



DIN VDE 0250-812 / 813 mining trailing cables

(N)TSW 3.6-6 kV

Medium-Voltage Rubber Trailing Cable

DIN VDE 0250-813 3.6/6 kV weather-resistant (W) medium-voltage rubber trailing power cable



DIN VDE 0250-813 Basis

3.6/6 kV (U_{max} 7.2 kV)

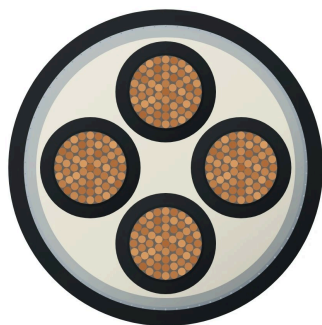
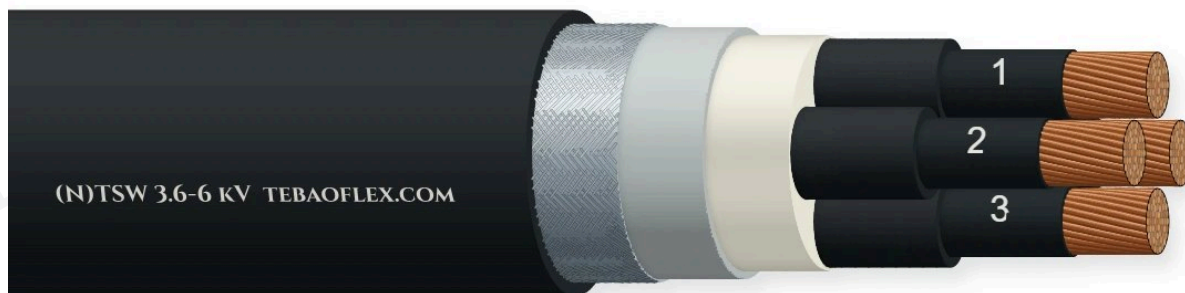
Weatherproof (W) · 3GI3 EPR

Application

(N)TSW 3.6-6 kV is a weather-resistant (W = wetterfest) 3.6/6 kV (U_{max} 7.2 kV) medium-voltage rubber trailing power cable based on DIN VDE 0250-813, featuring Class 5 tinned copper conductors, 3GI3 EPR insulation with semi-conductive stress control, split

Typical uses: Surface quarries & gravel pits, Floating sand & mineral dredgers, Open-cast mobile substations, Heavy construction & tunnel portals

Construction



Cross-section, not to scale

1	Phase & split earth conductors	DIN EN 60228 Class 5
2	Inner & outer field grading	DIN VDE 0250-813
3	MV EPR insulation (3GI3)	DIN VDE 0207-20
4	Symmetrical 3+3E lay-up	DIN VDE 0250-813
5	Inner sheath	DIN VDE 0250-813
6	Weatherproof outer sheath (W)	DIN VDE 0207-21

Technical data

Typical values

Rated voltage U ₀ /U	3.6/6 kV (U _{max} 7.2 kV)	AC routine test voltage	11 kV rms / 5 min
Max. operating DC voltage	5.4/9 kV DC	Insulation resistance @ 20 °C	≥ 500 MΩ·km
Max. conductor operating temp.	+90 °C	Max. short-circuit temperature	+250 °C (5 s)
Ambient temperature (trailing)	-25 °C to +60 °C	Ambient temperature (fixed)	-40 °C to +80 °C
Max. tensile load on copper	15 N/mm ²	Min. bending radius (fixed)	6 × D fixed · 10 × D trailing
Torsional & impact resilience	Compact unarmoured rubber construction for	Weather, UV & ozone resistance	DIN EN 60811-403 wetterfest (W) outdoor rated
Oil & grease resistance	DIN EN 60811-404 polychloroprene sheath	Flame retardancy	DIN EN 60332-1-2 self-extinguishing
Standards	DIN VDE 0250-813 ((N)TSW design)		

Sizes

8 standard constructions

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

Order designation	Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard (N)TSW 3.6-6 kV configurations 8 sizes						
☐ (N)TSW 3×16+3×16/3E 3.6/6 kV	3×16 + 3×16/3E (3.6/6 kV)	16	34.5	620	1,620	207
☐ (N)TSW 3×25+3×16/3E 3.6/6 kV	3×25 + 3×16/3E (3.6/6 kV)	25	38.0	880	2,010	228
☐ (N)TSW 3×35+3×16/3E 3.6/6 kV	3×35 + 3×16/3E (3.6/6 kV)	35	41.2	1,170	2,430	247
☐ (N)TSW 3×50+3×25/3E 3.6/6 kV	3×50 + 3×25/3E (3.6/6 kV)	50	45.5	1,680	3,090	273
☐ (N)TSW 3×70+3×35/3E 3.6/6 kV	3×70 + 3×35/3E (3.6/6 kV)	70	50.2	2,360	3,940	301
☐ (N)TSW 3×95+3×50/3E 3.6/6 kV	3×95 + 3×50/3E (3.6/6 kV)	95	55.6	3,260	5,040	334
☐ (N)TSW 3×120+3×70/3E 3.6/6 kV	3×120 + 3×70/3E (3.6/6 kV)	120	60.2	4,180	6,120	361
☐ (N)TSW 3×150+3×70/3E 3.6/6 kV	3×150 + 3×70/3E (3.6/6 kV)	150	64.8	5,040	7,190	389

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per DIN VDE 0250-813.

Electrical & ampacity data

8 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V _{rms}
3×16 + 3×16/3E (3.6/6 kV)	1.240	93	79	136	11,000
3×25 + 3×16/3E (3.6/6 kV)	0.799	122	104	151	11,000
3×35 + 3×16/3E (3.6/6 kV)	0.568	150	128	168	11,000
3×50 + 3×25/3E (3.6/6 kV)	0.396	187	159	192	11,000
3×70 + 3×35/3E (3.6/6 kV)	0.279	229	195	226	11,000
3×95 + 3×50/3E (3.6/6 kV)	0.211	276	235	267	11,000
3×120 + 3×70/3E (3.6/6 kV)	0.165	319	271	308	11,000
3×150 + 3×70/3E (3.6/6 kV)	0.132	365	310	358	11,000

– Current ratings apply at +30 °C ambient in free air; apply standard derating factors for elevated ambient or drum layers.

Standards and approvals

- ✓ DIN VDE 0250-813 Basis
- ✓ DIN EN 60332-1-2
- ✓ EN 10204 3.1

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/n-tsw-3-6-6-kv-medium-voltage-rubber-trailing-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.