



INSTRUMENTATION CABLE (BS 5308 Part 2)

Customization

Customized colour option and printing of the outer sheath on request

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

Part number	Number of Cores and mm ² per conductor	Outer diameter in mm approx.	Weight kg/km approx.
RJ 0301			
0301 00102	2 X 0.5	6.4	60
0301 00103	3 X 0.5	6.7	72
0301 00104	4 X 0.5	7.3	80
0301 00106	6 X 0.5	8.7	110
0301 00010	10 X 0.5	11.3	176
0301 00120	20 X 0.5	14.3	310
0301 00140	40 X 0.5	19.5	568
0301 00202	2 X 0.75	6.7	75
0301 00203	3 X 0.75	7.1	90
0301 00204	4 X 0.75	7.7	100
0301 00206	6 X 0.75	9.3	138
0301 00210	10 X 0.75	12.1	220
0301 00220	20 X 0.75	15.4	388
0301 00240	40 X 0.75	21.1	710
0301 00302	2 X 1.5	7.7	103
0301 00303	3 X 1.5	8.3	135
0301 00304	4 X 1.5	9.1	150
0301 00306	6 X 1.5	11.1	205
0301 00310	10 X 1.5	14.1	330
0301 00320	20 X 1.5	18.1	580
0301 00340	40 X 1.5	24.0	1065



INSTRUMENTATION CABLE (BS 5308 Part 2)

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 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

Part number	Number of pairs and mm ² per conductor	Outer diameter overall screened cables in mm approx.	Weight O/A screened kg/km
RJ 0302			
0302 00101	1 X 0.5	5.8	50
0302 00102	2 X 0.5	6.6	70
0302 00105	5 X 0.5	12.3	180
0302 00110	10 X 0.5	15.8	300
0302 00120	20 X 0.5	21.7	535
0302 00130	30 X 0.5	26.3	770
0302 00201	1 X 0.75	6.1	60
0302 00202	2 X 0.75	7.0	88
0302 00205	5 X 0.75	13.4	220
0302 00210	10 X 0.75	17.4	390
0302 00220	20 X 0.75	23.9	730
0302 00230	30 X 0.75	28.9	1020
0302 00401	1 X 1.5	7.0	80
0302 00402	2 X 1.5	8.1	130
0302 00405	5 X 1.5	15.6	320
0302 00410	10 X 1.5	20.4	600
0302 00420	20 X 1.5	27.9	1130
0302 00430	30 X 1.5	33.7	1600



INSTRUMENTATION CABLE (BS 5308 Part 2)

Customization

Customized colour option and printing of the outer sheath on request

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:



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 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 upto +70 °C
High Working Temp.: -20 °C upto +90 °C/105 °C
Cold application Temp upto -55 °C

Part number	Number of pairs and mm ² per conductor	Outer diameter individual & overall screened cables in mm approx.	Weight Individually & over all screened kg/km
RJ 0303			
0303 00101	1 X 0.5	6.4	50
0303 00102	2 X 0.5	9.3	100
0303 00105	5 X 0.5	12.6	210
0303 00110	10 X 0.5	17.7	380
0303 00120	20 X 0.5	23.2	700
0303 00130	30 X 0.5	27.6	1000
0303 00201	1 X 0.75	6.7	60
0303 00202	2 X 0.75	10.0	115
0303 00205	5 X 0.75	13.8	255
0303 00210	10 X 0.75	19.4	470
0303 00220	20 X 0.75	25.4	850
0303 00230	30 X 0.75	30.4	1130
0303 00401	1 X 1.5	7.7	80
0303 00402	2 X 1.5	11.8	160
0303 00405	5 X 1.5	16.0	350
0303 00410	10 X 1.5	22.7	670
0303 00420	20 X 1.5	29.8	1230
0303 00430	30 X 1.5	35.7	1800

Over all screened, armoured
90 ° C/105 ° C
RJ 0304


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 armoring is for addition protection, where use is under ground or in ducts.

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
- **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 upto -55 °C



Over all screened, armoured

Part number	Number of pairs and mm ² per conductor	Nominal Dia under Armour (mm)	Nominal Overall Dia (mm)	Armour Wire Dia (mm)	Weight kg/km approx.
RJ 0304					
0304 00102	2 X 0.5	7.0	11.0	0.9	280
0304 00103	3 X 0.5	9.7	14.0	0.9	390
0304 00104	4 X 0.5	11.0	17.0	1.4	730
0304 00106	6 X 0.5	13.3	19.0	1.4	870
0304 00110	10 X 0.5	15.8	20.6	4x0.8	820
0304 00120	20 X 0.5	21.5	26.8	4x0.8	1250
0304 00140	40 X 0.5	29.5	35.0	4x0.8	1960
0304 00202	2 X 0.75	7.3	12.0	1.4	320
0304 00203	3 X 0.75	10.3	16.0	1.4	560
0304 00204	4 X 0.75	12.3	17.0	1.4	600
0304 00206	6 X 0.75	14.3	19.0	4x0.8	685
0304 00210	10 X 0.75	17.2	22.5	4x0.8	940
0304 00220	20 X 0.75	23.5	28.9	4x0.8	1460
0304 00240	40 X 0.75	32.2	38.2	4x0.8	2120
0304 00402	2 X 1.5	8.5	14.0	1.4	590
0304 00403	3 X 1.5	12.1	17.0	4x0.8	540
0304 00404	4 X 1.5	14.0	19.0	4x0.8	765
0304 00406	6 X 1.5	17.0	22.0	4x0.8	870
0304 00410	10 X 1.5	20.2	26.0	4x0.8	1230
0304 00420	20 X 1.5	27.6	33.0	4x0.8	1985
0304 00440	40 X 1.5	38.2	44.0	4x0.8	2885



INSTRUMENTATION CABLE (BS 5308 Part 2)

Customization
Customized colour option and printing of the outer sheath on request

Over all screened with Copper braided

90 °C/105 °C

RJ 0305



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

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 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

Part number	Number of Strands / Strand dia.(mm)	Number of pairs and mm ² per conductor	Jacket		Copper index kg/km
			Nom. Thick (mm)	Nom. Dia. (mm)	
RJ 0305					
0305 12402	7/0.20 mm	2 X 0.22	0.9	6.2	30.66
0305 12403	7/0.20 mm	3 X 0.22	0.9	8.3	37.38
0305 12404	7/0.20 mm	4 X 0.22	0.9	8.9	44.52
0305 12405	7/0.20 mm	5 X 0.22	0.9	9.8	55.44
0305 12406	7/0.20 mm	6 X 0.22	0.9	10.6	59.64
0305 12407	7/0.20 mm	7 X 0.22	0.9	10.6	63.84
0305 12409	7/0.20 mm	9 X 0.22	0.9	11.8	81.48
0305 12410	7/0.20 mm	10 X 0.22	0.9	12.3	85.68
0305 12412	7/0.20 mm	12 X 0.22	0.9	13.3	94.10
0305 12418	7/0.20 mm	18 X 0.22	1.15	16.2	128.94
0305 12425	7/0.20 mm	25 X 0.22	1.15	19.0	167.58

Individual and over all screened, armoured

RJ 0306

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

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 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 upto -55 °C



Individual and over all screened, armoured

Part number	Number of pairs and mm ² per conductor	Nominal Dia under Armour (mm)	Nominal Overall Dia (mm)	Armour Wire Dia (mm)	Weight kg/km approx.
RJ 0306					
0306 00101	1 X 0.5	6.0	10.8	0.9	255
0306 00102	2 X 0.5	9.3	14.7	1.4	500
0306 00105	5 X 0.5	12.6	17.3	4x0.8	610
0306 00110	10 X 0.5	17.4	22.3	4x0.8	950
0306 00120	20 X 0.5	23.2	28.5	4x0.8	1560
0306 00130	30 X 0.5	27.5	33.3	4x0.8	2000
0306 00201	1 X 0.75	6.5	11.1	0.9	290
0306 00202	2 X 0.75	10.0	16.0	1.4	560
0306 00205	5 X 0.75	13.8	19.2	4x0.8	730
0306 00210	10 X 0.75	19.4	24.7	4x0.8	1150
0306 00220	20 X 0.75	25.3	30.7	4x0.8	1750
0306 00230	30 X 0.75	30.3	36.9	4x0.8	2300
0306 00401	1 X 1.5	7.5	12.3	0.9	405
0306 00402	2 X 1.5	11.7	17.0	1.4	535
0306 00405	5 X 1.5	16.0	21.5	4x0.8	900
0306 00410	10 X 1.5	22.7	27.8	4x0.8	1500
0306 00420	20 X 1.5	29.8	35.1	4x0.8	2360

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:



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

Part number	Number of Strands / Strand dia.(mm)	Number of pairs and mm ² per conductor	Jacket		Copper index kg/km
			Nom. Thick (mm)	Nom. Dia. (mm)	
RJ 0307					
0307 12402	7/0.20 mm	2 X 0.22	1.14	8.70	39.48
0307 12403	7/0.20 mm	3 X 0.22	1.14	9.10	47.88
0307 12404	7/0.20 mm	4 X 0.22	1.14	9.80	66.00
0307 12405	7/0.20 mm	5 X 0.22	1.14	10.40	72.24
0307 12406	7/0.20 mm	6 X 0.22	1.14	11.30	78.54
0307 12407	7/0.20 mm	7 X 0.22	1.14	11.30	84.84
0307 12408	7/0.20 mm	8 X 0.22	1.14	12.10	102.48
0307 12410	7/0.20 mm	10 X 0.22	1.14	14.80	115.10
0307 12415	7/0.20 mm	15 X 0.22	1.52	16.80	158.34
0307 12418	7/0.20 mm	18 X 0.22	1.52	17.40	177.24
0307 12425	7/0.20 mm	25 X 0.22	1.52	20.80	232.68