

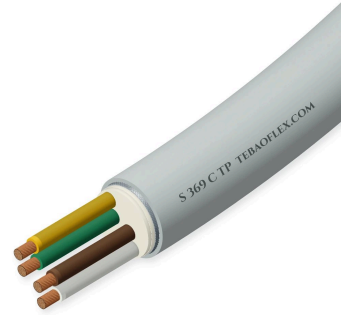


Continuous-Flex Drag-Chain PUR Data Cables

S 369 C TP

Screened Twisted-Pair PUR Cable-Chain Data Cable

DIN VDE 0812 / UL 20233 · 350/500 V · 2×2 to 24×2 × 0.14–1.5 mm² · Class 6 Cu · TP · TC



Twisted-Pair (TP) Chain

Class 6 · 7.5×D Flex

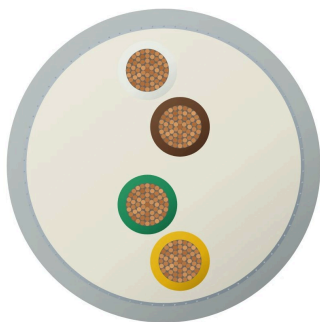
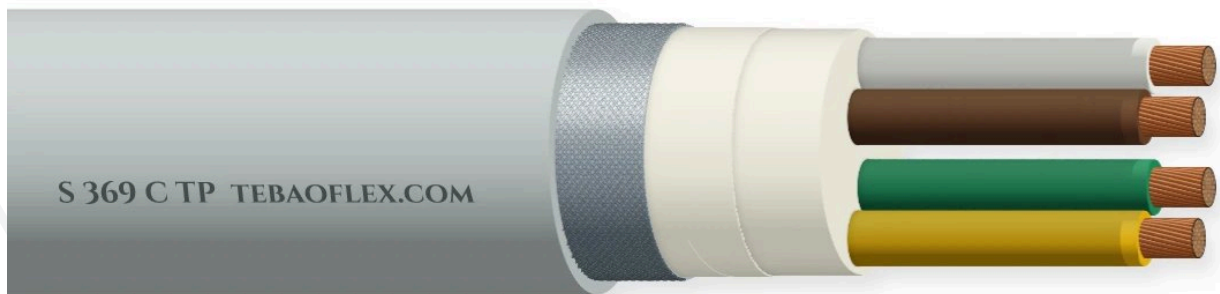
RS-485 & Servo Encoders

Application

S 369 C TP is a continuous-flex screened twisted-pair (TP) data cable (0.14 mm² to 1.5 mm², 350/500 V) engineered for differential RS-422/RS-485 bus links, incremental/absolute servo encoders (A/Ā, B/Ĕ, Z/Ž, EnDat, Hiperface, BiSS, SSI), and

Typical uses: Servo Motor Encoder & Resolver Feedback, RS-422 / RS-485 & CAN Motion Buses, CNC Linear Scales & Laser Interferometers, Robotic Welding & Assembly Cells, Semiconductor Wafer Stage Gantries

Construction



Cross-section, not to scale

1	Superfine Class 6 bare copper conductors	IEC 60228 Cl. 6
2	Low-capacitance TPE / PP twisted pairs	DIN 47100 / VDE 0812
3	Low-friction sliding fleece separator	VDE 0812
4	High-flex tinned copper wire braid	EN 50288-7
5	Halogen-free oil-resistant PUR outer	EN 50363-10-2

Technical data

Typical values

Characteristic differential	Approx. 100 $\Omega \pm 15 \Omega$ (at 1–10 MHz)	Mutual pair capacitance	Approx. 65 pF/m at 800 Hz
Core-to-screen capacitance	Approx. 110 pF/m at 800 Hz	Operating peak voltage	350 V ($\leq 0.34 \text{ mm}^2$) / 500 V ($\geq 0.50 \text{ mm}^2$)
Dielectric test voltage	1,500 V AC ($\leq 0.34 \text{ mm}^2$) / 2,000 V AC (≥ 0.5)	Near-end crosstalk (NEXT @ 1 MHz)	$\geq 65 \text{ dB}$ between adjacent pairs
Fixed operating temperature	-40 °C to +80 °C	Dynamic drag-chain temperature	-30 °C to +80 °C
UL AWM temperature rating	+80 °C (300 V Style 20233 / 21198)	Flame retardance	IEC 60332-1-2, UL VW-1 & CSA FT1
Halogen-free verification	IEC 60754-1/2	Cold-bend flexibility	-40 °C without sheath cracking
Conductor stranding class	IEC 60228 Class 6 superfine stranding class	Pair stranding geometry	Staggered short-pitch twisted pairs (TP)
Min. bend radius (fixed / chain)	4 × D (fixed) / 7.5 × D (drag chain)	Max. travel speed / acceleration	Up to 5–10 m/s · 50 m/s ²
Typical drag-chain cycle life	5,000,000 to 10,000,000 bend cycles	Pair count range	2×2, 3×2, 4×2, 6×2, 8×2, 10×2, 12×2 to 24×2
Oil & coolant resistance	EN 60811-404 / VDE 0473-811-404	VFD PWM common-mode immunity	Balanced TP + $\geq 85 \%$ tinned Cu braid
Hydrolysis & microbe resistance	Polyether PUR resists synthetic emulsions	Abrasion & tear strength	High-density matte PUR outer jacket
LABS / silicone-free status	PWIS-free for automotive assembly lines	RoHS / REACH status	RoHS 3 compliant
Standards	DIN VDE 0812 / VDE 0295 Class 6		

Sizes

5 standard constructions

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

Order designation	Construction / Variant	Conductor	Outer $\varnothing \approx$ mm	Metal kg/km	Weight $\approx$ kg/km	Min. bend R fixed mm
Standard S 369 C TP variants 5 sizes						
☐ S 369 C TP 2 × 2 × 0.25 mm ²	2 Twisted Pairs + TC Braid (PUR)	0.25 mm ² (24 AWG)	6.10	21.0	44.0	24
☐ S 369 C TP 4 × 2 × 0.25 mm ²	4 Twisted Pairs + TC Braid (PUR)	0.25 mm ² (24 AWG)	7.30	36.0	68.0	29
☐ S 369 C TP 6 × 2 × 0.25 mm ²	6 Twisted Pairs + TC Braid (PUR)	0.25 mm ² (24 AWG)	8.40	51.0	92.0	34
☐ S 369 C TP 4 × 2 × 0.34 mm ²	4 Twisted Pairs + TC Braid (PUR)	0.34 mm ² (22 AWG)	8.10	46.0	85.0	32
☐ S 369 C TP 4 × 2 × 0.50 mm ²	4 Twisted Pairs + TC Braid (PUR)	0.50 mm ² (20 AWG)	9.20	63.0	112.0	37

– Dimensions and weights are nominal production values subject to manufacturing tolerances per DIN VDE 0812 / EN 50288-7 / UL AWM 20233.

Impedance, capacitance & electrical data

5 sizes

Configuration	Max. conductor DC R Ω / km @ 20 °C	Characteristic Z_0 Ω	Capacitance pF / m	Velocity VoP %	Test voltage V _{rms}
2 Twisted Pairs + TC Braid (PUR)	2.3	100	48.0	68	1,500
4 Twisted Pairs + TC Braid (PUR)	2.3	100	48.0	68	1,500
6 Twisted Pairs + TC Braid (PUR)	2.3	100	48.0	68	1,500
4 Twisted Pairs + TC Braid (PUR)	2.5	100	48.0	68	1,500
4 Twisted Pairs + TC Braid (PUR)	2.8	100	48.0	68	1,500

– Transmission parameters measured at 1–100 MHz (+20 °C) in accordance with DIN VDE 0812 / EN 50288-7 / UL AWM 20233.

Standards and approvals

- ✓ DIN VDE 0812 / EN 50363
- ✓ UL / cUL AWM 20233
- ✓ Halogen-Free / RoHS 3

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/screened-twisted-pair-pur-cable-chain-data-cable



Typical values for this cable type, based on DIN VDE 0812 / EN 50288-7 / UL AWM 20233. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.