



# PE Insulated, PVC Sheathed, Overall Screened & Armoured Instrumentation Cables (Multipair)

### RE-2Y(St)2Y4YSWAY CU/PE/OS/HDPE/PA/SWA/PVC 90°C / 300V



# APPLICATION

For transmission of analogue and digital signals in instrument and control systems; allowed for use in zone 1 and zone 2, group II, classified areas (IEC 79-14), not allowed for direct connection to low impedance sources, e.g. public mains electricity supply.

Recommended for indoor and outerdoor installation, on racks, trays, in conduits, in dry and wet locations; not for direct buiral.

Recommended for use as fire protection messure for people and important material assets.

### STANDARDS

Basic design to EN 50288-7

#### **VOLTAGE RATING**

300V

### CABLE CONSTRUCTION

**Conductor:** Annealed copper solid or plain copper stranded to IEC 60228 Class 2. **Insulation:** PE compound as per EN 50290. 2-23.

**Pairs:** Two insulated conductors uniformly twisted together with a lay not exceeding 100mm **Overall Screen:** Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm<sup>2</sup>

### Inner Sheath1: HDPE.

#### Inner Sheath2: PA.

Amouring: Galvanized steel wire armour

**Outer Sheath:** Thermoplastic PVC compound as per EN 50290-2-22. UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option. Compliance to fire performance standard (IEC 60332-1, IEC 60332-3, UL 1581, UL 1666 etc) depends on the oxygen index of the PVC compound and the overall cable design. LSPVC can also be provided upon request.



#### COLOUR CODE

**Insulation:** Black / White, continuously numbered on white core(1, 2...)for multipair. **Outer Sheath:** Black or blue for intrinsically safe systems

# PHYSICAL AND THERMAL PROPERTIES

Temperature Range During Operation (Fixed State):  $-30^{\circ}C - +90^{\circ}C$ Temperature Range During Installation (Mobile State):  $-20^{\circ}C - +50^{\circ}C$ Minimum Bending Radius: 10 X Overall Diameter

#### **ELECTRICAL PROPERTIES**

Conductor Area Size		mm <sup>2</sup>	1.0		
DC Conductor resistance (20°C)		Ω/km(max.)	18.1		
Insulation resistance (20°C)		MΩ.km(Min.)	1000		
Mutual Capacitance (1 kHz)		pF/m(Max.)	150		
L / R (ratio) (max.)		μΗ/Ω	25		
Operating voltage Urms		V	500		
Test Voltage	Core to Core	V	1500		
	Core to Screen	V	1500		

#### CONSTRUCTION PARAMETERS

Caledonian Cable Code	No. of Pairsx2 xCross Section	No./ Nominal Diameter of Strands	Nominal Insulation Thickness	Nominal Armour Thickness	Nominal Outer Sheath Thickness	Nominal Overall Diameter	Approx. Weight
	No.x2xmm <sup>2</sup>	No/mm	mm <sup>2</sup>	mm	mm	mm	kg/km
RE-2Y(St)2Y4YSWAY 4P1.0	4x2x1.0	7/0.37					

Note : Other conductor sizes & core configurations are available upon request.





Rated Voltage

Standard