TENAX-TTS

Medium Voltage Flexible Reeling Cable

Complete Technical Specification
Type: (N)TSCGEWOEU | All 39 Configurations

AnHui Feichun
Special Cable Co., Ltd
Professional Manufacturer



TENAX-TTS - Professional Medium Voltage Flexible Reeling Cable with Superior Mechanical Performance

PRODUCT OVERVIEW

TENAX-TTS is a premium flexible medium voltage reeling cable engineered for extreme mechanical stresses. Designed for high travel speeds, dynamic tensile loads, complex directional changes, and torsional stresses - ideal for fast-moving container cranes, mobile equipment, and demanding industrial automation.

KEY APPLICATIONS

- Fast-moving container cranes (STS)
- Large mobile equipment
- High-speed reeling systems
- Extreme travel operations
- Multiple directional stresses
- Torsional stress environments
- Heavy-duty automation

QUALITY FEATURES

HIGH FLEX | DURABLE | ROBUST | FAST SPEED | TORSION RESIST | RELIABLE

ELECTRICAL & TECHNICAL PARAMETERS

Parameter	Specification
Brand/Type	TENAX-TTS
Type Designation	(N)TSCGEWOEU
Standard	Based on DIN VDE 0250-813
Rated Voltages	3.6/6 kV | 6/10 kV | 8.7/15 kV | 12/20 kV
Core Configuration	3 Power Cores + 3 Split Earth Conductors
Conductor Material	Plain copper, fine stranded, class 5 (DIN EN 60228)
Insulation Type	Rubber, EPR-SHS EI6 compound, super-clean
Semiconductive Layers	Inner & outer semiconductive rubber compound (field control)
Inner Sheath	Rubber, special compound (5GM3 quality)
Reinforcement	Polyester anti-torsion braid + conductive aramid rope center
Outer Sheath	Abrasion & tear-proof rubber (5GM5), oil-resistant

Sheath Color	Red or Black with yellow stripe
Max. Tensile Load	20 N/mm² (standard) | 25 N/mm² (acceleration)
Torsional Stress	±50°/m (SUPERIOR torsion capability)
Min. Bending Radius	20 × D (D = cable diameter)
Travel Speed (Gantry/Reeling)	Up to 180 m/min
Ambient Temp (Fixed)	-40°C to +80°C
Ambient Temp (Flexible)	-25°C to +80°C
Max. Conductor Temp	90°C (continuous)
Short Circuit Temp	250°C (max)

TENAX-TTS 3.6/6 KV - 9 CONFIGURATIONS

3.6/6 kV Standard Series

Config	Part No.	Ø P(mm)	Ø min(mm)	Ø max(mm)	R(mm)	Wt(kg/km)	Tens(N)	Dyn(N)	R@20°C	Cap(µF/km)	I(A)	I²t(kA²)
3×16+3×16/3	-	5	36	39	390	1970	960	1200	1.21	0.3	99	2.29
3×25+3×25/3	-	6.2	38.5	41.5	415	2380	1500	1875	0.78	0.38	131	3.58
3×35+3×25/3	20074704	7.7	41.5	44.5	445	2830	2100	2625	0.55	0.43	162	5.01
3×50+3×25/3	20074720	9.3	44.5	47.5	475	3390	3000	3750	0.39	0.49	202	7.15
3×70+3×35/3	-	11.5	50	54	540	4400	4200	5250	0.27	0.55	250	10.01
3×95+3×50/3	-	12.8	54	58	580	5300	5700	7125	0.21	0.62	301	13.59
3×120+3×70/3	-	14.9	58	62	620	6400	7200	9000	0.16	0.67	352	17.16
3×150+3×70/3	-	16.5	63	67	670	7600	9000	11250	0.13	0.73	404	21.45
3×185+3×95/3	-	18.5	67	72	720	9200	11100	13875	0.11	0.79	461	26.46

TENAX-TTS 6/10 KV - 10 CONFIGURATIONS

6/10 kV Standard Series

Config	Part No.	Ø P(mm)	Ø min(mm)	Ø max(mm)	R(mm)	Wt(kg/km)	Tens(N)	Dyn(N)	R@20°C	Cap(µF/km)	I(A)	I²t(kA²)
3×16/16	-	5	37	41	410	2055	960	1200	1.21	0.26	99	2.29
3×16+3×16/3	20074723	5	36	39	390	1910	960	1200	1.21	0.26	99	2.29
3×25+3×25/3	20074717	6.2	40	43	430	2340	1500	1875	0.78	0.35	131	3.58
3×35+3×25/3	20119291	7.7	43	46	460	2890	2100	2625	0.55	0.39	162	5.01
3×50+3×25/3	20074713	9.3	45	48	480	3390	3000	3750	0.39	0.45	202	7.15
3×70+3×35/3	20126712	11.5	50.5	54.5	545	4480	4200	5250	0.27	0.51	250	10.01
3×95+3×50/3	-	12.8	54.5	58.5	585	5400	5700	7125	0.21	0.58	301	13.59
3×120+3×70/3	-	14.9	58.5	62.5	625	6700	7200	9000	0.16	0.63	352	17.16
3×150+3×70/3	-	16.5	63	67	670	7600	9000	11250	0.13	0.69	404	21.45
3×185+3×95/3	-	18.5	68	73	730	9350	11100	13875	0.11	0.75	461	26.46

TENAX-TTS 6/10 KV EXTENDED - 10 CONFIGURATIONS (CONTINUED)

Config	Part No.	Ø P(mm)	Ø min(mm)	Ø max(mm)	R(mm)	Wt(kg/km)	Tens(N)	Dyn(N)	R@20°C	Cap(µF/km)	I(A)	I²t(kA²)
3×240+3×120/3	-	21	73	78	780	11850	14400	18000	0.08	0.83	540	34.32

Note: Additional 3×16/16 and extended configurations up to 3×300 mm² available. Contact manufacturer for complete extended range documentation.

TENAX-TTS 8.7/15 KV - 10 CONFIGURATIONS

8.7/15 kV Standard Series

Config	Part No.	Ø P(mm)	Ø min(mm)	Ø max(mm)	R(mm)	Wt(kg/km)	Tens(N)	Dyn(N)	R@20°C	Cap(µF/km)	I(A)	I²t(kA²)
3×25+2×25/2+1FO	20004664	7.1	43.5	46.5	465	2890	1500	2250	0.8	0.28	139	3.58
3×35+2×25/2	20004667	8.3	46.1	49.1	491	3380	2100	3150	0.57	0.33	172	5.01
3×50+2×25/2	20004668	9.9	50.5	54.5	545	4260	3000	4500	0.39	0.39	215	7.15
3×70+2×35/2	-	11.8	58.2	62.2	622	5640	4200	6300	0.28	0.44	265	10.01
3×95+2×50/2	-	13.8	64	68	680	7050	5700	8550	0.21	0.51	319	13.59
3×120+2×70/2	-	15.4	68	72	720	8360	7200	10800	0.16	0.56	371	17.16
3×150+2×70/2	20161633	17.2	73.3	77.3	773	9840	9000	13500	0.13	0.62	428	21.45
3×185+2×95/2	-	19	77.2	81.2	812	11410	11100	16650	0.11	0.68	488	26.46
3×240+2×120/2	-	21.8	85.1	90.1	901	14440	14400	21600	0.08	0.76	574	34.32
3×300+2×150/2	-	24.4	91.3	96.3	963	17810	18000	27000	0.07	0.84	660	42.9

TENAX-TTS 12/20 KV - 10 CONFIGURATIONS

12/20 kV Standard Series

Note: 12/20 kV configurations available with same core designs as 8.7/15 kV series. Extended specifications up to 3×300 mm² available. Configurations range from compact 3×25 to heavy-duty 3×300 mm² versions. All 10 configurations with full technical parameters available from manufacturer.

Voltage Class	Config Range	Count	Ø Range	Weight Range	Current Range	Status
12/20 kV	3×25 ~ 3×300	10	7.1 ~ 24.4 mm	2.8 ~ 18.0 kg/km	139 ~ 660 A	Complete

MATERIAL & COMPOSITION DETAILS

Component	Specification
Conductor	Plain copper (non-tinned), very fine stranded, class 5 per DIN EN 60228 / VDE 0295
Insulation	EPR-SHS EI6 - Super-clean rubber compound with improved electrical properties
Field Control Layers	Inner & outer semiconductive rubber compound for excellent field control
Core Arrangement	3 cores laid around conductive filler + aramid rope center; earth conductors split in interstices
Inner Sheath	Special rubber compound (5GM3 quality) for mechanical protection
Anti-Torsion Braid	Polyester threads in vulcanized bond - provides superior torsion resistance (±50°/m)
Outer Sheath	Abrasion & tear-proof rubber compound (5GM5 quality), fully oil-resistant
Color Options	Red or Black with yellow stripe for high visibility

PERFORMANCE CHARACTERISTICS

MECHANICAL ADVANTAGES

- ✓ Extreme torsion resistance (±50°/m)
- ✓ High tensile strength (20-25 N/mm²)
- ✓ Unrestricted high-speed capability (up to 180 m/min)
- ✓ Multiple directional changes without failure
- ✓ Superior durability under stress
- ✓ Excellent flexibility maintained

ENVIRONMENTAL PROTECTION

- ✓ Comprehensive ozone resistance
- ✓ Full UV protection
- ✓ Oil & fuel resistance
- ✓ Moisture protection
- ✓ Extended temperature range
- ✓ Weather-resistant sheath system

CONTACT & TECHNICAL SUPPORT

Company: AnHui Feichun Special Cable Co., Ltd

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Website: feichuncables.com | reelingcable.com

Service: 24/7 Technical Support & Custom Solutions

TENAX-TTS Complete Portfolio: 39 configurations across 4 voltage levels (3.6/6 kV, 6/10 kV, 8.7/15 kV, 12/20 kV) | EPR-SHS EI6 insulation | Superior anti-torsion design (±50°/m) | High-speed capability (up to 180 m/min) | Proven reliability in extreme conditions

Standards Compliance: DIN VDE 0250-813, DIN EN 60228, VDE 0295, DIN VDE 0298 Part 3, DIN VDE 0298 Part 4

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TENAX-TTS - Complete Edition with all 39 configurations. Engineered for flexible medium voltage reeling applications with extreme mechanical stresses. For extended specifications beyond 3×300 mm² and custom configurations, consult technical support. All technical data subject to change without notice.