

**1. Design guidelines.**

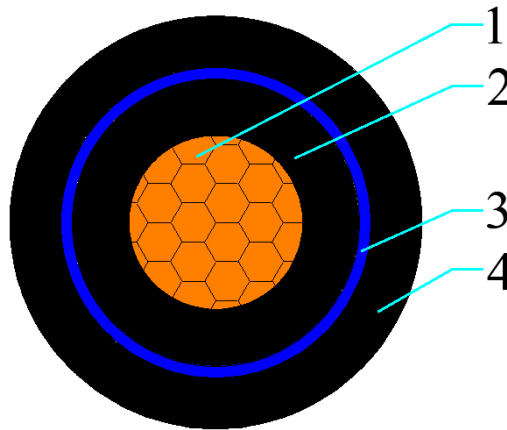
AS/NZS 5000.1	Electric cables-Polymeric insulated Part 1: For working voltages up to and including 0.6/1kV(1.2)kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

**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 - 25mm<sup>2</sup> x 1 Core Cu/XLPE(Black)/NY/MDPE(Black) – HCA9456PWC**



1	Conductor	Class 2, plain annealed circular compacted Copper conductor
2	Insulation	X-90 Black
3	Insect protection	Nylon 12 Blue
4	Outer sheath	MDPE Black

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

Identification of core: Black
Marking on cable: by printing in one line on the surface of outer sheath
HENGTONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE 0.6/1kV CHINA 25mm <sup>2</sup> x 1 Core Cu XLPE(Black) NY MDPE XXXXm

**5. Construction parameters.**

Description	Unit	Values
<b>Active Conductor</b>		
Material	-	Copper
Nominal cross-sectional area	mm <sup>2</sup>	25
Conductor shape	/	Circular Compacted
Approx. diameter of active conductor	mm	6.0
<b>Active Insulation</b>		
Material	-	X-90
Nominal thickness/Min. thickness at any point	mm	0.9/0.71
Approx. diameter over insulation	mm	8.0
<b>Insect protection</b>		
Material	-	Nylon 12
Min. thickness at any point	mm	0.50
Approx. diameter over Insect protection	mm	9.6
<b>Outer sheath</b>		
Material	-	MDPE
Nominal thickness/Min. thickness at any point	mm	1.4/1.09
Approx. diameter of outer sheath	mm	12.6
<b>Max. diameter of cable</b>	mm	14.6
<b>Approx. mass of cable</b>	kg/km	316
<b>Electrical data</b>		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.727
Max. A.C. resistance of conductor at 90°C	Ω/km	0.927
Fault current carrying capacity of conductor	kA/1sec	3.58
<b>Mechanical data</b>		
Maximum pulling tension of conductor	kN	1.7
Min. bending radius during installation	mm	370
Min. bending radius after installed	mm	220