

Instrumentation ARMOR-X STOS TYPE MC-HL

Type MC-HL Instrumentation Cable 600 Volt PVC/Nylon Insulated Singles Shielded Triads with Overall Shield Continuous Corrugated Armor-x -50°C to 90°C

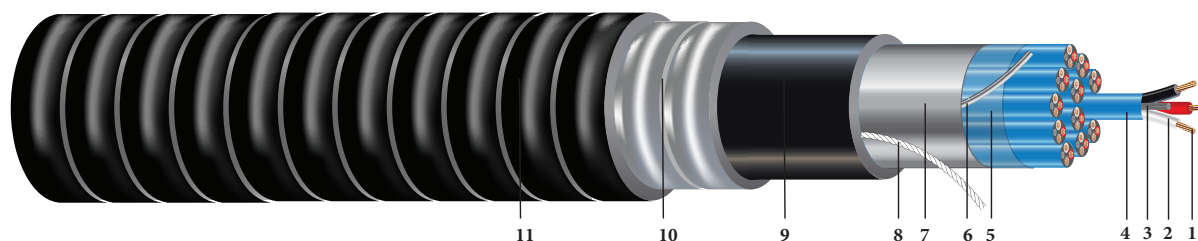


Image not to scale. See Table 1 Dimensions

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, Red with alpha-numeric print on each pair. 1-ONE, 2-TWO
3. **Drain Wire:** Tinned copper
4. **Shielded Twisted Triad:** 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 Polyvinyl Chloride (PVC)

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 triad conductors are colored black, white, red and alpha-numeric printed. Each triad 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 -50°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

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



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com



Southwire®

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

SAMPLE PRINT LEGEND:

SOUTHWIRE® #P# ARMOR-XTRA TYPE MC-HL (UL) SHLD TR XXAWG OVERALL SHIELDED PVC-N CDRS 90°C JKT SUN RES. DIR BUR FOR CT USE IEEE 1202/FT4 -50°C 600V (YR) USA SEQUENTIAL MARKING

Table 1 – Weights & Measurements for Shielded Triads Overall Shield STOS

Stock Code	Cond. Size AWG	No. of Triads	Insulation Thickness	Inner Jacket Thickness	Nominal Core OD	Outer Jacket Thickness	Nominal Overall OD (11)	Min Bending Radius	DC Resistance @ 25°C	Nominal Weight
			mils	mils	Inches	mils	Inches	Inches	Ω/MFT	(Lbs/Mft)
890567 [◇]	16	1	20	45	0.317	60	0.630	4.41	4.18	177
890569	16	4	20	45	0.636	60	0.970	6.79	4.18	444
890570	16	8	20	45	0.838	60	1.150	8.05	4.18	690
890571	16	12	20	45	1.023	60	1.450	10.15	4.18	1,012

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Standard stock item

Typical Electrical Specifications for Each Triad		
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.

