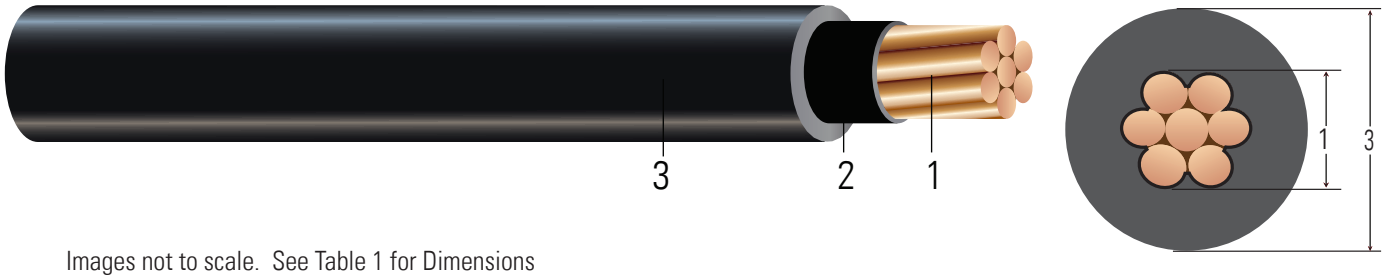
1/C CU 2.4KV XLPE INSULATION MV-90 DRY

Type MV-90 Dry Single Conductor Copper, Non-Shielded Cross Linked Polyethylene (XLPE)



Images not to scale. See Table 1 for Dimensions

CONSTRUCTION:

1. **Conductor**: Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Conductor Shield**: Semi-conducting cross-linked copolymer
3. **Insulation**: Cross Linked Polyethylene (XLPE)

APPLICATIONS AND FEATURES:

Southwire's 2.4KV XLPE cables are suited for use in dry areas, conduits, ducts, troughs, trays and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation, 130°C for emergency overload, and 250°C for short circuit conditions. Rated at -35°C for cold bend. Rated for 1000 lbs./FT maximum sidewall pressure.

SPECIFICATIONS:

- ASTM B3 Soft or annealed copper
- ASTM B8 Concentric-lay-standard copper
- UL 1072 - Medium Voltage Power Cables
- ICEA S-96-659 (NEMA WC 7) 2001-5000 V Nonshielded Cables
- FAA L-824 C Specification Approved by (AC 150/5345-53D), (AC 150/5345-7F)

SAMPLE PRINT LEGEND:

SOUTHWIRE [SYMBOL - LIGHTING BOLT] #P# (UL) 1/C [#AWG or #kcmil] CU XLPE 2.4KV MV-90 SUN. RES. YEAR (NESC) [SEQUENTIAL FEET MARKS]

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Table 1 – Weights & Measurements

Stock Code	Cond. Size	Dia. over Cond. (1)	Insulation Thickness	Approx. OD (3)	Approx. Weight	Max Pull Tension	Min Bending Radius
	AWG	inches	mils	inches	lbs./MFT	lbs.	inches
584689	6	0.174	110	0.43	137	210	3.4
584690	4	0.225	110	0.481	215	334	3.8
584691	2	0.283	110	0.537	313	531	4.3
TBA	1	0.322	110	0.574	340	670	4.6
TBA	1/0	0.362	110	0.614	415	845	4.9
TBA	2/0	0.405	110	0.657	509	1065	5.3
TBA	3/0	0.456	110	0.708	626	1342	5.7
TBA	4/0	0.512	110	0.764	772	1693	6.1
TBA	250	0.558	120	0.830	939	2000	6.6
TBA	350	0.661	120	0.933	1274	2800	7.5
TBA	500	0.789	120	1.061	1769	4000	8.5
TBA	750	0.968	130	1.260	2560	6000	10.0
TBA	1000	1.117	130	1.409	3409	8000	11.3

All dimensions are nominal and subject to normal manufacturing tolerances

Table 2 – Electrical and Engineering Data

Stock Code	Cond. Size	Resistance DC @ 25°C	Resistance AC @ 90°C	Reactance X_L @ 60Hz	Shield Short Circuit Current 6 Cycles	Allowable Ampacities 90°C In Duct †	Allowable Ampacities 90°C In Air ‡
	AWG	Ω/MFT	Ω/MFT	Ω/MFT	Amps	Amps	Amps
584689	6	0.411	0.515	0.042	5966	85	110
584690	4	0.258	0.323	0.039	9491	110	145
584691	2	0.162	0.203	0.036	15089	145	190
TBA	1	0.129	0.161	0.035	19029	170	225
TBA	1/0	0.102	0.128	0.034	24011	195	260
TBA	2/0	0.081	0.101	0.033	30264	220	300
TBA	3/0	0.064	0.081	0.032	38154	250	345
TBA	4/0	0.051	0.064	0.031	48114	290	400
TBA	250	0.043	0.054	0.031	56845	320	445
TBA	350	0.031	0.039	0.030	79583	385	550
TBA	500	0.022	0.028	0.029	113690	470	695
TBA	750	0.014	0.020	0.028	170535	585	900
TBA	1000	0.011	0.016	0.027	227380	670	1075

† Ampacities are based on TABLE 310.60(C)(77) Detail 1. of the 2014 National Electrical Code (20°C Ambient Earth Temperature, Thermal Resistance ROH of 90)
‡ Ampacities are based on TABLE 310.60(C)(69) of the 2014 National Electrical Code (40°C Ambient Air Temperature)

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