



# TRAFFIC, SOLAR, IRRIGATION & GARDEN LIGHTING CABLE

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# TRAFFIC CABLES

## 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<sub>0</sub>/U 0.6/1kV.

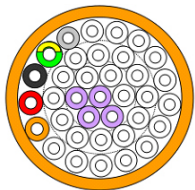
**Max AC Operating Voltage** U<sub>0</sub> 0.7kV.

**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

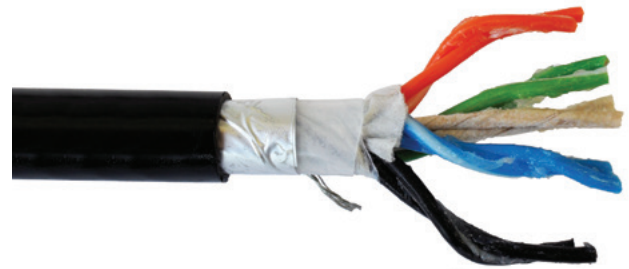
<b>Centre:</b>	1 Core: Violet (ONE)
<b>Second Layer:</b>	6 cores: Violet (TWO to FOUR) + White (ONE to THREE)
<b>Third Layer:</b>	12 cores: White (FOUR to FIFTEEN)
<b>Fourth Layer:</b>	17 Cores: White (SIXTEEN to TWENTY SEVEN) + Orange + Red + Black + Green/Yellow + Grey

Code	No. of Cores x Size (mm <sup>2</sup> )	Approx. Stranding No. of wires x mm <sup>2</sup>	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		

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# 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 C<sup>3</sup> 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 <sup>2</sup> )	Approx. Stranding No. of wires x mm	Insulation Thickness (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)
<b>OVERALL SCREEN</b>						
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
<b>INDIVIDUAL PAIR SCREEN</b>						
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

TRAFFIC, SOLAR, IRRIGATION  
& GARDEN LIGHTING CABLE

## 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 <sup>2</sup> )	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)
<b>TC001.5BK</b>	1 x 1.5	7/0.5	0.8	13.8	20 to 200	3.5

# SOLAR SERIES

High Performance Flexible Rubber (PV1-F) Solar Cable 0.9/1.8kV DC 120°C



**APPLICATIONS:**

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

**Power** Switchboards, flexible droppers from busbars, transformers, load banks or other equipment requiring fixed or flexible cable for medium industrial applications.

**PRODUCT FEATURES:**

- ▶ Tinned fine stranded copper conductor
- ▶ High flexibility
- ▶ UV resistant
- ▶ Environmentally friendly
- ▶ Flame retardant
- ▶ Heat, oil and chemical resistant (See Technical Section)

**CONSTRUCTION:**

**Conductor** Annealed tinned copper stranded extreme flexibility (Class 5 & 6).

**Insulation** XLR 120°C Compound (PV1-F).

**Sheath** XLR Compound.

**CHARACTERISTICS:**

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

**Maximum Conductor Temperature** 120°C.

**Rated Voltage** U<sub>o</sub>/U 0.6/1kV AC Voltage. U<sub>o</sub>/U 0.9/1.8kV DC Voltage.

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

**Sheath Colour** Black.

**Standard Core Colours** Single Core – Black.

2 Core – Black, Red.

**Relative Standards** AS/NZS 5033:2014, IEC 60332-1, IEC 60228, IEC 60754-1, IEC 61034, **RoHS** Compliant and **CE** Certified.

**Approvals** TÜV 2 Pfg 1169/08.2007 PV1-F Cert No: T 50402137 (To verify TÜV Rheinland certificate, go to [www.tuv.com](http://www.tuv.com) > Certificate Database).

Code	No. of Cores x Size (mm <sup>2</sup> )	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Current carrying capacity 60°C ambient temperature (free air)	Approx. Weight (Kg/Km)
SOLAR1/4.0	1 x 4.0	52 / 0.30	4.60	55	60
SOLAR2/4.0	2 x 4.0	52 / 0.30	4.60 x 9.40	55	120
SOLAR1/6.0	1 x 6.0	84 / 0.30	5.30	70	78
SOLAR2/6.0	2 x 6.0	84 / 0.30	5.30 x 10.80	70	156
SOLAR1/10	1 x 10	84 / 0.40	9.00	98	122
SOLAR1/16	1 x 16	128 / 0.40	10.20	132	180
SOLAR1/25	1 x 25	192 / 0.40	12.00	176	275
SOLAR1/35	1 x 35	276 / 0.40	13.80	218	366

TRAFFIC, SOLAR, IRRIGATION & GARDEN LIGHTING CABLE

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## 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

0.5mm<sup>2</sup> - Black, Blue, Brown, Green, Orange, Red, White, Yellow.

0.75mm<sup>2</sup> - 1.5mm<sup>2</sup> - Black, Blue, Red.

2.5mm<sup>2</sup> - 4.0mm<sup>2</sup> - 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.

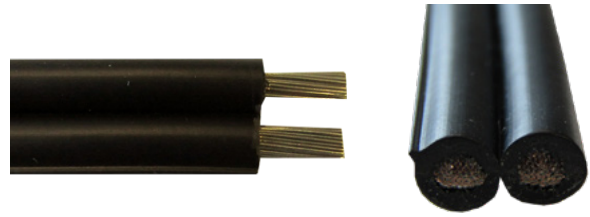
## ICLV SERIES continued

Code	No. of Cores x Size (mm <sup>2</sup> )	Approx. Stranding No. of wires x mm <sup>2</sup>	Approx. Overall Diameter (mm)	Nominal Amps		Max D.C. Conductor Resistance @ 20°C Ω/km	Approx. Weight (kg/km)
				Enclosed protected from sun	In Duct or Cabinet		
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 <sup>2</sup> )	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