

MV-90 25kV

UL 1072, ASTM B-231, AEIC CS8, ICEA S-94-649

Medium Voltage 25kV 100% Aluminum Conductor, Copper Wire Shielded Power Cable

APPLICATIONS

INDUSTRIAL AND COMMERCIAL ▪ Chemical Plants ▪ Petrochemical Plants ▪ Electrical Utility Plants ▪ Water Treatment Facilities ▪ Steel Mills ▪ Paper Mills ▪ Airports ▪ Shopping Malls ▪ Military Bases ▪ Medical Facilities ▪ Sports Stadiums	INSTALLATIONS ▪ In Cable Tray ▪ Conduit in Air ▪ Aerial with Messenger Supported ▪ Direct Buried ▪ Underground Duct ▪ Wet and Dry Locations
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CONSTRUCTION

Conductor	Class B compressed uncoated aluminum, watertight
Conductor shield	Extruded layer of semiconducting compound applied under simultaneous triple extrusion process
Insulation	Extruded layer of 90°C rated TR-XLPE
Insulation shield	Extruded layer of semiconducting compound applied by triple extrusion process
Metallic shield	Round Copper Wire Concentric Neutral with water blocking agent
Jacket	Extruded layer of black LLDPE with red stripes



Characteristic

Maximum conductor operating temperature:	+90°C
Maximum emergency overload temperature:	+140°C
Maximum short-circuit conductor temperature:	+250°C
Maximum sidewall pressure:	1000lbs/ft
Lowest ambient temperature for fixed installation:	-40°C
Lowest installation temperature:	-20°C
Minimum bending radius:	12xD (D-overall diameter of cable)

Approvals

(UL) E129949
 Approved by USDA Rural Utilities Service

MV-90

25kV 100% INSULATION LEVEL

Conductor Size	Insulation Thickness	Diameter over insulation	Concentric Neutral	Jacket Thickness	Outer Diameter	Cable Weight	Ampacities*			Min. Bending Radius	Max. Pull Tension
							Isolated in Air	Direct Buried	Under ground Duct		
AWG / MCM	mils	inches	No x AWG	mils	inches	lbs / 1000ft	A			inches	lbs
Full Concentric Neutral											
1	260	0.89	13 # 14	70	1.23	760	175	185	135	14.8	670
1/0	260	0.93	16 # 14	70	1.28	880	200	215	155	15.3	845
2/0	260	0.97	20 # 14	70	1.34	980	230	245	175	16.1	1065
3/0	260	1.02	25 # 14	70	1.39	1110	270	275	200	16.7	1345
One-Third Concentric Neutral											
4/0	260	1.08	17 # 16	70	1.44	1050	310	315	230	17.3	1695
250	260	1.13	13 # 14	70	1.5	1120	345	345	250	18.0	2000
350	260	1.23	18 # 14	70	1.6	1370	430	415	305	19.2	2800
500	260	1.36	25 # 14	90	1.7	1790	530	510	370	20.5	4000
750	260	1.55	38 # 14	90	2.0	2430	685	635	455	24.0	6000
1000	260	1.7	50 # 14	90	2.15	2950	825	740	525	25.8	6000
1250	260	1.84	62 # 14	90	2.29	3500	950	825	585	27.5	6000
1500	260	1.96	75 # 14	90	2.41	3980	1060	945	640	28.9	6000

* Ampacities „Underground Duct“ per NEC 2023 Table 315.60(C)(12). Ampacities „Isolated in Air“ per NEC 2023 Table 315.60(C)(4).
Ampacities „Direct Buried“ per NEC 2023 Table 315.60(C)(16).

Sample print legend:

TF KABLE (SIZE) AL STRANDFILLED TYPE MV-90 (UL) TRXLPE 25kV 100% INS LEVEL 260 MILS SUN RES MADE IN POLAND (Year)

