

CSA Instrumentation & Thermocouple Tray Cable

300V TC/CIC

Paired and Triad Constructions

Cable Specifications

- CSA C22.2 #239 Control and Instrumentation
- CSA C22.2 #230 Type TC
- CSA FT4 70,000 BTU Flame Test
- PVC Insulation 90°C Dry & 75°C Wet
- XLPE Insulation Optional 90°C Dry and Wet
- -40°C Cold Bend, -25°C Cold Impact
- -25°C Installation temp
- Per CEC Part 1, Suitable for use in hazardous locations:
Class 1 – Zone 2
Class 2 – Division 2
- Sun Res/UV resistant
- Direct Burial

To Create a Part Number

Add suffixes for Conductor, Insulation and Jacket Type and Shielding as shown below:

A = Bare Copper Conductor or Thermocouple alloy, PVC insulation, PVC Jacket

B = Tinned Copper Conductor, PVC Insulation, PVC Jacket

C = Bare Copper Conductor or Thermocouple alloy, XLPE Insulation, PVC Jacket

D = Tinned Copper Conductor, XLPE Insulation, PVC Jacket

1 = Overall Foil Shield + Drain Wire

2 = Individual and Overall Foil Shield + Drain Wire

Sample Part Number:

22001B2 = 300V, 2-Pair 20 AWG Tinned Copper Conductor cable with PVC Insulation, PVC Jacket, with Individual and Overall Foil Shields plus Drain Wire

Thermocouple Color Codes

ANSI Symbol	Jacket Color	Insulation Color Code	
		Positive (+)	Negative (-)
EX	Purple	Purple	Red
JX	Black	White	Red
KX	Yellow	Yellow	Red
TX	Blue	Blue	Red

Copper Color Codes

Pairs/Triads	Color Combination
Pairs	Black & White
Triads	Black, White & Red

No. of Pairs	Part Numbers				
	7 Strand Copper	Solid EX Chromel/Constantan	Solid JX Iron/Constantan	Solid KX Chromel/Alumel	Solid TX Copper/Constantan
20 AWG					
1	22000	21100	21114	21128	21142
2	22001	21101	21115	21129	21143
4	22002	21102	21116	21130	21144
6	22003	21103	21117	21131	21145
8	22004	21104	21118	21132	21146
10	22005	21105	21119	21133	21147
12	22006	21106	21120	21134	21148
16	22007	21107	21121	21135	21149
20	22008	21108	21122	21136	21150
24	22009	21109	21123	21137	21151
30	22010	21110	21124	21138	21152
36	22011	21111	21125	21139	21153
40	22012	21112	21126	21140	21154
50	22013	21113	21127	21141	21155
18 AWG					
1	22027	21156	21170	21184	21198
2	22028	21157	21171	21185	21199
4	22029	21158	21172	21186	21200
6	22030	21159	21173	21187	21201
8	22031	21160	21174	21188	21202
10	22032	21161	21175	21189	21203
12	22033	21162	21176	21190	21204
16	22034	21163	21177	21191	21205
20	22035	21164	21178	21192	21206
24	22036	21165	21179	21193	21207
30	22037	21166	21180	21194	21208
36	22038	21167	21181	21195	21209
40	22039	21168	21182	21196	21210
50	22040	21169	21183	21197	21211
16 AWG					
1	22054	21212	21226	21240	21254
2	22055	21213	21227	21241	21255
4	22056	21214	21228	21242	21256
6	22057	21215	21229	21243	21257
8	22058	21216	21230	21244	21258
10	22059	21217	21231	21245	21259
12	22060	21218	21232	21246	21260
16	22061	21219	21233	21247	21261
20	22062	21220	21234	21248	21262
24	22063	21221	21235	21249	21263
30	22064	21222	21236	21250	21264
36	22065	21223	21237	21251	21265
40	22066	21224	21238	21252	21266
50	22067	21225	21239	21253	21267

Triad Constructions, Copper Conductor

No. of Triads	Part Numbers		
	20 AWG (7 Strand)	18 AWG (7 Strand)	16 AWG (7 Strand)
1	22014	22041	22068
2	22015	22042	22069
4	22016	22043	22070
6	22017	22044	22071
8	22018	22045	22072
10	22019	22046	22073
12	22020	22047	22074
16	22021	22048	22075
20	22022	22049	22076
24	22023	22050	22077
30	22024	22051	22078
36	22025	22052	22079

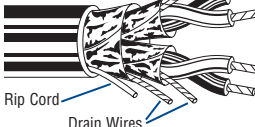
CSA Instrumentation Cable

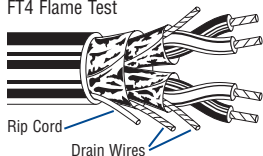
300V CIC

Belden offers a complete line of high performance and high quality CSA certified instrumentation cables (300V/600V and CIC/ACIC). These cables are designed to minimize noise and signal interference to deliver clean signals in harsh petrochemical, pulp and paper and process industry environments, as well as for use in general manufacturing operations.

Contact Belden Customer Service for other options:

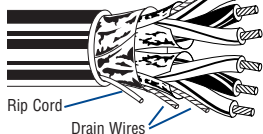
- 150V
- XLPE insulation (add D suffix to part number)
- Thermocouple alloy conductors
- Overall foil shield only
- Other pair and triad counts

Description	Part Number	No. of Pairs or Triads	Cable Weight		Jacket Thickness		Nominal OD	
			Lbs./1000 Ft.	kg/km	Inch	mm	Inch	mm
20 AWG Pairs Stranded (7x28) TC Conductors • Individual Beldfoil® + Polyester Isolation Tape • Overall Beldfoil Shield (100% Coverage)								
PVC Insulation • Black PVC Jacket (Color Code: Black and White with Numbers)								
CSA C22.2#239, Type CIC	22671*	1	71	106	.045	1.14	.260	6.60
CSA C22.2 #0.3 Clause 4.31 Low Acid Gas	22638	2	143	213	.045	1.14	.400	10.16
FT4 Flame Test	22639	4	217	323	.045	1.14	.460	11.68
	22640	6	320	476	.045	1.14	.570	14.48
	22641	8	405	603	.060	1.52	.610	15.49
	22676	12	573	853	.060	1.52	.730	18.54
	22643	16	722	1076	.060	1.52	.810	20.57
	22647	24	1103	1641	.080	2.03	1.040	26.42
	22670	36	1548	2304	.080	2.03	1.190	30.23
	-25°C Installed							
-40°C to +105°C (Dry) (75°C Wet)								



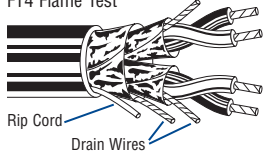
-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

20 AWG Triads Stranded (7x28) TC Conductors • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield (100% Coverage)								
PVC Insulation • Black PVC Jacket (Color Code: Black, White and Red with Numbers)								
CSA C22.2#239, Type CIC	22660*	1	89	132	.045	1.14	.270	6.86
CSA C22.2 #0.3 Clause 4.31 Low Acid Gas FT4 Flame Test	22662	2	177	263	.045	1.14	.420	10.67
	22663	4	277	412	.045	1.14	.490	12.45
	22672	8	521	775	.060	1.52	.650	16.51
	22673	16	1000	1488	.080	2.03	.910	23.11
	22674	24	1414	2104	.080	2.03	1.110	28.19



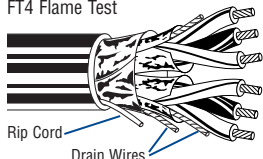
-25°C Installed • -40°C to +105°C (Dry) (75°C Wet)

18 AWG Pairs Stranded (7x26) TC Conductors • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield (100% Coverage)								
PVC Insulation • Black PVC Jacket (Color Code: Black and White with Numbers)								
CSA C22.2#239, Type CIC	22645*	1	97	144	.045	1.14	.300	7.62
CSA C22.2 #0.3 Clause 4.31 Low Acid Gas FT4 Flame Test	22633	2	196	292	.045	1.14	.480	12.19
	22648	4	338	503	.045	1.14	.580	14.73
	22634	6	473	704	.060	1.52	.670	17.02
	22635	8	570	848	.060	1.52	.730	18.54
	22636	12	869	1293	.060	1.52	.920	23.37
	22654	16	1095	1630	.080	2.03	1.020	25.91
	22637	24	1552	2310	.080	2.03	1.260	32.00



-25°C Installed • -40°C to +105°C (Dry) (75°C Wet)

18 AWG Triads Stranded (7x26) TC Conductors • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield (100% Coverage)								
PVC Insulation • Black PVC Jacket (Color Code: Black, White and Red with Numbers)								
CSA C22.2#239, Type CIC	22677*	1	121	180	.045	1.14	.303	7.70
CSA C22.2 #0.3 Clause 4.31 Low Acid Gas FT4 Flame Test	22678	2	256	381	.045	1.14	.480	12.19
	22679	4	427	636	.060	1.52	.620	15.75
	22680	8	597	888	.060	1.52	.710	18.03
	22681	16	740	1101	.060	1.52	.770	19.56
	22682	24	1130	1682	.080	2.03	.980	24.89
	22683	16	1436	2137	.080	2.03	1.090	27.69
	22684	24	2049	3049	.080	2.03	1.340	34.04



-25°C Installed • -40°C to +105°C (Dry) (75°C Wet)

*One pair/triad cables have one shield and drain wire

TC = Tinned Copper

BELDEN

For more information, contact **Belden Technical Support: 1-800-BELDEN-1 • www.belden.com**

Belden114@CableCon.kr / 0707-434-7704 / Fax. 02-744-0909 / www.CableCon.co.kr

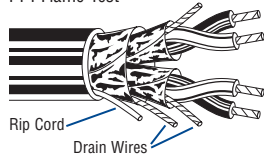
CSA Instrumentation Cable

300V CIC

Description	Part Number	No. of Pairs or Triads	Cable Weight		Jacket Thickness		Nominal OD	
			Lbs./1000 Ft.	kg/km	Inch	mm	Inch	mm

16 AWG Pairs Stranded (7x24) TC Conductors • Individual Beldfoil® + Polyester Isolation Tape • Overall Beldfoil Shield (100% Coverage)**PVC Insulation • Black PVC Jacket** (Color Code: Black and White with Numbers)

CSA C22.2#239, Type CIC

CSA C22.2 #0.3 Clause 4.31 Low Acid Gas
FT4 Flame Test

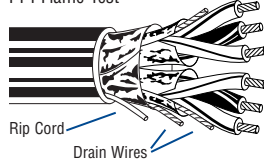
-25°C Installed

-40°C to +105°C (Dry) (75°C Wet)

22646*	1	122	182	.045	1.14	.320	8.13
22628	2	262	390	.045	1.14	.520	13.21
22629	4	438	652	.060	1.52	.628	15.95
22630	6	603	897	.060	1.52	.740	18.80
22631	8	752	1119	.060	1.52	.800	20.32
22632	12	1148	1708	.080	2.03	1.010	25.65
22685	16	1461	2174	.080	2.03	1.120	28.45
22686	24	2091	3112	.080	2.03	1.380	35.05

16 AWG Triads Stranded (7x24) TC Conductors • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield (100% Coverage)**PVC Insulation • Black PVC Jacket** (Color Code: Black, White and Red with Numbers)

CSA C22.2#239, Type CIC

CSA C22.2 #0.3 Clause 4.31 Low Acid Gas
FT4 Flame Test

-25°C Installed

-40°C to +105°C (Dry) (75°C Wet)

TC = Tinned Copper

*One pair/triad cables have one shield and drain wire

22603*	1	152	226	.045	1.14	.329	8.36
22687	2	344	512	.045	1.14	.580	14.73
22675	4	564	839	.060	1.52	.670	17.02
22688	6	819	1219	.060	1.52	.780	19.81
22689	8	1063	1582	.080	2.03	.940	23.88
22690	12	1524	2268	.080	2.03	1.080	27.43