

1. Design guidelines.

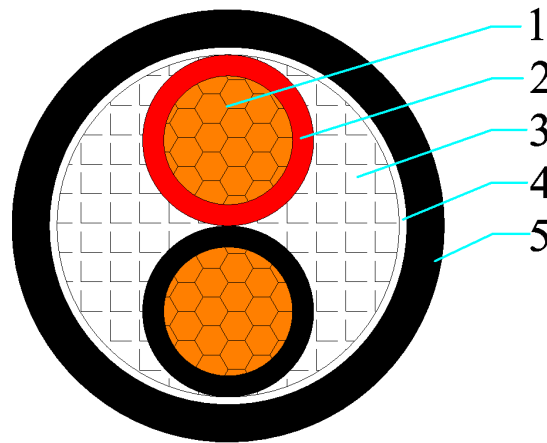
AS/NZS 5000.1	Electric cables-Polymeric insulated Part 1: For working voltages up to and including 0.6/1kV(1.2)kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

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 - 50mm² x 2 core Cu/XLPE/PVC(Black) 1kV - HCA-QMR50x2CuXP-B-1



1	Conductor	Class 2, plain annealed circular compacted Copper conductor
2	Insulation	X-90
3	Filler	Non-hygroscopic material
4	Binder tape	Non-hygroscopic material
5	Over sheath	5V-90 Black

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

Identification of core: Red, Black
Marking on cable: by printing in one line on the surface of outer sheath
HENGTONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE 0.6/1kV HPC-S 50mm ² x 2 Core Cu XLPE PVC XXXXm

	TECHNICAL DATA SHEET HENG TONG CABLE AUSTRALIA	Doc No.: GD/TC/4120001-2021
	0.6/1kV QMR	Rev: 1
		Date: 4/25/2023
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5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Copper
Nominal cross-sectional area	mm ²	50
Conductor shape	/	Circular Compacted
Approx. diameter of active conductor	mm	8.1
Active Insulation		
Material	-	X-90
Nominal thickness/Min. thickness at any point	mm	1.0/0.80
Approx. diameter over insulation	mm	10.3
Laying up of cores		
Direction of lay		Right
Diameter of laid up core	mm	21.0
Oversheath		
Material	-	5V-90
Nominal thickness/Min. thickness at any point	mm	1.8/1.43
Approx. diameter of oversheath	mm	24.6
Max. diameter of cable	mm	26.6
Approx. mass of cable	kg/km	1,180
Electrical data		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.387
Max. A.C. resistance of conductor at 90°C	Ω/km	0.494
Fault current carrying capacity of conductor	kA/1sec	7.15
Mechanical data		
Maximum pulling tension of conductor	kN	6.8
Min. bending radius during installation	mm	480
Min. bending radius after installed	mm	320