

# Junkosha Peelable Heat Shrink Tubing

# NFPS - Extra Large Offering

### Large Size Peelable Heat Shrink Tubing

Removing traditional FEP-Heat Shrink Tubing (HST) smoothly has been a serious problem in catheter manufacturing for many years. To resolve the issue of 'skiving' it off, Junkosha designed a product called Peelable Heat Shrink Tubing (PHST). Offering all of the performance of standard heat shrink tubing, it includes one critical difference: it is easy to remove from the catheter. Junkosha's Peelable Heat Shrink Tubing solution needs only a slit at one end to get it started, enabling it to be easily and consistently peeled along its entire length.



Junkosha's portfolio includes the widest range of both small and large size peelable heat shrink tubing solutions on the market today. The large size product range provides catheter manufacturers with the versatility they require to complete increasingly intricate procedures. Conventional skiving techniques do not work on larger reflowed catheters, frequently leading to bending or kinking of the catheter shaft, therefore rendering them useless. In addition, as a result of PHST's 'take-up', it allows the use of cost-effective, lower tolerance, baseline materials in the manufacturing process, facilitating the ability to reflow these easily into a single smooth and consistent construct.

#### **Features**

- Material Melting Temperature: 245°C to 275°C.
- Peelable Design: It features an easily peelable design, reducing the risk of damage to the catheter during removal.
- Customizable Options: In addition to the products listed in the catalog, we also offer custom size options, allowing you to choose the
  most suitable option according to your needs.
- Elongation Properties: The lengthwise elongation of the tube after shrinkage can be controlled within a specific range.
- USP Class VI Certified Material: The tube material is certified to meet the stringent requirements of USP (United States Pharmacopeia) Class VI, ensuring safety and quality.

## **Properties**

Material	FEP based Fluoropolymer		
Expanded I.D. [mm]	From 7.62 mm up to 11.43mm		
Recovered I.D. [mm]	From 4.77 mm to 7.13 mm		
Wall Thickness [mm]	0.07 mm		
Shrink Ratio	1.6 : 1		
Biocompatibility	USP Class VI		

### Extra Large PHST Applications

## **Heart Valve Disease - Catheters**

- Transcatheter Aortic Valve Replacement (TAVR)
- Transcatheter Mitral (TMVR)
- Transcatheter Tricuspid (TTVR)
- Transcatheter Pulmonary (TPVR)

### Peripheral Arterial Disease - Catheters

- Abdominal Aortic Aneurysm (AAA)
- Thoracic Aortic Aneurysm (TAA)

# **Product Lineup**

#### NFPS

Extra Large 1.6:1 Shrink Ratio Standard Length: 1000 mm Color: Opaque

Parts No.	Metric			Imperial			French
	Expanded I.D. Min.	Full Recovered I.D. Max	Full Recovered Wall Thickness	Expanded I.D. Min.	Full Recovered I.D. Max	Full Recovered Wall Thickness	Suitable for
NFPS062	7.62 mm	4.77 mm	0.46 +/- 0.07 mm	0.3000"	0.1878"	0.0181 +/- 0.0028"	17 - 20 Fr
NFPS072	8.89 mm	5.56 mm	0.51 +/- 0.07 mm	0.3500"	0.2189"	0.0201 +/- 0.0028"	20 - 23 Fr
NFPS083	10.16 mm	6.35 mm	0.51 +/- 0.07 mm	0.4000"	0.2500"	0.0201 +/- 0.0028"	23 - 27 Fr
NFPS093	11.43 mm	7.13 mm	0.51 +/- 0.07 mm	0.4500"	0.2807"	0.0201 +/- 0.0028"	27 - 30 Fr

Recommended Temperature: 200°C

# Technical Data

#### Specifications

Parts No.	NFPS062	NFPS072	NFPS083	NFPS093
Expanded I.D. [mm]	7.62	8.89	10.16	11.43
Recovered I.D. [mm]	4.77	5.56	6.35	7.13
Recovered Wall Thickness [mm]	0.46±0.07	0.51±0.07	0.51±0.07	0.51±0.07
Shrink Ratio <sup>*</sup> [%]	1.6:1(37%)	1.6:1(37%)	1.6:1(38%)	1.6:1(38%)
Colour	Opaque	Opaque	Opaque	Opaque
Material Melting Temperature [°C]	245~275	245~275	245~275	245~275
Peelability	YES	YES	YES	YES
Elongation [%]	9.7%	7.6%	7.9%	8.0%
Non-adhesiveness	YES	YES	YES	YES
REACH Compliant	YES	YES	YES	YES
RoHS Compliant	YES	YES	YES	YES
MSDS	YES	YES	YES	YES
USP Class VI	YES	YES	YES	YES

<sup>\*</sup>Shrink Ratio(%) = ([Expanded I.D.] - [Recovered I.D.]) / [Expanded I.D.] x 100

#### Visual Appearance

Example with Various Catheter Materials Inserted into Peelable Tubing





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