High-temperature fluoropolymer, silicone & HV wires

VDE 6Y Multi-Core FEP

DIN VDE 6Y Multi-Core 205 °C FEP Control Cable

European 300/500 V 205 °C metric multi-core all-FEP control cable

DIN VDE 0250 (6Y) | 300/500 V · +205 °C | Fluoropolymer HT



Application

VDE 6Y Multi-Core FEP groups IEC 60228 Class 5 tinned copper cores in FEP (6Y) insulation under a black chemical-proof FEP outer sheath rated 300/500 V and -100 °C to +205 °C for European hot-zone automation.

Typical uses: Industrial ovens, kilns & thermal processing, Aerospace avionics, defence & instrumentation, Steelworks, glassworks & foundry equipment, Switchgear cabinets, motors & heating appliances

Construction





Cross-section, not to scale

1	Conductor	IEC 60228 Class 5 flexible tinned annealed copper · IEC 60228 Class 5
2	Dielectric / core insulation	Extruded FEP (6Y) fluoropolymer core insulation · DIN VDE 0250 (6Y)
3	Core assembly & separator	Concentric cabled core assembly with low-friction fleece/polyester separator tape · DIN VDE 0250 (6Y)
4	Outer sheath	Black chemical- & weather-proof extruded FEP (6Y) outer sheath · 205 °C Continuous FEP

Technical data

Typical values

Rated voltage	300/500 V	**Test voltage**	2.5 kV AC
Conductor	Tinned Cu · Cl.5	**Insulation**	Extruded FEP (6Y) fluoropolymer core
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	**Temp. range (fixed)**	-100 °C to +205 °C
Temp. range (flexing)	-55 °C to +205 °C	**Peak / short-circuit**	+220 °C (short-term)
Min. bending radius	10 × OD (fixed)	**Flame / fire rating**	205 °C Continuous FEP
Thermal / chemical	Acid, Steam & Oil Proof	**Mechanical / special**	Non-Flammable Fluoropolymer
Outer finish	Black chemical- & weather-proof extruded		

Sizes

8 standard constructions

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

Cores × mm²	Outer Ø ≈ mm	Max. R20 Ω/km	Metal index kg/km	Weight ≈ kg/km	Min. bend R 10×D mm
☐ 2×0.5 mm²	4.6	40.09	10	41	46
☐ 3G0.75 mm²	5.4	26.73	22	68	54
☐ 4G0.75 mm²	5.9	26.73	29	86	59
☐ 3G1.0 mm²	5.9	20.05	29	86	59
☐ 4G1.0 mm²	6.5	20.05	38	108	65
☐ 3G1.5 mm²	6.6	13.67	43	117	66
☐ 4G1.5 mm²	7.3	13.67	58	151	73
☐ 4G2.5 mm²	8.8	8.20	96	236	88

- Conductor DC resistance R20 at 20 °C per IEC 60228 Class 5.
- Minimum bending radius calculated at 10 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- DIN VDE 0250 (6Y)
- IEC 60228 Class 5
- IEC 60332-1-2
- 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/vde-6y-multi-core-205c-fep-high-temp-control-cable

Typical values for this cable type, based on DIN VDE 0250 (6Y) · IEC 60228 Class 5 · IEC 60332-1-2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.