



Continuous-Flex Drag-Chain PUR Data Cables

S 368 C

Screened Multicore PUR Cable-Chain Data Cable

DIN VDE 0812 / UL 20233 · 350/500 V · 2 to 36 cores × 0.14–1.5 mm² · Class 6 Cu · Tinned



DIN VDE 0812 · UL 20233

Class 6 Drag-Chain Flex

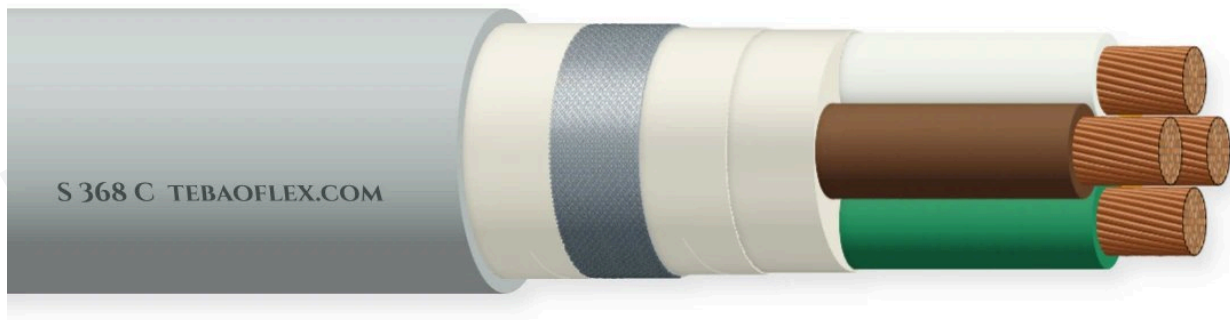
Tinned Cu Braid + PUR

Application

S 368 C is a continuous-flex screened multicore data and sensor cable (0.14 mm² to 1.5 mm², 350 V / 500 V peak) engineered specifically for high-speed linear drag chains, CNC machining centers, and automated gantry handling systems. It combines superfine

Typical uses: CNC Machining Centers & Milling Gantry, Linear Encoders & Optical Scales, Automated Storage & Retrieval (AS/RS), Semiconductor & PCB Pick-and-Place, Robotics & Packaging Energy Chains

Construction



Cross-section, not to scale

1	Superfine Class 6 bare copper conductors	IEC 60228 Cl. 6
2	Low-capacitance TPE / polyolefin core	DIN 47100
3	Low-friction sliding fleece wrap	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

Operating peak voltage	350 V (0.14–0.34 mm ²) / 500 V (≥ 0.50 mm ²)	UL AWM voltage rating	300 V rms (UL Style 20233 / 21198)
Core-to-core capacitance	Approx. 70 pF/m at 800 Hz	Core-to-screen capacitance	Approx. 115 pF/m at 800 Hz
Dielectric test voltage	1,500 V AC (≤ 0.34 mm ²) / 2,000 V AC (≥ 0.5)	Insulation resistance at 20 °C	≥ 100 MΩ·km
Fixed operating temperature	-40 °C to +80 °C	Dynamic drag-chain temperature	-30 °C to +80 °C
UL AWM temperature rating	+80 °C	Flame retardance	IEC 60332-1-2, UL VW-1 & CSA FT1
Halogen-free verification	IEC 60754-1/2 (zero halogens)	Smoke emission	Low smoke emission in machine enclosures
Conductor stranding class	IEC 60228 Class 6 superfine stranding class	Min. bend radius (fixed / chain)	4 × D (fixed) / 7.5 × D (drag chain)
Max. travel speed in chain	Up to 5 m/s (gliding) / 10 m/s (free-span)	Max. acceleration	Up to 50 m/s ²
Typical drag-chain cycle life	5,000,000 to 10,000,000 bend cycles	Core stranding geometry	Layered in short-pitch concentric tiers
Oil & cutting-fluid resistance	EN 60811-404 / VDE 0473-811-404	Hydrolysis & microbe resistance	Polyether-based PUR resists emulsion decay
Abrasion & notch resistance	High tear strength against chain crossbars	UV & outdoor weather	UV-resistant outer sheath
LABS / silicone-free status	Paint-wetting impairment substance free	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 Ø ≈ mm	Metal kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard S 368 C variants 5 sizes						
☐ S 368 C 4 × 0.25 mm ²	4 cores (DIN 47100) + TC Braid	0.25 mm ² (24 AWG)	5.10	18.5	36.0	20
☐ S 368 C 8 × 0.25 mm ²	8 cores (DIN 47100) + TC Braid	0.25 mm ² (24 AWG)	6.40	33.0	58.0	26
☐ S 368 C 12 × 0.34 mm ²	12 cores (DIN 47100) + TC Braid	0.34 mm ² (22 AWG)	7.90	59.0	96.0	32
☐ S 368 C 7 × 0.50 mm ²	7 cores (DIN 47100) + TC Braid	0.50 mm ² (20 AWG)	7.40	52.0	84.0	30
☐ S 368 C 18 × 0.50 mm ²	18 cores (DIN 47100) + TC Braid	0.50 mm ² (20 AWG)	10.80	118.0	185.0	43

– 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}
4 cores (DIN 47100) + TC Braid	2.3	100	48.0	66	1,500
8 cores (DIN 47100) + TC Braid	2.3	100	48.0	66	1,500
12 cores (DIN 47100) + TC Braid	2.5	100	48.0	66	1,500
7 cores (DIN 47100) + TC Braid	2.8	100	48.0	66	1,500
18 cores (DIN 47100) + TC Braid	2.8	100	48.0	66	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-multicore-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.