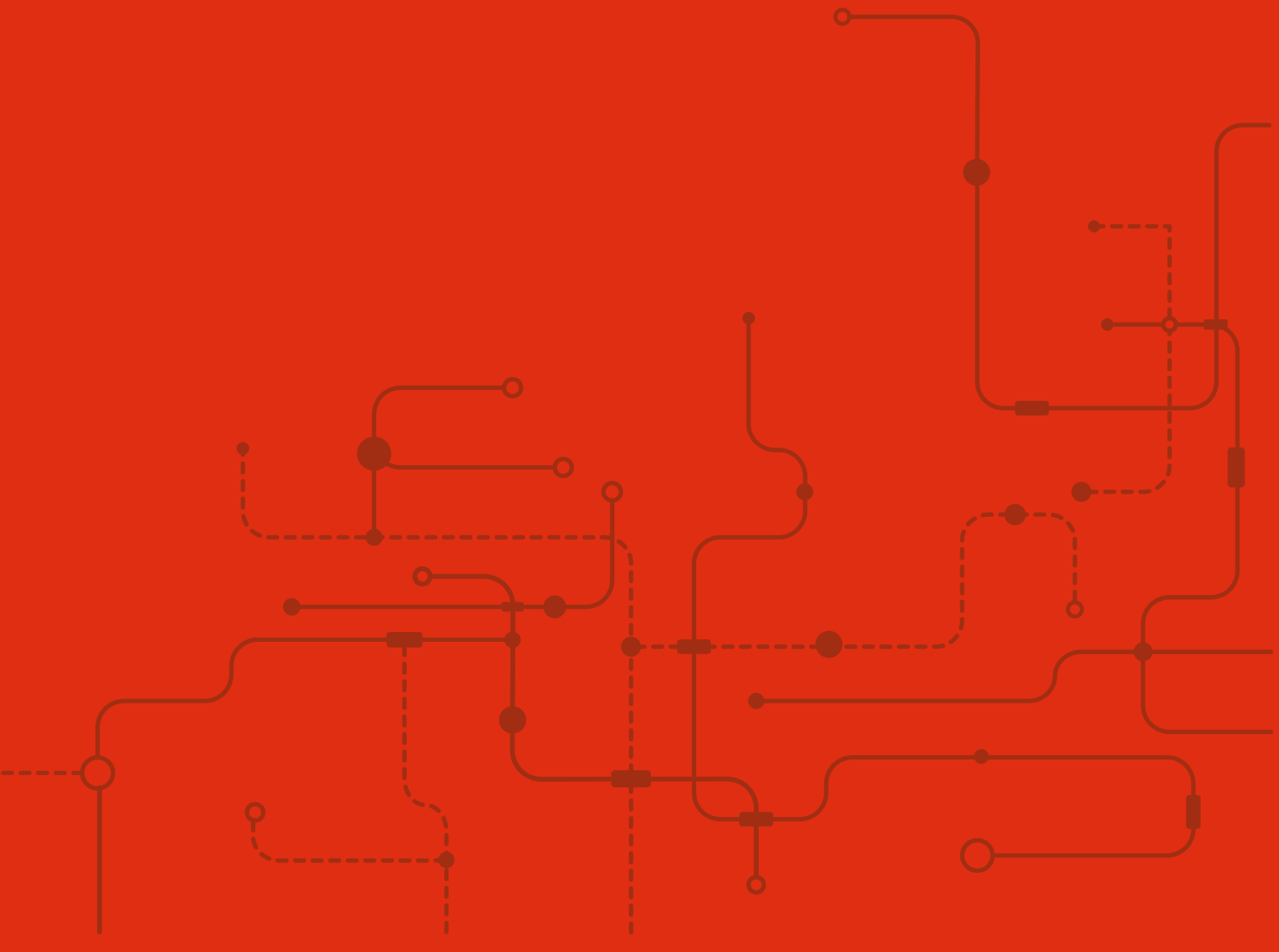
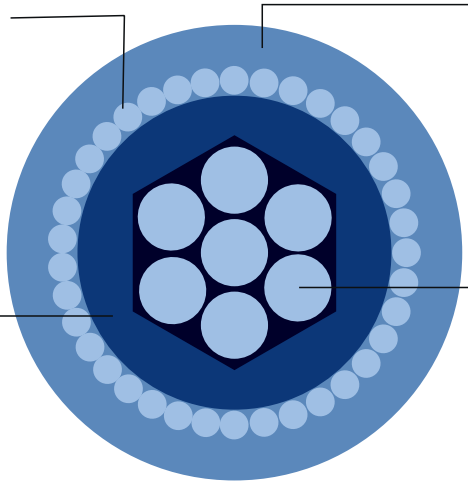
INSTRUMENTATION CABLES





ARMOUR
GALVANISED STEEL
WIRE / FLAT WIRE

OUTER SHEATH
1. PVC
2. FR/FRLS PVC
3. HALOGEN FREE (LSZH)

CABLING ELEMENT

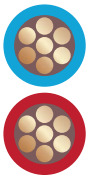
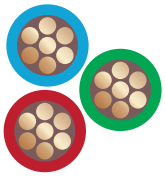
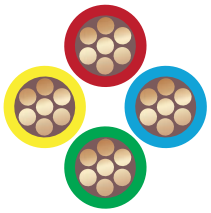
PAIR TRIAD UNIT

SCREENING (INDIVIDUAL & OVERALL)
1. Copper Wire Braid
2. Al-polyester Tape With Copper Drain Wire.
(individual & Overall)

INSULATION
1. PVC
2. Polyethylene
3. XLPE
4. LSZH

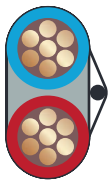
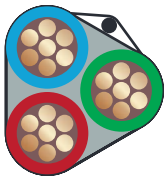
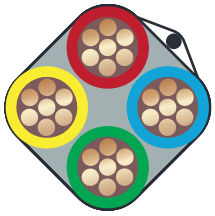
COPPER CONDUCTOR
1. Bare (ABC)
2. Tinned (ATC)
3. Solid
4. Stranded

INSTRUMENTATION CABLE CONSTRUCTION

CORE	PAIR	TRIAD	QUAD
			
Insulated conductor is known as Core	Two cores twisted to form a Pair	Three cores twisted to form a Triad	Four cores twisted to form a Quad

INDIVIDUAL SHIELDING OF ELEMENT:

In case where individual shielding is required, the above element are wrapped rst with plain polyester, then the drain wire is laid parallel, over it Aluminum - polyester tape is applied with Aluminum side touching the drain wire. Above this a plain polyester tape is applied for shield isolation from other shields.

SHIELDED PAIR	SHIELDED TRIAD	SHIELDED QUAD
		

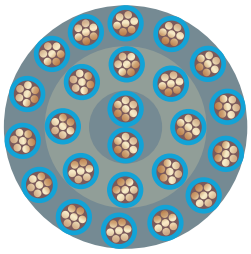
CORE AND PAIR CONSTRUCTION :

There is a confusion in specifying the cable required. If you ask for 24 Core x 1.50 sq.mm cable, we take 2 cores and twist them in one direction, above that 8 cores are laid in opposite direction and above that 14 cores are laid and it looks as drawing (a).

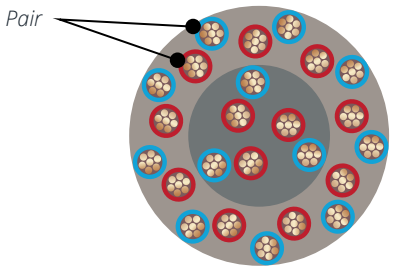
If you specify 12 pair cable, rst we take 2 cores and twist them to form a pair, 3 such pairs are again laid up, above that 9 such pairs are laid up to form a 12 pair cable and it look as drawing (b).

The diameter of multi paired cable is always more then that of multicore core cable having the same number of insulated cores and hence multi pair construction is always costlier.

NOTE: One Pair and Two Core cable are generally the same.



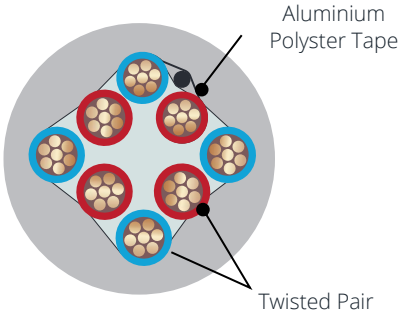
Drawing (a)
24 Pair Cable



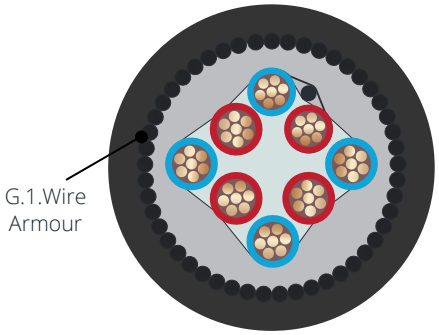
Drawing (b)
12 Pair Cable

CROSS SECTIONAL DRAWING

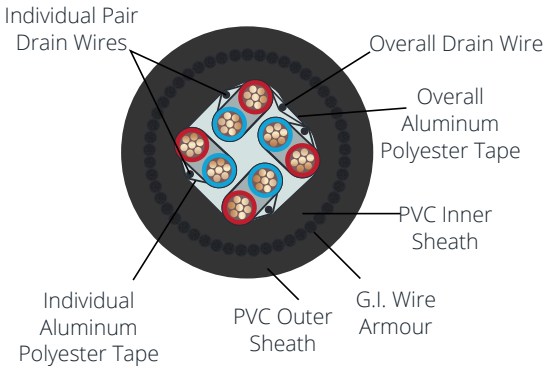
4 PAIR OVERALL SHIELDED UNARMOURED



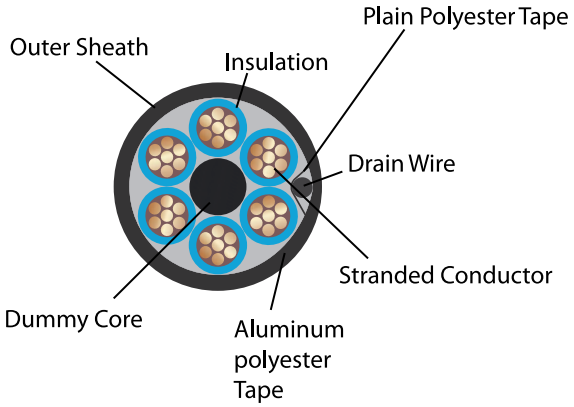
4 PAIR OVERALL SHIELDED ROUND ARMOURED CABLE



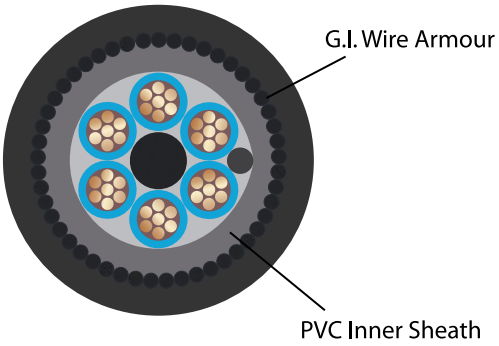
4 PAIR INDIVIDUAL & OVERALL SHIELDED ROUND ARMOURED CABLE



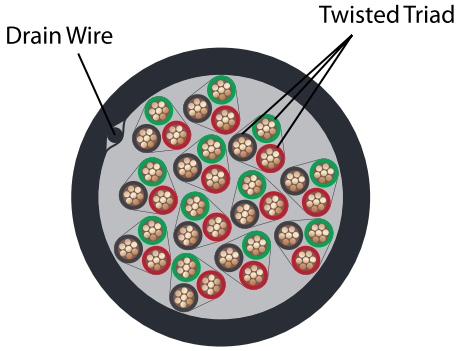
6 CORE OVERALL SHIELDED UNARMOURED



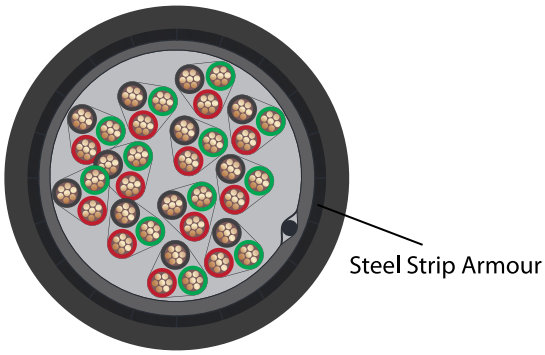
6 CORE OVERALL SHIELDED ARMOURED



12 TRIAD OVERALL SHIELDED UNARMOURED CABLE



12 TRIAD OVERALL SHIELDED STRIP ARMOURED CABLE



BS 5308, PART 1

COLOUR CODE :

A Identification of Collective Screened Pairs
B Identification of Individually Screened Pairs
C Identification of Cores

CABLE TYPES :

Single and Multitriple, XLPE / PE Insulation, Collective Screen, Type 1 (2XSY).....
Multipair Cables, XLPE / PE Insulation, Individual and Collective Screen, Type 1 (2XSSY) .....
Multitriple, XLPE / PE Insulation, Individual and Collective Screen, Type 1 (2XSSY).....
Multipair cables, XLPE / PE Insulation, Collective Screen, Armour, Type 2 (2XSWY).....
Multitriple, XLPE / PE Insulation, Individual and Collective Screen, Armour, Type 2 (2XSSWY).....
Single and Multitriple, XLPE / PE Insulation, Collective Screen, Armour, Type 2 (2XSWY).....
Multipair cables, XLPE / PE Insulation, Individual and Collective Screen, Armour, Type 2 (2XSSWY).....

BS 5308, PART 2

COLOUR CODE :

A Identification of Collective Screened Pairs
B Identification of Individually Screened Pairs
C Identification of Cores

CABLE TYPES :

Multicore Cables, PVC Insulation, Collective Screen, Type 1 (YSY)
Multipair Cables, PVC Insulation, Collective Screen, Type 1 (YSY)
Multitriple Cables, PVC Insulation, Collective Screen, Type 1 (YSY)
Multipair Cables, PVC Insulation, Individual and Collective Screen, Type 1 (YSSY)
Multicore Cables, PVC Insulation, Collective Screen, Armour, Type 2 (YSWY)
Multipair Cables, PVC Insulation, Collective Screen, Armour, Type 2 (YSWY)
Multipair Cables, PVC Insulation, Individual and Collective Screen, Armour, Type 2 (YSSWY)

BS 5308, PART 1

COLOUR CODE :

A- Identification of Collective Screened Pairs
B - Identification of Individually Screened Pairs
C - Identification of Cores
Core 1 to 40 Black with both printed numbers and written word in White ,"10, TEN"

1	black	blue	26	white	yellow
2	black	green	27	red	yellow
3	blue	green	28	orange	yellow
4	black	brown	29	black	grey
5	blue	brown	30	blue	grey
6	green	brown	31	green	grey
7	black	white	32	brown	grey
8	blue	white	33	white	grey
9	green	white	34	red	grey
10	brown	white	35	orange	grey
11	black	red	36	yellow	grey
12	blue	red	37	black	violet
13	green	red	38	blue	violet
14	brown	red	39	green	violet
15	white	red	40	brown	violet
16	black	orange	41	white	violet
17	blue	orange	42	red	violet
18	green	orange	43	orange	violet
19	brown	orange	44	yellow	violet
20	white	orange	45	grey	violet
21	red	orange	46	black	turquoise
22	black	yellow	47	blue	turquoise
23	blue	yellow	48	green	turquoise
24	green	yellow	49	brown	turquoise
25	brown	yellow	50	white	turquoise

INSTRUMENTATION CABLE BS 5308 PART 1 TYPE 1

Single & Multi Pair, XLPE / PE Insulation, Collective Screen, PVC Sheath (90°C / 70°C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Cross-linked Polyethylene XLPE / Polyethylene PE

COLOUR CODE :

According to BS 5308 PART 1 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

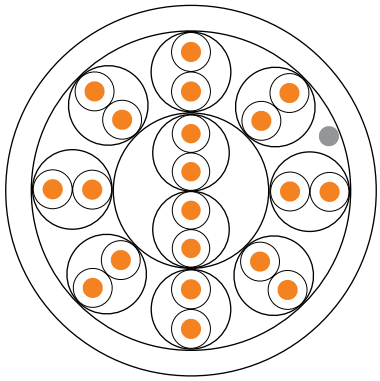
Temperature range:
-30°C up to +90 / 70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

2X - XLPE Insulation
S - Aluminium / Polyster collective screen
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value				
Conductor Size	nom.	mm²	0.5 Solid	1.0 Solid	0.5 Flexible	0.75 Flexible	1.5 Stranded
Conductor Resistance	max.	Ω/km	36.8	18.4	39.0	26.0	12.1
Insulation Resistance	min.	MΩxkm			5000		
Mutual Capacitance at 1kHz 1 Pair and 2 Pair all other Cables	max.	nF/km			115 75		120 85
Capacitance Unbalance at 1 kHz	max.	pF/250m			250		
L/R (Ratio)	max.	µH/Ω			25		
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000		
Rated Voltage : U_o / U	max.	V			300/500		



GEOMETRICAL DATA				
No of Pairs	RT of Insulation Nom (mm)	RT of outer Sheath Nom. (mm)	Overall Diameter Approx (mm)	Weight Approx (mm)
0.5 sq mm (solid)				
1	0.5	0.8	5.50	35
2	0.5	0.8	6.30	55
5	0.5	1.1	10.90	125
10	0.5	1.2	14.00	215
15	0.5	1.2	16.50	300
20	0.5	1.3	18.80	385
30	0.5	1.3	22.30	545
50	0.5	1.5	28.50	875
1.0 sq mm (Stranded)				
1	0.6	0.8	6.6	50
2	0.6	0.8	8.0	80
5	0.6	1.2	13.5	205
10	0.6	1.3	17.7	350
15	0.6	1.3	20.6	495
20	0.6	1.5	23.8	670
30	0.6	1.7	29.5	975
50	0.6	2	36.6	1580
0.5 sq mm (Flexible)				
1	0.6	0.8	6.2	45
2	0.6	0.8	7.6	60
5	0.6	1.1	12.4	145
10	0.6	1.2	16.5	245
15	0.6	1.3	19.2	345
20	0.6	1.3	21.7	435
30	0.6	1.5	26.4	640
50	0.6	1.7	33.4	1010
0.75 sq mm (Flexible)				
1	0.6	0.8	6.7	50
2	0.6	0.8	8.4	75
5	0.6	1.2	13.8	185
10	0.6	1.2	18.4	325
15	0.6	1.3	21.1	445
20	0.6	1.3	24.4	595
30	0.6	1.5	29.5	835
50	0.6	1.7	37.6	1385
1.5 sq mm (Stranded)				
1	0.6	0.8	7.5	70
5	0.6	0.9	9.3	120
5	0.6	1.2	15.6	280
10	0.6	1.3	20.9	515
15	0.6	1.5	24.6	740
20	0.6	1.5	27.8	940
30	0.6	1.7	33.7	1380
50	0.6	2	43	2245

For cables of sizes or pairs not listed above the product data available on request
Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 1 TYPE 1

Single & Multi Triple, XLPE / PE Insulation,
Collective Screen, PVC Sheath 90° C / 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Cross-linked Polyethylene XLPE / Polyethylene PE

COLOUR CODE :

According to BS 5308 PART 1 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

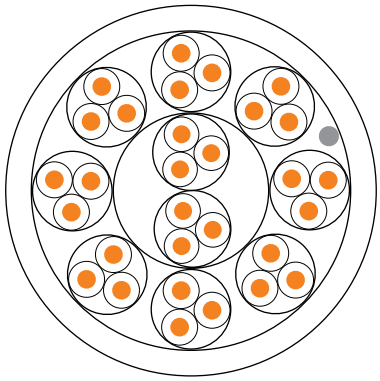
Temperature range:
-30°C up to +90 / 70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

2X - XLPE Insulation
S - Aluminium / Polyster collective screen
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value				
Conductor Size	nom.	mm²	0.5 Solid	1.0 Solid	0.5 Flexible	0.75 Flexible	1.5 Stranded
Conductor Resistance	max.	Ω/km	36.8	18.4	39.0	26.0	12.1
Insulation Resistance	min.	MΩxkm			5000		
Mutual Capacitance at 1kHz 1 & 2 Triples All other Cables	max.	nF/km			115 75		120 85
Capacitance Unbalance at 1 kHz	max.	pF/250m			250		
L/R (Ratio)	max.	µH/Ω			25		
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000		
Rated Voltage : U_o / U	max.	V			300/500		



GEOMETRICAL DATA				
No of Triples	**RT of Insulation Nom (mm)**	**RT of outer Sheath Nom. (mm)**	**Overall Diameter Approx (mm)**	**Weight Approx (mm)**
0.5 sq mm (solid)				
1	0.5	0.8	5.50	46
2	0.5	1.1	9.6	110
5	0.5	1.2	12.0	195
10	0.5	1.3	16.4	320
15	0.5	1.3	18.8	430
20	0.5	1.4	21.2	565
30	0.5	1.5	25.8	805
50	0.5	1.7	32.7	1300
1.0 sq mm (Stranded)				
1	0.6	0.8	6.9	75
2	0.6	1.1	12.0	180
5	0.6	1.2	14.9	325
10	0.6	1.5	20.5	570
15	0.6	1.5	23.8	790
20	0.6	1.5	26.9	1000
30	0.6	1.7	32.6	1450
50	0.6	2.2	42.0	2410
0.5 sq mm (Flexible)				
1	0.6	0.8	6.5	55
2	0.6	1.1	11.3	125
5	0.6	1.2	13.9	220
10	0.6	1.3	19.1	360
15	0.6	1.5	21.6	510
20	0.6	1.5	25.0	640
30	0.6	1.7	30.3	975
50	0.6	2.0	38.5	1600
0.75 sq mm (Flexible)				
1	0.6	0.8	7.1	65
2	0.6	1.1	12.5	150
5	0.6	1.2	15.3	270
10	0.6	1.3	21.0	455
15	0.6	1.5	24.4	645
20	0.6	1.5	27.6	850
30	0.6	1.7	33.5	1260
50	0.6	2.2	43.1	2100
1.5 sq mm (Stranded)				
1	0.6	0.8	7.9	95
5	0.6	1.2	13.5	225
5	0.6	1.3	17.3	430
10	0.6	1.5	24.4	750
15	0.6	1.7	27.8	1080
20	0.6	1.7	32	1320
30	0.6	2	38.9	1680
50	0.6	2.2	49.3	2760

For cables of sizes or pairs not listed above the product data available on request
Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 1 TYPE 1

Single & Multi Pair, XLPE / PE Insulation,
Individual & Collective Screen,
PVC Sheath 90° C / 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Cross-linked Polyethylene XLPE / Polyethylene PE

COLOUR CODE :

According to BS 5308 PART 1 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

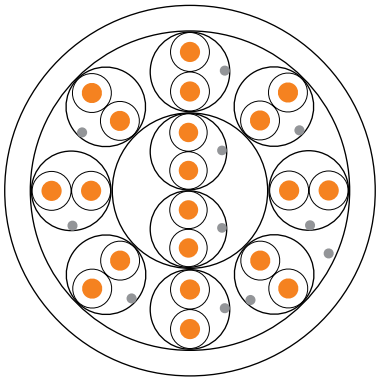
Temperature range:
-30°C up to +90 / 70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

2X - XLPE Insulation
S - Aluminium / Polyster individual screen
S - Aluminium / Polyster collective screen
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value				
Conductor Size	nom.	mm²	0.5 Solid	1.0 Solid	0.5 Flexible	0.75 Flexible	1.5 Stranded
Conductor Resistance	max.	Ω/km	36.8	18.4	39.0	26.0	12.1
Insulation Resistance	min.	MΩxkm			5000		
Mutual Capacitance at 1kHz 1 & 2 Pairs All other Cables	max.	nF/km			115 75		120 85
Capacitance Unbalance at 1 kHz	max.	pF/250m			250		
L/R (Ratio)	max.	µH/Ω			25		40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000		
Rated Voltage : U_o / U	max.	V			300/500		



GEOMETRICAL DATA				
No of Pairs	RT of Insulation Nom (mm)	RT of outer Sheath Nom. (mm)	Overall Diameter Approx (mm)	Weight Approx (mm)
0.5 sq mm (solid)				
2	0.5	0.9	9.7	95
5	0.5	1.2	13.0	180
10	0.5	1.2	16.9	310
15	0.5	1.3	19.7	440
20	0.5	1.3	22.3	560
30	0.5	1.5	27.1	820
50	0.5	2.0	35.0	1370
1.0 sq mm (Stranded)				
2	0.6	1.2	11.9	135
5	0.6	1.2	15.4	250
10	0.6	1.3	20.5	450
15	0.6	1.5	24.1	675
20	0.6	1.5	27.7	875
30	0.6	2.0	33.7	1290
50	0.3	2.2	42.5	2055
0.5 sq mm (Flexible)				
2	0.6	1.1	11.2	110
5	0.6	1.2	14.5	200
10	0.6	1.3	19.3	350
15	1.6	1.3	22.6	510
20	0.6	1.5	25.7	620
30	0.6	1.7	31.0	895
50	0.6	2.2	39.9	1535
0.75 sq mm (Flexible)				
2	0.6	1.1	12.1	128
5	0.6	1.2	15.7	238
10	0.6	1.3	20.9	421
15	0.6	1.5	24.6	614
20	0.6	1.5	27.9	806
30	0.6	1.7	34.4	1188
50	0.6	2.2	43.5	1880
1.5 sq mm (Stranded)				
2	0.6	1.2	13.6	180
5	0.6	1.3	17.7	340
10	0.6	1.5	23.9	635
15	0.6	1.7	28	915
20	0.6	1.7	31.7	1165
30	0.6	2	38.6	1725
50	0.6	2.2	48.9	2770

For cables of sizes or pairs not listed above the product data available on request
Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 1 TYPE 1

Multi Triple, XLPE / PE Insulation,
Individual and Collective Screen,
PVC Sheath 90° C / 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Cross-linked Polyethylene XLPE / Polyethylene PE

COLOUR CODE :

According to BS 5308 PART 1 (see Appendix)

TRIPLE SCREEN :

24 µm aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

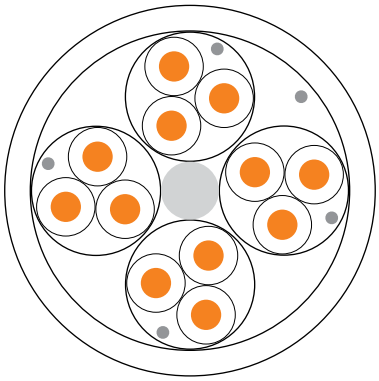
Temperature range:
-30°C up to +90 / 70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

2X - XLPE Insulation
S - Aluminium / Polyster individual screen
S - Aluminium / Polyster collective screen
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value				
Conductor Size	nom.	mm²	0.5 Solid	1.0 Solid	0.5 Flexible	0.75 Flexible	1.5 Stranded
Conductor Resistance	max.	Ω/km	36.8	18.4	39.0	26.0	12.1
Insulation Resistance	min.	MΩxkm			5000		
Mutual Capacitance at 1kHz 1 & 2 Triples All other Cables	max.	nF/km			115 75		120 85
Capacitance Unbalance at 1 kHz	max.	pF/250m			250		
L/R (Ratio)	max.	µH/Ω			25		40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000		
Rated Voltage : U_o / U	max.	V			300/500		



GEOMETRICAL DATA				
No of Triples	RT of Insulation Nom (mm)	RT of outer Sheath Nom. (mm)	Overall Diameter Approx (mm)	Weight Approx (mm)
0.5 sq mm (solid)				
2	0.5	1.1	11.0	120
5	0.5	1.2	14.1	220
10	0.5	1.3	19.4	410
15	0.5	1.3	22.0	555
20	0.5	1.5	25.4	710
30	0.5	1.7	30.8	1040
50	0.5	2.0	39.2	1685
1.0 sq mm (Stranded)				
2	0.6	1.2	13.3	190
5	0.6	1.2	16.8	355
10	0.6	1.5	23.8	700
15	0.6	1.5	27.0	950
20	0.6	1.7	31.1	1185
30	0.6	2.0	37.8	1790
50	0.6	2.2	47.9	2805
0.5 sq mm (Flexible)				
2	0.6	1.1	12.5	135
5	0.6	1.2	15.9	245
10	0.6	1.3	21.8	465
15	0.6	1.5	25.4	645
20	0.6	1.7	29.2	815
30	0.6	2.0	35.4	1200
50	0.6	2.2	44.8	1955
0.75 sq mm (Flexible)				
2	0.6	1.2	13.5	165
5	0.6	1.2	17.2	300
10	0.6	1.5	24.3	590
15	0.6	1.5	27.6	795
20	0.6	1.7	31.8	1000
30	0.6	2	38.6	1475
50	0.6	2.2	49	2355
1.5 sq mm (Stranded)				
2	0.6	1.2	15	235
5	1.6	1.3	19.4	460
10	0.6	1.5	27.2	900
15	1.6	1.7	31.4	1260
20	0.6	2	36.3	1600
30	0.6	2.2	43.8	2330
50	0.6	2.2	55.2	3695

For cables of sizes or pairs not listed above the product data available on request
Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 1 TYPE 2

Single & Multi Triples, XLPE / PE Insulation, Collective Screen, Armour, PVC Sheath 90° C / 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Cross-linked Polyethylene XLPE / Polyethylene PE

COLOUR CODE :

According to BS 5308 PART 1 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

BEDDING :

Polyvinyl Chloride PVC, Black

ARMOUR :

Galvanized Round Steel Wires

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

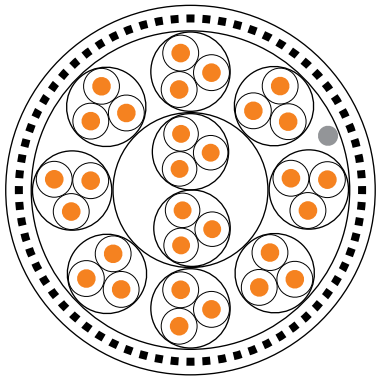
Temperature range:
-30°C up to +90 / 70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

2X - XLPE Insulation
S - Aluminium / Polyster individual screen
W - G.I Round Armour
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value				
Conductor Size	nom.	mm²	0.5 Solid	1.0 Solid	0.5 Flexible	0.75 Flexible	1.5 Stranded
Conductor Resistance	max.	Ω/km	36.8	18.4	39.0	26.0	12.1
Insulation Resistance	min.	MΩxkm			5000		
Mutual Capacitance at 1kHz 1 & 2 Triples All other Cables	max.	nF/km			115 75		120 85
Capacitance Unbalance at 1 kHz	max.	pF/250m			250		
L/R (Ratio)	max.	µH/Ω			25		40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000		
Rated Voltage : U_o / U	max.	V			300/500		



GEOMETRICAL DATA							
No of Triples	RT of Insulation Nom (mm)	RT pf bedding nom. (mm)	Dia. over bedding approx (mm)	Dia of armour wire nom (mm)	RT of outer sheath nom. (mm)	Overall Diameter approx (mm)	Weight approx (kg/km)
0.5 sq mm (solid)							
1	0.5	0.8	5.5	0.9	1.3	9.9	190
2	0.5	0.8	6.8	0.9	1.3	11.2	240
5	0.5	1.1	10.9	0.9	1.4	15.5	400
10	0.5	1.2	14.4	1.25	1.6	20.1	694
15	0.5	1.2	16.5	1.25	1.6	22.2	840
20	0.5	1.3	18.8	1.6	1.7	25.4	1160
30	0.5	1.3	22.3	1.6	1.8	29.1	1460
50	0.5	1.5	28.5	1.6	2.0	35.7	2020
1.0 sq mm (Stranded)							
1	0.6	0.8	6.6	0.9	1.3	11.0	220
2	0.6	0.8	8.0	0.9	1.4	12.6	300
5	0.6	1.2	13.5	1.25	1.5	19.0	645
10	0.6	1.3	17.7	1.25	1.7	23.6	930
15	0.6	0.3	20.6	1.6	1.8	27.4	1345
20	0.6	1.5	23.8	1.6	1.8	30.6	1625
30	0.6	1.7	28.4	1.6	2.0	35.6	2095
50	0.6	2.0	36.6	2.0	2.2	45.0	3482
0.5 sq mm (Flexible)							
1	0.6	0.8	6.2	0.9	1.3	10.6	200
2	0.6	0.8	7.6	0.9	1.3	12.0	245
5	0.6	1.1	12.4	0.9	1.5	17.2	460
10	0.6	1.2	16.5	1.25	1.6	22.2	790
15	0.6	1.3	19.2	1.6	1.7	25.8	1140
20	0.6	1.3	21.7	1.6	1.8	28.5	1310
30	0.6	1.5	29.5	2.0	1.9	37.5	2020
50	0.6	1.7	37.6	2.5	2.2	47.2	3210
0.75 sq mm (Flexible)							
1	0.6	0.8	6.7	0.9	1.3	11.1	230
2	0.6	0.8	8.4	0.9	1.4	13.0	295
5	0.6	1.2	13.8	1.25	1.5	19.5	645
10	0.6	1.2	18.4	1.3	1.6	25.0	1090
15	0.6	1.3	21.1	1.6	1.7	27.9	1300
20	0.6	1.3	24.4	1.6	1.8	31.4	1570
30	0.6	1.5	29.5	2.0	1.9	37.5	2020
50	0.6	1.7	37.6	2.5	2.2	47.2	3210
1.5 sq mm (Stranded)							
1	0.6	0.8	7.5	0.9	1.4	12.1	270
2	0.6	0.9	9.3	0.9	1.4	13.9	360
5	0.6	1.2	15.6	1.25	1.6	21.3	800
10	0.6	1.3	20.9	1.6	1.8	27.7	1385
15	0.6	1.5	24.6	1.6	1.9	31.6	1750
20	0.6	1.5	27.8	1.6	2.0	35.8	2315
30	0.6	1.7	33.7	2.0	2.1	41.9	3040
50	0.6	2.0	43.0	2.5	2.4	52.8	4810

For cables of sizes or pairs not listed above the product data available on request
Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 1 TYPE 2

Multi Pair, XLPE / PE Insulation, Individual & Collective Screen, Armour, PVC Sheath 90° C / 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Cross-linked Polyethylene XLPE / Polyethylene PE

COLOUR CODE :

According to BS 5308 PART 1 (see Appendix)

PAIR SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

BEDDING :

Polyvinyl Chloride PVC, black

ARMOUR :

Galvanized Round Steel Wires

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

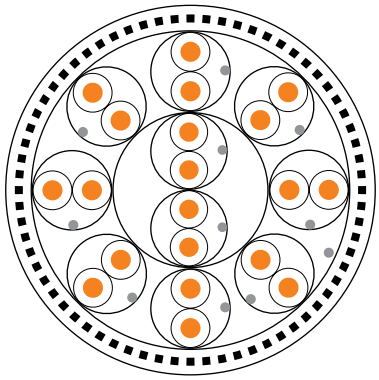
Temperature range:
-30°C up to +90 / 70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

2X - XLPE Insulation
S - Aluminium / Polyester Individual Screen
S - Aluminium / Polyester Collective Screen
W - G.I Round Armour
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value				
Conductor Size	nom.	mm²	0.5 Solid	1.0 Solid	0.5 Flexible	0.75 Flexible	1.5 Stranded
Conductor Resistance	max.	Ω/km	36.8	18.4	39.0	26.0	12.1
Insulation Resistance	min.	MΩxkm			5000		
Mutual Capacitance at 1kHz 1 Pair and 2 Pair All other Cables	max.	nF/km			115 75		120 85
Capacitance Unbalance at 1 kHz	max.	pF/250m			250		
L/R (Ratio)	max.	µH/Ω			25		40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000		
Rated Voltage : U_o / U	max.	V			300/500		



GEOMETRICAL DATA							
No of Pairs	RT of Insulation Nom (mm)	RT of bedding Nom. (mm)	Dia. of bedding approx (mm)	Dia of Armour wire nom.	RT of Outer Sheath nom. (mm)	Overall Diameter approx. (mm)	Weight approx. (mm)
0.5 sq mm (solid)							
2	0.5	0.9	9.7	0.9	1.4	14.3	345
5	0.5	1.2	13.0	1.25	1.5	18.5	610
10	0.5	1.2	16.9	1.25	1.7	22.8	870
15	0.5	1.3	19.7	1.6	1.7	26.3	1265
20	0.5	1.3	22.3	1.6	1.8	29.1	1475
30	0.5	1.5	27.1	1.6	1.9	34.1	1915
50	0.5	2.0	35.0	2.0	2.2	43.4	3075
1.0 sq mm (Stranded)							
2	0.6	1.2	11.9	1.25	1.5	16.7	435
5	0.6	1.2	15.4	1.25	1.6	21.1	755
10	0.6	1.3	20.5	1.6	1.8	27.3	1300
15	0.6	1.5	24.1	1.6	1.9	31.1	1665
20	0.6	1.5	27.7	1.6	2.0	35.7	2240
30	0.6	2.0	33.7	2.0	2.2	42.1	2950
50	0.6	2.2	42.5	2.5	2.5	52.5	4639
0.5 sq mm (Flexible)							
2	0.6	1.1	11.2	0.9	1.4	16.0	400
5	0.6	1.2	14.5	1.25	1.5	20.2	680
10	0.6	1.3	19.3	1.6	1.7	26.1	1175
15	0.6	1.3	22.6	1.6	1.8	29.4	1420
20	0.6	1.5	25.7	1.6	1.8	32.7	1680
30	0.6	1.7	31.0	2.0	2.0	39.2	2415
50	0.6	2.2	39.9	2.5	2.4	49.7	3940
0.75 sq mm (Flexible)							
2	0.6	1.1	12.1	0.9	1.5	16.9	437
5	0.6	1.2	15.7	1.5	1.6	21.4	755
10	1.6	1.3	20.9	1.6	1.7	27.5	1291
15	1.6	1.5	24.6	1.6	1.8	31.6	1680
20	0.6	1.5	27.9	1.6	1.9	34.9	2202
30	0.6	1.7	34.4	2.0	2.1	42.8	2880
50	0.6	2.2	43.5	2.5	2.5	53.5	4406
1.5 sq mm (Stranded)							
2	0.6	1.2	13.6	1.25	1.6	19.3	635
5	0.6	1.3	17.7	1.6	1.7	24.3	1070
10	0.6	1.5	23.9	1.6	1.9	30.9	1605
15	0.6	1.7	28.0	2.0	2.0	36.0	2280
20	0.6	1.7	31.7	2.0	2.1	39.9	2730
30	0.6	2.0	38.6	2.5	2.4	48.6	4075
50	0.6	2.2	48.9	2.5	2.7	59.3	5765

For cables of sizes or pairs not listed above the product data available on request
Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 1 TYPE 2

Single & Multi Triple, XLPE / PE Insulation, Collective Screen, Armour, PVC Sheath 900° C / 700° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Cross-linked Polyethylene XLPE / Polyethylene PE

COLOUR CODE :

According to BS 5308 PART 1 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

BEDDING :

Polyvinyl Chloride PVC, Black

ARMOUR :

Galvanized Round Steel Wires

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

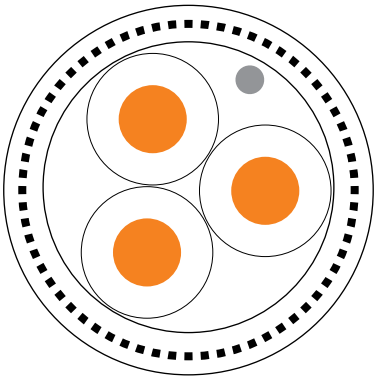
Temperature range:
-30°C up to +90 / 70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

2X - XLPE Insulation
S - Aluminium / Polyester Collective Screen
W - G.I Round Armour
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value				
Conductor Size	nom.	mm²	0.5 Solid	1.0 Solid	0.5 Flexible	0.75 Flexible	1.5 Stranded
Conductor Resistance	max.	Ω/km	36.8	18.4	39.0	26.0	12.1
Insulation Resistance	min.	MΩxkm			5000		
Mutual Capacitance at 1kHz 1 & 2 Triples All other Cables	max.	nF/km			115 75		120 85
Capacitance Unbalance at 1 kHz	max.	pF/250m			250		
L/R (Ratio)	max.	µH/Ω			25		40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000		
Rated Voltage : U_o / U	max.	V			300/500		



GEOMETRICAL DATA							
No of Triples	RT of Insulation Nom (mm)	RT of bedding Nom. (mm)	Dia Over bedding approx. (mm)	Dia of Armour Wire Nom.	RT of Outer Sheath nom. (mm)	Overall Diameter approx (mm)	Weight approx (kg/km)
0.5 sq mm (solid)							
1	0.5	0.8	5.8	0.9	1.3	10.2	210
2	0.5	1.1	9.6	0.9	1.4	14.2	330
5	0.5	1.2	12.0	1.3	1.5	16.8	470
10	0.5	1.3	16.4	1.6	1.7	22.1	840
15	0.5	1.3	18.8	1.6	1.8	25.4	1170
20	0.5	1.3	21.2	1.6	1.8	28.0	1385
30	0.5	1.5	25.8	1.6	1.9	32.8	2050
50	0.5	1.7	32.7	2.0	2.1	40.9	3010
1.0 sq mm (Stranded)							
1	0.6	0.8	6.9	0.9	1.3	11.3	270
2	0.6	1.2	12.0	1.25	1.5	16.8	450
5	0.6	1.2	14.9	1.25	1.6	20.6	760
10	0.6	1.5	20.5	1.6	1.9	27.1	1330
15	0.6	1.5	23.8	1.6	1.9	30.6	1670
20	0.6	1.5	26.9	1.6	1.9	33.9	2000
30	0.6	1.7	32.6	2.0	2.1	40.8	3345
50	0.6	2.2	42.0	2.5	2.4	51.8	5285
0.5 sq mm (Flexible)							
1	0.6	0.8	6.5	0.9	1.3	10.9	215
2	0.6	1.1	11.3	0.9	1.5	16.1	365
5	1.6	1.2	13.9	1.25	1.6	19.6	635
10	0.6	1.3	19.1	1.6	1.7	25.7	1080
15	0.6	1.5	21.6	1.6	1.8	28.4	1330
20	0.6	1.5	25.0	1.6	1.9	32.0	1900
30	0.6	1.7	30.3	2.0	2.0	38.3	2535
50	0.6	2.0	38.5	2.5	2.3	48.1	4005
0.75 sq mm (Flexible)							
1	0.6	1.8	7.1	0.9	1.3	11.5	270
2	0.6	1.1	12.5	0.9	1.5	18.0	440
5	0.6	1.2	15.3	1.25	1.6	21.0	750
10	0.6	1.3	21.0	1.6	1.8	27.8	1300
15	0.6	1.5	24.4	1.6	1.9	31.4	1630
20	0.6	1.5	27.6	1.6	1.9	34.6	1940
30	0.6	1.7	33.5	2.0	2.1	41.7	2960
50	0.6	2.2	43.1	2.5	2.4	52.9	4588
1.5 sq mm (Stranded)							
1	0.6	0.8	8.1	0.9	1.4	12.7	320
2	0.6	1.2	13.5	1.25	1.6	19.0	650
5	0.6	1.3	17.3	1.6	1.7	23.2	960
10	0.6	1.5	24.4	1.6	1.9	31.4	1720
15	0.6	1.7	27.8	2.0	2.0	34.8	2160
20	0.6	1.9	32.0	2.0	2.1	40.2	2850
30	0.6	2.0	38.9	2.5	2.3	48.5	4610
50	0.6	2.2	49.3	2.5	2.6	59.5	6720

For cables of sizes or triples not listed above the product data available on request
Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 1 TYPE 2

Single & Multi Triple, XLPE / PE Insulation,
Individual & Collective Screen,
Armour, PVC Sheath 900° C / 700° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Cross-linked Polyethylene XLPE / Polyethylene PE

COLOUR CODE :

According to BS 5308 PART 1 (see Appendix)

TRIPLE SCREEN :

24 µm aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

BEDDING :

Polyvinyl Chloride PVC, Black

ARMOUR :

Galvanized Round Steel Wires

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

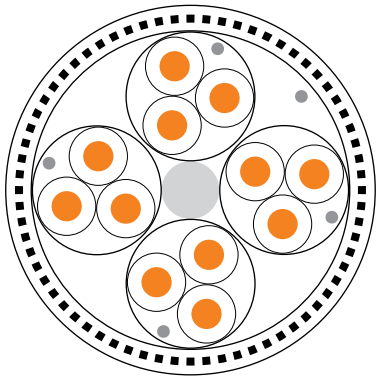
Temperature range:
-30°C up to +90 / 70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

2X - XLPE Insulation
S - Aluminium / Polyester Individual Screen
S - Aluminium / Polyester Collective Screen
W - G.I Round Armour
Y - PVC Outer Sheath

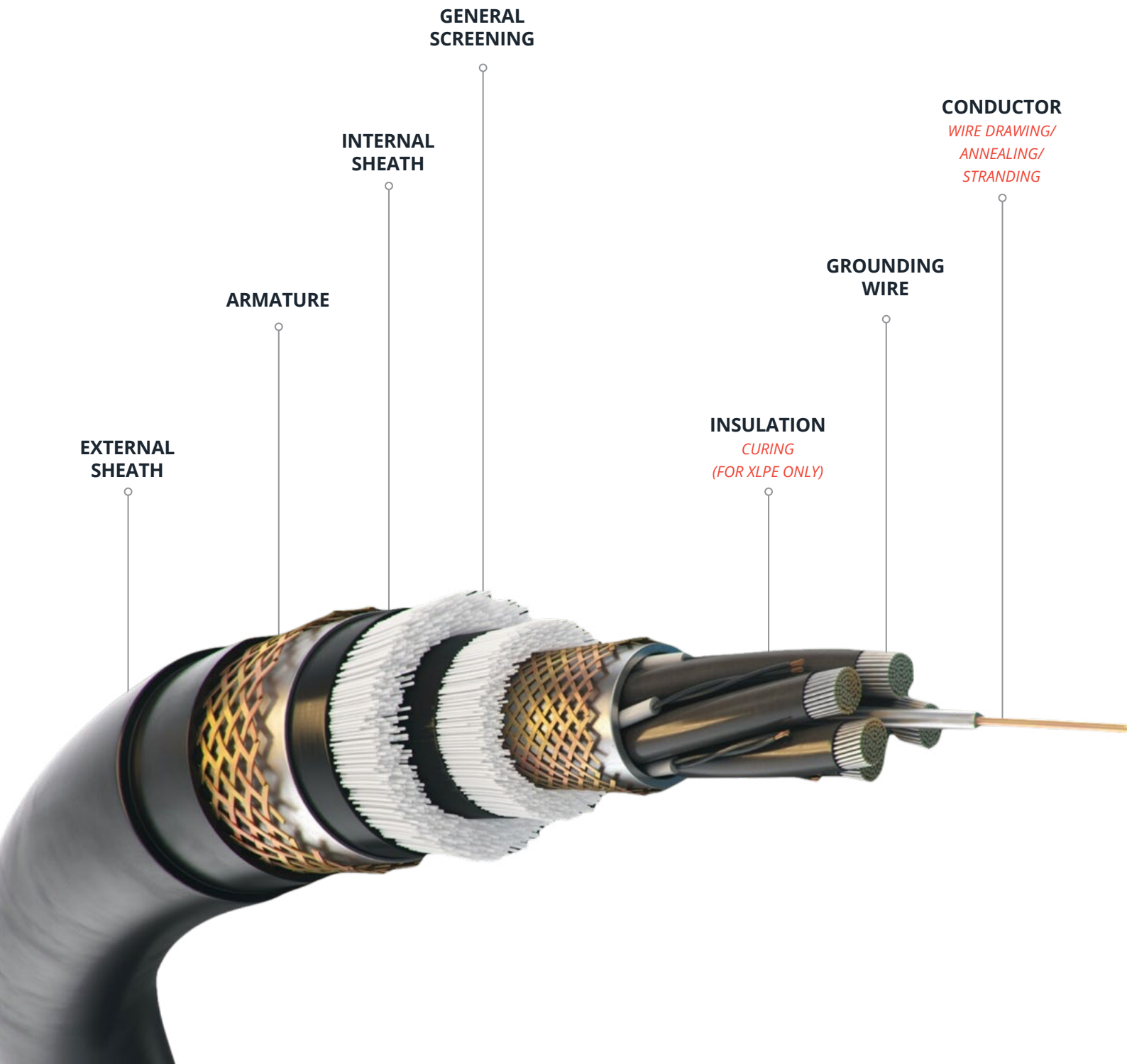
Electrical Data @ 20° C

	Character	Unit	Value				
Conductor Size	nom.	mm²	0.5 Solid	1.0 Solid	0.5 Flexible	0.75 Flexible	1.5 Stranded
Conductor Resistance	max.	Ω/km	36.8	18.4	39.0	26.0	12.1
Insulation Resistance	min.	MΩxkm			5000		
Mutual Capacitance at 1kHz 1 & 2 Triples All other Cables	max.	nF/km			115 75		120 85
Capacitance Unbalance at 1 kHz	max.	pF/250m			250		
L/R (Ratio)	max.	µH/Ω			25		40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000		
Rated Voltage : U_o / U	max.	V			300/500		



GEOMETRICAL DATA							
No of Triples	RT of Insulation Nom (mm)	RT of bedding Nom. (mm)	Dia Over bedding approx. (mm)	Dia of Armour Wire Nom.	RT of Outer Sheath nom. (mm)	Overall Diameter approx (mm)	Weight approx (kg/km)
0.5 sq mm (solid)							
2	0.5	1.1	11.0	0.9	1.4	15.8	400
5	0.5	1.2	14.1	1.25	1.5	19.8	690
10	0.5	1.3	19.4	1.6	1.7	26.0	1190
15	0.5	1.3	22.0	1.6	1.8	28.8	1450
20	0.5	1.5	25.4	1.6	1.9	32.4	1760
30	0.5	1.7	30.8	2.0	2.0	38.8	2155
50	0.5	2.0	39.2	2.5	2.3	48.8	3310
50							
1.0 sq mm (Stranded)							
1							
2	0.6	1.2	13.3	1.25	1.5	18.8	590
5	0.6	1.2	16.8	1.25	1.6	22.5	840
10	0.6	1.5	23.8	1.6	1.9	30.6	1480
15	0.6	1.5	27.0	1.6	2.0	34.0	1900
20	0.6	1.7	31.1	2.0	2.0	39.1	2570
30	0.6	2.0	37.8	2.5	2.3	47.4	3545
50	0.6	2.2	47.9	2.5	2.6	58.1	5685
0.5 sq mm (Flexible)							
2	0.6	1.1	12.5	0.9	1.5	18.0	380
5	0.6	1.2	15.9	1.25	1.6	21.6	665
10	0.6	1.3	21.8	1.6	1.8	28.6	1170
15	0.6	1.5	25.4	1.6	1.8	32.4	1540
20	0.6	1.7	29.2	2.0	2.0	37.2	1900
30	0.6	2.0	35.4	2.0	2.2	43.8	2735
50	0.6	2.2	44.8	2.5	2.5	54.8	4305
0.75 sq mm (Flexible)							
2	0.6	1.2	13.5	1.25	1.5	19.0	620
5	0.6	1.2	17.2	1.25	1.6	23.1	860
10	0.6	1.5	24.3	1.6	1.8	31.3	1570
15	0.6	1.5	27.6	1.6	1.9	34.6	1920
20	0.6	1.7	31.8	2.0	2.1	40.0	2550
30	0.6	2.0	38.6	2.5	2.3	48.2	3160
50	0.6	2.2	49.0	2.5	2.6	59.2	5055
1.5 sq mm (Stranded)							
2	0.6	1.2	15.0	1.25	1.6	20.7	730
5	0.6	1.3	19.4	1.6	1.7	26.0	1230
10	0.6	1.5	27.2	1.6	1.9	34.2	1950
15	0.6	1.7	31.4	2.0	2.1	39.4	2760
20	0.6	2.2	36.3	2.0	2.2	44.7	3390
30	0.6	2.2	43.8	2.5	2.5	53.8	4810
50	0.6	2.2	55.2	2.5	2.9	66.0	6920

For cables of sizes or triples not listed above the product data available on request
Dimensions and weights are representative figures and may very


GENERAL SCREENING
CONDUCTOR
WIRE DRAWING/ ANNEALING/ STRANDING
INTERNAL SHEATH
GROUNDING WIRE
ARMATURE
INSULATION
CURING (FOR XLPE ONLY)
EXTERNAL SHEATH

BS 5308, PART 2

COLOUR CODE :

A - Identification of Collective Screened Pairs
B - Identification of Individually Screened Pairs
All cables up to 50 pairs conform to the coding of following table:
C - Identification of Cores
Core 1 to 40 Black with both printed numbers and written word in White ,"10, TEN"

PAIR-NO	A-WIRE	B-WIRE	PARI-NO	A-WIRE	B-WIRE
1	White	Blue	26	Red-Blue	Blue
2	White	Orange	27	Red-Blue	Orange
3	White	Green	28	Red-Blue	Green
4	White	brown	29	Red-Blue	Brown
5	White	Grey	30	Red-Blue	Grey
6	Red	Blue	31	Blue-Black	Blue
7	Red	Orange	32	Blue-Black	Orange
8	Red	Green	33	Blue-Black	Green
9	Red	Brown	34	Blue-Black	Brown
10	Red	Grey	35	Blue-Black	Grey
11	Black	Blue	36	Yellow-Blue	Blue
12	Black	Orange	37	Yellow-Blue	Orange
13	Black	Green	38	Yellow-Blue	Green
14	Black	Brown	39	Yellow-Blue	Brown
15	Black	Grey	40	Yellow-Blue	Grey
16	Yellow	Blue	41	White-Orange	Blue
17	Yellow	Orange	42	White-Orange	Orange
18	Yellow	Green	43	White-Orange	Green
19	Yellow	Brown	44	White-Orange	Brown
20	Yellow	Grey	45	White-Orange	Grey
21	White-Blue	Blue	46	Orange-Red	Blue
22	White-Blue	Orange	47	Orange-Red	Orange
23	White-Blue	Green	48	Orange-Red	Green
24	White-Blue	Brown	49	Orange-Red	Brown
25	White-Blue	Grey	50	Orange-Red	Grey

INSTRUMENTATION CABLE BS 5308 PART 2 TYPE 1

Multi Core, PVC Insulation, Collective Screen, PVC Sheath 70°C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Polyvinyl Chloride PVC

COLOUR CODE :

According to BS 5308 PART 2 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

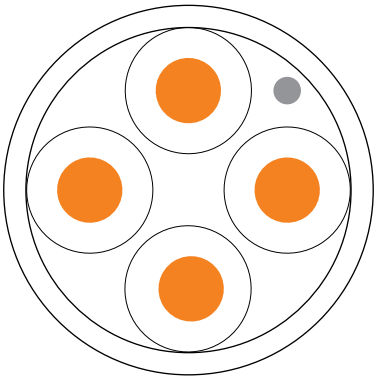
Temperature range:
-30°C up to +90 / 70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

Y - PVC Insulation
S - Aluminium / Polyester Collective Screen
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value			
Conductor Size	nom.	mm²	0.5 Flexible	0.75 Flexible	1.0 Stranded	1.5 Stranded
Conductor Resistance	max.	Ω/km	39	26.0	18.1	12.1
Insulation Resistance	min.	MΩxkm			25	
Mutual Capacitance at 1kHz 1 & 2 Pairs All other Cables	max.	nF/km			250	
Capacitance Unbalance at 1 kHz	max.	pF/250m			400	
L/R (Ratio)	max.	µH/Ω			25	40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000	
Rated Voltage : U_o / U	max.	V			300/500	



GEOMETRICAL DATA				
No of Cores	RT of Insulation Nom (mm)	RT of outer Sheath Nom. (mm)	Overall Diameter Approx (mm)	Weight Approx (mm)
0.5 sq mm (Flexible)				
1				
2	0.6	0.8	6.2	50
3	0.6	0.8	6.6	60
4	0.6	0.8	7.2	70
6	0.6	0.9	8.6	100
10	0.6	1.1	11.2	150
20	0.6	1.2	14.2	260
40	0.6	1.3	18.7	470
0.75 sq mm (Flexible)				
1				
2	0.6	0.8	6.7	60
3	0.6	0.8	7.2	70
4	0.6	0.8	7.8	80
6	0.6	0.9	9.4	120
10	0.6	1.1	12.2	190
20	0.6	1.2	15.6	330
40	0.6	1.3	20.6	610
1.0 sq mm (Stranded)				
2	0.6	0.8	6.8	60
3	0.6	0.8	7.6	80
4	0.6	0.8	7.8	90
6	0.6	1.1	12.0	150
10	0.6	1.2	14.0	215
20	0.6	1.3	18.0	375
40	0.6	1.5	25.0	700
1.5 sq mm (Stranded)				
2	0.6	0.8	8.0	90
3	0.6	0.9	8.2	100
4	0.6	0.9	9.0	130
6	0.6	1.1	11.0	190
10	0.6	1.2	14.0	290
20	0.6	1.3	17.9	530
40	0.6	1.5	24.0	1010

For cables of sizes or pairs not listed above the product data available on request

Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 2 TYPE 1

Single & Multi Pair, PVC Insulation, Collective Screen, PVC Sheath 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Polyvinyl Chloride PVC

COLOUR CODE :

According to BS 5308 PART 2 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

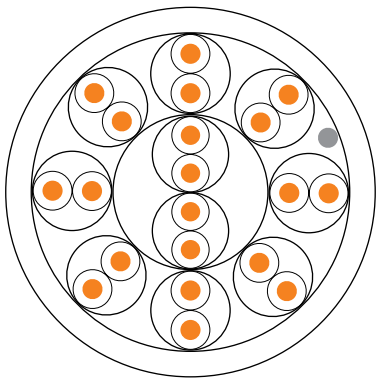
Temperature range:
-30°C up to +70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

Y - PVC Insulation
S - Aluminium / Polyester Collective Screen
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value			
Conductor Size	nom.	mm²	0.5 Flexible	0.75 Flexible	1.0 Stranded	1.5 Stranded
Conductor Resistance	max.	Ω/km	39	26.0	18.1	12.1
Insulation Resistance	min.	MΩxkm			25	
Mutual Capacitance at 1kHz 1 & 2 Pairs All other Cables	max.	nF/km			250	
Capacitance Unbalance at 1 kHz	max.	pF/250m			400	
L/R (Ratio)	max.	µH/Ω			25	40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000	
Rated Voltage : U_o / U	max.	V			300/500	



GEOMETRICAL DATA				
No of Pairs	RT of Insulation Nom (mm)	RT of outer Sheath Nom. (mm)	Overall Diameter Approx (mm)	Weight Approx (mm)
0.5 sq mm (Flexible)				
1	0.6	0.8	6.2	40
2	0.6	0.8	7.6	70
5	0.6	1.1	12.4	160
10	0.6	1.2	16.5	280
15	0.6	1.3	19.2	390
20	0.6	1.3	21.7	450
30	0.6	1.5	26.4	730
50	0.6	1.7	33.4	1160
0.75 sq mm (Flexible)				
1	0.6	0.8	6.7	50
2	0.6	0.8	8.2	80
5	0.6	1.2	13.8	200
10	0.6	1.3	13.8	350
15	0.6	1.3	21.1	490
20	0.6	1.5	24.4	660
30	0.6	1.7	29.5	960
50	0.6	2.0	37.6	1540
1.0 sq mm (Stranded)				
1	0.6	0.8	6.8	60
2	0.6	0.8	7.8	90
5	0.6	1.2	14.0	215
10	0.6	1.3	18.0	375
15	0.6	1.3	22.0	530
20	0.6	1.5	25.0	700
30	0.6	1.7	30.0	1020
50	0.6	2	39.0	1750
1.5 sq mm (Stranded)				
1	0.6	0.8	7.5	70
2	0.6	0.9	9.3	130
5	0.6	1.2	15.6	300
10	0.6	1.3	20.9	540
15	0.6	1.5	24.6	810
20	0.6	1.5	27.8	1030
30	0.6	1.7	33.7	1510
50	0.6	2.0	43.0	2470

For cables of sizes or pairs not listed above the product data available on request

Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 2 TYPE 1

Single & Multi Triple, PVC Insulation, Collective Screen, PVC Sheath 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Polyvinyl Chloride PVC

COLOUR CODE :

According to BS 5308 PART 2 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

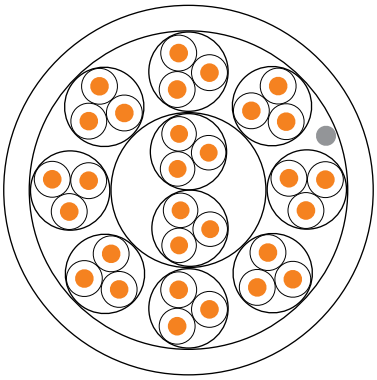
Temperature range:
-30°C up to +70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

Y - PVC Insulation
S - Aluminium / Polyester Collective Screen
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value			
Conductor Size	nom.	mm²	0.5 Flexible	0.75 Flexible	1.0 Stranded	1.5 Stranded
Conductor Resistance	max.	Ω/km	39	26.0	18.1	12.1
Insulation Resistance	min.	MΩxkm			25	
Mutual Capacitance at 1kHz 1 & 2 Triples All other Cables	max.	nF/km			250	
Capacitance Unbalance at 1 kHz	max.	pF/250m			400	
L/R (Ratio)	max.	µH/Ω			25	40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000	
Rated Voltage : U_o / U	max.	V			300/500	



GEOMETRICAL DATA				
No of Triples	RT of Insulation Nom (mm)	RT of outer Sheath Nom. (mm)	Overall Diameter Approx (mm)	Weight Approx (mm)
0.5 sq mm (Flexible)				
1				
2	0.6	1.1	11.2	120
5	0.6	1.2	14.6	210
10	0.6	1.3	19.4	370
15	0.6	1.5	22.7	540
20	0.6	1.5	25.9	690
30	0.6	1.7	31.2	950
50	0.6	2.2	40.1	1650
0.75 sq mm (Flexible)				
1				
2	0.6	1.1	12.2	130
5	0.6	1.2	15.8	250
10	0.6	1.3	21.1	450
15	0.6	1.5	24.9	650
20	0.6	1.7	28.6	850
30	0.6	2.0	34.7	1260
50	0.6	2.2	43.9	2000
1.0 sq mm (Stranded)				
2	0.6	1.2	13.5	180
5	0.6	1.2	17.0	325
10	0.6	1.5	25.0	570
15	0.6	1.5	27.0	790
20	0.6	1.7	29.0	1040
30	0.6	2.0	34.0	1520
50	0.6	2.2	42.0	2420
1.5 sq mm (Stranded)				
2	0.6	1.2	13.6	190
5	0.6	1.3	17.8	360
10	0.6	1.5	24.1	670
15	0.6	1.7	28.2	970
20	0.6	1.7	31.9	1240
30	0.6	2.0	38.8	1830
50	0.6	2.2	49.1	2940

For cables of sizes or pairs not listed above the product data available on request

Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 2 TYPE 1

Single & Multi Pair, PVC Insulation, Individual & Collective Screen, PVC Sheath 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Polyvinyl Chloride PVC

PAIR SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

COLOUR CODE :

According to BS 5308 PART 2 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

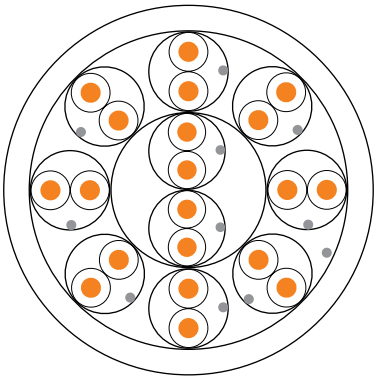
Temperature range:
-30°C up to +70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

Y - PVC Insulation
S - Aluminium / Polyester Collective Screen
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value			
Conductor Size	nom.	mm²	0.5 Flexible	0.75 Flexible	1.0 Stranded	1.5 Stranded
Conductor Resistance	max.	Ω/km	39	26.0	18.1	12.1
Insulation Resistance	min.	MΩxkm			25	
Mutual Capacitance at 1kHz 1 & 2 Pairs All other Cables	max.	nF/km			250	
Capacitance Unbalance at 1 kHz	max.	pF/250m			400	
L/R (Ratio)	max.	µH/Ω			25	40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000	
Rated Voltage : U_o / U	max.	V			300/500	



GEOMETRICAL DATA				
No of Pairs	RT of Insulation Nom (mm)	RT of outer Sheath Nom. (mm)	Overall Diameter Approx (mm)	Weight Approx (mm)
0.5 sq mm (Flexible)				
1				
2	0.6	1.1	11.2	120
5	0.6	1.2	14.6	210
10	0.6	1.3	19.4	370
15	0.6	1.5	22.7	540
20	0.6	1.5	25.9	690
30	0.6	1.7	31.2	950
50	0.6	2.2	40.1	1650
0.75 sq mm (Flexible)				
1				
2	0.6	1.1	12.2	130
5	0.6	1.2	15.8	250
10	0.6	1.3	21.1	450
15	0.6	1.5	24.9	650
20	0.6	1.7	28.6	850
30	0.6	2.0	34.7	1260
50	0.6	2.2	43.9	2000
1.0 sq mm (Stranded)				
2	0.6	1.2	13.0	155
5	0.6	1.2	16.0	270
10	0.6	1.3	22.0	495
15	0.6	1.5	25.0	700
20	0.6	1.5	28.0	880
30	0.6	2.0	35.0	1370
50	0.6	2.2	45.0	2190
1.5 sq mm (Stranded)				
2	0.6	1.2	13.6	190
5	0.6	1.3	17.8	360
10	0.6	1.5	24.1	670
15	0.6	1.7	28.2	970
20	0.6	1.7	31.9	1240
30	0.6	2.0	38.8	1830
50	0.6	2.2	49.1	2940

For cables of sizes or pairs not listed above the product data available on request
Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 2 TYPE 1

Multi Core, PVC Insulation, Collective Screen,
Armour PVC Sheath 700° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONSTRUCTION OF CABLE :

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Polyvinyl Chloride PVC

COLOUR CODE :

According to BS 5308 PART 2 (see Appendix)

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

ARMOUR :

Galvanized Round Steel Wire

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

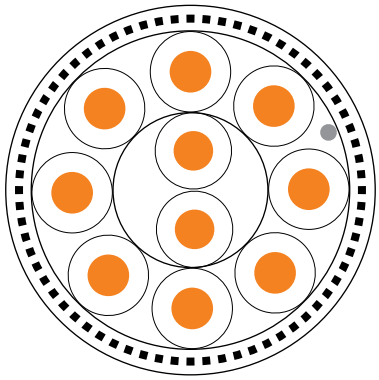
Temperature range:
-30°C up to +70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

Y - PVC Insulation
S - Aluminium / Polyester Individual Screen
S - Aluminium / Polyester Collective Screen
W - Galvanized Round Steel Wire
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value			
Conductor Size	nom.	mm²	0.5 Flexible	0.75 Flexible	1.0 Stranded	1.5 Stranded
Conductor Resistance	max.	Ω/km	39	26.0	18.1	12.1
Insulation Resistance	min.	MΩxkm			25	
Mutual Capacitance at 1kHz 1 & 2 Pairs All other Cables	max.	nF/km			250	
Capacitance Unbalance at 1 kHz	max.	pF/250m			400	
L/R (Ratio)	max.	µH/Ω			25	40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000	
Rated Voltage : U_o / U	max.	V			300/500	



GEOMETRICAL DATA							
No of Cores	RT of Insulation Nom (mm)	RT of bedding Nom. (mm)	Dia Over bedding approx. (mm)	Dia of Armour Wire Nom.	RT of Outer Sheath nom. (mm)	Overall Diameter approx (mm)	Weight approx (kg/km)
0.5 sq mm (Flexible)							
1							
2	0.6	0.8	6.7	0.9	1.3	11.1	210
3	0.6	0.8	6.6	0.9	1.3	11.0	250
4	0.6	0.8	7.2	0.9	1.3	11.6	280
6	0.6	0.9	8.6	0.9	1.4	13.2	330
10	0.6	1.1	11.2	0.9	1.5	16.0	460
20	0.6	1.2	14.2	1.25	1.6	19.9	760
40	0.6	1.3	18.7	1.6	1.7	25.3	1290
0.75 sq mm (Flexible)							
1							
2	0.6	1.8	7.2	0.9	1.3	11.6	240
3	0.6	1.8	7.2	0.9	1.3	11.6	280
4	0.6	0.8	7.8	0.9	1.4	12.4	310
6	0.6	0.9	9.4	0.9	1.4	14.0	380
10	0.6	1.1	12.2	1.9	1.5	17.0	520
20	0.6	1.2	15.6	1.25	1.6	21.3	870
40	0.6	1.3	20.6	1.6	1.8	27.4	1510
1.0 sq mm (Stranded)							
2	0.6	0.8	6.8	0.9	1.3	11.0	235
3	0.6	1.8	7.6	0.9	1.3	11.8	255
4	0.6	1.8	7.8	0.9	1.4	12.0	275
6	0.6	1.1	11.5	0.9	1.5	15.5	395
10	0.6	1.2	13.5	1.25	1.5	18.5	600
20	0.6	1.3	18.0	1.6	1.7	24.0	1020
40	0.6	1.5	24.0	1.6	19	31.0	1580
1.5 sq mm (Stranded)							
2	0.6	0.8	0.8	0.9	1.4	12.6	280
3	0.6	0.9	8.2	0.9	1.4	12.8	330
4	0.6	0.9	9.0	0.9	1.4	13.6	380
6	0.6	1.1	11.0	0.9	1.4	15.6	480
10	0.6	1.2	14.0	1.25	1.6	19.7	790
20	0.6	1.3	17.9	1.6	1.7	24.5	1320
40	0.6	1.5	24.0	1.6	1.9	31.0	2110

For cables of sizes or pairs not listed above the product data available on request

Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 2 TYPE 1

Multi Pair, PVC Insulation, Individual & Collective Screen, Armour PVC Sheath 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Polyvinyl Chloride PVC

COLOUR CODE :

According to BS 5308 PART 2 (see Appendix)

PAIR SCREEN :

24 µm aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

BEDDING :

Polyvinyl Chloride PVC, Black

ARMOUR :

Galvanized Round Steel Wire

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

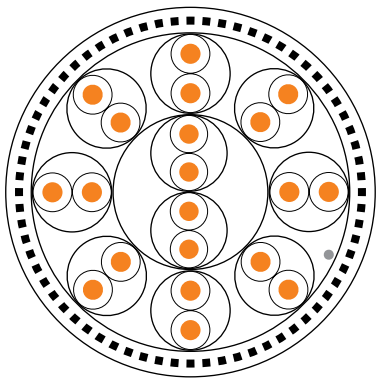
Temperature range:
-30°C up to +70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

Y - PVC Insulation
S - Aluminium / Polyester Individual Screen
S - Aluminium / Polyester Collective Screen
W - Galvanized Round Steel Wire
Y - PVC Outer Sheath

Electrical Data @ 20° C

	Character	Unit	Value			
Conductor Size	nom.	mm²	0.5 Flexible	0.75 Flexible	1.0 Stranded	1.5 Stranded
Conductor Resistance	max.	Ω/km	39	26.0	18.1	12.1
Insulation Resistance	min.	MΩxkm			25	
Mutual Capacitance at 1 & 2 Pairs All other Cables	max.	nF/km			250	
Capacitance Unbalance at 1 kHz	max.	pF/250m			400	
L/R (Ratio)	max.	µH/Ω			25	40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000	
Rated Voltage : U_o / U	max.	V			300/500	



GEOMETRICAL DATA							
No of Pairs	RT of Insulation Nom (mm)	RT of bedding Nom. (mm)	Dia Over bedding approx. (mm)	Dia of Armour Wire Nom.	RT of Outer Sheath nom. (mm)	Overall Diameter approx (mm)	Weight approx (kg/km)
0.5 sq mm (Flexible)							
1	0.6	0.8	6.2	0.9	1.3	10.6	230
2	0.6	0.8	7.1	0.9	1.3	11.5	260
5	0.6	1.1	12.4	0.9	1.5	17.2	490
10	0.6	1.2	16.5	1.25	1.6	22.2	840
15	0.6	1.3	19.2	1.6	1.7	25.8	1220
20	0.6	1.3	21.7	1.6	1.8	28.5	1430
30	0.6	1.5	26.4	1.6	1.9	33.4	1890
50	0.6	1.7	33.4	2.0	2.1	41.6	2910
0.75 sq mm (Flexible)							
1	0.6	0.8	6.7	0.9	1.3	11.1	250
2	0.6	0.8	7.7	0.9	1.4	12.3	300
5	0.6	1.2	13.8	1.25	1.5	19.3	670
10	0.6	1.3	18.4	1.6	1.7	25.0	1190
15	0.6	1.3	21.1	1.6	1.8	27.9	1390
20	0.6	1.5	24.4	1.6	1.8	31.2	1700
30	0.6	1.7	29.6	2.0	2.0	37.6	2490
50	0.6	2.0	37.6	2.5	2.3	47.3	3930
1.0 sq mm (Stranded)							
1	0.6	0.8	6.8	0.9	1.3	11.0	235
2	0.6	0.8	7.8	0.9	1.4	12.0	275
5	0.6	1.2	13.5	1.25	1.5	18.5	600
10	0.6	1.3	18.0	1.6	1.7	24.0	1020
15	0.6	1.3	21.0	1.6	1.8	28.0	1300
20	0.6	1.5	24.0	1.6	1.9	31.4	1580
30	0.6	1.7	30.0	2.0	2.0	38.0	2310
50	0.6	2.0	39.0	2.5	2.3	49.0	4010
1.5 sq mm (Stranded)							
1	0.6	0.8	7.5	0.9	1.4	12.1	290
2	0.6	0.9	8.8	0.9	1.4	13.4	390
5	0.6	1.2	15.6	1.25	1.6	21.3	850
10	0.6	1.3	20.9	1.6	1.8	27.7	1460
15	0.6	1.5	24.6	1.6	1.9	31.6	1900
20	0.6	1.5	27.8	1.6	2.0	35.0	2240
30	0.6	1.7	33.7	2.0	2.1	41.9	3310
50	0.6	2.0	43.0	2.5	2.4	52.8	5290

For cables of sizes or pairs not listed above the product data available on request

Dimensions and weights are representative figures and may very

INSTRUMENTATION CABLE BS 5308 PART 2 TYPE 1

Multi Pairs, PVC Insulation, Individual & Collective Screen, Armour PVC Sheath 70° C (300/500 V)

APPLICATION :

For transmission of analogue and digital signals in instrument and control systems; use in zone 1 and zone 2 group II classified areas (IEC 60079 part 14). Not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Not recommended for direct burial. For indoor and outdoor installation in dry and wet locations on racks, in conduits.

CONDUCTOR :

Plain annealed copper, sizes: 0.5 mm² solid / flexible, 0.75 mm² solid / stranded / flexible, 1.0 mm² solid / stranded / flexible or 1.5 mm² stranded / flexible.

INSULATION :

Polyvinyl Chloride PVC

COLOUR CODE :

According to BS 5308 PART 2 (see Appendix)

PAIR SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

WRAPPING :

At least 1 layer of Polyester Tape

COLLECTIVE SCREEN :

24 µm Aluminium / Polyster tape over tinned copper drain wire, 0.5 mm²

BEDDING :

Polyvinyl Chloride PVC, Black

ARMOUR :

Galvanized Round Steel Wire

OUTER SHEATH :

Polyvinyl Chloride PVC, Black

TECHNICAL DATA

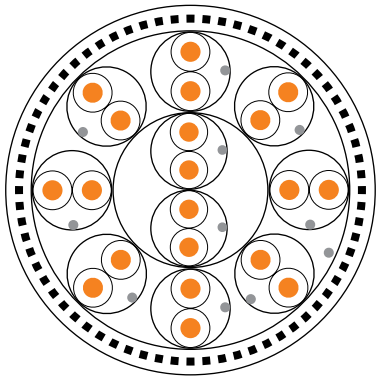
Temperature range:
-30°C up to +70°C (during operation)
- 5°C up to +50°C (during installation)
Min. Bending Radius :
During Operation - 6 X overall diameter
During Installation - 8 X overall diameter

ABBREVIATION

Y - PVC Insulation
S - Aluminium / Polyester Individual Screen
S - Aluminium / Polyester Collective Screen
W - Galvanized Round Steel Wire
Y - PVC Outer Sheath

Electrical Data @ 20° C

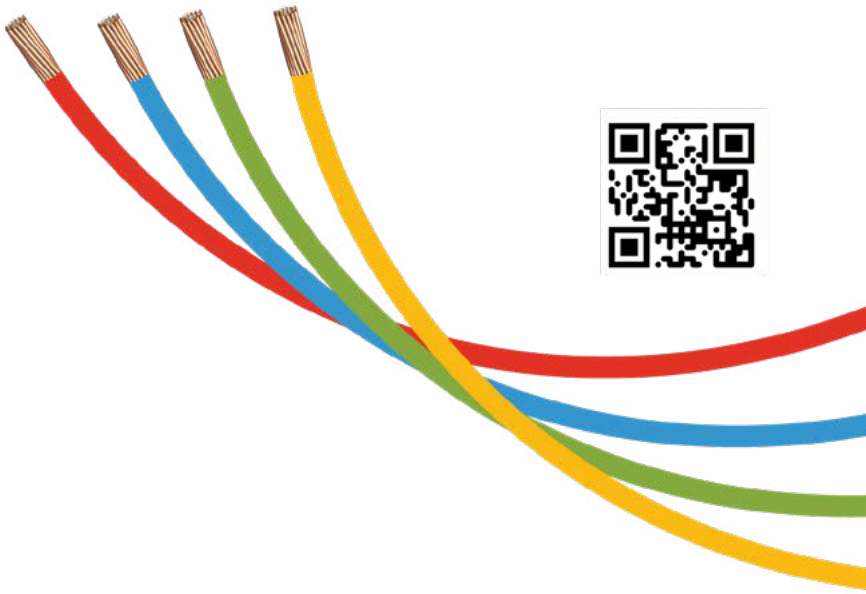
	Character	Unit	Value			
Conductor Size	nom.	mm²	0.5 Flexible	0.75 Flexible	1.0 Stranded	1.5 Stranded
Conductor Resistance	max.	Ω/km	39	26.0	18.1	12.1
Insulation Resistance	min.	MΩxkm			25	
Mutual Capacitance at 1kHz 1 & 2 Pairs All other Cables	max.	nF/km			250	
Capacitance Unbalance at 1 kHz	max.	pF/250m			400	
L/R (Ratio)	max.	µH/Ω			25	40
Test Voltage : (Core to Core) (Core to Screen)		V			1000 1000	
Rated Voltage : U_o / U	max.	V			300/500	



GEOMETRICAL DATA							
No of Pairs	RT of Insulation Nom (mm)	RT of bedding Nom. (mm)	Dia Over bedding approx. (mm)	Dia of Armour Wire Nom.	RT of Outer Sheath nom. (mm)	Overall Diameter approx (mm)	Weight approx (kg/km)
0.5 sq mm (Flexible)							
1							
2	0.6	0.8	10.6	0.9	1.3	15.0	430
5	0.6	1.1	14.3	0.9	1.5	19.1	720
10	0.6	1.2	19.1	1.25	1.6	24.8	1240
15	0.6	1.3	22.2	1.6	1.7	28.8	1520
20	0.6	1.3	25.3	1.6	1.8	32.1	1790
30	0.6	1.5	30.6	1.6	1.9	37.6	2570
50	0.6	1.7	38.9	2.0	2.1	47.1	4210
0.75 sq mm (Flexible)							
1							
2	0.6	0.8	11.5	0.9	1.4	16.1	460
5	0.6	1.2	15.7	1.25	1.5	21.2	800
10	0.6	1.3	20.9	1.6	1.7	27.5	1360
15	0.6	1.3	24.2	1.6	1.8	31.0	1700
20	0.6	1.5	27.9	1.6	1.8	34.7	2340
30	0.6	1.7	33.8	2.0	2.0	41.8	3050
50	0.6	2.0	43.1	2.5	2.3	52.7	4800
1.00 sq mm (Stranded)							
2	0.6	1.2	12.5	1.25	1.5	175	515
5	0.6	1.2	16.0	1.25	1.6	21.0	820
10	0.6	1.3	22.0	0.6	1.8	28.0	1400
15	0.6	1.5	25.0	1.6	1.9	31.0	1850
20	0.6	1.5	28.0	1.6	2.0	34.0	2810
30	0.6	2.0	35.0	2.0	2.2	43.0	3510
50	0.6	2.2	45.0	2.5	235	55.0	5050
1.5 sq mm (Stranded)							
2	0.6	0.9	13.0	1.9	1.4	17.6	670
5	0.6	1.2	17.5	1.25	1.6	23.2	1130
10	0.6	1.3	23.5	1.6	1.8	30.3	1710
15	0.6	1.5	27.6	1.6	1.9	34.6	2420
20	0.6	1.5	31.3	1.6	2.0	38.5	2900
30	0.6	1.7	38.0	2.0	2.1	46.2	4300
50	0.6	2.0	48.5	2.5	2.4	58.3	6140

For cables of sizes or pairs not listed above the product data available on request

Dimensions and weights are representative figures and may very



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