

Radiation resistant wires with PEEK insulation: 310-PEEKM-035 / 310-PEEK50-TRIAX



Peek insulated cables have outstanding properties for use in Ultra High Vacuum systems: They combine high radiation resistance and a very high insulation resistance over a broad temperature range.

The low water absorption in air (0.1%) combined with a high diffusion rate of water makes it also ideal for systems, who cannot be baked.

High insulation resistance and a high disruptive voltage give the cable excellent properties for delicate signals and high voltage applications.



PEEK insulated wire, 310-PEEKM-035

General Specifications	
Vacuum	UHV (10^{-10} mbar and better)
Radiation Resistance	10^9 Rad = 10^7 Gy
Temperature	-65°C... 250°C, -200°C for non-flex applications
Insulation	PEEK, unfilled, natural colour
Insulation resistance	$> 1 \times 10^{16}$ Ohm cm
Construction	Multistrand wire, extruded PEEK insulation
Min. Bend radius	7.5 x diameter (long term)
310-PEEKM-035	
Conductor	Silver plated copper, multistrand 0.35mm: 7x 0.12mm \varnothing
Outer diameter	Typ. 0.7mm, max. 0.75mm
Voltage Rating	7.5KV DC in vacuum at RT
Disruptive Voltage	> 20 KV DC
Tested Voltage (in Air) (DC, Test on single item)	310-PEEKM-035: >25 KV
310-PEEK50-TRIAX	
Construction	Silver plated copper. Conductor: 0.35mm: 7x 0.12mm \varnothing Shield 1 and 2 coverage min. 85%
Impedance	50 Ohm (conductor to first shield)
Outer diameter	2.7mm (+/-0.1)
Voltage Rating	At least 4KV DC in vacuum (conductor to Shield 1 and Shield 1 to Shield 2)
Disruptive Voltage	> 10 KV DC



*Double shielded PEEK Triaxial cable,
50 Ohm Impedance,
310-PEEK50-TRIAX*

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All data given in this sheet are carefully checked but subject to change at any time.