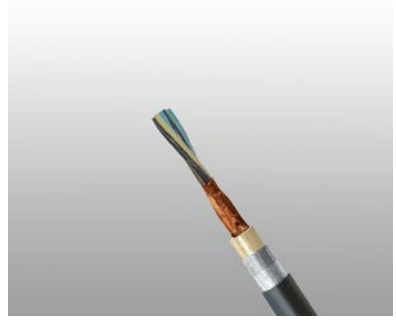
S2 or S2/S6 RFOU(c) 250V

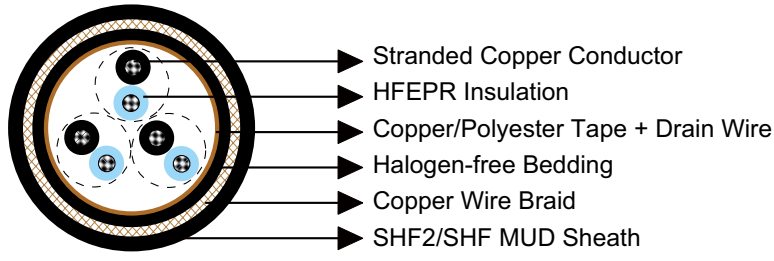
Applications



These cables are 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 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:** Halogen free EPR compound.
- **Twinning:** Colour coded cores twisted together.
- **Collective Shielding:** Pairs/triples are layed up and collectively screened by copper backed polyester tape in contact with a stranded tinned copper drain wire. 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 S2). Halogen free MUD resistant thermosetting compound, SHF MUD (for TYPE S2/S6), 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	80	90	100	110
Nominal Inductance@1KHz	MH/km	0.682	0.645	0.632	0.593
Maximum L/R@1KHz	μH/Ω	20	25	35	50
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	1.1	11.1	200
2×2×0.75	0.6	1.1	1.3	15.0	295
3×2×0.75	0.6	1.1	1.3	15.6	355
4×2×0.75	0.6	1.1	1.3	16.4	390
5×2×0.75	0.6	1.1	1.4	17.8	540
6×2×0.75	0.6	1.1	1.4	19.1	610
7×2×0.75	0.6	1.1	1.4	19.1	625
8×2×0.75	0.6	1.1	1.5	20.7	680
9×2×0.75	0.6	1.1	1.5	21.8	745
10×2×0.75	0.6	1.1	1.6	22.9	760
12×2×0.75	0.6	1.1	1.6	23.4	810
14×2×0.75	0.6	1.1	1.6	24.5	875
15×2×0.75	0.6	1.1	1.7	26.1	960
16×2×0.75	0.6	1.1	1.7	26.5	1010
18×2×0.75	0.6	1.1	1.8	27.9	1080
19×2×0.75	0.6	1.1	1.8	28.2	1115
20×2×0.75	0.6	1.1	1.8	29.2	1210
21×2×0.75	0.6	1.1	1.8	30.0	1255
23×2×0.75	0.6	1.1	1.9	30.6	1355
24×2×0.75	0.6	1.1	1.9	31.9	1370

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		
27×2×0.75	0.6	1.2	1.9	32.9	1480
30×2×0.75	0.6	1.2	2.0	34.1	1605
33×2×0.75	0.6	1.2	2.0	35.3	1725
37×2×0.75	0.6	1.2	2.1	36.9	1950
1×3×0.75	0.6	1.1	1.2	11.7	230
2×3×0.75	0.6	1.1	1.3	14.5	360
3×3×0.75	0.6	1.1	1.3	16.2	415
4×3×0.75	0.6	1.1	1.4	17.6	540
5×3×0.75	0.6	1.1	1.4	19.1	645
6×3×0.75	0.6	1.1	1.5	21.1	755
7×3×0.75	0.6	1.1	1.5	21.1	780
8×3×0.75	0.6	1.1	1.6	22.6	845
9×3×0.75	0.6	1.1	1.6	23.9	945
10×3×0.75	0.6	1.1	1.7	25.7	960
12×3×0.75	0.6	1.1	1.7	26.4	1080
14×3×0.75	0.6	1.1	1.7	27.5	1150
15×3×0.75	0.6	1.1	1.8	28.5	1230
16×3×0.75	0.6	1.1	1.8	29.2	1310
18×3×0.75	0.6	1.1	1.9	30.7	1405
19×3×0.75	0.6	1.1	1.9	31.0	1475
20×3×0.75	0.6	1.1	1.9	31.8	1560
21×3×0.75	0.6	1.2	1.9	32.7	1640
23×3×0.75	0.6	1.2	2.0	34.1	1795
24×3×0.75	0.6	1.2	2.0	34.6	1830
27×3×0.75	0.6	1.2	2.1	36.8	2040
30×3×0.75	0.6	1.2	2.1	38.3.	2210
32×3×0.75	0.6	1.2	2.2	39.5	2345
1×2×1.0	0.6	1.1	1.2	11.7	225
2×2×1.0	0.6	1.1	1.3	13.4	335
3×2×1.0	0.6	1.1	1.3	16.3	470
4×2×1.0	0.6	1.1	1.4	17.4	535
5×2×1.0	0.6	1.1	1.4	18.7	610
6×2×1.0	0.6	1.1	1.5	20.2	700
7×2×1.0	0.6	1.1	1.5	20.2	720
8×2×1.0	0.6	1.1	1.5	21.8	775
9×2×1.0	0.6	1.1	1.6	23.2	850
10×2×1.0	0.6	1.1	1.6	24.1	880
12×2×1.0	0.6	1.1	1.6	24.7	980
14×2×1.0	0.6	1.1	1.7	26.0	1030
15×2×1.0	0.6	1.1	1.8	27.8	1125
16×2×1.0	0.6	1.1	1.8	28.2	1175
18×2×1.0	0.6	1.1	1.8	29.5	1255
19×2×1.0	0.6	1.1	1.8	29.8	1295

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		
20×2×1.0	0.6	1.1	1.9	31.1	1420
21×2×1.0	0.6	1.1	1.9	31.9	1475
23×2×1.0	0.6	1.2	1.9	32.7	1610
24×2×1.0	0.6	1.2	2.0	34.3	1620
27×2×1.0	0.6	1.2	2.0	35.0	1745
30×2×1.0	0.6	1.2	2.1	36.7	1980
33×2×1.0	0.6	1.2	2.1	38.0	2130
37×2×1.0	0.6	1.2	2.2	39.3	2305
1×3×1.0	0.6	1.1	1.2	12.0	250
2×3×1.0	0.6	1.1	1.4	17.0	520
3×3×1.0	0.6	1.1	1.4	17.4	540
4×3×1.0	0.6	1.1	1.4	18.7	625
5×3×1.0	0.6	1.1	1.5	20.2	745
6×3×1.0	0.6	1.1	1.6	22.4	875
7×3×1.0	0.6	1.1	1.6	22.4	905
8×3×1.0	0.6	1.1	1.6	23.8	980
9×3×1.0	0.6	1.1	1.7	25.4	1080
10×3×1.0	0.6	1.1	1.7	27.1	1150
12×3×1.0	0.6	1.1	1.8	28.1	1265
14×3×1.0	0.6	1.1	1.8	29.2	1355
15×3×1.0	0.6	1.1	1.8	30.1	1440
16×3×1.0	0.6	1.1	1.9	31.1	1570
18×3×1.0	0.6	1.2	1.9	32.8	1675
19×3×1.0	0.6	1.2	2.0	33.3	1750
20×3×1.0	0.6	1.2	2.0	34.1	1880
21×3×1.0	0.6	1.2	2.0	34.8	1950
23×3×1.0	0.6	1.2	2.1	36.6	2215
24×3×1.0	0.6	1.2	2.1	37.3	2200
27×3×1.0	0.6	1.2	2.2	39.2	2425
30×3×1.0	0.6	1.2	2.2	40.8	2630
32×3×1.0	0.6	1.2	2.3	42.1	2790
1×2×1.5	0.7	1.1	1.2	12.7	260
2×2×1.5	0.7	1.1	1.4	15.4	420
3×2×1.5	0.7	1.1	1.4	17.6	585
4×2×1.5	0.7	1.1	1.4	18.8	635
5×2×1.5	0.7	1.1	1.5	21.1	770
6×2×1.5	0.7	1.1	1.6	22.8	890
7×2×1.5	0.7	1.1	1.6	22.8	925
8×2×1.5	0.7	1.1	1.6	23.7	975
9×2×1.5	0.7	1.1	1.7	26.3	1060
10×2×1.5	0.7	1.1	1.7	27.4	1130
12×2×1.5	0.7	1.1	1.8	28.3	1270
14×2×1.5	0.7	1.1	1.8	29.5	1325

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		
15×2×1.5	0.7	1.1	1.9	31.6	1445
16×2×1.5	0.7	1.1	1.9	32.1	1575
18×2×1.5	0.7	1.2	2.0	34.2	1670
19×2×1.5	0.7	1.2	2.0	34.5	1765
20×2×1.5	0.7	1.2	2.1	36.0	1895
21×2×1.5	0.7	1.2	2.1	37.3	2050
23×2×1.5	0.7	1.2	2.1	37.9	2185
24×2×1.5	0.7	1.2	2.2	39.8	2200
27×2×1.5	0.7	1.2	2.2	40.6	2390
30×2×1.5	0.7	1.2	2.3	42.1	2600
33×2×1.5	0.7	1.2	2.3	43.6	2805
37×2×1.5	0.7	1.4	2.4	45.4	3080
1×3×1.5	0.7	1.1	1.2	13.2	295
2×3×1.5	0.7	1.1	1.4	17.0	490
3×3×1.5	0.7	1.1	1.5	19.5	685
4×3×1.5	0.7	1.1	1.5	20.9	785
5×3×1.5	0.7	1.1	1.6	21.0	820
6×3×1.5	0.7	1.1	1.7	22.8	960
7×3×1.5	0.7	1.1	1.7	25.1	1135
8×3×1.5	0.7	1.1	1.7	27.0	1270
9×3×1.5	0.7	1.1	1.8	28.9	1445
10×3×1.5	0.7	1.1	1.9	31.1	1450
12×3×1.5	0.7	1.1	1.9	31.5	1710
14×3×1.5	0.7	1.2	2.0	33.8	1815
15×3×1.5	0.7	1.2	2.0	34.8	1930
16×3×1.5	0.7	1.2	2.1	36.0	2110
18×3×1.5	0.7	1.2	2.1	38.1	2305
19×3×1.5	0.7	1.2	2.2	38.6	2375
20×3×1.5	0.7	1.2	2.2	39.6	2580
21×3×1.5	0.7	1.2	2.2	40.4	2680
23×3×1.5	0.7	1.2	2.3	42.0	2925
24×3×1.5	0.7	1.2	2.3	42.7	3140
27×3×1.5	0.7	1.4	2.4	45.3	3250
30×3×1.5	0.7	1.4	2.5	47.4	3555
32×3×1.5	0.7	1.4	2.5	48.6	3745
1×2×2.5	0.7	1.1	1.2	13.5	300
2×2×2.5	0.7	1.1	1.4	18.9	650
3×2×2.5	0.7	1.1	1.5	19.9	720
4×2×2.5	0.7	1.1	1.5	21.1	820
5×2×2.5	0.7	1.1	1.6	23.0	965
6×2×2.5	0.7	1.1	1.6	24.8	1105
7×2×2.5	0.7	1.1	1.6	24.8	1150
8×2×2.5	0.7	1.1	1.7	27.0	1255

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		
9×2×2.5	0.7	1.1	1.8	28.8	1385
10×2×2.5	0.7	1.1	1.8	30.0	1430
12×2×2.5	0.7	1.3	1.9	31.0	1545
14×2×2.5	0.7	1.2	1.9	32.7	1730
15×2×2.5	0.7	1.2	2.0	35.0	1885
16×2×2.5	0.7	1.2	2.0	35.6	1970
18×2×2.5	0.7	1.2	2.1	37.9	2235
19×2×2.5	0.7	1.2	2.1	38.3	2315
20×2×2.5	0.7	1.2	2.2	39.9	2530
21×2×2.5	0.7	1.2	2.2	41.0	2630
23×2×2.5	0.7	1.2	2.3	41.8	2750
24×2×2.5	0.7	1.2	2.3	43.7	2850
27×2×2.5	0.7	1.4	2.4	45.1	3150
30×2×2.5	0.7	1.4	2.5	46.8	3435
33×2×2.5	0.7	1.4	2.5	48.5	3715
37×2×2.5	0.7	1.4	2.6	50.2	4040
1×3×2.5	0.7	1.1	1.3	14.3	360
2×3×2.5	0.7	1.1	1.5	20.5	785
3×3×2.5	0.7	1.1	1.5	21.2	875
4×3×2.5	0.7	1.1	1.6	22.9	1035
5×3×2.5	0.7	1.1	1.6	24.8	1205
6×3×2.5	0.7	1.1	1.8	27.8	1430
7×3×2.5	0.7	1.1	1.8	27.8	1505
8×3×2.5	0.7	1.1	1.8	29.6	1625
9×3×2.5	0.7	1.1	1.9	31.7	1855
10×3×2.5	0.7	1.2	2.0	34.4	1890
12×3×2.5	0.7	1.2	2.0	35.5	2110
14×3×2.5	0.7	1.2	2.1	37.6	2445
15×3×2.5	0.7	1.2	2.2	38.9	2620
16×3×2.5	0.7	1.2	2.2	40.0	2755
18×3×2.5	0.7	1.2	2.3	42.0	3010
19×3×2.5	0.7	1.2	2.3	42.4	3125
20×3×2.5	0.7	1.2	2.3	43.5	3360
21×3×2.5	0.7	1.4	2.4	44.9	3555
23×3×2.5	0.7	1.4	2.5	46.7	3885
24×3×2.5	0.7	1.4	2.5	47.5	3870
27×3×2.5	0.7	1.4	2.6	50.0	4280
30×3×2.5	0.7	1.4	2.7	52.3	4695
32×3×2.5	0.7	1.4	2.7	53.8	4960