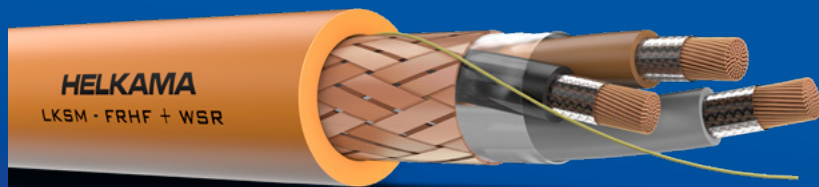


LKSM-FRHF+WSR/WJR

0.6/1 kV

Fire-resistant + Water Spray Resistant and/or
Water Jet Resistant armoured power and control cable

0.6/1 kV CABLES



• Flame-retardant • Fire-resistant • Halogen-free • Low smoke emission • Water Spray and/or Water Jet Resistant

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.
ARMOUR	Copper wire braid, coverage > 90% 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 + Water Spray Resistant and/or Water Jet Resistant armoured power and control cable. For fixed installation in most areas, and on open deck in ships and offshore units. Especially intended to ensure availability of all critical transportation-, comfort- and safety systems, i.e. to meet the concepts of; **Orderly Evacuation** (3 hours burning time) and **Safe Return to Port** (Fire test with simultaneous Water Spray / Water Jet + mechanical shocks) to simulate firefighting conditions.

If the cable is exposed to direct sunlight, protective covering or cable with black outer sheath is recommended.

PHYSICAL PROPERTIES:

CABLE TYPES	Cable Ø ≤20 mm LKSM-FRHF+WSR Cable Ø > 20 mm LKSM-FRHF+WJR
CORE IDENTIFICATION	Colour code for 1...4 core cables, number code for 5...37 core cables
MARINE TYPE APPROVALS	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
HALOGEN-FREE SMOKE EMISSION	IEC 60754 series IEC 61034 series
FIRE- AND WATER SPRAY RESISTANT (+WSR)	IEC 60331-2 + EN 50200 Annex E (180 min)
FIRE- AND WATER JET RESISTANT (+WJR)	IEC 60331-1 + BS 8491 (180 min)
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-FRHF+WSR/WJR 0.6/1 kV

Part number	G-type	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)
628541	-	1 x 1.0	3.0	6.5	75	18	40
628568	-	1 x 1.5	3.0	7.0	85	23	40
628570	-	1 x 2.5	3.1	7.5	95	30	45
628572	-	1 x 4	3.1	8.0	115	40	50
628574	-	1 x 6	3.1	8.5	145	52	50
628576	-	1 x 10	3.5	10.0	205	72	60
629060	627058	1 x 16 cl5	4.0	11.0	265	94	65
629061	627060	1 x 25 cl5	4.9	13.0	380	123	80
629062	627062	1 x 35 cl5	5.5	14.0	480	153	85
629063	627064	1 x 50 cl5	8.7	16.5	670	196	100
629064	627066	1 x 70 cl5	10.0	18.5	905	240	110
629065	627068	1 x 95 cl5	11.5	20.0	1140	284	120
629066	627070	1 x 120 cl5	12.3	22.5	1415	331	135
629067	627072	1 x 150 cl5	14.7	25.0	1760	381	150
629068	627074	1 x 185 cl5	15.2	27.5	2095	429	165
629069	627076	1 x 240 cl5	18.2	30.5	2725	507	180
629070	627078	1 x 300 cl5	18.7	34.0	3365	582	205
628542	-	2 x 1.0	3.5	10.0	155	15	60
628602	-	2 x 1.5	3.8	11.0	175	20	65
628604	-	2 x 2.5	4.3	12.0	205	26	70
628606	-	2 x 4	4.9	13.0	280	34	80
628608	-	2 x 6	5.4	14.5	405	44	85
628610	-	2 x 10	8.7	17.0	600	61	100
629071	-	2 x 16 cl5	10.0	19.5	770	80	115
629072	-	2 x 25 cl5	14.5	24.0	1215	105	145
629073	-	2 x 35 cl5	14.7	26.0	1460	130	155
629074	-	2 x 50 cl5	18.1	30.0	1950	167	180
629075	-	2 x 70 cl5	18.7	34.0	2645	204	205
629076	-	2 x 95 cl5	22.2	37.5	3315	241	225
628543	628544	3 x 1.0	4.1	10.5	155	13	65
628622	628623	3 x 1.5	4.1	11.5	180	16	70
628624	628625	3 x 2.5	4.6	12.5	220	21	75
628626	628627	3 x 4	5.2	14.0	295	28	85
628628	628629	3 x 6	5.8	15.0	420	36	90
628630	628631	3 x 10	9.3	18.0	625	50	110
629082	629083	3 x 16 cl5	10.7	20.5	905	66	125
629084	629085	3 x 25 cl5	14.6	25.5	1385	86	155
629086	629087	3 x 35 cl5	15.0	27.5	1710	107	165
629088	629089	3 x 50 cl5	18.3	32.0	2355	137	195
629090	629091	3 x 70 cl5	22.0	36.5	3190	168	220
629092	629093	3 x 95 cl5	22.8	40.5	4025	199	240
629094	629095	3 x 120 cl5	37.8	45.5	5170	232	270
629096	629097	3 x 150 cl5	39.3	51.5	6415	267	310
629098	629099	3 x 185 cl5	43.4	56.5	7770	300	340
629100	629101	3 x 240 cl5	49.1	63.5	10135	355	380
628545	628546	4 x 1.0	4.1	11.5	180	13	70
628642	628643	4 x 1.5	4.5	12.5	215	16	75
628644	628645	4 x 2.5	5.0	14.0	275	21	85

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-FRHF+WSR/WJR 0.6/1 kV

Part number	G-type	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 radiusmm (fixed)
628646	628647	4 x 4	5.8	15.0	360	28	90
628648	628649	4 x 6	8.8	17.0	535	36	100
628650	628651	4 x 10	10.3	20.0	760	50	120
629104	629105	4 x 16 cl5	11.9	23.0	1040	66	135
629106	629107	4 x 25 cl5	14.8	28.5	1550	86	170
629108	629109	4 x 35 cl5	18.1	30.5	1995	107	185
629110	629111	4 x 50 cl5	19.5	35.5	2715	137	210
629112	629113	4 x 70 cl5	22.4	40.5	3690	168	245
629114	629115	4 x 95 cl5	37.8	45.5	4860	199	270
629116	629117	4 x 120 cl5	39.3	50.5	6020	232	300
628547	628548	5 x 1.0	4.5	12.5	210	10	75
628662	628663	5 x 1.5	5.0	14.0	255	13	85
628664	628665	5 x 2.5	5.6	15.0	320	17	90
628705	628706	5 x 4	8.6	17.0	455	23	100
628707	628708	5 x 6	9.7	18.5	620	30	110
628709	628710	5 x 10	11.5	21.5	895	42	130
629126	629127	5 x 16 cl5	13.2	25.0	1230	55	150
629128	629129	5 x 25 cl5	18.1	31.0	1870	71	185
629130	629131	5 x 35 cl5	18.6	33.5	2415	89	200
629132	629133	5 x 50 cl5	21.6	39.0	3325	114	235
628549	628550	7 x 1.0	4.9	13.5	260	9	80
628551	628552	10 x 1.0	8.7	17.5	380	8	105
628553	628554	12 x 1.0	9.0	18.0	425	8	105
628555	628556	14 x 1.0	11.4	18.5	490	7	110
628557	628558	16 x 1.0	11.4	20.0	545	7	120
628559	628560	19 x 1.0	11.4	21.0	605	7	125
628561	628562	24 x 1.0	12.5	24.5	755	6	145
628563	628564	27 x 1.0	12.8	25.0	815	6	150
628564	-	30 x 1.0	13.3	26.0	885	5	155
628565	628566	37 x 1.0	14.4	28.0	1050	5	170
628666	628667	7 x 1.5	5.4	15.0	310	12	90
628723	628724	10 x 1.5	9.6	19.0	460	11	115
628670	628671	12 x 1.5	9.9	20.0	525	10	120
628727	628728	14 x 1.5	11.4	21.0	595	10	125
628731	628732	16 x 1.5	11.5	22.0	650	9	130
628674	628675	19 x 1.5	11.7	23.0	730	9	135
628678	628679	24 x 1.5	13.9	27.0	940	8	165
628682	628683	27 x 1.5	14.1	27.5	1015	8	165
-	-	30 x 1.5	14.7	28.5	1105	7	170
628684	628685	37 x 1.5	16.0	31.0	1315	7	185
628668	628669	7 x 2.5	8.5	16.5	430	16	100
628725	628726	10 x 2.5	11.5	21.0	600	14	125
628672	628673	12 x 2.5	11.5	21.5	675	13	130
628729	628730	14 x 2.5	11.8	23.0	780	13	140
628733	628734	16 x 2.5	12.5	24.5	865	12	145
628676	628677	19 x 2.5	13.2	25.5	980	11	155

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-FRHF+WSR/WJR 0.6/1 kV

Part number	G-type	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)
628680	628681	24 x 2.5	15.7	30.0	1240	10	180
628686	628687	27 x 2.5	16.1	30.5	1350	10	185
-	-	30 x 2.5	16.7	32.0	1470	10	190
628688	628689	37 x 2.5	18.1	34.5	1775	9	205

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.



Photo credit/copyright: Helkama Bica Oy



Tel. +31 (0) 183-617 109

Mail: info@helmacab.nl

Website: www.helmacab.nl

Subject to change without prior notice.