EN 50288-7 / IEC 60584-3 SWA multipair thermocouple cable

TT PVC-oST-PVC-SWA-PVC

Armoured Multipair Thermocouple Cable

EN 50288-7 / IEC 60584-3 · 300/500 V · Foil-screened SWA multipair thermocouple cable



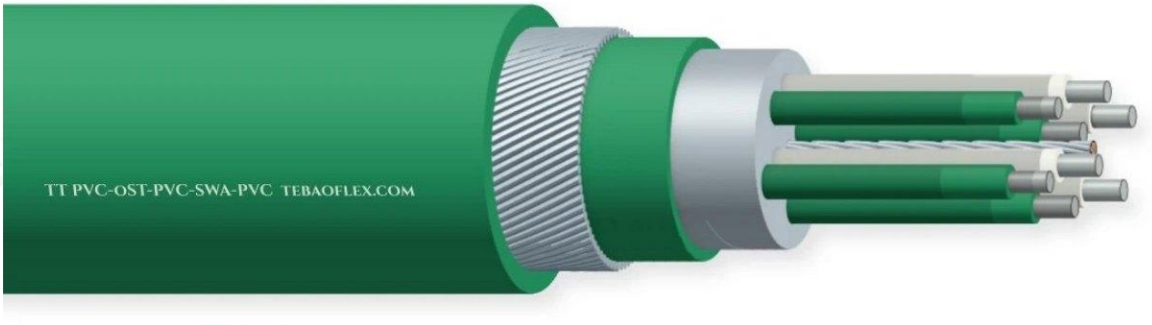
EN 50288-7 / IEC 60584-3 | Type KX/JX/TX/EX/NX | oST Foil + Round SWA

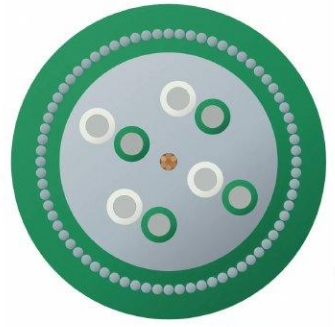
Application

TT PVC-oST-PVC-SWA-PVC armoured multipair thermocouple extension and compensating cable per EN 50288-7 and IEC 60584-3 (KX, JX, TX, EX, NX), featuring solid thermocouple alloy cores, overall Al/PET foil screen (oST), round SWA and FR-PVC sheath.

Typical uses: Underground Coal & Hard-Rock Mining, Open-Cast Excavators, Draglines & Shovels, Vertical Mine Shafts, Hoists & Boreholes, Tunneling, Mineral Processing & Slurry Plants

Construction





Cross-section, not to scale

1. Thermocouple Alloy Conductors (4×2×1.3)
2. Polarity-Coded PVC Insulation
3. Overall Foil Screen (oST)
4. PVC Inner Sheath & Round SWA
5. Hydrocarbon-Resistant Outer Sheath

Technical data

Typical values

Rated voltage / transmission duty	300/500 V (EN 50288-7 / IEC 60584-3 / IEC 60332-3-22)	**Core / conductor construction**	Thermocouple Alloy Conductors (4×2×1.3) — Solid IEC 60584-3 Type KX alloy conductors (+NiCr / -NiAl)
Primary dielectric / buffering	Polarity-Coded PVC Insulation — IEC 60584-3 color-coded PVC pairs (Green positive / White negative)	**Continuous operating temperature**	-30 to +80 °C (mining & industrial service)
Short-circuit / peak thermal rating	Verified thermal stability per EN 50288-7 / IEC 60584-3 / IEC 60332-3-22	**Storage & transport temperature**	−40...+80 °C on export wooden/steel drum
Outer protection / armouring	Hydrocarbon-Resistant Outer Sheath — IEC 60584-3 green Cat. A flame-retardant & oil-resistant PVC jacket	**Minimum bending radius**	12 × OD
Crush, impact & abrasion duty	Heavy-duty mining rock-cut, impact and tensile protection per EN 50288-7 / IEC 60584-3 / IEC 60332-3-22	**Flame retardancy & mine fire safety**	Self-extinguishing / flame-retardant mining jacket per EN 50288-7 / IEC 60584-3 / IEC 60332-3-22
Mine water, oil & chemical resistance	Resistant to acidic mine water, hydraulic oils and abrasion per EN 50288-7 / IEC 60584-3 / IEC 60332-3-22	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	EN 50288-7 / IEC 60584-3 / IEC 60332-3-22		

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	Net weight ≈ kg/km	Tensile rating kN ≈	Min. bend R mm
TT PVC-oST-PVC-SWA-PVC Construction Schedule (-30 to +80 °C) 3 sizes						
☐ TT PVC-oST-PVC-SWA-PVC 2×2×1.3 mm² KX	2 × 2 × 1.3 mm² Type KX (+NiCr/-NiAl)	Solid Ø 1.29 mm (16 AWG)	13.8	365	4.5	165
☐ TT PVC-oST-PVC-SWA-PVC 4×2×1.3 mm² KX	4 × 2 × 1.3 mm² Type KX (+NiCr/-NiAl)	Solid Ø 1.29 mm (16 AWG)	16.4	520	6.2	195
☐ TT PVC-oST-PVC-SWA-PVC 12×2×1.3 mm² KX	12 × 2 × 1.3 mm² Type KX (+NiCr/-NiAl)	Solid Ø 1.29 mm (16 AWG)	23.6	1,080	11.5	285

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per EN 50288-7 / IEC 60584-3 / IEC 60332-3-22.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
2 × 2 × 1.3 mm² Type KX	77.00	Class 1 EMF tolerance (±1.5 °C)	-30 to +80 °C
4 × 2 × 1.3 mm² Type KX	77.00	Class 1 EMF tolerance (±1.5 °C)	-30 to +80 °C
12 × 2 × 1.3 mm² Type KX	77.00	Class 1 EMF tolerance (±1.5 °C)	-30 to +80 °C

– Every production length undergoes routine conductor DC resistance, high-voltage Spark/AC dielectric or OTDR continuity and dimensional verification.

Standards and approvals

- IEC 60584-3 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/tt-pvc-ost-pvc-swa-pvc-iec-60584-3-foil-screened-swa-thermocouple-cable

Typical values for this cable type, based on EN 50288-7 / IEC 60584-3 / IEC 60332-3-22. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.