

Applications

SIMBAL ‘FLATFLEX’ Screened flat cables can be used on Festoon systems on cranes and handling equipment, typical applications include overhead cranes, monorails, transfer cars etc. The copper screen is efficient against electro magnetic disturbances caused by power & control cables.

Design

1. **Conductor** :- Flexible plain copper, Class 5 - IEC 60228 DIN VDE 0295
2. **Insulation** :- PVC to DIN VDE 0207 Part 4
3. **Screen** :- Single Core or bundle copper braid coverage ca. 80% - 90%
4. **Outer Sheath** :- PVC to DIN VDE 0207 Part 5 Colour - Black

Marking

Type (eg. YCFLY), 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

DIN VDE 0250



Mechanical Properties	
Tensile strength of the conductor	Static 15 N/mm ² Dynamic 30 N/mm ²
Bending Radii	Static Installation 10 x t Fixed Installation 10 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	
Cold resistant types KYCFLY, KYFLCY	

Electrical & Thermal Properties	
Rated Voltage	0.5mm ² = 300V > 1.0mm ² = U _o / U 300 / 500 V
Test Voltage	1.2 k V / 2.0 Kv - 50Hz in AC
Max surface temperature	- fixed installation - 40 deg C up to + 70 deg C - mobile installation - 30 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	Outer dimensions Approx w x t	Weight Approx
YCFLY					
5c x 0.5mm ²	08012 0050 05	2930 (M32/29)	6 Amps	22 x 4.5mm	0.140 kg/m
4c x 1.0mm ²	08012 0100 04	1616 (M20/16)	14 Amps	14 x 5mm	0.131 kg/m
YFLCY					
7 x 4 x 0.5mm ²	08012 0050 28	4250 (M63/48)	6 Amps	50 x 10mm	0.745 kg/m
14 x 4 x 0.5mm ²	08012 0050 56		6 Amps	100 x 10mm	1.490 kg/m
7 x 3 G 1mm ²	08012 0100 21	4250 (M63/48)	14 Amps	50 x 10mm	0.755 kg/m
14 x 3 GG 1mm ²	08012 0100 42		14 Amps	100 x 10mm	1.510 kg/m
KYCFLY					
4c x 1.5mm ²	08012 0150 04	2930 (M32/29)	19 Amps	20 x 6.5mm	0.210 kg/m
8c x 1.5mm ²	08012 0150 08	3640 (M40/36)	14 Amps	37 x 6.5mm	0.400 kg/m
12c x 1.5mm ²	08012 0150 12	4250 (M63/48)	11 Amps	50 x 6.5mm	0.610 kg/m
4c x 2.5mm ²	08012 0250 04	2930 (M32/29)	27 Amps	22 x 7mm	0.270 kg/m
4c x 4mm ²	08012 0400 04	2930 (M32/29)	36 Amps	25.5 x 8mm	0.400 kg/m
4c x 6mm ²	08012 0600 04	3640 (M40/36)	46 Amps	31 x 10mm	0.520 kg/m
4c x 10mm ²	08012 1000 04	4245 (M50/42)	64 Amps	37.5 x 11.5mm	0.840 kg/m
4c x 16mm ²	08012 1600 04	4250 (M63/48)	86 Amps	50 x 15mm	1.800 kg/m
KYFLCY					
8 x 7 G 0.5mm ²	08012 0050 56	8110 Plate Gland	6 Amps	71 x 12.5mm	1.180 kg/m
4 x 4 G 1mm ²	08012 0100 16	4245 (M50/42)	14 Amps	35 x 11.5mm	0.625 kg/m
VCVH6-F					
4 x 25mm ²	08013 2500 04	8107 Plate Gland	114Amps	50 x 15mm	1.950 kg/m
4 x 35mm ²	08013 3500 04	8107 Plate Gland	142 Amps	55 x 16mm	2.300 kg/m