# tyco

### **Electronics**

High-Shrink-Ratio, Adhesive-Lined **Polyolefin Tubing** 

#### **Product Facts**

- 3:1 and 4:1 shrink ratios allow for connector-to-cable sealing
- Tubing environmentally seals and protects components and interconnections
- Medium wall provides increased mechanical protection
- ATUM adhesive bonds to a wide variety of plastics, rubbers, and metals, including polyethylene, aluminum, steel, and copper













#### **Applications**

**ATUM** 

Environmentally seals and protects a wide variety of electrical applications, including back end connector sealing, breakouts, and connectorto-cable transitions. High expansion ratio makes it possible to repair most damaged cable jackets without removing connectors.

#### Installation

Minimum shrink temperature: 80°C [176°F] Minimum full recovery temperature: 110°C [230°F]

#### **Operating Temperature Range**

-55°C to 110°C [-67°F to 230°F]

#### Specifications/Approvals

Series	UL** <b>51</b>	Military	Raychem
ATUM	E85381 600V, 110°C	AMS-DTL-23053/4*, Class 3	RW-2063 - Black RK-6024 - Colors and clear

<sup>\*</sup>Formerly MIL-I-23053/4 and MIL-DTL-23053/4. Sizes 3/1, 6/2, 12/4, 24/8, and 40/13 only.

Available in:	Americas	Europe	Asia Pacific	
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<sup>\*\*</sup>Black only, except sizes 3/1 and 4/1.



### **Electronics**

**Product Dimensions** 

## Dual Wall Tubing (Adhesive & Encapsulant-Lined)

## Raychem

#### ATUM (Continued)

	Inside Diameter		Recovered Wall Thickness**	
Size	Minimum Expanded as Supplied	Maximum Recovered After Heating	Total Wall After Heating	Adhesive Wall After Heating (Nominal)
3:1				
3/1	3.0 [0.118]	1.0 [0.039]	1.00 ± 0.28 [0.039 ± 0.010]	0.50 [0.020]
4.5/1.5	4.5 [0.177]	1.5 [0.059]	1.10 ± 0.25 [0.043 ± 0.011]	0.50 [0.020]
6/2	6.0 [0.236]	2.0 [0.079]	1.00 ± 0.28 [0.039 ± 0.010]	0.50 [0.020]
9/3	9.0 [0.354]	3.0 [0.118]	1.40 ± 0.28 [0.055 ± 0.010]	0.61 [0.024]
12/4	12.0 [0.472]	4.0 [0.157]	1.78 ± 0.38 [0.070 ± 0.015]	0.76 [0.030]
19/6	19.0 [0.748]	6.0 [0.236]	2.25 ± 0.55 [0.088 ± 0.022]	0.76 [0.030]
24/8	24.0 [0.940]	8.0 [0.315]	2.54 ± 0.55 [0.100 ± 0.022]	1.02 [0.040]
40/13	40.0 [1.570]	13.0 [0.512]	2.54 ± 0.55 [0.100 ± 0.022]	1.02 [0.040]
4:1				
4/1	4.0 [0.158]	1.0 [0.039]	1.00 ± 0.28 [0.039 ± 0.010]	0.50 [0.020]
8/2	8.0 [0.315]	2.0 [0.079]	1.00 ± 0.28 [0.039 ± 0.010]	0.50 [0.020]
12/3	12.0 [0.472]	3.0 [0.118]	1.40 ± 0.28 [0.055 ± 0.010]	0.61 [0.024]
16/4	16.0 [0.630]	4.0 [0.158]	1.78 ± 0.38 [0.070 ± 0.015]	0.76 [0.030]
24/6	24.0 [0.945]	6.0 [0.236]	2.25 ± 0.55 [0.088 ± 0.022]	0.76 [0.030]
32/8	32.0 [1.260]	8.0 [0.315]	2.54 ± 0.55 [0.100 ± 0.022]	1.02 [0.040]
52/13	52.0 [2.050]	13.0 [0.512]	2.54 ± 0.55 [0.100 ± 0.022]	1.02 [0.040]

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

#### **Ordering Information**

Color	Standard	Black (-0)	
	Nonstandard	Clear in 3:1 sizes only (non-flame-retardant jacket); other colors available on request.	
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.		
Standard packaging	In 1.2-meter [4-foot] lengths.		
Ordering description***	Specify product name, size and color (for example, ATUM 8/2-0).		

<sup>\*\*\*</sup>Europe Only. For supply to MIL, Def Stan and BS add -MS, -DS or -BS to ordering description.