

**1. Design guidelines.**

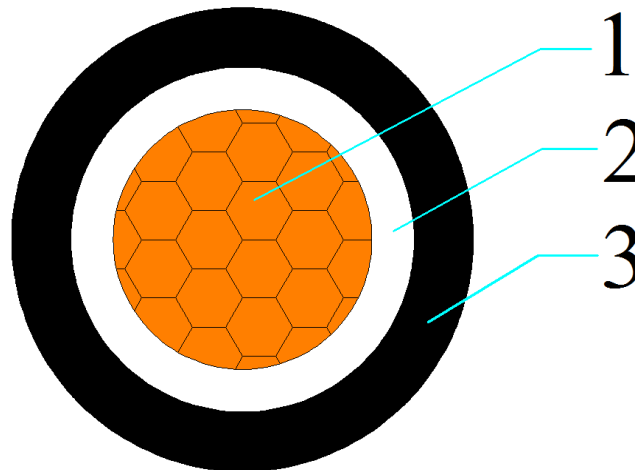
AS/NZS 5000.1	Electric cables-Polymeric insulated Part 1: For working voltages up to and including 0.6/1kV(1.2)kV
AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and including 19/33(36) kV (Insulation thickness only)
AS/NZS 1125	Conductors in insulated 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 - 70mm<sup>2</sup> x 1 core T-Cu(F)/R-EP-90/GP-85-PCP Flexible - HCA406718PWC**



1	Conductor	Class 5, tinned annealed circular stranded Copper conductor
2	Insulation	R-EP-90
3	Oversheath	GP-85-PCP Black

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

Identification of core: Natural
Marking on cable: by printing in one line on the surface of outer sheath
HENG TONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE 1.9/3.3kV 70mm <sup>2</sup> x 1 core T-Cu(F) R-EP-90 GP-85-PCP Flexible XXXXm



**TECHNICAL DATA SHEET  
HENGTONG CABLE AUSTRALIA**

Doc No.:  
GD/TC/416001-2023

Rev: 1

**1.9/3.3(3.6)kV PWC**

Date: 4/4/2023

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**5. Construction parameters.**

Description	Unit	Values
<b>Conductor</b>		
Material	-	Copper
Nominal cross-sectional area	mm <sup>2</sup>	70
Conductor shape	/	Circular Stranded
Approx. diameter of active conductor	mm	11.8
<b>Insulation</b>		
Material	-	R-EP-90
Nominal thickness/Min. thickness at any point	mm	2.2/1.88
Approx. diameter over insulation	mm	17.0
<b>Oversheath</b>		
Material	-	GP-85-PCP
Nominal thickness/Min. thickness at any point	mm	2.0/1.60
Approx. diameter of oversheath	mm	21.0
<b>Max. diameter of cable</b>	mm	23.0
<b>Approx. mass of cable</b>	kg/km	957
<b>Electrical data</b>		
Max. D.C. resistance of conductor at 20°C	Ω/km	0.277
Max. A.C. resistance of conductor at 90°C	Ω/km	0.354
Fault current carrying capacity of conductor	kA/1sec	10.02
<b>Mechanical data</b>		
Maximum pulling tension of conductor	kN	4.76
Min. bending radius during installation	mm	140
Min. bending radius after installed	mm	90