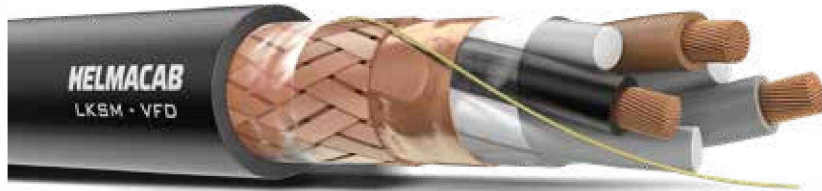


LKSM-VFD

1.8/3 kV

Armoured power and control cable
with improved EMC-screening



• FLAME-RETARDANT • HALOGEN-FREE • LOW SMOKE EMISSION • OIL RESISTANT (SHF2 only)

| | |
|--------------------|--|
| CONDUCTOR | Stranded copper conductor 10-300 mm ² , IEC 60228 Class 5 |
| INSULATION | XLPE |
| CABLING/BEDDING | Cabling, cores twisted together, fillers or dummy cores included in select sizes based on product specifications to obtain symmetrical and round construction. Bedding, lapped tape. |
| SCREEN | Copper tape, coverage 100% |
| ARMOUR | Copper wire braid, coverage > 90%, IEC 60092-350 |
| RIP CORD | For conductors ≥ 16 mm ² |
| SHEATH | Polyolefine SHF1, IEC 60092-360 Cross-linked polyolefine SHF2 on request Standard colour black, other colours on request |
| REFERENCE STANDARD | IEC 60092-353 |

APPLICATION

Armoured power and control cable. For fixed installation in most areas, and on open deck in ships and offshore units. Specially designed cables to meet requirements for Variable Frequency Drivers (VFD). Suitable for voltage peaks up to 3 kV.

PHYSICAL PROPERTIES

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

MAIN CHARACTERISTICS

| | |
|-------------------------------|--|
| RATED VOLTAGE | 1.8/3 kV (3.6 kV) DC 2.7/4.5 kV (if voltage to earth does not exceed 2.7 kV) |
| FIRE PERFORMANCE | IEC 60332-1-2 IEC 60332-3-22 |
| HALOGEN-FREE | IEC 60754 series |
| SMOKE EMISSION | IEC 61034 series |
| OIL RESISTANCE (SHF2 only) | IEC 60811-404 conditions acc. to 60092-360/SHF2 |
| TRANSFER IMPEDANCE | IEC 61196-1 (typical value 26 dB over 1 m Ω /m at 100 MHz [20 m Ω /m]) |
| MIN. INSTALLATION TEMPERATURE | -15 °C |
| OPERATING TEMPERATURE | -40 - 80 °C fixed installation |
| MAX. CONDUCTOR TEMPERATURE | 90 °C |

LKSM-VFD 1.8/3 kV

1.8/3 kV CABLES

| Part number | No. of conductors x Conductor area (mm ²) | Cross-section of armour mm ² | Nominal outer Ø (mm) | Weight kg/km | Current rating A | Min. bending radius mm (fixed) | Note |
|-------------|---|---|----------------------|--------------|------------------|--------------------------------|------|
| 26918 | 1 x 10 | 4.6 | 13.0 | 270 | 72 | 105 | x |
| 26920 | 1 x 16 | 4.6 | 14.0 | 335 | 96 | 110 | x |
| 26922 | 1 x 25 | 10.1 | 16.0 | 480 | 127 | 130 | x |
| 26924 | 1 x 35 | 10.1 | 17.0 | 580 | 157 | 135 | x |
| 26926 | 1 x 50 | 10.2 | 18.5 | 740 | 196 | 150 | x |
| 26928 | 1 x 70 | 10.7 | 20.0 | 945 | 242 | 160 | x |
| 26930 | 1 x 95 | 11.9 | 22.0 | 1195 | 293 | 175 | x |
| 26932 | 1 x 120 | 13.1 | 24.0 | 1450 | 339 | 190 | x |
| 26934 | 1 x 150 | 13.9 | 26.0 | 1750 | 389 | 210 | x |
| 26936 | 1 x 185 | 16.0 | 27.5 | 2080 | 444 | 220 | x |
| 26938 | 1 x 240 | 16.5 | 30.5 | 2650 | 522 | 240 | x |
| 26940 | 1 x 300 | 18.0 | 33.5 | 3260 | 601 | 265 | x |
| 230211020 | 2 x 10 DC | 11.6 | 20.5 | 680 | 61 | 165 | 1 |
| 2302112020 | 2 x 16 DC | 13.1 | 23.0 | 885 | 82 | 185 | x |
| 2302113020 | 2 x 25 DC | 16.0 | 25.5 | 1180 | 108 | 205 | 1 |
| 2302114020 | 2 x 35 DC | 16.2 | 27.0 | 1410 | 133 | 220 | x |
| 2302115020 | 2 x 50 DC | 18.0 | 30.5 | 1845 | 167 | 245 | x |
| 2302116020 | 2 x 70 DC | 20.0 | 33.5 | 2415 | 206 | 270 | x |
| 2302117020 | 2 x 95 DC | 35.6 | 37.5 | 3195 | 249 | 300 | x |
| 26892 | 3 x 10 | 13.0 | 23.5 | 845 | 50 | 185 | 1 |
| 26871 | 3 x 16 | 14.3 | 26.5 | 1185 | 67 | 215 | x |
| 26873 | 3 x 25 | 16.2 | 30.0 | 1580 | 89 | 240 | 1 |
| 26875 | 3 x 35 | 17.7 | 32.0 | 1940 | 110 | 255 | 1 |
| 26877 | 3 x 50 | 34.4 | 35.5 | 2665 | 137 | 285 | 1 |
| 26879 | 3 x 70 | 35.4 | 40.0 | 3545 | 169 | 320 | 1 |
| 26881 | 3 x 95 | 36.6 | 43.5 | 4325 | 205 | 350 | x |
| 26883 | 3 x 120 | 38.1 | 47.5 | 5205 | 237 | 380 | x |
| 26885 | 3 x 150 | 41.2 | 52.5 | 6315 | 272 | 420 | x |
| 26887 | 3 x 185 | 44.5 | 55.5 | 7475 | 311 | 445 | x |
| 26889 | 3 x 240 | 49.5 | 62.0 | 9535 | 365 | 495 | x |
| 26891 | 3 x 300 | 53.7 | 68.5 | 11765 | 421 | 545 | x |
| 27165 | 3 x 10 + 3 x 4 | 13.1 | 24.0 | 970 | 50 | 195 | 2 |
| 27166 | 3 x 16 + 3 x 6 | 14.3 | 26.5 | 1255 | 67 | 215 | 2 |
| 27167 | 3 x 25 + 3 x 6 | 16.2 | 30.0 | 1605 | 89 | 240 | 2 |
| 27168 | 3 x 35 + 3 x 6 | 17.7 | 32.0 | 1975 | 110 | 255 | 2 |
| 27169 | 3 x 50 + 3 x 10 | 34.4 | 35.5 | 2755 | 137 | 285 | 2 |
| 27170 | 3 x 70 + 3 x 16 | 35.4 | 39.0 | 3590 | 169 | 315 | 2 |
| 26893 | 3 x 95 + 3 x 16 | 36.6 | 43.5 | 4430 | 205 | 350 | 2 |
| 26895 | 3 x 120 + 3 x 25 | 38.1 | 47.5 | 5515 | 237 | 380 | 2 |
| 26897 | 3 x 150 + 3 x 25 | 41.2 | 52.5 | 6520 | 272 | 420 | 2 |
| 26899 | 3 x 185 + 3 x 35 | 44.5 | 55.5 | 7900 | 311 | 445 | 2 |
| 26901 | 3 x 240 + 3 x 50 | 49.5 | 62.0 | 10345 | 365 | 495 | 2 |
| 230211040 | 4 x 10 DC | 13.9 | 26.0 | 1055 | 50 | 210 | 1 |
| 2302112040 | 4 x 16 DC | 16.2 | 29.5 | 1425 | 67 | 235 | 1 |
| 2302113040 | 4 x 25 DC | 17.8 | 33.0 | 1875 | 89 | 265 | 1 |
| 2302114040 | 4 x 35 DC | 19.7 | 35.0 | 2320 | 110 | 280 | 1 |
| 2302115040 | 4 x 50 DC | 25.2 | 40.0 | 3130 | 137 | 320 | 1 |
| 2302116040 | 4 x 70 DC | 36.7 | 44.0 | 4190 | 169 | 355 | 1 |
| 2302117040 | 4 x 95 DC | 38.9 | 48.5 | 5225 | 205 | 390 | x |
| 2302118040 | 4 x 120 DC | 42.5 | 53.0 | 6435 | 237 | 425 | x |
| 2302119040 | 4 x 150 DC | 45.9 | 58.0 | 7825 | 272 | 465 | x |
| 2302120040 | 4 x 185 DC | 49.7 | 62.0 | 9290 | 311 | 495 | x |

NOTE!

PE-rules For cables ≤ 10mm² the PE-conductor must be same as main conductor.

For cables > 16mm² the PE-conductor must be half of main conductor and min. 16mm².

PE rule according to IEC 60092-352, Electrical installations in ships - (Choice and installation of electrical cables).

x = Protective earth (PE) rules are NOT fulfilled.

1 = Single Armour can be used as Protective Earth. PE-rules are fulfilled.

2 = Three additional protective earth (PE) conductors. Protective earth (PE) rules are fulfilled.

DC 2- and 4-core cables mainly used for DC voltage grids.

Colour of insulation for 2-core cables: Red/Black

Colour of insulation for 4-core cables: Red1 / Black1 / Red2 / Black2

Information given is indicative and doesn't involve any warranty on results. We reserve the right to change this datasheet.

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