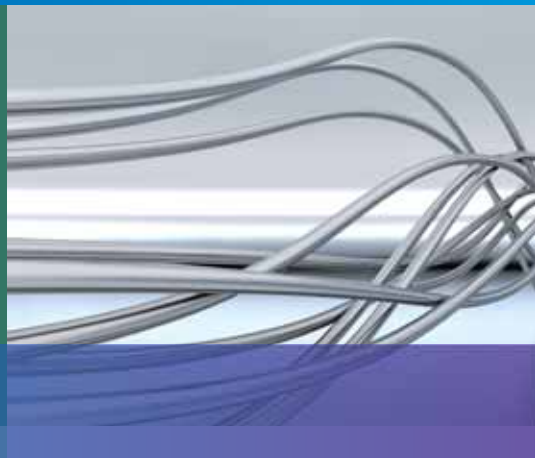


# INSTRUMENTATION CABLE

Today's manufacturing and processing operations are largely controlled and measured by electronic circuitry. To ensure accuracy and greater control, interconnecting cables have to be reliable and durable. Instrumentation cables from Universal Cable (M) Bhd (UCMB) are designed and manufactured to ensure ease of installation, minimum interference in transmission of signals and full compliance to recognized industrial standards.

Instrumentation cables have very diverse applications. Manufactured to BS 5308, these cables are designed for use in communication and instrumentation applications in and around process industries like oil exploration, cement, paper, steel, power generation and others. Cables made to specific rigid requirements are utilized in process controls, transmission of signals, computers, control systems and monitor networks as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants.



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# GENERAL SPECIFICATIONS

Instrumentation cables manufactured by UCMB are manufactured to BS 5308 which are suitable for operations at voltages up to and including 300V r.m.s core to earth and 500V r.m.s core to core



## A. Typical Categories

### Type 1 :

- a. PE insulated / PVC sheathed
- b. PVC insulated / PVC sheathed

### Type 2 :

- a. PE insulated, PE bedded, Single wire armoured and PVC oversheathed
- b. PVC insulated, PVC bedded, Single wire armoured and PVC oversheathed

## B. Conductor

Conductors shall be plain annealed copper wires which are solid (Class 1), stranded (Class 2) or flexible (Class 5)

## C. Insulation

The instrumentation cables may be insulated with :

- PVC ( polyvinyl chloride )
- PE ( polyethylene )
- XLPE ( cross-linked polyethylene)
- EPR ( ethylene propylene rubber )

## D. Screening

Two insulated conductors are uniformly twisted to form pairs which are then assembled. The paired conductors may be :

- Unscreened
- individually and overall screened
- overall screened

Screening materials can be aluminium tape, copper tape or copper wire braiding as per customers' specifications.

## E. Armouring

Instrumentation cables may be armoured or non armoured. Armouring which basically serves as mechanical protection can be in the form galvanized steel wire, tape or braiding wire.

## F. Sheathing

The sheath protects the cable from damage and provides resistance to abrasion, impact, moisture and chemicals.

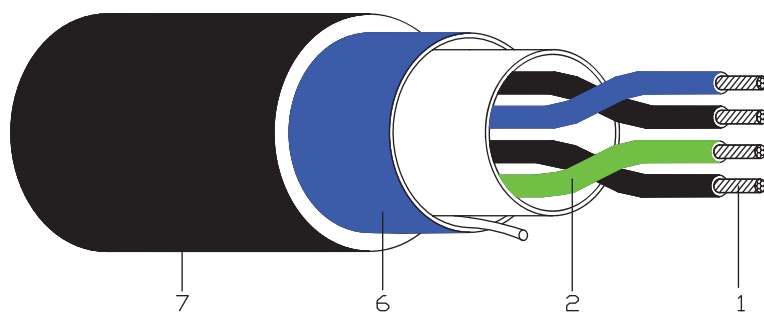
Sheathing may be :

- PVC (polyvinyl chloride)
- LSOH (Low Smoke Halogen Free)
- PE (polyethylene)
- EVA (ethylene vinyl acrylate)
- EMA (ethylene methyl acrylate)

# POLYETHYLENE INSULATED POLYVINYL CHLORIDE SHEATHED OVERALL SCREENED INSTRUMENT CABLE

## PE/PVC OVERALL SCREENED INSTRUMENT CABLE

### BS 5308 PART 1 : TYPE 1 300/500V



#### DESCRIPTION

Single pair and multi-pair cables with copper conductor, PE insulated, overall screened and PVC sheathed. Voltage rated at 300/500V.

#### CONSTRUCTION

##### 1 Conductor

Plain annealed circular stranded copper conductor, conform to BS 6360 class 2.

##### 2 Insulation

PE (polyethylene).

##### 3 Pairing

Two insulated cores shall be uniformly twisted together to form a pair with maximum lay length of 100 mm.

Note : Two pair cables with overall screen shall have four cores laid in quad formation.

##### 4 Pair identification

Colour code as per Appendix A.

##### 5 Cabling

Twisted pairs are laid up together, if necessary filled with non-hygrosopic material compatible with the insulation.

##### 6 Overall Screening

Accumulated pairs screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>

##### 7 Sheath

PVC (Polyvinyl Chloride).

**PE/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
1 x 0.5	7 / 0.3	0.6	0.8	6.6	62
2* x 0.5	7 / 0.3	0.6	0.8	7.5	75
3 x 0.5	7 / 0.3	0.6	1.1	10.2	119
4 x 0.5	7 / 0.3	0.6	1.1	11.1	129
5 x 0.5	7 / 0.3	0.6	1.1	12.1	156
6 x 0.5	7 / 0.3	0.6	1.2	13.4	180
7 x 0.5	7 / 0.3	0.6	1.2	13.4	196
8 x 0.5	7 / 0.3	0.6	1.2	14.5	220
9 x 0.5	7 / 0.3	0.6	1.2	15.60	243
10 x 0.5	7 / 0.3	0.6	1.2	17.0	282
11 x 0.5	7 / 0.3	0.6	1.2	17.0	297
12 x 0.5	7 / 0.3	0.6	1.2	17.5	317
13 x 0.5	7 / 0.3	0.6	1.2	17.5	332
14 x 0.5	7 / 0.3	0.6	1.2	17.5	349
15 x 0.5	7 / 0.3	0.6	1.2	18.5	376
16 x 0.5	7 / 0.3	0.6	1.2	18.5	393
17 x 0.5	7 / 0.3	0.6	1.3	19.7	420
18 x 0.5	7 / 0.3	0.6	1.3	19.7	436
19 x 0.5	7 / 0.3	0.6	1.3	19.7	453
20 x 0.5	7 / 0.3	0.6	1.3	20.7	460
21 x 0.5	7 / 0.3	0.6	1.3	20.7	492
22 x 0.5	7 / 0.3	0.6	1.3	21.8	516
23 x 0.5	7 / 0.3	0.6	1.3	21.8	533
24 x 0.5	7 / 0.3	0.6	1.3	23.1	553
25 x 0.5	7 / 0.3	0.6	1.3	23.1	569
26 x 0.5	7 / 0.3	0.6	1.3	23.1	585
27 x 0.5	7 / 0.3	0.6	1.3	23.6	610
28 x 0.5	7 / 0.3	0.6	1.3	24.5	632
29 x 0.5	7 / 0.3	0.6	1.3	24.5	648
30 x 0.5	7 / 0.3	0.6	1.3	24.5	646
31 x 0.5	7 / 0.3	0.6	1.5	25.8	697
32 x 0.5	7 / 0.3	0.6	1.5	25.8	713
33 x 0.5	7 / 0.3	0.6	1.5	25.8	729
34 x 0.5	7 / 0.3	0.6	1.5	26.8	768
35 x 0.5	7 / 0.3	0.6	1.5	26.8	784
36 x 0.5	7 / 0.3	0.6	1.5	26.8	780

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PE/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
1 x 0.75	7 / 0.37	0.6	0.8	7.0	72
2* x 0.75	7 / 0.37	0.6	0.8	8.0	91
3 x 0.75	7 / 0.37	0.6	1.1	11.0	144
4 x 0.75	7 / 0.37	0.6	1.1	12.0	158
5 x 0.75	7 / 0.37	0.6	1.2	13.3	199
6 x 0.75	7 / 0.37	0.6	1.2	14.5	223
7 x 0.75	7 / 0.37	0.6	1.2	14.5	259
8 x 0.75	7 / 0.37	0.6	1.2	15.7	298
9 x 0.75	7 / 0.37	0.6	1.2	16.9	320
10 x 0.75	7 / 0.37	0.6	1.3	18.6	361
11 x 0.75	7 / 0.37	0.6	1.3	18.6	400
12 x 0.75	7 / 0.37	0.6	1.3	19.2	409
13 x 0.75	7 / 0.37	0.6	1.3	19.2	430
14 x 0.75	7 / 0.37	0.6	1.3	19.2	453
15 x 0.75	7 / 0.37	0.6	1.3	20.3	471
16 x 0.75	7 / 0.37	0.6	1.3	20.3	510
17 x 0.75	7 / 0.37	0.6	1.3	21.4	535
18 x 0.75	7 / 0.37	0.6	1.3	21.4	556
19 x 0.75	7 / 0.37	0.6	1.3	21.4	579
20 x 0.75	7 / 0.37	0.6	1.5	22.9	630
21 x 0.75	7 / 0.37	0.6	1.5	22.9	652
22 x 0.75	7 / 0.37	0.6	1.5	24.0	684
23 x 0.75	7 / 0.37	0.6	1.5	24.0	706
24 x 0.75	7 / 0.37	0.6	1.5	25.5	735
25 x 0.75	7 / 0.37	0.6	1.5	25.5	756
26 x 0.75	7 / 0.37	0.6	1.5	25.5	778
27 x 0.75	7 / 0.37	0.6	1.5	26.0	810
28 x 0.75	7 / 0.37	0.6	1.7	27.4	866
29 x 0.75	7 / 0.37	0.6	1.7	27.4	888
30 x 0.75	7 / 0.37	0.6	1.7	27.4	910
31 x 0.75	7 / 0.37	0.6	1.7	28.5	924
32 x 0.75	7 / 0.37	0.6	1.7	28.5	946
33 x 0.75	7 / 0.37	0.6	1.7	28.5	968
34 x 0.75	7 / 0.37	0.6	1.7	29.7	1021
35 x 0.75	7 / 0.37	0.6	1.7	29.7	1043
36 x 0.75	7 / 0.37	0.6	1.7	29.7	1065

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PE/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
1 x 1.0	7 / 0.44	0.6	0.8	7.4	84
2* x 1.0	7 / 0.44	0.6	0.8	8.5	113
3 x 1.0	7 / 0.44	0.6	1.1	11.7	171
4 x 1.0	7 / 0.44	0.6	1.2	13.0	215
5 x 1.0	7 / 0.44	0.6	1.2	14.3	257
6 x 1.0	7 / 0.44	0.6	1.2	15.6	288
7 x 1.0	7 / 0.44	0.6	1.2	15.6	317
8 x 1.0	7 / 0.44	0.6	1.2	16.9	355
9 x 1.0	7 / 0.44	0.6	1.2	18.2	394
10 x 1.0	7 / 0.44	0.6	1.2	19.8	453
11 x 1.0	7 / 0.44	0.6	1.2	19.8	482
12 x 1.0	7 / 0.44	0.6	1.3	20.7	506
13 x 1.0	7 / 0.44	0.6	1.3	20.7	533
14 x 1.0	7 / 0.44	0.6	1.3	20.7	563
15 x 1.0	7 / 0.44	0.6	1.3	21.9	607
16 x 1.0	7 / 0.44	0.6	1.3	21.9	636
17 x 1.0	7 / 0.44	0.6	1.5	23.5	689
18 x 1.0	7 / 0.44	0.6	1.5	23.5	718
19 x 1.0	7 / 0.44	0.6	1.5	23.5	748
20 x 1.0	7 / 0.44	0.6	1.5	24.7	786
21 x 1.0	7 / 0.44	0.6	1.5	24.7	815
22 x 1.0	7 / 0.44	0.6	1.5	25.9	854
23 x 1.0	7 / 0.44	0.6	1.5	25.9	884
24 x 1.0	7 / 0.44	0.6	1.5	27.5	944
25 x 1.0	7 / 0.44	0.6	1.5	27.5	974
26 x 1.0	7 / 0.44	0.6	1.5	27.5	1004
27 x 1.0	7 / 0.44	0.6	1.5	28.1	1018
28 x 1.0	7 / 0.44	0.6	1.5	29.3	1058
29 x 1.0	7 / 0.44	0.6	1.5	29.3	1087
30 x 1.0	7 / 0.44	0.6	1.5	29.3	1116
31 x 1.0	7 / 0.44	0.6	1.7	30.8	1189
32 x 1.0	7 / 0.44	0.6	1.7	30.8	1218
33 x 1.0	7 / 0.44	0.6	1.7	30.8	1248
34 x 1.0	7 / 0.44	0.6	1.7	32.0	1281
35 x 1.0	7 / 0.44	0.6	1.7	32.0	1310
36 x 1.0	7 / 0.44	0.6	1.7	32.0	1338

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PE/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

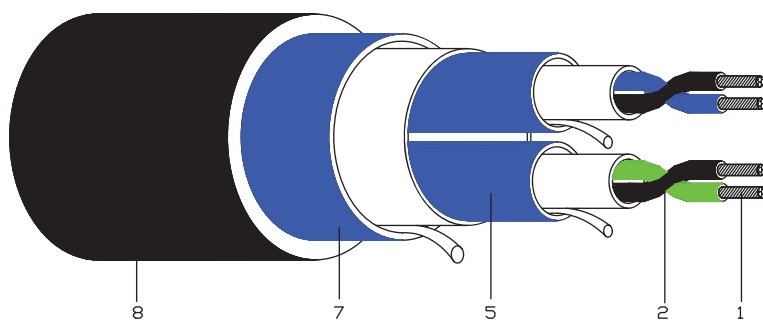
Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
1 x 1.5	7 / 0.53	0.6	0.8	8.0	102
2* x 1.5	7 / 0.53	0.6	0.9	9.3	144
3 x 1.5	7 / 0.53	0.6	1.2	12.9	218
4 x 1.5	7 / 0.53	0.6	1.2	14.1	268
5 x 1.5	7 / 0.53	0.6	1.2	15.5	322
6 x 1.5	7 / 0.53	0.6	1.2	16.9	362
7 x 1.5	7 / 0.53	0.6	1.2	16.9	402
8 x 1.5	7 / 0.53	0.6	1.3	18.6	461
9 x 1.5	7 / 0.53	0.6	1.3	20.0	512
10 x 1.5	7 / 0.53	0.6	1.3	21.9	588
11 x 1.5	7 / 0.53	0.6	1.3	21.9	629
12 x 1.5	7 / 0.53	0.6	1.5	23.0	670
13 x 1.5	7 / 0.53	0.6	1.5	23.0	708
14 x 1.5	7 / 0.53	0.6	1.5	23.0	748
15 x 1.5	7 / 0.53	0.6	1.5	24.3	805
16 x 1.5	7 / 0.53	0.6	1.5	24.3	846
17 x 1.5	7 / 0.53	0.6	1.5	25.6	888
18 x 1.5	7 / 0.53	0.6	1.5	25.6	927
19 x 1.5	7 / 0.53	0.6	1.5	25.6	967
20 x 1.5	7 / 0.53	0.6	1.5	27.0	1018
21 x 1.5	7 / 0.53	0.6	1.5	27.0	1057
22 x 1.5	7 / 0.53	0.6	1.7	28.9	1138
23 x 1.5	7 / 0.53	0.6	1.7	28.9	1179
24 x 1.5	7 / 0.53	0.6	1.7	30.6	1256
25 x 1.5	7 / 0.53	0.6	1.7	30.6	1296
26 x 1.5	7 / 0.53	0.6	1.7	30.6	1337
27 x 1.5	7 / 0.53	0.6	1.7	31.3	1358
28 x 1.5	7 / 0.53	0.6	1.7	32.4	1407
29 x 1.5	7 / 0.53	0.6	1.7	32.4	1446
30 x 1.5	7 / 0.53	0.6	1.7	32.4	1487
31 x 1.5	7 / 0.53	0.6	2.0	34.3	1594
32 x 1.5	7 / 0.53	0.6	2.0	34.3	1633
33 x 1.5	7 / 0.53	0.6	2.0	34.3	1673
34 x 1.5	7 / 0.53	0.6	2.0	35.6	1718
35 x 1.5	7 / 0.53	0.6	2.0	35.6	1757
36 x 1.5	7 / 0.53	0.6	2.0	35.6	1796

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

# POLYETHYLENE INSULATED POLYVINYL CHLORIDE SHEATHED OVERALL SCREENED INSTRUMENT CABLE

## PE/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE

### BS 5308 PART 1 : TYPE 1 300/500V



#### DESCRIPTION

Multi-pair cables with copper conductor, PE insulated, individual & overall screened and PVC sheathed. Voltage rated at 300/500V.

#### CONSTRUCTION

- 1 Conductor**  
Plain annealed circular stranded copper conductor, conform to BS 6360 class 2.
- 2 Insulation**  
PE (polyethylene).
- 3 Pairing**  
Two insulated cores shall be uniformly twisted together to form a pair with maximum lay length of 100 mm.
- 4 Pair identification**  
Colour code as per Appendix A.
- 5 Individual Screening**  
Each pair screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>
- 6 Cabling**  
Twisted pairs are laid up together, if necessary filled with non-hygroscopic material compatible with the insulation.
- 7 Overall Screening**  
Accumulated pairs screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>
- 8 Sheath**  
PVC (Polyvinyl Chloride).

**PE/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
2 x 0.5	7 / 0.3	0.6	0.9	11.1	123
3 x 0.5	7 / 0.3	0.6	1.1	12.2	159
4 x 0.5	7 / 0.3	0.6	1.2	13.6	196
5 x 0.5	7 / 0.3	0.6	1.2	14.9	236
6 x 0.5	7 / 0.3	0.6	1.2	16.2	263
7 x 0.5	7 / 0.3	0.6	1.2	16.2	288
8 x 0.5	7 / 0.3	0.6	1.2	17.6	330
9 x 0.5	7 / 0.3	0.6	1.2	19.0	376
10 x 0.5	7 / 0.3	0.6	1.2	20.7	409
11 x 0.5	7 / 0.3	0.6	1.2	20.7	434
12 x 0.5	7 / 0.3	0.6	1.3	21.6	457
13 x 0.5	7 / 0.3	0.6	1.3	21.7	481
14 x 0.5	7 / 0.3	0.6	1.3	21.7	506
15 x 0.5	7 / 0.3	0.6	1.3	22.9	544
16 x 0.5	7 / 0.3	0.6	1.3	22.9	569
17 x 0.5	7 / 0.3	0.6	1.3	24.2	597
18 x 0.5	7 / 0.3	0.6	1.3	24.2	622
19 x 0.5	7 / 0.3	0.6	1.3	24.2	647
20 x 0.5	7 / 0.3	0.6	1.3	25.4	688
21 x 0.5	7 / 0.3	0.6	1.3	25.4	712
22 x 0.5	7 / 0.3	0.6	1.5	27.2	783
23 x 0.5	7 / 0.3	0.6	1.5	27.2	809
24 x 0.5	7 / 0.3	0.6	1.5	28.9	846
25 x 0.5	7 / 0.3	0.6	1.5	28.9	871
26 x 0.5	7 / 0.3	0.6	1.5	28.9	896
27 x 0.5	7 / 0.3	0.6	1.5	29.6	910
28 x 0.5	7 / 0.3	0.6	1.5	30.7	943
29 x 0.5	7 / 0.3	0.6	1.5	30.7	967
30 x 0.5	7 / 0.3	0.6	1.5	30.7	992
31 x 0.5	7 / 0.3	0.6	1.7	32.3	1062
32 x 0.5	7 / 0.3	0.6	1.7	32.3	1086
33 x 0.5	7 / 0.3	0.6	1.7	32.3	1112
34 x 0.5	7 / 0.3	0.6	2.0	34.2	1190
35 x 0.5	7 / 0.3	0.6	2.0	34.2	1215
36 x 0.5	7 / 0.3	0.6	2.0	34.2	1239

**PE/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
2 x 0.75	7 / 0.37	0.6	1.1	12.2	153
3 x 0.75	7 / 0.37	0.6	1.2	13.2	191
4 x 0.75	7 / 0.37	0.6	1.2	14.4	233
5 x 0.75	7 / 0.37	0.6	1.2	15.8	276
6 x 0.75	7 / 0.37	0.6	1.2	17.3	310
7 x 0.75	7 / 0.37	0.6	1.2	17.3	341
8 x 0.75	7 / 0.37	0.6	1.3	19.0	401
9 x 0.75	7 / 0.37	0.6	1.3	20.5	457
10 x 0.75	7 / 0.37	0.6	1.3	22.3	497
11 x 0.75	7 / 0.37	0.6	1.3	22.3	528
12 x 0.75	7 / 0.37	0.6	1.5	23.5	567
13 x 0.75	7 / 0.37	0.6	1.5	23.6	597
14 x 0.75	7 / 0.37	0.6	1.5	23.6	628
15 x 0.75	7 / 0.37	0.6	1.5	24.9	676
16 x 0.75	7 / 0.37	0.6	1.5	24.9	707
17 x 0.75	7 / 0.37	0.6	1.5	26.3	742
18 x 0.75	7 / 0.37	0.6	1.5	26.3	773
19 x 0.75	7 / 0.37	0.6	1.5	26.3	805
20 x 0.75	7 / 0.37	0.6	1.7	28.0	882
21 x 0.75	7 / 0.37	0.6	1.7	28.0	912
22 x 0.75	7 / 0.37	0.6	1.7	29.6	973
23 x 0.75	7 / 0.37	0.6	1.7	29.6	1004
24 x 0.75	7 / 0.37	0.6	1.7	31.3	1046
25 x 0.75	7 / 0.37	0.6	1.7	31.3	1078
26 x 0.75	7 / 0.37	0.6	1.7	31.3	1110
27 x 0.75	7 / 0.37	0.6	1.7	32.1	1128
28 x 0.75	7 / 0.37	0.6	2.0	33.8	1215
29 x 0.75	7 / 0.37	0.6	2.0	33.8	1246
30 x 0.75	7 / 0.37	0.6	2.0	33.8	1278
31 x 0.75	7 / 0.37	0.6	2.0	35.2	1329
32 x 0.75	7 / 0.37	0.6	2.0	35.2	1360
33 x 0.75	7 / 0.37	0.6	2.0	35.2	1391
34 x 0.75	7 / 0.37	0.6	2.0	36.5	1429
35 x 0.75	7 / 0.37	0.6	2.0	36.5	1459
36 x 0.75	7 / 0.37	0.6	2.0	36.5	1490

**PE/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
2 x 1.0	7 / 0.44	0.6	1.1	12.9	176
3 x 1.0	7 / 0.44	0.6	1.2	13.9	220
4 x 1.0	7 / 0.44	0.6	1.2	15.3	270
5 x 1.0	7 / 0.44	0.6	1.2	16.8	323
6 x 1.0	7 / 0.44	0.6	1.3	18.6	372
7 x 1.0	7 / 0.44	0.6	1.3	18.6	410
8 x 1.0	7 / 0.44	0.6	1.3	20.2	472
9 x 1.0	7 / 0.44	0.6	1.3	21.8	538
10 x 1.0	7 / 0.44	0.6	1.3	23.8	586
11 x 1.0	7 / 0.44	0.6	1.3	23.8	625
12 x 1.0	7 / 0.44	0.6	1.5	25.0	669
13 x 1.0	7 / 0.44	0.6	1.5	25.1	706
14 x 1.0	7 / 0.44	0.6	1.5	25.1	745
15 x 1.0	7 / 0.44	0.6	1.5	26.5	801
16 x 1.0	7 / 0.44	0.6	1.5	26.5	840
17 x 1.0	7 / 0.44	0.6	1.7	28.4	909
18 x 1.0	7 / 0.44	0.6	1.7	28.4	947
19 x 1.0	7 / 0.44	0.6	1.7	28.4	986
20 x 1.0	7 / 0.44	0.6	1.7	30.0	1052
21 x 1.0	7 / 0.44	0.6	1.7	30.0	1089
22 x 1.0	7 / 0.44	0.6	1.7	31.5	1157
23 x 1.0	7 / 0.44	0.6	1.7	31.5	1196
24 x 1.0	7 / 0.44	0.6	2.0	34.0	1294
25 x 1.0	7 / 0.44	0.6	2.0	34.0	1333
26 x 1.0	7 / 0.44	0.6	2.0	34.0	1372
27 x 1.0	7 / 0.44	0.6	2.0	34.7	1394
28 x 1.0	7 / 0.44	0.6	2.0	36.0	1445
29 x 1.0	7 / 0.44	0.6	2.0	36.0	1483
30 x 1.0	7 / 0.44	0.6	2.0	36.0	1522
31 x 1.0	7 / 0.44	0.6	2.0	37.4	1582
32 x 1.0	7 / 0.44	0.6	2.0	37.4	1619
33 x 1.0	7 / 0.44	0.6	2.0	37.4	1658
34 x 1.0	7 / 0.44	0.6	2.0	38.9	1704
35 x 1.0	7 / 0.44	0.6	2.0	38.9	1742
36 x 1.0	7 / 0.44	0.6	2.0	38.9	1779

**PE/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

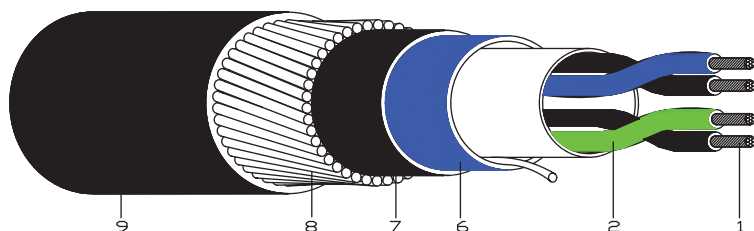
**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
2 x 1.5	7 / 0.53	0.6	1.2	14.2	216
3 x 1.5	7 / 0.53	0.6	1.2	15.1	265
4 x 1.5	7 / 0.53	0.6	1.2	16.6	326
5 x 1.5	7 / 0.53	0.6	1.3	18.5	402
6 x 1.5	7 / 0.53	0.6	1.3	20.2	452
7 x 1.5	7 / 0.53	0.6	1.3	20.2	502
8 x 1.5	7 / 0.53	0.6	1.3	21.9	564
9 x 1.5	7 / 0.53	0.6	1.5	24.1	650
10 x 1.5	7 / 0.53	0.6	1.5	26.3	744
11 x 1.5	7 / 0.53	0.6	1.5	26.3	794
12 x 1.5	7 / 0.53	0.6	1.5	27.2	822
13 x 1.5	7 / 0.53	0.6	1.5	27.3	869
14 x 1.5	7 / 0.53	0.6	1.5	27.3	920
15 x 1.5	7 / 0.53	0.6	1.7	29.4	1021
16 x 1.5	7 / 0.53	0.6	1.7	29.4	1071
17 x 1.5	7 / 0.53	0.6	1.7	31.0	1125
18 x 1.5	7 / 0.53	0.6	1.7	31.0	1173
19 x 1.5	7 / 0.53	0.6	1.7	31.0	1223
20 x 1.5	7 / 0.53	0.6	1.7	32.7	1287
21 x 1.5	7 / 0.53	0.6	1.7	32.7	1336
22 x 1.5	7 / 0.53	0.6	2.0	34.9	1449
23 x 1.5	7 / 0.53	0.6	2.0	34.9	1500
24 x 1.5	7 / 0.53	0.6	2.0	37.0	1597
25 x 1.5	7 / 0.53	0.6	2.0	37.0	1647
26 x 1.5	7 / 0.53	0.6	2.0	37.0	1697
27 x 1.5	7 / 0.53	0.6	2.0	37.9	1727
28 x 1.5	7 / 0.53	0.6	2.0	39.3	1790
29 x 1.5	7 / 0.53	0.6	2.0	39.3	1838
30 x 1.5	7 / 0.53	0.6	2.0	39.3	1889
31 x 1.5	7 / 0.53	0.6	2.0	40.9	1963
32 x 1.5	7 / 0.53	0.6	2.0	40.9	2012
33 x 1.5	7 / 0.53	0.6	2.0	40.9	2062
34 x 1.5	7 / 0.53	0.6	2.0	42.5	2118
35 x 1.5	7 / 0.53	0.6	2.0	42.5	2166
36 x 1.5	7 / 0.53	0.6	2.0	42.5	2215

# POLYETHYLENE INSULATED POLYETHYLENE BEDDING STEEL WIRE ARMoured POLYVINYL CHLORIDE SHEATHED OVERALL SCREENED INSTRUMENT CABLE

## PE/PE/SWA/PVC OVERALL SCREENED INSTRUMENT CABLE

### BS 5308 PART 1 : TYPE 1 300/500V



#### DESCRIPTION

Single pair and multi-pair cables with copper conductor, PE insulated, overall screened, PE bedding, Steel wire armoured and PVC sheathed. Voltage rated at 300/500V.

#### CONSTRUCTION

- 1 Conductor**  
Plain annealed circular stranded copper conductor, conform to IEC 60228 or BS 6360 class 2.
- 2 Insulation**  
PE (polyethylene).
- 3 Pairing**  
Two insulated cores shall be uniformly twisted together to form a pair with maximum lay length of 100 mm.  
  
Note : Two pair cables with overall screen shall have four cores laid in quad formation.
- 4 Pair identification**  
Colour code as per Appendix A.
- 5 Cabling**  
Twisted pairs are laid up together, if necessary filled with non-hygrosopic material compatible with the insulation.
- 6 Overall Screening**  
Accumulated pairs screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>.
- 7 Bedding**  
PE (polyethylene), colour black.
- 8 Armouring**  
Galvanized steel round wire over the bedding.
- 9 Sheath**  
PVC (Polyvinyl Chloride).

**PE/PE/SWA/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
1 x 0.5	7 / 0.3	0.6	0.8	0.9	1.3	11.0	239
2* x 0.5	7 / 0.3	0.6	0.8	0.9	1.3	11.9	278
3 x 0.5	7 / 0.3	0.6	1.1	0.9	1.3	14.6	383
4 x 0.5	7 / 0.3	0.6	1.1	0.9	1.4	15.7	434
5 x 0.5	7 / 0.3	0.6	1.1	0.9	1.4	16.7	482
6 x 0.5	7 / 0.3	0.6	1.2	1.25	1.5	18.9	655
7 x 0.5	7 / 0.3	0.6	1.2	1.25	1.5	18.9	672
8 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	20.2	743
9 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	21.3	811
10 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	22.7	875
11 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	22.7	892
12 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	23.2	915
13 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	23.2	930
14 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	23.2	946
15 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	24.2	1000
16 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	24.2	1017
17 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	26.3	1256
18 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	26.3	1272
19 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	26.3	1289
20 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	27.3	1354
21 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	27.3	1370
22 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	28.6	1459
23 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	28.6	1475
24 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	29.9	1547
25 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	29.9	1564
26 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	29.9	1581
27 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	30.4	1601
28 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.3	1663
29 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.3	1679
30 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.3	1696
31 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	32.8	1799
32 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	32.8	1814
33 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	32.8	1831
34 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	33.8	1892
35 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	33.8	1908
36 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	33.8	1924

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PE/PE/SWA/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
1 x 0.75	7 / 0.37	0.6	0.8	0.9	1.3	11.4	256
2* x 0.75	7 / 0.37	0.6	0.8	0.9	1.4	12.6	310
3 x 0.75	7 / 0.37	0.6	1.1	0.9	1.4	15.6	433
4 x 0.75	7 / 0.37	0.6	1.1	0.9	1.5	16.8	492
5 x 0.75	7 / 0.37	0.6	1.2	1.25	1.5	18.8	672
6 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	20.2	740
7 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	20.2	762
8 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	21.4	839
9 x 0.75	7 / 0.37	0.6	1.2	1.25	1.7	22.8	930
10 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.2	1171
11 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.2	1194
12 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.8	1225
13 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.8	1246
14 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.8	1268
15 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	27.1	1358
16 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	27.1	1381
17 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	28.2	1447
18 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	28.2	1469
19 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	28.2	1492
20 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	29.7	1600
21 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	29.7	1622
22 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.8	1706
23 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.8	1729
24 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	32.5	1828
25 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	32.5	1851
26 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	32.5	1874
27 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	33.0	1903
28 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	35.4	2253
29 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	35.4	2275
30 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	35.4	2298
31 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.5	2396
32 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.5	2418
33 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.5	2441
34 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.7	2532
35 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.7	2554
36 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.7	2576

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PE/PE/SWA/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 1**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
1 x 1.0	7 / 0.44	0.6	0.8	0.9	1.3	11.8	275
2* x 1.0	7 / 0.44	0.6	0.8	0.9	1.4	13.1	338
3 x 1.0	7 / 0.44	0.6	1.1	0.9	1.5	16.5	484
4 x 1.0	7 / 0.44	0.6	1.2	1.25	1.5	18.5	666
5 x 1.0	7 / 0.44	0.6	1.2	1.25	1.5	19.8	747
6 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	21.3	826
7 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	21.3	855
8 x 1.0	7 / 0.44	0.6	1.2	1.25	1.7	22.8	956
9 x 1.0	7 / 0.44	0.6	1.2	1.25	1.7	24.1	1047
10 x 1.0	7 / 0.44	0.6	1.2	1.25	1.7	25.7	1128
11 x 1.0	7 / 0.44	0.6	1.2	1.25	1.7	25.7	1158
12 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	27.5	1390
13 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	27.5	1418
14 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	27.5	1447
15 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	28.7	1534
16 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	28.7	1564
17 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	30.3	1672
18 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	30.3	1701
19 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	30.3	1730
20 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	31.5	1822
21 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	31.5	1850
22 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.9	1968
23 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.9	1998
24 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	34.7	2107
25 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	34.7	2137
26 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	34.7	2166
27 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	35.3	2210
28 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	36.5	2294
29 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	36.5	2323
30 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	36.5	2352
31 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.8	2737
32 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.8	2766
33 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.8	2796
34 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	40.2	2910
35 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	40.2	2939
36 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	40.2	2967

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PE/PE/SWA/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 2**

**300/500V**

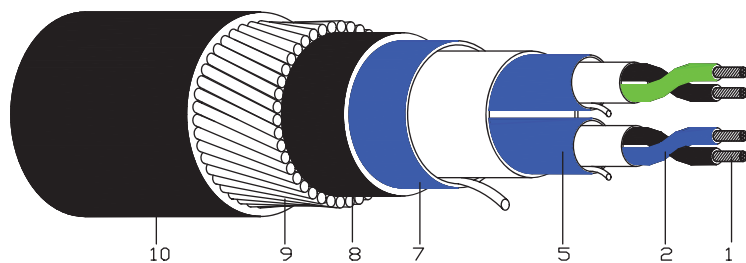
Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
1 x 1.5	7 / 0.53	0.6	0.8	0.9	1.4	12.6	309
2* x 1.5	7 / 0.53	0.6	0.9	0.9	1.4	13.9	383
3 x 1.5	7 / 0.53	0.6	1.2	1.25	1.5	18.4	666
4 x 1.5	7 / 0.53	0.6	1.2	1.25	1.6	19.8	762
5 x 1.5	7 / 0.53	0.6	1.2	1.25	1.6	21.2	856
6 x 1.5	7 / 0.53	0.6	1.2	1.25	1.7	22.8	952
7 x 1.5	7 / 0.53	0.6	1.2	1.25	1.7	22.8	992
8 x 1.5	7 / 0.53	0.6	1.3	1.6	1.7	25.2	1268
9 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	26.8	1397
10 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	28.7	1515
11 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	28.7	1556
12 x 1.5	7 / 0.53	0.6	1.5	1.6	1.8	29.8	1633
13 x 1.5	7 / 0.53	0.6	1.5	1.6	1.8	29.8	1670
14 x 1.5	7 / 0.53	0.6	1.5	1.6	1.8	29.8	1711
15 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	31.3	1835
16 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	31.3	1876
17 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	32.6	1961
18 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	32.6	2000
19 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	32.6	2041
20 x 1.5	7 / 0.53	0.6	1.5	1.6	2.0	34.2	2179
21 x 1.5	7 / 0.53	0.6	1.5	1.6	2.0	34.2	2218
22 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	36.9	2644
23 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	36.9	2685
24 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	38.6	2801
25 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	38.6	2842
26 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	38.6	2882
27 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	39.3	2936
28 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.6	3065
29 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.6	3104
30 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.6	3145
31 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	42.7	3327
32 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	42.7	3366
33 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	42.7	3407
34 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	44.0	3516
35 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	44.0	3555
36 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	44.0	3594

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

POLYETHYLENE INSULATED POLYETHYLENE  
BEDDING STEEL WIRE ARMoured  
POLYVINYL CHLORIDE SHEATHED INDIVIDUAL &  
OVERALL SCREENED INSTRUMENT CABLE

## PE/PE/SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE

BS 5308 PART 1 : TYPE 2  
300/500V



### DESCRIPTION

Multi-pair cables with copper conductor, PE insulated, individual & overall screened, PE bedding, Steel wire armoured and PVC sheathed. Voltage rated at 300/500V.

### CONSTRUCTION

- 1 Conductor**  
Plain annealed circular stranded copper conductor, conform to IEC 60228 or BS 6360 class 2.
- 2 Insulation**  
PE (polyethylene).
- 3 Pairing**  
Two insulated cores shall be uniformly twisted together to form a pair with maximum lay length of 100 mm.
- 4 Pair identification**  
Colour code as per Appendix A.
- 5 Individual Screening**  
Each pair screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>
- 6 Cabling**  
Twisted pairs are laid up together, if necessary filled with non-hygroscopic material compatible with the insulation.
- 7 Overall Screening**  
Accumulated pairs screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>
- 8 Bedding**  
PE (polyethylene), colour black.
- 9 Armouring**  
Galvanized steel round wire over the bedding.
- 10 Sheath**  
PVC (Polyvinyl Chloride).

**PE/PE/SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
2 x 0.5	7 / 0.3	0.6	0.9	0.9	1.4	15.7	418
3 x 0.5	7 / 0.3	0.6	1.1	0.9	1.5	17.0	483
4 x 0.5	7 / 0.3	0.6	1.2	1.25	1.5	19.1	665
5 x 0.5	7 / 0.3	0.6	1.2	1.25	1.5	20.4	729
6 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	21.9	818
7 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	21.9	843
8 x 0.5	7 / 0.3	0.6	1.2	1.25	1.7	23.5	925
9 x 0.5	7 / 0.3	0.6	1.2	1.25	1.7	24.9	1015
10 x 0.5	7 / 0.3	0.6	1.2	1.25	1.7	26.6	1100
11 x 0.5	7 / 0.3	0.6	1.2	1.25	1.7	26.6	1124
12 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	28.2	1361
13 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	28.3	1386
14 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	28.3	1412
15 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	29.5	1481
16 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	29.5	1506
17 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.0	1616
18 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.0	1641
19 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.0	1666
20 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	32.2	1733
21 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	32.2	1757
22 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	34.2	1899
23 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	34.2	1924
24 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	35.9	2024
25 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	35.9	2048
26 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	35.9	2072
27 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	36.6	2139
28 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	37.7	2215
29 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	37.7	2239
30 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	37.7	2264
31 x 0.5	7 / 0.3	0.6	1.7	2.0	2.1	40.5	2671
32 x 0.5	7 / 0.3	0.6	1.7	2.0	2.1	40.5	2696
33 x 0.5	7 / 0.3	0.6	1.7	2.0	2.1	40.5	2720
34 x 0.5	7 / 0.3	0.6	2.0	2.0	2.2	42.6	2923
35 x 0.5	7 / 0.3	0.6	2.0	2.0	2.2	42.6	2947
36 x 0.5	7 / 0.3	0.6	2.0	2.0	2.2	42.6	2971

**PE/PE/SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
2 x 0.75	7 / 0.37	0.6	1.1	0.9	1.5	17.0	478
3 x 0.75	7 / 0.37	0.6	1.2	1.25	1.5	18.7	647
4 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	20.1	735
5 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	21.5	822
6 x 0.75	7 / 0.37	0.6	1.2	1.25	1.7	23.2	911
7 x 0.75	7 / 0.37	0.6	1.2	1.25	1.7	23.2	942
8 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.6	1192
9 x 0.75	7 / 0.37	0.6	1.3	1.60	1.8	27.3	1314
10 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	29.1	1424
11 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	29.1	1455
12 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.3	1549
13 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.4	1580
14 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.4	1612
15 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	31.9	1706
16 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	31.9	1737
17 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	33.3	1846
18 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	33.3	1876
19 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	33.3	1908
20 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.0	2277
21 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.0	2307
22 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.6	2458
23 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.6	2489
24 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	39.3	2599
25 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	39.3	2629
26 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	39.3	2660
27 x 0.75	7 / 0.37	0.6	1.7	2.0	2.1	40.3	2758
28 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	42.2	2943
29 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	42.2	2974
30 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	42.2	3005
31 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	43.6	3094
32 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	43.6	3125
33 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	43.6	3155
34 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	44.9	3261
35 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	44.9	3292
36 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	44.9	3322

**PE/PE/SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
2 x 1.0	7 / 0.44	0.6	1.1	0.9	1.5	17.7	517
3 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	19.6	706
4 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	21.0	799
5 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	22.5	899
6 x 1.0	7 / 0.44	0.6	1.3	1.6	1.7	25.2	1166
7 x 1.0	7 / 0.44	0.6	1.3	1.6	1.7	25.2	1205
8 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	27.0	1336
9 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	28.6	1465
10 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	30.6	1588
11 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	30.6	1627
12 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.0	1721
13 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.1	1766
14 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.1	1805
15 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	33.5	1891
16 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	33.5	1928
17 x 1.0	7 / 0.44	0.6	1.7	1.6	2.0	35.6	2104
18 x 1.0	7 / 0.44	0.6	1.7	1.6	2.0	35.6	2141
19 x 1.0	7 / 0.44	0.6	1.7	1.6	2.0	35.6	2181
20 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.0	2566
21 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.0	2577
22 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	39.7	2755
23 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	39.7	2795
24 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	42.4	2994
25 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	42.4	3032
26 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	42.4	3070
27 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	43.1	3156
28 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	44.4	3272
29 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	44.4	3309
30 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	44.4	3349
31 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	45.8	3441
32 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	45.8	3479
33 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	45.8	3516
34 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	47.3	3663
35 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	47.3	3700
36 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	47.3	3738

**PE/PE/SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 1 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
2 x 1.5	7 / 0.53	0.6	1.2	1.25	1.6	19.9	711
3 x 1.5	7 / 0.53	0.6	1.2	1.25	1.6	20.8	789
4 x 1.5	7 / 0.53	0.6	1.2	1.25	1.7	22.5	905
5 x 1.5	7 / 0.53	0.6	1.3	1.6	1.7	25.1	1190
6 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	27.0	1316
7 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	27.0	1366
8 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	28.7	1505
9 x 1.5	7 / 0.53	0.6	1.5	1.6	1.8	30.9	1687
10 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	33.3	1847
11 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	33.3	1897
12 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	34.2	1958
13 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	34.3	2014
14 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	34.3	2064
15 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	37.4	2504
16 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	37.4	2554
17 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	39.0	2699
18 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	39.0	2747
19 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	39.0	2798
20 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.9	2963
21 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.9	3011
22 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	43.3	3246
23 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	43.3	3297
24 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	45.4	3460
25 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	45.4	3510
26 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	45.4	3560
27 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	46.3	3625
28 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	50.1	4227
29 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	50.1	4275
30 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	50.1	4325
31 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	51.7	4498
32 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	51.7	4547
33 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	51.7	4597
34 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	53.3	4752
35 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	53.3	4800
36 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	53.3	4848

# APPENDIX A : IDENTIFICATION OF PAIR TO BS 5308 PART 1

## A) Identification of Pairs by colour code

Pair reference number	a-wire	b-wire	Pair reference number	a-wire	b-wire
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

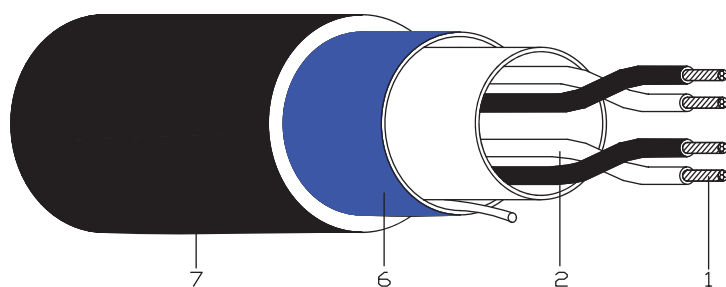
Note : Two pairs collectively screened cable shall be cabled in quad formation and colour coded in clockwise rotation : Black, Blue, Green and Brown.

## B ) Alternative method of identification of cable pairs.

Pair number	a-wire	b-wire
1	White	Black
2 to 50	White with pair number.	Black with pair number.

POLYVINYL CHLORIDE INSULATED POLYVINYL  
CHLORIDE SHEATHED OVERALL SCREENED  
INSTRUMENT CABLE

PVC/PVC OVERALL SCREENED  
INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1  
300/500V



#### DESCRIPTION

Single pair and multi-pair cables with copper conductor, PVC insulated, overall screened and PVC sheathed.  
Voltage rated at 300/500V.

#### CONSTRUCTION

##### 1 Conductor

Plain annealed circular stranded copper conductor, conform to BS 6360 class 2.

##### 2 Insulation

PVC (Polyvinyl Chloride).

##### 3 Pairing

Two insulated cores shall be uniformly twisted together to form a pair with maximum lay length of 100 mm.

Note : Two pair cables with overall screen shall have four cores laid in quad formation.

##### 4 Pair identification

Colour code as per Appendix B

##### 5 Cabling

Twisted pairs are laid up together, if necessary filled with non-hygrosopic material compatible with the insulation.

##### 6 Overall Screening

Accumulated pairs screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>.

##### 7 Sheath

PVC (Polyvinyl Chloride).

**PVC/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
1 x 0.5	7 / 0.3	0.6	0.8	6.6	65
2* x 0.5	7 / 0.3	0.6	0.8	7.5	83
3 x 0.5	7 / 0.3	0.6	1.1	10.2	130
4 x 0.5	7 / 0.3	0.6	1.1	11.1	144
5 x 0.5	7 / 0.3	0.6	1.1	12.1	175
6 x 0.5	7 / 0.3	0.6	1.2	13.4	203
7 x 0.5	7 / 0.3	0.6	1.2	13.4	223
8 x 0.5	7 / 0.3	0.6	1.2	14.5	250
9 x 0.5	7 / 0.3	0.6	1.2	15.60	277
10 x 0.5	7 / 0.3	0.6	1.2	17.0	319
11 x 0.5	7 / 0.3	0.6	1.2	17.0	339
12 x 0.5	7 / 0.3	0.6	1.2	17.5	362
13 x 0.5	7 / 0.3	0.6	1.2	17.5	381
14 x 0.5	7 / 0.3	0.6	1.2	17.5	402
15 x 0.5	7 / 0.3	0.6	1.2	18.5	432
16 x 0.5	7 / 0.3	0.6	1.2	18.5	453
17 x 0.5	7 / 0.3	0.6	1.3	19.7	484
18 x 0.5	7 / 0.3	0.6	1.3	19.7	504
19 x 0.5	7 / 0.3	0.6	1.3	19.7	524
20 x 0.5	7 / 0.3	0.6	1.3	20.7	535
21 x 0.5	7 / 0.3	0.6	1.3	20.7	570
22 x 0.5	7 / 0.3	0.6	1.3	21.8	599
23 x 0.5	7 / 0.3	0.6	1.3	21.8	619
24 x 0.5	7 / 0.3	0.6	1.3	23.1	644
25 x 0.5	7 / 0.3	0.6	1.3	23.1	663
26 x 0.5	7 / 0.3	0.6	1.3	23.1	683
27 x 0.5	7 / 0.3	0.6	1.3	23.6	712
28 x 0.5	7 / 0.3	0.6	1.3	24.5	738
29 x 0.5	7 / 0.3	0.6	1.3	24.5	757
30 x 0.5	7 / 0.3	0.6	1.3	24.5	759
31 x 0.5	7 / 0.3	0.6	1.5	25.8	814
32 x 0.5	7 / 0.3	0.6	1.5	25.8	833
33 x 0.5	7 / 0.3	0.6	1.5	25.8	853
34 x 0.5	7 / 0.3	0.6	1.5	26.8	896
35 x 0.5	7 / 0.3	0.6	1.5	26.8	916
36 x 0.5	7 / 0.3	0.6	1.5	26.8	915

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation.

**PVC/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
1 x 0.75	7 / 0.37	0.6	0.8	7.0	76
2* x 0.75	7 / 0.37	0.6	0.8	8.0	99
3 x 0.75	7 / 0.37	0.6	1.1	11.0	157
4 x 0.75	7 / 0.37	0.6	1.1	12.0	176
5 x 0.75	7 / 0.37	0.6	1.2	13.3	220
6 x 0.75	7 / 0.37	0.6	1.2	14.5	249
7 x 0.75	7 / 0.37	0.6	1.2	14.5	289
8 x 0.75	7 / 0.37	0.6	1.2	15.7	333
9 x 0.75	7 / 0.37	0.6	1.2	16.9	359
10 x 0.75	7 / 0.37	0.6	1.3	18.6	404
11 x 0.75	7 / 0.37	0.6	1.3	18.6	447
12 x 0.75	7 / 0.37	0.6	1.3	19.2	461
13 x 0.75	7 / 0.37	0.6	1.3	19.2	486
14 x 0.75	7 / 0.37	0.6	1.3	19.2	513
15 x 0.75	7 / 0.37	0.6	1.3	20.3	536
16 x 0.75	7 / 0.37	0.6	1.3	20.3	579
17 x 0.75	7 / 0.37	0.6	1.3	21.4	608
18 x 0.75	7 / 0.37	0.6	1.3	21.4	634
19 x 0.75	7 / 0.37	0.6	1.3	21.4	661
20 x 0.75	7 / 0.37	0.6	1.5	22.9	717
21 x 0.75	7 / 0.37	0.6	1.5	22.9	743
22 x 0.75	7 / 0.37	0.6	1.5	24.0	779
23 x 0.75	7 / 0.37	0.6	1.5	24.0	806
24 x 0.75	7 / 0.37	0.6	1.5	25.5	838
25 x 0.75	7 / 0.37	0.6	1.5	25.5	864
26 x 0.75	7 / 0.37	0.6	1.5	25.5	891
27 x 0.75	7 / 0.37	0.6	1.5	26.0	927
28 x 0.75	7 / 0.37	0.6	1.7	27.4	987
29 x 0.75	7 / 0.37	0.6	1.7	27.4	1013
30 x 0.75	7 / 0.37	0.6	1.7	27.4	1040
31 x 0.75	7 / 0.37	0.6	1.7	28.5	1058
32 x 0.75	7 / 0.37	0.6	1.7	28.5	1085
33 x 0.75	7 / 0.37	0.6	1.7	28.5	1111
34 x 0.75	7 / 0.37	0.6	1.7	29.7	1168
35 x 0.75	7 / 0.37	0.6	1.7	29.7	1194
36 x 0.75	7 / 0.37	0.6	1.7	29.7	1220

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PVC/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
1 x 1.0	7 / 0.44	0.6	0.8	7.4	89
2* x 1.0	7 / 0.44	0.6	0.8	8.5	123
3 x 1.0	7 / 0.44	0.6	1.1	11.7	186
4 x 1.0	7 / 0.44	0.6	1.2	13.0	235
5 x 1.0	7 / 0.44	0.6	1.2	14.3	281
6 x 1.0	7 / 0.44	0.6	1.2	15.6	317
7 x 1.0	7 / 0.44	0.6	1.2	15.6	351
8 x 1.0	7 / 0.44	0.6	1.2	16.9	394
9 x 1.0	7 / 0.44	0.6	1.2	18.2	438
10 x 1.0	7 / 0.44	0.6	1.2	19.8	502
11 x 1.0	7 / 0.44	0.6	1.2	19.8	536
12 x 1.0	7 / 0.44	0.6	1.3	20.7	565
13 x 1.0	7 / 0.44	0.6	1.3	20.7	597
14 x 1.0	7 / 0.44	0.6	1.3	20.7	632
15 x 1.0	7 / 0.44	0.6	1.3	21.9	680
16 x 1.0	7 / 0.44	0.6	1.3	21.9	715
17 x 1.0	7 / 0.44	0.6	1.5	23.5	773
18 x 1.0	7 / 0.44	0.6	1.5	23.5	806
19 x 1.0	7 / 0.44	0.6	1.5	23.5	841
20 x 1.0	7 / 0.44	0.6	1.5	24.7	884
21 x 1.0	7 / 0.44	0.6	1.5	24.7	918
22 x 1.0	7 / 0.44	0.6	1.5	25.9	962
23 x 1.0	7 / 0.44	0.6	1.5	25.9	997
24 x 1.0	7 / 0.44	0.6	1.5	27.5	1062
25 x 1.0	7 / 0.44	0.6	1.5	27.5	1096
26 x 1.0	7 / 0.44	0.6	1.5	27.5	1131
27 x 1.0	7 / 0.44	0.6	1.5	28.1	1150
28 x 1.0	7 / 0.44	0.6	1.5	29.3	1195
29 x 1.0	7 / 0.44	0.6	1.5	29.3	1229
30 x 1.0	7 / 0.44	0.6	1.5	29.3	1263
31 x 1.0	7 / 0.44	0.6	1.7	30.8	1341
32 x 1.0	7 / 0.44	0.6	1.7	30.8	1375
33 x 1.0	7 / 0.44	0.6	1.7	30.8	1409
34 x 1.0	7 / 0.44	0.6	1.7	32.0	1448
35 x 1.0	7 / 0.44	0.6	1.7	32.0	1481
36 x 1.0	7 / 0.44	0.6	1.7	32.0	1515

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation.

**PVC/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1**

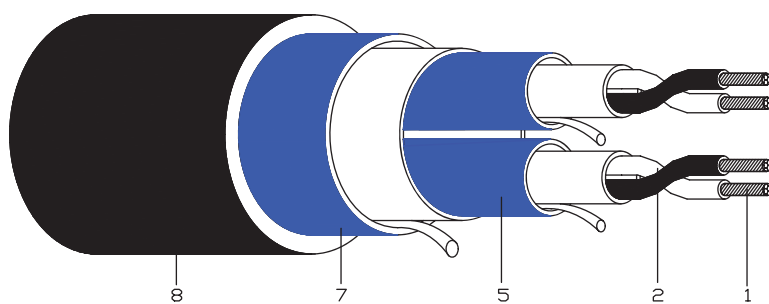
**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
1 x 1.5	7 / 0.53	0.6	0.8	8.0	107
2* x 1.5	7 / 0.53	0.6	0.9	9.3	155
3 x 1.5	7 / 0.53	0.6	1.2	12.9	235
4 x 1.5	7 / 0.53	0.6	1.2	14.1	291
5 x 1.5	7 / 0.53	0.6	1.2	15.5	350
6 x 1.5	7 / 0.53	0.6	1.2	16.9	396
7 x 1.5	7 / 0.53	0.6	1.2	16.9	442
8 x 1.5	7 / 0.53	0.6	1.3	18.6	507
9 x 1.5	7 / 0.53	0.6	1.3	20.0	563
10 x 1.5	7 / 0.53	0.6	1.3	21.9	645
11 x 1.5	7 / 0.53	0.6	1.3	21.9	691
12 x 1.5	7 / 0.53	0.6	1.5	23.0	738
13 x 1.5	7 / 0.53	0.6	1.5	23.0	781
14 x 1.5	7 / 0.53	0.6	1.5	23.0	828
15 x 1.5	7 / 0.53	0.6	1.5	24.3	890
16 x 1.5	7 / 0.53	0.6	1.5	24.3	937
17 x 1.5	7 / 0.53	0.6	1.5	25.6	984
18 x 1.5	7 / 0.53	0.6	1.5	25.6	1029
19 x 1.5	7 / 0.53	0.6	1.5	25.6	1075
20 x 1.5	7 / 0.53	0.6	1.5	27.0	1131
21 x 1.5	7 / 0.53	0.6	1.5	27.0	1176
22 x 1.5	7 / 0.53	0.6	1.7	28.9	1263
23 x 1.5	7 / 0.53	0.6	1.7	28.9	1309
24 x 1.5	7 / 0.53	0.6	1.7	30.6	1392
25 x 1.5	7 / 0.53	0.6	1.7	30.6	1438
26 x 1.5	7 / 0.53	0.6	1.7	30.6	1484
27 x 1.5	7 / 0.53	0.6	1.7	31.3	1511
28 x 1.5	7 / 0.53	0.6	1.7	32.4	1566
29 x 1.5	7 / 0.53	0.6	1.7	32.4	1611
30 x 1.5	7 / 0.53	0.6	1.7	32.4	1657
31 x 1.5	7 / 0.53	0.6	2.0	34.3	1769
32 x 1.5	7 / 0.53	0.6	2.0	34.3	1814
33 x 1.5	7 / 0.53	0.6	2.0	34.3	1860
34 x 1.5	7 / 0.53	0.6	2.0	35.6	1911
35 x 1.5	7 / 0.53	0.6	2.0	35.6	1955
36 x 1.5	7 / 0.53	0.6	2.0	35.6	2000

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

POLYVINYL CHLORIDE INSULATED POLYVINYL  
CHLORIDE SHEATHED INDIVIDUAL &  
OVERALL SCREENED INSTRUMENT CABLE

PVC/PVC INDIVIDUAL & OVERALL  
SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1  
300/500V



**DESCRIPTION**

Multi-pair cables with copper conductor, PVC insulated, individual & overall screened and PVC sheathed.  
Voltage rated at 300/500V.

**CONSTRUCTION**

**1 Conductor**

Plain annealed circular stranded copper conductor, conform to BS 6360 class 2.

**2 Insulation**

PVC (Polyvinyl Chloride).

**3 Pairing**

Two insulated cores shall be uniformly twisted together to form a pair with maximum lay length of 100 mm.

Note : Two pair cables with overall screen shall have four cores laid in quad formation.

**4 Pair identification**

Colour code as per Appendix B

**5 Individual Screening**

Each pair screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>.

**6 Cabling**

Twisted pairs are laid up together, if necessary filled with non-hygroscopic material compatible with the insulation

**7 Overall Screening**

Accumulated pairs screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>.

**8 Sheath**

PVC (Polyvinyl Chloride).

**PVC/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
2 x 0.5	7 / 0.3	0.6	0.9	11.1	130
3 x 0.5	7 / 0.3	0.6	1.1	12.2	170
4 x 0.5	7 / 0.3	0.6	1.2	13.6	212
5 x 0.5	7 / 0.3	0.6	1.2	14.9	254
6 x 0.5	7 / 0.3	0.6	1.2	16.2	285
7 x 0.5	7 / 0.3	0.6	1.2	16.2	314
8 x 0.5	7 / 0.3	0.6	1.2	17.6	360
9 x 0.5	7 / 0.3	0.6	1.2	19.0	410
10 x 0.5	7 / 0.3	0.6	1.2	20.7	446
11 x 0.5	7 / 0.3	0.6	1.2	20.7	475
12 x 0.5	7 / 0.3	0.6	1.3	21.6	502
13 x 0.5	7 / 0.3	0.6	1.3	21.7	529
14 x 0.5	7 / 0.3	0.6	1.3	21.7	558
15 x 0.5	7 / 0.3	0.6	1.3	22.9	600
16 x 0.5	7 / 0.3	0.6	1.3	22.9	629
17 x 0.5	7 / 0.3	0.6	1.3	24.2	661
18 x 0.5	7 / 0.3	0.6	1.3	24.2	689
19 x 0.5	7 / 0.3	0.6	1.3	24.2	718
20 x 0.5	7 / 0.3	0.6	1.3	25.4	763
21 x 0.5	7 / 0.3	0.6	1.3	25.4	791
22 x 0.5	7 / 0.3	0.6	1.5	27.2	866
23 x 0.5	7 / 0.3	0.6	1.5	27.2	895
24 x 0.5	7 / 0.3	0.6	1.5	28.9	936
25 x 0.5	7 / 0.3	0.6	1.5	28.9	965
26 x 0.5	7 / 0.3	0.6	1.5	28.9	994
27 x 0.5	7 / 0.3	0.6	1.5	29.6	1011
28 x 0.5	7 / 0.3	0.6	1.5	30.7	1048
29 x 0.5	7 / 0.3	0.6	1.5	30.7	1076
30 x 0.5	7 / 0.3	0.6	1.5	30.7	1105
31 x 0.5	7 / 0.3	0.6	1.7	32.3	1179
32 x 0.5	7 / 0.3	0.6	1.7	32.3	1207
33 x 0.5	7 / 0.3	0.6	1.7	32.3	1236
34 x 0.5	7 / 0.3	0.6	2.0	34.2	1318
35 x 0.5	7 / 0.3	0.6	2.0	34.2	1346
36 x 0.5	7 / 0.3	0.6	2.0	34.2	1374

**PVC/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
2 x 0.75	7 / 0.37	0.6	1.1	12.2	162
3 x 0.75	7 / 0.37	0.6	1.2	13.2	204
4 x 0.75	7 / 0.37	0.6	1.2	14.4	250
5 x 0.75	7 / 0.37	0.6	1.2	15.8	298
6 x 0.75	7 / 0.37	0.6	1.2	17.3	336
7 x 0.75	7 / 0.37	0.6	1.2	17.3	371
8 x 0.75	7 / 0.37	0.6	1.3	19.0	436
9 x 0.75	7 / 0.37	0.6	1.3	20.5	496
10 x 0.75	7 / 0.37	0.6	1.3	22.3	540
11 x 0.75	7 / 0.37	0.6	1.3	22.3	576
12 x 0.75	7 / 0.37	0.6	1.5	23.5	618
13 x 0.75	7 / 0.37	0.6	1.5	23.6	653
14 x 0.75	7 / 0.37	0.6	1.5	23.6	689
15 x 0.75	7 / 0.37	0.6	1.5	24.9	740
16 x 0.75	7 / 0.37	0.6	1.5	24.9	776
17 x 0.75	7 / 0.37	0.6	1.5	26.3	816
18 x 0.75	7 / 0.37	0.6	1.5	26.3	851
19 x 0.75	7 / 0.37	0.6	1.5	26.3	887
20 x 0.75	7 / 0.37	0.6	1.7	28.0	968
21 x 0.75	7 / 0.37	0.6	1.7	28.0	1003
22 x 0.75	7 / 0.37	0.6	1.7	29.6	1068
23 x 0.75	7 / 0.37	0.6	1.7	29.6	1104
24 x 0.75	7 / 0.37	0.6	1.7	31.3	1150
25 x 0.75	7 / 0.37	0.6	1.7	31.3	1186
26 x 0.75	7 / 0.37	0.6	1.7	31.3	1222
27 x 0.75	7 / 0.37	0.6	1.7	32.1	1244
28 x 0.75	7 / 0.37	0.6	2.0	33.8	1336
29 x 0.75	7 / 0.37	0.6	2.0	33.8	1371
30 x 0.75	7 / 0.37	0.6	2.0	33.8	1407
31 x 0.75	7 / 0.37	0.6	2.0	35.2	1463
32 x 0.75	7 / 0.37	0.6	2.0	35.2	1498
33 x 0.75	7 / 0.37	0.6	2.0	35.2	1534
34 x 0.75	7 / 0.37	0.6	2.0	36.5	1576
35 x 0.75	7 / 0.37	0.6	2.0	36.5	1611
36 x 0.75	7 / 0.37	0.6	2.0	36.5	1645

**PVC/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1**

**300/500V**

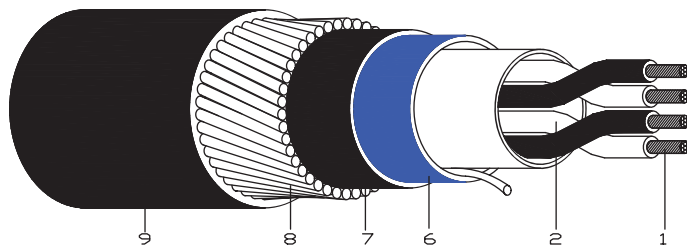
Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
2 x 1.0	7 / 0.44	0.6	1.1	12.9	186
3 x 1.0	7 / 0.44	0.6	1.2	13.9	235
4 x 1.0	7 / 0.44	0.6	1.2	15.3	289
5 x 1.0	7 / 0.44	0.6	1.2	16.8	347
6 x 1.0	7 / 0.44	0.6	1.3	18.6	401
7 x 1.0	7 / 0.44	0.6	1.3	18.6	445
8 x 1.0	7 / 0.44	0.6	1.3	20.2	511
9 x 1.0	7 / 0.44	0.6	1.3	21.8	582
10 x 1.0	7 / 0.44	0.6	1.3	23.8	635
11 x 1.0	7 / 0.44	0.6	1.3	23.8	679
12 x 1.0	7 / 0.44	0.6	1.5	25.0	728
13 x 1.0	7 / 0.44	0.6	1.5	25.1	770
14 x 1.0	7 / 0.44	0.6	1.5	25.1	813
15 x 1.0	7 / 0.44	0.6	1.5	26.5	875
16 x 1.0	7 / 0.44	0.6	1.5	26.5	919
17 x 1.0	7 / 0.44	0.6	1.7	28.4	993
18 x 1.0	7 / 0.44	0.6	1.7	28.4	1035
19 x 1.0	7 / 0.44	0.6	1.7	28.4	1079
20 x 1.0	7 / 0.44	0.6	1.7	30.0	1150
21 x 1.0	7 / 0.44	0.6	1.7	30.0	1192
22 x 1.0	7 / 0.44	0.6	1.7	31.5	1264
23 x 1.0	7 / 0.44	0.6	1.7	31.5	1308
24 x 1.0	7 / 0.44	0.6	2.0	34.0	1412
25 x 1.0	7 / 0.44	0.6	2.0	34.0	1456
26 x 1.0	7 / 0.44	0.6	2.0	34.0	1500
27 x 1.0	7 / 0.44	0.6	2.0	34.7	1526
28 x 1.0	7 / 0.44	0.6	2.0	36.0	1582
29 x 1.0	7 / 0.44	0.6	2.0	36.0	1625
30 x 1.0	7 / 0.44	0.6	2.0	36.0	1669
31 x 1.0	7 / 0.44	0.6	2.0	37.4	1734
32 x 1.0	7 / 0.44	0.6	2.0	37.4	1776
33 x 1.0	7 / 0.44	0.6	2.0	37.4	1820
34 x 1.0	7 / 0.44	0.6	2.0	38.9	1871
35 x 1.0	7 / 0.44	0.6	2.0	38.9	1913
36 x 1.0	7 / 0.44	0.6	2.0	38.9	1956

**PVC/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 1**

**300/500V**

Size	Number /Wire Diameter	Nominal Insulation thickness	Nominal sheath thickness	Nominal Overall Diameter	Approx.Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	Kg / Km
2 x 1.5	7 / 0.53	0.6	1.2	14.2	227
3 x 1.5	7 / 0.53	0.6	1.2	15.1	282
4 x 1.5	7 / 0.53	0.6	1.2	16.6	349
5 x 1.5	7 / 0.53	0.6	1.3	18.5	430
6 x 1.5	7 / 0.53	0.6	1.3	20.2	486
7 x 1.5	7 / 0.53	0.6	1.3	20.2	542
8 x 1.5	7 / 0.53	0.6	1.3	21.9	609
9 x 1.5	7 / 0.53	0.6	1.5	24.1	701
10 x 1.5	7 / 0.53	0.6	1.5	26.3	801
11 x 1.5	7 / 0.53	0.6	1.5	26.3	857
12 x 1.5	7 / 0.53	0.6	1.5	27.2	890
13 x 1.5	7 / 0.53	0.6	1.5	27.3	943
14 x 1.5	7 / 0.53	0.6	1.5	27.3	999
15 x 1.5	7 / 0.53	0.6	1.7	29.4	1106
16 x 1.5	7 / 0.53	0.6	1.7	29.4	1161
17 x 1.5	7 / 0.53	0.6	1.7	31.0	1221
18 x 1.5	7 / 0.53	0.6	1.7	31.0	1275
19 x 1.5	7 / 0.53	0.6	1.7	31.0	1331
20 x 1.5	7 / 0.53	0.6	1.7	32.7	1400
21 x 1.5	7 / 0.53	0.6	1.7	32.7	1455
22 x 1.5	7 / 0.53	0.6	2.0	34.9	1574
23 x 1.5	7 / 0.53	0.6	2.0	34.9	1630
24 x 1.5	7 / 0.53	0.6	2.0	37.0	1733
25 x 1.5	7 / 0.53	0.6	2.0	37.0	1789
26 x 1.5	7 / 0.53	0.6	2.0	37.0	1845
27 x 1.5	7 / 0.53	0.6	2.0	37.9	1880
28 x 1.5	7 / 0.53	0.6	2.0	39.3	1949
29 x 1.5	7 / 0.53	0.6	2.0	39.3	2003
30 x 1.5	7 / 0.53	0.6	2.0	39.3	2059
31 x 1.5	7 / 0.53	0.6	2.0	40.9	2139
32 x 1.5	7 / 0.53	0.6	2.0	40.9	2193
33 x 1.5	7 / 0.53	0.6	2.0	40.9	2249
34 x 1.5	7 / 0.53	0.6	2.0	42.5	2311
35 x 1.5	7 / 0.53	0.6	2.0	42.5	2365
36 x 1.5	7 / 0.53	0.6	2.0	42.5	2419

POLYVINYL CHLORIDE INSULATED POLYVINYL  
CHLORIDE BEDDING STEEL WIRE ARMoured  
POLYVINYL CHLORIDE SHEATHED  
OVERALL SCREENED INSTRUMENT CABLE  
**PVC/PVC/SWA/PVC OVERALL  
SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 2  
300/500V**



#### DESCRIPTION

Single pair and multi-pair cables with copper conductor, PVC insulated, overall screened, PVC bedding, Steel wire armoured and PVC sheathed. Voltage rated at 300/500V.

#### CONSTRUCTION

##### 1 Conductor

Plain annealed circular stranded copper conductor, conform to BS 6360 class 2.

##### 2 Insulation

PVC (Polyvinyl Chloride).

##### 3 Pairing

Two insulated cores shall be uniformly twisted together to form a pair with maximum lay length of 100 mm.

Note : Two pair cables with overall screen shall have four cores laid in quad formation.

##### 4 Pair identification

Colour code as per Appendix B

##### 5 Cabling

Twisted pairs are laid up together, if necessary filled with non-hygroscopic material compatible with the insulation

##### 6 Overall Screening

Accumulated pairs screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>.

##### 7 Bedding

PVC (Polyvinyl Chloride).

##### 8 Armouring

Galvanized steel round wire over the bedding.

##### 9 Sheath

PVC (Polyvinyl Chloride).

**PVC/PVC/SWA/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
1 x 0.5	7 / 0.3	0.6	0.8	0.9	1.3	11.0	251
2* x 0.5	7 / 0.3	0.6	0.8	0.9	1.3	11.9	295
3 x 0.5	7 / 0.3	0.6	1.1	0.9	1.3	14.6	412
4 x 0.5	7 / 0.3	0.6	1.1	0.9	1.4	15.7	469
5 x 0.5	7 / 0.3	0.6	1.1	0.9	1.4	16.7	523
6 x 0.5	7 / 0.3	0.6	1.2	1.25	1.5	18.9	704
7 x 0.5	7 / 0.3	0.6	1.2	1.25	1.5	18.9	725
8 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	20.2	802
9 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	21.3	874
10 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	22.7	947
11 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	22.7	967
12 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	23.2	995
13 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	23.2	1014
14 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	23.2	1034
15 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	24.2	1094
16 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	24.2	1115
17 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	26.3	1363
18 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	26.3	1383
19 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	26.3	1403
20 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	27.3	1475
21 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	27.3	1494
22 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	28.6	1589
23 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	28.6	1610
24 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	29.9	1689
25 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	29.9	1709
26 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	29.9	1730
27 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	30.4	1755
28 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.3	1823
29 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.3	1843
30 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.3	1863
31 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	32.8	1980
32 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	32.8	2000
33 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	32.8	2021
34 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	33.8	2088
35 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	33.8	2107
36 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	33.8	2127

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PVC/PVC/SWA/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
1 x 0.75	7 / 0.37	0.6	0.8	0.9	1.3	11.4	270
2* x 0.75	7 / 0.37	0.6	0.8	0.9	1.4	12.6	329
3 x 0.75	7 / 0.37	0.6	1.1	0.9	1.4	15.6	466
4 x 0.75	7 / 0.37	0.6	1.1	0.9	1.5	16.8	531
5 x 0.75	7 / 0.37	0.6	1.2	1.25	1.5	18.8	720
6 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	20.2	795
7 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	20.2	822
8 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	21.4	905
9 x 0.75	7 / 0.37	0.6	1.2	1.25	1.7	22.8	1003
10 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.2	1255
11 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.2	1282
12 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.8	1319
13 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.8	1344
14 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.8	1371
15 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	27.1	1467
16 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	27.1	1494
17 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	28.2	1568
18 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	28.2	1594
19 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	28.2	1621
20 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	29.7	1744
21 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	29.7	1770
22 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.8	1862
23 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.8	1890
24 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	32.5	1996
25 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	32.5	2023
26 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	32.5	2051
27 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	33.0	2086
28 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	35.4	2452
29 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	35.4	2478
30 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	35.4	2505
31 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.5	2611
32 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.5	2637
33 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.5	2664
34 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.7	2764
35 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.7	2790
36 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.7	2816

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PVC/PVC/SWA/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
1 x 1.0	7 / 0.44	0.6	0.8	0.9	1.3	11.8	289
2* x 1.0	7 / 0.44	0.6	0.8	0.9	1.4	13.1	359
3 x 1.0	7 / 0.44	0.6	1.1	0.9	1.5	16.5	520
4 x 1.0	7 / 0.44	0.6	1.2	1.25	1.5	18.5	711
5 x 1.0	7 / 0.44	0.6	1.2	1.25	1.5	19.8	799
6 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	21.3	886
7 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	21.3	921
8 x 1.0	7 / 0.44	0.6	1.2	1.25	1.7	22.8	1029
9 x 1.0	7 / 0.44	0.6	1.2	1.25	1.7	24.1	1128
10 x 1.0	7 / 0.44	0.6	1.2	1.25	1.7	25.7	1217
11 x 1.0	7 / 0.44	0.6	1.2	1.25	1.7	25.7	1252
12 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	27.5	1494
13 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	27.5	1527
14 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	27.5	1561
15 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	28.7	1656
16 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	28.7	1690
17 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	30.3	1814
18 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	30.3	1848
19 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	30.3	1883
20 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	31.5	1982
21 x 1.0	7 / 0.44	0.6	1.5	1.6	1.8	31.5	2016
22 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.9	2141
23 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.9	2176
24 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	34.7	2294
25 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	34.7	2329
26 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	34.7	2364
27 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	35.3	2413
28 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	36.5	2506
29 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	36.5	2539
30 x 1.0	7 / 0.44	0.6	1.5	1.6	2.0	36.5	2574
31 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.8	2977
32 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.8	3011
33 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.8	3045
34 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	40.2	3168
35 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	40.2	3202
36 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	40.2	3236

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

**PVC/PVC/SWA/PVC OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 2**

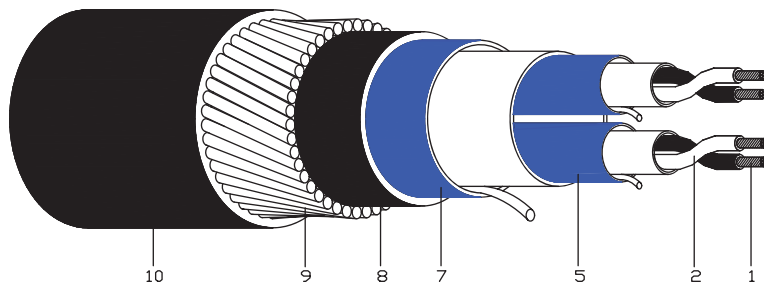
**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
1 x 1.5	7 / 0.53	0.6	0.8	0.9	1.4	12.6	325
2* x 1.5	7 / 0.53	0.6	0.9	0.9	1.4	13.9	408
3 x 1.5	7 / 0.53	0.6	1.2	1.25	1.5	18.4	708
4 x 1.5	7 / 0.53	0.6	1.2	1.25	1.6	19.8	813
5 x 1.5	7 / 0.53	0.6	1.2	1.25	1.6	21.2	915
6 x 1.5	7 / 0.53	0.6	1.2	1.25	1.7	22.8	1020
7 x 1.5	7 / 0.53	0.6	1.2	1.25	1.7	22.8	1066
8 x 1.5	7 / 0.53	0.6	1.3	1.6	1.7	25.2	1354
9 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	26.8	1492
10 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	28.7	1620
11 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	28.7	1666
12 x 1.5	7 / 0.53	0.6	1.5	1.6	1.8	29.8	1758
13 x 1.5	7 / 0.53	0.6	1.5	1.6	1.8	29.8	1802
14 x 1.5	7 / 0.53	0.6	1.5	1.6	1.8	29.8	1848
15 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	31.3	1981
16 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	31.3	2027
17 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	32.6	2122
18 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	32.6	2167
19 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	32.6	2213
20 x 1.5	7 / 0.53	0.6	1.5	1.6	2.0	34.2	2361
21 x 1.5	7 / 0.53	0.6	1.5	1.6	2.0	34.2	2406
22 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	36.9	2852
23 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	36.9	2898
24 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	38.6	3025
25 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	38.6	3071
26 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	38.6	3117
27 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	39.3	3179
28 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.6	3317
29 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.6	3362
30 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.6	3408
31 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	42.7	3617
32 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	42.7	3662
33 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	42.7	3708
34 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	44.0	3828
35 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	44.0	3872
36 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	44.0	3917

\* Note : Two pair cables with overall screen shall have four cores laid in quad formation

POLYVINYL CHLORIDE INSULATED POLYVINYL  
CHLORIDE BEDDING STEEL WIRE ARMoured  
POLYVINYL CHLORIDE SHEATHED INDIVIDUAL &  
OVERALL SCREENED INSTRUMENT CABLE

# PVC/PVC/SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE BS 5308 PART 2 : TYPE 2 300/500V



## DESCRIPTION

Multi-pair cables with copper conductor, PVC insulated, individual & overall screened, PVC bedding, Steel wire armoured and PVC sheathed. Voltage rated at 300/500V.

## CONSTRUCTION

- 1 Conductor**  
Plain annealed circular stranded copper conductor, conform to BS 6360 class 2.
- 2 Insulation**  
PVC (Polyvinyl Chloride).
- 3 Pairing**  
Two insulated cores shall be uniformly twisted together to form a pair with maximum lay length of 100 mm.
- 4 Pair identification**  
Colour code as per Appendix B
- 5 Individual Screening**  
Each pair screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>.
- 6 Cabling**  
Twisted pairs are laid up together, if necessary filled with non-hygroscopic material compatible with the insulation
- 7 Overall Screening**  
Accumulated pairs screened with aluminium/mylar tape, helically applied with the metallic side down, in electrical contact with a tinned annealed copper drain wire of 0.5 mm<sup>2</sup>.
- 8 Bedding**  
PVC (Polyvinyl Chloride).
- 9 Armouring**  
Galvanized steel round wire over the bedding.
- 10 Sheath**  
PVC (Polyvinyl Chloride).

**PVC/PVC/SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE**  
**BS 5308 PART 2 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
2 x 0.5	7 / 0.3	0.6	0.9	0.9	1.4	15.7	442
3 x 0.5	7 / 0.3	0.6	1.1	0.9	1.5	17.0	517
4 x 0.5	7 / 0.3	0.6	1.2	1.25	1.5	19.1	707
5 x 0.5	7 / 0.3	0.6	1.2	1.25	1.5	20.4	777
6 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	21.9	873
7 x 0.5	7 / 0.3	0.6	1.2	1.25	1.6	21.9	901
8 x 0.5	7 / 0.3	0.6	1.2	1.25	1.7	23.5	990
9 x 0.5	7 / 0.3	0.6	1.2	1.25	1.7	24.9	1087
10 x 0.5	7 / 0.3	0.6	1.2	1.25	1.7	26.6	1179
11 x 0.5	7 / 0.3	0.6	1.2	1.25	1.7	26.6	1207
12 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	28.2	1454
13 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	28.3	1483
14 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	28.3	1512
15 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	29.5	1588
16 x 0.5	7 / 0.3	0.6	1.3	1.6	1.7	29.5	1616
17 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.0	1734
18 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.0	1762
19 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	31.0	1791
20 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	32.2	1864
21 x 0.5	7 / 0.3	0.6	1.3	1.6	1.8	32.2	1892
22 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	34.2	2051
23 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	34.2	2079
24 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	35.9	2188
25 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	35.9	2216
26 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	35.9	2244
27 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	36.6	2316
28 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	37.7	2398
29 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	37.7	2426
30 x 0.5	7 / 0.3	0.6	1.5	1.6	1.9	37.7	2455
31 x 0.5	7 / 0.3	0.6	1.7	2.0	2.1	40.5	2881
32 x 0.5	7 / 0.3	0.6	1.7	2.0	2.1	40.5	2909
33 x 0.5	7 / 0.3	0.6	1.7	2.0	2.1	40.5	2937
34 x 0.5	7 / 0.3	0.6	2.0	2.0	2.2	42.6	3165
35 x 0.5	7 / 0.3	0.6	2.0	2.0	2.2	42.6	3193
36 x 0.5	7 / 0.3	0.6	2.0	2.0	2.2	42.6	3221

**PVC/PVC/v SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE**  
**BS 5308 PART 2 : TYPE 2** **300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
2 x 0.75	7 / 0.37	0.6	1.1	0.9	1.5	17.0	509
3 x 0.75	7 / 0.37	0.6	1.2	1.25	1.5	18.7	686
4 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	20.1	781
5 x 0.75	7 / 0.37	0.6	1.2	1.25	1.6	21.5	875
6 x 0.75	7 / 0.37	0.6	1.2	1.25	1.7	23.2	972
7 x 0.75	7 / 0.37	0.6	1.2	1.25	1.7	23.2	1007
8 x 0.75	7 / 0.37	0.6	1.3	1.6	1.7	25.6	1268
9 x 0.75	7 / 0.37	0.6	1.3	1.60	1.8	27.3	1398
10 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	29.1	1516
11 x 0.75	7 / 0.37	0.6	1.3	1.6	1.8	29.1	1551
12 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.3	1660
13 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.4	1696
14 x 0.75	7 / 0.37	0.6	1.5	1.6	1.8	30.4	1732
15 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	31.9	1834
16 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	31.9	1869
17 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	33.3	1986
18 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	33.3	2020
19 x 0.75	7 / 0.37	0.6	1.5	1.6	1.9	33.3	2056
20 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.0	2443
21 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	36.0	2478
22 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.6	2638
23 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	37.6	2673
24 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	39.3	2792
25 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	39.3	2827
26 x 0.75	7 / 0.37	0.6	1.7	2.0	2.0	39.3	2862
27 x 0.75	7 / 0.37	0.6	1.7	2.0	2.1	40.3	2967
28 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	42.2	3177
29 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	42.2	3212
30 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	42.2	3248
31 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	43.6	3346
32 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	43.6	3381
33 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	43.6	3416
34 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	44.9	3531
35 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	44.9	3566
36 x 0.75	7 / 0.37	0.6	2.0	2.0	2.2	44.9	3600

**PVC/PVC/SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE  
BS 5308 PART 2 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
2 x 1.0	7 / 0.44	0.6	1.1	0.9	1.5	17.7	551
3 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	19.6	749
4 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	21.0	849
5 x 1.0	7 / 0.44	0.6	1.2	1.25	1.6	22.5	958
6 x 1.0	7 / 0.44	0.6	1.3	1.6	1.7	25.2	1236
7 x 1.0	7 / 0.44	0.6	1.3	1.6	1.7	25.2	1279
8 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	27.0	1419
9 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	28.6	1557
10 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	30.6	1690
11 x 1.0	7 / 0.44	0.6	1.3	1.6	1.8	30.6	1734
12 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.0	1843
13 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.1	1893
14 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	32.1	1937
15 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	33.5	2031
16 x 1.0	7 / 0.44	0.6	1.5	1.6	1.9	33.5	2074
17 x 1.0	7 / 0.44	0.6	1.7	1.6	2.0	35.6	2268
18 x 1.0	7 / 0.44	0.6	1.7	1.6	2.0	35.6	2311
19 x 1.0	7 / 0.44	0.6	1.7	1.6	2.0	35.6	2355
20 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.0	2750
21 x 1.0	7 / 0.44	0.6	1.7	2.0	2.0	38.0	2765
22 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	39.7	2954
23 x 1.0	7 / 0.44	0.6	1.7	2.0	2.1	39.7	2998
24 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	42.4	3226
25 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	42.4	3268
26 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	42.4	3311
27 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	43.1	3405
28 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	44.4	3530
29 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	44.4	3572
30 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	44.4	3616
31 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	45.8	3718
32 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	45.8	3761
33 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	45.8	3803
34 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	47.3	3960
35 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	47.3	4003
36 x 1.0	7 / 0.44	0.6	2.0	2.0	2.2	47.3	4045

**PVC/PVC/SWA/PVC INDIVIDUAL & OVERALL SCREENED INSTRUMENT CABLE**  
**BS 5308 PART 2 : TYPE 2**

**300/500V**

Size	Number / Wire Diameter	Nominal Insulation thickness	Nominal Bedding Thickness	Nominal diameter of steel wire	Nominal sheath thickness	Nominal Overall Diameter	Approx. Cable Weight
pair x mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	Kg / Km
2 x 1.5	7 / 0.53	0.6	1.2	1.25	1.6	19.9	751
3 x 1.5	7 / 0.53	0.6	1.2	1.25	1.6	20.8	836
4 x 1.5	7 / 0.53	0.6	1.2	1.25	1.7	22.5	961
5 x 1.5	7 / 0.53	0.6	1.3	1.6	1.7	25.1	1258
6 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	27.0	1394
7 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	27.0	1450
8 x 1.5	7 / 0.53	0.6	1.3	1.6	1.8	28.7	1599
9 x 1.5	7 / 0.53	0.6	1.5	1.6	1.8	30.9	1798
10 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	33.3	1970
11 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	33.3	2026
12 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	34.2	2095
13 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	34.3	2157
14 x 1.5	7 / 0.53	0.6	1.5	1.6	1.9	34.3	2212
15 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	37.4	2673
16 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	37.4	2728
17 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	39.0	2884
18 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	39.0	2938
19 x 1.5	7 / 0.53	0.6	1.7	2.0	2.0	39.0	2994
20 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.9	3170
21 x 1.5	7 / 0.53	0.6	1.7	2.0	2.1	40.9	3224
22 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	43.3	3488
23 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	43.3	3544
24 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	45.4	3720
25 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	45.4	3776
26 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	45.4	3832
27 x 1.5	7 / 0.53	0.6	2.0	2.0	2.2	46.3	3905
28 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	50.1	4518
29 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	50.1	4572
30 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	50.1	4628
31 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	51.7	4812
32 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	51.7	4866
33 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	51.7	4922
34 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	53.3	5088
35 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	53.3	5142
36 x 1.5	7 / 0.53	0.6	2.0	2.5	2.4	53.3	5196

# APPENDIX B :

## IDENTIFICATION OF PAIR TO BS 5308 PART 2

### A) Identification of Pairs by colour code

Pair reference number	a-wire	b-wire	Pair reference number	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

Note : Two pairs collectively screened cable shall be cabled in quad formation and colour coded in clockwise rotation : Blue, Green, Orange and Brown.

### B ) Alternative method of identification of cable pairs.

Pair number	a-wire	b-wire
1	White	Black
2 to 50	White with pair number.	Black with pair number.

# TECHNICAL DATA

## APPLICATION

Generally used within industrial manufacturing process plants for telecommunication , data and voice or transmission of signal.

## ELECTRICAL CHARACTERISTICS FOR INSTRUMENTATION CABLES

Conductor size (mm <sup>2</sup> )	Resistance at 20°C (Ohm/km)	Mutual Capacitance ( PE )		Mutual Capacitance ( PVC )		L/R ratio (mH/Ohm)
		Overall Screen #	Individual Screen	Pair adjacent core	Between any core or screen	
0.5	36.8	75	115	250	400	25
0.75	25.0	75	115	250	400	25
1.0	18.4	75	115	250	400	25
1.5	12.3	85	120	250	400	40

Note : # Except for one pair and two pairs

**Maximum Operating Temperature : 70 °C ( after installation )**

**Test Voltage : 1000V ( r.m.s ) for 1 Minute.**

**Insulation Resistance of conductor at 20 °C**

PE : > 5 GOhm / Km

PVC : > 25 MOhm / Km

**Insulation Resistance of screen at 20 °C**

PE or PVC : > 1MOhm / Km

**Bending Radius :**

Unarmoured ( Type 1 ) : 5 X Cable Overall Diameter.

Armoured ( Type 2 ) : 6 X Cable Overall Diameter.

# QUALITY ASSURANCE

Universal Cable (M) Bhd's extensive range of cables have gained recognition for high durability and reliability. The MS ISO 9001 awarded by SIRIM and the type test by Singapore PSB are testimony to our total commitment to product quality and manufacturing excellence.

A comprehensive quality control system in operation covers all phases of manufacturing from input material to finished products. All input materials are sampled and checked for conformity to required standards prior to issue to the production lines. Quality control procedures ensure that the required product quality standards are achieved and maintained at all stages and prevent substandard material from proceeding to the next manufacturing stage.

In-process checking and batch sampling of the product at the finished stage are carried out to ascertain that cables manufactured are of desired quality and compliant to the required standards and technical specifications.

The stringent control of quality ensures that our cables are able to meet the demanding standards expected by our customers locally and overseas.