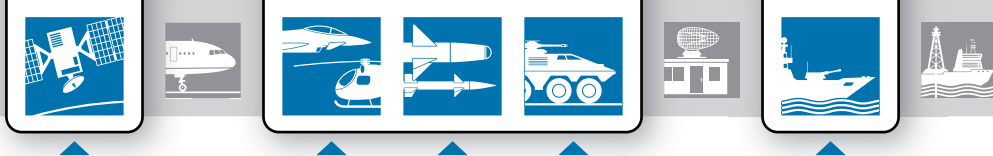




Micro Molded Heat-Shrink Shapes



Introduction

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

The range of small heat-shrink molded shapes from TE Connectivity (TE) 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, TE's 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.

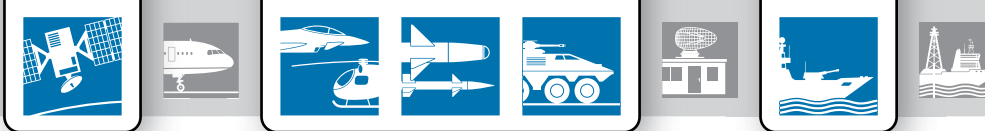
FEATURES

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

BENEFITS

- n Weight and space savings
- n Facilitates installation
- n Environmental sealing against fluid and dirt ingress
- n Provides protection against mechanical abuse at the cable-connector interface
- n 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 and 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/**

Adhesive Slash Number (if required see compatibility chart)

Modification Number

Material Dash Number (refer to product drawing)

Base Part Number

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.te.com/adm or contact our TE sales representatives.

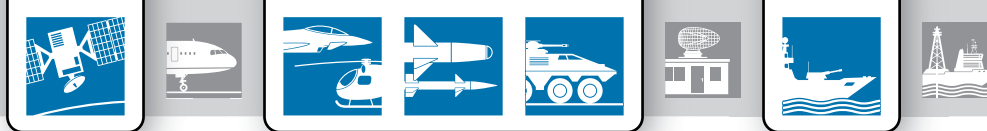
Materials:

*As Supplied/Expanded dimensions may be slightly reduced due to the nature of the material. After recovery sizes are not affected.

Micro Molded Shapes

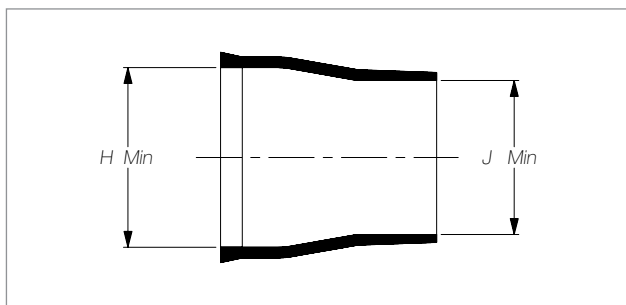
Literature No. 1654422-1 · Rev. 08/2011



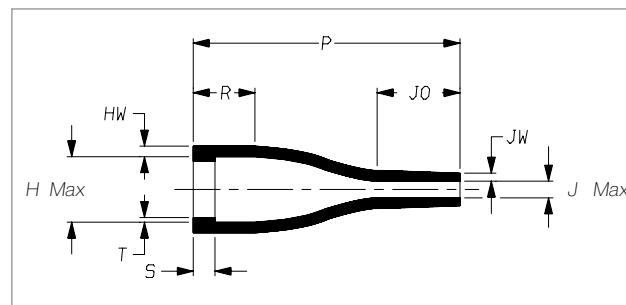


Selection Guide

AS SUPPLIED (a)

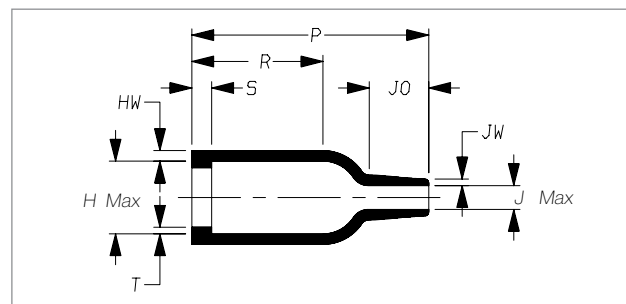
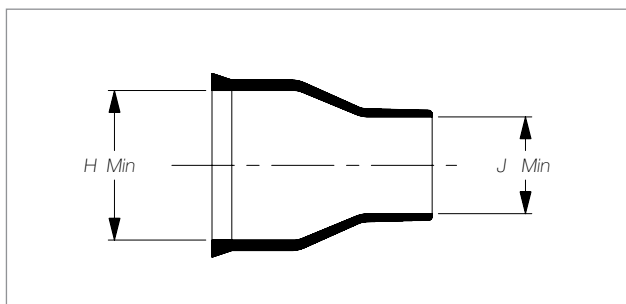


AFTER RECOVERY (b)



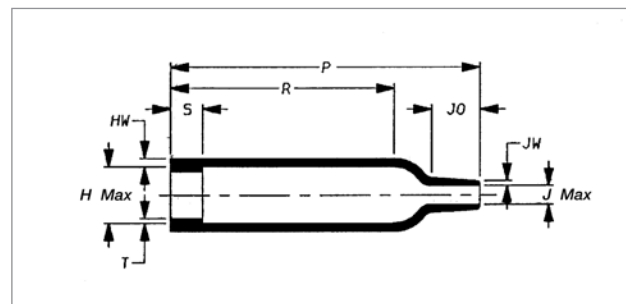
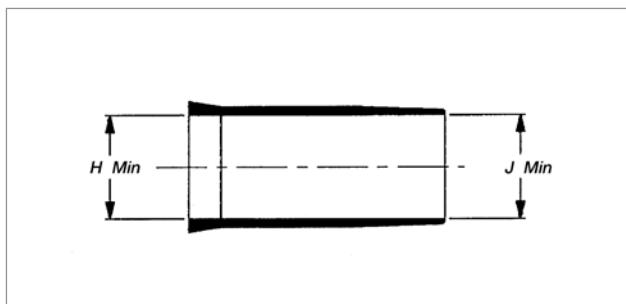
DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY								
	H	J	H	J	P	R	S	T	JO	HW	JW
	Min a	Min a	Max b	Max b	±10% b	±10% b	±10% b	±10% b	±10% b	±20% b	±20% b
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)



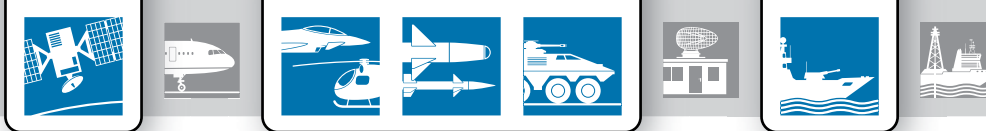
DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY								
	H	J	H	J	P	R	S	T	JO	HW	JW
	Min a	Min a	Max b	Max b	±10% b	±10% b	±10% b	±10% b	±10% b	±20% b	±20% b
203W301*-G02	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)



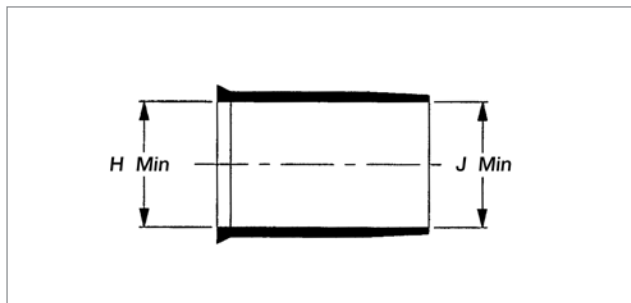
DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY								
	H	J	H	J	P	R	S	T	JO	HW	JW
	Min a	Min a	Max b	Max b	±10% b	±10% b	±10% b	±10% b	±10% b	±20% b	±20% b
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)

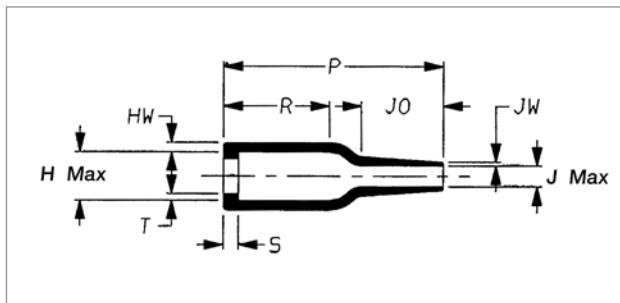


Selection Guide

AS SUPPLIED (a)

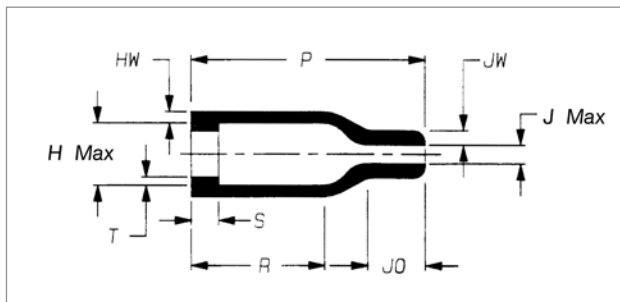
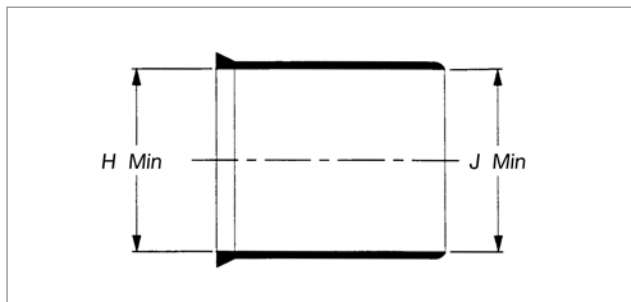


AFTER RECOVERY (b)



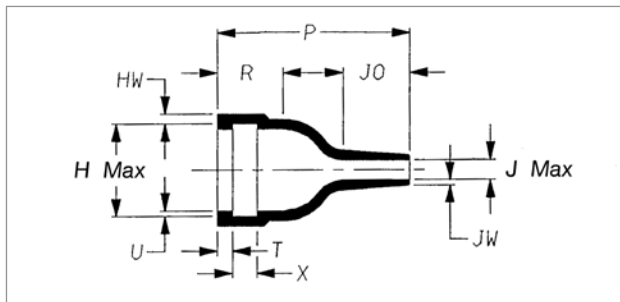
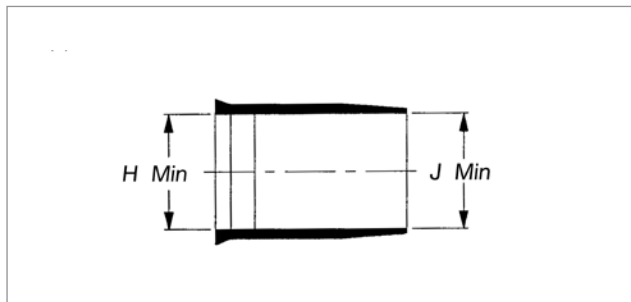
DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY								
	H	J	H	J	P	R	S	T	JO	HW	JW
	Min a	Min a	Max b	Max b	±10% b	±10% b	±10% b	±10% b	±10% b	±20% b	±20% b
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	J	H	J	P	R	S	T	JO	JW	HW
	Min a	Min a	Max b	Max b	±10% b	±10% b	±10% b	±10% b	±10% b	±20% b	±20% b
202A111-*-G07	17 (0.67)	17 (0.67)	7.9 (0.31)	2.2 (0.09)	25 (0.98)	14 (0.55)	3.0 (0.12)	1.0 (0.04)	6.0 (0.24)	1.7 (0.07)	1.0 (0.04)



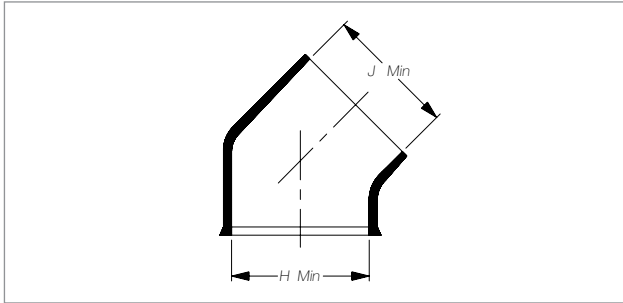
DIMENSIONS in millimeters

Part Number	AS SUPPLIED		AFTER RECOVERY									
	H	J	H	J	P	R	T	U	X	JO	HW	JW
	Min a	Min a	Max b	Max b	±10% b	±10% b	±10% b	±10% b	±10% b	±10% b	±20% b	±20% b
204W221	11 (0.43)	11 (0.43)	9.3 (0.37)	2.1 (0.08)	19 (0.75)	6.5 (0.26)	1.5 (0.06)	0.55 (0.02)	2.4 (0.09)	6.6 (0.26)	1.1 (0.04)	0.5 (0.02)

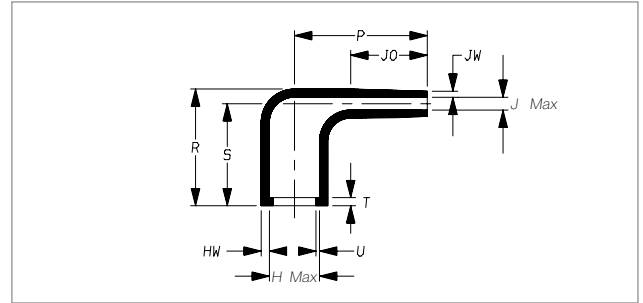


Selection Guide

AS SUPPLIED (a)

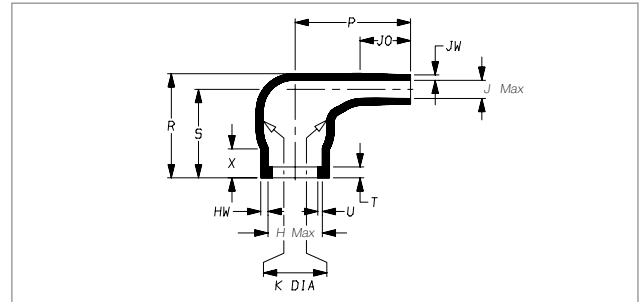
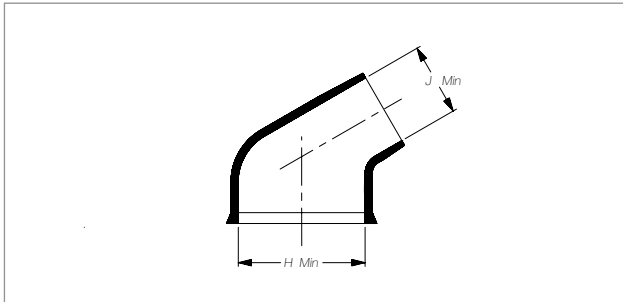


AFTER RECOVERY (b)



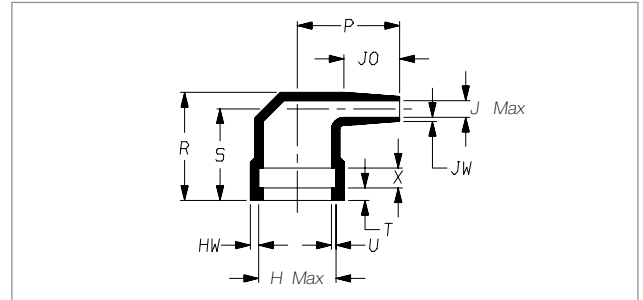
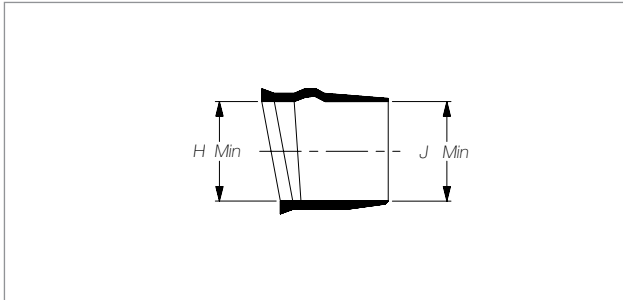
DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY									
	H	J	H	J	P	R	S	T	U	JO	HW	JW
	Min a	Min a	Max b	Max b	±10% b	±10% b	±10% b	±10% b	±10% b	±10% b	±20% b	±20% b
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)

AS SUPPLIED			AFTER RECOVERY												
Part Number	H	J	H	J	K	P	R	S	T	U	JO	HW	JW	X	
	Min	Min	Max	Max	Min	Max	±10%	±10%	±10%	±10%	±10%	±20%	±20%	±20%	
	a	a	b	b	b	b	b	b	b	b	b	b	b	b	
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)	



DIMENSIONS in millimeters (in inches, for reference)

Part Number	AS SUPPLIED		AFTER RECOVERY										
	H	J	H	J	P	R	S	T	U	X	JO	HW	JW
	Min a	Min a	Max b	Max b	±10% b	±10% b	±10% b	±10% b	±10% b	±10% b	±10% b	±20% b	±20% b
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 TE Connectivity



WIRE AND CABLE



TRANSITIONAL BREAKOUTS



COLD-APPLIED SPLICES



ADHESIVES



SIDE-ENTRY BUSHINGS



NBCCS HEAT-SHRINK TUBING



ADAPTORS



SOLDERSLEEVES/DEVICES



HARNWARE SOFTWARE

MICRO MOLDED SHAPES

FOR MORE INFORMATION

Technical Support

Internet:	www.te.com/ADM
E-mail:	product.info@te.com
USA:	+1 (800) 522-6752
Canada:	+1 (905) 470-4425
Mexico:	+52 (0) 55-1106-0814
C. America:	+52 (0) 55-1106-0814
South America:	+55 (0) 11-2103-6000
Germany:	+49 (0) 6251-133-1999
Great Britain:	+44 (0) 8706-080208
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

te.com

© 2011 Tyco Electronics Corporation. All Rights Reserved.

16544221-1 ADM 2.5M 08/2011

HarnWare, Raychem, TE Connectivity and the TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies.

While TE has made every reasonable effort to ensure the accuracy of the information herein, nothing herein constitutes any guarantee that such information is error-free, or any other representation, warranty or guarantee that the information is accurate, correct, reliable, or current. The TE entity issuing this publication reserves the right to make any adjustments to the information contained herein at any time without notice. All implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose are expressly disclaimed. The dimensions herein are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

