



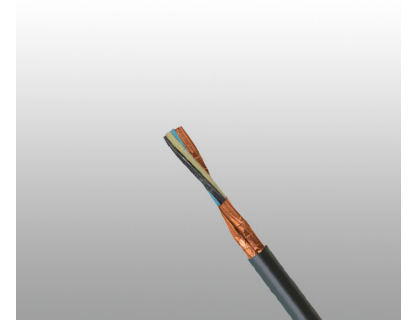
Instrumentation Cables

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S105 (Formerly S11) RU(i)/TU(i) 250 V

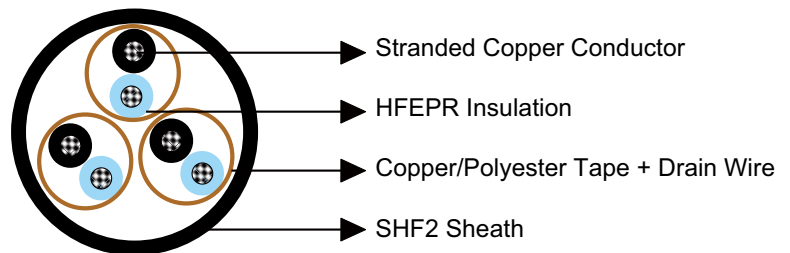
Applications

These unarmoured cables are flame retardant, low smoke and halogen free, 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 or class 5.
- **Insulation:** Halogen free EPR compound or XLPE.
- **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.
- **Outer Sheath:** Halogen free thermosetting compound, SHF2, coloured grey (blue for intrinsically safe).

Electrical Characteristics

Nominal Cross Section Area	mm ²	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	90	100	110	120
Nominal Inductance@1KHz	MH/km	0.686	0.649	0.637	0.598
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°C ~ +90°C

Dimensions and Weight

Construction No. of elements×No. of cores in element×Cross section(mm ²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×2×0.75	0.6	1.0	7.6	95
2×2×0.75	0.6	1.1	9.7	180
4×2×0.75	0.6	1.2	12.1	255
7×2×0.75	0.6	1.3	14.4	380
8×2×0.75	0.6	1.3	15.6	425
12×2×0.75	0.6	1.5	19.0	610
16×2×0.75	0.6	1.5	21.0	785
19×2×0.75	0.6	1.6	22.4	895
24×2×0.75	0.6	1.7	25.6	1135
32×2×0.75	0.6	1.8	28.4	1440
1×3×0.75	0.6	1.0	8.0	110
2×3×0.75	0.6	1.2	11.0	180
3×3×0.75	0.6	1.2	12.7	265
4×3×0.75	0.6	1.2	13.8	325
7×3×0.75	0.6	1.4	16.7	500
8×3×0.75	0.6	1.4	18.0	540
12×3×0.75	0.6	1.6	22.2	815
16×3×0.75	0.6	1.6	24.7	1045
19×3×0.75	0.6	1.7	26.2	1205
24×3×0.75	0.6	1.9	30.5	1545
1×2×1.0	0.6	1.0	8.1	110
2×2×1.0	0.6	1.1	10.4	215
4×2×1.0	0.6	1.2	12.9	310
7×2×1.0	0.6	1.4	15.5	475
8×2×1.0	0.6	1.4	17.0	540



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Construction No. of elements×No. of cores in element×Cross section(mm ²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
12×2×1.0	0.6	1.5	20.5	760
16×2×1.0	0.6	1.5	22.9	995
19×2×1.0	0.6	1.7	24.1	1135
24×2×1.0	0.6	1.8	27.8	1450
32×2×1.0	0.6	1.9	30.8	1850
1×3×1.0	0.6	1.0	8.5	125
3×3×1.0	0.6	1.3	13.4	320
4×3×1.0	0.6	1.3	14.8	395
7×3×1.0	0.6	1.5	17.9	615
12×3×1.0	0.6	1.6	23.7	990
16×3×1.0	0.6	1.7	26.5	1295
19×3×1.0	0.6	1.8	28.0	1475
24×3×1.0	0.6	2.0	32.6	1900
1×2×1.5	0.7	1.0	9.1	140
2×2×1.5	0.7	1.2	11.7	280
4×2×1.5	0.7	1.3	14.9	410
7×2×1.5	0.7	1.5	18.0	635
8×2×1.5	0.7	1.5	19.7	720
12×2×1.5	0.7	1.6	23.8	1015
16×2×1.5	0.7	1.6	26.6	1330
19×2×1.5	0.7	1.9	28.3	1525
24×2×1.5	0.7	2.0	32.6	1945
32×2×1.5	0.7	2.2	36.1	2475
1×3×1.5	0.7	1.0	9.5	160
2×3×1.5	0.7	1.3	14.0	285
3×3×1.5	0.7	1.3	15.5	425
4×3×1.5	0.7	1.3	17.0	525
7×3×1.5	0.7	1.6	20.9	830
8×3×1.5	0.7	1.6	22.5	900
12×3×1.5	0.7	1.8	27.6	1340
16×3×1.5	0.7	1.9	31.1	1770
19×3×1.5	0.7	2.0	32.8	2020
24×3×1.5	0.7	2.2	38.4	2610
1×2×2.5	0.7	1.0	9.8	175
1×3×2.5	0.7	1.2	10.4	205

