

Flexible medium voltage cable BiTcrane[®] (N)TSCGEWUEU-SR FO



Application: Flexible medium voltage reeling cable with fiber optic wires and screened control cores, for deflection and reeling application.

- Min. bending radius: acc. to VDE 0298-3
- Max. current rating: acc. to VDE 0298-4 table 15

Construction and technical data:

Standard:	DIN VDE 0250-813 (with ref. to)
Conductor material:	copper, bare
Conductor construction:	Class 5 = flexible
Insulation:	basic EPR
Electrical field control:	inner and outer semiconducting rubber layer
Arrangement of protective conductors:	arrange in the outer interstice
Material inner sheath:	rubber 5GM5
Torsion protection:	synthetic braid
Sheathing material:	rubber 5GM5
Colour of outer sheath:	red
Flame-retardant:	VDE 0482-332-1-2/IEC 60332-1-2
UV-resistant:	yes
Oil-resistant:	EN 60811-404
Max. temperature at conductor, °C:	90 °C
Max. short circuit temperature at conductor, °C:	250 °C
Permitted outer cable temperature, fixed, °C:	-40 - +80 °C
Permitted outer cable temperature, moved, °C:	-30 - +80 °C
Min. distance with S-type directional changes:	20 x Ø
Operating speed:	60 m/min.



The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.

Bending radii

on deflection pulleys	15D
reeling application	12D

BiTcrane (N)TSCGEWUEU-SR FO 3.6/6 kV

Nominal voltage U_o: 3.6 kV

Nominal voltage U: 6 kV

Maximum permitted operating voltage in 7.2 kV

three-phase systems:

Test voltage: 11 kV

part no.	part name	RI [Ohm/km]	l _{bl} [A]	l _k [kA]	Ø [mm]	F _{zp} [N]	F _{zd} [N]	Cu	G [kg]
054918	03X35 + 1X25 + 2X(12X2.5)C + 2X12G50/125	0.554	162	5	76.5	1575	5000	2066	7251
054932	03X70 + 2X35/2 + 12G62.5/125	0.272	250	14.2	54	3150	4200	2352	4490
054368	03X95 + 1X50 + 2X(6X2.5)C + 2X12 E9/125	0.206	301	13.6	67	4275	5700	3686	7149
054369	03X95 + 1X50 + 2X(6X2.5)C + 2X12G50/125	0.206	301	13.6	64	4275	5700	3686	7149
054370	03X95 + 1X50 + 2X(6X2.5)C + 2X12G62.5/125	0.206	301	13.6	67	4275	5700	3686	7149
054842	03X240 + 2X120/2 + 1X12G62.5/125	0.0801	538	35.8	77	10800	14400	8064	12550

BiTcrane (N)TSCGEWUEU-SR FO 6/10 kV

Nominal voltage U_o: 6 kV

Nominal voltage U: 10 kV

Maximum permitted operating voltage in 12 kV

three-phase systems:

Test voltage: 17 kV

part no.	part name	RI [Ohm/km]	l _{bl} [A]	l _k [kA]	Ø [mm]	F _{zp} [N]	F _{zd} [N]	Cu	G [kg]
054086	03x25+2x25/2+12E9/125	0.78	131	3.6	47	1125	1500	960	2888
054087	03x25+2x25/2+12G50/125	0.78	131	3.6	47	1125	1500	960	2888
054088	03x25+2x25/2+12G62.5/125	0.78	131	3.6	47	1125	1500	960	2888
053494	03x25+1x25+2x(9x2.5)C+ 12E9/125+12G50/125	0.78	131	3.6	61	1125	1500	1577	4680
054012	03x35+1x16+2x(9x2.5)C+ 12E9/125+12G50/125	0.554	162	5	62	1575	2100	1794	5175
054257	03X35 + 1X25 + 2X(6X2.5)C + 12 E9/125	0.554	162	5	59	1575	2100	1473	4756
054258	03X35 + 1X25 + 2X(6X2.5)C + 12G50/125	0.554	162	5	59	1575	2100	1473	4756
054259	03X35 + 1X25 + 2X(6X2.5)C + 12G62.5/125	0.554	162	5	59	1575	2100	1473	4756
053495	03x50+1x50+2x(9x2.5)C+ 12E9/125+12G50/125	0.386	202	7.2	64	2250	3000	2537	5861
054094	03x50+1x25+(8x1.5)C+ 2x12E9/125	0.386	202	7.2	61	2250	3000	1873	4971
054095	03x50+1x25+(8x1.5)C+ 2x12G50/125	0.386	202	7.2	61	2250	3000	1873	4971
054096	03x50+1x25+(8x1.5)C+ 2x12G62.5/125	0.386	202	7.2	61	2250	3000	1873	4971
054678	03X50 + 1X25 + 2X(9X2.5)C + FO (1X12E9/125)	0.386	202	7.5	64	2250	3000	2301	5819
054243	03X70 + 2X35/2 + 12 E9/125	0.272	250	14.2	54	3150	4200	2352	4610
054244	03X70 + 2X35/2 + 12G50/125	0.272	250	14.2	54	3150	4200	2352	4610
054468	03X70 + 1X35 + (4X2.5)C + 2X12 E9/125	0.272	250	14.2	65	3150	4200	2533	6056
054469	03X70 + 1X35 + (4X2.5)C + 2X12G50/125	0.272	250	14.2	65	3150	4200	2533	6056
054470	03X70 + 1X35 + (4X2.5)C + 2X12G62.5/125	0.272	250	14.2	65	3150	4200	2533	6056
054245	03X70 + 2X35/2 + 12G62.5/125	0.272	250	14.2	54	3150	4200	2352	4610
054210	03x95+2x50/2+12E9/125	0.206	301	13.6	59	4275	5700	3216	5755
054211	03x95+2x50/2+12G50/125	0.206	301	13.6	59	4275	5700	3216	5755
054212	03x95+2x50/2+12G62.5/125	0.206	301	13.6	59	4275	5700	3216	5755
054709	03X95 + 1X50 + (4x2.5) + 2x12E9/125	0.206	301	13.6	64	4275	5700	3312	6444
054471	03X95 + 1X50 + (4X2.5)C + 2X12 E9/125	0.206	301	13.6	69	4275	5700	3397	7115
054472	03X95 + 1X50 + (4X2.5)C + 2X12G50/125	0.206	301	13.6	69	4275	5700	3397	7115
054473	03X95 + 1X50 + (4X2.5)C + 2X12G62.5/125	0.206	301	13.6	69	4275	5700	3397	7115

part no.	part name	RI [Ohm/km]	Ibl [A]	Ik [kA]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
054432	03x120+1x50+2x(6x1.5)C+12E9/125	0.161	352	17.2	68	5400	7200	4271	7742
054433	03x120+1x50+2x(6x1.5)C+12G50/125	0.161	352	17.2	68	5400	7200	4271	7742
054434	03x120+1x50+2x(6x1.5)C+12G62.5/125	0.161	352	17.2	68	5400	7200	4271	7742
054710	03X120 + 1X70 + (4x2.5) + 2X12E9/125	0.161	352	17.2	70	5400	7200	4224	8126
054474	03X120 + 1X70 + (4X2.5)C + 2X12 E9/125	0.161	352	17.2	71	5400	7200	4309	8115
054475	03X120 + 1X70 + (4X2.5)C + 2X12G50/125	0.161	352	17.2	71	5400	7200	4309	8115
054476	03X120 + 1X70 + (4X2.5)C + 2X12G62.5/125	0.161	352	17.2	71	5400	7200	4309	8115
054227	03X120 + 2X70/2 + 12 E9/125	0.161	352	17.2	62	5400	7200	4128	6815
054228	03X120 + 2X70/2 + 12G50/125	0.161	352	17.2	62	5400	7200	4128	6815
054229	03X120 + 2X70/2 + 12G62.5/125	0.161	352	17.2	62	5400	7200	4128	6815
054348	03X120 + 1X70 + 2X(6X2.5)C + 12 E9/125	0.161	352	17.2	71	5400	7200	4580	8408
054349	03X120 + 1X70 + 2X(6x2.5)C + 12G50/125	0.161	352	17.2	71	5400	7200	4580	8408
054350	03X120 + 1X70 + 2X(6X2.5)C + 12G62.5/125	0.161	352	17.2	71	5400	7200	4580	8408
054700	03X185 + 1X95 + (4X2.5)C + (2X12G50/125 OM3)	0.106	461	26.5	80	8325	11100	6450	11801
054205	03x240+2x120/2+2x12E9/125	0.0801	538	34.1	80	10800	14400	8064	12462
054206	03x240+2x120/2+2x12G50/125	0.0801	538	34.1	80	10800	14400	8064	12462
054207	03x240+2x120/2+2x12G62.5/125	0.0801	538	34.1	80	10800	14400	8064	12462

BiTrane (N)TSCGEWUEU-SR FO 8.7/15 kV

Nominal voltage U_o: 8.7 kV

Nominal voltage U: 15 kV

Maximum permitted operating voltage in 18 kV

three-phase systems:

Test voltage: 24 kV

part no.	part name	RI [Ohm/km]	Ibl [A]	Ik [kA]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
054726	03X25 + 1X16 + 2X(6X2.5)C + 1X(12E9/125)	0.78	139	3.6	57	1500	1125	1337	4235
053514	03X35 + 1X25 + 2X(9X2.5)C + 12E9/125	0.554	172	5	62	1575	2100	1680	5027
054640	03X50 + 2X25/2 + 12G62.5/125	0.386	216	7.2	50	2250	3000	1680	3660
054351	03X120 + 1X70 + 2X(6X2.5)C + 12 E9/125	0.161	371	17.2	71	5400	7200	4580	8408
054352	03X120 + 1X70 + 2X(6X2.5)C + 12G50/125	0.161	371	17.2	71	5400	7200	4580	8408
054353	03X120 + 1X70 + 2X(6X2.5)C + 12G62.5/125	0.161	371	17.2	71	5400	7200	4580	8408
054354	03X150 + 1X70 + 2X(6X2.5)C + 12 E9/125	0.129	428	22.4	73	6750	9000	5444	9312
054355	03X150 + 1X70 + 2X(6X2.5)C + 12G50/125	0.129	428	22.4	73	6750	9000	5444	9312
054356	03X150 + 1X70 + 2X(6X2.5)C + 12G62.5/125	0.129	428	22.4	73	6750	9000	5444	9312

RI	Conductor resistance
Ibl	Ampacity in air (30 °C)
Ik	Short-circuit current (1 s)
Ø	outer diameter approx.
Fzp	Tensile strength (permanent)
Fzd	Tensile strength (dynamic)
Cu	Copper weight (GER)
G	net weight per 1000