

Semi-flexible, general purpose adhesive-lined, moisture proof heat-shrinkable tubing.

Provides excellent environmental sealing, 3:1 and 4:1 shrink ratios, high strength bonding, operating temperature -55°C to +110°C.

Atum is a semi-flexible, heat-shrinkable tubing with a meltable adhesive inner lining designed to provide moisture proof sealing to a wide range of substrates such as electrical wire vsplices,

cable jackets, wire breakouts and electrical components.

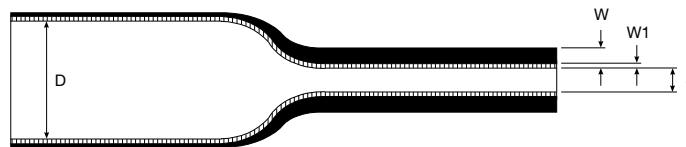
The high shrink ratios mean that only seven sizes are required to cover a wide range of substrate diameters.

Typical applications are environmental sealing of electrical components including wire splices and harness breakouts as well as sealing cable ends against moisture ingress.

Temperature rating

Operating temperature range:	-55°C to +110°C
Minimum shrink temperature:	+80°C
Minimum full recovery temperature:	+110°C

Ordering information



Inside diameter				Wall thickness				Standard package			
D (min)		d (max)		W (nom)		W1 (nom)		Length		Ordering description	
Expanded as supplied	Recovered after heating	Recovered after heating	Recovered after heating	Total wall recovered after heating	Meltable wall recovered after heating	Total wall recovered after heating	Meltable wall recovered after heating	3:1	4:1	3:1	4:1
mm	mm	mm	mm	mm	mm	mm	mm	m	m		
3	4	1	1	1.00	1.00	0.5	0.5	30	30	Atum-3/1-color code	Atum-4/1-color code
4.5	-	1.5	-	1.10	-	0.5	-	30	-	Atum-4.5/1.5-color code	-
6	8	2	2	1.00	1.00	0.5	0.5	30	30	Atum-6/2-color code	Atum-8/2-color code
9	12	3	3	1.40	1.40	0.6	0.6	30	30	Atum-9/3-color code	Atum-12/3-color code
12	16	4	4	1.78	1.78	0.7	0.7	30	30	Atum-12/4-color code	Atum-16/4-color code
19	24	6	6	2.25	2.25	0.8	0.8	30	30	Atum-19/6-color code	Atum-24/6-color code
24	32	8	8	2.54	2.54	1.0	1.0	30	12	Atum-24/8-color code	Atum-32/8-color code
40	52	13	13	2.54	2.54	1.0	1.0	12	6	Atum-40/13-color code	Atum-52/13-color code

Standard colors

Standard color	Black	Clear				
Code	0	X (only 3:1)				
Non Standard color	Red	Yellow	Green	Blue	Grey	White
Code	2	4	5	6	8	9

Approvals

UL E85381 (Black only)
MIL-DTL-23053/4 Class 3 (Black only)
3:1 Shrink ratio only (excludes sizes 9/3, 19/6)
VG 95343 (clear 3:1 only)
VDE 0341/Pt 9012 (clear 3:1 only)

Performance

Test	Test method	Test requirement
Tensile strength:	ISO 37	9 MPa (min)
Ultimate elongation:	ISO 37	300% (min)
Inner wall adhesion: ATUM to aluminium		60 N per 25 mm (min)
Heat shock:	4 h at 225°C	Pass - no dripping, cracking or flowing of outer wall
Heat ageing:	168 h at 150°C	Pass - no dripping, cracking or flowing of outer wall
Low temperature flexibility:	4 h at -55°C	Pass - no cracking
Dielectric strength:	IEC 243	12 MV/m (min)
Fluid resistance:	24 h at 23°C, ISO 37	Tensile strength: 7 MPa (min) Ultimate elongation: 300% (min) Inner wall adhesion: 60 N per 25 mm (min)
	Test fluids:	Diesel fuel (BS 2869 class A1) Hydraulic fluid (H-515) Lubricating oil (O-149)

For full product performance details consult Raychem Specification.

Specifications

Raychem Specification RW 2063. (Black) RK6024 (colors and clear)
Material Safety Data Sheet available on request.
Installation instructions available on request.

Raychem and ATUM are trademarks of Tyco Electronics Corporation.

Users should independently evaluate the suitability of the product for their application.

Tyco Electronics Corporation
300 Constitution Drive
Menlo Park, CA 94025-1164
USA
Tel: (800) 926-2425 (US & Canada)
Tel: +1 (650) 361-3860 (All other countries)

Tyco Electronics UK Ltd.
Faraday Road
Dorcan, Swindon, SN3 5HH
United Kingdom
Tel: +44 1793 528171

Tyco Electronics Raychem K.K.
3816 Noborito, Tama-ku
Kawasaki, Kanagawa 214-8533
Japan
Tel: +81 44 900 5102

Tyco Electronics Singapore Pte Ltd.
Asia Pacific Headquarters
26 Ang Mo Kio, Industrial Park 2
Singapore 569507
Tel: +65 4866 151

All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Tyco Electronics Corporation makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. Tyco Electronics Corporation's only obligations are those in the Standard Terms and Conditions of Sale for these products and in no case will Tyco Electronics Corporation be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of the product. Tyco Electronics Corporation's Specifications are subject to change without notice. In addition, Tyco Electronics Corporation reserves the right to make changes in materials or processing without notification to the Buyer which do not affect compliance with any applicable specification.

For more information about this product visit www.tycoelectronics.com and www.raychem.com