



### INSTRUMENTATION CABLES STANDARDS COMPARISON

#### BS5308 PT 1 & PT 2

British Standard :

**Rated Voltage : 300/500V**

**Test Voltage : 1 kV ac 1 minute**

Construction, material & tests

Cross - Section 0.5 - 0.75 - 1.0 - 1.5

PVC Insulation (Part 2)

Polythene Insulation (Part 1)

Minimum at point and nominal thickness specified

Pair ID - As per BS5308

Electrostatic Screens (foil)

Maybe individual, collective or both

Galvanised Steel Wire Armour  
(heavy zinc coating)

Lead Sheath (Part 1 only)

Sheath thickness dependent on number & size of pairs etc

Pair count as per standard : 1, 2, 5, 10, 15, 20, 30, 50

Sheath thickness calculated from nominal dimensions

Sheath Type : PVC or LSF\*

Capacitance :

Part 1 - 75 pF/m and 85 pF/m for unscreened pairs  
115 pF/m and 120 pF/m for screened pairs

Part 2 - 250 pF/m for screened and unscreened pairs with PVC insulation

\* LSF not specified in BS5308 but is used in place of PVC on many types.

#### EN 50288-7

European Standard :

**Rated Voltage : 90V, 300V, 500V**

**Test Voltage : 0.75, 1.0, 2.0 kV ac 1 minute**

Construction, material & tests

Cross - Section 0.5 - 0.75 - 1.0 - 1.5 - 2.5

PVC, Polythene, Polypropylene, XLPE, Halogen Free

Minimum at point thickness specified for different voltage ratings\*\*

Pair ID - As per IEC60189-2/EN 60708/Customer's Preference  
(Black/White Pairs Typically Used)

Electrostatic (foil) and Electromagnetic (braid) screens

Maybe individual, collective or both

Galvanised Steel Wire, Braid or Tape  
(light zinc coating)

Lead Sheath and Moisture Barriers

Sheath thickness dependent on number & size of pairs etc

Pair count as per standard : Unlimited

Sheath thickness calculated from "fictitious" dimensions

Sheath Type : PVC, PE, or Halogen Free

Capacitance :

150 pF/m for screened and unscreened pairs (PE Insulation)

250 pF/m for screened and unscreened pairs (others)

\*\* minimum at point thickness for 500V, lower than that of BS5308

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