



# Excel Technology Co Pty Ltd

## Industry Recommended Loop 'Winding' and Feeder Cable

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# LOOP FEEDER CABLE



## BELDEN AUSTRALIA PTY LTD TECHNICAL DATA SHEET



### Belden Traffic Detector Feeder Cable

**Product Type:** JTCD28AA002

#### Description:

2-Cores (1-pair), 16 AWG (7x0.5mm), Stranded Bare Copper Wire, Polyethylene Insulated, Jelly Filled, Twisted Pair, Polyester Tape Wrap, Polyethylene Sheath, Jelly Coated, Aluminium/Polyester Screened with Tinned Copper Drain Wire, PVC Jacket. Sequentially marked at 1-metre intervals.

#### Applicable Specifications:

Cable for Traffic Installations to AS 2276-Part 2, Feeder Cable for Vehicle Detectors.

#### Applications:

Intended for use in traffic signal installations for the interconnection of vehicle detector equipment and inductive-type vehicle detector loops. It is also intended for operation in extra low voltage (ELV) circuits in traffic signals.

#### Physical Characteristics:

Conductors:	-
Number of Pairs:	1
Number of Conductors:	2
Size:	16 AWG (1.5mm <sup>2</sup> )
Stranding:	7/0.5mm (nominal)
Type:	Bare Copper
Insulation:	-
Material:	Polyethylene
Thickness:	0.5mm (nominal)
Colour:	Black
Inner Sheath:	-
Material:	Polyethylene
Thickness:	0.65mm (nominal)
Colour:	Natural
Outer Sheath:	-
Material:	PVC
Thickness:	0.8mm (nominal)
Colour:	Black
Overall Diameter:	9.3mm (nominal)
Cable Weight:	80 kg/km
Temperature Range:	-10 to + 70 DegC

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**Electrical Characteristics:**

DC Resistance @ 20 DegC:	13.6 ohm/km (maximum)
Insulation Resistance @ 500v DC:	20 Gohm.km (minimum)
Characteristic Impedance @ 25, 50 & 100 kHz:	80 - 100 ohms
Mutual Capacitance @ 1 kHz:	65 - 80 nF/km
Capacitance Unbalance:	< 2 %

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For the most up-to-date information, contact Belden:

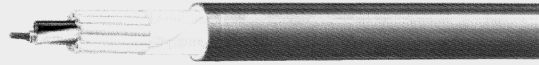
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## Traffic Signalling Multicore Power Cable



**Application** Complete supply of cables for traffic signal installation management.

**Construction** Stranded (7/0.50mm) bare copper conductor, orange PVC insulated, PVC sheathed to AS/NZS 2276.1.

Total	Number of cores		Nominal overall diameter mm	Approximate mass kg/100m	Product code
	Power	Control			
13	3 × 2.5	10 × 1.5	17.6	43	LXMP07AA013
19	3 × 2.5	16 × 1.5	19.9	59	LXMP07AA019
29	3 × 2.5	26 × 1.5	23.7	81	LXMP07AA029
51	3 × 4.0	48 × 1.5	32.3	143	LXMP09AA051

Colours: **Power cores:** Grey, Black, Green/Yellow. **Control cores:** White, black numbered.

## Feeder Cable for Vehicle Detectors



**Construction** Stranded (7/0.50mm) bare copper conductor, PE insulated twisted balanced – twin, jelly filled, metallic screened, PVC sheathed, for ELV to AS/NZS 2276.2.

Number of pairs	Nominal overall diameter mm	Appropriate mass kg/100m	Nominal insulation thickness mm	Characteristic impedance ohms	Mutual capacitance nF/km	Capacitance unbalance <sup>1</sup>	Water penetration <sup>1</sup>	Pack sizes		Product code
								500m drum	1000m drum	
1	9.3	8	0.5	80–100	65–80	<2%	<3%	✓	✓	JTCD28*002
3	24.3	29	0.5	80–100	65–80	<2%	<3%	✓	–	JTCD28A5006

<sup>1</sup>Capacitance unbalance and water penetration tests to AS/NZS 2276.2/1986.

## Loop Cable for Vehicle Detectors



**Construction** Single core stranded (7/0.50mm) tinned copper conductor, XLPE or polypropylene insulated 250V to AS/NZS 2276.3.

Insulation	Nominal overall diameter mm	Approximate mass kg/100m	500m spool	Pack sizes		Product code
				1000m drum	1000m drum	
XLPE	4.0	2.3	✓	–	–	XDCP55A5001
PP	3.6	2.0	✓	✓	–	ZZLM07*332