



## Application

BS 5308 PT1 TY1 collectively screened instrumentation cables are designed for use in process control and instrumentation systems, where they are used to transmit low-level analogue or digital signals between field instruments and control equipment. Typical applications include automated control systems in industrial environments such as waste incineration plants and sewage treatment facilities. These cables are generally suitable for indoor installations where additional mechanical protection is not required.

## Characteristics

**Voltage Rating** 300/500v

**Temperature in operation** -30°C to +70°C (Fixed)

**Min. bending radius** 7.5 x OD

## Standards

BS 5308, BS EN 60228

Flame Retardant: IEC 60332-1-2, IEC 60332-3-24 (Cat. C)

## Construction

### Conductor

Stranded electrolytic copper wire Class 2 & 5 (BS EN 60228:2005)

### Insulation

PE (Polyethylene)

### Wrapping

PES Tape

### Screen

AL-PES Tape

### Drain Wire

Tinned Copper Drain Wire (0,5 mm<sup>2</sup>)

### Sheath

PVC (Polyvinyl Chloride)

## Regulatory Compliance



RESPONSIBLY  
PRODUCED  
COPPER

The Copper Mark Partnership

- IEWC promotes sustainable practices by our suppliers
- Copper Mark promotes seven of 17 UN Global Sustainability Goals
- Copper Mark recipients cover
- 20% of global copper production

## Core Identification

BS 5308-1

## Sheath Colour

RAL 9005 Black, RAL 5015 Blue

Cross Section (mm <sup>2</sup> )	Overall Diameter (mm)	Weight (kg/km)
1x2x0.5	6.11	41.57
1x3x0.5	6.40	50.39
2x2x0.5 (QUAD)	6.90	59.66
5x2x0.5	11.80	139.09
10x2x0.5	16.40	245.71
15x5x0.5	19.00	342.98
20x2x0.5	21.20	430.97
1x2x0.75	6.40	48.38
1x3x0.75	6.80	59.68
2x2x0.75 (QUAD)	7.40	71.89
5x2x0.75	12.70	169.45
10x2x0.75	17.70	304.53
15x2x0.75	20.50	429.39
20x2x0.75	23.30	568.41
1x2x1	6.50	54.98
1x3x1	6.90	69.35
2x2x1 (QUAD)	7.50	84.64
5x2x1	12.90	201.38
10x2x1	18.00	368.56
15x2x1	20.90	525.74
20x2x1	23.70	696.99
1x2x1.5	7.30	69.77
1x3x1.5	7.80	90.15
2x2x1.5 (QUAD)	8.70	115.91
5x2x1.5	14.90	275.66
10x2x1.5	20.80	508.82
15x2x1.5	24.40	742.22
20x2x1.5	27.20	952.39
1x2x2.5	8.20	92.99
1x3x2.5	8.70	122.91
2x2x2.5 (QUAD)	9.80	159.65
5x2x2.5	16.90	384.40
10x2x2.5	24.00	735.46
15x2x2.5	28.10	1075.99

Electrical Specification							
Conductor cross-section	Non.	mm <sup>2</sup>	0.5	0.75	1	1.5	2.5
Insulation resistance	Min	MΩxkm	5000				
Mutual capacitance	Max.	nF/km	65	65	65	75	75
Inductance	Max.	mH/km	1				
Capacitance unbalance	Max.	pf/500 m	500				
L/R ratio	Max.	μH/Ω	25			40	
Test voltage Urms (core:core)			2000				
Test voltage Urms (core:screen)			2000				
Operating Voltage			300/500				

This datasheet is for guidance only. While we believe the information is accurate at the time of publication, it is subject to manufacturing tolerances.