INSTRUMENTATION CABLE (BS 5308 Part 2)

Over all screened, unarmoured, multicore 70/90/105°C RJ 0301

Product Description:
Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services, typically within the chemical and petrochemical industries.

Application:
- Instrumentation System
- Power Limited Tray Cable

Approvals:

Product features:
- Flame retardant, Low smoke, Zero halogen

Colour Codes:
- As per BS 5308 Part-2

Technical Data:
- Based on BS 5308 Part-2
- Specific insulation resistance > 20 G Ohm x cm
- Conductor stranding Fine wire in accordance to VDE 0295 Class 5 / IEC 60228 Class 5

Make Up:
- Tinned copper inner conductor
- PVC Compound insulation
- Outer sheathing to use, colour coded, PVC, HR, FR, FRLS, ZHFR, insulated
- Cores twisted in layers
- Overall Aluminum/Polyester Foil overlapped, Foil Facing Outward
- Drain wire: 0.5mm² tinned copper
- Minimum bending radius 8 x diameter
- Rated voltage Core/core: 500 V Core/screen: 300 V
- Test voltage 4000 V (Spark Test) 1000 V (Dielectric Strength)
- FRLS/Flame Properties
  - Oxygen Index as per ASTM D 2863
  - Temperature Index as per ASTM D 2863
  - Smoke Density Rating as per ASTM D 2843
  - HCL Acid Gas Generation as per IEC 754/Pt-1
  - Flammability Test as per IEEE-383
  - Swedish Chimney Test as per SEN-SS4241475
  - Thermal Stability as per IS:10810 Pt. 60
- ZHFR Properties (on sheath)
  - Corrosivity of gases evolved during combustion pH & conductivity as per IEC-60754-2
- Range of temperature
  - Normal Working Temp.: -20 °C up to +70 °C
  - High Working Temp.: -20 °C up to +90 °C/105 °C
  - Cold application Temp upto -55 °C

Make Up:

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<tr>
<th>Part number</th>
<th>Number of Cores</th>
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<th>Weight (kg/km approx)</th>
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Customization
Customized colour option and printing of the outer sheath on request.
Customization
Customized colour option and printing of the outer sheath on request

OVER ALL SCREENED, UNARMOURED, MULTIPAIRS

70/90/105°C

RJ 0302

PRODUCT DESCRIPTION:
Generally used within industrial process manufacturing plants for communication, data and voice, transmission signals and services, typically within the chemical and petrochemical industries.

APPLICATION:
- Audio, Pulse or RF Signal Transmission
- Computer or Electronic Peripheral Interconnectors Where High Levels Of Noise Interference Are Anticipated
- Banking System

APPROVALS:

PRODUCT FEATURES:
- Flame retardant, Low smoke, Zero halogen

COLOUR CODES:
- As per BS 5308 Part-2

TECHNICAL DATA:
- Based on BS 5308 Part-2
- Specific insulation resistance > 25 M Ohm x Km
- Conductor stranding: Fine wire in accordance to VDE 0295 Class 5 / IEC 60228 Class 5

MAKE UP:
- Tinned copper inner conductor
- PVC Compound insulation
- Outer sheathing to use, colour coded, PVC, HR, FR, FRLS, ZHFR, insulated
- Cores twisted in pairs
- Individually pair and overall screened with aluminum/ Polyester Foil overlapped
- Drain wire: 0.5mm² tinied copper

- Minimum bending radius
  8 x diameter
- Rated voltage
  Core/core: 500 V
  Core/screen: 300 V
- Test voltage
  4000 V (Spark Test)
  1000 V (Dielectric Strength)
- FRLS/Flame Properties
  Oxygen Index as per ASTM D 2863
  Temperature Index as per ASTM D 2863
  Smoke Density Rating as per BS 5308 Part-2
- ZHFR Properties(on sheath)
  Corrosivity of gases evolved during combustion pH & conductivity as per IEC-60754-2
- Range of temperature
  Normal Working Temp.: -20°C up to +70°C
  High Working Temp.: -20°C up to +90°C/105°C
  Cold application Temp.: upto -55°C

<table>
<thead>
<tr>
<th>Part number</th>
<th>Number of pairs and mm² per conductor</th>
<th>Outer diameter overall screened cables in mm approx.</th>
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## INSTRUMENTATION CABLE (BS 5308 Part 2)

### Individual and over all screened, unarmoured, Multipairs 70/90/105°C RJ 0303

#### Product Description:
Generally used within industrial process manufacturing plants for communication, data and voice, transmission signals and services, typically within the chemical and petrochemical industries.

#### Application:
- Audio, Pulse or RF Signal Transmission
- Computer or Electronic Peripheral Interconnectors Where High Levels Of Noise Interference Are Anticipated
- Banking System

#### Approvals:
- Computer or Electronic Peripheral Interconnectors Where High Levels Of Noise Interference Are Anticipated
- Minimum Bending Radius
- Rated Voltage
- Test Voltage
- FRLS/Flame Properties
- ZHFR Properties
- Range of Temperature

#### Product Features:
- Flame retardant, Low smoke, Zero halogen

#### Colour Codes:
- As per BS 5308 Part-2

#### Technical Data:
- Based on BS 5308 Part-2
- Specific insulation resistance
  - > 25 M Ohm x Km
- Conductor stranding
  - Fine wire in accordance to VDE 0295 Class 5 / IEC 60228 Class 5

#### Make Up:
- Tinmed copper inner conductor
- PVC Compound insulation
- Outer sheathing to use, colour coded, PVC, HR, FR, FRLS, ZHFR, insulated
- Cores twisted in pairs
- Individually pair and overall screened with aluminum/Polyester Foil overlapped
- Drain wire: 0.5mm² tinned copper
- Minimum bending radius
  - 8 x diameter
- Rated voltage
  - Core/core: 500 V
  - Core/screen: 300 V
- Test voltage
  - 4000 V (Spark Test)
  - 1000 V (Dielectric Strength)
- FRLS/Flame Properties
  - Oxygen Index as per ASTM D 2863
  - Temperature Index as per ASTM D 2863
  - Smoke Density Rating as per IEC 754/Pt-1
  - Flammability Test as per IEEE-383
  - Swedish Chimney Test as per SEN-SS4241475
  - Thermal Stability as per IIS-10810 Pt. 60
- ZHFR Properties
  - Corrosivity of gases evolved during combustion pH & conductivity as per IEC-60754-2
- Range of temperature
  - Normal Working Temp.: -20°C up to +70°C
  - High Working Temp.: -20°C up to +90°C/105°C
  - Cold application Temp upto -55°C

#### Part Number, Number of pairs and mm² per conductor, Outer diameter individual & overall screened cables in mm approx., Weight Individually & over all screened kg/km:

<table>
<thead>
<tr>
<th>Part number</th>
<th>Number of pairs and mm² per conductor</th>
<th>Outer diameter individual &amp; overall screened cables in mm approx.</th>
<th>Weight Individually &amp; over all screened kg/km</th>
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**Product Description:**
Generally used within industrial process manufacturing plants for communication, data and voice, transmission signals and services, typically within the chemical and petrochemical industries.

**Application:**
Application are as unarmoured cables, but armouring is for addition protection, where use is under ground or in ducts.

**Approvals:**

- **RoHS**
- **ISO 9001 Quality Assurance**
- **CE**

**Product Features:**
- Flame retardant, Low smoke, Zero halogen

**Colour Codes:**
- As per BS 5308 Part 2

**Technical Data:**
- **Based on**
  BS 5308 Part-2
- **Specific insulation resistance**
  > 20 G Ohm x cm
- **Conductor stranding**
  Fine wire in accordance to VDE 0295 Class 5 / IEC 60228 Class 5
- **Minimum bending radius**
  12 x diameter

**Make Up:**
- Tinned copper inner conductor
- PVC Compound insulation
- Cores twisted in pairs
- Outer sheathing to use, colour coded, PVC, HR, FR, FRLS, ZHFR
- Overall screened with Aluminum/Polyester Foil overlapped
- Drain wire: 0.5mm² tinned copper
- Inner sheathing of PVC
- Armour/Shield: G.I. Wire

- **Rated voltage**
  Core/core: 500 V
  Core/screen: 300 V

- **Test voltage**
  4000 V (Spark Test)
  1000 V (Dielectric Strength)

- **FRLS/Flame Properties**
  Oxygen Index as per ASTM D 2863
  Temperature Index as per ASTM D 2863
  Smoke Density Rating as per ASTM D 2843
  HCL Acid Gas Generation as per IEC 754/Pt-1
  Flammability Test as per IEEE-383
  Swedish Chimney Test as per SEN-SS4241475
  Thermal Stability as per IS:10810 Pt. 60

- **ZHFR Properties(on sheath)**
  Corrosivity of gases evolved during combustion pH & conductivity as per IEC-60754-2

- **Range of temperature**
  Normal Working Temp.: -20 °C up to +70 °C
  High Working Temp.: -20 °C up to +90 °C/105 °C
  Cold application Temp. up to -55 °C
Over all screened, armoured

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<th>Nominal Overall Dia (mm)</th>
<th>Armour Wire Dia (mm)</th>
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Product Description:
Generally used within industrial process manufacturing plants for communication, data and voice, transmission signals and services, typically within the chemical and petrochemical industries.

Application:
Application are as unarmoured cables, but armouring is for addition protection, where use is under ground or in ducts.

Approvals:

Product Features:
- Flame retardant, Low smoke, Zero halogen
- As per BS 5308 Part 2

Colour Codes:
- As per BS 5308 Part 2

Technical Data:
- Based on BS 5308 Part 2
- Specific insulation resistance > 20 G Ohm x cm
- Conductor stranding: Fine wire in accordance to VDE 0295 Class 5 / IEC 60228 Class 5

Make Up:
- Tinned copper inner conductor
- PVC Compound insulation
- Cores twisted in pairs
- Outer sheathing to use, colour coded, PVC, HR, FR, FRLS, ZHFR, insulated
- Overall screened with ATC braid
- Drain wire: 0.5mm² tinned copper
- Armour/Shield: G.I. Wire/Copper braid
- Minimum bending radius 12 x diameter
- Rated voltage
  - Core/core: 500 V
  - Core/screen: 300 V
- Test voltage
  - 4000 V (Spark Test)
  - 1000 V (Dielectric Strength)
- FRLS/Flame Properties
  - Oxygen Index as per ASTM D 2863
  - Temperature Index as per ASTM D 2863
  - Smoke Density Rating as per ASTM D 2843
  - HCL Acid Gas Generation as per IEC 754/ Pt-1
  - Flammability Test as per IEE-383
  - Swedish Chimney Test as per SEN-SS4241475
  - Thermal Stability as per IS:10810 Pt. 60
- ZHFR Properties(on sheath)
  - Corrosivity of gases evolved during combustion pH & conductivity as per IEC-60754-2
- Range of temperature
  - Normal Working Temp.: -20 °C up to +70 °C
  - High Working Temp.: -20 °C up to +90 °C/105 °C
  - Cold application Temp upto -55 °C

<table>
<thead>
<tr>
<th>Part number</th>
<th>Number of Strands/Strand dia.(mm)</th>
<th>Number of pairs and mm² per conductor</th>
<th>Jacket Nom. Thick (mm)</th>
<th>Nom. Dia. (mm)</th>
<th>Copper index kg/km</th>
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</table>
**Product Description:**
Generally used within industrial process manufacturing plants for communication, data and voice, transmission signals and services, typically within the chemical and petrochemical industries.

**Application:**
Application are as unarmoured cables, but armouring is for addition protection, where use is under ground or in ducts.

**Approvals:**
- RoHS Friendly
- ISO 9001 Quality Assurance

**Product Features:**
- Flame retardant, Low smoke, Zero halogen
- As per BS 5308 Part 2

**Technical Data:**
- Based on BS 5308 Part 2
- Specific insulation resistance > 20 G Ω·m
- Conductor stranding: Fine wire in accordance to VDE 0295 Class 5 / IEC 60228 Class 5

**Make Up:**
- Tinned copper inner conductor
- PVC Compound insulation
- Cores twisted in pairs and screened with Al mylar foil
- Outer sheathing to use, colour coded, PVC, HR, FR, FRLS, ZHFR, insulated
- Overall screened with Aluminum/Polyester Foil overlapped
- Drain wire: 0.5mm² tinned copper
- Inner sheathing of PVC
- Armour/Shield: G.I. Wire

- Minimum bending radius 12 x diameter
- Rated voltage
  - Core/core: 500 V
  - Core/screen: 300 V
- Test voltage
  - 4000 V (Spark Test)
  - 1000 V (Dielectric Strength)
- FRLS/Flame Properties
  - Oxygen Index as per ASTM D 2863
  - Temperature Index as per ASTM D 2863
  - Smoke Density Rating as per ASTM D 2843
  - HCL Acid Gas Generation as per IEC 754/Pt-1
  - Flammability Test as per IEEE-383
  - Swedish Chimney Test as per SEN-SS4241475
  - Thermal Stability as per IS:10810 Pt. 60
- ZHFR Properties (on sheath)
  - Corrosivity of gases evolved during combustion pH & conductivity as per IEC-60754-2
- Range of temperature
  - Normal Working Temp.: -20 °C up to +70 °C
  - High Working Temp.: -20 °C up to +90 °C / 105 °C
  - Cold application Temp up to -55 °C
## Individual and over all screened, armoured

<table>
<thead>
<tr>
<th>Part number</th>
<th>Number of pairs and mm² per conductor</th>
<th>Nominal Dia under Armour (mm)</th>
<th>Nominal Overall Dia (mm)</th>
<th>Armour Wire Dia (mm)</th>
<th>Weight kg/km approx.</th>
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INSTRUMENTATION CABLE (BS 5308 Part 2)

Individual and over all screened, armoured with Copper braid shielded RJ 0307

Product Description:
 Generally used within industrial process manufacturing plants for communication, data and voice, transmission signals and services, typically within the chemical and petrochemical industries.

Make Up:
- Tinned copper inner conductor
- PVC Compound insulation
- Cores twisted in pairs
- Outer sheathing to use, colour coded, PVC, HR, FR, FRLS, ZHFR, insulated
- Overall screened with ATC braid
- Drain wire: 0.5mm² tinned copper
- Armour/Shield: G.I. Wire/Copper braid

Application:
- Different BUS Interface systems
- CAD/CAM Applications

Approvals:
- RoHS
- TUV
- ISO 9001
- CE

Product Features:
- Flame retardant, Low smoke, Zero halogen

Colour Codes:
- As per BS 5308 Part-2

Technical Data:
- Based on BS 5308 Part-2
- Specific insulation resistance: > 20 G Ohm x cm
- Conductor stranding:
  Fine wire in accordance to VDE 0295 Class 5 / IEC 60228 Class 5
- Minimum bending radius: 12 x diameter

Rated voltage:
- Core/core: 500 V
- Core/screen: 300 V

Test voltage:
- 4000 V (Spark Test)
- 1000 V (Dielectric Strength)

FRLS/Flame Properties:
- Oxygen Index as per ASTM D 2863
- Temperature Index as per ASTM D 2863
- Smoke Density Rating as per ASTM D 2843
- HCL Acid Gas Generation as per IEC 754/Pt-1
- Flammability Test as per IEEE-383
- Swedish Chimney Test as per SEN-SS4241475
- Thermal Stability as per IS:10810 Pt. 60

ZHFR Properties (on sheath):
- Corrosivity of gases evolved during combustion pH & conductivity as per IEC-60754-2

Range of temperature:
- Normal Working Temp.: -20°C up to +70°C
- High Working Temp.: -20 °C up to +90 °C/105°C
- Cold application Temp. upto -55°C
Individual and over all screened with Copper braid shielded

<table>
<thead>
<tr>
<th>Part number</th>
<th>Number of Strands / Strand dia.(mm)</th>
<th>Number of pairs and mm² per conductor</th>
<th>Jacket Nom. Thick (mm)</th>
<th>Jacket Nom. Dia. (mm)</th>
<th>Copper index kg/km</th>
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