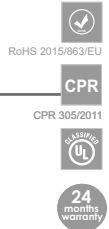
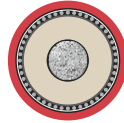


# BITflex<sup>®</sup>(N)TMCGCW11Y



Medium voltage, screened single core cable based on DIN VDE 0250-813



## Technical data:

### Thermal parameters:

**Ambient temperature:**  
 fixed installation: -40 °C to 80 °C  
 flexible operation: -25 °C to 80 °C  
**Max. permissible conductor temp.:** 90 °C  
**Max. short-circuit temp. at conductor:** 200 °C  
**De-rating factors:** acc. to DIN VDE 0298-4

### Mechanical parameters:

**Max. tensile load per conductor:** 15 N/mm<sup>2</sup>  
**Bending radius:**  
 - fixed installation: ≥ 6 x outer-Ø  
 - free moving: ≥ 8 x outer-Ø

## Design:

**Main cores**  
**Conductor:** tinned copper wires, finely stranded, class 5 acc. to DIN EN / IEC 60228  
**Insulation:**  
 - inner semi-conductive stress control layer  
 - EPR compound with improved electrical and mechanical characteristics based on DIN VDE 0207-20  
 - outer semi-conductive insulation shield layer  
**Screen:** concentric ground conductor: spinning with tinned copper wire strands acc. to DIN VDE 0250-1, covering approx. 85 %  
**Outer sheath:** special PUR compound with improved mechanical characteristics, oil resistance acc. to EN 60811-404, unrestricted use indoors, outdoors, resistance to moisture, colour: red, inkjet marking

## Application:

Flexible voltage cable used in short lengths, e.g. as a connection in switch-gear or transformer houses where small bending radius is requested. Cable are also used in slow moving Offshore-Power-Systems: energy chains or reeling operation or power supply for large electrical applications and drives via cable carrier systems.

## Approvals:

UL Classified

## Chemical parameters:

Resistance to oil: DIN EN / IEC 60811-404  
 Behaviour in case of fire: DIN EN / IEC 60332-1-2  
 Weather resistance: unrestricted use indoors, outdoors, resistance to ozone, UV and moisture

Rated voltage U <sub>0</sub> /U [kV]	3.6/6	6/10	8.7/15	12/20	14/25	18/30
Maximum permissible operating voltage U <sub>0,max</sub> in AC systems [kV]:	4.2/7.2	6.9/12	10.4/18	13.9/24	17.3/30	20.8/36
Maximum permissible operating voltage U <sub>0,max</sub> in DC systems [kV]:	5.4/10.8	9/18	13.5/27	18/36	22.5/45	27/54
AC. test voltage acc. to DIN VDE 0250-813 [kV]:	11	17	24	29	36	43

Cable Factory BITNER reserves the right to modify specifications without prior notification.  
 Note: on customer's request other cross sections or number of cores can be produced

# BiTflex<sup>®</sup>(N)TMCGCW11Y

Medium voltage, screened single core cable based on DIN VDE 0250-813

## BiTflex<sup>®</sup>(N)TMCGCW11Y 6/10 kV

n x mm <sup>2</sup>	Maximum conductor resistance	Nominal diameter over insulation	Outer diameter min.-max. [mm]	Approximate cable weight [kg/km]	Current carrying capacity <sup>1)</sup>
1x25/16	0.795	13,0	21-23	730	135
1x35/16	0.565	14,5	22-24	860	169
1x50/16	0.393	16,0	24-26	1050	207
1x70/16	0.277	18,0	26-28	1290	268
1x95/16	0.210	19,0	27-29	1550	328
1x120/16	0.164	21,0	29-31	1820	383
1x150/25	0.132	23,0	31-33	2170	444
1x185/25	0.108	25,0	33-35	2510	510
1x240/25	0.0817	27,0	36-38	3080	607

## BiTflex<sup>®</sup>(N)TMCGCW11Y 12/20 kV

n x mm <sup>2</sup>	Maximum conductor resistance	Nominal diameter over insulation	Outer diameter min.-max. [mm]	Approximate cable weight [kg/km]	Current carrying capacity <sup>1)</sup>
1x25/16	0.795	17,0	25-27	930	135
1x35/16	0.565	18,0	26-28	1070	169
1x50/16	0.393	19,0	27-29	1260	207
1x70/16	0.277	21,0	29-31	1520	268
1x95/16	0.210	23,0	31-33	1790	328
1x120/16	0.164	24,0	33-35	2070	383
1x150/25	0.132	26,0	35-37	2450	444
1x185/25	0.108	28,0	37-39	2810	510
1x240/25	0.0817	30,0	39-41	3350	607

<sup>1)</sup> acc. to IEC 60364-5-52, conductor temperature: 90 °C/Reference ambient temperature: 30 °C, free in air, based on installation method F, three loaded conductors trefoil, values for further installation methods on request

Cable Factory BITNER reserves the right to modify specifications without prior notification.  
Note: on customer's request other cross sections or number of cores can be produced