LKSM-VFD

1.8/3 kV
Armoured power cable with improved EMC-screening

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

CONDUCTOR	Stranded copper conductor 10–300 mm², 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 mm²
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 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 mΩ/m at 100 MHz [20 mΩ/m])
MIN. INSTALLATION TEMPERATURE	-15 °C
OPERATING TEMPERATURE	-40 – 80 °C fixed installation
MAX. CONDUCTOR TEMPERATURE	90 °C

Subject to change without prior notice. See latest update on our webpage.
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HELMACAB
A WORLD OF CONNECTIONS
customer.care@helmacab.com
+358 2 410 8700

HELMACAB HOLLAND
sales.holland@helmacab.com
+ 31 183 617 109

HELMACAB SHANGHAI
sales.shanghai@helmacab.com
+86 21 3365 5333

helmacab.com

LKSM-VFD 1.8/3 kV

Part number	No. of conductors x Conductor area (mm²)	Cross-section of armour mm²	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
2302111020	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
2302111040	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