



MV reeling cable

NTSKCGWÖU / NTSKCGWÖU KON

Loader Cable

MV 3.6/6 & 6/10 kV underground LHD scooptram reeling cable to DIN VDE 0250-813



DIN VDE 0250-813

U0/U 3.6/6 & 6/10 kV

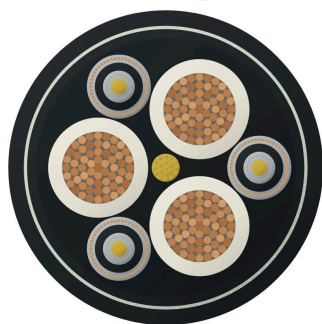
LHD & Scooptram Reeling

Application

Medium-voltage reeling cable based on DIN VDE 0250-813 for underground LHD loaders, scooptrams and drill jumbos, supplied in 3-earth + central pilot (NTSKCGWÖU) and concentric earth (NTSKCGWÖU KON) designs up to 120 m/min and 25–30 N/mm².

Typical uses: Underground LHD loaders & scooptrams, Tunnel drill jumbos & bolting rigs, Underground haulage & shuttle cars, Roadheaders & continuous miners, Hard-rock & potash mining headings

Construction



Cross-section, not to scale

1	Phase, earth & pilot conductors	IEC 60228 Class 5 / DIN VDE 0295
2	Inner conductor screen	DIN VDE 0250-813 radial field control
3	Core insulation	
4	Outer core screen	
5	Central pilot & earth arrangement	
6	Inner sheath	DIN VDE 0207-21 pressure-extruded bedding
7	Anti-torsion polyaramid reinforcement	
8	Outer sheath	

Technical data

Typical values

Rated voltage U0/U	3.6/6 kV and 6/10 kV	Max. operating voltage AC	4.2/7.2 kV (3.6/6) · 6.9/12 kV (6/10)
Max. operating voltage DC	5.4/10.8 kV (3.6/6) · 9.0/18 kV (6/10)	AC test voltage (5 min)	11 kV (3.6/6 kV) · 17 kV (6/10 kV)
Current rating basis	DIN VDE 0298-4 (30 °C in air)	Field control & earthing	Inner/outer semicon + 3G+ST or KON earth
Temperature, flexing	–35 to +90 °C	Temperature, fixed	–40 to +90 °C
Max. conductor temperature	+90 °C	Short-circuit temperature (5 s)	+250 °C
Min. bending radius, moving	10 × OD free · 12 × OD forced reeling	Min. bending radius, fixed	6 × OD
Max. reeling speed	120 m/min	Max. tensile load	20 N/mm ² perm. · 25–30 N/mm ² dynamic
Torsional stress	± 100 °/m	Oil & emulsion resistance	EN 60811-404 (mineral & hydraulic oil)
Flame retardance	IEC 60332-1-2	Tear & cut resistance	5GM5 PCP/NBR compound (tear ≥ 30 N/mm)
Water & mine moisture	Submersible in mine water (HD 22.16)	Standards	Based on DIN VDE 0250-813
Standard packing	ISPM-15 heat-treated lagged drums with sealed moisture-proof ends		

Sizes

18 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	U0/U kV	Construction mm ²	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm	Dynamic pull N
NTSKCGWÖU · 3.6/6 kV (3G + Pilot) 7 sizes							
☐ NTSKCGWÖU 3×16+3×16/3+1×10 ST 3.6/6 kV	3.6/6	3 × 16 + 3 × 16/3 + 1 × 10	38.5	710	1,980	462	1,440
☐ NTSKCGWÖU 3×25+3×25/3+1×10 ST 3.6/6 kV	3.6/6	3 × 25 + 3 × 25/3 + 1 × 10	41.8	1,056	2,460	502	2,250
☐ NTSKCGWÖU 3×35+3×25/3+1×10 ST 3.6/6 kV	3.6/6	3 × 35 + 3 × 25/3 + 1 × 10	44.6	1,344	2,890	535	3,150
☐ NTSKCGWÖU 3×50+3×25/3+1×10 ST 3.6/6 kV	3.6/6	3 × 50 + 3 × 25/3 + 1 × 10	48.2	1,776	3,540	578	4,500
☐ NTSKCGWÖU 3×70+3×35/3+1×10 ST 3.6/6 kV	3.6/6	3 × 70 + 3 × 35/3 + 1 × 10	53.0	2,448	4,520	636	6,300
☐ NTSKCGWÖU 3×95+3×50/3+1×16 ST 3.6/6 kV	3.6/6	3 × 95 + 3 × 50/3 + 1 × 16	58.5	3,370	5,780	702	8,550
☐ NTSKCGWÖU 3×120+3×70/3+1×16 ST 3.6/6 kV	3.6/6	3 × 120 + 3 × 70/3 + 1 × 16	63.2	4,282	6,980	758	10,800
NTSKCGWÖU · 6/10 kV (3G + Pilot) 6 sizes							
☐ NTSKCGWÖU 3×16+3×16/3+1×10 ST 6/10 kV	6/10	3 × 16 + 3 × 16/3 + 1 × 10	40.2	710	2,120	482	1,440
☐ NTSKCGWÖU 3×25+3×25/3+1×10 ST 6/10 kV	6/10	3 × 25 + 3 × 25/3 + 1 × 10	43.2	1,056	2,590	518	2,250
☐ NTSKCGWÖU 3×35+3×25/3+1×10 ST 6/10 kV	6/10	3 × 35 + 3 × 25/3 + 1 × 10	46.0	1,344	3,040	552	3,150
☐ NTSKCGWÖU 3×50+3×25/3+1×10 ST 6/10 kV	6/10	3 × 50 + 3 × 25/3 + 1 × 10	49.8	1,776	3,710	598	4,500
☐ NTSKCGWÖU 3×70+3×35/3+1×10 ST 6/10 kV	6/10	3 × 70 + 3 × 35/3 + 1 × 10	54.6	2,448	4,720	655	6,300
☐ NTSKCGWÖU 3×95+3×50/3+1×16 ST 6/10 kV	6/10	3 × 95 + 3 × 50/3 + 1 × 16	60.2	3,370	5,990	722	8,550
NTSKCGWÖU KON · 3.6/6 & 6/10 kV 5 sizes							
☐ NTSKCGWÖU KON 3×16+1×10 ST +16 KON 3.6/6 kV	3.6/6	3 × 16 + 1 × 10 + 16 KON	36.8	730	1,840	442	1,440
☐ NTSKCGWÖU KON 3×25+1×10 ST +25 KON 3.6/6 kV	3.6/6	3 × 25 + 1 × 10 + 25 KON	39.8	1,075	2,290	478	2,250
☐ NTSKCGWÖU KON 3×35+1×10 ST +25 KON 3.6/6 kV	3.6/6	3 × 35 + 1 × 10 + 25 KON	42.5	1,365	2,710	510	3,150
☐ NTSKCGWÖU KON 3×35+1×10 ST +25 KON 6/10 kV	6/10	3 × 35 + 1 × 10 + 25 KON	44.0	1,365	2,860	528	3,150
☐ NTSKCGWÖU KON 3×50+1×10 ST +25 KON 6/10 kV	6/10	3 × 50 + 1 × 10 + 25 KON	47.6	1,795	3,490	571	4,500

- ST = extensible central pilot control conductor for ground-check / earth-continuity monitoring.
- KON = concentric protective earth conductor positioned around the laid-up cores for compact outer diameter.

Electrical & current data

7 sizes

Phase CSA mm ²	Max. DC resistance 20 °C, Ω/km	Ampacity (in air, 30 °C) A	1 s short-circuit kA	Perm. pull (20 N/mm ²) N	Dynamic pull (30 N/mm ²) N
16	1.240	99	2.29	960	1,440
25	0.795	131	3.58	1,500	2,250
35	0.565	162	5.01	2,100	3,150
50	0.393	202	7.15	3,000	4,500
70	0.277	250	10.01	4,200	6,300
95	0.210	301	13.59	5,700	8,550
120	0.164	352	17.16	7,200	10,800

– Apply DIN VDE 0298-4 derating factors for multi-layer cylindrical loader reels (typically 0.76 for 1 layer, 0.61 for 2 layers, 0.49 for 3 layers).

Standards and approvals

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/ntskcgwoeu-loader-cable



Typical values for this cable type, based on DIN VDE 0250-813. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.