

Optinova FEP Tubing

Solutions for Industrial Applications.



Optinova's FEP tubing is suited for the handling of fluids where high transparency and chemical resistance is required.

FEP offers many advantages, including high transparency and excellent UV transmittance. Its superior permeation properties compared to PTFE make it suited for transporting gases with medium to large molecular sizes. Additionally, FEP is softer than other fluoropolymers, which is beneficial when tubing needs to be formed in tight spaces.



Key advantages

- **High transparency and UV transmittance:** Well-suited for applications requiring optical clarity.
- **Superior permeation properties:** Compared to PTFE, FEP offers better permeation resistance.
- **Softness and flexibility:** FEP is softer than other fluoropolymers.
- **Flame retardant:** Rated UL94 V0 with an oxygen index of >95.
- **High-temperature capability:** Can be used in high-temperatures.
- **Resistance to solvents, acids, and chemicals:** High resistance to common solvents and acids.
- **Durability against elements:** Virtually unaffected by oxygen, ozone, and UV light.
- **Wide operating temperature range:** from -200°C to +200°C.
- **Dielectric insulation:** Very good electrical insulation.
- **Autoclavable:** Compatible with autoclave sterilization.
- **Custom options:** Secondary operations available upon request.

Applications

- General fluid handling in dosage systems and dispensers
- Laboratory analytics, water purification (Ozone)
- Electrical applications: wire and cable constructions, liquid cooling, cryogenics,
- Food, Beverage and Nutrition processing, roll covers
- Paint distribution systems
- Pharmaceutical production

Technical specifications

Diameter range:
ID 0,30 mm (0,0118") up to 110,0 mm (4,330")
OD 0,50mm (0,0197") up to 115,0 mm (4,528")
Wall thickness 0,10 mm (0.0039") up to 3,00 mm (0,118")
Tight tolerances from +/-0,03mm (+/- 0,001")
Usage temp. -200° C (-328° F) to +200°C (392° F)
UL 94 V0
Materials:
Material from Premium Suppliers
Various grades available upon request
Regulatory:
Raw materials produced without use of PFOA or PFOS
REACH and RoHS compliant
FDA conformity as minimum, USP 88 Class VI on selected grades
Direct food contact certifications available for certain raw materials grades
Supply:
Colored tubing is available in 10 standard colors
On coils with 25/30/50 or 100 meters, smaller diameters on standard plastic spools
Straight pieces up to 6 meters upon request

For more technical information, please contact us at our sales offices or visit our website: [optinova.com/contacts](https://www.optinova.com/contacts)

With a variety of possible sizes, tolerances, and lengths, **Optinova FEP Tubing** can be **tailored** to meet your application challenge without compromising on **performance**.



Premium Tubing for the Industrial Sector.



Industrial-grade certifications



Standard Tolerances

ID (mm/inch)	Tol (mm/inch)	Wall (mm/inch)	Tol (mm/inch)
>2,00 mm / 0,079"	+/-0,08 mm / +/-0,0031"	>0,30 mm / 0,012"	+/-0,07 mm 0,0027"
>4,00 mm / 0,158"	+/-0,10 mm / +/-0,0039"	>0,50 mm / 0,020"	+/-0,10 mm 0,0039"
>8,00 mm / 0,315"	+/-0,12 mm / +/-0,0047"	>0,70 mm / 0,0275"	+/-0,12 mm 0,0047"
>10,00 mm / 0,3937"	+/-0,15 mm / +/-0,0059"	>0,80 mm / 0,315"	+/-0,15 mm 0,0059"
>12,00 mm / 0,4724"	+/-0,20 mm / +/-0,0079"	>1,00 mm / 0,0393"	+/-0,20 mm 0,0079"
>16,00 mm / 0,6299"	+/-0,25 mm / +/-0,0098"	>1,25 mm / 0,0492"	+/-0,25 mm 0,0098"
>18,00 mm / 0,7087"	+/-0,30 mm / +/-0,0118"	>1,51 mm / 0,0594"	+/-0,30 mm 0,0118"
>20,00 mm / 0,7874"	+/-0,35 mm / +/-0,0138"	>3,01 mm / 0,119"	+/-0,50 mm 0,020"
>24,00 mm / 0,9448"	+/-0,40 mm / +/-0,157"		

If you need fabricated tubing (pre-formed in 2D or 3D shapes), please send us your drawing and we make you a customized proposal. Other secondary operations as cutting, hole punching, flaring, skiving, tapering, spiral cut, etching available upon request.

Monofilaments available in all materials up to 5 mm OD.

We also have solutions in other premium materials as PEEK, PFA, PTFE, ETFE and PVdF.

About Us

Founded in 1971, Optinova is a world-leading extrusion partner for advanced medical and industrial tubing. With sales offices around the world and four extrusion plants in Finland, Thailand, and the US, we are serving partners from 50+ countries across industries.

Contact Us

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