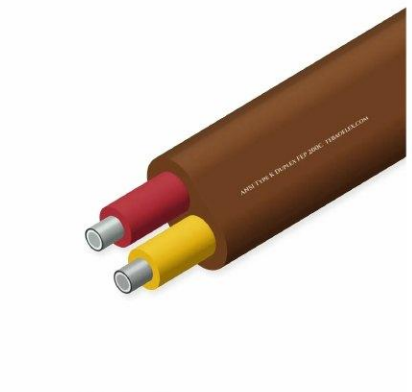
Thermocouple, RTD & downhole logging cables

ANSI Type K FEP Cable

ANSI Type K Duplex FEP 200 °C Thermocouple Cable

ASTM E230 / ANSI MC96.1 parallel FEP-insulated 200 °C Type K cable

ASTM E230 | 300 V · +200 °C | Fluoropolymer HT



Application

ANSI Type K Duplex FEP 200 °C pairs matched Chromel (+) / Alumel (-) thermocouple alloy conductors in ANSI yellow/red FEP insulation and a brown extruded FEP flat outer jacket for 200 °C process sensing.

Typical uses: Industrial kilns, autoclaves & heat-treatment furnaces, Chemical reactors, refineries & process skids, Aerospace composite curing & thermal testing, Semiconductor, pharmaceutical & laboratory chambers

Construction





Cross-section, not to scale

1	Conductor	Matched ASTM E230 Type K Chromel (NiCr +) / Alumel (NiAl -) thermocouple alloy conductors · ASTM E230 / IEC 60584
2	Dielectric / core insulation	Extruded FEP fluoropolymer (ANSI yellow + / red -) · ASTM E230
3	Outer sheath	Brown chemical- & moisture-resistant extruded FEP flat outer jacket · UL VW-1 Flame

Technical data

Typical values

Rated voltage	300 V	Test voltage	1.5 kV AC
Conductor	Type K NiCr/NiAl	Insulation	Extruded FEP fluoropolymer (ANSI yellow +
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-75 °C to +200 °C
Temp. range (flexing)	-40 °C to +200 °C	Peak / short-circuit	+220 °C (short-term)
Min. bending radius	8 × OD (fixed)	Flame / fire rating	UL VW-1 Flame
Thermal / chemical	Chemical & Moisture Proof FEP	Mechanical / special	±1.1 °C Special Limits
Outer finish	Brown chemical- & moisture-resistant		

Sizes

5 standard constructions

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

Pair × AWG	Outer Ø ≈ mm	Max. R20 Ω/km	Metal index kg/km	Weight ≈ kg/km	Min. bend R 8×D mm
☐ 2×24 AWG (Type K)	2.5	4,880.00	4	14	20
☐ 2×20 AWG (Type K)	3.2	1,930.00	10	24	26
☐ 2×18 AWG (Type K)	3.8	1,215.00	16	36	30
☐ 2×16 AWG (Type K)	4.4	765.00	25	52	35
☐ 2×14 AWG (Type K)	5.2	480.00	39	76	42

- Conductor DC resistance R20 at 20 °C per ASTM E230 / IEC 60584.
- For flat cable geometries, Outer Ø indicates nominal bending-plane thickness; minimum bending radius is 8 × nominal thickness.

Standards and approvals

- ✓ ASTM E230
- ✓ ANSI MC96.1 Type K
- ✓ IEC 60584-3
- ✓ 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/ansi-type-k-duplex-fep-200c-thermocouple-cable

Typical values for this cable type, based on ASTM E230 · ANSI MC96.1 Type K · IEC 60584-3. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.