

# Optinova Dual Wall Heat Shrink Tubing Solutions for Industrial Applications.



Dual Wall Heat Shrink tubing consists of an outer PTFE heat shrink tube and an inner FEP tube delivered as one part. When the PTFE tubing shrinks, the inner FEP tube melts creating a tight protection around the components.

Optinova's Dual Wall Heat Shrink solutions are suited to encapsulate sensitive parts in an air and liquid tight environment.



## Key advantages

- **Working temperature:** Up to 205°C / 401°F (higher temperatures require a different inner tube).
- **UV94 Class 0:** Nonflammable
- **Excellent Chemical Resistance:** Highly resistant to a broad range of chemicals, making it suitable for demanding applications.
- **Resistance to elements:** Virtually unaffected by oxygen, ozone and UV light
- **Low friction:** Low coefficient of friction
- **Compliance:** FDA and/or USP class VI approved raw materials
- **Sterilizable:** Compatible with ETO and steam sterilization
- **Electrical insulation:** Offers excellent dielectric properties
- **Customizable appearance:** Available in a range of colors
- **Shrinking Temperature:** from 330°C / 626°F

## Applications

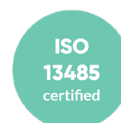
- Insulation and jacketing
- Wire connecting and splicing
- Encapsulation of electronic components
- Protection of probes and antennas
- Corrosion protection for metal parts

## Technical specifications

	PTFE	FEP
Shrink temperature	Ca 330 C (626 F)	Ca 100 C (212 F)
Shrink Ratio	2:1 and 4:1	1:6:1 and 1:3:1
Length change	+/-12%	+/-12%
Working temperature	-260 C to 260 C 436 F to 500 F	-100 C to 205 C -148 F to 401 F
Chemical resistance	Excellent	Very good
Flammability	UL 94 V0	UL 94 V0
Shelf life	Infinite	Infinite
Water absorption	>0,01%	>0,01%
Hardness	D60	D55
UV resistance	Unaffected	Unaffected
Ozone resistance	Unaffected	Unaffected
Sterilization	EtO, Steam	EtO, Steam
Food-grade materials	Available	Available

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

## Industrial-grade certifications



Dual Wall Heat Shrink protects and enhances functionality in extreme environments such as heat, corrosive fluids and moisture.



# We empower customers through highly reliable tubing solutions.



## Specifications

Type	supplied ID		shrunk ID		wall full shrink	
	inch	mm	inch	mm	inch	mm
36S	0,036	0,914	-	-	-	-
60S	0,06	1,524	-	-	-	-
130S	0,130	3,302	-	-	0,031	0,800
160S	0,160	4,064	-	-	0,031	0,800
190S	0,190	4,826	0,062	1,575	0,035	0,889
250S	0,250	6,350	0,125	3,175	0,035	0,889
350S	0,350	8,890	0,190	4,826	0,035	0,889
450S	0,450	11,430	0,312	7,925	0,055	1,397
700S	0,700	17,780	0,440	11,176	0,055	1,397
950S	0,950	24,130	0,630	16,002	0,065	1,651
65 L	0,065	1,651	-	-	-	-
115 L	0,115	2,921	0,045	1,143	0,015	0,381
130 L	0,130	3,302	0,060	1,524	0,015	0,381
180 L	0,180	4,572	0,065	1,651	0,015	0,381
190 L	0,190	4,826	0,070	1,778	0,015	0,381
350 L	0,350	8,890	0,210	5,334	0,025	0,635
480L	0,480	12,192	0,315	8,001	0,032	0,813
700L	0,700	17,780	0,500	12,700	0,040	1,016
1000L	1,000	25,400	0,700	17,780	0,045	1,413

We recommend using heat gun or oven to shrink the tube. You must maintain good ventilation when heating fluoropolymers. The fumes are invisible, odorless and at high temperatures can be unpleasant or cause nausea and flu-like symptoms.

Temperature resistivity on the part to be encapsulated needs to be checked prior shrinkage of the tubing to avoid damaging the part.

Standard supply is made on spools (lay flat) or in 1,22 meter cut pieces.

Custom dimensions and lengths can be made upon request. PTFE, FEP and ETFE heat shrink tubing is available as well.

## 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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