

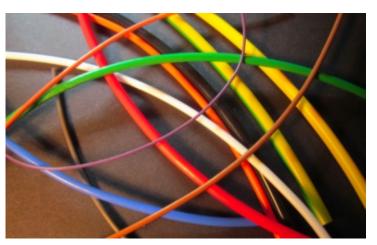
PTFE TW

PTFE TW (Polytetrafluoroethylene) is a non-flammable, thin-wall sleeving with an exceptionally high operating temperature of -70°C-+260°C. It has a very low coefficient of friction, high dielectric strength and is virtually inert to all chemicals. It is available in many colours and AWG, metric and imperial sizes as standard. Bespoke sizes, wall thicknesses and colours are also available.

PTFE hose and convoluted tubing is ideal for enhanced protection of wire, cable, electrical and electronic components for commercial and high performance military and aerospace systems. It is extremely stable at very high temperatures and retains a measure of toughness and strength even at cryogenic temperatures. It is virtually innert to all chemicals resisting most acids. Alkalis and petroleum products. It is virtually unaffected by oxygen, ozone and UV light. It is extremely hydrophobic and has a UL 94 rating of V-O. It also has a very low coefficient of friction and high dielectric strength and excellent mechanical properties.

Technical Data

- Operating Temperature -70°C-+260°C
- Flame Retardant: Non-flammable
- Colours: Natural, Brown, Pink, Black, Yellow, Blue, Grey, Orange, Violet, Red, Green, White
- Sizes: TW30mm? TW0mm
- Packing: Coils, reels, cut to length, cut sleeves
- Approvals: RoHS compliant
- **Applications / Industries:** General, Commercial, Electrical, Electronics, Industrial, Mechanical, Automotive, Military-defence, Aerospace



| Properties | Typical Values | Test Methods |
|--------------------------|---|--------------------------------|
| General | • | - |
| Operating Temperature | -70C - +260°C | |
| Shelf Life | No special requirements | |
| Physical | • | |
| Tensile Strength | Longitudinal -33N/mm², transverse 31N/mm² | DIN 53455, ASTM D1457-81 |
| Ultimate elongation | Longitudinal -350%, transverse610% | DIN 53455, ASTM D1457-81 |
| Water absorption | 0.01% max. | |
| Density | 2.15g/cm ³ | ASTM D1457-81 |
| Hardness | D 55 | ASTM D2240 |
| Co-efficient of friction | Extremely low | |
| UV Resistance | Virtually unaffected by oxygen, ozone, visible or UV light | |
| Thermal | • | • |
| Flammability | Non-flammable | UL 94 VO |
| Gel Transition Range | 320°C – 340°C | DTA |
| Thermal Conductivity | 0.25-0.50W/m.K | DIN 52612 |
| Electrical | | |
| Dielectric strength | 40-80kV/mm (safe figure 40kV/mm) | ASTM D149 |
| Volume resistivity | 10 ¹ ??cm | ASTM D257 |
| Surface Resistance | 10¹?? | ASTM D257 |
| Chemical | | |
| Chemical resistance | Virtually inert to all chemicals, organic solvents do not attack/dissolve | |



| Size (mm) | Supplied diameter (mm) | Nominal wall thickness (mm) |
|-----------|------------------------|-----------------------------|
| TW30 | 0.33 | 0.23 |
| TW28 | 0.41 | 0.23 |
| TW26 | 0.51 | 0.23 |
| TW24 | 0.58 | 0.25 |
| TW22 | 0.71 | 0.25 |
| TW20 | 0.91 | 0.3 |
| TW19 | 1.02 | 0.3 |
| TW18 | 1.14 | 0.3 |
| TW17 | 1.27 | 0.3 |
| TW16 | 1.42 | 0.3 |
| TW15 | 1.57 | 0.3 |
| TW14 | 1.73 | 0.3 |
| TW13 | 1.93 | 0.3 |
| TW12 | 2.16 | 0.3 |
| TW11 | 2.44 | 0.3 |
| TW10 | 2.72 | 0.38 |
| TW9 | 3.02 | 0.38 |
| TW8 | 3.43 | 0.38 |
| TW7 | 3.84 | 0.38 |
| TW6 | 4.29 | 0.38 |
| TW5 | 4.83 | 0.38 |
| TW4 | 5.44 | 0.38 |
| TW3 | 6.07 | 0.38 |
| TW2 | 6.81 | 0.38 |
| TW1 | 7.62 | 0.38 |
| TW0 | 8.53 | 0.38 |

Printasleeve Ltd is as diligent as possible in compiling and updating the above information. It reflects averages derived from product sample testing, is subject to normal manufacturing and testing tolerances and may be changed without notice. Furthermore aesthetic and textural style differences can result in local variation. For specific or further information concerning our products, their specifications and their utiliation please contact us. E & OE

