

ENGINEERING & STANDARDS DEPARTMENT

693A Spanish Town Road, Kingston 11

Tel. 937-9200-9399, Fax 937-9259

T & D MATERIAL PURCHASING SPECIFICATION

JPS SPECIFICATION: MVCCABLE2017	DATE: May 2, 2017
ITEM STOCK:020302012007	SUPERSEDES: All Previous

DESCRIPTION: Cable, XLPE, 25kV, Aluminum, 7 Strands, Overhead, 70mm² (#2/0 AWG)

APPLICATION: For use as overhead distribution lines in areas of high vegetation and reduced right of way.

SPECIFICATION

Cable, XLPE Insulated, 25kV, Aluminum, 7 Strands, Aerial 70mm² (#2/0 AWG): Used for overhead primary distribution lines in areas of high vegetation and reduced right of way.

Conductor material shall be Aluminum Alloy 6201 T81 with a cross sectional area of 70mm² and shall consist of seven (7) strands. The conductor shall be manufactured with three layers of insulation of the following properties:

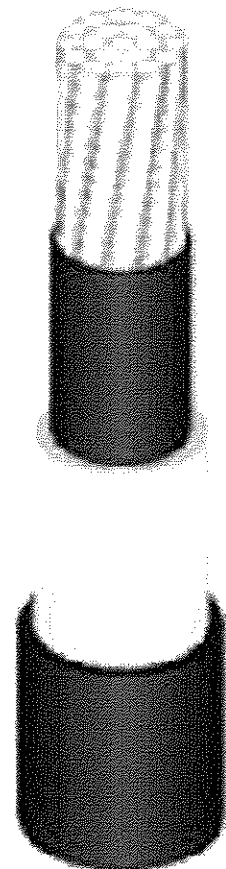
Insulation layer	Material type	Thickness (inch)	colour
Conductor shield	Semiconductor	0.015	Black
Inner layer	High or low density polyethylene	0.125	Black or grey
Outer layer/jacket	TR-HPDE or XLPE	0.125	Black

The outer layer shall be track and weather resistant. The insulation shall be rated at 25kV. The cable shall have a minimum ampacity of 250A in air at 40°C. The maximum DC electrical resistance at 20°C shall not exceed 0.65 Ohm/km.

The cable shall be permanently marked in bright colours (orange/yellow) every 2ft along its length 'Manufacturer's Name, 2/0 AWG, AL, 25kV XLPE, Date, PROPERTY OF JPS.'

The markings on the cable shall be legible from 7ft away. The cable shall be packaged on reels of minimum length 1km, and shall be lagged.

Conductor shall be manufactured in accordance with the relevant ASTM and NEMA standards. The manufacturer/Supplier shall provide at the time of tendering a complete data sheet outlining the cable's construction, insulation, mechanical and electrical characteristics, dimensions and packaging details.



Prepared by:

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Approved by:

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Manufacturer/Supplier	
Catalogue No.	
Manufacturing Standard(s)	
Voltage Rating / Insulation Class (kV)	
Insulation Type	
Testing Standards (s)	
Stranding	
Area (mm ²)	
Diameter (mm)	
Weight per Unit Length (kg/km)	
Ultimate Tensile Strength	
Modulus of Elasticity (Initial & Final)	
Coefficient of Linear Expansion	
Standard Length of Cable on Reel (m)	