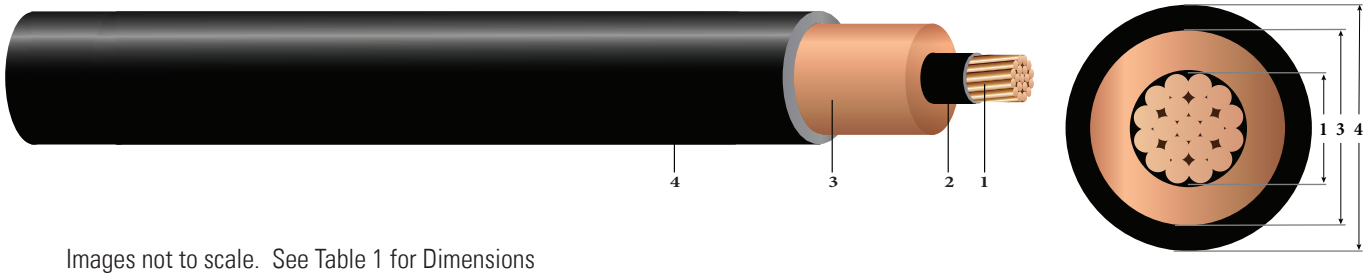
1/C CU 2.4KV EPR LSZH MV-90

Type MV-90 Single Conductor Copper, Ethylene Propylene Rubber (EPR) SOLONON® Low Smoke Zero Halogen (LSZH) Jacket



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**: Ethylene Propylene Rubber (EPR)
4. **Overall Jacket**: SOLONON® Low Smoke Zero Halogen (LSZH)

APPLICATIONS AND FEATURES:

Southwire's 2.4KV cables are suited for use in wet and dry areas, conduits, ducts, troughs, direct burial, 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 -25°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

SAMPLE PRINT LEGEND:

SOUTHWIRE [SYMBOL - LIGHTING BOLT] #P# (UL) 1/C [#AWG or #kcmil] CU EPR 2.4KV MV-90 SUN. RES. [-25°C] YEAR (NESC) [SEQUENTIAL FEET MARKS]

Table 1 – Weights & Measurements

Stock Code	Cond. Size	Diameter over Cond. (1)	Diameter over Insul. (3)	Diameter over Insul. Shield	Insul. Thick-ness	Jacket Thick-ness[1]	Approx. OD (4)	Approx. Weight	Max Pull Tension	Min Bending Radius	Conduit Size*
	AWG	inches	inches	inches	mils	mils	inches	lbs./MFT	lbs.	inches	inches
958546	2	0.283	0.563	-	125	80	0.723	411	531	5.8	2
958553	1	0.322	0.602	-	125	80	0.762	477	670	6.1	2.5
611095	1/0	0.362	0.642	-	125	80	0.802	560	845	6.4	2.5
611103	2/0	0.405	0.685	-	125	80	0.845	663	1065	6.8	2.5
611111	3/0	0.456	0.736	-	125	95	0.926	819	1342	7.4	3
611129	4/0	0.512	0.792	-	125	95	0.982	979	1693	7.9	3
611137	250	0.558	0.878	-	140	110	1.098	1181	2000	8.8	3.5
611152	350	0.661	0.981	-	140	110	1.201	1541	2800	9.6	3.5
611178	500	0.789	1.109	-	140	110	1.329	2067	4000	10.6	4
611194	750	0.968	1.318	-	155	125	1.568	3007	6000	12.5	5
611202	1000	1.117	1.467	-	155	125	1.717	3858	8000	13.7	5

All dimensions are nominal and subject to normal manufacturing tolerances
* Conduit size based on 3 phase 40% fill-factor without ground

Table 2 – Electrical and Engineering Data

Stock Code	Cond. Size	Resistance DC @ 25°C	Resistance AC @ 90°C	Reactance X_C @ 60Hz	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	MΩ*MFT	Ω/MFT	Amps	Amps	Amps
958546	2	0.162	0.203	-	0.043	15089	145	190
958553	1	0.129	0.161	-	0.042	19029	170	225
611095	1/0	0.102	0.128	-	0.040	24011	195	260
611103	2/0	0.081	0.101	-	0.039	30264	220	300
611111	3/0	0.064	0.081	-	0.038	38154	250	345
611129	4/0	0.051	0.064	-	0.037	48114	290	400
611137	250	0.043	0.054	-	0.037	56845	320	445
611152	350	0.031	0.039	-	0.035	79583	385	550
611178	500	0.022	0.028	-	0.034	113690	470	695
611194	750	0.014	0.020	-	0.033	170535	585	900
611202	1000	0.011	0.016	-	0.032	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)