5 kVAC / 15 kVDC floating-potential control cable

HSC-5-7X2SVA-2

15 kVDC Floating-Potential Control Cable

DIN 47100 / IEC 60502 · 5 kVAC / 15 kVDC · −30…+80 °C dual-screened HV deck control cable



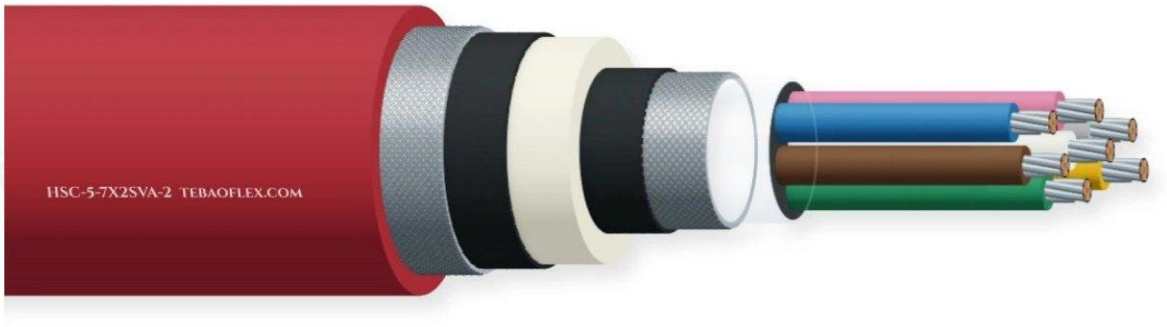
5 kVAC / 15 kVDC | FloatingHV Screen | 7×AWG 26 Control

Application

HSC-5-7X2SVA-2 5 kVAC / 15 kVDC floating-potential control cable isolating a 7 × AWG 26 low-voltage control bundle inside an inner floating screen, stress-controlled XLPE high-voltage barrier, outer grounded EMC copper braid and a red PVC jacket.

Typical uses: High-Voltage Ion Sources & Electron Gun Decks, Solid-State HV Modulators & Series IGBT Gate Drives, High-Voltage Isolation Amplifiers & Plasma Diagnostics, Medical Linear Accelerators & HV Research Racks

Construction





Cross-section, not to scale

1	Control Bundle (7xAWG 26)	DIN 47100 / IEC 60502
2	Inner Screen I (Floating HV)	DIN 47100 / IEC 60502
3	HV Stress-Controlled Barrier	DIN 47100 / IEC 60502
4	Outer Screen II (Earth)	DIN 47100 / IEC 60502
5	Outer Sheath (-2 Red)	DIN 47100 / IEC 60502

Technical data

Typical values

Rated voltage / transmission duty	5 kVAC / 15 kVDC (DIN 47100 / IEC 60502)	**Core / conductor construction**	Control Bundle (7xAWG 26) — Seven 7 x 0.16 mm (0.14 mm², AWG 26) stranded tinned copper control cores with DIN 47100 polypropylene (PP) insulation (300 V core-to-screen I)
Primary dielectric / insulation	Inner Screen I (Floating HV) — Polyester separator tape and inner tinned copper wire braid screen I operating at floating high-voltage potential	**Continuous operating temperature**	−30…+80 °C (rated operating envelope)
Storage & transport temperature	−40…+80 °C on export drum or reel	**Outer protection / sheath**	Outer Sheath (-2 Red) — Red silk-mat polyvinyl chloride (PVC) outer sheath (OD 11.4 mm) identifying high-voltage floating-potential circuits
Minimum bending radius	10 × OD	**Structural layer count**	5 concentric functional layers
Environmental & chemical resistance	Industrial moisture, oils and mechanical wear per DIN 47100 / IEC 60502	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	DIN 47100 / IEC 60502		

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-5-7X2SVA-2 Construction Schedule (−30…+80 °C) 3 sizes						
☐ HSC-5-4X2SVA-2 (4×AWG 26, 15 kVDC)	4 × AWG 26 (0.14 mm²)	7×0.16 mm tinned Cu + 2×screen	10.2	148	0.4	102
☐ HSC-5-7X2SVA-2 (7×AWG 26, 15 kVDC)	7 × AWG 26 (0.14 mm²)	7×0.16 mm tinned Cu + 2×screen	11.4	185	0.6	114
☐ HSC-5-12X2SVA-2 (12×AWG 26, 15 kVDC)	12 × AWG 26 (0.14 mm²)	7×0.16 mm tinned Cu + 2×screen	13.2	245	0.9	132

– Custom core counts, cross-sections, sheath colours and factory-tested cut lengths available per DIN 47100 / IEC 60502.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Capacity	Operating temp.
4 × AWG 26 (300 V / 15 kVDC)	138.00	5 kVAC / 15 kVDC isolation	−30…+80 °C
7 × AWG 26 (300 V / 15 kVDC)	138.00	5 kVAC / 15 kVDC isolation	−30…+80 °C
12 × AWG 26 (300 V / 15 kVDC)	138.00	5 kVAC / 15 kVDC isolation	−30…+80 °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-5-7x2sva-2-5kvac-15kvdc-floating-potential-dual-screened-cable

Typical values for this cable type, based on DIN 47100 / IEC 60502. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.