

Applications

SIMBAL 'LSHF' Flat cables can be used on Festoon systems on cranes and handling equipment in special applications where halogen free & low smoke materials are required. e.g Nuclear power plants & underground installations.

Design

1. **Conductor** :- Flexible plain copper, Class 5 - IEC 60228
2. **Insulation** :- Halogen Free compound
3. **Outer Sheath** :- Polyolefin Halogen free compound
Colour :- Black

Marking

LSHF, number of cores - cross section - voltage - year & week of manufacture.

Core Identification

In accordance with HD308 S2

- 4 core:- Black, Grey, Green / Yellow, Brown
- 5 core :- Black, Grey, Green / Yellow, Brown, Blue
- > 5 cores :- Black with white printed numbers (with or without Green / yellow earth).



Standards

Manufacturers standard specification

Mechanical Properties		
Tensile strength of the conductor	Static	15 N/mm ²
	Dynamic	30 N/mm ²
Bending Radii	10 x Cable diameter in dynamic applications	
Chemical Properties		
Moisture, UV & Ozone resistant		
For Indoor & Outdoor applications		
Flame & Fire retardant		
Low Smoke (IEC 61034), Low Toxicity (IEC60754), Low Corrosivity (IEC60754)		
Electrical & Thermal Properties		
Nominal Voltage	U ₀ / U	0.6 / 1 kV
Maximum Operating Voltage in AC systems U _m		1.2 kV
Test Voltage	3.5 kV - 50Hz in AC	
Maximum temperature at the conductor		
- in service	+ 90 deg C	
- in short circuit	+ 250 deg C	
Max surface temperature		
- fixed installation	- 40 deg C up to + 60 deg C	
- mobile installation	- 25 deg C up to + 60 deg C	

Cable Specification

CONTROL CABLES

Number of cores & nominal cross section	Part No.	Gland PG (Metric)	Current rating at 30 deg C	Outer dimensions Approx	Weight Approx
8c x 1.5mm ²	08015 0150 08	2930 (M32/29)	19 Amps	29 x 5mm	0.220 kg/m
8c x 2.5mm ²	08015 0250 08	2930 (M32/29)	25 Amps	35 x 5mm	0.330 kg/m
12c x 1.5mm ²	08015 0150 12	3640 (M40/36)	19 Amps	41 x 6mm	0.320 kg/m
12c x 2.5mm ²	08015 0250 12	4250 (M50/42)	25 Amps	51 x 6mm	0.490 kg/m

POWER CABLES

Number of cores & nominal cross section	Part No.	Gland PG (Metric)	Current rating at 30 deg C	Outer dimensions Approx	Weight Approx
4c x 1.5mm ²	08015 0150 04	2121 (M25/21)	19 Amps	16 x 5mm	0.110 kg/m
4c x 2.5mm ²	08015 0250 04	2121 (M25/21)	25 Amps	19 x 6mm	0.170 kg/m
4c x 4mm ²	08015 0400 04	2121 (M25/21)	34 Amps	21 x 6.5mm	0.250 kg/m
4c x 6mm ²	08015 0600 04	2930 (M32/29)	43 Amps	25.5 x 7mm	0.330 kg/m
4c x 10mm ²	08015 1000 04	2930 (M32/29)	60 Amps	29 x 9mm	0.550 kg/m
4c x 16mm ²	08015 1600 04	3640 (M40/36)	80 Amps	35 x 10.5mm	0.800 kg/m
4c x 25mm ²	08015 2500 04	4245 (M50/42)	101 Amps	46 x 13.5mm	1.350 kg/m
4c x 35mm ²	08015 3500 04	8107 Plate Gland	126 Amps	50.5 x 15mm	1.800 kg/m
4c x 50mm ²	08015 5000 04	8107 Plate Gland	153 Amps	56 x 16.5mm	2.400 kg/m
4c x 70mm ²	08015 7000 04	8108 Plate Gland	196 Amps	63 x 18mm	3.250 kg/m