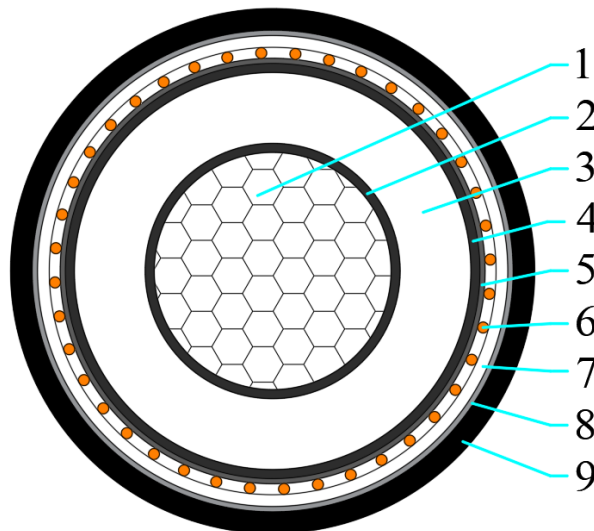


12.7/22(24) kV EQL
1. Design guidelines.

AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and including 19/33(36) kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

2. Application.

Normal use operating temperature	90°C
Max. conductor temperature during short circuit(5s)	250°C
Lowest recommended temperature during installation	0°C

3. Construction.
HCA - 630mm² x 1 Core Al/TR-XLPE/WBT/CWS(13.5kA)/WBT/APL/MDPE(Graphite) 22kV - HCA2429926EQL


1	Conductor	Class 2, circular compacted Aluminium conductor A layer of semi-conductive tape shall be applied over the conductor
2	Conductor screen	Semi-conductive compound
3	Insulation	TR-XLPE
4	Insulation screen	Semi-conductive compound
5	Bedding tape	Semi-conductive water-blocking tape
6	Metallic screen	Plain annealed copper wire screen
7	Binder tape	Water-blocking tape
8	Water barrier	Poly-laminated Aluminium tape
9	Outer sheath	MDPE/Black

4. Core identification and mark as listed below, or as purchase order.

Identification of core: Natural
Marking on cable: by printing in two diametrically opposed lines on the surface of outer sheath
HENG TONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE ERGON 460 12.7/22kV 630mm ² 1 core Al TR-XLPE WBT CWS(13.5kA) WBT APL MDPE XXXXm

12.7/22(24) kV EQL
5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Aluminium
Nominal cross-sectional area	mm ²	630
Conductor shape	/	Circular Compacted
Approx. diameter of active conductor	mm	30.0
Conductor screen		
Min. thickness at any point	mm	0.3
Approx. diameter of conductor screen	mm	31.7
Active Insulation		
Material	-	TR-XLPE
Nominal thickness/Min. thickness at any point	mm	5.5/4.85
Approx. diameter over insulation	mm	42.7
Insulation screen		
Type	-	Hand-strippable
Min. thickness at any point	mm	0.6
Approx. diameter of insulation screen	mm	44.2
Metallic screen		
No. & Diameter of copper wires per phase	No./mm	52/1.53
Approx. diameter of metallic screen	mm	48.1
Water barrier		
Material		Polylaminated Al
Nominal thickness		0.30
Approx. diameter over water barrier		50.8
Outer sheath		
Material	-	MDPE
Nominal thickness/Min. thickness at any point	mm	2.6/1.88
Approx. diameter of outer sheath	mm	56.0
Max. diameter of cable	mm	58.8
Approx. mass of cable	kg/km	4,138
Electrical data		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.0496
Max. A.C. resistance of conductor at 90°C	Ω/km	0.0630
Fault current carrying capacity of conductor	kA/1sec	59.5
Fault current carrying of screen	kA/1sec	13.5
Mechanical data		
Maximum pulling tension of conductor	kN	73.7
Min. bending radius during installation	mm	1400
Min. bending radius after installed	mm	840