



Low-voltage polyurethane (PUR) reeling cables

TRA 0.6/1 kV PUR

TRA High-Speed PUR Reeling Cable for Portal Cranes (0.6/1 kV)

Signal-green RAL 6032 double-PUR reeling cable with aramid core for 200 m/min reels



0.6/1 kV

200 m/min · 30 N/mm²

RAL 6032 Green PUR

Application

High-speed 0.6/1 kV halogen-free PUR reeling cable (RAL 6032 signal green) with Class 5 copper cores, polypropylene (PP) insulation, central polyaramid support, and double-PUR sheath with anti-torsion braid for reels up to 200 m/min and 30 N/mm².

Typical uses: Portal & Harbour Cranes, Shiploaders & Bulk Terminals, Stacker / Reclaimers, High-Speed Industrial Reels

Construction



Cross-section, not to scale

- 1 Flexible plain copper conductor
- 2 Polypropylene (PP) core insulation
- 3 Central polyaramid strain-relief core
- 4 Inner sheath
- 5 Embedded anti-twisting braid
- 6 Outer sheath (RAL 6032 Signal Green)

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV	Max. operating voltage AC	0.7/1.2 kV
Max. operating voltage DC	0.9/1.8 kV	AC test voltage	3.5 kV AC per IEC 60502-1
Current rating & voltage drop	9–20 A (7G2.5 to 54G2.5) and 75–127 A (5G10 to 5G25) laid straight on ground at +30 °C; apply VDE 0298-4 reel layer factors	Temperature, flexing	–25 °C to +60 °C
Temperature, fixed installation	–30 °C to +60 °C	Max. conductor temperature	+80 °C
Short-circuit temperature	+200 °C	Max. travel speed	Up to 200 m/min horizontal & vertical reeling
Max. tensile load (dynamic)	30 N/mm ² across all 10 table sizes (525–4,050 N; overview text notes 25 N/mm ²)	Min. bending radius	6 × D on spool · 4 × D on anti-tension drum · 9 × D on guiding device (pulleys not recommended)
Halogen-free construction	Halogen-free polypropylene (PP) core insulation and double polyurethane (PUR) sheaths	Oil, UV & ozone resistance	Oil, ozone, UV, humidity and moisture resistant
Flame retardance	Low flammability per IEC 60332-1-2 / DIN VDE 0482-265-2-1	Standards	TRA series high-speed PUR reeling cable; voltage test per IEC 60502-1

Sizes

10 standard constructions

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

Designation	Cores × mm ²	Outer Ø min	Outer Ø max	Cu number	Weight ≈	Permitted pull	Reel R min 6×D
TRA Control Cable (7 G 2.5 – 54 G 2.5) 7 sizes							
☐ TRA 7 G 2.5	7 G 2.5	13.3	14.7	156	300	525	88
☐ TRA 12 G 2.5	12 G 2.5	20.5	22.6	268	650	900	136
☐ TRA 20 G 2.5	20 G 2.5	21	23.1	448	800	1,500	139
☐ TRA 24 G 2.5	24 G 2.5	24.3	26.8	533	1,000	1,800	161
☐ TRA 28 G 2.5	28 G 2.5	26	28.4	672	1,150	2,100	170
☐ TRA 42 G 2.5	42 G 2.5	30	33.1	947	1,600	3,150	199
☐ TRA 54 G 2.5	54 G 2.5	33.2	36.7	1,312	2,000	4,050	220
TRA Power Cable (5 G 10 – 5 G 25) 3 sizes							
☐ TRA 5 G 10	5 G 10	19.5	20.5	480	700	1,500	123
☐ TRA 5 G 16	5 G 16	23	24	768	1,005	2,400	144
☐ TRA 5 G 25	5 G 25	27.5	28	1,200	1,600	3,750	168

- All 10 configurations verified against the reference reeling cable catalog.
- Cable weights are expressed in kg/km (300 to 2,000 kg/km); the source catalog column header '[kg/m]' with German thousands separator (1.000 to 2.000) means kg/km.
- Permitted dynamic tensile loads [N] in the table correspond to 30 N/mm² of total copper cross-section (525 N on 7 G 2.5 up to 4,050 N on 54 G 2.5).

Electrical data (ampacity, voltage drop & DC resistance)

10 sizes

Designation	Rated U0/U	Max. Ampacity 30 °C	Voltage Drop	Max. DC R 20 °C	AC Test Voltage
TRA Control Cable (7 G 2.5 – 54 G 2.5) 7 sizes					
TRA 7 G 2.5	0.6/1 kV	20	14	7.98	3.5 kV AC (IEC 60502-1)
TRA 12 G 2.5	0.6/1 kV	16	14	7.98	3.5 kV AC (IEC 60502-1)
TRA 20 G 2.5	0.6/1 kV	13	14	7.98	3.5 kV AC (IEC 60502-1)
TRA 24 G 2.5	0.6/1 kV	12	14	7.98	3.5 kV AC (IEC 60502-1)
TRA 28 G 2.5	0.6/1 kV	11	14	7.98	3.5 kV AC (IEC 60502-1)
TRA 42 G 2.5	0.6/1 kV	10	14	7.98	3.5 kV AC (IEC 60502-1)
TRA 54 G 2.5	0.6/1 kV	9	14	7.98	3.5 kV AC (IEC 60502-1)
TRA Power Cable (5 G 10 – 5 G 25) 3 sizes					
TRA 5 G 10	0.6/1 kV	75	3.36	1.91	3.5 kV AC (IEC 60502-1)
TRA 5 G 16	0.6/1 kV	100	2.15	1.21	3.5 kV AC (IEC 60502-1)
TRA 5 G 25	0.6/1 kV	127	1.42	0.780	3.5 kV AC (IEC 60502-1)

- Current-carrying capacity [A] is for cable laid straight on the ground at +30 °C ambient; apply DIN VDE 0298-4 reel layer conversion factors (0.80 for 1 layer, 0.61 for 2 layers, 0.49 for 3 layers).
- Voltage drop [V/(A·km)] is stated at $\cos \varphi = 0.8$ and +90 °C core reference.
- Maximum DC conductor resistance at 20 °C for 5 G 10 (1.91 Ω /km), 5 G 16 (1.21 Ω /km), and 5 G 25 (0.780 Ω /km) restored from IEC 60228 Table 3, correcting the 7.98 Ω /km copy-paste error from the 2.5 mm² row in the legacy datasheet.

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/tra-pur-reeling-cable



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