

Specification Sheet

BWC Part Number #: BWC-500-012.4KVNSEP

Single Conductor 2.4KV Non-Shielded, MV-90

Application

This 2.4KV Non-shielded MV-90 power cable is primarily used for power circuits in commercial, industrial, refinery, and petro-chemical plants, as well as utility power generation and substations. The cable can be installed in wet or dry locations, in ducts, in open air, and in cable trays for sizes 1/0 AWG and larger. It is approved for temperatures up to 90°C and voltages up to 2400 volts.

Construction

- Conductor: Class B stranded, soft drawn, or annealed copper per ASTM B496.
- Conductor Shield: Extruded thermoset semiconducting shield that is free-stripping from the conductor and bonded to the insulation.
- Insulation: Natural high dielectric strength EPR-based insulation, formulated to enhance electrical and mechanical characteristics for extended cable life.
- Jacket: Black, sunlight-resistant, non-migrating polyvinyl chloride (PVC) or chlorinated polyethylene (CPE) jacket is applied over the insulation.

Standards

- UL 1072.
- ICEA S-96-659 (5kV).
- UL 1685 Vertical Tray Flame Test.

PART NUMBER	COND SIZE (AWG/ MCM)	INSULATION THICKNES (INCH)	CONDUCTOR DIAMETER (INCH)	INSULATION DIAMETER (INCH)	JACKET DIAMETER (INCH)	NET WEIGHT (LBS/KFT)	AMPACITY 90 C* IN DUCT (AMPS	AMPACIT Y 90 C **IN AIR (AMPS)
BWC-4-012.4KVNSEP	4	.125	.215	.520	.690	311	110	145
BWC-2-012.4KVNSEP	2	.125	.266	.570	.740	407	145	190
BWC-1-012.4KVNSEP	1	.125	.299	.600	.770	472	170	225







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PART NUMBER	COND SIZE (AWG/ MCM)	INSULATION THICKNES (INCH)	CONDUCTOR DIAMETER (INCH)	INSULATION DIAMETER (INCH)	JACKET DIAMETER (INCH)	NET WEIGHT (LBS/KFT)	AMPACITY 90 C* IN DUCT (AMPS	AMPACIT Y 90 C **IN AIR (AMPS)
BWC-1/0-012.4KVNSEP	1/0	.125	.341	.640	.810	556	195	260
BWC-2/0-012.4KVNSEP	2/0	.125	.376	.680	.850	655	220	300
BWC-3/0-012.4KVNSEP	3/0	.125	.423	.730	.920	806	250	345
BWC-4/0-012.4KVNSEP	4/0	.125	.479	.780	.980	961	290	400
BWC-250-012.4KVNSEP	250	.140	.522	.860	1.090	1156	320	445
BWC-350-012.4KVNSEP	350	.140	.622	.960	1.190	1510	385	550
BWC-500-012.4KVNSEP	500	.140	.742	1.080	1.310	2027	470	695
BWC-75012.4KVNSEP	750	.155	.917	1.290	1.550	2990	585	900
BWC-1000- 012.4KVNSEP	1000	.155	1.071	1.450	1.710	3816	670	1075

^{*}Table data sourced from. All values are nominal and subject to correction.

ALL SPECIFIED PARAMETERS WITHOUT A TOLERANCE ARE NOMINAL AND SUBJECT TO VERIFICATION. BEST WIRE IS NOT RESPONSIBLE FOR UNKNOWN PERFORMANCE ATTRIBUTES THAT WERE NOT MADE KNOWN TO BEST WIRE AT THE TIME OF DESIGN.





^{*}Ampacity in Duct rating is for three cables in an underground duct based on a 20°C earth temperature, 100% load factor, and RHO of 90 per NEC table 310.60(C)(77).

^{**}Ampacity in Air rating is for a single cable isolated in 40°C air per NEC table 310.60(C)(69).