



## FLAME Convincing advantages

### New in TKD product range: FLAME cables oil-resistant, halogen-free!

Specially designed for fire hazard zones and facilities. The use of high-quality materials protects people and material assets in the event of a fire.

Convince yourself of the advantages of the TKD FLAME cables!

- good oil-resistance\*
- increased temperature resistance\*
- increased chemical resistance\*
- good stress crack resistance\*
- halogen-free insulation materials
- shielded and unshielded
- highly flame retardant
- no fire transmission
- low smoke gas density
- low toxicity of smoke gases
- low corrosiveness
- Silicone, Asbestos, CFC, Lead and PVC-free
- completely recyclable

\*applies to FLAME-JZ/OZ-Hö FRNC and FLAME-JZ/OZ-HCHö FRNC

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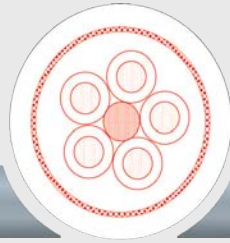
[www.tkd-gruppe.de](http://www.tkd-gruppe.de)



## FLAME Flexible connection cables

oil-resistant  
halogen-free  
flame retardant

**FLAME-JZ/OZ-Hö FRNC**  
**FLAME-JZ/OZ-HCHö FRNC**



**FLAME-JZ/OZ-H FRNC**  
**FLAME-JZ/OZ-CH FRNC**



**Application**

For fixed installation and flexible use with average mechanical requirements. Specially designed for fire hazard zones and facilities. **Oil-resistant** and chemically resistant. **Halogen-free** and environmentally friendly. Suitable for use in dry, humid and wet rooms, including industrial conditions.  
Typical application areas:  
automobile industry, conveyor and automation installations, washing bays, paper and chemical industry, food production, butcheries and dairies, as well as in public buildings and commercial facilities.

**Construction & Technical Data**

conductor material	bare copper strands
core insulation	Polyolefin Copolymer
core identification	black with white numerals, from 3 cores with gr/yl
outer sheath construction	dual layer outer sheath inner: Polyolefin Polymer / outer: TPE
sheath colour	grey, RAL 7001
rated voltage	Uo/U: 300/500 V
testing voltage	3.500 V
conductor resistance	acc. to DIN VDE 0295 (IEC 60228) class 5
insulation resistance	min. 20 MΩ x km
current carrying capacity	acc. to DIN VDE, see Technical Guidelines
min. bending radius fixed	4x d, 6x d for FLAME-JZ/OZ-HCHö FRNC
min. bending radius moved	15x d
operat. temp. fixed min/max	-40 °C / +90 °C
operat. temp. moved min/max	-25 °C / +80 °C
halogen free	acc. to IEC 60754-1, EN 50267-2-1 (<5mg/g)
smoke density	acc. to IEC 61034, EN 50268-2 (>95%)
corrodibility inexistent resp.	acc. to IEC 60754-2, EN 50267-2-2 (ph>5)
toxic	NES 02-713 (1,12), NFC 20-454 (3,31/86)
burning behavior	IEC 60332-3, EN 50266-2
fire load	DIN 51900
resistant to oil	EN 60811-2-1 (24 h/70 °C)
standard	according to DIN VDE 0245, 0250 und 0281

**Application**

Power, control and connecting cable for electrical installations. Specially designed for fire hazard zones and facilities. **Halogen-free** and environmentally friendly. For increased protection of people and material assets. For fixed installation and flexible use without tensile stress and without defined cable routing. Suitable for dry and humid rooms. Outdoor use only with UV-protection, no laying underground.  
Typical application areas:  
automobile industry, conveyor and automation installations, washing bays, paper and chemical industry, food production, butcheries and dairies, as well as in public buildings and commercial facilities.

**Construction & Technical Data**

conductor material	bare copper strands
core insulation	special halogen-free compound
core identification	black with white numerals, from 3 cores with gr/yl
outer sheath	special halogen-free compound
sheath colour	grey, RAL 7001
rated voltage	Uo/U: 300/500 V
testing voltage	3.000 V
conductor resistance	acc. to DIN VDE 0295 (IEC 228) classe 5
insulation resistance	min. 20 MΩ x km
current carrying capacity	acc. to DIN VDE, see Technical Guidelines
min. bending radius fixed	4x d, 6x d bei FLAME-JZ/OZ-CH FRNC
min. bending radius removed	15x d
operat. temp. fixed min/max	-40 °C / +80 °C
operat. temp. moved min/max	-5 °C / +70 °C
haloogen free	halogen-free and ultra flame retardant DIN VDE 0482 Teil 265-1 (IEC 332/3-test C)
Standard	according to DIN VDE 0245, 0250 und 0281

**Plan today - Enjoy tomorrow.**

With this motto, three successful companies of the cable industry have joined under the umbrella of TKD and have established themselves as a strong, innovative organization with international focus.

HPM KABEL KABEL WÄCHTER WITT + ARNOLD . . . . .transfer

> **Three specialists, wide-ranging expertise.**

transfer

**Know how** . . . . .

**Tradition und innovation**

We are sticking to the 'tried and true' while simultaneously peering into the future for new opportunities. For our customers, this represents an enormous product variety - which is mainly accomplished by the specific cable range of each of the TKD-companies. Moreover, we pay a lot of attention to the technical changes and visions of our time. Thanks to creative and innovative cable engineering, we contribute to the realization of those ideas.

**Consequently customer-oriented from consultation to delivery**

We offer our customers all the attributes that you expect from a modern, fair and reliable business partner. Extensive product range, dedicated service, knowledgeable sales consultation, modern product innovations, high-quality materials, best quality, friendly contact personnel. In short: cable products, speciality solutions, individualized development and accessories - all from a single source!