



# Micro Molded Heat-Shrink Shapes



## Introduction

Connector manufacturers are increasingly offering smaller high performance, rugged, micro circular connectors for use in wiring looms in both civilian and defence markets.

The Tyco Electronics range of small heat-shrink molded shapes has evolved in order to cater for these requirements for smaller, lighter-weight products that still offer a great balance of protection properties at the connector-wire interface.

Produced in a variety of shapes and materials, Tyco Electronics' range of Raychem branded molded shapes are supplied in an expanded form. On the application of heat they shrink to a pre-determined size and shape, providing a tough, protective covering for the components over which they are installed.

### FEATURES

- Small size
- Supplied in expanded form
- Adhesive lined options
- Strain relief
- Available in a range of different cross-linked polymeric materials

### BENEFITS

- Weight and space saving
- Facilitates installation
- Environmental sealing against fluid and dirt ingress
- Provides protection against mechanical abuse at the cable connector interface
- Suitable for a wide range of application and environmental requirements for low fire hazard, flame retardance, high temperatures and fluid resistant characteristics. Applications from underwater to outer space, in military vehicles to cars, rail & mass transit





## Material

### -25 MOLDED PART MATERIAL

A heat-shrinkable, semi rigid, fluid and temperature resistant, elastomeric molding compound, designed to offer excellent performance in harsh environments. Ideal for use in military and commercial vehicles where high temperatures and long term exposure to hot fluids is expected.

### -12 MOLDED PART MATERIAL

A high temperature, heat-shrinkable, flexible, flame retarded, fluoroelastomeric molding compound with excellent resistance to long term fluid immersion and heat exposure.



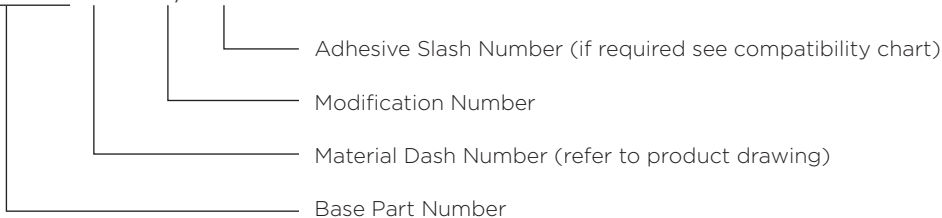
### -100 MOLDED PART MATERIAL

A heat-shrinkable, semi flexible, low fire hazard molding compound designed to offer excellent fire safety characteristics combined with low smoke and low acid gas emission. 100 also exhibits good mechanical and fluid resistance properties.



## Ordering Information

203W301-\* -G02/\*\*

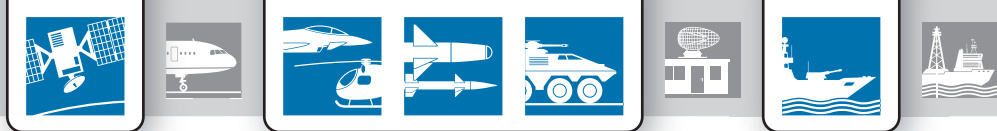


**Min** = Minimum inner diameter of the supplied expanded shape. We would supply to this dimension or greater.

**Max** = Recovered dimensions after heating.

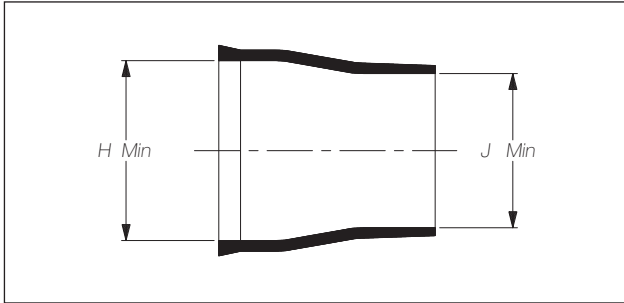
The recommended usage range for the part is from 10% less than minimum expanded inside diameter to 10% greater than the maximum recovered inside diameter.

For more information please search by Part Number on: [www.tycoelectronics.com/adm](http://www.tycoelectronics.com/adm) or contact our Tyco Electronics sales representatives.

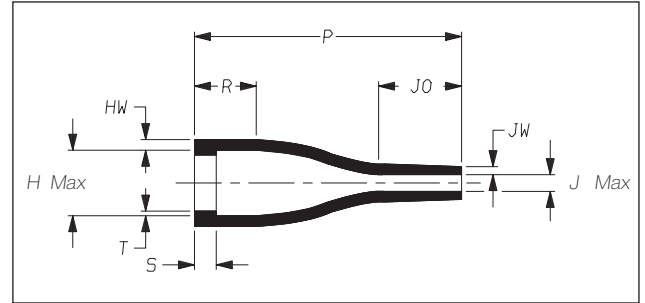


## Selection Guide

### AS SUPPLIED (a)

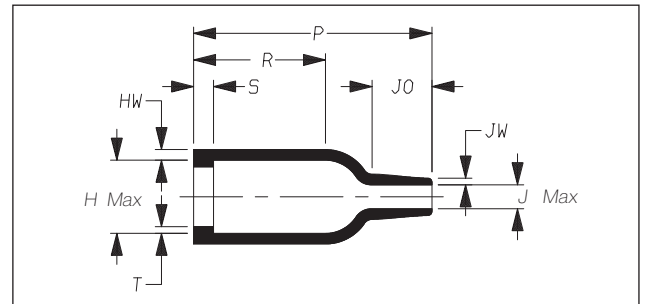
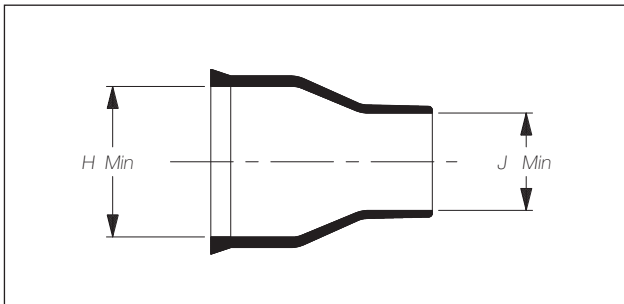


### AFTER RECOVERY (b)



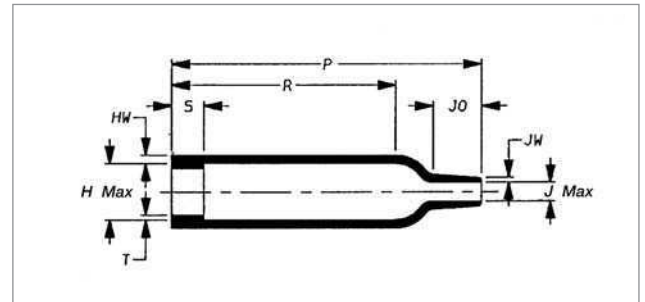
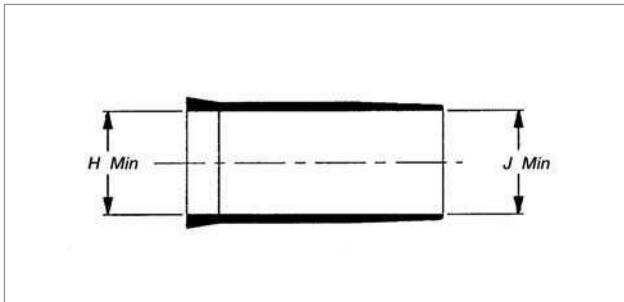
DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY									
	H Min	J Min	H Max	J Max	P	R	S	T	JO	HW	JW	
204W201	10 (0.39)	9.0 (0.35)	5.2 (0.20)	1.5 (0.06)	20 (0.79)	4.0 (0.16)	0.8 (0.03)	0.35 (0.01)	6.6 (0.26)	0.8 (0.03)	0.6 (0.02)	



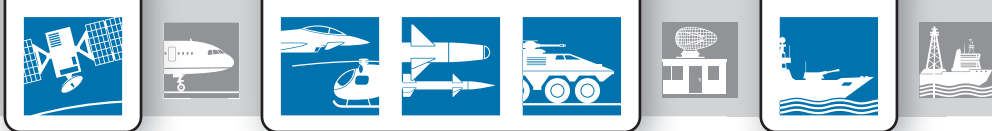
DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY									
	H Min	J Min	H Max	J Max	P	R	S	T	JO	HW	JW	
203W301-*GO2	10 (0.39)	6.0 (0.24)	5.8 (0.23)	2.2 (0.09)	19 (0.75)	11 (0.43)	1.5 (0.06)	0.5 (0.02)	4.5 (0.18)	0.8 (0.03)	0.5 (0.02)	



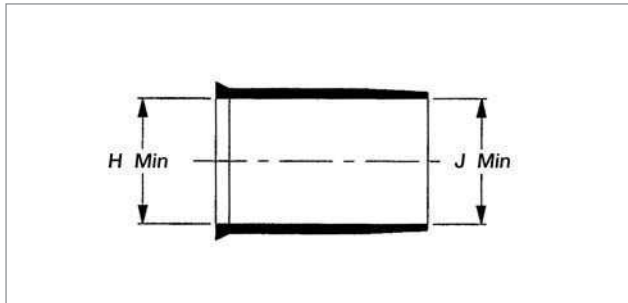
DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY									
	H Min	J Min	H Max	J Max	P	R	S	T	JO	HW	JW	
203W301	10 (0.39)	10 (0.39)	5.8 (0.23)	2.2 (0.09)	29 (1.14)	21 (0.83)	3.0 (0.12)	0.5 (0.02)	4.5 (0.18)	0.8 (0.03)	0.5 (0.02)	

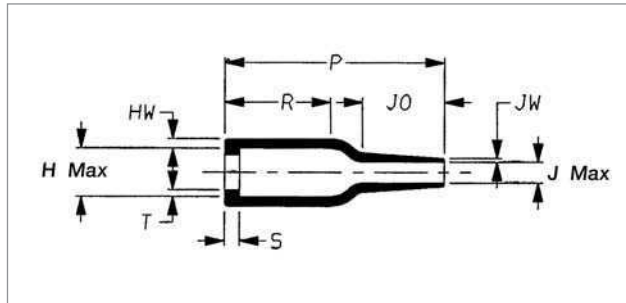


## Selection Guide

### AS SUPPLIED (a)

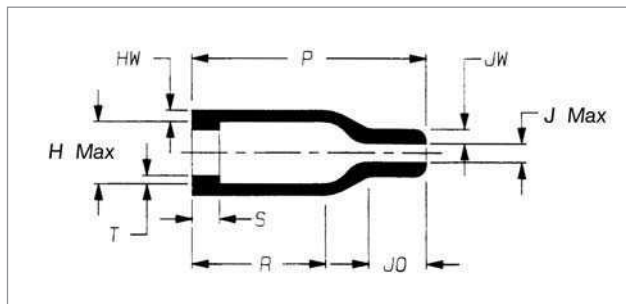
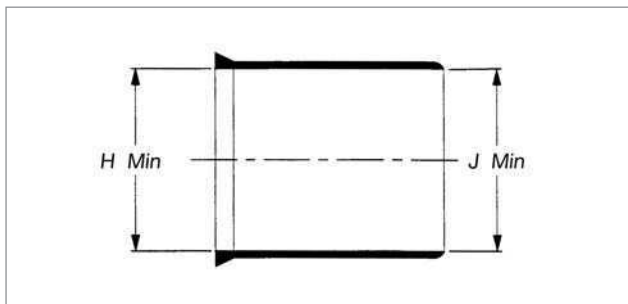


### AFTER RECOVERY (b)



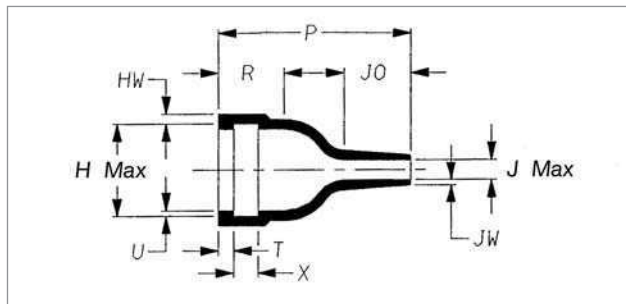
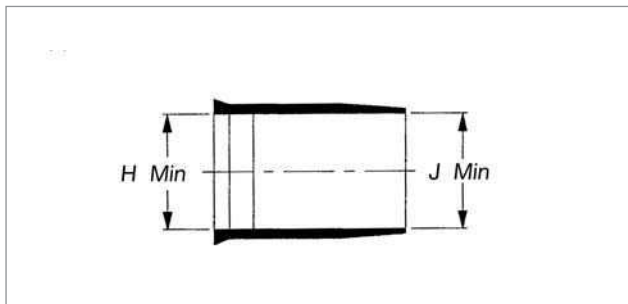
**DIMENSIONS** in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY								
	H Min	J Min	H Max	J Max	P	R	S	T	JO	HW	JW
202K111-*-01	17 (0.67)	17 (0.67)	6.9 (0.27)	3.0 (0.12)	29 (1.14)	14 (0.55)	1.7 (0.07)	0.9 (0.04)	10.8 (0.43)	1.3 (0.05)	0.7 (0.03)



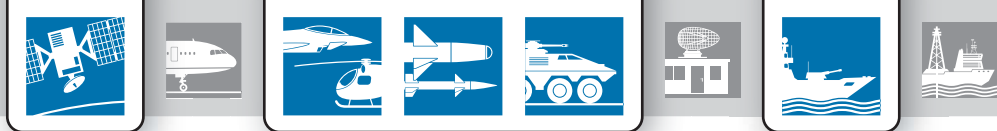
**DIMENSIONS** in millimeters

Part Number	AS SUPPLIED		AFTER RECOVERY								
	H Min	J Min	H Max	J Max	P	R	S	T	JO	JW	HW
202A111-*-G07	17	17	7.9	2.2	25	14	3.0	1.0	6.0	1.7	1.0



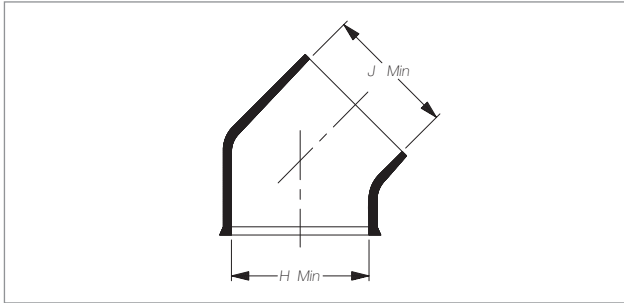
**DIMENSIONS** in millimeters

Part Number	AS SUPPLIED		AFTER RECOVERY									
	H Min	J Min	H Max	J Max	P	R	T	U	X	JO	HW	JW
204W221	11	11	9.3	2.1	19	6.5	1.5	0.55	2.4	6.6	1.1	0.5

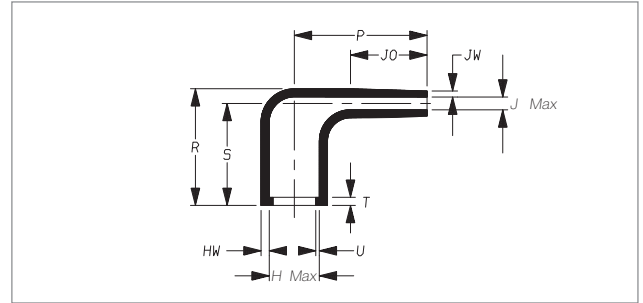


## Selection Guide

### AS SUPPLIED (a)

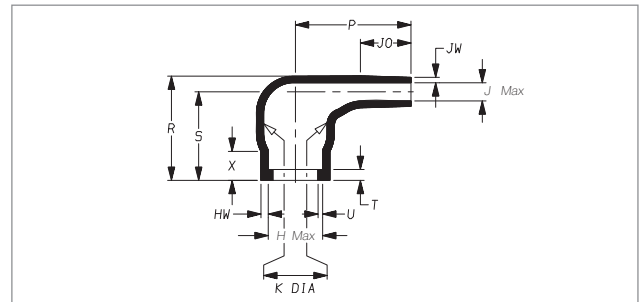
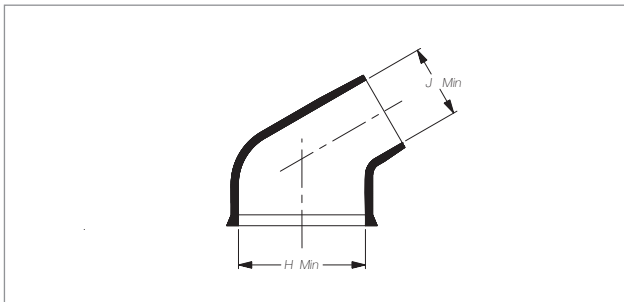


### AFTER RECOVERY (b)



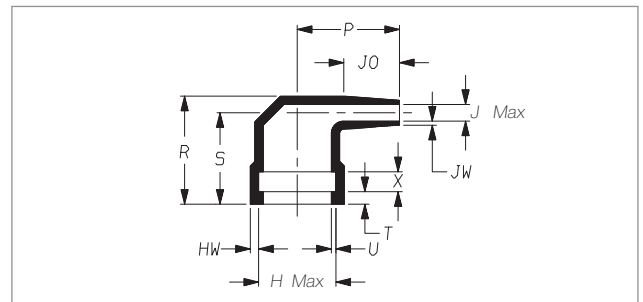
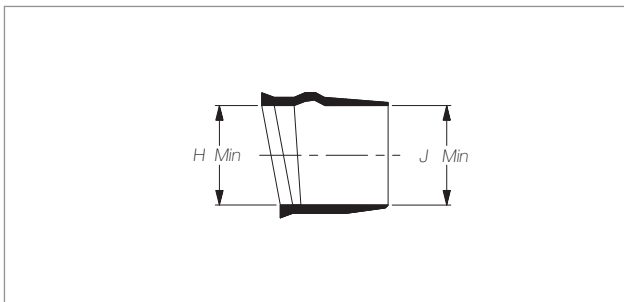
DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY									
	H Min	J Min	H Max	J Max	P	R	S	T	U	JO	HW	JW
224W201	11 (0.43)	9.0 (0.35)	5.2 (0.20)	1.6 (0.06)	13 (0.51)	11.5 (0.45)	10 (0.39)	0.8 (0.03)	0.35 (0.01)	7.5 (0.30)	0.8 (0.03)	0.6 (0.02)



DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY												
	H Min	J Min	H Max	J Max	K	P	R	S	T	U	JO	HW	JW	X	
223W601	10 (0.39)	6.0 (0.24)	6.3 (0.25)	2.0 (0.08)	10 (0.39)	7.4 (0.29)	12.5 (0.49)	11.5 (0.45)	9.8 (0.39)	1.2 (0.05)	0.5 (0.02)	6.0 (0.24)	1.0 (0.04)	0.6 (0.02)	3.2 (0.13)



DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY										
	H Min	J Min	H Max	J Max	P	R	S	T	U	X	JO	HW	JW
224W221	11 (0.43)	11 (0.43)	9.3 (0.37)	2.1 (0.08)	12.3 (0.48)	13 (0.51)	11 (0.43)	1.5 (0.06)	0.55 (0.02)	2.4 (0.09)	6.6 (0.26)	1.0 (0.04)	0.5 (0.02)



## Additional Products from Tyco Electronics



WIRE & CABLE



TRANSITIONAL BREAKOUTS



TUBING



ADHESIVES



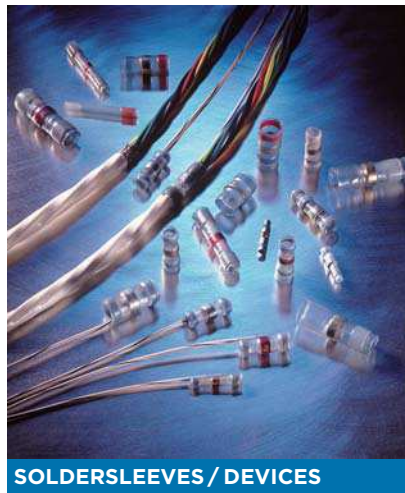
LABELS & MARKERS



HFT WOVEN HEAT SHRINK



ADAPTORS



SOLDERSLEEVES / DEVICES



HARNWARE SOFTWARE

MICRO MOLDED SHAPES

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1654422-1/CKW 10-2009

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