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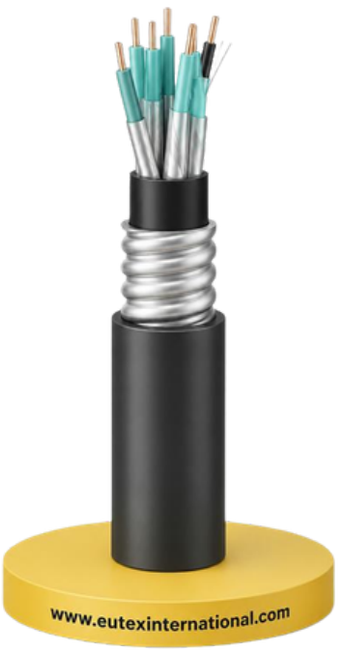
EUTEX

MC-HL

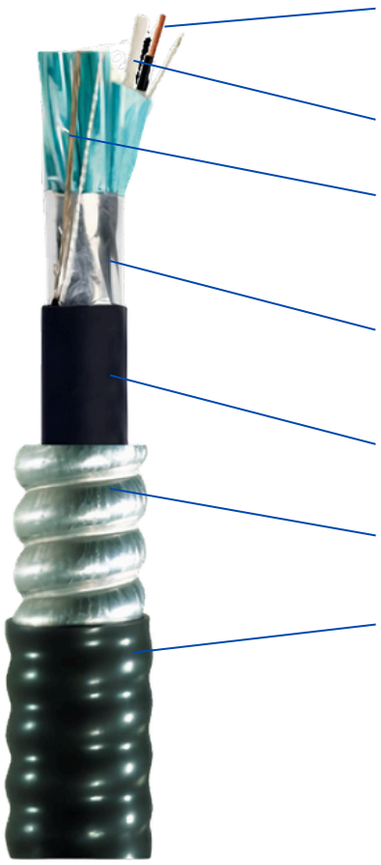
CCW® MC-HL Armored Instrumentation



CCW ® MC-HL Armored Instrumentation Cables are single or multiple individually shielded pairs or triads and have an overall cable shield. They have a PVC inner and outer jacket with a continuous corrugated aluminum sheath. These cables are suitable for control, signal, and instrumentation circuits with 600 volt rating & 90°C dry and wet installations.

APPLICATION STANDARD
Widerange of applications, including ALL hazardous locations
Chemical, oil and gas, and forestry industries, plus commercial or high-rise buildings
Services, feeders and branch circuits
Indoors or outdoors
Exposed or concealed
Cable Tray & raceway
Direct burial
Concrete encasement

CONSTRUCTION



Conductor
Bare, annealed copper conforming to ASTM B3 & Class B stranded in accordance with ASTM B81

Insulation
PVC/Nylon type TFN

Individual shield
Aluminum foil/polyester shield helically wrapped to provide 100% coverage and tinned copper drain wire that is two gauge sizes smaller than the circuit conductors. These shields are electrically isolated from each other.

Overall cable shield
Aluminum foil/polyester shield helically wrapped to provide 100% coverage and tinned copper drain wire that is the same size as the circuit conductors.

PVC inner jacket
A rip cord is laid longitudinally under the jacket to facilitate stripping.

Continuous corrugated aluminum sheath
A rip cord is laid longitudinally under the jacket to facilitate stripping.

Black PVC outer jacket
Pairs (SPOS) or Triads (STOS) - 16 AWG

Assembly: pairs/triads are cabled in concentric layers with interstices filled with suitable non-hygroscopic fillers, as required. A binder tape of synthetic material assembles the core in an essentially round configuration.

Conductor Identification:
Pairs: black/white & number coded
Triads: black/white/red & number coded

Minimum Bending Radius:
Fixed Position: 7 × overall cable diameter
During Pull: 14 x overall cable diameter

MULTI PAIRS, 600 V - 16 AWG (7W) SPOS

AWG	# of Pairs	Insulation Thickness		Nominal Diameter over Core (inches)	Inner Jacket Thickness (inches)	Nominal Diameter over Inner Jacket (inches)	Nominal Diameter over Sheath (inches)	Outer Jacket Thickness (inches)	Nominal Diameter over Outer Jacket (inches)	Approx. Net Cable Weight (lb/kft)
		PVC (inches)	Nylon (inches)							
16awg	1	0.015	0.004	0.21	0.040	0.29	0.49	0.050	0.61	157
16awg	2	0.015	0.004	0.42	0.040	0.48	0.64	0.050	0.74	216
16awg	4	0.015	0.004	0.48	0.050	0.53	0.77	0.050	0.87	375
16awg	8	0.015	0.004	0.64	0.050	0.68	0.93	0.050	1.03	604
16awg	12	0.015	0.004	0.80	0.050	0.84	1.14	0.050	1.25	862
16awg	24	0.015	0.004	1.12	0.050	1.13	1.42	0.050	1.53	1432

MULTI TRIADS, 600 V - 16 AWG (7W) STOS

AWG	# of Triads	Insulation Thickness		Nominal Diameter over Core (inches)	Inner Jacket Thickness (inches)	Nominal Diameter over Inner Jacket (inches)	Nominal Diameter over Sheath (inches)	Outer Jacket Thickness (inches)	Nominal Diameter over Outer Jacket (inches)	Approx. Net Cable Weight (lb/kft)
		PVC (inches)	Nylon (inches)							
16awg	1	0.015	0.004	0.23	0.040	0.30	0.51	0.050	0.62	171
16awg	12	0.015	0.004	0.82	0.050	0.84	1.21	0.050	1.32	1007

ELECTRICAL PROPERTIES 600 V Shielded Pairs / Triads with an overall Cable Shield

Conduct or Size (AWG)	DC Resistance 20°C Ω/kft	Capacitance			
		Pairs		Triads	
		Conductor -Conductor (pF/ft)	Conductor -Shield (pF/ft)	Conductor -Conductor (pF/ft)	Conductor -Shield (pF/ft)
18	6.64	74	148	63	156
16	4.18	86	172	87	180

PRODUCT DATA

	Insulation	CCW® MC-HL Instrumentation		CCW® MC-HL and VFD	
		Inne Jacket	Outer Jacket	Insulation	Jacket
Polymer Type	PVC	PVC	PVC	XLPE	PVC
Temperature Rating	105°C	90°C	90°C	90°C	90°C
Application Standard	UL 13	UL 13	UL 13	UL 44	UL 1569
	ICEA S-73-532	ICEA S-73-532	ICEA S-73-532	ICEA S-95-658	ICEA S-95-658
Tensile Strength psi min	1500	1500	1500	1500	1500
Elongation % min	100	100	100	150	100