



Fluoroplastic Heat Shrink Sleeving

Fluoroplastic heat shrink is the ultimate choice for applications that need high resistance to temperature, chemicals, solvents and UV light.

With a choice of shrink ratios up to 4:1 and working temperatures of up to 260°C, the applications for heat shrink tubing and sleeving are limitless.

Newly developed production methods mean that the PTFE and FEP heat shrink sleeves are now as competitive as inferior polymers, and with their use, product quality can be improved with little or no extra cost.

We offer the choice of PTFE, FEP and PFA heat shrink, which all have their own special properties in both shrinking characteristics and working performance.

Our PTFE and FEP heat shrink sleeving is available in a variety of standard sizes. However, we appreciate that every customer's application is unique, and we also produce a custom size heat shrink sleeve to order.



Fluoroplastic Unique Properties

- Virtually total chemical and solvent resistance
- Working temperature from -200°C to +260°C
- Remains flexible at cryogenic temperatures
- Very low coefficient of friction
- Non-stick surface
- Extremely high electrical resistance
- Very low dielectric loss at high frequencies
- Total resistance to UV radiation
- Naturally non-inflammable
- Non-toxic
- Inert to body tissue (does not cause reaction)

FEP Heat Shrink Sleeving

Our high temperature heat shrink sleeving in FEP can be safely shrunk over temperature sensitive materials, without causing damage. Couple this property with its transparency, complete chemical resistance, total UV resistance, and non-stick nature and you have a unique material.

FEP heat shrink sleeving is available in many standard sizes, from 1.50mm to 150mm ID. Select the correct size sleeve by allowing a generous amount of shrinkage, rather than using a tight sleeve if possible.

FEP Standard Wall

Adtech Part No	Supplied ID (mm)	Recovered ID (mm)	Recovered Wall (mm)
FHS1	1.50	1.00	0.25
FHS1.1	1.60	1.10	0.25
FHS1.5	2.00	1.50	0.30
FHS1.9	2.50	1.90	0.30
FHS2.7	3.60	3.00	0.20
FHS3	4.20	3.00	0.50
FHS3.6	4.80	3.60	0.30
FHS3.8	5.10	3.80	0.35
FHS4.6	6.20	4.60	0.30
FHS6	8.00	6.00	0.30
FHS7	9.50	7.00	0.50
FHS9	12.00	9.00	0.50
FHS10	13.50	10.00	0.50
FHS11	15.00	11.00	0.50
FHS13	18.00	13.00	0.50
FHS14	19.00	14.00	0.50
FHS16	21.00	16.00	0.50
FHS19	25.00	19.00	0.50
FHS23	31.00	23.00	0.50
FHS27	36.00	27.00	0.50
FHS32	43.00	32.00	0.50
FHS40	54.00	40.00	0.50
FHS46	62.00	46.00	0.50
FHS56	76.00	56.00	0.50
FHS65	85.00	65.00	0.50
FHS80	96.00	80.00	0.50
FHS95	115.00	95.00	0.50
FHS113	150.00	115.00	0.70

FEP Light Wall

Adtech Part No	Supplied ID (mm)	Recovered ID (mm)	Recovered Wall (mm)
FHS1.3	2.70	2.00	0.20
FHS2	2.70	2.00	0.20
FHS2.1L	2.80	2.10	0.10
FHS2.6	3.40	2.60	0.10
FHS3.8L	5.10	3.80	0.25
FHS5.5L	7.40	5.50	0.25
FHS7.5L	10.20	7.50	0.25
FHS9.5L	12.80	9.50	0.25
FHS13L	18.00	13.00	0.25
FHS14L	19.00	14.00	0.25
FHS16L	22.00	16.00	0.25
FHS19L	25.00	19.00	0.25
FHS23L	31.00	23.00	0.25
FHS32L	43.00	32.00	0.25
FHS39L	53.00	39.00	0.25
FHS46L	62.00	46.00	0.25

FEP Heavy Wall

Adtech Part No	Supplied ID (mm)	Recovered ID (mm)	Recovered Wall (mm)
FHS23H	31.00	23.00	1.50
FHS37H	50.00	37.00	1.50
FHS49H	66.00	49.00	1.50
FHS61H	82.00	61.00	1.50
FHS74H	100.00	74.00	1.50
FHS98H	132.00	98.00	1.50

PTFE Heat Shrink Sleeving

PTFE's high working temperature exceeds that of any other heat shrink polymer. In addition, it is completely resistant to virtually all chemicals, UV radiation, very high temperatures and voltage breakdown.

PTFE heat shrink sleeving is available in many standard sizes from 0.80mm to 51mm ID, in 4:1 and 2:1 shrink ratios, and the shrinking temperature is 327°C. As a result, very complex shapes or terminals can be covered.

PTFE Shrink Ratio 4:1

Adtech Part No	Supplied ID (mm)	Recovered ID (mm)	Recovered Wall (mm)
TR20	1.98	0.64	0.22
TR32	3.18	0.94	0.25
TR48	4.75	1.27	0.30
TR64	6.35	1.60	0.30
TR80	7.92	2.00	0.30
TR95	9.52	2.44	0.30
TR111	11.13	2.85	0.30
TR125	12.70	3.66	0.38
TR143	14.27	3.94	0.38
TR158	15.88	4.52	0.38
TR175	17.45	5.03	0.38
TR190	19.05	5.70	0.38
TR222	22.23	6.20	0.38
TR254	25.40	7.06	0.38
TR317	31.75	8.82	0.38
TR381	38.00	10.20	0.38
TR444	44.44	11.00	0.38
TR508	50.80	12.70	0.38

PTFE Shrink Ratio 2:1

Adtech Part No	Supplied ID (mm)	Recovered ID (mm)	Recovered Wall (mm)
HST30-T	0.86	0.38	0.23
HST28-T	0.97	0.46	0.23
HST26-T	1.17	0.56	0.23
HST24-T	1.27	0.64	0.25
HST22-T	1.40	0.80	0.25
HST20-T	1.52	0.97	0.30
HST19-T	1.65	1.10	0.30
HST18-T	1.93	1.17	0.30
HST17-T	2.15	1.38	0.30
HST16-T	2.35	1.45	0.30
HST14-T	3.05	1.82	0.30
HST12-T	3.81	2.26	0.30
HST10-T	4.85	2.80	0.30
HST08-T	6.10	3.55	0.38
HST06-T	7.67	4.40	0.38
HST04-T	9.40	5.45	0.38
HST02-T	10.90	6.90	0.38
HST00-T	11.95	8.56	0.38

Fume precautions during heat shrinking: Like all plastics and rubber, fluoroplastics decompose at high temperatures and give off unpleasant fumes. Unlike other polymers, the fumes from fluoroplastics are odourless and therefore, may not be noticed during overheating of the material. Ample ventilation must always be provided when heating these heat shrink materials above 300°C. Where they are used in a production process, extraction equipment is recommended.

PTFE/ FEP Dual Wall Heat Shrink Sleeving

The unique properties of the dual wall heat shrink sleeving lends its utilisation in any application that requires a high working temperature, non-stick surface, high electrical resistance and chemical resistance.

With PTFE/ FEP dual wall heat shrink, it is possible to 'pot' components in pure fluoroplastic and protect them against mechanical and chemical exposure, even in immersed conditions.

PTFE/FEP Dual Wall Heat Shrink

Adtech Part No	Supplied ID (mm)	Recovered ID (mm)	Recovered Wall (mm)
FIP0T	11.00	7.00	0.80
FIP02T	9.50	5.50	0.80
FIP04T	8.50	4.00	0.60
FIP06T	6.50	3.50	0.60
FIP08T	5.00	2.00	0.60
FIP10T	4.00	1.50	0.60
FIP12T	3.00	1.00	0.60
FIP14T	2.20	0.50	0.60
FIP16T	1.50	0.00	0.60
FIP19T	0.90	0.00	0.60

Heat Shrink Selection & Use

FEP heat shrink sleeve is the easiest to use followed by 2:1 PTFE, then 4:1 PTFE. Therefore, if other factors are not critical, select in this order of preference. Select size by allowing a generous amount of shrinkage rather than using a tight sleeve if possible.

Hot air guns are the preferred method of applying heat. FEP shrinks down easily at 110°C, PTFE needs 330°C, so gun temperatures should be at least 200°C and 400°C respectively. To obtain the higher temperature, we suggest a hot air gun of 1.5KW capacity.

Parts to be covered that have a large thermal mass (e.g. a solid steel roller) may need preheating when PTFE heat shrink is applied, in order to prevent chilling of the PTFE and causing a loose fit. Heating an object in an oven at 400°C can be used to advantage to shrink the PTFE sleeve, particularly when a number of parts are to be covered.

Our technical department are always pleased to offer advice, or cover sample items for customers. We also offer a covering service for large numbers or difficult items.

For more information about our Heat Shrink Sleeving, please visit adtech.co.uk.

For other custom sizes or technical assistance, contact our customer service team:

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