

FB – FLEXIBLE INSULATED BUSBARS

Construction and Application:

These Flexible insulated busbars consist of several layers of uncoated or tinned copper strips and are insulated with highly flexible PVC or TPE compound with extrusion technology. They are excellently suitable for high current connections inside switchgears, solar energy panels and other electro technical installations. It is an ideal replacement for thick cables and solid bus bars.

The ends of the busbars can be used directly as connections by stamping holes on the laminated copper strips at ends.



Technical Data:

Conductor:

- ✓ Annealed copper strips (99.9%Cu)
- ✓ Single layer thickness 0.3~1mm
- ✓ Surface: uncoated or tinned
- ✓ Electrical conductivity: 56.2MS/m (corresponding to 97%IACS)
- ✓ Tensile strength: 200MPa
- ✓ Elongation: 30%

Insulation:

- ✓ Material: high flexible PVC or TPE; Color: PVC black or orange, TPE grey
- ✓ Thickness: 1~1.5mm (orange), 1.8~2.2mm (black)
- ✓ Coating method: extrusion
- ✓ Dielectric strength: >23kV/mm
- ✓ Tensile strength: 20MPa
- ✓ Elongation after 135°C 7-day aging test: >180%
- ✓ Oxygen index: 30%
- ✓ Flame retardant performance: self-extinguishing, UL94-V0

Working temperature:

- ✓ PVC: -30°C ~ +105°C
- ✓ TPE: -40°C ~ +135°C

Operating voltage: 600VAC/750VDC; 1000VAC/1500VDC

Voltage withstand performance with 15min/50Hz AC:

- ✓ Between busbar and ground: >15kV
- ✓ Between busbars: >30kV

Flame retardant performance: self-extinguishing, UL94-V0

UL758 certified

SGS certified: RoHS compliant

Delivery: standard length: 2m or 3 m (25m in roll is possible for 1-layer busbars)

Dimensions and ampacity:

Cat. No	Dim x burs q-ty	Cross section [mm ²]	Ampacity $\Delta T=20K$	Ampacity $\Delta T=40K$	Ampacity $\Delta T=50K$
FB 15,5x0,8x2	15,5x0,8x2	24,8	125	175	200
FB 15,5x0,8x3	15,5x0,8x3	37,2	160	210	240
FB 15,5x0,8x4	15,5x0,8x4	49,6	195	265	295
FB 15,5x0,8x6	15,5x0,8x6	74,4	225	320	360
FB 15,5x0,8x8	15,5x0,8x8	99,2	265	380	430
FB 15,5x0,8x10	15,5x0,8x10	124	300	420	480
FB 20x1x2	20x1x2	40	170	240	270
FB 20x1x3	20x1x3	60	230	320	360
FB 20x1x4	20x1x4	80	270	380	440
FB 20x1x5	20x1x5	100	300	430	490
FB 20x1x6	20x1x6	120	330	470	530
FB 20x1x8	20x1x8	160	400	560	620
FB 20x1x10	20x1x10	200	420	580	650
FB 24x1x2	24x1x2	48	200	280	320
FB 24x1x3	24x1x3	72	250	360	410
FB 24x1x4	24x1x4	96	280	410	460
FB 24x1x5	24x1x5	120	330	470	530
FB 24x1x6	24x1x6	144	360	510	570
FB 24x1x8	24x1x8	192	420	590	670
FB 24x1x10	24x1x10	240	500	700	790
FB 32x1x2	32x1x2	64	230	320	360
FB 32x1x3	32x1x3	96	280	410	460
FB 32x1x4	32x1x4	128	320	460	520
FB 32x1x5	32x1x5	160	390	550	610
FB 32x1x6	32x1x6	192	440	620	700
FB 32x1x8	32x1x8	256	510	720	822
FB 32x1x10	32x1x10	320	600	840	930
FB 40x1x2	40x1x2	80	240	330	380
FB 40x1x3	40x1x3	120	330	480	540
FB 40x1x4	40x1x4	160	400	560	630
FB 40x1x5	40x1x5	200	450	630	710
FB 40x1x6	40x1x6	240	480	680	750
FB 40x1x8	40x1x8	320	600	830	920
FB 40x1x10	40x1x10	400	670	920	1030
FB 50x1x3	50x1x3	150	400	570	650
FB 50x1x4	50x1x4	200	490	700	790
FB 50x1x5	50x1x5	250	540	780	880
FB 50x1x6	50x1x6	300	590	840	950
FB 50x1x8	50x1x8	400	680	1000	1130
FB 50x1x10	50x1x10	500	750	1100	1300
FB 63x1x5	63x1x5	315	650	900	1000
FB 63x1x6	63x1x6	378	690	980	1100
FB 63x1x8	63x1x8	504	840	1200	1350
FB 63x1x10	63x1x10	630	920	1300	1450
FB 80x1x5	80x1x5	400	700	1100	1230
FB 80x1x6	80x1x6	480	780	1210	1360
FB 80x1x8	80x1x8	640	950	1400	1570
FB 80x1x10	80x1x10	800	1090	1550	1730
FB 100x1x5	100x1x5	500	860	1250	1400
FB 100x1x6	100x1x6	600	950	1380	1530
FB 100x1x8	100x1x8	800	1100	1580	1760
FB 100x1x10	100x1x10	1000	1220	1710	1920
FB 100x1x12	100x1x12	1200	1300	1800	2010