

1. Design guidelines.

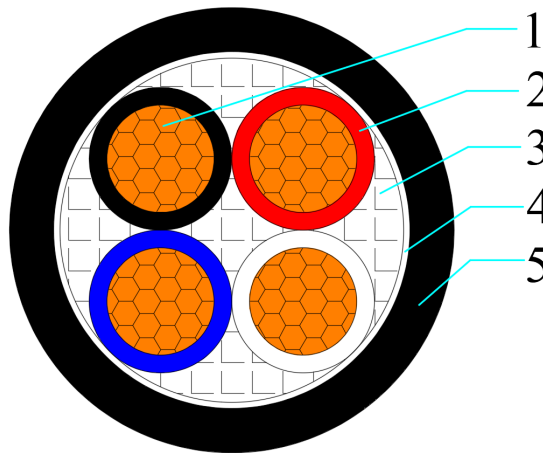
AS/NZS 5000.1	Electric cables-Polymeric insulated Part 1: For working voltages up to and including 0.6/1kV(1.2)kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

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 - 70mm² x 4 core Cu/XLPE/PVC(Black) 1kV - HCA-QMR70x4CuXP-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, White, Blue, Black
Marking on cable: by printing in one line on the surface of outer sheath
HENG TONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE 0.6/1kV HPC-S
70mm ² x 4 Core Cu XLPE PVC XXXXm

5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Copper
Nominal cross-sectional area	mm ²	70
Conductor shape	/	Circular Compacted
Approx. diameter of active conductor	mm	9.9
Active Insulation		
Material	-	X-90
Nominal thickness/Min. thickness at any point	mm	1.1/0.89
Approx. diameter over insulation	mm	12.3
Laying up of cores		
Direction of lay		Right
Diameter of laid up core	mm	30.2
Oversheath		
Material	-	5V-90
Nominal thickness/Min. thickness at any point	mm	2.0/1.60
Approx. diameter of oversheath	mm	34.2
Max. diameter of cable	mm	36.2
Approx. mass of cable	kg/km	2,989
Electrical data		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.268
Max. A.C. resistance of conductor at 90°C	Ω/km	0.343
Fault current carrying capacity of conductor	kA/1sec	10.02
Mechanical data		
Maximum pulling tension of conductor	kN	19.0
Min. bending radius during installation	mm	650
Min. bending radius after installed	mm	430