Simpull® 09XW

5kV or 8kV Type MV-90 Copper Conductor. Thermosetting Conductor and Insulation Shield. XLP Insulation. Copper Wire Shield. Simpull® PVC Jacket.



APPLICATIONS

Southwire SIMpull 09XW Type MV-90 Cable is for use in aerial, direct burial, conduit, and underground duct installations. These cables are capable of operating continuously at a conductor temperature not in excess of 90°C for normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 5,000V, 133% (ungrounded system) and 8,000V, 100% insulation level (grounded system). Maximum sidewall pressure is 1000 lbs. This cable can be installed without the need for pulling lubricant.

SPECIFICATIONS

Southwire SIMpull 09XW Type MV-90 Cable is manufactured and tested in accordance with the latest revisions of the following standards and specification:

- UL 1072
- ICEA S-93-639 (NEMA WC 74)
- AEIC CS-8
- RoHS

CONSTRUCTION

Southwire SIMpull 09XW Type MV- 90 Cable offers our patented SIM (Slikqwik [®] Infused Membrane) Technology [®] for easier pulling, proven XLP insulation, 90°C continuous conductor operating temperature, fast stripping thermosetting insulation shield, and it is triple extruded. Cable is sunlight resistant, suitable for direct burial. SOLONON™ low smoke, non halogen polyolefin jackets are available upon request.





09XW 1c, 5/8kV, 115mil XLP(133/100%), WS, PVC

Product Code	Size	Conductor Diameter		0.115" Insulation Diameter		Extruded Insulation Shield Diameter		Min. Point Jacket Thickness		Approximate Overall Diameter		Approximate Net Weight		Allowable Ampacities+	
	AWG or kcmil	inch*	mm	inch**	mm	inch***	mm	inch	mm	inch	mm	lb./Mft.	kg/km	Duct	Conduit In Air
09-XW-002	2	.283	7.19	.568	14.41	.623	15.81	.055	1.4	.787	20	402	599	155	150
09-XW-001	1	.322	8.18	.608	15.43	.663	16.83	.07	1.78	.858	21.8	493	734	175	170
09-XW-010	1/0	.362	9.19	.648	16.45	.703	17.84	.07	1.78	.898	22.8	576	857	200	195
09-XW-020	2/0	.405	10.29	.688	17.46	.743	18.86	.07	1.78	.938	23.8	677	1007	230	225
09-XW-030	3/0	.456	11.58	.738	18.73	.793	20.13	.07	1.78	.988	25.1	803	1195	260	260
09-XW-040	4/0	.512	13	.793	20.13	.848	21.53	.07	1.78	1.043	26.5	961	1430	295	295
09-XW-250	250	.558	14.17	.85	21.59	.905	22.99	.07	1.78	1.098	27.9	1101	1638	325	330
09-XW-350	350	.661	16.79	.953	24.19	1.008	25.59	.07	1.78	1.203	30.5	1452	2160	390	395
09-XW-500	500	.79	20.07	1.078	27.37	1.133	28.77	.07	1.78	1.328	33.7	1961	2919	465	480
09-XW-750	750	.968	24.59	1.265	32.13	1.32	33.53	.07	1.78	1.515	38.5	2808	4178	565	585
09-XW-100	1000	1.117	28.37	1.41	35.81	1.465	37.21	.1	2.54	1.723	43.8	3731	5551	640	675

^{*}Nominal diameter per ASTM Standards. **±0.030" ***±0.050"

Scope: This specification covers single conductor XLP (cross-linked thermosetting polyethylene) insulated, shielded, thermoplastic jacketed power cable for use in aerial, direct burial, conduit, and underground duct installations. These cables are capable of operating continuously at a conductor temperature not in excess of 90°C for normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 5,000 volts, 133% and 8,000 volts, 100% insulation level.

Standards: The following standards shall form a part of this specification - UL Standard 1072 for Medium Voltage Power Cable and ICEA S-93-639 (NEMA WC 74) 5-46 kV Shielded Power Cable for Use in the Transmission & Distribution of Electric Energy.

Conductor: The conductor shall be Class B compressed concentric stranded bare copper in accordance with ASTM specs B3 and B8 and ICEA Part 2, Section 2.1 and 2.5.

Conductor Shield: The conductor shall be shielded with an extruded semi-conducting thermosetting polymeric layer which shall be firmly bonded to the insulation. The thickness shall be in accordance with the referenced standards.

Insulation: The insulation shall be XLP meeting the requirements of the referenced standards. The nominal thickness shall be 0.115".

Insulation Shield: The insulation shall be shielded with an extruded semi-conducting thermosetting polymeric layer which shall be identified as semi-conducting. The thickness shall be in accordance with the referenced standards. Over this layer shall be applied a concentric serve of #24 AWG annealed solid bare copper wires over which shall be applied a lapped non-metallic tape.

Jacket: The cable shall be covered with a black sunlight resistant PVC jacket conforming to the requirements specified for polyvinyl chloride jackets in ICEA. The average thickness shall be in accordance with Table 7-3 of ICEA. Optional SOLONON low smoke, non halogen polyolefin jackets are available upon request.

Identification: Cable shall be identified by surface printing on the jacket.

Tests: Qualification tests shall be conducted in accordance with the requirements of AEIC.







⁺Ampacities are based on the NEC, 2008 Edition. Duct ampacities are based on Table 310.77 three conductors in one underground duct, 90°C conductor, 20°C earth ambient temperature. Conduit in air ampacities are based on Table 310.73 three cables in isolated conduit in air, 90°C conductor, 40°C ambient temperature.