Low-capacitance ePTFE spacer-tube signal cable

HSC-0.25-8Q1SFA-6

Low-Capacitance ePTFE Signal Cable

DIN 47100 / IEC 60228 · 250 VAC (<40 pF/m) · −90…+200 °C 8×AWG 28 spacer-tube cable



<40 pF/m Low Cap. | 8×AWG 28 ePTFE | −90…+200 °C

Application

HSC-0.25-8Q1SFA-6 ultra-low-capacitance (<40 pF/m) multicore instrumentation cable featuring 8 × AWG 28 silver-plated copper conductors laid around a central PTFE spacer tube with expanded ePTFE dielectric wraps, tinned copper braid screen and blue FEP jacket.

Typical uses: Particle Accelerators, Synchrotrons & Detector Arrays, Cryogenic, Vacuum & Thermal Test Chambers, High-Impedance Acoustic, Piezo & Charge Telemetry, Semiconductor Metrology & Precision Instrumentation

Construction





Cross-section, not to scale

1	Central PTFE Spacer Tube	DIN 47100 / IEC 60228
2	Signal Conductors (8xAWG 28)	DIN 47100 / IEC 60228
3	Low-Capacitance Core Stack	DIN 47100 / IEC 60228
4	Overall Dielectric & EMC Screen	DIN 47100 / IEC 60228
5	Outer Jacket (-6 Blue)	DIN 47100 / IEC 60228

Technical data

Typical values

Rated voltage / transmission duty	250 VAC (DIN 47100 / IEC 60228)	**Core / conductor construction**	Central PTFE Spacer Tube — Hollow polytetrafluoroethylene (PTFE) central spacer tube (OD 3.5 mm / ID 2.5 mm) wrapped with low-permittivity expanded PTFE-E
Primary dielectric / insulation	Signal Conductors (8xAWG 28) — Eight 19 x 0.08 mm (0.095 mm², AWG 28) finely stranded silver-plated copper conductors laid around the spacer tube	**Continuous operating temperature**	−90...+200 °C (rated operating envelope)
Storage & transport temperature	−40...+80 °C on export drum or reel	**Outer protection / sheath**	Outer Jacket (-6 Blue) — Smooth blue extruded fluorinated ethylene propylene (FEP) fluoropolymer outer sheath (OD 6.3 mm, -90 °C to +200 °C)
Minimum bending radius	8 × OD	**Structural layer count**	5 concentric functional layers
Environmental & chemical resistance	Industrial moisture, oils and mechanical wear per DIN 47100 / IEC 60228	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	DIN 47100 / IEC 60228		

Sizes

3 standard constructions

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

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Weight ≈ kg/km	Tensile load kN ≈	Min. bend R mm
HSC-0.25-8Q1SFA-6 Construction Schedule (−90...+200 °C) 3 sizes						
☐ **HSC-0.25-4Q1SFA-6 (4×AWG 28)**	4 × AWG 28 (0.095 mm²)	19×0.08 mm SPC + ePTFE	5.2	42	0.2	42
☐ **HSC-0.25-8Q1SFA-6 (8×AWG 28)**	8 × AWG 28 (0.095 mm²)	19×0.08 mm SPC + ePTFE	6.3	64	0.4	50
☐ **HSC-0.25-12Q1SFA-6 (12×AWG 28)**	12 × AWG 28 (0.095 mm²)	19×0.08 mm SPC + ePTFE	7.4	88	0.5	60

– Custom core counts, cross-sections, sheath colours and factory-tested cut lengths available per DIN 47100 / IEC 60228.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Capacity	Operating temp.
4 × AWG 28	202.00	250 VAC / <38 pF/m	−90...+200 °C
8 × AWG 28	202.00	250 VAC / <40 pF/m	−90...+200 °C
12 × AWG 28	202.00	250 VAC / <42 pF/m	−90...+200 °C

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric and dimensional verification.

Standards and approvals

- DIN 47100 Compliant
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

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/hsc-0-25-8q1sfa-6-250vac-low-capacitance-eptfe-spacer-tube-cable

Typical values for this cable type, based on DIN 47100 / IEC 60228. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.