600V CU PVC PAIRS ARMORED PVC SPOS Instrumentation

Type MC-HL Instrumentation Cable 600 Volt PVC/Nylon Insulated Singles Shielded Pairs with Overall Shield Continuous Corrugated Armor - ARMORED -40°C to 90°C

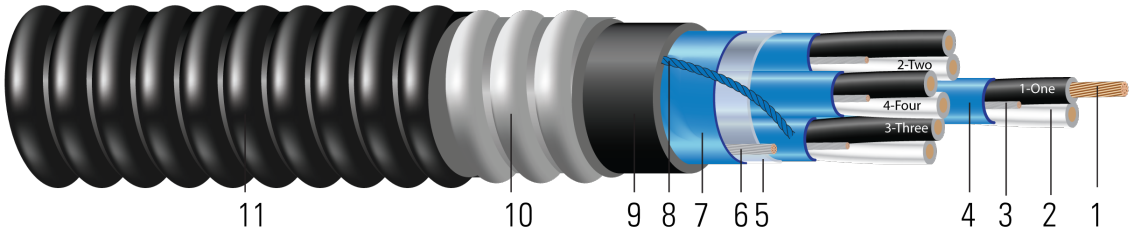

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B stranded bare copper per ASTM B3 and B8
2. **Insulation:** Premium Grade Polyvinyl Chloride (PVC) plus nylon. Color code: Black/White with alpha-numeric print on each pair. 1-ONE, 2-TWO.
3. **Drain Wire:** Tinned copper
4. **Twisted Shielded Pairs:** 100% coverage aluminum/polyester foil shield with an individual drain wire shown in step 3
5. **Binder:** Mylar binder
6. **Overall Drain Wire:** Tinned Copper
7. **Overall Shielded:** 100% coverage aluminum/polyester foil shield with a drain wire as shown in step 6
8. **Rip Cord:** Rip cord under jacket for ease of removal
9. **Inner Jacket:** Black Polyvinyl Chloride (PVC)
10. **Armor:** ARMORED continuous impervious weld corrugated aluminum armor
11. **Jacket:** Black sunlight and moisture resistant Polyvinyl Chloride (PVC)

APPLICATIONS AND FEATURES:

Tanner's Instrumentation Cables Type MC-HL ARMORED per UL 1569 are suitable for installations as outlined in NEC Article 330 for process control and instrumentation, control circuits for operation and interconnection of protective and signaling devices and for general use in manufacturing, industrial and commercial distribution systems. Cables are constructed with 7-strand copper conductors insulated with nylon covered PVC. The paired conductors are colored black, white and alpha-numeric printed. Each pair has an aluminum polyester foil with 100% coverage and a tinned drain wire. The overall assembly is covered with an aluminum polyester foil with 100% coverage and a tinned drain wire. The cable is suited for use in cable trays, raceways, conduit, aerial (when supported with a messenger) and direct burial. The cable is rated for -40°C to 90°C and rated for Class I Div I hazardous locations. The inner jacket is black PVC with a nylon rip cord for easy removal. The outer jacket is black PVC. For uses in Class I, II, and III, Division 1 and 2 hazardous locations per NEC Article 501, 502, and 503.

SPECIFICATIONS:

- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- UL 66 Fixture Wire

- UL 83 Thermoplastic Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- UL 2225 Cables and Cable-Fittings For Use In Hazardous (Classified) Locations
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- EPA 40 CFR, Part 26, Subpart C heavy metals per Table 1, TCLP method

SAMPLE PRINT LEGEND:

TANNER #P# ARMORED TYPE MC-HL (UL) SHLD PR XXAWG OVERALL SHIELDED PVC-N CDRS 90°C JKT SUN RES. DIR BUR FOR CT USE IEEE 1202/FT4 -40°C 600V (YR) USA SEQUENTIAL MARKING

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Number of Pairs	Diameter Over Conductor	Insul. Thickness	Diameter Over Armor	Jacket Thickness	Approx. OD	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C
	AWG/ Kcmil	pair	inch	mil	inch	mil	inch	lb/1000ft	inch	Ω/1000ft
24IPS6-1802ARM	18	2	0.045	15	0.60	60	0.710	213	4.9	6.669
24IPS6-1804ARM	18	4	0.045	15	0.70	60	0.820	291	5.74	6.669
24IPS6-1808ARM	18	8	0.045	15	0.92	50	1.040	440	7.2	6.669
24IPS6-1812ARM	18	12	0.045	15	1.02	60	1.146	560	8.0	6.669
24IPS6-1816ARM	18	16	0.045	15	1.23	60	1.356	786	9.4	6.669
24IPS6-1601ARM	16	1	0.056	15	0.53	60	0.656	184	4.5	4.181
24IPS6-1602ARM	16	2	0.056	15	0.65	60	0.770	266	5.3	4.181
24IPS6-1604ARM	16	4	0.056	15	0.84	60	0.960	405	6.7	4.181
24IPS6-1608ARM	16	8	0.056	15	1.02	60	1.146	560	8.0	4.181
24IPS6-1612ARM	16	12	0.056	15	1.22	60	1.346	789	9.4	4.181
24IPS6-1616ARM	16	16	0.056	15	1.30	60	1.426	953	9.9	4.181
24IPS6-1624ARM	16	24	0.056	15	1.47	60	1.596	1319	11.1	4.181

All dimensions are nominal and subject to normal manufacturing tolerances

Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Number of Pairs	Diameter Over Conductor	Insul. Thickness	Diameter Over Armor	Jacket Thickness	Approx. OD	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C
	AWG/ Kcmil	pair	inch	mm	mm	mm	mm	lb/km	mm	Ω/km
24IPS6-1802ARM	18	2	0.045	0.38	15.24	1.52	18.03	317	124.46	21.88
24IPS6-1804ARM	18	4	0.045	0.38	17.78	1.52	20.83	433	145.80	21.88
24IPS6-1808ARM	18	8	0.045	0.38	23.37	1.27	26.42	655	182.88	21.88
24IPS6-1812ARM	18	12	0.045	0.38	25.91	1.52	29.11	833	203.20	21.88
24IPS6-1816ARM	18	16	0.045	0.38	31.24	1.52	34.44	1170	238.76	21.88
24IPS6-1601ARM	16	1	0.056	0.38	13.46	1.52	16.66	274	114.30	13.72
24IPS6-1602ARM	16	2	0.056	0.38	16.51	1.52	19.56	396	134.62	13.72
24IPS6-1604ARM	16	4	0.056	0.38	21.34	1.52	24.38	603	170.18	13.72
24IPS6-1608ARM	16	8	0.056	0.38	25.91	1.52	29.11	833	203.20	13.72
24IPS6-1612ARM	16	12	0.056	0.38	30.99	1.52	34.19	1174	238.76	13.72
24IPS6-1616ARM	16	16	0.056	0.38	33.02	1.52	36.22	1418	251.46	13.72
24IPS6-1624ARM	16	24	0.056	0.38	37.34	1.52	40.54	1963	281.94	13.72

Typical Electrical Specifications for Each Pair

Size	Capacitance	Inductance
AWG	pF/ft	µH/ft
18	40.66	0.0957
16	48.51	0.0895