



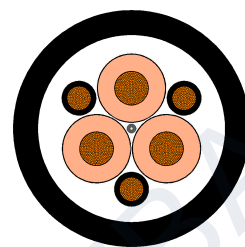
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

F-(N)TSCGEWOEU

Medium voltage flexible cable for semi-flexible installation



APPLICATION

For laying alongside conveyor belts, shiftable units and material handling equipment, including continuous movement in cable booms or connections between upper and lower cars. Also suitable for connection of submersible pump units.

CONSTRUCTION

Component	Description
Conductor	Electrolytic copper, not tinned, very finely stranded Class 5
Insulation	EPR base special compound, better than 3GI3 quality
Electrical field control	Inner and outer layer of semi-conductive rubber compound
Core identification	Natural colouring with black semi-conductive rubber and white core digits
Core arrangement	Three main conductors laid up with protective earth conductor split into three outer interstices
Inner sheath	EPR base special compound
Outer sheath	Synthetic elastomer compound, better than 5GM3, red

OPERATING CHARACTERISTICS

Parameter	Value
Rated voltage range	3.6/6 kV, 6/10 kV, 8.7/15 kV, 12/20 kV, 14/25 kV, 18/30 kV
AC test voltage	11 kV, 17 kV, 24 kV, 29 kV, 36 kV, 43 kV
Max. conductor operating temperature	90 °C
Max. short-circuit conductor temperature	250 °C
Fixed installation temperature	-40 °C to +90 °C
Flexible operation temperature	-25 °C to +90 °C
Maximum tensile load	15 N/mm ²
Torsional stress	+/- 100 °/m
Minimum bending radius	According to DIN VDE 0298-3

STANDARDS AND PERFORMANCE

Parameter	Value
Cable standard	Based on DIN VDE 0250-813
Fire performance	IEC 60332-1-2
Oil resistance	IEC 60811-404
Water resistance	EN 50525-2-21
Weather resistance	Outdoor and indoor use, resistant to ozone, UV and moisture

TECHNICAL DATA

Dimensions and electrical values. Manufacturer-specific part numbers have been omitted.

3.6/6 kV								
Cross section	Cond. dia.	OD min	OD max	Weight	Tensile	DC res.	Current	Short circuit
3x25+3x25/3	6.4	33.6	36.6	2090	1125	0.78	131	3.58
3x25+3x50/3	6.4	40.2	41.9	2730	1125	0.78	131	3.58
3x35+3x25/3	7.6	36.1	39.1	2510	1575	0.554	162	5.01
3x35+2x25/2+1x10	7.6	41	44	3000	1575	0.554	162	5.01
3x35+3x50/3	7.6	41.7	44.7	3190	1575	0.554	162	5.01
3x50+3x25/3	9.1	40.4	43.4	3210	2250	0.386	202	7.15
3x50+3x50/3	9.1	42.9	45.9	3640	2250	0.386	202	7.15
3x70+3x35/3	10.8	43.9	46.9	4070	3150	0.272	250	10.01
3x70+3x50/3	10.8	44.4	47.4	4240	3150	0.272	250	10.01
3x95+3x50/3	12.7	49.7	53.7	5300	4275	0.206	301	13.59
3x120+3x70/3	14.3	53.1	57.1	6430	5400	0.161	352	17.16
3x150+3x70/3	16	56.8	60.8	7310	6750	0.129	404	21.45
3x185+3x95/3	17.7	61.7	65.7	9000	8325	0.106	461	26.46
3x240+3x120/3	20.6	68.4	72.4	11280	10800	0.0801	540	34.32
3x300+3x150/3	23.1	75.1	79.1	13770	13500	0.0641	620	42.9

6/10 kV								
Cross section	Cond. dia.	OD min	OD max	Weight	Tensile	DC res.	Current	Short circuit
3x25+3x25/3	6.4	34.9	37.9	2190	1125	0.78	131	3.58
3x25+3x50/3	6.4	39.9	42.9	2830	1125	0.78	131	3.58
3x35+3x25/3	7.6	38.4	41.4	2710	1575	0.554	162	5.01
3x35+3x35/3	7.6	38.4	41.4	2790	1575	0.554	162	5.01
3x35+3x50/3	7.6	41.9	44.9	3230	1575	0.554	162	5.01
3x50+3x25/3	9.1	41.6	44.6	3340	2250	0.386	202	7.15
3x50+3x50/3	9.1	42.2	45.2	3590	2250	0.386	202	7.15
3x70+3x35/3	10.8	45.2	48.2	4200	3150	0.272	250	10.01
3x70+3x50/3	10.8	45.2	48.2	4300	3150	0.272	250	10.01
3x95+3x50/3	12.7	50.9	54.9	5440	4275	0.206	301	13.59
3x95+3x70/3	12.7	50.9	54.9	5610	4275	0.206	301	13.59
3x120+3x70/3	14.3	54.4	58.4	6600	5400	0.161	352	17.16
3x150+3x70/3	16	57.9	61.9	7670	6750	0.129	404	21.45
3x185+3x95/3	17.7	62.5	66.5	9170	8325	0.106	461	26.46
3x240+3x120/3	20.6	68.7	72.7	11540	10800	0.0801	540	34.32

Current carrying capacity is based on rubber cables laid on a surface at 30 °C ambient temperature.

TECHNICAL DATA

Dimensions and electrical values. Manufacturer-specific part numbers have been omitted.

8.7/15 kV								
Cross section	Cond. dia.	OD min	OD max	Weight	Tensile	DC res.	Current	Short circuit
3x25+3x25/3	6.4	40.2	43.2	2690	1125	0.78	139	3.58
3x25+3x50/3	6.4	41.8	44.8	3050	1125	0.78	139	3.58
3x35+3x25/3	7.6	41.8	44.8	2930	1575	0.554	172	5.01
3x35+3x50/3	7.6	41.8	44.8	3300	1575	0.554	172	5.01
3x50+3x25/3	9.1	45	48	3550	2250	0.386	215	7.15
3x50+3x50/3	9.1	45	48	3930	2250	0.386	215	7.15
3x70+3x35/3	10.8	49.5	53.5	4590	3150	0.272	265	10.01
3x70+3x50/3	10.8	49.9	53.9	4950	3150	0.272	265	10.01
3x95+3x50/3	12.7	54.4	58.4	5930	4275	0.202	319	13.59
3x120+3x70/3	14.3	57.3	61.3	7020	5400	0.161	371	17.16
3x150+3x70/3	16	63.8	67.8	8220	6750	0.129	428	21.45
3x185+3x95/3	17.7	65.9	69.9	9760	8325	0.106	488	26.46

12/20 kV								
Cross section	Cond. dia.	OD min	OD max	Weight	Tensile	DC res.	Current	Short circuit
3x25+3x25/3	6.4	42.3	45.3	2870	1125	0.78	139	3.58
3x25+3x50/3	6.4	42.3	45.3	3120	1125	0.78	139	3.58
3x35+3x25/3	7.6	45.8	48.8	3470	1575	0.554	172	5.01
3x35+3x50/3	7.6	44.8	47.8	3620	1575	0.554	172	5.01
3x50+3x25/3	9.1	47.9	50.9	4010	2250	0.386	215	7.15
3x50+3x50/3	9.1	47.9	50.9	4430	2250	0.386	215	7.15
3x70+3x35/3	10.8	52.4	56.4	5110	3150	0.272	265	10.01
3x70+3x50/3	10.8	52.4	56.4	5270	3150	0.272	265	10.01
3x95+3x50/3	12.7	56.5	60.5	6170	4275	0.206	319	13.59
3x120+3x70/3	14.3	61.7	65.7	7650	5400	0.161	371	17.16
3x150+3x70/3	16	65.9	69.9	8930	6750	0.129	428	21.45
3x185+3x95/3	17.7	68.8	72.8	10230	8325	0.106	488	26.46

Current carrying capacity is based on rubber cables laid on a surface at 30 °C ambient temperature.

TECHNICAL DATA

Dimensions and electrical values. Manufacturer-specific part numbers have been omitted.

14/25 kV								
Cross section	Cond. dia.	OD min	OD max	Weight	Tensile	DC res.	Current	Short circuit
3x25+3x25/3	6.4	46	49	3120	1125	0.78	139	3.58
3x35+3x25/3	7.6	49.5	53.5	3930	1575	0.554	172	5.01
3x35+3x35/3	7.6	49.5	53.5	3890	1575	0.554	172	5.01
3x50+3x25/3	9.1	53.3	57.3	4760	2250	0.386	215	7.15
3x70+3x35/3	10.8	56.2	60.2	5570	3150	0.272	265	10.01
3x70+3x50/3	10.8	56.8	60.8	5710	3150	0.272	265	10.01
3x95+3x50/3	12.7	61.9	65.9	6990	4275	0.206	319	13.59
3x120+3x70/3	14.3	65.9	69.9	8200	5400	0.161	371	17.16
3x150+3x70/3	16	70.6	74.6	9210	6750	0.129	428	21.45
3x185+3x95/3	17.7	75.5	79.5	10820	8325	0.106	488	26.46

18/30 kV								
Cross section	Cond. dia.	OD min	OD max	Weight	Tensile	DC res.	Current	Short circuit
3x25+3x25/3	6.4	47	51	3650	1125	0.78	139	3.58
3x35+3x25/3	7.6	52.9	56.9	4350	1575	0.554	172	5.01
3x50+3x25/3	9.1	52.6	56.6	4850	2250	0.386	215	7.15
3x70+3x35/3	10.8	61.7	65.7	6420	3150	0.272	265	10.01
3x95+3x50/3	12.7	65.1	69.1	7410	4275	0.206	319	13.59
3x120+3x70/3	14.3	68.8	72.8	8660	5400	0.161	371	17.16
3x150+3x70/3	16	75.3	79.3	9970	6750	0.129	428	21.45
3x185+3x95/3	17.7	78.9	82.9	11730	8325	0.106	488	26.46
3x240+3x120/3	20.6	84.4	89.4	14510	10800	0.0801	574	34.32

Current carrying capacity is based on rubber cables laid on a surface at 30 °C ambient temperature.

CERTIFICATIONS



TEBAOFLEX CABLE