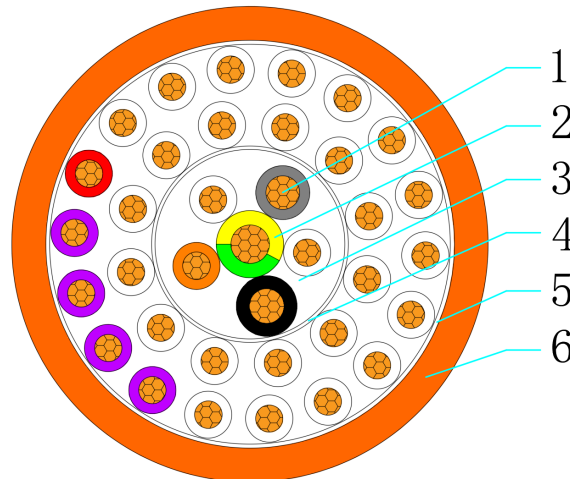


**1. Design guidelines.**

AS/NZS 2276.1	Cables for traffic signal installations Part1: Multicore power cables
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	75°C
Max. conductor temperature during short circuit(5s)	160°C
Lowest recommended temperature during installation	0°C

**3. Construction.**
**HCA - 36 Cores Traffic Signal Cable Cu/PVC/PVC(Orange) 1kV - HCA-QMR36CuPP-O-T-1**


1	Conductor	Class 5, plain, annealed, flexible Copper conductor
2	Insulation	V-90
3	Filler	Non-hygroscopic material
4	Binder tape	Non-hygroscopic material
5	Binder tape	Non-hygroscopic material
6	Outer sheath	5V-90 Orange

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

Core identification:	
ELV return	Grey
Neutral and Earth	Black and G/Y
Phase	27×White cores with black numbering, 4×Purple cores with black numbering, 1×Red, 1×Orange
Cable marking: by printing in one line on the surface of outer sheath	
HENG TONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE 0.6/1KV HPC-N	
36 Cores Traffic Signal Cable Cu PVC PVC XXXXm	

**5. Construction parameters.**

Description	Unit	Values
<b>Conductor for Earth Core</b>		
Cross sectional area	mm <sup>2</sup>	6
Shaped	/	Circular Stranded
Approx. diameter of conductor	mm	3.02
<b>Insulation for Earth Core</b>		
Average thickness/Min. thickness at any point	mm	1.0/0.80
Approx. diameter over insulation	mm	5.8
<b>Conductor for Black Core</b>		
Cross sectional area	mm <sup>2</sup>	4
Shaped	/	Circular Stranded
Approx. diameter of conductor	mm	2.48
<b>Insulation for Black Core</b>		
Average thickness/Min. thickness at any point	mm	1.0/0.80
Approx. diameter over insulation	mm	5.2
<b>Conductor for Grey Core</b>		
Cross sectional area	mm <sup>2</sup>	2.5
Shaped	/	Circular Stranded
Approx. diameter of conductor	mm	1.95
<b>Insulation for Grey Core</b>		
Nominal thickness/Min. thickness at any point	mm	0.8/0.62
Approx. diameter over insulation	mm	4.2
<b>Conductor for White/Orange/Red/Pink Core</b>		
Cross sectional area	mm <sup>2</sup>	1.5
Shaped	/	Circular Stranded
Approx. diameter of conductor	mm	1.58
<b>Insulation for White/Orange/Red/Pink Core</b>		
Nominal thickness/Min. thickness at any point	mm	0.8/0.62
Approx. diameter over insulation	mm	3.8
<b>Laying up</b>		
Direction of lay		Right
Diameter of laid up core	mm	32.3
<b>Outer sheath (PVC)</b>		
Nominal thickness/Min. thickness at any point	mm	2.0/1.60
Approx. diameter over PVC sheath	mm	36.7
<b>Max. diameter of cable</b>	mm	38.7
<b>Approx. mass of cable</b>	kg/km	1,830
Min. bending radius during installation	mm	348
Min. bending radius after installed	mm	232



**TECHNICAL DATA SHEET  
HENG TONG CABLE AUSTRALIA**

Doc No.: S17101001

Rev: 1

**0.6/1(1.2) kV QMR**

Date: 4/25/2023

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Description	Unit	Values
Max. D.C. resistance of conductor at 20°C	Ω/km	13.3
Fault current carrying capacity of conductor for 1 second	kA	0.2
Maximum pulling tension of conductor	kN	4.22