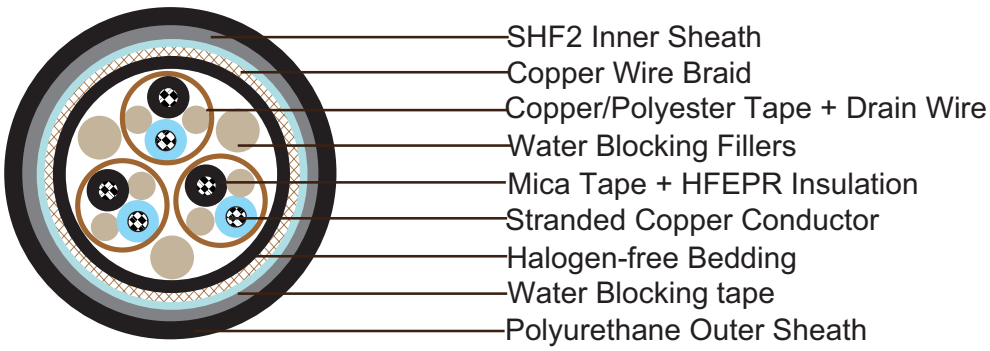
Water Blocked S3 or S3/S7 BFOU(i) 250V

Applications

These cables are partially water blocked, 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
- VG 95218 part 29



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.
- Filler: Water blocking fillers, if required.
- **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.
- **Filler:** Water blocking fillers, if required.
- **Bedding:** Halogen free compound, PETP wrapping tape will be applied over the bedding, if required.
- **Armour:** Tinned copper wire braid, PETP wrapping tape will be applied over the braiding, if required.
- **Water Blocking Elements:** Water blocking tape and strings for providing longitudinal

water tightness.

- **Inner 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).
- **Outer Sheath:** Polyurethane for providing transversal water tightness, PE is optional,but can not meet low smoke standard.

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˚C	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˚C ~ +90˚C

Dimensions and Weight

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Inner Sheath Thickness mm	Nominal Outer Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×2×0.75	0.6	1.1	1.2	1.0	14.1±2	236
2×2×0.75	0.6	1.1	1.3	1.0	18.7±2	425
3×2×0.75	0.6	1.1	1.4	1.0	19.5±2	567
4×2×0.75	0.6	1.1	1.4	1.0	20.6±2	641
5×2×0.75	0.6	1.1	1.5	1.0	22.2±2	740
6×2×0.75	0.6	1.1	1.5	1.0	23.7±2	845
7×2×0.75	0.6	1.1	1.5	1.0	23.7±2	872
8×2×0.75	0.6	1.1	1.6	1.0	25.6±2	950
9×2×0.75	0.6	1.1	1.7	1.0	27.1±2	1050
10×2×0.75	0.6	1.1	1.7	1.0	28.2±2	1082
12×2×0.75	0.6	1.1	1.7	1.0	28.8±2	1202
14×2×0.75	0.6	1.1	1.8	1.0	30.2±2	1265

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Inner Sheath Thickness mm	Nominal Outer Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
15×2×0.75	0.6	1.1	1.8	1.0	32.0±2	1370
16×2×0.75	0.6	1.1	1.9	1.0	32.6±2	1486
18×2×0.75	0.6	1.1	1.9	1.0	34.1±2	1549
19×2×0.75	0.6	1.2	1.9	1.0	34.7±2	1654
20×2×0.75	0.6	1.2	2.0	1.0	36.1±2	1785
21×2×0.75	0.6	1.2	2.0	1.0	37.0±2	1853
23×2×0.75	0.6	1.2	2.0	1.0	37.5±2	1990
24×2×0.75	0.6	1.2	2.1	1.0	39.7±2	2079
27×2×0.75	0.6	1.2	2.2	1.0	40.7±2	2273
30×2×0.75	0.6	1.2	2.2	1.0	41.9±2	2452
33×2×0.75	0.6	1.2	2.3	1.0	43.5±2	2662
37×2×0.75	0.6	1.2	2.3	1.0	44.7±2	2861
1×3×0.75	0.6	1.1	1.1	1.0	13.9±2	257
2×3×0.75	0.6	1.1	1.4	1.0	17.5±2	441
3×3×0.75	0.6	1.1	1.4	1.0	20.4±2	609
4×3×0.75	0.6	1.1	1.4	1.0	21.7±2	709
7×3×0.75	0.6	1.1	1.6	1.0	25.6±2	1008
8×3×0.75	0.6	1.1	1.7	1.0	27.0±2	1029
12×3×0.75	0.6	1.3	1.8	1.0	31.6±2	1507
16×3×0.75	0.6	1.4	1.9	1.0	34.6±2	1859
19×3×0.75	0.6	1.4	2.1	1.0	36.4±2	2084
24×3×0.75	0.6	1.8	2.2	1.0	41.6±2	2709
1×2×1.0	0.6	1.1	1.2	1.0	14.5±2	257
2×2×1.0	0.6	1.1	1.4	1.0	19.6±2	473
3×2×1.0	0.6	1.1	1.4	1.0	20.3±2	630
4×2×1.0	0.6	1.1	1.4	1.0	21.3±2	656
5×2×1.0	0.6	1.1	1.5	1.0	23.1±2	966
6×2×1.0	0.6	1.1	1.6	1.0	24.8±2	998
7×2×1.0	0.6	1.1	1.6	1.0	24.8±2	903
8×2×1.0	0.6	1.1	1.6	1.0	26.7±2	1034
9×2×1.0	0.6	1.1	1.7	1.0	28.3±2	1192
10×2×1.0	0.6	1.1	1.7	1.0	29.4±2	1229
12×2×1.0	0.6	1.1	1.8	1.0	30.3±2	1365
14×2×1.0	0.6	1.1	1.8	1.0	31.5±2	1449
15×2×1.0	0.6	1.1	1.9	1.0	33.6±2	1586
16×2×1.0	0.6	1.1	1.9	1.0	34.1±2	1701
18×2×1.0	0.6	1.2	2.0	1.0	36.2±2	1832
19×2×1.0	0.6	1.2	2.0	1.0	36.5±2	1922
20×2×1.0	0.6	1.2	2.1	1.0	38.0±2	2074
21×2×1.0	0.6	1.2	2.1	1.0	39.3±2	2242

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Inner Sheath Thickness mm	Nominal Outer Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
23×2×1.0	0.6	1.2	2.1	1.0	39.9±2	2410
24×2×1.0	0.6	1.2	2.2	1.0	41.8±2	2452
27×2×1.0	0.6	1.2	2.2	1.0	42.6±2	2625
30×2×1.0	0.6	1.2	2.3	1.0	44.1±2	2856
33×2×1.0	0.6	1.2	2.3	1.0	45.6±2	3087
37×2×1.0	0.6	1.4	2.4	1.0	47.4±2	3392
1×3×1.0	0.6	1.1	1.2	1.0	14.6±2	289
2×3×1.0	0.6	1.1	1.4	1.0	20.8±2	672
3×3×1.0	0.6	1.1	1.5	1.0	21.3±2	698
4×3×1.0	0.6	1.1	1.5	1.0	22.9±2	814
5×3×1.0	0.6	1.1	1.6	1.0	24.8±2	1013
6×3×1.0	0.6	1.1	1.7	1.0	27.4±2	1192
7×3×1.0	0.6	1.1	1.7	1.0	27.4±2	1239
8×3×1.0	0.6	1.1	1.7	1.0	29.0±2	1334
9×3×1.0	0.6	1.1	1.8	1.0	30.9±2	1523
10×3×1.0	0.6	1.1	1.9	1.0	33.1±2	1528
12×3×1.0	0.6	1.1	1.9	1.0	34.0±2	1769
14×3×1.0	0.6	1.2	2.0	1.0	35.8±2	1911
15×3×1.0	0.6	1.2	2.0	1.0	36.8±2	2032
16×3×1.0	0.6	1.2	2.1	1.0	38.0±2	2210
18×3×1.0	0.6	1.2	2.1	1.0	40.1±2	2426
19×3×1.0	0.6	1.2	2.2	1.0	40.6±2	2473
20×3×1.0	0.6	1.2	2.2	1.0	41.6±2	2720
21×3×1.0	0.6	1.2	2.2	1.0	42.4±2	2819
23×3×1.0	0.6	1.2	2.3	1.0	44.0±2	3082
24×3×1.0	0.6	1.2	2.3	1.0	44.8±2	3302
27×3×1.0	0.6	1.4	2.4	1.0	47.3±2	3418
30×3×1.0	0.6	1.4	2.5	1.0	49.4±2	3743
32×3×1.0	0.6	1.4	2.5	1.0	50.6±2	3943
1×2×1.5	0.7	1.1	1.2	1.0	15.5±2	310
2×2×1.5	0.7	1.1	1.4	1.0	21.2±2	572
3×2×1.5	0.7	1.1	1.5	1.0	22.2±2	761
4×2×1.5	0.7	1.1	1.5	1.0	23.5±2	809
5×2×1.5	0.7	1.1	1.6	1.0	25.4±2	1024
6×2×1.5	0.7	1.1	1.7	1.0	27.4±2	1187
7×2×1.5	0.7	1.1	1.7	1.0	27.4±2	1229
8×2×1.5	0.7	1.1	1.7	1.0	29.5±2	1286
9×2×1.5	0.7	1.1	1.8	1.0	31.4±2	1475
10×2×1.5	0.7	1.1	1.9	1.0	32.9±2	1512
12×2×1.5	0.7	1.1	1.9	1.0	33.6±2	1764

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Inner Sheath Thickness mm	Nominal Outer Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
14×2×1.5	0.7	1.2	2.0	1.0	35.6±2	1838
15×2×1.5	0.7	1.2	2.1	1.0	38.0±2	2006
16×2×1.5	0.7	1.2	2.1	1.0	38.9±2	2158
18×2×1.5	0.7	1.2	2.2	1.0	40.9±2	2373
19×2×1.5	0.7	1.2	2.2	1.0	41.3±2	2515
20×2×1.5	0.7	1.2	2.2	1.0	42.8±2	2667
21×2×1.5	0.7	1.2	2.3	1.0	44.1±2	2793
23×2×1.5	0.7	1.2	2.3	1.0	44.7±2	3008
24×2×1.5	0.7	1.4	2.4	1.0	47.2±2	3234
27×2×1.5	0.7	1.4	2.4	1.0	48.1±2	3313
30×2×1.5	0.7	1.4	2.5	1.0	49.8±2	3612
32×2×1.5	0.7	1.4	2.6	1.0	51.0±2	3869
33×2×1.5	0.7	1.4	2.6	1.0	51.7±2	3927
37×2×1.5	0.7	1.4	2.6	1.0	53.2±2	4242
1×3×1.5	0.7	1.1	1.3	1.0	15.6±2	341
2×3×1.5	0.7	1.1	1.5	1.0	20.5±2	588
3×3×1.5	0.7	1.1	1.5	1.0	23.4±2	840
4×3×1.5	0.7	1.1	1.6	1.0	25.7±2	1024
5×3×1.5	0.7	1.1	1.7	1.0	27.4±2	1255
6×3×1.5	0.7	1.1	1.8	1.0	30.3±2	1475
7×3×1.5	0.7	1.1	1.8	1.0	30.3±2	1544
8×3×1.5	0.7	1.1	1.8	1.0	32.2±2	1664
9×3×1.5	0.7	1.2	1.9	1.0	34.6±2	1927
10×3×1.5	0.7	1.2	2.0	1.0	37.1±2	2032
12×3×1.5	0.7	1.2	2.1	1.0	38.8±2	2221
14×3×1.5	0.7	1.2	2.1	1.0	40.3±2	2478
15×3×1.5	0.7	1.2	2.2	1.0	41.7±2	2657
16×3×1.5	0.7	1.2	2.2	1.0	42.8±2	2914
18×3×1.5	0.7	1.2	2.3	1.0	44.9±2	3050
19×3×1.5	0.7	1.2	2.3	1.0	45.3±2	3360
20×3×1.5	0.7	1.4	2.4	1.0	46.9±2	3470
21×3×1.5	0.7	1.4	2.4	1.0	47.8±2	3602
23×3×1.5	0.7	1.4	2.5	1.0	49.7±2	3943
24×3×1.5	0.7	1.4	2.5	1.0	50.6±2	4121
27×3×1.5	0.7	1.4	2.6	1.0	53.1±2	4321
30×3×1.5	0.7	1.4	2.7	1.0	55.5±2	4736
32×3×1.5	0.7	1.6	2.8	1.0	57.5±2	5093
1×2×2.5	0.7	1.1	1.3	1.0	16.0±2	357
2×2×2.5	0.7	1.1	1.5	1.0	20.5±2	588
3×2×2.5	0.7	1.1	1.5	1.0	23.6±2	908

Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Inner Sheath Thickness mm	Nominal Outer Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
4×2×2.5	0.7	1.1	1.6	1.0	25.2±2	1061
5×2×2.5	0.7	1.1	1.7	1.0	27.3±2	1244
6×2×2.5	0.7	1.1	1.7	1.0	29.4±2	1439
7×2×2.5	0.7	1.1	1.7	1.0	29.4±2	1502
8×2×2.5	0.7	1.1	1.8	1.0	31.9±2	1638
9×2×2.5	0.7	1.1	1.9	1.0	33.9±2	1869
10×2×2.5	0.7	1.2	2.0	1.0	35.8±2	1864
12×2×2.5	0.7	1.2	2.0	1.0	36.6±2	2063
14×2×2.5	0.7	1.2	2.1	1.0	38.9±2	2389
15×2×2.5	0.7	1.2	2.2	1.0	41.5±2	2604
16×2×2.5	0.7	1.2	2.2	1.0	42.1±2	2720
18×2×2.5	0.7	1.2	2.3	1.0	44.3±2	2966
19×2×2.5	0.7	1.2	2.3	1.0	44.7±2	3077
20×2×2.5	0.7	1.4	2.4	1.0	46.8±2	3402
21×2×2.5	0.7	1.4	2.4	1.0	48.1±2	3544
23×2×2.5	0.7	1.4	2.5	1.0	48.9±2	3738
24×2×2.5	0.7	1.4	2.5	1.0	51.1±2	3843
27×2×2.5	0.7	1.4	2.6	1.0	52.3±2	4200
30×2×2.5	0.7	1.4	2.7	1.0	54.2±2	4589
33×2×2.5	0.7	1.4	2.7	1.0	56.1±2	4972
37×2×2.5	0.7	1.6	2.8	1.0	58.4±2	5486
1×3×2.5	0.7	1.1	1.2	1.0	16.5±2	399
2×3×2.5	0.7	1.1	1.6	1.0	24.5±2	998
3×3×2.5	0.7	1.1	1.6	1.0	25.4±2	1108
4×3×2.5	0.7	1.1	1.7	1.0	27.3±2	1313
5×3×2.5	0.7	1.1	1.7	1.0	29.4±2	1533
6×3×2.5	0.7	1.1	1.9	1.0	32.7±2	1822
7×3×2.5	0.7	1.1	1.9	1.0	32.7±2	1922
8×3×2.5	0.7	1.2	2.0	1.0	35.3±2	2126
9×3×2.5	0.7	1.2	2.0	1.0	37.4±2	2405
10×3×2.5	0.7	1.2	2.2	1.0	40.8±2	2525
12×3×2.5	0.7	1.2	2.2	1.0	42.0±2	2819
14×3×2.5	0.7	1.2	2.3	1.0	43.9±2	3150
15×3×2.5	0.7	1.2	2.3	1.0	45.1±2	3350
16×3×2.5	0.7	1.4	2.4	1.0	46.9±2	3591
18×3×2.5	0.7	1.4	2.5	1.0	49.2±2	3927
19×3×2.5	0.7	1.4	2.5	1.0	49.6±2	4079
20×3×2.5	0.7	1.4	2.5	1.0	50.9±2	4394
21×3×2.5	0.7	1.4	2.6	1.0	52.0±2	4589
23×3×2.5	0.7	1.4	2.7	1.0	54.1±2	4998

NEK606 Water Blocked Offshore & Marine Cables

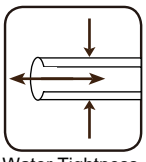
Construction No. of elements×No. of cores in element×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Inner Sheath Thickness mm	Nominal Outer Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
24×3×2.5	0.7	1.4	2.7	1.0	55.0±2	5024
27×3×2.5	0.7	1.6	2.8	1.0	58.2±2	5602
30×3×2.5	0.7	1.6	2.9	1.0	60.8±2	6148
32×3×2.5	0.7	1.6	3.0	1.0	62.6±2	6526

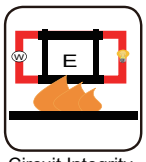
Standard

Standard

Standard

Standard


Water Tightness
VG 95218-29



Circuit Integrity
IEC 60331-21

Halogen Free
IEC60754-1


Low Corrosivity
IEC60754-2


Low Smoke Emission
IEC 61034-1&2


Flame Retardancy
IEC60332-1


Reduced Fire Propagation
IEC60332-3-22