

## ATUM

### 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
- The adhesive in ATUM tubing bonds to a wide variety of plastics, rubbers, and metals, including polyethylene, aluminum, steel, and copper
- RoHS compliant



#### Applications

Environmentally seals and protects a wide variety of electrical applications, including back end connector sealing, breakouts, and connector-to-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**  | Military                  | Raychem                                       |
|--------|------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------------|
| ATUM   | E85381<br>600V, 110°C                                                                    | AMS-DTL-23053/4,* Class 3 | RW-2063 - Black<br>RK-6024 - Colors and clear |

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

\*\*Black only, except sizes 3/1 and 4/1.

| Available in: | Americas | Europe | Asia Pacific |
|---------------|----------|--------|--------------|
|               | ■        | ■      | ■            |

## ATUM (Continued)

### Product Dimensions

| Size       | Inside Diameter              |                                 | Recovered Wall Thickness**  |                                       |
|------------|------------------------------|---------------------------------|-----------------------------|---------------------------------------|
|            | Minimum Expanded as Supplied | Maximum Recovered After Heating | Total Wall After Heating    | Adhesive Wall After Heating (Nominal) |
| <b>3:1</b> |                              |                                 |                             |                                       |
| 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]                          |
| <b>4:1</b> |                              |                                 |                             |                                       |
| 4/1        | 4.0 [0.157]                  | 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 [0.157]                     | 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]                          |

\*\*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 (-X, 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 or on spools.                                                                                             |                                                                                              |
| Ordering description**** | Specify product name, size and color (for example, ATUM 8/2-0).                                                                         |                                                                                              |

\*\*\*Only 1.2 meter [4-foot] lengths are standard in the Americas. ATUM tubing on spools is nonstandard.

\*\*\*\*For supply to MIL spec., add -MS to ordering description.

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## TE Connectivity:

[ATUM-12/3-0-SP-CS6877](#) [ATUM-16/4-0-SP-CS6877](#) [ATUM-24/6-0-SP-CS6877](#) [ATUM-32/8-0-SP-CS6877](#) [ATUM-52/13-0-SP-CS6877](#) [ATUM-6/2-0-MS-STK](#) [ATUM-52/13-0-SP](#) [M23053/4-304-0](#)