TENAX-PUR (N)TSCGEH3S

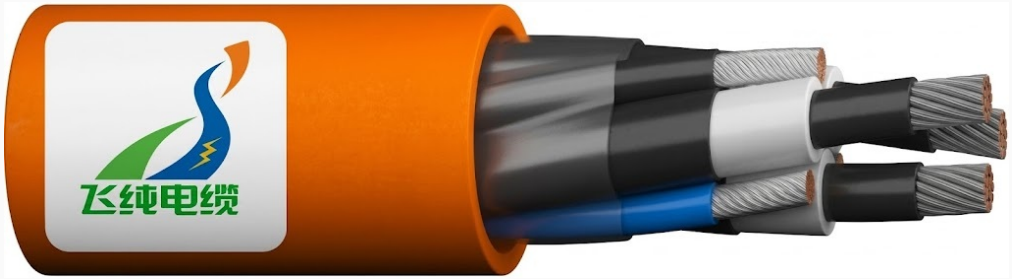
Medium Voltage Trailing Cable, PUR Power Cable for Trailing Application | 6 - 10 kV

AnHui Feichun Special Cable Co., Ltd

WhatsApp: +86 13855123218

feichuncables.com

reelingcable.com



Robust PUR Trailing Cable for Mobile Mining Equipment

TENAX-PUR (N)TSCGEH3S is a medium voltage trailing cable for the power supply to large mobile equipment in mines, such as shovels and draglines. The outer sheath (available in orange, yellow, or other colours on demand) is extremely robust and tough against abrasion and tearing, suitable for fully flexible operation down to -50°C.

Total Configurations: 20 — covering 2 voltage classes, 3.6/6 kV and 6/10 kV, with conductor sizes from 3×16 mm² up to 3×240 mm², each including an integrated pilot core.

Key Advantages: Fully flexible operation to -50°C • Extremely robust, abrasion & tear resistant PUR sheath • Oil, ozone & UV resistant • Available in multiple sheath colours

Technical Summary & Specifications

ELECTRICAL

Voltage: 3.6/6 (7.2) – 6/10 (12) kV

Test Voltage: 11 – 17 kV

Conductor: Finely stranded tinned copper, class 5

THERMAL

Max conductor temp: 90°C

Short circuit temp: 250°C

Fixed install: -50 to +80°C

Flexible install: -50 to +60°C

MECHANICAL

Torsional stress: ±100°/m

Tensile strength: 20 N/mm² static

Bend radius: 6×D fixed / 10×D flexible / 20×D S-type

CHEMICAL

Flame Retardant: ✓ EN/IEC 60332-1-2

Oil / Ozone / UV: ✓ Resistant

Standards: DIN VDE 0250-813 • DIN EN 60228 / IEC 60228 / VDE 0295 • DIN EN 60332-1-2 / IEC 60332-1-2 • IEC 60754-2 • DIN VDE 0298-4 • DIN EN 60811-404 / IEC 60811-404

Cable Construction

Conductor & Insulation

1. Conductor — finely stranded copper, tinned, class 5
2. Inner semi-conducting layer
3. Core insulation

Core Arrangement

4. Core arrangement
5. Outer semi-conducting layer
6. Pilot element

Sheath

7. Outer sheath — Polyurethane (PUR), extremely robust, abrasion and tear resistant, available in orange, yellow, or other colours on demand

Complete Technical Specifications — All 20 Configurations

TENAX-PUR (N)TSCGEH3S 3.6/6kV — 12 Configurations

Basic Construction (mm²)	Conductor Ø (mm)	Cable Ø min (mm)	Cable Ø max (mm)	Cable Weight (kg/km)	Max. Tensile Strength (N)	Nominal Capacitance (nF/km)	Operation Inductance (mH/km)	Conductor Resistance at 20°C (Ω/km)	Current (A)
3×16+2×10+1×10	5	42.2	46.2	2,400	1,200	280	0.39	1.24	99
3×25+2×16+1×16	6.2	43.5	47.5	2,800	1,875	300	0.37	0.795	131
3×35+2×16+1×16	7.5	46	50	3,380	2,625	320	0.35	0.565	162
3×35+2×16+1×16	7.5	46	50	3,380	2,625	320	0.35	0.565	162
3×50+2×16+1×16	9	47.4	51.4	3,760	3,750	360	0.32	0.393	202
3×70+2×25+1×16	11	52	56	4,700	5,250	410	0.30	0.277	250
3×95+2×25+1×16	12.6	55.3	59.3	5,420	7,125	460	0.29	0.21	301
3×120+2×35+1×16	14.8	60.5	64.5	6,700	9,000	520	0.28	0.164	352
3×120+2×35+1×16	14.8	60.5	64.5	6,700	9,000	520	0.28	0.164	352
3×150+2×35+1×16	16	62.5	66.5	7,430	11,250	560	0.27	0.132	404
3×150+3×95/3	16	62.5	66.5	8,170	11,250	560	0.27	0.132	404
3×185+2×50+1×16	17.7	68.5	72.5	9,500	13,875	600	0.26	0.108	461

TENAX-PUR (N)TSCGEH3S 6/10kV — 8 Configurations

Basic Construction (mm²)	Conductor Ø (mm)	Cable Ø min (mm)	Cable Ø max (mm)	Cable Weight (kg/km)	Max. Tensile Strength (N)	Nominal Capacitance (nF/km)	Operation Inductance (mH/km)	Conductor Resistance at 20°C (Ω/km)	Current (A)
3×35+2×16+1×16	7.5	46	50	3,380	2,625	290	0.35	0.565	162
3×50+2×16+1×16	9	49.2	53.2	3,800	3,750	330	0.33	0.393	202
3×70+2×25+1×16	11	53.5	57.5	4,850	5,250	370	0.31	0.277	250
3×95+2×25+1×16	12.6	57	61	5,700	7,125	420	0.30	0.21	301
3×120+2×35+1×16	14.8	61.7	65.7	6,990	9,000	470	0.29	0.164	352
3×150+2×35+1×16	16	65.5	69.5	7,800	11,250	500	0.28	0.132	404
3×185+2×50+1×16	17.7	72.8	76.8	10,000	13,875	540	0.27	0.108	461
3×240+2×70+1×16	20.3	77.3	81.3	12,500	18,000	600	0.26	0.0817	540

Note: two constructions in the 3.6/6kV table (3×35+2×16+1×16 and 3×120+2×35+1×16) are duplicated with identical values in the manufacturer's source data; both entries are reproduced here to ensure no configuration is omitted.

Applications

Application	Benefit
Shovels & Draglines	Fully flexible operation to -50°C for extreme cold-climate mining
Large Mobile Mining Equipment	Robust PUR sheath resists abrasion and tearing in continuous trailing
Opencast Mine Power Distribution	2 voltage classes (3.6/6 kV, 6/10 kV) cover common MV installations

Ordering Information

For custom lengths, drum packaging, special sheath colours, or technical consultation, please contact us directly via WhatsApp or visit our websites below. All 20 standard configurations are available ex-works with standard lead times.

Contact AnHui Feichun Special Cable Co., Ltd
WhatsApp: +86 13855123218 | feichuncables.com | reelingcable.com