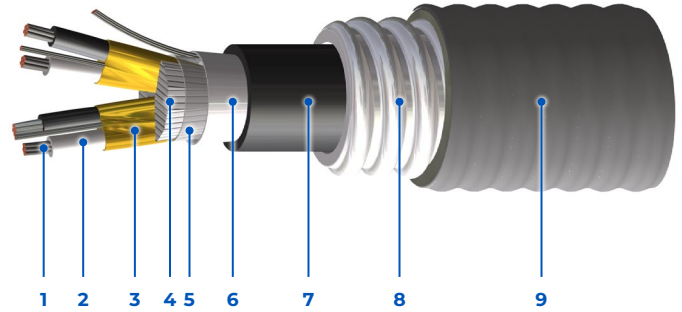


# CSA ACIC Armoured Instrumentation, 600 V

Armoured Instrumentation cables are used to convert analogue or digital signals. Used when there is a possibility for crosstalk between pairs/triads. Interlocked armour replaces the use of conduit for mechanical protection. Cables can be installed in raceways, direct burial applications and in outdoor exposed Industrial applications.

## Standards:



1 – Stranded Bare Copper Conductors (Tin-coated Available)

2 – XLPE (RW90 Rated) Insulated Conductors

3 – Individual Shield & Overall Shielded Pairs/Triads

4 – Polypropylene Fillers

5 – Polyester Separator Tape

6 – Overall Aluminum/Mylar Shield with Tin-coated Copper Drain Wire

7 – FR LAG PVC Inner Protective Jacket

8 – Aluminum Interlocked Armour (AIA)

9 – FR LAG PVC Outer Protective Jacket

## Product Construction

### Insulation:

- FR XLPE/XLPE (RW90 rated) (standard) rated: 90°C wet/105°C dry
- PVC (optional)

### Shielding (foil-free edge):

- ISOS (standard)
- OS (optional)

### Armour:

- Aluminum Interlocked Armour (AIA) (standard)
- Steel Interlocked Armour (SIA) (optional)
- Serve Wire Armour (SIA) (optional)

### Jacket:

- FR LAG PVC (AG14 rated) inner black jacket rated: 90°C to -40°C
- FR LAG PVC (AG14 rated) outer grey jacket rated: 90°C to -40°C

### Available in:

- Copper taper or braided shield

## Certification/Compliances

- CSA C22.2 NO. 239, Control & Instrumentation Cables (Type ACIC)
- CSA C22.2 NO. 174, Cables & Cable Glands for use in Hazardous Locations
- 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
- HL rated for use in hazardous locations:
  - Class 1 Zone 0 (Intrinsically Safe cables only)
  - Class I Zone 1 (Div 1)
  - Class I Zone 2 (Div 2)
  - HL-BCD gas groups rated

## Colour Coding

- Pairs – Black, & white
- Triads – Black, white & red

# 600 V

Voltage (Optional: 300/1000 V)

# CSA Type ACIC

Instrumentation

# CSA ACIC Armoured Instrumentation, 600 V

## Pairs

PART NUMBER	NUMBER OF PAIRS	CONDUCTOR SIZE <i>(AWG/kcmil)</i>	OD OVER INNER JACKET <i>(in/mm)</i>	NORMAL DIAMETERS		CABLE WEIGHT <i>(lbs/1000ft) (kg/km)</i>	MAX PULLING TENSION (PULLING EYE) <i>(lb/kg)</i>	MIN BEND RADIUS (PULL) <i>(in/mm)</i>
				OVER ARMOUR <i>(in/mm)</i>	OVERALL CABLE <i>(in/mm)</i>			
69222M160118700	1	16	0.327 / 8.3	0.567 / 14.4	0.679 / 17.3	180 / 269	41 / 19	12.2 / 310
69222M160218700	2	16	0.494 / 12.6	0.734 / 18.7	0.846 / 21.5	285 / 424	82 / 37	15.2 / 387
69222M160418700	4	16	0.608 / 15.5	0.848 / 21.5	0.960 / 24.4	379 / 564	165 / 75	17.3 / 439
69222M160618700	6	16	0.732 / 18.6	0.972 / 24.7	1.084 / 27.5	488 / 726	247 / 112	19.5 / 496
69222M160818700	8	16	0.797 / 20.3	1.037 / 26.3	1.149 / 29.2	612 / 910	330 / 150	20.7 / 525
69222M161218700	12	16	1.010 / 25.6	1.250 / 31.8	1.362 / 34.6	843 / 1254	494 / 224	24.5 / 623
69222M161618700	16	16	1.128 / 28.7	1.368 / 34.8	1.480 / 37.6	1003 / 1493	659 / 299	26.6 / 677
69222M162418700	24	16	1.406 / 35.7	1.646 / 41.8	1.778 / 45.2	1399 / 2081	989 / 449	32 / 813
69222M163618700	36	16	1.625 / 41.3	1.930 / 49.0	2.062 / 52.4	1931 / 2874	1483 / 673	37.1 / 943
69221M180118700	1	18	0.303 / 7.7	0.543 / 13.8	0.655 / 16.6	165 / 245	26 / 12	11.8 / 299
69222M180218700	2	18	0.455 / 11.6	0.695 / 17.7	0.807 / 20.5	250 / 373	52 / 24	14.5 / 369
69222M180418700	4	18	0.560 / 14.2	0.800 / 20.3	0.912 / 23.2	325 / 484	104 / 47	16.4 / 417
69222M180618700	6	18	0.672 / 17.1	0.912 / 23.2	1.024 / 26.0	411 / 611	156 / 71	18.4 / 468
69222M180818700	8	18	0.730 / 18.6	0.970 / 24.6	1.082 / 27.5	470 / 700	208 / 94	19.5 / 495
69222M181218700	12	18	0.925 / 23.5	1.165 / 29.6	1.277 / 32.4	695 / 1034	312 / 142	23 / 584
69222M181618700	16	18	1.032 / 26.2	1.272 / 32.3	1.384 / 35.2	817 / 1216	416 / 189	24.9 / 633
69222M182418700	24	18	1.283 / 32.6	1.523 / 38.7	1.635 / 41.5	1092 / 1625	624 / 283	29.4 / 748
69222M183618700	36	18	1.480 / 37.6	1.720 / 43.7	1.852 / 47.1	1448 / 2154	936 / 425	33.3 / 847

# CSA ACIC Armoured Instrumentation, 600 V

## Triads

PART NUMBER	NUMBER OF TRIADS	CONDUCTOR SIZE <i>(AWG/kcmil)</i>	OD OVER INNER JACKET <i>(in/mm)</i>	NORMAL DIAMETERS		CABLE WEIGHT <i>(lbs/1000ft) (kg/km)</i>	MAX PULLING TENSION (PULLING EYE) <i>(lb/kg)</i>	MIN BEND RADIUS (PULL) <i>(in/mm)</i>
				OVER ARMOUR <i>(in/mm)</i>	OVERALL CABLE <i>(in/mm)</i>			
69231M160118700	1	16	0.345 / 8.8	0.585 / 14.9	0.697 / 17.7	198 / 295	62 / 28	12.5 / 319
69232M160218700	2	16	0.591 / 15.0	0.831 / 21.1	0.943 / 24.0	356 / 530	124 / 56	17 / 431
69232M160418700	4	16	0.694 / 17.6	0.934 / 23.7	1.046 / 26.6	458 / 681	247 / 112	18.8 / 478
69232M160618700	6	16	0.871 / 22.1	1.111 / 28.2	1.223 / 31.1	684 / 1017	371 / 168	22 / 559
69232M160818700	8	16	0.946 / 24.0	1.186 / 30.1	1.298 / 33.0	795 / 1183	494 / 224	23.4 / 593
69232M161218700	12	16	1.156 / 29.4	1.396 / 35.5	1.508 / 38.3	1054 / 1569	742 / 336	27.2 / 690
69232M161618700	16	16	1.294 / 32.9	1.534 / 39.0	1.666 / 42.3	1301 / 1936	989 / 449	30 / 762
69232M162418700	24	16	1.619 / 41.1	1.924 / 48.9	2.056 / 52.2	1880 / 2797	1483 / 673	37 / 940
69231M180118700	1	18	0.319 / 8.1	0.559 / 14.2	0.671 / 17.1	178 / 265	39 / 18	12.1 / 307
69232M180218700	2	18	0.544 / 13.8	0.784 / 19.9	0.896 / 22.8	311 / 464	78 / 35	16.1 / 410
69232M180418700	4	18	0.637 / 16.5	0.877 / 22.3	0.989 / 25.1	388 / 578	156 / 71	17.8 / 452
69232M180618700	6	18	0.767 / 19.5	0.987 / 25.1	1.099 / 27.9	540 / 803	234 / 106	19.8 / 503
69232M180818700	8	18	0.867 / 22.0	1.107 / 28.1	1.219 / 31.0	662 / 985	312 / 142	21.9 / 557
69232M181218700	12	18	1.057 / 26.9	1.297 / 33.0	1.409 / 35.8	865 / 1287	468 / 212	25.4 / 644
69232M181618700	16	18	1.181 / 30.0	1.421 / 36.1	1.533 / 38.9	1024 / 1524	624 / 283	27.6 / 701
69232M182418700	24	18	1.474 / 37.4	1.713 / 43.5	1.845 / 46.9	1425 / 2121	936 / 425	33.2 / 844