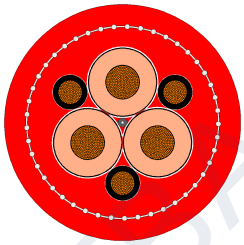
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrialcable

(N)TSKCGEWÖU

3.6/6 (7.2) kV medium voltage trailing cable



APPLICATION

Medium-voltage trailing cable for large material handling machines such as excavators, dumpers and crushers in open-cast mines. Suitable for high mechanical stresses with mono-spiral reels, cylindrical reels and other industrial applications.

CONSTRUCTION

Component	Description
Conductors	Annealed flexible stranded tin-coated 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	Ethylene-propylene rubber type 3GI3 to DIN VDE 0207 Part 20
Insulation screen	Semi-conductive layer; maximum resistivity 200 ohm x m
Core cable	Three power cores, two earth cores and one pilot core laid up on cradle separator with central reinforcement
Semi-conductive covering	Semi-conductive layer over cable core
Inner sheath	Synthetic thermosetting compound type 5GM5 to DIN VDE 0207 Part 21
Anti-torsion braid	Polyamide thread braid between inner and outer sheath
Outer sheath	Synthetic thermosetting compound type 5GM5; black outer jacket

CHARACTERISTICS

- Excellent tear, impact, abrasion and torsion resistance.
- Flame retardant, oil resistant, UV, sunlight, ozone and moisture resistant.
- Embossed marking for easy identification.
- Standard cable packing: 500 m drums; other packing available on request.

OPERATING CHARACTERISTICS

Parameter	Value
Voltage rating Uo/U	3.6/6 (7.2) kV
Temperature range	-50 °C to +90 °C
Fixed installation temperature	+90 °C / -50 °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/mm2
Current carrying capacity	According to DIN VDE 0298 Part 4

STANDARDS

Parameter	Value
Cable standard	Based on 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

Values are technical parameters only. Cable dimensions may vary due to manufacturing tolerances.

Cross-section mm2	Cond. dia. mm	Approx. OD mm	Weight kg/km	DC res. ohm/km	Current A
		3.6/6 kV (N)TSKCGEWÖU			
3x25+2x16+2x16	6.30	41.80	2835	0.795	132
3x35+2x16+1x16	7.00	44.40	3214	0.565	161
3x50+2x16+1x16	9.00	48.70	3922	0.393	202
3x70+2x25+1x25	10.80	53.70	5140	0.277	251
3x95+2x25+1x25	13.00	59.10	6172	0.210	301
3x120+2x35+1x35	14.10	70.00	6750	0.164	351
3x150+2x35+1x35	16.00	78.00	8152	0.132	405
3x185+2x50+1x50	18.20	82.00	9670	0.108	462

PHYSICAL AND ELECTRICAL PARAMETERS

Parameter	Value
Tensile strength	min. 15 N/mm2
Elongation at break	min. 300%
Ageing in air oven	100 °C, 168 h; TS +/-30%, EB +/-40%
Ageing in oil	100 °C, 24 h; TS and EB +/-40%
Tear resistance	min. 30 N/mm

Parameter	Value
Ambient temperature	20 | 25 | 30 | 35 | 40 | 45 | 50 °C
Conversion factor	1.09 | 1.05 | 1.00 | 0.92 | 0.88 | 0.83 | 0.78

Voltage tests shall be performed according to DIN VDE 0250 Part 813. Partial discharge max. 20 pC.

CERTIFICATIONS