

## WRSZT Heat Shrink Breakout



- Manufactured from cross-linked polyolefin.
- Provide sealing protection and strain relief over multi-core cable crutch, including 2-, 3-, 4-, and 5-core breakout.
- Coated with adhesive on the body and the fingers to form a watertight seal.
- Flame-retardant breakouts are available upon customer request.
- Meeting with varieties of configuration requirements.
- Shrink temperature: start at 90°C, and fully recovered at 130°C.

### Technical Data

| Property                                        | Test Method | Standard Value           |                          |                          |
|-------------------------------------------------|-------------|--------------------------|--------------------------|--------------------------|
|                                                 |             | Insulated Breakout       | Oil Resistant Breakout   | Semi-conductive Breakout |
| Tensile Strength                                | ASTM-D-638  | ≥12MPa                   | ≥12MPa                   | ≥12MPa                   |
| Elongation at Break<br>(120°C,168 hrs)          | ASTM-D-638  | ≥300%                    | ≥300%                    | ≥300%                    |
| Tensile Strength after Aging<br>(120°C,168 hrs) | ASTM-D-638  | ≥10MPa                   | ≥10MPa                   | ≥10MPa                   |
| Elongation at Break after Aging                 | ASTM-D-638  | ≥230%                    | ≥230%                    | ≥230%                    |
| Tensile Strength Variation<br>after Dipping     | ASTM-D-638  | -                        | ≤20%                     | -                        |
| Elongation at Break<br>after Dipping            | ASTM-D-638  | -                        | ≥230%                    | -                        |
| Dielectric Strength                             | IEC 60243   | ≥15kV/mm                 | ≥15kV/mm                 | -                        |
| Water Absorption                                | ISO 62      | ≤0.1%                    | ≤0.1%                    | ≤0.1%                    |
| Volume Resistivity                              | IEC 60093   | ≥1×10 <sup>13</sup> Ω·cm | ≥1×10 <sup>13</sup> Ω·cm | ≤1×10 <sup>3</sup> Ω·cm  |
| Brittle Temperature                             | ISO 974     | -40°C                    | -40°C                    | -40°C                    |
| Heat Shock                                      | 160°C, 4h   | No Crack                 | No Crack                 | No Crack                 |
| Hardness(Shore A)                               | ISO 868     | ≥80                      | ≥80                      | ≥80                      |

## Selection Table

| Cores               | Spec.               | As Supplied (mm)     |                        |                     | After Recovered      |                        |
|---------------------|---------------------|----------------------|------------------------|---------------------|----------------------|------------------------|
|                     |                     | Body Diameter(D) Min | Finger Diameter(d) Min | Full Length (L)(±5) | Body Diameter(D) Max | Finger Diameter(d) Max |
| 2-cores<br>Breakout | WRSZT2-24/14(0#)    | 24                   | 12                     | 140                 | 14                   | 5                      |
|                     | WRSZT2-38/18(1#)    | 38                   | 20                     | 145                 | 18                   | 7                      |
|                     | WRSZT2-45/22(2#)    | 45                   | 25                     | 145                 | 22                   | 10                     |
|                     | WRSZT2-60/25(3#)    | 60                   | 35                     | 140                 | 25                   | 11                     |
|                     | WRSZT2-70/25(4#)    | 70                   | 40                     | 140                 | 25                   | 11                     |
| 3-cores<br>Breakout | WRSZT3-24/17(-2#)   | 24                   | 11                     | 140                 | 17                   | 5                      |
|                     | WRSZT3-48/22(-1#)   | 48                   | 18                     | 165                 | 22                   | 7                      |
|                     | WRSZT3-58/28(0#)    | 58                   | 25                     | 180                 | 28                   | 8                      |
|                     | WRSZT3-68/37(1#)*☆  | 68                   | 30                     | 210                 | 37                   | 13                     |
|                     | WRSZT3-87/43(2#)*☆  | 87                   | 39                     | 220                 | 43                   | 16                     |
|                     | WRSZT3-106/53(3#)*☆ | 106                  | 42                     | 235                 | 53                   | 19                     |
|                     | WRSZT3-125/65(4#)*☆ | 125                  | 58                     | 245                 | 65                   | 25                     |
| WRSZT3-140/65(5#)   | 140                 | 65                   | 245                    | 65                  | 25                   |                        |
| 4-cores<br>Breakout | WRSZT4-38/19(0#)    | 38                   | 10                     | 125                 | 19                   | 5                      |
|                     | WRSZT4-50/25(1#)*☆  | 50                   | 16                     | 135                 | 25                   | 7                      |
|                     | WRSZT4-70/32(2#)*☆  | 70                   | 23                     | 185                 | 32                   | 10                     |
|                     | WRSZT4-82/46(3#)*☆  | 82                   | 30                     | 210                 | 46                   | 13                     |
|                     | WRSZT4-90/46(4#)*☆  | 90                   | 35                     | 210                 | 46                   | 13                     |
|                     | WRSZT4-109/54(5#)   | 109                  | 42                     | 240                 | 54                   | 18                     |
| 5-cores<br>Breakout | WRSZT5-42/21(0#)    | 42                   | 11                     | 130                 | 21                   | 5                      |
|                     | WRSZT5-57/30(1#)    | 57                   | 15                     | 170                 | 30                   | 7                      |
|                     | WRSZT5-70/38(2#)    | 70                   | 23                     | 170                 | 38                   | 9                      |
|                     | WRSZT5-90/53(3#)    | 90                   | 30                     | 180                 | 53                   | 13                     |
|                     | WRSZT5-120/48(4#)   | 120                  | 39                     | 205                 | 48                   | 14                     |

- Remark: 1. \* means 3-core semi-conductive breakouts are available upon custom request.  
 2. ☆ means 3-core or 4-core oil resistant breakouts are available upon custom request.  
 3. The breakout coated with hot-melt adhesive comes in two forms: flat adhesive and spiral adhesive, which can meet different customer needs.