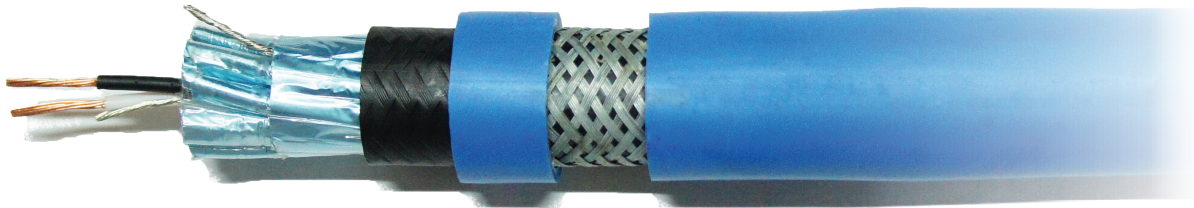


Instrumentation Cable

BS EN 50288-7

Multipair, individual & overall screen, braided



Application

Used for transmission of analogue or digital signals in measurement, process control and data system technologies. Individual pair screening will provide excellent electromagnetic protection against outer environment. Steel wire braid prevents the cable from mechanical damage while providing better flexibility, hence it is suitable for installation in small compartment such as shipboards and offshore platforms.

Construction

- Annealed stranded copper wire, class 2 or 5 acc. to IEC 60228
- Insulation compound - PVC, PE, XLPE or XLEVA
- Black & white twisted pair (up to 50 pairs) with numbering (other colours upon request)
- Individual & Collective screen - aluminium/polyester foil & 0.5mm² stranded tinned copper drain wire
- PVC or PE inner sheath
- Galvanized steel wire braid with 80% coverage
- PVC outer sheath with flame retardancy acc. to IEC 60332-3-22 (Cat A) or IEC 603320-3-24 (Cat C)

Conductor Sizes

- 0.5mm², 0.75mm², 1.0mm², 1.5mm², 2.5mm² (other sizes upon request)

Technical Data

- Operating temp. up to 70°C (PVC); up to 90°C (PE, XLPE); up to 105°C (XLEVA)
- Min. bending radius approx 10 x Ø
- Limiting Oxygen Index (LOI) > 30

Upon Request

- Multi-core or multi-triad
- Tinned copper conductor
- Fire resistant acc. to IEC 60331 or BS 6387
- Low smoke halogen free (LS0H) sheathing or insulation material acc. to IEC 60754 & IEC 61034
- Anti-termite, anti-rodent, UV, oil resistant material

Electrical Data Sheet @20°C

				Conductor size			
				0.5mm ²	1.0mm ²	1.5mm ²	2.5mm ²
Conductor resistance	Class 2	max	Ω/km	36.7	18.4	12.3	7.56
Insulation resistance	PE-insulated	min	MΩ/km	1000			
	PVC-insulated			10			
Rated Voltage		max	V	300 or 500			
High voltage test	300V AC (DC)	1 min	kV	1 (2)			
	500V AC (DC)			2 (3)			
Mutual capacitance	PE-insulated	max	nF/km	150			
	PVC-insulated			250			
L/R ratio		max	μH/Ω	25	25	40	60

Geometrical Data Sheet

Number of pair	300V			500V		
	Overall diameter (approx) mm	Weight (approx) kg/km		Overall diameter (approx) mm	Weight (approx) kg/km	
		PVC-insulated	PE-insulated		PVC-insulated	PE-insulated
0.5mm ² - 7/0.3mm						
2	13.0	241	237	14.0	271	265
4	14.7	323	314	15.7	354	343
8	18.2	489	472	19.8	549	526
10	20.5	595	573	22.0	650	622
12	21.1	652	626	22.7	718	684
16	23.1	793	758	24.7	861	816
20	25.7	923	880	28.0	1060	1004
24	28.1	1069	1017	30.8	1236	1169
1.0mm ² - 7/0.43mm						
2	14.5	296	291	15.3	320	313
4	16.4	404	393	17.5	443	429
8	20.8	644	621	22.2	701	672
10	23.5	790	761	24.9	847	811
12	24.1	869	835	25.8	948	905
16	26.3	1058	1013	28.7	1221	1164
20	29.9	1309	1252	32.0	1421	1348
24	32.9	1532	1463	35.3	1667	1580
1.5mm ² - 7/0.53mm						
2	16.2	363	355	17.1	390	380
4	18.4	504	488	19.7	554	535
8	23.7	828	797	25.1	891	853
10	26.5	997	958	28.8	1154	1107
12	27.9	1182	1136	29.6	1274	1217
16	30.6	1450	1388	32.5	1561	1485
20	34.3	1709	1632	36.4	1832	1737
24	37.8	2004	1911	40.3	2163	2049
2.5mm ² - 7/0.67mm						
2				19.8	506	492
4				22.6	719	691
8				29.7	1264	1208
10				33.6	1547	1477
12				35.0	1755	1671
16				38.5	2161	2050
20				43.0	2532	2392
24				47.8	3009	2842