

# Flexible medium voltage cable

## BiTcrane<sup>®</sup> (N)TSKCGEWOEU-SR PLUS HS FO



**Application:** Flexible reeling cable with integrated fibre optics wires for high and extreme mechanical stresses, e.g. torsional stress, deflection into different planes and high reeling speed.

- Bending radius: acc. to VDE 0298-3
- Ampacity: acc. to VDE 0298-4
- Reeling speed (application with end feeding point): < 240 m/min

Optical fiber element:

- tube colour blue: 12G62.5/125 fiber
- tube colour yellow: 12E9/125 fiber

### Construction and technical data:

<b>Standard:</b>	DIN VDE 0250-813 (with ref. to)
<b>Conductor material:</b>	copper, bare
<b>Conductor construction:</b>	Class 5 = flexible
<b>Insulation:</b>	basic EPR
<b>Electrical field control:</b>	semiconductive tape + inner and outer semiconducting rubber layer
<b>Arrangement of protective conductors:</b>	split in the outer interstices
<b>Material inner sheath:</b>	rubber 5GM5
<b>Sheathing material:</b>	rubber 5GM5
<b>Colour of outer sheath:</b>	red
<b>Flame-retardant:</b>	VDE 0482-332-1-2/IEC 60332-1-2
<b>UV-resistant:</b>	yes
<b>Oil-resistant:</b>	EN 60811-404
<b>Max. temperature at conductor, °C:</b>	90 °C
<b>Max. short circuit temperature at conductor, °C:</b>	250 °C
<b>Permitted outer cable temperature, fixed, °C:</b>	-40 - +80 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-30 - +80 °C
<b>Min. distance with S-type directional changes:</b>	20 x Ø



## Bending radii

on deflection pulleys	15 x Ø
reeling application	12 x Ø

BiTcrane<sup>®</sup> (N)TSKCGEWOEU-SR PLUS HS FO 6/10 kV

**Nominal voltage U<sub>o</sub>:** 6 kV

**Nominal voltage U:** 10 kV

**Maximum permitted operating voltage in three-** 12 kV

**phase systems:**

**Test voltage:** 17 kV

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	I <sub>k</sub> [kA]	Ø min. [mm]	Ø max. [mm]	Ø [mm]	F <sub>zp</sub> [N]	F <sub>zd</sub> [N]	Cu	G [kg]
053883	03x25+2x25/2+12E9/125+12G62.5/125	0.78	131	3.7	45	48	48	1125	6250	960	2890
053884	03x35+2x25/2+12E9/125+12G62.5/125	0.554	162	5.2	47	50	50	1575	7150	1248	3320
053885	03x50+2x25/2+12E9/125+12G62.5/125	0.386	202	7.5	51	54	54	2250	8500	1680	4061

BiTcrane<sup>®</sup> (N)TSKCGEWOEU-SR PLUS HS FO 12/20 kV

**Nominal voltage U<sub>o</sub>:** 12 kV

**Nominal voltage U:** 20 kV

**Maximum permitted operating voltage in three-** 24 kV

**phase systems:**

**Test voltage:** 29 kV

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	I <sub>k</sub> [kA]	Ø min. [mm]	Ø max. [mm]	Ø [mm]	F <sub>zp</sub> [N]	F <sub>zd</sub> [N]	Cu	G [kg]
054409	03x25+2x25/2+(12E9/125+12G62.5/125)	0.78	139	3.7	50	53	53	1125	2250	960	3809

RI	Conductor resistance
I <sub>bl</sub>	Ampacity in air (30 °C)
I <sub>k</sub>	Short-circuit current (1 s)
Ø min.	outer diameter min.
Ø max.	outer diameter max.
Ø	outer diameter approx.
F <sub>zp</sub>	Tensile strength (permanent)
F <sub>zd</sub>	Tensile strength (dynamic)
Cu	Copper weight (GER)
G	net weight per 1000