

Instrumentation ARMOR-X SPOS TYPE MC-HL

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

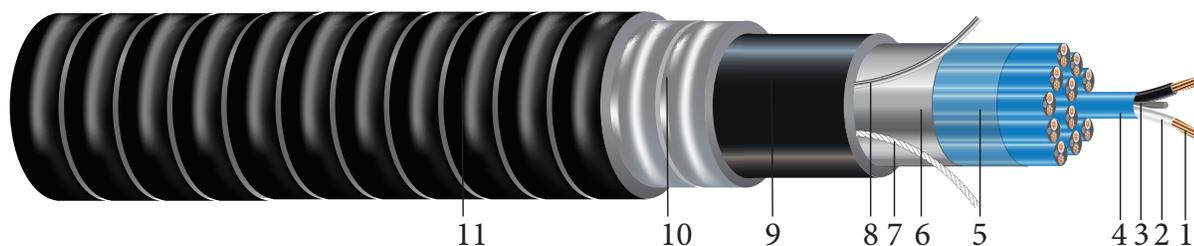


Image not to scale. See Table 1 Dimensions

CONSTRUCTION:

1. **Conductors:** Class B stranded bare copper per ASTM B-3 and B-8
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. **Shielded Twisted Pair:** 100% coverage aluminum/polyester foil shield with an individual drain wire shown in step 3
5. **Binder:** Mylar binder
6. **Overall Shielded:** 100% coverage aluminum/polyester foil shield with an individual drain wire as shown in step 8
7. **Rip Cord:** Rip cord under jacket for ease of removal
8. **Overall Drain Wire:** Tinned Copper
9. **Inner Jacket:** Black PVC
10. **Armor:** Armor-x continuous impervious weld corrugated aluminum armor
11. **Jacket:** Black sunlight and moisture resistant Solonon Low Smoke Zero Halogen (LSZH) jacket

APPLICATIONS AND FEATURES:

Southwire's Instrumentation Cables Type MC-HL 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 90°C and rated for Class I Div I hazardous locations. The inner jacket is black polyvinyl chloride (PVC) with a nylon rip cord for easy removal. The outer jacket is black Solonon Low Smoke Zero Halogen (LSZH).

SPECIFICATIONS:

- ASTM B8 - Concentric Lay-Standard Copper
- ASTM B33 - Tinned soft or Annealed Copper
- UL 83 Thermoplastic-Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1309 Marine Shipboard Cable
- UL 2225 Cables and Cable-Fittings For Use In Hazardous (Classified) Locations



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SPECIFICATIONS:

- UL 66 - Fixture Wire Type TFFN (18 and 16 AWG)
- UL 1685 - Vertical-Tray Fire Propagation and Smoke-Release Test.
- IEEE 1202/FT4 - Flame Test 70,000 Btu/hr Vertical Tray
- EPA 40CFR.Part 261, Subpart C, Heavy Metals Per Table 1, TCLP Method
- IEEE 1580 - Incidental Motion "IM" Compliance
- ABS - Listed as CWC MC

SAMPLE PRINT LEGEND:

SOUTHWIRE® #P# ARMOR-XTRA 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 600V (YR) USA SEQUENTIAL MARKING

Table 1 – Weights & Measurements for Shielded Pairs Overall Shield SPOS

Stock Code	Cond. Size AWG	No. of Pairs	Insulation Thickness	Inner Jacket Thickness	Nominal Core OD	Outer Jacket Thickness	Nominal Overall OD	Min Bending Radius	DC Resistance @ 25°C	Nominal Weight
			mils	mils	Inches	mils	Inches	Inches	Ω/MFT	(Lbs/Mft)
TBA	18	2	20	45	0.506	50	0.710	4.97	6.66	207
TBA	18	4	20	45	0.516	60	0.860	6.02	6.66	260
TBA	18	8	20	45	0.676	60	1.010	7.07	6.66	455
TBA	18	12	20	45	0.814	60	1.110	7.77	6.66	593
TBA	18	16	20	45	0.944	60	1.320	9.24	6.66	766
575916	16	1	20	45	0.302	60	0.630	4.41	4.18	166
TBA	16	2	20	45	0.416	60	0.750	5.25	4.18	237
TBA	16	4	20	45	0.552	60	0.940	6.58	4.18	366
TBA	16	8	20	45	0.720	60	1.110	7.77	4.18	541
TBA	16	12	20	45	0.868	60	1.340	9.20	4.18	798
TBA	16	16	20	45	1.023	60	1.470	9.80	4.18	964
TBA	16	24	20	45	1.218	60	1.660	11.62	4.18	1,436
TBA	16	36	20	45	1.302	60	1.880	13.16	4.18	1,901

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Standard stock item

Typical Electrical Specifications for Each Pair		
Size	Capacitance	Inductance
18 AWG	40.66 pF/ft.	0.0957 μ Henry/ft.
16 AWG	48.51 pF/ft.	0.0895 μ Henry/ft.

