

# Three Core Power Cable For URD Application 12.7/22kV



STANDARD: AS/NZS 4026

RATED VOLTAGE: 12.7/22 (24) kV

FAULT LEVEL: Up to 10kA for 1sec or to customer requirements

IMPULSE VOLTAGE: 95kV

TEMPERATURE RANGE:

In continuous operation Max. conductor temp 90°C.  
Lowest cable temperature during installation: -10°C and below 0°C special precaution must be taken.

BENDING RADIUS:

During installation: 25 x D. When installed: 15 x D (HDPE sheathed cables)  
D = Overall diameter of cable

DESIGN

CONDUCTOR:

Stranded, round and compacted aluminium complying with AS/NZS 1125

SEMI-CONDUCTIVE CONDUCTOR SCREEN:

Extruded cross-linked compound

INSULATION:

XLPE complying with AS/NZS 3808

SEMI-CONDUCTIVE INSULATION SCREEN:

Extruded hand strippable cross-linked compound

METALLIC SCREEN:

Circular copper wires

INNER SHEATH:

PVC, Orange

OUTER SHEATH:

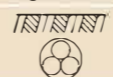

HDPE, Black



## Electrical Data

Conductor size	Maximum conductor DC resistance at 20°C	Cond.AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz and 90°C	Insulation resistance at 20°C	Charging current Per phase	Dielectric loss per phase	Zero sequence resistance at 20°C	Zero sequence resistance at 50Hz
mm <sup>2</sup>	Ω/km	Ω/km	Ω/km	MΩ.km	A/km	W/km	Ω/km	Ω/km
95	0.32	0.411	0.115	11000	0.888	45.1	1.20	0.0691
185	0.164	0.211	0.103	8500	1.14	57.7	0.961	0.0577
240	0.125	0.161	0.0991	7700	1.25	63.5	0.922	0.0541

## Current Ratings

Conductor size	Continuous current-carrying capacity, A		Conductor fault current carrying capacity for 1 second	Short circuit current rating of the screen 1sec
	in ground	In air		
mm <sup>2</sup>			kA	kA
95			9.0	4.8
185			17.5	6.8
240			22.7	9.1

## 12.7/22kV Three Core PVC/HDPE Sheathed URD

### Aluminium Conductor

Product code	Conductor size	Nominal thickness of insulation	Diameter over insulation	Number & Nominal Diameter of Screen Wires	Overall diameter (approx.)	Mass (approx.)	Maximum pulling tension	Minimum bending radius	
								During installation	Installed
	mm <sup>2</sup>	mm	mm	no./mm	mm	kg/km	kN	mm	mm
3MV095A22HH	95	5.5	23.7	36/0.85	27.0	3600	14.4	1620	970
3MV185A22HH	185	5.5	28.5	40/0.85	31.8	4850	25.0	1900	1140
3MV240A22HH	240	5.5	30.7	40/0.85	34.0	5650	25.0	2030	1220