

## HRHF/HRNF/HRSR

#### High-Ratio, Heat-Shrinkable Tubing

#### **Product Facts**

- Offers toughness and durability
- Provides excellent insulation and abrasion protection
- Is available in flameretardant material
- Shrinks to fit (5.6:1)
- FR callouts meet all of the requirements of AMS-DTL-23053/15\*, except for some of the tubing sizes, which do not meet the exact recovered wall thickness requirements
- HRHF and HRSR have the following agency approvals:
  - ABS (American Bureau of Shipping)
  - Lloyd's (Lloyd's Register of Shipping
- RoHS compliant



#### **Applications**

High-ratio (HR) heatshrinkable tubing, with expansion ratios as high as 5.6 to 1, is designed to accommodate large size differences between cables and cable connectors and backshells, thus simplifying repair of damaged cable. High-ratio tubing is available in semirigid flame-retardant (SR), standard (NF), or high-flex flame-retardant (HF) material and with or without factory-applied sealants and adhesives. The water-proofing sealant provides environmental sealing and is watertight in wet and corrosive locations. The thermoplastic adhesive coating offers excellent strain relief and environmental sealing.

#### Installation

Minimum shrink temperature: 80°C [176°F] Minimum full recovery temperature: 121°C [250°F]

#### **Operating Temperature Range**

-55°C to 110°C [-67°F to 230°F]

#### Specifications/Approvals

Series	Agency	Raychem
HRSR	ABS, Lloyd's	RW-2013
HRHF	ABS, Lloyd's	RW-2013
HRNF	_	RW-2013

Available in:	Americas	Europe	Asia Pacific
			•



# HRHF/HRNF/HRSR (Continued)

## **Product Dimensions**

Size†	Inside I	Diameter	Recovered Wall Thickness††	
	Minimum Expanded as Supplied	Maximum Recovered After Heating	Nominal After Heating	
HR**060	15.24 [0.600]	3.81 [0.150]	1.52 [0.060]	
HR**125	31.75 [1.250]	6.10 [0.240]	1.52 [0.060]	
HR**175	44.45 [1.750]	8.00 [0.315]	2.41 [0.095]	
HR**200	50.80 [2.000]	9.52 [0.375]	2.67 [0.105]	
HR**250	63.50 [2.500]	12.70 [0.500]	3.05 [0.120]	
HR**300	76.20 [3.000]	19.05 [0.750]	3.05 [0.120]	
HR**400	101.60 [4.000]	22.86 [0.900]	3.56 [0.140]	

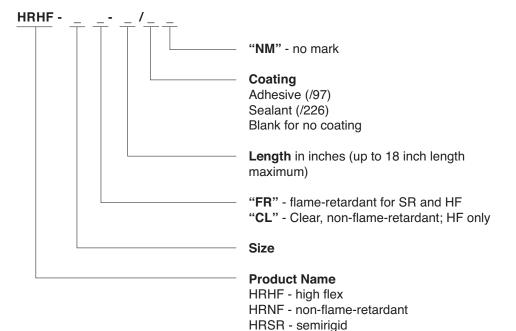
<sup>†</sup>For \*\* substitute HF, NF or SR for material required.

# **Ordering Information**

Color	Standard	Black (-0)	
	Nonstandard	Clear available on request (not flame-retardant; HRHF only)	
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Other sizes are available upon request.		
Standard packaging	Up to 18 inch lengths maximum.*		
Ordering description	See below.		

<sup>\*</sup>Cutting tolerance is ± 0.125".

## **Part Numbering System**



Example: HRHF-125FR-10/226-NM

Germany: 49-6251-133-1999 China: 86-400-820-6015 Japan: 81-44-844-8013 UK: 44-800-267-666

<sup>††</sup>Wall thickness will be less if tubing recovery is restricted during shrinkage.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Heat Shrink Tubing and Sleeves category:

Click to view products by TE Connectivity manufacturer:

Other Similar products are found below:

5685710001 CR9960-000 5734012004 607381P039 6284592002 CX4711-000 D-306-38 770-006S302 770-010Y106W1 770-018S103
770-018S202W1 770-018S205W1 770-020S705 MFP-3/64"-Clear 790-3012 MHHT-4-15K2-G-104 8003012003 MIL-LT-1-1/2-4-SP MIL-LT-1/2-9-STK MIL-LT-1/2-2-STK MIL-LT-3-0-SP MIL-LT-3/32-0-SP MIL-LT-3/32-6-SP MIL-LT-3/4-4-STK MIL-LT-3/4-6-SP
8159270001 839602-000 8423-6 FP301-116-48"-Clear FP301-18-48"-Black-Hdr FP301-1/8-6"-Black FP301-18-6"-Black-Bulk 912229N002
R280637030 HDCW-5515-1000 HDT-0400-48A-Black HDT-0800-48A-RED HDT1100-48A-BLK HDT-2000-48A-Black AE-900 RHW-70/20-1200/ADH-0 DWP-125-0.450-4-55MM-CS879 156082-000 MT5500-3/8-X-SP MW-12-48"-Black EPS200-1/4-48"-Black EPS200-3/16-48"-Black EPS200-3/16-48"-Black EPS200-38-48"-Black-Bulk EPS400-.700-48"-Black-Bulk