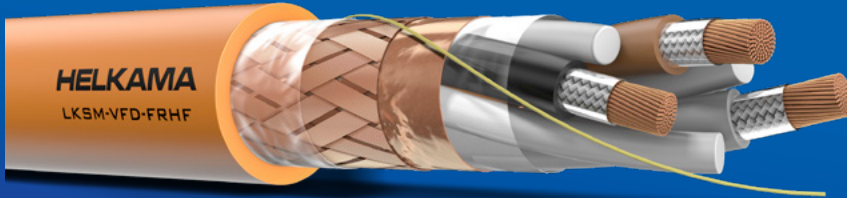


LKSM-VFD-FRHF

1.8/3 kV

Fire-resistant armoured power cable
with improved EMC-screening



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

CONDUCTOR	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 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 1...4
MARINE TYPE APPROVALS	DNV

MAIN CHARACTERISTICS:

RATED VOLTAGE	AC 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
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

Subject to change without prior notice. See latest update on our webpage.

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LKSM-VFD-FRHF 1.8/3kV

Part number	No. of conductors x Conductor area (mm ²)	Cross-section of armour mm ²	Diameter of inner sheath	Nominal outer Ø (mm)	Weight (kg/km)	Current rating A	Min. bending radius mm (fixed)	Note
2335111010	1 x 10 mm ²	4.6	10.5	13.5	280	71	105	x
2335112010	1 x 16 mm ²	4.6	11.5	14.5	345	94	115	x
2335113010	1 x 25 mm ²	10.1	13.0	16.5	495	123	130	x
2335114010	1 x 35 mm ²	10.1	14.0	17.0	595	153	135	x
2335115010	1 x 50 mm ²	10.2	15.5	19.0	760	196	150	x
2335116010	1 x 70 mm ²	10.7	17.0	20.5	965	240	165	x
2335117010	1 x 95 mm ²	13.0	19.0	22.5	1230	284	180	x
2335118010	1 x 120 mm ²	13.1	20.5	24.0	1475	331	195	x
2335119010	1 x 150 mm ²	13.9	22.5	26.5	1780	381	210	x
2335120010	1 x 185 mm ²	16.0	24.0	28.0	2110	429	225	x
2335121010	1 x 240 mm ²	16.5	26.5	30.5	2685	507	245	x
2335122010	1 x 300 mm ²	18.0	29.0	33.5	3300	582	270	x
2335111030	3 x 10 mm ²	13.0	20.5	24.0	885	50	195	1)
2335112030	3 x 16 mm ²	16.0	23.5	27.0	1245	66	220	1)
2335113030	3 x 25 mm ²	16.2	26.5	30.5	1635	86	245	1)
2335114030	3 x 35 mm ²	17.7	28.0	32.5	2000	107	260	1)
2335115030	3 x 50 mm ²	34.4	32.0	36.0	2735	137	290	1)
2335116030	3 x 70 mm ²	35.4	35.5	40.5	3625	168	325	1)
2335117030	3 x 95 mm ²	36.6	39.0	44.5	4410	199	355	x
2335118030	3 x 120 mm ²	38.1	42.5	48.5	5310	232	385	x
2335119030	3 x 150 mm ²	41.2	47.0	53.0	6425	267	425	x
2335120030	3 x 185 mm ²	44.5	49.5	56.5	7595	300	450	x
2335121030	3 x 240 mm ²	49.5	55.5	62.5	9665	355	500	x
2335122030	3 x 300 mm ²	53.7	61.5	69.0	12015	407	550	x
2335111035	3 x 10+3 x 4 mm ²	13.1	21.0	25.0	1000	50	200	2)
2335112035	3 x 16+3 x 6 mm ²	15.9	23.5	27.0	1315	66	220	2)
2335113035	3 x 25+3 x 6 mm ²	16.2	26.5	30.5	1660	86	245	2)
2335114035	3 x 35+3 x 6 mm ²	17.7	28.0	32.5	2035	107	260	2)
2335115035	3 x 50+3 x 10 mm ²	34.4	32.0	36.0	2825	137	290	2)
2335116035	3 x 70+3 x 16 mm ²	35.4	35.5	40.0	3665	168	320	2)
2335117035	3 x 95+3 x 16 mm ²	36.6	39.0	44.5	4515	199	355	2)
2335118035	3 x 120+3 x 25 mm ²	38.1	42.5	48.5	5610	232	385	2)
2335119035	3 x 150+3 x 25 mm ²	41.2	47.0	53.0	6620	267	425	2)
2335120035	3 x 185+3 x 35 mm ²	44.5	49.5	56.5	8015	300	450	2)
2335121035	3 x 240+3 x 50 mm ²	49.5	55.5	62.5	10470	355	500	2)

NOTE!

PE-rules: For cables. equal and under 10mm² the PE-conductor have to be same as main conductor and for cables over 16mm² the PE-conductor have to be half of main conductor and min. 16mm².

This 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.

Information given are indicative and don't involve any warranty on results. We keep the right to change this datasheet.

Other sizes on request.

Part number for oil resistant SHF2 cable on request.