

# Thin Wall Adhesive Lined

## ADW3



### Technical Data

| Properties                  | Test Method  | Typical Values                               |
|-----------------------------|--|--|
| Cold Impact                 | SAE-AMS-DTL23053/4:1999<br>ASTM D746-13 (-40°C)              | No Cracking                                  |
| Heat Shock                  | SAE-AMS-DTL23053/4:1999<br>(250°C, 4 hrs)                    | No Cracking/Dripping                         |
| Sealing Efficiency          | SAE-AMS-DTL23053/4:1999<br>(200°C, 3min) Reheat (150°, 5min) | No opening on reheat                         |
| Tensile Strength (MPa)      | SAE-AMS-DTL23053/4:1999<br>ASTM D638-10                      | 12.8   |
| Elongation at Break (%)     | SAE-AMS-DTL23053/4:1999<br>ASTM D638-10                      | 390  |
| Dielectric Strength (kV/mm) | SAE-AMS-DTL23053/4:1999<br>ASTM D2671-09                     | 19.7   |
| Volume Resistivity (Ω.cm)   | SAE-AMS-DTL23053/4:1999<br>ASTM D257-07                      | 2x10 <sup>15</sup>                           |
| Flammability                | SAE-AMS-DTL23053/4:1999<br>ASTM D2671-09                     | Pass (Self extinguishing)                    |
| Corrosion                   | SAE-AMS-DTL23053/4:1999<br>(121°C, 16hrs)                    | No Corrosion                                 |
| Water Absorbtion (%)        | SAE-AMS-DTL23053/4:1999<br>ASTM D570-98 (23°C, 24hrs)        | 0.25   |
| Heat Resistance             | SAE-AMS-DTL23053/4:1999<br>(175°C, 168hrs)                   | No Cracks/Dripping/Flowing<br>of outer walls |
| Longitudinal Shrinkage (%)  | UL224  | 0 ± 5  |

### Dimensions

| Product  | Inside Diameter (mm) |           | Wall Thickness (mm) | Reel Length (m) |
|----------|----------------------|-----------|---------------------|-----------------|
|          | Supplied             | Recovered | Recovered           |                 |
| ADW315   | 1.6                  | 0.5       | 0.45                | 100             |
| ADW331   | 3.2                  | 1.0       | 0.90                | 100             |
| ADW341   | 4.8                  | 1.5       | 1.00                | 100             |
| ADW362   | 6.4                  | 2.0       | 1.25                | 100             |
| ADW393   | 9.5                  | 3.0       | 1.40                | 100             |
| ADW3124  | 12.7                 | 4.0       | 1.70                | 100             |
| ADW3196  | 19.1                 | 6.0       | 1.95                | 100             |
| ADW3258  | 25.4                 | 8.0       | 2.05                | 75              |
| ADW33813 | 38.1                 | 13.0      | 2.50                | 30              |
| ADW35016 | 50.8                 | 16        | 2.80                | 15              |

### Description

ADW3 is manufactured by co-extrusion of Polyolefin and hot-melt adhesive. The product has been developed for applications that require a flame retardant highly flexible thin wall tubing with a higher shrink ratio and where moisture sealing is required.

### Features

- Crosslinked Polyolefin
- Shrink Ratio 3:1
- Adhesive lined
- Operating temperature -45 to 125 °C
- Excellent flame retardant properties VW-1
- Standard colours - Black/Clear  
Special Colours on request
- Minimum shrink temperature, 70 °C
- RoHS /REACH Complaint
- **Military approved**
- **Excellent oil & chemical resistance**

### Applications

- Environmental seal & insulation for electrical and electronic connections
- Bundling of wires and cables for flexible harnesses, including automotive and marine harnesses
- Quick recovery at low temperatures makes it ideal for use in the electronics & telecommunication applications
- Its 3:1 shrink ratio can easily cope with components of varying diameter, with no tendency to split

### Clear

- Abrasion and oil resistant covering for identification labels/tags and write and wrap labels
- Strain relief and environmental seal for electrical and electronic connections where visibility of the connection is required
- Designed for applications where substrates need to remain visible and protected against the ingress of fluids



# Dual Wall Splicing Sleeves

## ADW4



### Description

**ADW4** is an adhesive lined flame retardant tubing. High shrink ratio combined with excellent sealing characteristics makes this product ideal for electrical and electronic connections where a moisture seal is required.

### Features

- Shrink Ratio 4 : 1
- Operating temperature - 55 to 135°C
- Good flame retardant properties
- Good electrical and fungal resistant properties
- Colours - Black
- Minimum/fully recovered shrink temperature 90/110°C

### Technical Data

| Properties                                     | Test Methods                     | Typical Values   |
|--|----------------------------------|------------------|
| Tensile (MPa)                                  | UL 224                           | > 14             |
| Elongation (%)                                 | UL 224                           | > 400            |
| Heat Ageing: Tensile (MPa)<br>: Elongation (%) | UL 224<br>(175° C x 168 hrs)     | > 12<br>> 250    |
| Heat Shock (25°C x4hrs)                        | UL 224                           | Pass             |
| Low temperature Flexibility                    | ASTM D 2671<br>(4 hrs @ - 55°C ) | No Cracking      |
| Copper Stability                               | ASTM D 2671<br>(175°C x 168 hrs) | Pass             |
| Flammability                                   | VW-1                             | Pass *           |
| Dielectric Strength (kV/mm)                    | ASTM D 2671                      | > 20             |
| Volume Resistivity (Ω.cm)                      | ASTM D 257                       | 10 <sup>14</sup> |

Tests values are for outer crosslinked polyolefin layer



### Dimensions

| Product | Inside Diameter (mm) |           | Wall Thickness (mm) |           |
|---------|----------------------|-----------|---------------------|-----------|
|         | Supplied             | Recovered | Supplied            | Recovered |
| ADW461  | 6.5                  | 1.3       | 1.0                 | 1.8       |
| ADW491  | 8.9                  | 1.6       | 1.0                 | 2.5       |
| ADW4122 | 11                   | 2.4       | 1.1                 | 2.1       |
| ADW4164 | 16                   | 4.0       | 1.2                 | 3.0       |
| ADW4194 | 19                   | 4.0       | 1.2                 | 3.0       |
| ADW4256 | 25                   | 6.0       | 1.2                 | 3.2       |

Eccentricity < 30% as per UL 224

Tolerances on size id's and wall thickness allow 15% on above values

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