

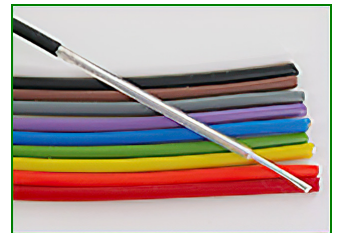
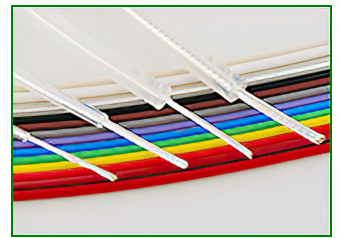
UNSHIELDED HIGH VOLTAGE / HIGH TEMPERATURE WIRE 18kV_{DC} - 30kV_{DC} - FEP, ETCHED FEP AND SILICONE COATED FEP

FEATURES

- Extremely Small Diameter - High Flexibility
- Operating Temperature: -55°C - +200°C
- Bondable Surface: pre-etched or Silicone coated
- High Voltage up to 30kV_{DC}
- 28 AWG - 18 AWG Conductors - Silver Plated Copper
- Ozone and Corona Resistant
- Reference: MIL-W-22759
- FEP Resins Meet Flammability Requirements of UL94V-0
- RoHS Compliant

APPLICATIONS

- Laser Systems
- High Voltage Transformers
- Military & Space
- Industrial & Medical
- High Voltage Power Supplies



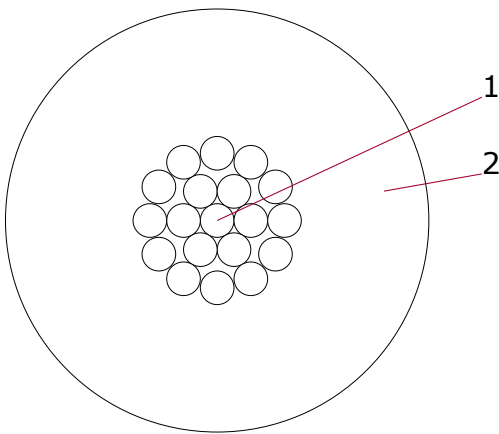
Fluorinated Ethylene Propylene (FEP) offers an excellent combination of properties that include: exceptional dielectric properties, a low dielectric constant over a wide frequency range, chemical inertness including transformer oils and dielectric fluids, heat resistance with retention of properties after service at 204° C, toughness, flexibility, possesses a very high degree of stress crack resistance, low coefficient of friction, low flammability, negligible moisture absorption, has long term weatherability and excellent resistance to ozone sunlight and weather.

FEP offers the lowest refractive index of all thermoplastics with low light reflection (the same as water).

HFPE: pre-etched surface is compatible with epoxy based potting materials.

HFPS: Silicone coated surface is compatible with RTV/Silicone based potting materials and adhesives..

HFP, HFPE WIRES



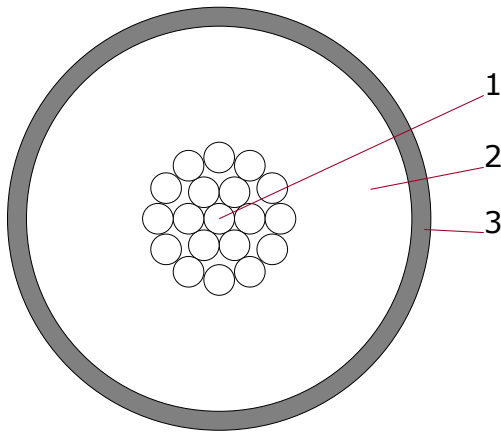
1. Conductor	Silver plated copper wires
2. Dielectric	HFPE Series: Pre-etched FEP

Pre-etching provides a bond ready FEP surface compatible with epoxy based potting materials.

The shelf life of the etching on the HFPE wires is normally 6 months or longer when protected from ultra-violet light (sunlight).

HFP TYPE	HFPE TYPE	RATED VOLTAGE [kV _{DC}]	SIZE [AWG]	STRANDS [n/AWG]	OUTER DIA [mm]
HFP-1828-19-*	HFPE-1828-19-*	18	28	19/40	1.02
HFP-1826-19-*	HFPE-1826-19-*	18	26	19/38	1.14
HFP-2026-19-*	-	20	26	19/38	1.27
HFP-1824-19-*	HFPE-1824-19-*	18	24	19/36	1.27
HFP-2022-19-*	HFPE-2022-19-*	20	22	19/34	1.52
HFP-2520-19-*	HFPE-2520-19-*	25	20	19/32	2.03
HFP-3020-19-*	HFPE-3020-19-*	30	20	19/32	2.54
HFP-3018-19-*	-	30	18	19/30	3.30

▪ HFPS WIRES



1. Conductor	Silver plated copper wires
2. Dielectric	FEP
3. Coating	Silicone

Silicone coating provides a bond ready jacket compatible with RTV based potting materials and adhesives.

HFPS TYPE	RATED VOLTAGE [kV _{dC}]	SIZE [AWG]	STRANDS [n/AWG]	DIELECTRIC DIA [mm]	OUTER DIA [mm]
HFPS-1828-19-*	18	28	19/40	1.02	1.32
HFPS-1824-19-*	18	24	19/36	1.27	1.52
HFPS-2022-19-*	20	22	19/34	1.52	1.78
HFPS-2520-19-*	25	20	19/32	2.03	2.29
HFPS-3020-19-*	30	20	19/32	2.54	2.79

Thicker silicone coating available on request.

▪ ORDERING INFORMATION

Ordering example for part number: **HFPE-3020-19-2**

HFPE	-	30	-	20	-	19	-	2
Base Part Designation		Voltage Rating [kV _{dC}]		Conductor Size [AWG]		No. of Strands		Color Code

▪ COLOR CODE

0 black	1 brown	2 red	3 orange	4 yellow	5 green
6 blue	7 violet	8 grey	9 white	10 natural	

Preferred colors shown in **bold**. Minimum order quantities may apply.

The HFP series wires are normally not stocked.

For abrasive applications Nomex braid is available optionally.

Disclaimer

The information given in this data sheet is technical data, not assured product characteristics. It has been carefully checked and is believed to be accurate; however, no responsibility is assumed for inaccuracies. The user has to ensure by adequate tests that the product is suitable for his application regarding safety and technical aspects. hivolt.de GmbH & Co. KG does not assume any liability arising out of the application or use of any product described.

Safety Advice

Design, installation and inspection of machinery and devices carrying high voltage require accordingly trained and qualified personnel. Appropriate safety rules and directives must be complied with. Improper handling of high voltage can mean severe injuries or death and may cause serious collateral damage!