

**SERIES
8100S**

Power and Control Tray Cable, TC-ER



Schermati - shielded



Impiego - Use

Cavi UL Listed schermati (THHN/THWN or TFN) costruiti per gli usi specificati dall'articolo 336 del ANSI/NFPA 70 "National Electrical Code" (NEC) e idonei all'impiego in Class I, Division 2, Hazardous Locations. 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 devono rispondere ai requisiti di resistenza all'impatto richiesti per i cavi Type MC.

UL Listed shielded cables (THHN/THWN or TFN) built for the uses specified by art. 336 of ANSI/NFPA 70 "National Electrical Code" (NEC) and suitable for use in Class I, Division 2, Hazardous Locations. The cables identified as Type TC-ER (Exposed Run) can be installed in industrial establishments for the connections between the cable trays and the equipment without metal conduits or armored cables Type MC (Metal Clad Cable); this kind of connections is called Open Wiring. The Type TC-ER cables have to meet the impact resistance requirements necessary for Type MC cables.

Informazione. Si prega di chiedere all'ufficio commerciale la possibilità del servizio aggiuntivo di taglio a misura certificato UL ("Processed Wire").
Information. Please ask the sales department for the possibility of an additional UL certified cut-to-size service ("Processed Wire").

Dati tecnici - Technical data

Secondo quanto specificato dal NEC i cavi TC (tray cable) possono essere utilizzati per gli usi seguenti¹:

According to NEC, the TC cables (tray cable) can be employed as follows¹:

- (1) For power, lighting, control and signal circuits.
- (2) In cable trays.
- (3) In raceways.
- (4) In outdoor locations supported by a messenger wire.
- (5) For Class 1 circuits as permitted in Parts II and III of Article 725 (NEC).
- (6) For non-power-limited fire alarm circuits if conductors comply with the requirements of Article 760.27 (NEC).
- (7) In industrial establishments where the conditions of maintenance and supervision ensure that only qualified persons service the installation, and where the cable is continuously supported and protected against physical damage using mechanical protection, such as struts, angles, or channels... (see Article 336.10).
- (8) Where installed in wet locations, type TC cable shall also be resistant to moisture and corrosive agents.

¹ Per assicurare la corretta destinazione d'uso definita nel NEC si è deciso di mantenere la versione linguistica originaria.

Caratteristica Characteristics	Valore/proprietà Value/property
Conduttore Conductor	Trefolo di rame Copper strand
Isolamento Insulation	PVC/Nylon
Distinzione conduttori Conductor distinction	ICEA Metodo 1, tabella E-2 (vedi appendice) ICEA Method 1, table E-2 (see appendix)
Schermatura Shield	Nastro di alluminio con filo di continuità Aluminium band with drain wire
Guaina Jacket	PVC resistente agli olii, colore nero PVC oil-resistant, black color
Temperatura di esercizio Temperature range	+90°C (dry conditions), +75°C (wet conditions)
Tensione nominale Voltage rating	600 V
Raggio di curvatura Bending radius	Vedi Article 336.24 (NEC) See Article 336.24 (NEC)
Riferimenti normativi costruttivi Standards of construction	UL/CSA approvals: (UL) Type TC-ER (Exposed Run), Class 1, Div. 2 NEC Art. 336, 392, 501; CSA C22.1 Tab.19; UL 1581, UL 1277, CSA C22.2 No.230, CSA C22.2 No. 239
Riferimenti normativi d'impiego Standards of use	NFPA 70 (NEC), CSA C22.1 (CE Code)

Codifiche e dimensioni - Coding and dimensions

Codice Code	Numero di conduttori Number of conductors	Sezione Size [AWG/kcmil]	Sezione conduttore di terra Ground wire size [AWG]	Diametro Diameter [mm (inch)]	Peso Weight [kg/km (lb/mft)]
CV02XW18_8100S_NE*	2	18	-	7,1 (0.280)	60 (40)
CV02XW16_8100S_NE*	2	16	-	7,6 (0.299)	77 (52)
CV02XW14_8100S_NE*	2	14	-	8,4 (0.331)	100 (67)
CV02XW12_8100S_NE*	2	12	-	9,4 (0.370)	124 (83)
CV02XW10_8100S_NE*	2	10	-	10,9 (0.429)	177 (119)
CV03XW18_8100S_NE	3	18	-	7,4 (0.291)	73 (49)
CV03XW16_8100S_NE	3	16	-	8,1 (0.319)	94 (63)
CV03XW14_8100S_NE	3	14	-	8,9 (0.350)	125 (84)
CV03XW12_8100S_NE	3	12	-	9,9 (0.390)	165 (111)
CV03XW10_8100S_NE	3	10	-	11,7 (0.461)	241 (162)
CV04XW18_8100S_NE	4	18	-	7,9 (0.311)	86 (58)

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

Codice Code	Numero di conduttori Number of conductors	Sezione Size [AWG/kcmil]	Sezione conduttore di terra Ground wire size [AWG]	Diametro Diameter [mm (inch)]	Peso Weight [kg/km (lb/mft)]
CV04XW16_8100S_NE	4	16	-	8,9 (0.350)	115 (77)
CV04XW14_8100S_NE	4	14	-	9,7 (0.382)	155 (104)
CV04XW12_8100S_NE	4	12	-	10,7 (0.421)	207 (139)
CV04XW10_8100S_NE	4	10	-	12,7 (0.500)	305 (205)
CV05XW18_8100S_NE	5	18	-	8,6 (0.339)	104 (70)
CV05XW16_8100S_NE	5	16	-	9,4 (0.370)	135 (91)
CV05XW14_8100S_NE	5	14	-	10,2 (0.402)	183 (123)
CV07XW18_8100S_NE	7	18	-	9,4 (0.370)	132 (89)
CV07XW16_8100S_NE	7	16	-	10,4 (0.409)	177 (119)
CV07XW14_8100S_NE	7	14	-	11,2 (0.441)	240 (161)
CV09XW16_8100S_NE	9	16	-	12,0 (0.472)	223 (150)
CV12XW16_8100S_NE	12	16	-	13,0 (0.512)	275 (185)

* In accordo a NFPA 70 (NEC), questo articolo è Tray Cable (TC) ma non Exposed Run (ER).

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Composizione del codice - Code composition

CV □□ X □□□ _8100S_NE

Numero conduttori Number of conductors	Inserire To be inserted
2, ..., 12	02, ..., 12

Sezione Size	Inserire To be inserted
10, 12, ..., 18 AWG	W10, W12, ..., W18