S_□□**	1 X 2	1	18	7,8 (0.307)	80 (54)
CV022100_8110S_□□	2 X 2	1	18	10,5 (0.413)	150 (101)
CV032100_8110S_□□	3 X 2	1	18	n.a.	n.a.
CV042100_8110S_□□	4 X 2	1	18	12,3 (0.484)	231 (155)
CV062100_8110S_□□	6 X 2	1	18	16,7 (0.657)	370 (249)
CV082100_8110S_□□	8 X 2	1	18	18,0 (0.709)	496 (333)
CV102100_8110S_□□	10 X 2	1	18	20,0 (0.787)	517 (347)

Cavi multipolari non armati per posa fissa - Unarmoured cables for fixed applications

Codice Code	Numero di conduttori Number of conductors	Sezione Size [mm ²]	Sezione Size [AWG]	Diametro Diameter [mm (inch)]	Peso Weight [kg/km (lb/mft)]
CV122100_8110S_□□	12 X 2	1	18	22,7 (0.894)	656 (441)
CV162100_8110S_□□	16 X 2	1	18	25,6 (1.008)	850 (571)
CV202100_8110S_□□	20 X 2	1	18	28,1 (1.106)	1053 (708)
CV242100_8110S_□□	24 X 2	1	18	30,4 (1.197)	1180 (793)
CV362100_8110S_□□	36 X 2	1	18	36,3 (1.429)	1713 (1151)
CV502100_8110S_□□	50 X 2	1	18	42,1 (1.657)	2265 (1522)
CV012150_8110S_□□**	1 X 2	1,5	16	8,4 (0.331)	94 (63)
CV022150_8110S_□□	2 X 2	1,5	16	11,4 (0.449)	182 (122)
CV032150_8110S_□□	3 X 2	1,5	16	n.a.	n.a.
CV042150_8110S_□□	4 X 2	1,5	16	14,1 (0.555)	310 (208)
CV062150_8110S_□□	6 X 2	1,5	16	18,2 (0.717)	453 (304)
CV082150_8110S_□□	8 X 2	1,5	16	19,6 (0.772)	610 (410)
CV102150_8110S_□□	10 X 2	1,5	16	22,9 (0.902)	693 (466)
CV122150_8110S_□□	12 X 2	1,5	16	24,7 (0.972)	808 (543)
CV162150_8110S_□□	16 X 2	1,5	16	27,8 (1.094)	1051 (706)
CV202150_8110S_□□	20 X 2	1,5	16	30,7 (1.209)	1309 (880)
CV242150_8110S_□□	24 X 2	1,5	16	33,2 (1.307)	1471 (988)
CV362150_8110S_□□	36 X 2	1,5	16	39,7 (1.563)	2148 (1443)
CV502150_8110S_□□	50 X 2	1,5	16	47,6 (1.874)	3022 (2031)

** In accordo a NFPA 70 (NEC) e CSA C22.1 (CEC) cavi con 2 conduttori non sono Exposed Run (ER).

** According to NFPA 70 (NEC) and CSA C22.1 (CEC) cables with 2 conductors are not Exposed Run (ER).

Composizione del codice - Code composition

