

**SUBMERSIBLE PUMP SHIELDED
POWER CABLE
5000 VOLT - TYPE MV-90
3 CONDUCTORS WITH GROUND
INSULATION: XLPE
OUTER JACKET: PVC
SIZES: 8 AWG – 750 MCM
90°C DRY / 75°C WET**



1.0 Applications:

- 1.1** Shielded, Medium Voltage and UL listed wet and dry locations. Suitable for use as a submersible cable. Direct Burial rated.

2.0 Construction:

- 2.1 Conductors:**
Consist of uncoated soft, copper strands meeting the requirements of ASTM B3. Conductor shall be supplied as Class B compact per ASTM B496.
- 2.2 Conductor Shield:**
Consists of an extruded semi-conducting layer.
- 2.3 Insulation:**
Cross-linked polyethylene (XLPE) extruded in a single pass with the conductor and insulation shields to the wall thickness
- 2.4 Insulation Shielding:**
Consist of a semi-conducting extruded compound and a 5 mil bare copper metallic tape shield overlapped a minimum of 20%.

2.5 Conductor Coding:

Phase identification for multi-conductor cables is provided by a colored stripe on the insulation shield of each of the conductors (red, black, white).

2.6 Ground:

Standard multi-conductor cables include one stranded bare copper ground in one of the outer cable interstices. The ground wire is sized per UL requirements. Custom ground wire sizes and configurations are available upon request.

2.7 Assembly:

Conductors and ground wire are cabled together with a left hand lay and suitable fillers are used in the interstices to round out the cable cross section. A mylar binder tape is applied overall.

2.8 Jacket:

A sunlight and ozone resistant jacket of polyvinyl chloride (PVC) or chlorinated polyethylene (CPE) is extruded over the single and multi-conductor assembly.

3.0 Standards and Ratings:

- 3.1** Conforms to ICEA S-93-639/NEMA WC74 Shielded Power Cable 5-46KV.
- 3.2** Cable listed by UL as Type MV-90 or MC per Standard 1072.
- 3.3** Listed by UL as Sunlight Resistant, for Direct Burial and For CT Use.
- 3.4** Listed by CSA as Type Power Cable per Standard SCA C68.3 (with -40°C PVC jacket).

4.0 Dimensions:

CONDUCTOR				INSULATION	JACKET	SIZE AWG COPPER GROUND WIRE	APPROXIMATE O.D.		APPROX. WEIGHT	AMPACITY (1) 40°C AMBIENT TEMP.
SIZE	No. of Insulated Conductors	No. of Strands	Nominal O.D.	mils	mils		inches	mm	lbs/1000 ft	
8	3	7	0.14	90	80	8	1.17	29.72	705	59
6	3	7	0.18	90	80	6	1.24	31.50	880	79
4	3	7	0.23	90	80	6	1.34	34.04	1095	105
2	3	7	0.27	90	80	6	1.43	36.32	1395	140
1	3	19	0.32	90	80	4	1.55	39.37	1695	160
1/0	3	19	0.34	90	80	4	1.58	40.13	1930	185
2/0	3	19	0.38	90	80	4	1.66	42.16	2255	215
3/0	3	19	0.42	90	110	3	1.83	46.48	2795	250
4/0	3	19	0.48	90	110	3	1.94	49.28	3310	285
250	3	37	0.52	90	110	2	2.07	52.58	3845	320
350	3	37	0.62	90	110	2	2.28	57.91	4985	395
500	3	37	0.74	90	110	1	2.53	64.26	6715	485
750	3	61	0.91	90	140	1/0	3.05	77.47	9588	615
1000	3	61	1.12	90	140	2/0	3.49	88.65	12825	705

Ampacity based on one three conductor cable isolated in air per NEC.

P7311-SP