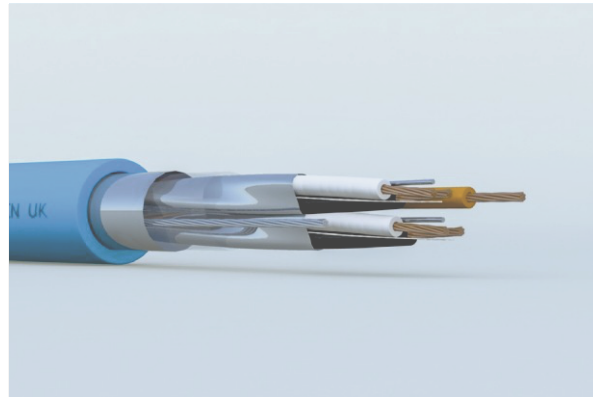


INSTRUMENTATION CABLE BS 5308 PART-1

BS 5308 Cables are used to carry voice and data services, interconnection between electrical equipment and instruments, particularly in and around process plants where transducer generated signals are transmitted through panels, controllers and other devices.



CABLE CONSTRUCTION

Conductor

Class 1, 2 or 5 Plain Copper Conductors
BS EN60228:2005

Insulation

PE (Polyethylene) to BS 6234
XLPE (Cross Linked Polyethylene) to BS 5308
LSZH (Low smoke Zero Halogen)

Twisted Pair

Two insulated wires are twisted to form a Pair with a lay not exceeding 100 mm

Pair Identification

BS 5308 Colour Code

Screen

Individually Screened Pairs:Al-Polyester Tape Foil is applied to each pair, metallic side down and in continuous contact with a 0.5 mm² tinned copper drain wire.

Collectively Screened Pairs:Al-Polyester Tape Foil is applied over the laid up pairs, metallic side down and in continuous contact with a 0.5 mm² tinned copper drain wire.

Drain Wire

Tinned Copper

Bedding (applied only for Type 2)

PE (Polyethylene) to BS1442

Armour (applied only for Type 2)

GSWA (Galvanized Steel Wire Armour) to BS 1442

Outer Sheath

PVC (Polyvinyl Chloride) to BS 7655
LSZH (Low Smoke Zero Halogen)

Sheath Color

Blue or Black

Standard Packing Mode

Cut of Length / Wooden Reel

ELECTRICAL CHARACTERISTICS

Nom. Cross Sectional Area (Nom. Number and Nom. Diameter of Strands)	mm ² (#/mm)	0.5 (16/0.2)	0.75 (24/0.2)	1.0 (1/1.13)	1.5 (7/0.53)
Capacitance at 1 kHz cables with only Collective Screen (except one pair and two pair)	pF/m	75	75	75	85
Capacitance at 1 kHz one pair and two pair cables collectively screened and all cables with individually screened pairs	pF/m	115	115	115	115
Max. Conductor Resistance @ 20 °C	Ω/km	39.0	24.5	18.1	12.1
L/R Ratio Maximum Value	μH/Ω	25	25	25	40

*0.75 mm²conductor generally to BS 5308

▷ Operating Temperature Range

-20 °C to +90 °C

▷ Voltage Rating

300/500 V

▷ Test Voltage

1000V between conductor to conductor and conductor to screen

BS 5308 Part 1 Type 1: PE Insulation/Al-Polyester Screen/Unarmoured

BS 5308 Part 1 Type 2: PE Insulation/Al-Polyester Screen/Armoured

INSTRUMENTATION CABLE BS 5308 PART-1

ORDERING INFORMATION

▷ BS 5308 Part 1 Type 1: PE Insulation/Collective Screen/Unarmoured

Part Number	No. of Pairs x Nom. CSA n x mm ²	Nom. No. and Nom. Dia. n x mm	Nom. Overall Diameter mm	Nom. Weight kg/km
73-130051101X	1 x 0.5	16/0.2	7.0	60
73-130051102X	2 x 0.5	16/0.2	7.9	80
73-130051105X	5 x 0.5	16/0.2	13.1	210
73-130051110X	10 x 0.5	16/0.2	17.2	340
73-130051130X	30 x 0.5	16/0.2	26.9	780
73-130051201X	1 x 0.75	24/0.2	7.3	75
73-130051202X	2 x 0.75	24/0.2	8.3	100
73-130051205X	5 x 0.75	24/0.2	14.3	250
73-130051210X	10 x 0.75	24/0.2	18.7	450
73-130051230X	30 x 0.75	24/0.2	29.5	980
73-130021301X	1 x 1.0	7/0.43	7.4	85
73-130021302X	2 x 1.0	7/0.43	8.4	115
73-130021305X	5 x 1.0	7/0.43	14.2	290
73-130021310X	10 x 1.0	7/0.43	18.4	500
73-130021330X	30 x 1.0	7/0.43	29.0	1030
73-130021401X	1 x 1.5	7/0.53	8.3	100
73-130021402X	2 x 1.5	7/0.53	9.7	150
73-130021405X	5 x 1.5	7/0.53	16.4	360
73-130021410X	10 x 1.5	7/0.53	21.6	690
73-130021430X	30 x 1.5	7/0.53	34.3	1560

▷ BS 5308 Part 1 Type 1: PE Insulation/Individual and Collective Screen/Unarmoured

Part Number	No. of Pairs x Nom. CSA n x mm ²	Nom. No. and Nom. Dia. n x mm	Nom. Overall Diameter mm	Nom. Weight kg/km
73-230051101X	1 x 0.5	16/0.2	-	-
73-230051102X	2 x 0.5	16/0.2	12.0	100
73-230051105X	5 x 0.5	16/0.2	15.2	250
73-230051110X	10 x 0.5	16/0.2	21.1	480
73-230051130X	30 x 0.5	16/0.2	32.3	1020
73-230051201X	1 x 0.75	24/0.2	-	-
73-230051202X	2 x 0.75	24/0.2	12.8	190
73-230051205X	5 x 0.75	24/0.2	16.3	270
73-230051210X	10 x 0.75	24/0.2	22.6	550
73-230051230X	30 x 0.75	24/0.2	35.9	1100
73-230021301X	1 x 1.0	7/0.43	-	-
73-230021302X	2 x 1.0	7/0.43	12.8	200
73-230021305X	5 x 1.0	7/0.43	16.2	290
73-230021310X	10 x 1.0	7/0.43	22.6	580
73-230021330X	30 x 1.0	7/0.43	35.4	1430
73-230021401X	1 x 1.5	7/0.53	-	-
73-230021402X	2 x 1.5	7/0.53	14.7	250
73-230021405X	5 x 1.5	7/0.53	18.8	460
73-230021410X	10 x 1.5	7/0.53	26.5	760
73-230021430X	30 x 1.5	7/0.53	41.0	1900

INSTRUMENTATION CABLE BS 5308 PART-1

▷ BS 5308 Part 1 Type 2: PE Insulation/Collective Screen/Armoured

Part Number	No. of Pairs x Nom. CSA n x mm ²	Nom. No. and Nom. Dia. n x mm	Nom. Overall Diameter mm	Nom. Weight kg/km
73-333151101X	1 x 0.5	16/0.2	11.4	250
73-333151102X	2 x 0.5	16/0.2	12.3	300
73-333151105X	5 x 0.5	16/0.2	17.9	560
73-333151110X	10 x 0.5	16/0.2	22.9	970
73-333151130X	30 x 0.5	16/0.2	33.9	1770
73-333151201X	1 x 0.75	24/0.2	11.7	280
73-333151202X	2 x 0.75	24/0.2	12.9	330
73-333151205X	5 x 0.75	24/0.2	19.8	750
73-333151210X	10 x 0.75	24/0.2	25.3	1260
73-333151230X	30 x 0.75	24/0.2	37.5	2290
73-333121301X	1 x 1.0	7/0.43	11.8	290
73-333121302X	2 x 1.0	7/0.43	13.0	345
73-333121305X	5 x 1.0	7/0.43	19.7	790
73-333121310X	10 x 1.0	7/0.43	24.3	1310
73-333121330X	30 x 1.0	7/0.43	36.2	2180
73-333121401X	1 x 1.5	7/0.53	12.9	320
73-333121402X	2 x 1.5	7/0.53	14.3	420
73-333121405X	5 x 1.5	7/0.53	22.1	940
73-333121410X	10 x 1.5	7/0.53	28.4	1500
73-333121430X	30 x 1.5	7/0.53	42.5	3170
73-332122401X	1 x 1.5	7/0.53	12.9	320
73-332122402X	2 x 1.5	7/0.53	14.3	420
73-332122601X	1 x 2.5	7/0.53	13.6	340

▷ BS 5308 Part 1 Type 2: PE Insulation/Individual and Collective Screen/Armoured

Part Number	No. of Pairs x Nom. CSA n x mm ²	Nom. No. and Nom. Dia. n x mm	Nom. Overall Diameter mm	Nom. Weight kg/km
73-433151101X	1 x 0.5	16/0.2	-	-
73-433151102X	2 x 0.5	16/0.2	16.8	460
73-433151105X	5 x 0.5	16/0.2	20.9	760
73-433151110X	10 x 0.5	16/0.2	27.9	1300
73-433151130X	30 x 0.5	16/0.2	40.5	2400
73-433151201X	1 x 0.75	24/0.2	-	-
73-433151202X	2 x 0.75	24/0.2	17.6	500
73-433151205X	5 x 0.75	24/0.2	22.0	920
73-433151210X	10 x 0.75	24/0.2	29.5	1610
73-433151230X	30 x 0.75	24/0.2	43.9	3130
73-433121301X	1 x 1.0	7/0.43	-	-
73-433121302X	2 x 1.0	7/0.43	17.6	515
73-433121305X	5 x 1.0	7/0.43	21.9	950
73-433121310X	10 x 1.0	7/0.43	29.4	1330
73-433121330X	30 x 1.0	7/0.43	43.8	2900
73-433121401X	1 x 1.5	7/0.53	-	-
73-433121402X	2 x 1.5	7/0.53	20.4	730
73-433121405X	5 x 1.5	7/0.53	25.4	1180
73-433121410X	10 x 1.5	7/0.53	33.5	1820
73-433121430X	30 x 1.5	7/0.53	50.8	4050

INSTRUMENTATION CABLE BS 5308 PART-1

▷ BS 5308 Part 1 Type 2: XLPE Insulation/Individual and Collective Screen/Armoured

Part Number	No. of Pairs x Nom. CSA n x mm ²	Nom. No. and Nom. Dia. n x mm	Nom. Overall Diameter mm	Nom. Weight kg/km
73-453151102X	2 x 0.5	16/0.2mm	15.8mm	400kg/km
73-453151105X	5 x 0.5	16/0.2mm	19.9mm	700kg/km
73-453151110X	10 x 0.5	16/0.2mm	26.9mm	1200kg/km

▷ BS 5308 Part 1 Type 2: XLPE Insulation/Collective Screen/Armoured

Part Number	No. of Pairs x Nom. CSA n x mm ²	Nom. No. and Nom. Dia. n x mm	Nom. Overall Diameter mm	Nom. Weight kg/km
73-353151301X	1 x 1.0	7/0.43mm	12.0mm	260kg/km
73-353121302X	2 x 1.0	7/0.43mm	16.6mm	350kg/km
73-353121310X	10 x 1.0	7/0.43mm	28.4mm	1300kg/km
73-353151402X	1x1.5	7/0.53mm	12.6mm	290kg/km

X → BK:Black BL:Blue GN:Green GY:Gray RD:Red WH:White TP:Transparent