



Reeling cable

6-CHCU TTAR

Extra-Heavy-Duty Trailing and Reeling Cable

0.6/1 kV (1.1 kV mining) anti-torsion EPR/PCP/CSM cable for jumbos and LHD loaders



NF M 82-375 / VDE 0250-812

U0/U 0.6/1 kV (1.1 kV mining)

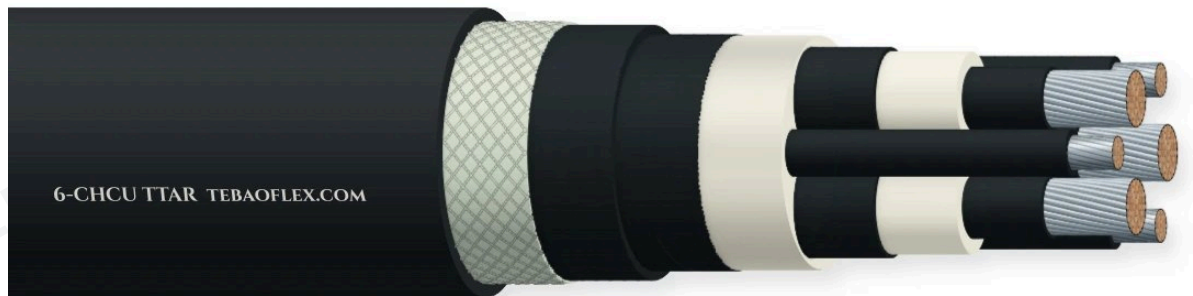
TTAR Anti-Torsion Braid

Application

Built to NF M 82-375 and DIN VDE 0250-812 for extra-heavy-duty underground reeling and trailing on drill jumbos, LHD scooptrams and roadheaders, with 3G13 EPR cores, anti-torsion braid (AR) and tear-proof 5GM5/CSM outer sheath.

Typical uses: Tunnel drill jumbos & bolting rigs, Underground LHD scooptrams & loaders, Roadheaders & continuous miners, Potash, salt & hard-rock mines, Civil tunnelling & cavern excavation

Construction



Cross-section, not to scale

1 Phase, earth & pilot conductors

IEC 60228 Class 5 / NF C 32-013

2 Core insulation**3** Protective earth & pilot control cores**4** Inner sheath**5** Anti-torsion reinforcement (AR)**6** Outer sheath (TTAR)

Technical data

Typical values

Rated voltage U ₀ /U	0.6/1 kV (up to 1.1 kV mining service)	Max. operating voltage AC	0.7/1.2 kV
Max. operating voltage DC	0.9/1.8 kV	AC test voltage (5 min)	3.5 kV AC (power cores) · 2.0 kV (pilots)
Current rating basis	DIN VDE 0298-4 / NF C 15-100 (30 °C in air)	Temperature, flexing	–25 to +85 °C
Temperature, fixed	–40 to +85 °C	Max. conductor temperature	+90 °C
Short-circuit temperature (5 s)	+250 °C	Min. bending radius, moving	6 × OD trailing · 8 × OD forced reeling
Min. bending radius, fixed	4 × OD	Max. reeling speed	100 m/min
Max. tensile load	20 N/mm ² perm. · 25 N/mm ² dynamic	Torsional stress	± 100 %/m (with AR anti-torsion braid)
Oil & drilling fluid resistance	EN 60811-404 (mineral & hydraulic oil)	Flame retardance	IEC 60332-1-2 / NF C 32-070 C2
Impact, cut & tear resistance	Extra-heavy-duty TTAR 5GM5/CSM (≥ 30 N/mm)	Water & humidity	AD7 / HD 22.16 submersible in tunnel water
Standards	NF M 82-375 / DIN VDE 0250-812	Standard packing	ISPM-15 heat-treated lagged drums with sealed moisture-proof ends

Sizes

16 standard constructions

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

Order designation	Cores × mm ²	Phase AWG ≈	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm	Perm. pull N
3 × Phase + 1 × Earth (4-core) 8 sizes							
☐ 6-CHCU TTAR 3×16+16	3 × 16 + 1 × 16	6	29.8	614	1,420	238	960
☐ 6-CHCU TTAR 3×25+16	3 × 25 + 1 × 16	4	33.6	874	1,860	269	1,500
☐ 6-CHCU TTAR 3×35+16	3 × 35 + 1 × 16	2	36.8	1,162	2,290	294	2,100
☐ 6-CHCU TTAR 3×50+25	3 × 50 + 1 × 25	1	42.0	1,680	3,120	336	3,000
☐ 6-CHCU TTAR 3×70+35	3 × 70 + 1 × 35	2/0	47.2	2,352	4,140	378	4,200
☐ 6-CHCU TTAR 3×95+50	3 × 95 + 1 × 50	3/0	53.5	3,216	5,460	428	5,700
☐ 6-CHCU TTAR 3×120+70	3 × 120 + 1 × 70	4/0	58.8	4,128	6,720	470	7,200
☐ 6-CHCU TTAR 3×150+70	3 × 150 + 1 × 70	300 kcmil	63.6	4,992	7,950	509	9,000
3 × Phase + 1 × Earth + Pilot cores 8 sizes							
☐ 6-CHCU TTAR 3×16+16+3×2.5	3 × 16 + 16 + 3 × 2.5	6	31.4	686	1,580	251	960
☐ 6-CHCU TTAR 3×25+16+3×2.5	3 × 25 + 16 + 3 × 2.5	4	35.2	946	2,040	282	1,500
☐ 6-CHCU TTAR 3×35+16+3×2.5	3 × 35 + 16 + 3 × 2.5	2	38.4	1,234	2,480	307	2,100
☐ 6-CHCU TTAR 3×50+25+3×2.5	3 × 50 + 25 + 3 × 2.5	1	43.6	1,752	3,340	349	3,000
☐ 6-CHCU TTAR 3×70+35+3×2.5	3 × 70 + 35 + 3 × 2.5	2/0	48.8	2,424	4,380	390	4,200
☐ 6-CHCU TTAR 3×95+50+3×4	3 × 95 + 50 + 3 × 4	3/0	55.2	3,331	5,740	442	5,700
☐ 6-CHCU TTAR 3×120+70+3×4	3 × 120 + 70 + 3 × 4	4/0	60.4	4,243	7,010	483	7,200
☐ 6-CHCU TTAR 3×150+70+3×4	3 × 150 + 70 + 3 × 4	300 kcmil	65.2	5,107	8,260	522	9,000

– TTAR = Tout-Terrain Anti-Rotation (extra-heavy-duty double elastomeric sheath with vulcanised anti-torsion braid).

– Dynamic acceleration pull up to 25 N/mm² of total phase cross-section is permissible on tension-controlled jumbo and loader reels.

Electrical & current data

8 sizes

Phase CSA mm ²	Max. DC resistance 20 °C, Ω/km	Current rating in air 30 °C, A	1 s short-circuit kA	Dynamic pull (25 N/mm ²) N
16	1.240	99	2.29	1,200
25	0.795	131	3.58	1,875
35	0.565	162	5.01	2,625
50	0.393	202	7.15	3,750
70	0.277	250	10.01	5,250
95	0.210	301	13.59	7,125
120	0.164	352	17.16	9,000
150	0.132	404	21.45	11,250

– Current ratings apply to a single cable in free air at 30 °C; derate for multi-layer drum winding per DIN VDE 0298-4.

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

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/6-chcu-ttar-extra-heavy-duty-trailing-and-reeling-cable



Typical values for this cable type, based on NF M 82-375 / DIN VDE 0250-812. Values for your order are confirmed in the quotation. Subject to change without notice.
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