



TRAFFIC, SOLAR, IRRIGATION & GARDEN LIGHTING CABLE

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TC 36 SERIES

**High Performance Fixed Traffic
Signal 36 Core Cable 0.6/1kV 90°C**



APPLICATIONS:

Traffic Signals Underground multicore cable for the interconnection of traffic signal posts and control equipment.

PRODUCT FEATURES:

- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Direct burial
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

CONSTRUCTION:

Conductor Annealed plain copper stranded (Class 2).

Insulation V-90 SPVC.

Sheath PVC 5V-90.

CHARACTERISTICS:

Operating Temperature Range Fixed -5°C to 90°C.

Maximum Conductor Temperature 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage U_o/U 0.6/1kV.

Max AC Operating Voltage U_o 0.7kV.

Minimum Bending Radius Fixed 7.5 x cable diameter.

Sheath Colour Orange.

Relevant Standards AS/NZS 2276.1, AS/NZS 1125, AS/NZS 3808,

RoHS Compliant.



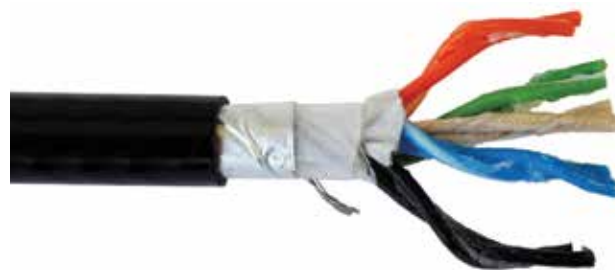
LAYUP CONSTRUCTION

Centre:	1 Core: Violet (ONE)
Second Layer:	6 cores: Violet (TWO to FOUR) + White (ONE to THREE)
Third Layer:	12 cores: White (FOUR to FIFTEEN)
Fourth Layer:	17 Cores: White (SIXTEEN to TWENTY SEVEN) + Orange + Red + Black + Green/Yellow + Grey

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm ²	Insulation Colour	Max D.C. Resistance of conductor at 20°C (ohm/kM)	Approx. Weight (Kg/Km)	Approx. Overall Diameter (mm)
TC36OR	3 x 2.5	7/0.67	Orange, Red, Black	7.41	1400	26.0
	1 x 4.0	7/0.85	Green, Yellow	4.61		
	32 x 1.5	7/0.50	Grey, Violet – No: 1 to 4 White – No: 1 to 27	13.60		

TC FEEDER SERIES

**High Performance Fixed
Instrumentation Traffic Feeder Cable
300V 70°C**



APPLICATIONS:

Traffic Signals Gel filled instrumentation cables for traffic signal installations.

PRODUCT FEATURES:

- ▶ UV resistant
- ▶ Flame retardant
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

CONSTRUCTION:

Conductor Annealed plain copper stranded (Class 2).

Insulation LDPE.

Cable Filler Transparent LDPE.

Water Block Material Gel filled with water block tape to AS/NZS 2276.2.

TCGEL-ES (Individual Pair Screen) PET+ Aluminium/Polyster tape screen applied with 7/0.25mm TC drain wire complete with gel compound.

TCGEL (Overall Screen) Aluminium/Polyster tape screen applied with 7/0.25mm TC drain wire and gel compound.

Sheath PVC 4V-75.

CHARACTERISTICS:

Operating Temperature Range Fixed -20°C to 70°C.

Maximum Conductor Temperature 70°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Max. Conductor Resistance 13.6 Ω/km.

Min. Insulation Resistance 20G Ω/km @ 500Vdc.

Mutual Capacitance 65-80nF/km @ 1kHz.

Max. Water Penetration 3% Maximum variation of C³ between cores.

Rated Voltage 300V.

Minimum Bending Radius 12 x cable diameter.

Sheath Colour Black.

Standard Core Colour

PAIR 1: Blue, Blue with White Stripe.

PAIR 2: Orange, Orange with White Stripe.

PAIR 3: Green, Green with White Stripe.

PAIR 4: Black, Black with White Stripe.

NOTE: THE CABLE HAS A PAIR TO NUMBER MARKING ON THE SHEATH FOR IDENTIFICATION PURPOSES.

Relevant Standards AS/NZS 2276.2 (exception to overall diameter for 2 & 4 pair cables), AS/NZS 1125, AS/NZS 1660, AS/NZS 1049 and

RoHS Compliant.

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Insulation Thickness (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)
OVERALL SCREEN						
TCGEL01/2/1.5	1 pair 1.5	7/0.5	0.5	0.8	1.2	9.1
TCGEL02/2/1.5	2 pair 1.5	7/0.5	0.5	0.8	1.2	13.4
TCGEL04/2/1.5	4 pair 1.5	7/0.5	0.5	0.8	1.2	14.8
INDIVIDUAL PAIR SCREEN						
TCGEL02/2/1.5ES	2 pair 1.5	7/0.5	0.5	0.8	1.2	13.4
TCGEL04/2/1.5ES	4 pair 1.5	7/0.5	0.5	0.8	1.2	15.4

TC LOOP SERIES

**High Performance Fixed
Instrumentation Traffic Loop Cable
250V 80°C**



APPLICATIONS:

Traffic Signals Operating in the frequency range 20kHz to 200kHz. Suitable for slots cut into the road surface.

PRODUCT FEATURES:

- ▶ UV resistant
- ▶ Flame retardant
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

CONSTRUCTION:

Conductor Annealed plain copper stranded (Class 2).

Insulation PP - Polypropylene.

CHARACTERISTICS:

Operating Temperature Range Fixed -10°C to 80°C.

Maximum Conductor Temperature 80°C.

Min. Insulation Resistance 20G Ω/km @ 500Vdc.

Rated Voltage 250V.

Minimum Bending Radius 12 x cable diameter.

Sheath Colour Black.

Relevant Standards AS/NZS 2276.3, AS/NZS 1125, AS/NZS 1660, AS/NZS 1049 and **RoHS** Compliant.

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Insulation Thickness (mm)	Max D.C. Resistance of conductor at 20°C Ω/km	Frequency Range (kHz)	Approx. Overall Diameter (mm)
TC001.5BK	1 x 1.5	7/0.5	0.8	13.8	20 to 200	3.5

SOLAR SERIES

Standard Performance Solar Cable
1.0/1.5kV DC 120°C



APPLICATIONS:

Solar Suitable for cabling between interconnected solar modules or DC/AC inverter (photovoltaic power supply systems).

PRODUCT FEATURES:

- ▶ Tinned fine stranded copper conductor
- ▶ UV resistant
- ▶ Environmentally friendly
- ▶ Flame retardant
- ▶ Heat, oil and chemical resistant

CONSTRUCTION:

Conductor Annealed tinned copper stranded Class 5 for flexibility.

Insulation EBXL 120°C compound.

Sheath EBXL 120°C compound.

CHARACTERISTICS:

Operating Temperature Range -40°C to 90°C.

Maximum Conductor Temperature 120°C.

Rated Voltage U_o/U 1.0/1.5kV DC Voltage.

Minimum Bending Radius Fixed 4 x cable diameter /
Flexing 6 x cable diameter.

Sheath Colour Black.

Standard Core Colours Black, Red.

Relative Standards AS/NZS 5033:2021, IEC 62930:2017,

RoHS Compliant and **CE** Certified.

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Current carrying capacity 60°C ambient temperature (free air)	Approx. Weight (Kg/Km)
SOLAR2/4.0	2 x 4.0	52 / 0.30	5.60 x 11.50	55	120
SOLAR2/6.0	2 x 6.0	84 / 0.30	6.20 x 12.50	70	156

ICLV SERIES

**FIRSTFLO Standard Performance
Irrigation Cable 25VAC/60VDC 75°C**



APPLICATIONS:

Control Used to control the valves in residential and commercial irrigation systems including golf courses and fruit orchard systems.

Harsh Environments Designed for applications where harsh conditions may be encountered and are resistant to ground chemicals.

PRODUCT FEATURES:

- ▶ UV stabilised
- ▶ Water and moisture resistant
- ▶ High density polypropylene
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

CONSTRUCTION:

Conductor Annealed plain copper stranded (Class 2).

Insulation PP.

Sheath SPVC V-75.

See over for full product table ▶

CHARACTERISTICS:

Operating Temperature Range Fixed -15°C to 75°C.

Maximum Conductor Temperature 80°C.

Rated Voltage 25VAC / 60VDC.

Standard Core Colours

Single Core

0.5mm² - Black, Blue, Brown, Green, Orange, Red, White, Yellow.

0.75mm² - 1.5mm² - Black, Blue, Red.

2.5mm² - 4.0mm² - Black, Red
(other colours available on request).

Multi Core

2 Core - Black, Red.

3 Core - Black, Red, White.

4 Core - Black, Red, White, Blue.

5 Core - Black, Red, White, Blue, Green.

7 Core - Black, Red, White, Blue, Green, Brown, Yellow.

9 Core - Black, Red, White, Blue, Green, Brown, Yellow, Pink, Grey.

13 Core - Black, Red, White, Blue, Green, Brown, Yellow, Pink, Grey, Violet, Beige, Light Green, Orange.

Multi Core Sheath Colour Blue (Other colours available on request).

Relevant Standards AS/NZS 3808, IEC 60332.1,

RoHS Compliant.

ICLV SERIES continued

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm ²	Approx. Overall Diameter (mm)	Nominal Amps Enclosed protected from sun In Duct or Cabinet	Max D.C. Conductor Resistance @ 20°C Ω/km	Approx. Weight (kg/km)
ICLV01/0.5	1 x 0.5	7 x 0.30	1.5	4	38.4	6
ICLV01/0.75	1 x 0.75	7 x 0.37	2.1	7	25.3	8
ICLV01/1.0	1 x 1.0	7 x 0.40	2.3	10	21.2	15
ICLV01/1.5	1 x 1.5	7 x 0.50	2.7	16	13.6	20
ICLV01/2.5	1 x 2.5	7 x 0.67	3.2	23	7.41	28
ICLV01/4.0	1 x 4.0	7 x 0.85	3.8	30	4.61	35
ICLV02/0.5	2 x 0.5	7 x 0.30	4.2	4	38.4	24
ICLV02/1.0	2 x 1.0	7 x 0.40	5.2	10	21.1	35.0
ICLV02/1.5	2 x 1.5	7 x 0.50	5.9	16	13.6	40.0
ICLV02/2.5	2 x 2.5	7 x 0.67	7.1	23	7.41	80.00
ICLV03/0.5	3 x 0.5	7 x 0.30	4.5	4	38.4	33
ICLV03/1.0	3 x 1.0	7 x 0.40	5.6	10	21.2	40.0
ICLV03/1.5	3 x 1.5	7 x 0.50	6.2	16	13.6	70.0
ICLV03/2.5	3 x 2.5	7 x 0.67	7.3	23	7.41	125.00
ICLV05/0.5	5 x 0.5	7 x 0.30	5.5	4	38.4	40.0
ICLV05/1.0	5 x 1.0	7 x 0.40	6.7	10	21.2	90.0
ICLV05/1.5	5 x 1.5	7 x 0.50	7.7	16	13.6	120.0
ICLV05/2.5	5 x 2.5	7 x 0.67	9.0	23	7.41	165.00
ICLV07/0.5	7 x 0.5	7 x 0.30	6.1	4	38.4	50.0
ICLV07/1.0	7 x 1.0	7 x 0.40	7.3	10	21.2	110.0
ICLV07/1.5	7 x 1.5	7 x 0.50	8.6	16	13.6	160.0
ICLV07/2.5	7 x 2.5	7 x 0.67	10.1	23	7.41	280.00
ICLV09/0.5	9 x 0.5	7 x 0.30	6.8	4	38.4	56.0
ICLV09/1.0	9 x 1.0	7 x 0.40	8.8	10	21.2	132.0
ICLV09/1.5	9 x 1.5	7 x 0.50	9.9	16	13.6	175.0
ICLV09/2.5	9 x 2.5	7 x 0.67	11.9	23	7.41	350.00
ICLV13/0.5	13 x 0.5	7 x 0.30	8.5	4	38.4	120.0
ICLV13/1.0	13 x 1.0	7 x 0.40	10.4	10	21.2	140.0
ICLV13/1.5	13 x 1.5	7 x 0.50	11.8	16	13.6	243.0
ICLV13/2.5	13 x 2.5	7 x 0.67	14.2	23	7.41	410.00

GARDEN LIGHTING CABLE

GLT SERIES

High Performance Flexible Twin
Garden Lighting Cable ELV 90°C



APPLICATIONS:

Lighting Used for festoon and garden lighting where a flexible water resistant PVC cable is required.

PRODUCT FEATURES:

- ▶ Raised rib on one core for polarity identification +/-
- ▶ Tinned fine stranded copper conductor
- ▶ UV stabilised
- ▶ Water resistant
- ▶ Heat, oil and chemical resistant (See Technical Section)

CONSTRUCTION:

Conductor Annealed tinned copper stranded high flexibility

Insulation Special SPVC V-90HT.

CHARACTERISTICS:

Operating Temperature Range Fixed -20°C to 90°C

Maximum Conductor Temperature 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage 50 VAC / 120 VDC ELV (Not for mains connection)

Minimum Bending Radius Fixed 10 x cable diameter / Flexing 15 x cable diameter.

Insulation Colour Black. (Raised rib on one core for polarity identification +/-)

Relevant Standards AS/NZS 1125, AS/NZS 3808, IEC 60332-1, **RoHS** Compliant.

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Max D.C Conductor Resistance @20°C Ω/km	1 Phase Volt Drop @50Hz / MAX. Conductor Temp: (Mv/Am) 75°C
GLT02/1.0	2 x 1.0	32/0.20	2.6h x 5.7w	38	20	47.5
GLT02/1.5	2 x 1.5	30/0.25	4.0h x 8.3w	64	13.7	32.3
GLT02/2.5	2 x 2.5	50/0.25	4.3h x 9.0w	90	8.21	19.4
GLT02/4.0	2 x 4.0	127/0.20	4.7h x 9.5w	124	5.09	12.0
GLT02/6.0	2 x 6.0	192/0.20	5.5h X 11.5w	160	3.39	7.25

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