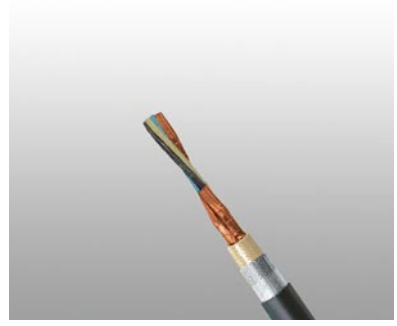
S3 or S3/S7 BFOU(i) 250V

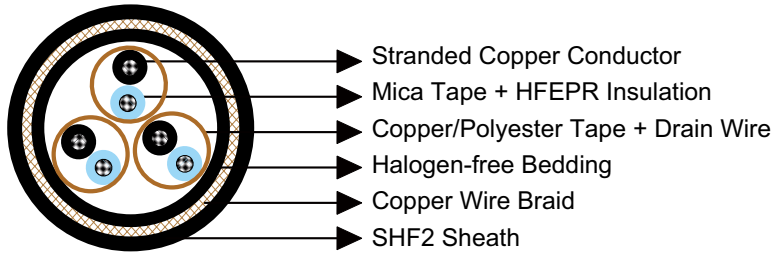
Applications

These cables are fire resistant, flame retardant, low smoke, halogen free and mud resistant, used for instrumentation, communication, control and alarm systems.



Standards

- IEC 60092-376
- IEC 60092-351
- IEC 60092-359
- IEC 60331-21
- IEC 60332-1
- IEC 60332-3-22
- IEC 60754-1,2
- IEC 61034-1,2
- NEK 606:2004



Construction

- **Conductors:** Circular tinned annealed stranded copper wire to IEC 60228 class 2.
- **Insulation:** Mica tape + Halogen free EPR compound.
- **Twinning:** Colour coded cores twisted together.
- **Individual Shielding:** Each pairs/triples are screened by copper backed polyester tape in contact with a stranded tinned copper drain wire and wrapped with polyester tape. Pairs/triples are numbered with numbered tape or by numbers printed directly on the insulated conductors.
- **Bedding:** Halogen free compound.
- **Armour:** Tinned copper wire braid.
- **Outer Sheath:** Halogen free thermosetting compound, SHF2 (for TYPE S3). Halogen free MUD resistant thermosetting compound, SHF MUD (for TYPE S3/S7), coloured grey (blue for intrinsically safe).

Electrical Characteristics

Nominal Cross Section Area	mm²	0.75	1.0	1.5	2.5
Nominal Conductor Diameter	mm	1.1	1.3	1.6	2.0
Maximum Resistant@20℃	Ω/km	26.3	19.3	12.9	8.02
Mutual Capacitance	nF/km	85	95	100	110
Nominal Inductance@1KHz	MH/km	0.731	0.691	0.673	0.629
Maximum L/R@1KHz	μH/Ω	20	25	35	55
Operating Voltage	V	250	250	250	250

Mechanical and Thermal Properties

- Bending Radius: 8×OD (during installation); 6×OD (fixed installed)
- Temperature Range: -20℃ ~ +90℃

Dimensions and Weight

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
1×2×0.75	0.6	1.1	1.2	12.1	225
2×2×0.75	0.6	1.1	1.3	16.7	405
3×2×0.75	0.6	1.1	1.4	17.5	540
4×2×0.75	0.6	1.1	1.4	18.6	610
5×2×0.75	0.6	1.1	1.5	20.2	705
6×2×0.75	0.6	1.1	1.5	21.7	805
7×2×0.75	0.6	1.1	1.5	21.7	830
8×2×0.75	0.6	1.1	1.6	23.6	905
9×2×0.75	0.6	1.1	1.7	25.1	1000
10×2×0.75	0.6	1.1	1.7	26.2	1030
12×2×0.75	0.6	1.1	1.7	26.8	1145
14×2×0.75	0.6	1.1	1.8	28.2	1205
15×2×0.75	0.6	1.1	1.8	30.0	1305
16×2×0.75	0.6	1.1	1.9	30.6	1415
18×2×0.75	0.6	1.1	1.9	32.1	1475
19×2×0.75	0.6	1.2	1.9	32.7	1575
20×2×0.75	0.6	1.2	2.0	34.1	1700
21×2×0.75	0.6	1.2	2.0	35.0	1765

Fire Resistant Instrumentation Cables

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
23×2×0.75	0.6	1.2	2.0	35.5	1895
24×2×0.75	0.6	1.2	2.1	37.7	1980
27×2×0.75	0.6	1.2	2.2	38.7	2165
30×2×0.75	0.6	1.2	2.2	39.9	2335
33×2×0.75	0.6	1.2	2.3	41.5	2535
37×2×0.75	0.6	1.2	2.3	42.7	2725
1×3×0.75	0.6	1.1	1.1	11.9	245
2×3×0.75	0.6	1.1	1.4	15.5	420
3×3×0.75	0.6	1.1	1.4	18.4	580
4×3×0.75	0.6	1.1	1.4	19.7	675
7×3×0.75	0.6	1.1	1.6	23.6	960
8×3×0.75	0.6	1.1	1.7	25.0	980
12×3×0.75	0.6	1.3	1.8	29.6	1435
16×3×0.75	0.6	1.4	1.9	32.6	1770
19×3×0.75	0.6	1.4	2.1	34.4	1985
24×3×0.75	0.6	1.8	2.2	39.6	2580
1×2×1.0	0.6	1.1	1.2	12.5	245
2×2×1.0	0.6	1.1	1.4	17.6	450
3×2×1.0	0.6	1.1	1.4	18.3	600
4×2×1.0	0.6	1.1	1.4	19.3	625
5×2×1.0	0.6	1.1	1.5	21.1	920
6×2×1.0	0.6	1.1	1.6	22.8	950
7×2×1.0	0.6	1.1	1.6	22.8	860
8×2×1.0	0.6	1.1	1.6	24.7	985
9×2×1.0	0.6	1.1	1.7	26.3	1135
10×2×1.0	0.6	1.1	1.7	27.4	1170
12×2×1.0	0.6	1.1	1.8	28.3	1300
14×2×1.0	0.6	1.1	1.8	29.5	1380
15×2×1.0	0.6	1.1	1.9	31.6	1510
16×2×1.0	0.6	1.1	1.9	32.1	1620
18×2×1.0	0.6	1.2	2.0	34.2	1745
19×2×1.0	0.6	1.2	2.0	34.5	1830
20×2×1.0	0.6	1.2	2.1	36.0	1975
21×2×1.0	0.6	1.2	2.1	37.3	2135
23×2×1.0	0.6	1.2	2.1	37.9	2295
24×2×1.0	0.6	1.2	2.2	39.8	2335
27×2×1.0	0.6	1.2	2.2	40.6	2500
30×2×1.0	0.6	1.2	2.3	42.1	2720
33×2×1.0	0.6	1.2	2.3	43.6	2940
37×2×1.0	0.6	1.4	2.4	45.4	3230

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
1×3×1.0	0.6	1.1	1.2	12.6	275
2×3×1.0	0.6	1.1	1.4	18.8	640
3×3×1.0	0.6	1.1	1.5	19.3	665
4×3×1.0	0.6	1.1	1.5	20.9	775
5×3×1.0	0.6	1.1	1.6	22.8	965
6×3×1.0	0.6	1.1	1.7	25.4	1135
7×3×1.0	0.6	1.1	1.7	25.4	1180
8×3×1.0	0.6	1.1	1.7	27.0	1270
9×3×1.0	0.6	1.1	1.8	28.9	1450
10×3×1.0	0.6	1.1	1.9	31.1	1455
12×3×1.0	0.6	1.1	1.9	32.0	1685
14×3×1.0	0.6	1.2	2.0	33.8	1820
15×3×1.0	0.6	1.2	2.0	34.8	1935
16×3×1.0	0.6	1.2	2.1	36.0	2105
18×3×1.0	0.6	1.2	2.1	38.1	2310
19×3×1.0	0.6	1.2	2.2	38.6	2355
20×3×1.0	0.6	1.2	2.2	39.6	2590
21×3×1.0	0.6	1.2	2.2	40.4	2685
23×3×1.0	0.6	1.2	2.3	42.0	2935
24×3×1.0	0.6	1.2	2.3	42.8	3145
27×3×1.0	0.6	1.4	2.4	45.3	3255
30×3×1.0	0.6	1.4	2.5	47.4	3565
32×3×1.0	0.6	1.4	2.5	48.6	3755
1×2×1.5	0.7	1.1	1.2	13.5	295
2×2×1.5	0.7	1.1	1.4	19.2	545
3×2×1.5	0.7	1.1	1.5	20.2	725
4×2×1.5	0.7	1.1	1.5	21.5	770
5×2×1.5	0.7	1.1	1.6	23.4	975
6×2×1.5	0.7	1.1	1.7	25.4	1130
7×2×1.5	0.7	1.1	1.7	25.4	1170
8×2×1.5	0.7	1.1	1.7	27.5	1225
9×2×1.5	0.7	1.1	1.8	29.4	1405
10×2×1.5	0.7	1.1	1.9	30.9	1440
12×2×1.5	0.7	1.1	1.9	31.6	1680
14×2×1.5	0.7	1.2	2.0	33.6	1750
15×2×1.5	0.7	1.2	2.1	36.0	1910
16×2×1.5	0.7	1.2	2.1	36.9	2055
18×2×1.5	0.7	1.2	2.2	38.9	2260
19×2×1.5	0.7	1.2	2.2	39.3	2395
20×2×1.5	0.7	1.2	2.2	40.8	2540

Fire Resistant Instrumentation Cables

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
21×2×1.5	0.7	1.2	2.3	42.1	2660
23×2×1.5	0.7	1.2	2.3	42.7	2865
24×2×1.5	0.7	1.4	2.4	45.2	3080
27×2×1.5	0.7	1.4	2.4	46.1	3155
30×2×1.5	0.7	1.4	2.5	47.8	3440
32×2×1.5	0.7	1.4	2.6	49.0	3685
33×2×1.5	0.7	1.4	2.6	49.7	3740
37×2×1.5	0.7	1.4	2.6	51.2	4040
1×3×1.5	0.7	1.1	1.3	13.6	325
2×3×1.5	0.7	1.1	1.5	18.5	560
3×3×1.5	0.7	1.1	1.5	21.4	800
4×3×1.5	0.7	1.1	1.6	23.7	975
5×3×1.5	0.7	1.1	1.7	25.4	1195
6×3×1.5	0.7	1.1	1.8	28.3	1405
7×3×1.5	0.7	1.1	1.8	28.3	1470
8×3×1.5	0.7	1.1	1.8	30.2	1585
9×3×1.5	0.7	1.2	1.9	32.6	1835
10×3×1.5	0.7	1.2	2.0	35.1	1935
12×3×1.5	0.7	1.2	2.1	36.8	2115
14×3×1.5	0.7	1.2	2.1	38.3	2360
15×3×1.5	0.7	1.2	2.2	39.7	2530
16×3×1.5	0.7	1.2	2.2	40.8	2775
18×3×1.5	0.7	1.2	2.3	42.9	2905
19×3×1.5	0.7	1.2	2.3	43.3	3200
20×3×1.5	0.7	1.4	2.4	44.9	3305
21×3×1.5	0.7	1.4	2.4	45.8	3430
23×3×1.5	0.7	1.4	2.5	47.7	3755
24×3×1.5	0.7	1.4	2.5	48.6	3925
27×3×1.5	0.7	1.4	2.6	51.1	4115
30×3×1.5	0.7	1.4	2.7	53.5	4510
32×3×1.5	0.7	1.6	2.8	55.5	4850
1×2×2.5	0.7	1.1	1.3	14.0	340
2×2×2.5	0.7	1.1	1.5	18.5	560
3×2×2.5	0.7	1.1	1.5	21.6	865
4×2×2.5	0.7	1.1	1.6	23.2	1010
5×2×2.5	0.7	1.1	1.7	25.3	1185
6×2×2.5	0.7	1.1	1.7	27.4	1370
7×2×2.5	0.7	1.1	1.7	27.4	1430
8×2×2.5	0.7	1.1	1.8	29.9	1560
9×2×2.5	0.7	1.1	1.9	31.9	1780

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
10×2×2.5	0.7	1.2	2.0	33.8	1775
12×2×2.5	0.7	1.2	2.0	34.6	1965
14×2×2.5	0.7	1.2	2.1	36.9	2275
15×2×2.5	0.7	1.2	2.2	39.5	2480
16×2×2.5	0.7	1.2	2.2	40.1	2590
18×2×2.5	0.7	1.2	2.3	42.3	2825
19×2×2.5	0.7	1.2	2.3	42.7	2930
20×2×2.5	0.7	1.4	2.4	44.8	3240
21×2×2.5	0.7	1.4	2.4	46.1	3375
23×2×2.5	0.7	1.4	2.5	46.9	3560
24×2×2.5	0.7	1.4	2.5	49.1	3660
27×2×2.5	0.7	1.4	2.6	50.3	4000
30×2×2.5	0.7	1.4	2.7	52.2	4370
33×2×2.5	0.7	1.4	2.7	54.1	4735
37×2×2.5	0.7	1.6	2.8	56.4	5225
1×3×2.5	0.7	1.1	1.2	14.5	380
2×3×2.5	0.7	1.1	1.6	22.5	950
3×3×2.5	0.7	1.1	1.6	23.4	1055
4×3×2.5	0.7	1.1	1.7	25.3	1250
5×3×2.5	0.7	1.1	1.7	27.4	1460
6×3×2.5	0.7	1.1	1.9	30.7	1735
7×3×2.5	0.7	1.1	1.9	30.7	1830
8×3×2.5	0.7	1.2	2.0	33.3	2025
9×3×2.5	0.7	1.2	2.0	35.4	2290
10×3×2.5	0.7	1.2	2.2	38.8	2405
12×3×2.5	0.7	1.2	2.2	40.0	2685
14×3×2.5	0.7	1.2	2.3	41.9	3000
15×3×2.5	0.7	1.2	2.3	43.1	3190
16×3×2.5	0.7	1.4	2.4	44.9	3420
18×3×2.5	0.7	1.4	2.5	47.2	3740
19×3×2.5	0.7	1.4	2.5	47.6	3885
20×3×2.5	0.7	1.4	2.5	48.9	4185
21×3×2.5	0.7	1.4	2.6	50.0	4370
23×3×2.5	0.7	1.4	2.7	52.1	4760
24×3×2.5	0.7	1.4	2.7	53.0	4785
27×3×2.5	0.7	1.6	2.8	56.2	5335
30×3×2.5	0.7	1.6	2.9	58.8	5855
32×3×2.5	0.7	1.6	3.0	60.6	6215