

Control and Instrumentation Cables

PAS/BS5308 Part 1, XLPE, Type 1&2

PVC Sheath

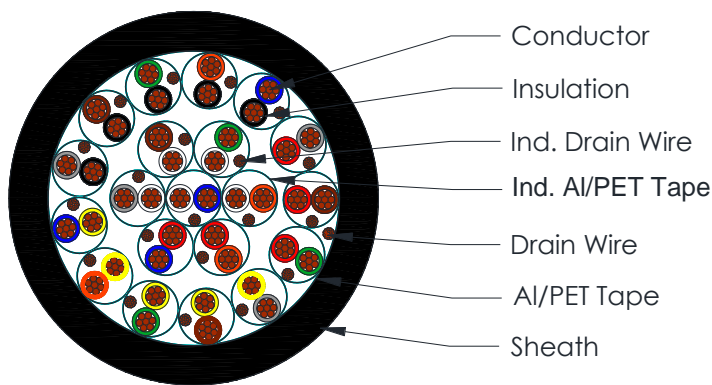


C3272 to C3276 C3439 to C3461 C3521 C3938 to C3940 C4948 to C4953

Applications

Process control, equipment interconnection, typically in chemical and petrochemical locations.

Cross Section Drawing



Design

Unit	Properties
Conductor	Plain copper wire
Insulation	XLPE
Twinning	Pair construction
Individual Screening (If applicable)	Aluminum/Polyester tape with Tinned copper drain wire
Collective Screening	Aluminum/Polyester tape with Tinned copper drain wire
Bedding (If applicable)	Flame Retardant PVC Standard Colour: Black
Armour (If applicable)	Galvanized Steel Wire
Sheath Material	UV resistant Low Halogen Flame Retardant PVC Standard Colour: Black
Standard Put Up Length	305M or 500m

*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

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Electrical Characteristics at 20°C

Conductor Size(sqmm)	Conductor Construction	Max. DCR (Ohm/km)	Max. Mutual Capacitance (pF/m) at 1KHz	Max. Mutual Capacitance unbalance (pF/500m) at 1KHz	Test voltage between conductors and between conductors and screen (V r.m.s.)	Max. L/R ratio (μH/Ω)	Min Insulation Resistance of PE (M.Ohm/km)
1.00	1*1.13	18.4	115	500	1000	25	5000
0.75	24*0.2	26.5	115	500	1000	25	5000
1.50	7*0.53	12.3	120	500	1000	40	5000
2.50	7*0.67	7.6	105	500	1000	60	5000

Color Scheme

Pair No.	Color		Pair No.	Color	
1	White	Blue	11	Black	Blue
2	White	Orange	12	Black	Orange
3	White	Green	13	Black	Green
4	White	Brown	14	Black	Brown
5	White	Grey	15	Black	Grey
6	Red	Blue	16	Yellow	Blue
7	Red	Orange	17	Yellow	Orange
8	Red	Green	18	Yellow	Green
9	Red	Brown	19	Yellow	Brown
10	Red	Grey	20	Yellow	Grey

Note: 2 Pair unshielded cables are in quad formation, colour code (clockwise): Black, Blue, Green, and Brown

Constructional Information

Part 1: Type1: Individually & Collectively Screened Unarmoured

P/N	Number of Pairs	Conductor Construction (sq mm)	Nom. Radial Thickness of Insulation (mm)	Drain wire cross section (sq mm)	Nom. Thickness of Jacket (mm)	Overall Diameter (mm)	Nom. Weight (kg/km)
C3272	5	1.00(1*1.13)	0.60	0.50	1.20	15.2	233.2
C3273	10	1.00(1*1.13)	0.60	0.50	1.30	21.6	430.5
C3274	1	1.50 (7*0.53)	0.60	0.50	1.20	8.4	82.3
C3521	2	1.50 (7*0.53)	0.60	0.50	1.20	13.70	149.1
C3275	5	1.50 (7*0.53)	0.60	0.50	1.30	17.8	349.9
C3276	8	1.50 (7*0.53)	0.60	0.50	1.50	22.5	479.5

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Part 1: Type2: Collectively Screened Armoured

P/N	Number of Pairs	Conductor Construction (sq mm)	Nom. Radial Thickness of Insulation (mm)	Drain wire cross section (sq mm)	Diameter of Bedding (mm)	Diameter of Armour (mm)	Nom. Thickness of Jacket (mm)	Nom. Diameter of cable (mm)	Nom. Weight (kg/km)
C3938	2	0.75 (24*0.2)	0.60	0.50	7.40	9.20	1.40	12.00	276.8
C3939	4	0.75 (24*0.2)	0.60	0.50	12.30	14.10	1.40	16.90	550.1
C3940	5	0.75 (24*0.2)	0.60	0.50	13.20	15.70	1.50	18.70	640.1
C3439	1	1.00 (7*0.42)	0.60	0.50	6.80	8.60	1.40	11.40	277
C3440	2	1.00 (7*0.42)	0.60	0.50	11.90	13.70	1.40	16.50	477
C3441	4	1.00 (7*0.42)	0.60	0.50	14.00	16.50	1.50	19.50	744
C3442	10	1.00 (7*0.42)	0.60	0.50	22.00	25.2	1.70	28.60	1480
C3445	1	1.50 (7*0.53)	0.60	0.50	7.30	9.10	1.40	11.90	303
C3446	2	1.50 (7*0.53)	0.60	0.50	8.70	10.50	1.40	13.30	329
C3447	5	1.50 (7*0.53)	0.60	0.50	15.40	17.90	1.60	21.10	773
C3448	10	1.50 (7*0.53)	0.60	0.50	20.60	23.80	1.80	27.40	1313
C4948	14	1.50 (7*0.53)	0.60	0.50	23.90	25.70	1.80	29.30	1838
C4949	18	1.50 (7*0.53)	0.60	0.50	26.80	28.60	1.80	32.20	2363
C3453	1 TRIPE	1.50 (7*0.53)	0.60	0.50	7.60	9.40	1.40	12.20	284
C4950	12 TRIPE	1.50 (7*0.53)	0.60	0.50	24.20	26.0	1.80	29.6	3408
C4951	1	2.50 (7*0.67)	0.60	0.50	8.10	9.90	1.40	12.70	325
C4952	4	2.50 (7*0.67)	0.60	0.50	15.60	17.40	1.50	20.40	709
C4953	8	2.50 (7*0.67)	0.60	0.50	20.9	22.7	1.80	26.3	1420

Part 1: Type2: Individually & Collectively Screened Armoured

P/N	Number of Pairs	Conductor Construction (sq mm)	Nom. Radial Thickness of Insulation (mm)	Drain wire cross section (sq mm)	Diameter of Bedding (mm)	Diameter of Armour (mm)	Nom. Thickness of Jacket (mm)	Nom. Diameter of cable (mm)	Nom. Weight (kg/km)
C3454	5	1.00 (7*0.42)	0.60	0.50	15.60	18.10	1.60	21.30	889
C3455	10	1.00 (7*0.42)	0.60	0.50	22.20	25.40	1.70	28.80	1582
C3457	2	1.50 (7*0.53)	0.60	0.50	13.70	16.20	1.60	19.40	727
C3458	3	1.50 (7*0.53)	0.60	0.50	15.20	18.40	1.70	21.80	993
C3459	5	1.50 (7*0.53)	0.60	0.50	17.80	21.00	1.70	24.40	1244
C3460	6	1.50 (7*0.53)	0.60	0.50	19.50	22.70	1.70	26.10	1261
C3461	8	1.50 (7*0.53)	0.60	0.50	21.30	24.50	1.80	28.10	1471

Reference Standards

BS5308 Part 1	EN 50290-2
BS EN 60228	RoHS directives
BS 7655	IEC 60332-3-24