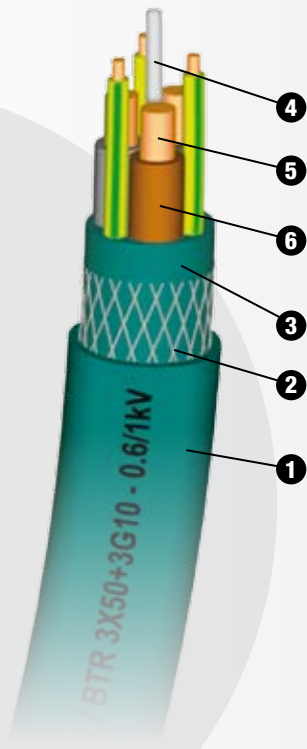


BTR & BTC

FLEXIBLE CABLES FOR REELING APPLICATIONS - STANDARD DUTY OPERATIONS - 0.6 / 1 KV

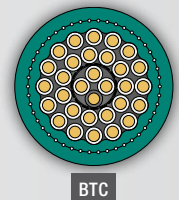
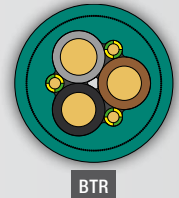


All the very stringent characteristics of the insulating cover and the sheath make the cable suitable for use with reeling systems such as power supply of moving machines.

In addition to its excellent mechanical characteristics, the **polyurethane** sheath has a good resistance to wear combined with a high flexibility over a large range of temperatures.

Design

- ❶ Polyurethane outer sheath, green coloured RAL 6032
 - ❷ Textile anti twist braid
 - ❸ Polyurethane inner sheath
 - ❹ Reinforced filler
 - ❺ Plain copper cores
 - ❻ Polyethylene insulation BTR:
 - 3 phase cores black - brown - grey
 - 3 earth cores green / yellow
- Polyethylene insulation BTC:
- White with black printed numbers



Marking

“CONDUCTIX WAMPFLER / BTR 3×__+3G__ - 0.6/1kV”

Standards

- NF-EN 60228 (class 5) and/or CEI 60228 for the copper cores
- VDE 295 - BSI 6360 for the copper cores
- Flame resistance: class C3 (not tested)
- Halogen free

Conditions of Use

- Suitable for all spool types in adequacy with the minimum bending radius.
- **Not suitable for level wind applications.**
- Installation with a deflection pulley: contact us.

Voltage

- 0.6 / 1 kV - Low Voltage

Linear reeling speed

- 60 m/min max

Ambient temperature

- From -25 up to +60°C (see table of de-rating factors on next page).



Cables BTR & BTC Technical Data

Type	BTR										BTC
	3×35 +	3×50 +	3×70 +	3×95 +	3×120 +	3×150 +	3×185 +	3×240 +	3×300 +	26×2.5 +	
Number of Cores and Nominal C.S.A. (mm ²)	3G6	3G10	3G16	3G16	3G25	3G25	3G25	3G50	3G50	(4×2.5) ^c	
Mechanical Data											
Min. outer diameter (mm)	27.0	30.0	35.0	39.0	44.0	49.0	54.5	60.5	68.5	24.5	
Max. outer diameter (mm)	29.5	32.5	37.5	42.0	47.0	52.5	58.5	64.5	72.5	27.0	
Unsheathed cable diameter (mm)	21.0	24.0	28.0	31.5	35.5	39.5	44.0	49.0	56.0	19.0	
Linear weight (kg/m)	1.640	2.240	3.100	3.890	5.080	6.160	7.680	9.870	12.300	1.260	
Min. bending radius (mm) :											
Anchor drum	Max. cable outer diameter × 4										
Spool	Max. cable outer diameter × 6										
Guiding device	Max. cable outer diameter × 9										
Pulley	Not recommended - Contact us										
Max. tensile load (daN) :											
Direct	178	255	357	484	612	765	943	1 224	1 530	127	
With guiding device	133	191	267	363	459	573	707	918	1 143	95	
With pulley	Not recommended - Contact us										
Electrical Data											
Current carrying capacity (A) ^(a)	158	192	246	298	346	395	450	538	680	9	
Voltage drop (V/A.km) ^(b)	1.00	0.75	0.55	0.42	0.35	0.30	0.22	0.21	0.20	13	
Max. resistance (Ω/m) ^(c)	0.554	0.386	0.272	0.206	0.161	0.129	0.106	0.080	0.064	7.980	

Oblique grey tint: cable not referenced, contact us.
 (a): Cable laid on the ground @ +30°C
 (b): $\cos \varphi = 0.8$ / temperature of cores = +90°C

(c): DC resistance of a core @ +20°C
 (d): Impedance of the screen = 300 Ω

Recommendations

- Amperage de-rating factor for reeling applications: 0.85
- De-rating factors in relation to the ambient temperature above 30°C:

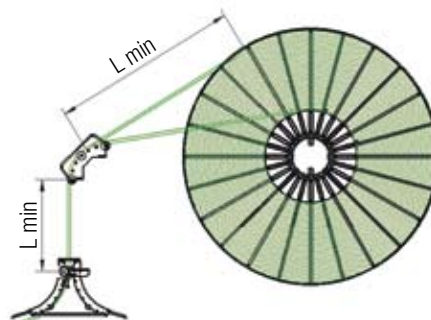
30°C up to 40°C	0.90
40°C up to 50°C	0.80
50°C up to 55°C	0.74
55°C up to 60°C	0.65

- Recommended voltage drop limits:

Usual	5%
Lighting	3%
Frequency inverter	2.5%

Installation

- Minimum distance between two guiding devices: $L_{\min} = 20 \times \text{cable O.D.}$



- Deflection angle (if $\varnothing r < \text{bending radius}$) = 15° max for laying on rollers

