



P7271M-SP

**FLAT SUBMERSIBLE pumpwire**  
**2 & 3**  
**CONDUCTOR WITH GROUND**  
**600/2000 VOLTS**  
**INSULATION: POLYVINYL CHLORIDE**  
**AND NYLON**  
**JACKET: POLYVINYL CHLORIDE**  
**SIZES: 12 - 500 MCM 90°C Dry, 75°C Wet**

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**1.0 APPLICATIONS:**

**1.1** Heavy duty (double jacketed), Flat Submersible pump cable suitable for use within well casings for wiring deep well fresh or salt water submersible pumps.

**2.0 CONSTRUCTION:**

**2.1 Conductors:**

Class C, soft drawn, bare copper per ASTM B3 and ASTM B8.

**2.2 Insulation:**

Heat and moisture resistant, polyvinyl chloride meeting the requirements of UL 83 for Type THHN and THWN wires. The insulation is acceptable for use in locations at 90°C dry or 75°C wet. The insulation thickness is in accordance with UL 83.

**2.3 Conductor Jacket:**

A nylon jacket is applied directly to the surface of the PVC insulation. Nylon shall meet the requirements of UL 83. The thickness is in accordance with UL 83.

**2.4 Ground Conductor:**

Class C, soft drawn, bare copper per ASTM B3 and ASTM B8. The conductor is insulated with PVC/Nylon and the nominal overall diameter shall equal the insulated circuit conductors.

**2.5 Assembly:**

The insulated circuit and grounding conductors are laid flat and parallel together. The jacket will be applied directly over the insulated conductors encapsulating them.

**2.6 Jacket:**

Heat and moisture resistant, Black polyvinyl chloride meeting the requirements of UL 83. The thickness is in accordance with UL 83.

**2.7 Color Code:**

Black, yellow, red & green grounding conductor.

**2.8 Surface Marking:**

The overall jacket will have the following information printed: PAIGE SUBMERSIBLE PUMP CABLE NUMBER AND "size of conductors", TYPE THHN/THWN 600 V (UL).

**2.9 Approvals:**

UL: E63611-T  
MSHA: P-7K-206644

### 3.0 DIMENSIONS:

NUMBER OF INSULATED CONDUCTORS	CONDUCTOR SIZE	GROUNDING CONDUCTOR SIZE	INSULATION THICKNESS AVERAGE/MINIMUM PVC/NYLON		JACKET THICKNESS		CABLE O.D.		CABLE WEIGHT	AMPACITY (1) 40°C
	AWG or MCM	AWG	INCHES	MM	INCHES	MM	INCHES	MM	LB/MFT*	AMBIENT TEMP.
2	14	14	0.013/0.004	0.330/0.102	0.030	0.762	0.54 x 0.22	13.7 x 5.6	79	18
2	12	12	0.037/0.004	0.939/0.102	0.030	0.762	0.56 x 0.23	14.2 x 5.8	95	24
2	10	10	0.013/0.004	0.330/0.102	0.030	0.762	0.60 x 0.24	15.2 x 6.1	158	33
3	14	14	0.013/0.004	0.330/0.102	0.030	0.762	0.53 x 0.18	13.4 x 4.5	110	18
3	12	12	0.013/0.004	0.330/0.102	0.030	0.762	0.59 x 0.21	14.9 x 5.3	138	24
3	10	10	0.013/0.004	0.330/0.102	0.045	1.143	0.75 x 0.25	19.0 x 6.4	210	33
3	8	10	0.027/0.005	0.686/0.127	0.055	1.397	0.99 x 0.37	25.6 x 8.1	360	43
3	6	8	0.027/0.005	0.686/0.127	0.060	1.524	1.18 x 0.42	29.9 x 10.6	487	58
3	4	8	0.036/0.006	0.914/0.152	0.060	1.524	1.47 x 0.44	37.3 x 11.1	721	79
3	2	6	0.036/0.006	0.914/0.152	0.060	1.524	1.72 x 0.50	43.6 x 12.7	1061	105
3	1	6	0.045/0.007	1.143/0.178	0.060	1.524	1.915 x 0.630	48.6 x 16.0	1829	121
3	1/0	6	0.045/0.007	1.143/0.178	0.060	1.524	2.170 x 0.64	55.1 x 16.2	1836	145
3	2/0	6	0.045/0.007	1.143/0.178	0.060	1.524	2.360 x 0.69	59.9 x 17.5	2034	166
3	3/0	6	0.045/0.007	1.143/0.178	0.060	1.524	2.580 x 0.74	65.5 x 18.7	2428	189
3	4/0	4	0.045/0.007	1.143/0.178	0.060	1.524	2.820 x 0.80	71.6 x 20.3	3092	223
3	250 MCM	4	0.054/0.008	1.372/0.203	0.095	2.413	3.150 x 1.00	80.0 x 25.4	4290	245
3	350 MCM	3	0.054/0.008	1.372/0.203	0.095	2.413	3.550 x 1.20	90.1 x 30.4	4550	305
3	500 MCM	3	0.054/0.008	1.372/0.203	0.065	1.651	3.860 x 1.30	98.0 x 27.0	8270	380

\*Ampacities (Amps per conductor) are based on 30°C ambient temperature in air. 90°C conductor temperature per the 2002NEC Table 400-5 (B)