

### Technical Specification

**Cable Type: High Voltage Single Conductor Cables**  
**Type 40/69 KV YE<sub>3</sub>S(AL)E Stranded Copper Conductor, XLPE Insulation, PE Jacket Served Copper Wire Shield**

**Western Wire Series: WPCV**

**Revision: 02/02 Date: 5 December 2002**



Single Conductor High-Voltage Cables Type 40/69 KV YE<sub>3</sub>S(AL)E, conforming to IEC 60840. Stranded copper conductor, inner semi-conductive layer, XLPE insulation, outer semi-conductive layer, swellable semi-conductive tape, served round annealed copper wire shield, bonded aluminum moisture barrier and PE outer jacket, for high-safety power supply in permanent underground and outdoor installations.

#### Cable Construction

Conductor	Stranded annealed bare copper conductors, conforming to ASTM B3
Inner semi-conductive layer	Conductive compound.
Insulation	XLPE compound.
Outer semi-conductive layer	Conductive compound.
Tape wrap	Swellable semi-conductive tape.
Overall shield	Served round annealed bare copper wires + copper tape.
Tape wrap	Semi-conductive binder tape.
Moisture barrier	Bonded aluminum tape.
Outer jacket	Heavy duty PE compound, colored black.
Surface marking	Per request.

#### Electrical Parameters

Maximum Operating Temperature	90C
Maximum short circuit temperature	250C for 5 S max.
Voltage Rating	40/69 KV

WW P/N	Construction and Cross Section		DC Resistance @20C	Overall Diameter	Total Weight	Inductance	Capacitance	Ampacity			
	mm <sup>2</sup>							Ohm/Km	mm	Kg/Km	mH/Km
	Nominal		Max.	Nom.	Nom.	Nom.	Nom.				
	Cond.	Shield					Underground @ 20C		In Air @ 30C		
WPCV1X240	240	25	0.0754	70	5240	0.64	0.13	545	544	724	665
WPCV1X300	300	25	0.0601	72	5940	0.62	0.14	605	612	822	758
WPCV1X400	400	25	0.0470	76	7030	0.60	0.15	672	692	941	874
WPCV1X500	500	35	0.0366	79	8210	0.58	0.16	743	780	1073	1003
WPCV1X630	630	35	0.0283	84	9850	0.55	0.18	812	872	1212	1145