

# MEDIUM VOLTAGE POWER CABLE

## TYPE MV-90 - SHIELDED XLP POWER CABLE, 5000 VOLT - WET AND DRY LOCATIONS

### Construction

#### Conductor:

- Compressed class B stranded annealed uncoated copper.

#### Conductor Shield:

- Extruded semi-conducting co-polymer compound.

#### Insulation:

- 90°C rated Cross-linked Polyethylene (XLPE) per ICEA S-93-639 section 4 and UL-1072.

#### Insulation Shield:

- Extruded semi-conducting co-polymer compound applied directly over the insulation. The conductor shield, insulation and insulation shield are applied in one tandem operation.

#### Shield:

- Uncoated helically applied copper wires.

#### Jacket:

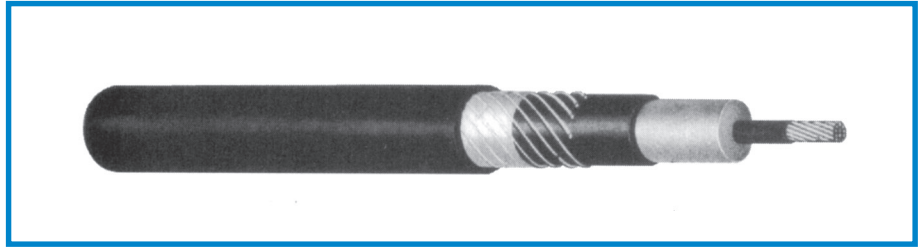
- Extruded PVC jacket with excellent mechanical properties. Jacket is UL recognized as being "sunlight resistant."

#### Tests:

- The finished cable shall be tested in accordance with and meet the requirements of ICEA S-93-639, UL-1072, and AEIC CS-5.

#### Industry Approvals:

- Listed by UL as 5000-volt power cable, Type MV-90, per UL Standard 1072.
- Conforms to ICEA Pub No. S-66-524 and NEMA Pub. No. WC7 for Crosslinked-thermosetting-polyethylene-Insulated Wire and Cable.
- Sizes 8-4 AWG with copper conductor approved under FAA AC 150/5345-7D, Specification L-824 Airport Lighting Cable, Type C.
- Conforms to Federal specification J-C-30B.



CUSTOM CATALOG NUMBER	CONDUCTOR		NOMINAL THICKNESS (INCHES)		APPROX. O.D. INCHES	AMPS			APPROX. NET WEIGHT LBS/MFT
	AWG/MCM	STRAND	INSULATION	JACKET		DIRECT BURIAL <sup>1</sup>	DUCT <sup>2</sup>	AIR <sup>3</sup>	
<b>5000 VOLTS, SHIELDED, 100% AND 133% INSULATION LEVELS (GROUNDED and UNGROUNDED NEUTRAL)</b>									
13420	8	7	0.090	0.060	.640	110	64	55	195
13421	6	7	0.090	0.060	.675	140	85	75	244
13422	4	7	0.090	0.060	.725	180	110	97	309
13423	2	7	0.090	0.060	.780	230	145	130	409
13424	1	19	0.090	0.060	.820	260	170	150	475
13425	1/0	19	0.090	0.080	.900	295	195	180	559
13426	2/0	19	0.090	0.080	.945	335	220	205	661
13427	3/0	19	0.090	0.080	1.000	385	250	240	822
13428	4/0	19	0.090	0.080	1.055	435	290	280	983
13429	250	37	0.090	0.080	1.120	470	320	315	1127
13430	350	37	0.090	0.080	1.225	570	385	385	1482
13431	500	37	0.090	0.080	1.375	690	470	475	2069
13432	750	61	0.090	0.080	1.575	845	585	600	2940
13433	1000	61	0.090	0.110	1.785	980	670	690	3789

- Ampacities are based on three single conductor cables directly buried in earth, conductor temperature of 90°C and ambient earth temperature of 20°C per Table 310.81 of the 2002 NEC.
- Ampacities are based on three single conductor cables in underground electrical duct, conductor temperature of 90°C and ambient earth temperature of 20°C per Table 310.77 of the 2002 NEC.
- Ampacities are based on three single conductor cables in isolated conduit in air, conductor temperature of 40°C and ambient air temperature of 40°C per Table 310.73 of the 2002 NEC.

- NOTES:
- Upon request, sizes 250 MCM and larger can be manufactured and listed for installation in cable tray.
  - Copper metallic tape shield available on special request.
  - CPE, Neoprene or Hypalon® jacket may also be supplied on special order.

### Applications

UL listed and OSHA acceptable. Where NEC requirements apply, cables are suitable for use in wet or dry locations at maximum operating temperature of 90°C for normal operation; 130°C for emergency overload conditions; and 250°C for short circuit conditions. Cables may be installed in conduit, duct or aerially when properly supported by a messenger. Cables are also suitable for direct burial if installed in a system with a grounding conductor that is in close proximity and conforms with Article 250A(A)(5) and 250.4(B)(4) of the 2002 NEC.



# Custom Cable Corp.