

**Applications**

SIMBAL 'FLATFLEX' flat cables can be used on Festoon systems on cranes and handling equipment, typical applications include overhead cranes, monorails, transfer cars etc.

**Design**

1. **Conductor** :- Flexible plain copper, Class 5 - IEC 60228 DIN VDE 0295
2. **Insulation** :- PVC to DIN VDE 0207 Part 4
3. **Outer Sheath** :- PVC to DIN VDE 0207 Part 5 Colour - Black

**Marking**

H07VVH6-F or 07VVH-F, Number of cores, - cross section - year & week of manufacture.

**Core Identification**

In accordance with DIN VDE Part 308/HD 308 S2

4 cores :- Black, Grey, Green / Yellow, Brown

5 cores :- Black, Grey, Green / Yellow, Brown, Blue

> 5 cores :- Black with white printed numbers (with or without green/yellow earth).

**Standards**

HD 359 S2, IEC 60227 part 6  
DIN VDE 0281 Part 404



Mechanical Properties			
Tensile strength of the conductor	Static	15 N/mm <sup>2</sup>	
	Dynamic	30 N/mm <sup>2</sup>	
Bending Radii			
Cable Thickness	< 8mm	8 - 12mm	>12mm
Festoon Systems :-	3 x t	4 x t	5 x t
Cable Chains :-	4 x t	4 x t	5 x t
Fixed Installation :-	3 x t	3 x t	4 x t
Max travelling speed of festoon system	120 m/min		

Chemical Properties	
Oil, Acid & Alkaline resistant	
For Indoor & Outdoor applications, Moisture, UV & Ozone resistant	
Flame retardant in accordance with IEC 60332 part 1	

Electrical & Thermal Properties	
Nominal Voltage	U <sub>0</sub> / U 450 / 750 V
Test Voltage	2.5 k V - 50Hz in AC
Max surface temperature	
- fixed installation	- 40 deg C up to + 70 deg C
- mobile installation	- 25 deg C up to + 70 deg C
Maximum temperature at the conductor	
- in operation	+ 70 deg C
- in short circuit	+ 150 deg C

**Technical data**

Number of cores & nominal cross section	Part No.	Gland PG (Metric)	Current rating at 30 deg C	U (cos 0.8) Voltage drop (V/A x km)	Outer dimensions Approx w x t	Weight Approx
4c x 1.5mm <sup>2</sup>	08011 0150 04	1616 (M20/16)	19 Amps	20.2	15 x 5mm	0.150 kg/m
4c x 2.5mm <sup>2</sup>	08011 0250 04	2121 (M25/21)	27 Amps	12.3	18.5 x 6mm	0.250 kg/m
4c x 4mm <sup>2</sup>	08011 0400 04	2930 (M32/29)	36 Amps	7.8	21.5 x 7mm	0.320 kg/m
4c x 6mm <sup>2</sup>	08011 0600 04	2930 (M32/29)	46 Amps	5.3	24.5 x 8mm	0.430 kg/m
4c x 10mm <sup>2</sup>	08011 1000 04	2930 (M32/29)	64 Amps	3.2	31 x 10mm	0.690 kg/m
4c x 16mm <sup>2</sup>	08011 1600 04	3640 (M40/36)	86 Amps	2.0	35.5 x 11mm	0.970 kg/m
4c x 25mm <sup>2</sup>	08011 2500 04	8107 Plate Gland	114 Amps	1.3	41.5 x 13mm	1.405 kg/m
4c x 35mm <sup>2</sup>	08011 3500 04	8107 Plate Gland	142 Amps	0.97	49 x 16mm	2.035 kg/m
4c x 50mm <sup>2</sup>	08011 5000 04	8108 Plate Gland	176 Amps	0.74	61.5 x 19mm	3.000 kg/m
4c x 70mm <sup>2</sup>	08011 7000 04	8108 Plate Gland	218 Amps	0.55	64 x 21mm	4.100 kg/m
4c x 95mm <sup>2</sup>	08011 9500 04	8108 Plate Gland	262 Amps	0.42	72.5 x 20.5mm	4.550 kg/m
5c x 1.5mm <sup>2</sup>	08011 0150 05	2121 (M25/21)	19 Amps	20.2	18 x 5mm	0.180 kg/m
5c x 2.5mm <sup>2</sup>	08011 0250 05	2930 (M32/29)	27 Amps	12.3	22 x 6mm	0.280 kg/m
5c x 4mm <sup>2</sup>	08011 0400 04	2930 (M32/29)	36 Amps	7.8	26 x 7mm	0.390 kg/m
5c x 6mm <sup>2</sup>	08011 0600 04	2930 (M32/29)	46 Amps	5.3	29.5 x 8mm	0.530 kg/m
5c x 10mm <sup>2</sup>	08011 1000 05	3640 (M40/36)	64 Amps	3.2	34.5 x 9mm	0.780 kg/m
5c x 16mm <sup>2</sup>	08011 1600 05	4245 (M50/42)	86 Amps	2.0	50 x 13mm	1.450 kg/m
7c x 1.5mm <sup>2</sup>	08011 0150 07	2930 (M32/29)	14 Amps	20.2	27 x 5mm	0.265 kg/m
7c x 2.5mm <sup>2</sup>	08011 0250 07	3640 (M40/36)	20 Amps	12.3	33.5 x 6mm	0.385 kg/m
7c x 4mm <sup>2</sup>	08011 0400 07	3640 (M40/36)	27 Amps	7.8	38 x 7mm	0.560 kg/m
7c x 6mm <sup>2</sup>	08011 0600 07	4245 (M50/42)	35 Amps	5.3	41 x 8mm	0.750 kg/m
8c x 1.5mm <sup>2</sup>	08011 0150 08	2930 (M32/29)	14 Amps	20.2	29 x 5mm	0.295 kg/m
8c x 2.5mm <sup>2</sup>	08011 0250 08	3640 (M40/36)	20 Amps	12.3	37 x 6mm	0.430 kg/m
10c x 1.5mm <sup>2</sup>	08011 0150 10	3640 (M40/36)	12 Amps	20.2	36 x 5mm	0.355 kg/m
12c x 1.5mm <sup>2</sup>	08011 0150 12	3642 (M40/36)	11 Amps	20.2	41 x 5mm	0.415 kg/m
12c x 2.5mm <sup>2</sup>	08011 0250 12	4250 (M63/48)	15 Amps	12.3	51 x 5mm	0.630 kg/m
16c x 1.5mm <sup>2</sup>	08011 0150 16	4250	10 Amps	20.2	53.5 x 5mm	0.560 kg/m
18c x 1.5mm <sup>2</sup>	08011 0150 18	4250	9 Amps	20.2	58 x 5mm	0.620 kg/m