

LKSM-EMC-FRHF

0.6/1 kV

Fire-resistant armoured power and control cable with improved EMC-screening



- Flame-retardant • Fire-resistant • Halogen-free • Low smoke emission • Oil Resistant (SHF2 only)

| | |
|---------------------------|--|
| CONDUCTOR | Stranded copper conductor 1.0-10 mm ² , IEC 60228 Class 2 Stranded copper conductor 16-300 mm ² , IEC 60228 Class 5 |
| INSULATION | Special grade Mica tape XLPE |
| CABLING/BEDDING | Cabling, cores twisted together, with optional fillers or dummy cores for symmetrical and round construction. Bedding, lapped tape. |
| SCREEN | Copper tape, coverage 100% |
| ARMOUR | Copper wire braid, coverage > 90%, IEC 60092-350 Tinned copper wire braid on request |
| RIP CORD | For conductors ≥ 16 mm ² |
| SHEATH | Polyolefine SHF1, IEC 60092-360 Thermosetting polyolefine SHF2 on request Standard colour orange, SHF2 standard colour black, other colours on request |
| REFERENCE STANDARD | IEC 60092-353 |

APPLICATION

Fire-resistant armoured power and control cable with improved EMC-screening. For fixed installation in most areas, and on open deck in ships and offshore units. If the cable is exposed to direct sunlight, protective covering or cable with black outer sheath is recommended. Specially designed cables with screen for improved screening properties to address EMI/EMC problems.

PHYSICAL PROPERTIES:

| | |
|------------------------------|---|
| CORE IDENTIFICATION | Colour code for 1...4 core cables, number code for 5...37 core cables |
| MARINE TYPE APPROVALS | ABS, BV, CCS, CRS, DNV, LR, RINA |

MAIN CHARACTERISTICS:

| | |
|--------------------------------------|--|
| RATED VOLTAGE | AC 0.6/1 kV (1.2 kV) DC 0.9/1.5 kV (if voltage to earth does not exceed 0.9 kV) |
| FIRE PERFORMANCE | IEC 60332-1-2 IEC 60332-3-22 |
| FIRE-RESISTANT | IEC 60331-1 / IEC 60331-2 (180 min) |
| HALOGEN-FREE | IEC 60754 series |
| SMOKE EMISSION | IEC 61034 series |
| OIL RESISTANCE (SHF2 only) | IEC 60811-404 conditions according to 60092-360/SHF2 |
| MIN. INSTALLATION TEMPERATURE | -15 °C |
| OPERATING TEMPERATURE | -40 - 80 °C fixed installation |
| MAXIMUM CONDUCTOR TEMPERATURE | 90 °C |

LKSM-EMC-FRHF 0.6/1 kV

| Part number | | No. of conductors x Conductor area (mm ²) | Cross-section of armour mm ² | Diameter of screen mm | Nominal outer Ø (mm) | Weight kg/km | Current rating A | Min. bending radius mm (fixed) |
|---------------|---------------|---|---|-----------------------|----------------------|--------------|------------------|--------------------------------|
| Normal | G-type | | | | | | | |
| - | - | 1 x 1.0 | 3.0 | 4.5 | 6.5 | 90 | 18 | 40 |
| - | - | 1 x 1.5 | 3.0 | 4.5 | 7.0 | 100 | 23 | 40 |
| - | - | 1 x 2.5 | 3.1 | 5.0 | 7.5 | 110 | 30 | 45 |
| - | - | 1 x 4 | 3.1 | 5.5 | 8.0 | 130 | 40 | 45 |
| - | - | 1 x 6 | 3.1 | 6.0 | 8.5 | 155 | 52 | 50 |
| - | - | 1 x 10 | 3.5 | 7.0 | 10.0 | 215 | 72 | 60 |
| - | - | 1 x 16 cl5 | 4.1 | 8.5 | 11.0 | 285 | 94 | 65 |
| - | - | 1 x 25 cl5 | 4.8 | 10.5 | 13.0 | 410 | 123 | 80 |
| - | - | 1 x 35 cl5 | 5.5 | 11.5 | 14.0 | 515 | 153 | 85 |
| - | - | 1 x 50 cl5 | 8.6 | 13.5 | 17.0 | 705 | 196 | 100 |
| - | - | 1 x 70 cl5 | 10.0 | 15.5 | 18.5 | 935 | 240 | 110 |
| - | - | 1 x 95 cl5 | 11.5 | 18.0 | 21.5 | 1190 | 284 | 130 |
| - | - | 1 x 120 cl5 | 12.3 | 20.0 | 23.5 | 1465 | 331 | 140 |
| - | - | 1 x 150 cl5 | 14.7 | 22.5 | 26.5 | 1800 | 381 | 160 |
| - | - | 1 x 185 cl5 | 15.2 | 25.5 | 29.0 | 2165 | 429 | 175 |
| - | - | 1 x 240 cl5 | 16.9 | 28.5 | 32.5 | 2790 | 507 | 195 |
| - | - | 1 x 300 cl5 | 18.6 | 31.0 | 35.5 | 3420 | 582 | 210 |
| - | - | 2 x 1.0 | 3.7 | 7.5 | 10.0 | 140 | 15 | 60 |
| 27872 | - | 2 x 1.5 | 4.1 | 8.0 | 10.5 | 160 | 20 | 65 |
| 27873 | - | 2 x 2.5 | 4.5 | 9.0 | 11.5 | 190 | 26 | 70 |
| 27874 | - | 2 x 4 | 5.1 | 10.0 | 13.0 | 245 | 34 | 75 |
| 27875 | - | 2 x 6 | 5.6 | 11.0 | 14.0 | 365 | 44 | 85 |
| 27876 | - | 2 x 10 | 8.9 | 13.5 | 16.5 | 540 | 61 | 100 |
| 27877 | - | 2 x 16 cl5 | 11.4 | 15.5 | 19.0 | 730 | 80 | 115 |
| 27878 | - | 2 x 25 cl5 | 12.6 | 19.5 | 23.5 | 1070 | 105 | 140 |
| 27879 | - | 2 x 35 cl5 | 14.8 | 22.0 | 25.5 | 1350 | 130 | 155 |
| 27880 | - | 2 x 50 cl5 | 16.6 | 26.0 | 30.0 | 1815 | 167 | 180 |
| 27881 | - | 2 x 70 cl5 | 19.0 | 30.0 | 34.5 | 2420 | 204 | 205 |
| - | - | 2 x 95 cl5 | 21.5 | 35.0 | 39.5 | 3150 | 241 | 240 |
| - | - | 3 x 1.0 | 4.0 | 8.0 | 10.5 | 170 | 13 | 65 |
| 27882 | 28444 | 3 x 1.5 | 4.3 | 8.5 | 11.0 | 190 | 16 | 65 |
| 27883 | 28445 | 3 x 2.5 | 4.8 | 9.5 | 12.5 | 240 | 21 | 75 |
| 27884 | 28446 | 3 x 4 | 5.5 | 10.5 | 13.5 | 305 | 28 | 80 |
| 27885 | 28447 | 3 x 6 | 11.3 | 12.5 | 15.5 | 485 | 36 | 90 |
| 27886 | 28448 | 3 x 10 | 9.6 | 14.5 | 17.5 | 630 | 50 | 105 |
| 27887 | 28449 | 3 x 16 cl5 | 11.5 | 17.5 | 20.5 | 890 | 66 | 125 |
| 27888 | 28450 | 3 x 25 cl5 | 14.7 | 21.5 | 25.5 | 1315 | 86 | 155 |
| 27889 | 28451 | 3 x 35 cl5 | 15.8 | 24.0 | 28.0 | 1675 | 107 | 170 |
| 27890 | 28452 | 3 x 50 cl5 | 18.5 | 28.5 | 33.0 | 2280 | 137 | 200 |
| 27891 | 28453 | 3 x 70 cl5 | 22.2 | 32.5 | 37.5 | 3055 | 168 | 225 |
| 27892 | 28454 | 3 x 95 cl5 | 32.5 | 38.5 | 43.5 | 4055 | 199 | 260 |
| 27893 | 28455 | 3 x 120 cl5 | 36.1 | 42.5 | 48.0 | 4980 | 232 | 290 |
| 27894 | 28456 | 3 x 150 cl5 | 40.2 | 48.0 | 54.0 | 6200 | 267 | 325 |
| - | - | 4 x 1.0 | 4.4 | 9.0 | 11.5 | 195 | 13 | 70 |
| 27897 | 28459 | 4 x 1.5 | 4.8 | 9.5 | 12.5 | 230 | 16 | 75 |
| 27898 | 28460 | 4 x 2.5 | 5.4 | 10.5 | 13.5 | 280 | 21 | 80 |
| 27899 | 28461 | 4 x 4 | 11.3 | 12.0 | 15.0 | 420 | 28 | 90 |
| 27900 | 28462 | 4 x 6 | 9.2 | 13.5 | 16.5 | 540 | 36 | 100 |

Standard length 1000 m

G-type with yellow/green earth conductor and G-marking on sheath e.g. 3G1.5

SHF2 on request. Part number for SHF2 cables 4 + code from above table → 4xxxxx

Table continues on next page

LKSM-EMC-FRHF 0.6/1 kV

| Part number | No. of conductors x Conductor area (mm ²) | Cross-section of armour mm ² | Diameter of screen mm | Nominal outer Ø (mm) | Weight kg/km | Current rating A | Min. bending radius mm (fixed) |
|---------------|---|---|-----------------------|----------------------|--------------|------------------|--------------------------------|
| Normal | G-type | | | | | | |
| 27905 | 28463 | 4 x 10 | 10.7 | 16.0 | 19.5 | 760 | 115 |
| 27906 | 28464 | 4 x 16 cl5 | 12.8 | 19.0 | 23.0 | 1095 | 135 |
| 27907 | 28465 | 4 x 25 cl5 | 15.6 | 24.0 | 28.0 | 1595 | 165 |
| 27908 | 28466 | 4 x 35 cl5 | 18.3 | 26.5 | 31.0 | 2090 | 185 |
| 27909 | 28467 | 4 x 50 Fcl5 | 20.4 | 32.0 | 36.5 | 2825 | 220 |
| 27910 | 28468 | 4 x 70 cl5 | 23.3 | 36.5 | 41.5 | 3840 | 250 |
| 27912 | 28469 | 4 x 95 cl5 | 36.1 | 43.0 | 48.5 | 5055 | 290 |
| 27913 | 28470 | 4 x 120 cl5 | 40.2 | 47.5 | 53.5 | 6285 | 320 |
| - | - | 4 x 150 cl5 | 44.8 | 53.5 | 60.5 | 7820 | 360 |
| - | - | 5 x 1.0 | 4.9 | 9.5 | 12.5 | 235 | 75 |
| 27914 | 28471 | 5 x 1.5 | 5.3 | 10.5 | 13.0 | 270 | 80 |
| 27915 | 28472 | 5 x 2.5 | 6.0 | 11.5 | 14.5 | 335 | 85 |
| 27916 | 28473 | 5 x 4 | 11.3 | 13.5 | 16.5 | 490 | 100 |
| 27917 | 28474 | 5 x 6 | 11.4 | 15.0 | 18.0 | 660 | 110 |
| 27918 | 28475 | 5 x 10 | 11.9 | 18.0 | 21.5 | 940 | 130 |
| 27919 | 28476 | 5 x 16 cl5 | 14.1 | 21.0 | 25.0 | 1325 | 150 |
| 27920 | 28477 | 5 x 25 cl5 | 17.2 | 26.5 | 30.5 | 1940 | 185 |
| - | - | 7 x 1.0 | 5.4 | 10.5 | 13.5 | 270 | 80 |
| - | - | 10 x 1.0 | 9.6 | 14.0 | 17.0 | 400 | 105 |
| - | - | 12 x 1.0 | 10.0 | 14.5 | 18.0 | 445 | 105 |
| - | - | 14 x 1.0 | 10.5 | 15.5 | 18.5 | 495 | 110 |
| - | - | 16 x 1.0 | 11.1 | 16.5 | 19.5 | 540 | 115 |
| - | - | 19 x 1.0 | 11.8 | 17.0 | 20.5 | 630 | 125 |
| - | - | 24 x 1.0 | 13.9 | 20.5 | 24.0 | 815 | 145 |
| - | - | 27 x 1.0 | 14.4 | 21.0 | 24.5 | 870 | 150 |
| - | - | 30 x 1.0 | 14.9 | 21.5 | 25.5 | 935 | 155 |
| - | - | 37 x 1.0 | 16.2 | 23.5 | 27.5 | 1090 | 165 |
| 27921 | 28478 | 7 x 1.5 | 5.9 | 11.5 | 14.5 | 315 | 85 |
| 27923 | 28480 | 10 x 1.5 | 10.5 | 15.0 | 18.5 | 475 | 110 |
| 27925 | 28482 | 12 x 1.5 | 10.9 | 15.5 | 19.0 | 525 | 115 |
| 27927 | 28484 | 14 x 1.5 | 11.5 | 16.5 | 20.0 | 585 | 120 |
| 27929 | 28486 | 16 x 1.5 | 12.2 | 17.5 | 21.0 | 665 | 125 |
| 27931 | 28488 | 19 x 1.5 | 12.9 | 18.5 | 22.0 | 780 | 135 |
| 27933 | 28490 | 24 x 1.5 | 15.3 | 22.0 | 26.0 | 975 | 155 |
| 27935 | 28492 | 27 x 1.5 | 15.8 | 22.5 | 26.5 | 1055 | 160 |
| - | - | 30 x 1.5 | 16.4 | 23.5 | 27.5 | 1135 | 165 |
| 27937 | 28494 | 37 x 1.5 | 17.8 | 25.5 | 30.0 | 1345 | 180 |
| 27922 | 28479 | 7 x 2.5 | 9.9 | 13.0 | 16.0 | 445 | 95 |
| 27924 | 28481 | 10 x 2.5 | 11.7 | 17.0 | 20.0 | 605 | 120 |
| 27926 | 28483 | 12 x 2.5 | 12.1 | 17.5 | 21.0 | 700 | 125 |
| 27928 | 28485 | 14 x 2.5 | 12.8 | 18.5 | 22.0 | 780 | 135 |
| 27930 | 28487 | 16 x 2.5 | 13.6 | 19.5 | 23.5 | 860 | 140 |
| 27932 | 28489 | 19 x 2.5 | 14.4 | 21.0 | 24.5 | 1020 | 150 |
| 27934 | 28491 | 24 x 2.5 | 17.2 | 24.5 | 28.5 | 1280 | 170 |
| 27936 | 28493 | 27 x 2.5 | 17.6 | 25.5 | 29.5 | 1410 | 180 |
| - | - | 30 x 2.5 | 18.3 | 26.5 | 30.5 | 1525 | 185 |
| 27938 | 28495 | 37 x 2.5 | 20.0 | 28.5 | 33.0 | 1790 | 200 |

Standard length 1000 m

G-type with yellow/green earth conductor and G-marking on sheath e.g. 3G1.5

SHF2 on request. Part number for SHF2 cables 4 + code from above table → 4xxxxx

Other sizes on request.