

Internal Wiring Power Cable EPR Insulated, PVC Jacketed



A Viakable Company

5 kV, Non Shielded

Features

UL Listed as Nonshielded Cable.

Jacket is Listed Sunlight Resistant.

Jacket is flame retardant.

Application

Nonshielded cables are intended solely for use as factory-installed wiring in equipment (internal wiring), in industrial applications where such cable systems are maintained by trained personnel, not as type MV. These cables must be protected and are not to be in contact by personnel while energized.

Typical applications are for OEM equipment such as switchgear, transformers, etc.

Standards

UL 2460

Nonshielded Cable.

ICEA S-96-659/NEMA WC71

Standard for non shielded cables rated 2001-5000 volts for use in the Distribution of Electrical Energy.

Specifications

Maximum operating voltage:

- 5 kV.

Maximum conductor operation temperatures:

In wet and dry locations

- Normal: 90 °C
- Emergency: 130 °C
- Short Circuit: 250 °C

Engineering Information

1. Conductor: Soft annealed uncoated copper compacted Class B per ASTM B496 or hard drawn Aluminum-1350 compacted Class B per ASTM B400.

On request, strand filled or compressed strand.

Sizes: 8 AWG (6 AWG Aluminum) up to 1000 kcmil.

On request, larger conductor sizes available.

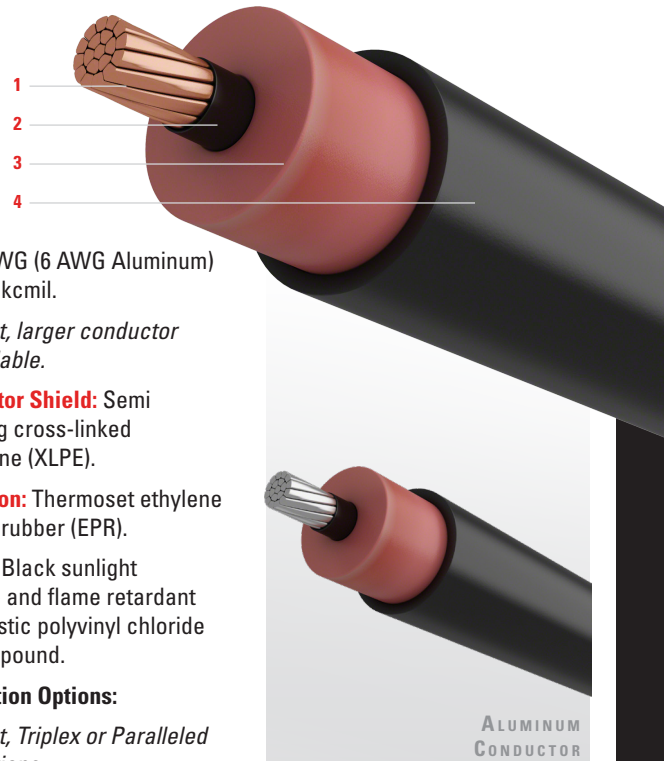
2. Conductor Shield: Semi conducting cross-linked polyethylene (XLPE).

3. Insulation: Thermoset ethylene propylene rubber (EPR).

4. Jacket: Black sunlight resistance and flame retardant thermoplastic polyvinyl chloride (PVC) compound.

Configuration Options:

On request, Triplex or Paralleled configurations.



ALUMINUM CONDUCTOR

Technical Data

5 kV EPR Insulated

Size AWG or kcmil	Number of Strands	Conductor Nominal OD in	100% and 133% Insulation Levels				Approximate Net Weight	
			Insulation Thickness mil	Jacket Thickness mil	Approximate Outside Diameter in	Copper	Aluminum	
						lb/kft	lb/kft	
8	7	0.13	125	80	0.59	208	–	
6	7	0.17	125	80	0.63	254	197	
4	7	0.21	125	80	0.67	321	231	
2	7	0.27	125	80	0.72	422	279	
1	19	0.30	125	80	0.76	488	308	
1/0	19	0.34	125	80	0.79	572	345	
2/0	19	0.38	125	80	0.83	675	389	
3/0	19	0.42	125	95	0.91	831	470	
4/0	19	0.48	125	95	0.96	991	537	
250	37	0.52	140	110	1.08	1198	660	
350	37	0.62	140	110	1.18	1559	806	
500	37	0.74	140	110	1.30	2088	1012	
750	61	0.91	155	125	1.54	3047	1434	
1000	61	1.06	155	125	1.69	3910	1760	

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.

Ampacities: Refer to beginning of section.



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