Caledonian

Caledonian Highway Cables

- British Standard
- International Municipal Signal Association
- National Motorway Communications System Specifications

www.caledonian-cables.co.uk
www.caledonian-cables.com

Addison

Company Profile

Caledonian. established in 1978.offers one of the most complete lines of fiber and copper cabling system solutions with over hundreds of different cabling system products. . Our superior products provide leading edge within every cable series and for every application.

Among the national and international standards with which our cables could comply are: BS - British Standard; LPCB Fire Performance Standard. ISO Standard etc. Caledonian Cables offers a comprehensive stock of cables and cabling products through its nationwide network of resellers and distributors. Caledonian Cables has continually expanded its global presence in Europe and Asia.

Caledonian & Addison. produces a wide range of cables for communication. power and electronics in its primary plants in UK. Italy and Spain. To stay in front. we continually keep expanding our manufacturing capabilities in more low cost region such as Romania. Taiwan. Malaysia etc. This low-cost manufacturing facilities enable us provide a flexible. scalable global system that delivers superior operational performance and optimal results for our customers.

Our extensive global network of manufacturing facilities gives us significant scale and the flexibility to fulfill our customer requirements. This global presence provides design and consultancy solutions that are combined with core cable manufacturing. logistic services. and vertically integrated with our E commerce technologies. to optimize customer operations by lowering costs and reducing time to market.

Caledonian & Addison has been respected for its high standards of quality. excellent service level. competitive pricing and a unique and innovative spirit. With our latest technologies. we are both inspired and well-positioned to meet the changing needs of our customers. We have the resources to diversify and to enhance our product lines and services. We understand the need for change and with our accurate planning. we are ready for the future and the promise of new marketing opportunities. Our tradition of growth through excellence is assured.

Our Design Centers work closely with customers to constantly improve its standard range of products and technologies and to develop customized. country and industry-specific solutions. Caledonian & Addison has established an extensive network of design. manufacturing. and logistics facilities in the world’s major markets to serve the growing outsourcing needs of both multinational and regional customers.

Our Certificate

ISO 9001
REGISTERED FIRM

Registration Certificate

This document certifies that the administration systems of

Caledonian Cables Limited / Addison Technology Limited

Marchants Industrial Centre, Mill Lane, Laughton, Lewes, Sussex, BN8 6AJ, United Kingdom

have been assessed and approved by QAS International to the following management systems, standards and guidelines:

ISO 9001 : 2008

With the permitted exclusion of clauses 7.3 Design and Development

The approved administration systems apply to the following:

The manufacture and supply of electrical cables and ancillary power equipment to customers internationally.

Original Approval	6th September 1997
Current Certificate	7th February 2013
Certificate Expiry	7th February 2014
Certificate Number	A6211

On behalf of QAS International

www.qas-international.com

This certificate remains valid while the holder maintains their quality administration systems in accordance with the standards and guidelines stated above, which will be audited annually by QAS International. The holder is entitled to display the above registration mark for the duration of this certificate. This certificate must be returned to QAS International on reasonable request.

Issuing Office: QAS International, 20A Oxford Street, Malmesbury, Wiltshire, SN16 9AX

Table of Content

TR Series

TR2029-Inductive Loop Detector Cable.....6
TR2031- Loop Detector Feeder Cable.....8
TR2153-Non armoured Energy Cable..... 11
TR2161-Armoured Energy Cable.....13

IMSA Series

IMSA 19-1.....17
IMSA 20-1.....21
IMSA 19-5/20-5..... 25
IMSA 50-2 28
IMSA 51-1.....30
IMSA 51-3.....32
IMSA 51-5.....34
IMSA 51-7.....36
IMSA 19-2/20-2.....38
IMSA 19-6/20-6.....41
IMSA 39-2/40-2.....44
IMSA 39-6/40-6.....47

BS Standard

Traffic Signal Cable to BS 6346..... 51
Loop Feeder Cable to BS6346..... 54
Loop Detector Cable to BS6500 and BS6195.....57

British Standard

International Municipal Signal Association

National Motorway Communications System Specifications

TR Series

TR2029-Inductive Loop Detector Cable

TR2031- Loop Detector Feeder Cable

TR2153-Non armoured Energy Cable

TR2161-Armoured Energy Cable

TR2029-Inductive Loop Detector Cable

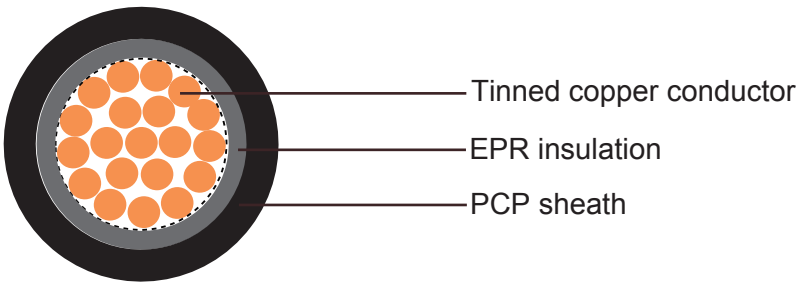
Application and Description:

TR2029 inductive loop detector cable is a single core multistranded flexible cable sheathed with polychloroprene designed for installation in a slot cut into the carriageway. It is used to measure and control traffic flow. The cables are buried beneath the road in 'loops' and an electrical current is passed through them creating a magnetic inductive field. the vehicle passing through this field that creates a disturbance and a means by which to measure traffic flow and vehicle type. Typical applications are for traffic control signals, safety cameras, variable speed control systems, flow monitoring and access control. The cables have to be of a robust design to withstand a hostile working environment and accommodate back filling with hot bitumen during cable pulling.

Standard:

TR2029, IEC 60811 and BS 6500, BS EN 60332-1-2

Cable Construction:



- **Conductor:** Tin coated plain annealed copper, comply with IEC 60228 for Class 5
- **Insulation:** Ethylene propylene rubber (EPR), GP1, 85 ° C, comply with BS 7655
- **Insulation Color:** Black

- **Sheath:** Polychloroprene(PCP), RS3, 85 ° C, comply with BS 7655,heavy-duty, oil-resisting and flame retardant
- **Sheath Color:** Black

Technical Characteristics:

- **Rated voltage:** 450/750 volts
- **Minimum bending radius:** 5 x Ø
- **Rated temperature:** +90° C
- **Conductor resistance at 20°C:** 1.5mm^2---- 13.7ohms/km
  2.5mm^2---- 8.21ohms/km
- **Insulation resistance:** >665 MΩ x km
- **Flame retardant:** BS EN 60332-1-2

Cable Parameter:

Number of Cores	Nominal Conductor Area	Nominal Conductor Stranding	Insulation Thickness	Sheath Thickness	Nominal O/D	Approx Cable Weight
	mm^2	NO./mm	mm	mm	mm	Kg/km
EPR insulation only						
1	1.5	30/0.25	1.1	-	3.8-4.0	30
1	2.5	50/0.25	2.1	-	6.1-6.4	48
EPR insulation with PCP sheath						
1	1.5	30/0.25	0.8	1.4	5.8-7.2	65