

# Instrumentation Cables

## BS 5308 PART I TYPE 2

### XLPE insulated SWA Armoured Cable



#### C3546

#### Applications

These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants (e.g. petrochemical industry etc.). Suitable for direct burial applications.

#### Design

Unit	Properties
Conductor	Class 1 Plain Copper Wire
Insulation	Cross-linked Polyethylene (XLPE)
Twinning	Pair construction
Construction Binder	PET Tape
Individual Screening	Aluminum/Polyester tape with Tinned copper drain wire
Collective Screening	Aluminum/Polyester tape with Tinned copper drain wire
Bedding	Polyethylene (PE) Color: Black
Armour	Galvanized Steel Wire Armour (SWA)
Outer Sheath Material	Flame Retardant PVC Standard Colour: Light Blue
Standard Put Up Length	305M or 500m

\*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

#### Constructional Information

PN	Number of Pairs	Conductor Construction (sq mm)	Conductor Diameter (mm)	Nom. Radial Thickness of Insulation (mm)	Drain wire cross section (sq mm)	Nom. Thickness of Jacket (mm)	Overall Diameter (mm)
C3546	20	2.5	1.38	0.60	0.50	2.20	42.7

#### Electrical Characteristics at 20°C

Conductor Size(sqmm)	Max. DCR (Ohm/km)	Max. Mutual Capacitance (pF/m) at 1KHz	Max. L/R ratio (μH/Ω)	Min Insulation Resistance (GOhm/km)	Voltage Rating (V)	Operating Temperature (°C)
2.50	7.60	140	60	1.0	300/500	-15 to +60

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**Color Scheme**

Pair No.	Color		Pair No.	Color	
1	Black	Blue	11	Black	Red
2	Black	Green	12	Blue	Red
3	Blue	Green	13	Green	Red
4	Black	Brown	14	Brown	Red
5	Blue	Brown	15	White	Red
6	Green	Brown	16	Black	Orange
7	Black	White	17	Blue	Orange
8	Blue	White	18	Green	Orange
9	Green	White	19	Brown	Orange
10	Brown	White	20	White	Orange

**Reference Standards**

BS50228-7	EN 50290-2
BS EN 60228	IEC60332-3 catA
BS 5308 Part1 Type 2	RoHS directives