



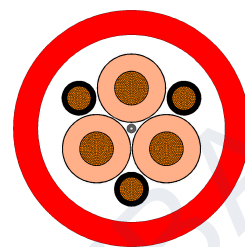
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

F-(N)TSCGEWÖU

Medium voltage cable for fixed applications



APPLICATION

For laying alongside conveyor belts and on material handling equipment, for connection of submersible pump units and other industrial fixed applications.

CONSTRUCTION

Component	Description
Conductors	Annealed flexible stranded tinned or bare copper, Class 5 to IEC 60228 and HD 383
Separator	Semi-conductive tape between conductor and insulation if required
Conductor screen	Semi-conductive layer
Insulation	High grade EPR thermosetting compound exceeding 3GI3 parameters
Insulation screen	Semi-conductive layer; maximum resistivity 200 ohm x m
Internal sheath layer	Synthetic thermosetting compound
Outer sheath	Synthetic thermosetting compound type 5GM5 or 5GM3, red or other colours

CHARACTERISTICS

- Excellent tear, impact and abrasion resistance.
- UV, sunlight, ozone and moisture resistant.
- Flame-retardant construction with oil-resistant sheath.
- Embossed marking for easy identification.

OPERATING CHARACTERISTICS

Parameter	Value
Rated voltage range	3.6/6 kV to 18/30 kV
Temperature range	-25 °C to +90 °C
Fixed installation temperature	-40 °C to +90 °C
Maximum conductor operating temperature	90 °C
Short-circuit conductor temperature	250 °C
Minimum bending radius	6 x D for fixed installation
Tensile load	up to 20 N/mm ²
Current carrying capacity	According to DIN VDE 0298 Part 4

STANDARDS AND PERFORMANCE

Parameter	Value
Cable standard	DIN VDE 0250 Part 813
Conductor standard	IEC 60228, HD 383
Insulation and sheath	DIN VDE 0207 Parts 20 and 21
Oil resistance	DIN VDE Part 811-2-1 p. 10
Weather resistance	Ozone, UV and moisture resistant

TECHNICAL DATA

Dimensions and electrical values. Values are technical parameters only.

3.6/6 kV					
Cross section	Cond. dia.	Approx. OD	Weight	DC res.	Current
3x25+3x25/3	6.30	40.3	2492	0.795	132
3x25+3x50/3	6.30	40.3	2613	0.795	132
3x35+3x25/3	7.00	41.8	2858	0.565	161
3x35+3x50/3	7.00	41.8	2979	0.565	161
3x50+3x25/3	9.00	46.2	3557	0.393	202
3x50+3x50/3	9.00	46.2	3677	0.393	202
3x70+3x35/3	10.80	51.8	4593	0.277	251
3x70+3x50/3	10.80	51.8	4714	0.277	251
3x95+3x50/3	12.90	56.4	5665	0.210	301
3x120+3x70/3	14.00	58.7	6718	0.164	351
3x150+3x70/3	15.80	64.0	7968	0.132	405
3x185+3x95/3	18.10	68.0	9415	0.108	462
3x240+3x120/3	19.60	72.0	11395	0.0817	540
3x300+3x150/3	23.20	82.2	14350	0.0654	620

6/10 kV					
Cross section	Cond. dia.	Approx. OD	Weight	DC res.	Current
3x25+3x25/3	6.30	42.0	2649	0.795	132
3x25+3x50/3	6.30	42.0	2769	0.795	132
3x35+3x25/3	7.00	43.6	3021	0.565	161
3x35+3x50/3	7.00	43.6	3141	0.565	161
3x50+3x25/3	9.00	47.9	3735	0.393	202
3x50+3x50/3	9.00	47.9	3856	0.393	202
3x70+3x35/3	10.80	53.6	4794	0.277	251
3x70+3x50/3	10.80	53.6	4914	0.277	251
3x95+3x50/3	12.90	58.1	5882	0.210	301
3x120+3x70/3	14.00	60.4	6944	0.164	351
3x150+3x70/3	15.80	66.2	8342	0.132	405
3x185+3x95/3	18.10	71.0	9873	0.108	462
3x240+3x120/3	19.60	76.0	11989	0.0817	540
3x300+3x150/3	23.20	83.9	14665	0.0654	620

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

TECHNICAL DATA

Dimensions and electrical values. Values are technical parameters only.

8.7/15 kV					
Cross section	Cond. dia.	Approx. OD	Weight	DC res.	Current
3x25+3x25/3	6.30	45.4	2981	0.795	138
3x25+3x50/3	6.30	45.4	3101	0.795	138
3x35+3x25/3	7.00	47.0	3365	0.565	173
3x35+3x50/3	7.00	47.0	3485	0.565	173
3x50+3x25/3	9.00	53.1	4330	0.393	216
3x50+3x50/3	9.00	53.1	4450	0.393	216
3x70+3x35/3	10.80	57.0	5214	0.277	265
3x70+3x50/3	10.80	57.0	5335	0.277	265
3x95+3x50/3	12.90	63.3	6597	0.210	320
3x120+3x70/3	14.00	67.1	7919	0.164	370
3x150+3x70/3	15.80	69.7	8859	0.132	428
3x185+3x95/3	18.10	76.2	10740	0.108	489
3x240+3x120/3	19.60	79.5	12581	0.0817	574
3x300+3x150/3	23.20	89.2	15684	0.0654	665

12/20 kV					
Cross section	Cond. dia.	Approx. OD	Weight	DC res.	Current
3x25+3x25/3	6.30	48.5	3294	0.795	138
3x25+3x50/3	6.30	48.5	3414	0.795	138
3x35+3x25/3	7.00	51.8	3900	0.565	173
3x35+3x50/3	7.00	51.8	4021	0.565	173
3x50+3x25/3	9.00	56.1	4693	0.393	216
3x50+3x50/3	9.00	56.1	4814	0.393	216
3x70+3x35/3	10.80	60.0	5604	0.277	265
3x70+3x50/3	10.80	60.0	5724	0.277	265
3x95+3x50/3	12.90	66.3	7029	0.210	320
3x120+3x70/3	14.00	70.1	8377	0.164	370
3x150+3x70/3	15.80	72.7	9332	0.132	428
3x185+3x95/3	18.10	79.3	11258	0.108	489
3x240+3x120/3	19.60	82.5	13120	0.0817	574
3x300+3x150/3	23.20	92.2	16288	0.0654	665

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

TECHNICAL DATA

Dimensions and electrical values. Values are technical parameters only.

18/30 kV					
Cross section	Cond. dia.	Approx. OD	Weight	DC res.	Current
3x25+3x25/3	6.30	58.0	4426	0.795	138
3x25+3x50/3	6.30	58.0	4546	0.795	138
3x35+3x25/3	7.00	59.6	4853	0.565	173
3x35+3x50/3	7.00	59.6	4974	0.565	173
3x50+3x25/3	9.00	65.7	5990	0.393	216
3x50+3x50/3	9.00	65.7	6110	0.393	216
3x70+3x35/3	10.80	69.6	6982	0.277	265
3x70+3x50/3	10.80	69.6	7103	0.277	265
3x95+3x50/6	12.90	75.9	8543	0.210	320
3x120+3x70/3	14.00	78.2	9695	0.164	370
3x150+3x70/3	15.80	82.2	10981	0.132	428
3x185+3x95/3	18.10	88.8	13046	0.108	489
3x240+3x120/3	19.60	92.0	14977	0.0817	574

PHYSICAL AND ELECTRICAL PARAMETERS

Parameter	Value
Insulation tensile strength	min. 6 N/mm ²
Insulation elongation at break	min. 200%
Outer sheath tensile strength	min. 15 N/mm ²
Outer sheath elongation at break	min. 300%
Tear resistance	min. 30 N/mm
Ambient derating factors	20/25/30/35/40/45/50 °C = 1.09/1.05/1.00/0.92/0.88/0.83/0.78

CERTIFICATIONS



TEBAOFLEX CABLE