TR2161-Armoured Energy Cable

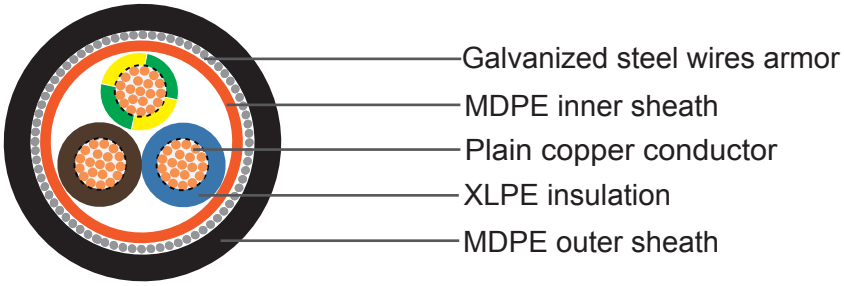
Application and Description:

TR2161 Non-armoured Energy Cable is a motorway cable sheathed with medium density polyethyylene (MDPE) designed for street lighting.

Standard and Approval:

IEC 60502, BS 5467

Cable Construction:



- **Conductor:** Plain annealed stranded copper conductor, comply with IEC 60228 for Class 2
- **Insulation:** Cross linked polyethylene (XLPE)
- **Core Identification:** Brown, Blue, Green/Yellow
- **Inner Sheath:** Medium density polyethylene (MDPE), comply with IEC 60708.
- **Armor (for Armoured Cable Only):** Galvanized steel wires
- **Outer Sheath:** Medium density polyethylene (MDPE), comply with IEC 60708.
- **Sheath Color:** Black

Technical Characteristics:

- **Rated voltage:** 600/Kft volts
- **Minimum bending radius:** 12 x Ø
- **Rated temperature:** +90° C
- **Conductor resistance:**

Conductor size	mm^2	10	25	50	70	95	120	150
Resistance	ohms/km	1.83	0.727	0.387	0.268	0.193	0.153	0.124

- **Current rating in duct:**

Conductor size	mm^2	10	25	50	70	95	120	150
Current rating	A	92	152	217	266	319	33	406

- **Volt drop:**

Conductor size	mm^2	10	25	50	70	95	120	150
Volt drop	mv/m	4.1	1.65	0.87	0.6	0.45	0.37	0.3

Cable Parameter

Number of Cores	Nominal Conductor Area	Nominal Conductor Stranding	Inner Sheath Thickness	Armour thickness	Outer Sheath Thickness	Nominal O/D	Approx Cable Weight
	mm^2	NO./mm	mm	mm	mm	mm	Kg/km
3	10	7/1.35	1.0	1.25	1.8	19.1	881
3	25	7/2.14	1.0	1.60	1.8	24.9	1703
3	50	19/1.78	1.0	1.60	2.0	30.7	2660
3	70	19/2.14	1.0	1.60	2.0	34.6	3489
3	95	19/2.52	1.2	2.0	2.2	40.7	4903
3	120	37/2.03	1.2	2.0	2.3	44.4	5891
3	150	37/2.25	1.4	2.5	2.5	50.0	7521

British Standard

International Municipal Signal Association

National Motorway Communications System Specifications

IMSA Series

IMSA 19-1
IMSA 20-1
IMSA 19-5/20-5
IMSA 50-2
IMSA 51-1
IMSA 51-3
IMSA 51-5
IMSA 51-7
IMSA 19-2/20-2
IMSA 19-6/20-6
IMSA 39-2/40-2
IMSA 39-6/40-6

About the IMSA:

Since 1896, the International Municipal Signal Association (IMSA) has been concerned with many aspects of governmental public safety, communications and signaling. The majority of its members are municipal, county, state/provincial and federal officials and employees located throughout the United States and Canada.

The development of a series of electrical cable and wire specifications is one of the many services provided by IMSA. These specifications assure specifying engineers, purchasers and users that they are receiving quality cable and wire that will perform reliably within the application scope of each specifications.

The cable constructions offer maximum resistance to moisture and weathering and are primarily designed for outside installations, including aerial, underground duct and direct earth burial. They are also excellent options for industrial and other users when selecting control and communications cables for outside installations