

Part Number TSGBK

Header TSGBK Low Voltage Cable Breakouts

Description Thermosleeve-USA TSGBK Low Voltage Cable Breakout is made from irradiated cross-linked polyolefin. This specifically designed formulation provides the tubing with a low shrink temperature, fire-retardance properties, and flexibility. It also meets RoHS and other environmentally concerned standards. TSGBK comes in 2, 3, 4, and 5-core cable breakouts.

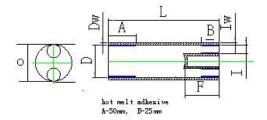
Agency Approval & Compliance ROHS, and REACH compliant

Application TSGBK molded polyolefin is designed for breakouts. It is suitable for applications in low voltage cable terminations where electrical insulation and waterproofing is essential.

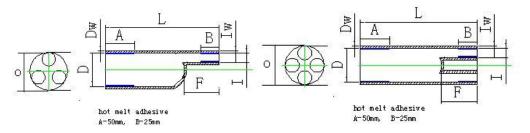
Shrink Ratio and Operating Temperature TSGBK is available as a 2:1 material, shrinking to one half (50%) of its supplied size and $\leq 10\%$ along the axis. The tubing's wall thickness also changes proportionally to the degree of recovery.

TSGBK low voltage cable breakouts have a continuous operating temperature range of -55 degrees C (-67 degrees F) to 135 degrees C (275 degrees F). Working temperature: 150°C (302 degrees F).

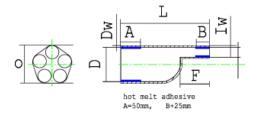
Standard Sizes and Dimensions



| Size (mm) | As supplied (mm) ± 10% | | D (mm) | | I (mm) | | Recovered wall (mm) ±10% | | Recovered wall (mm) ±20% | |
|------------------------|---------------------------|-----|--------------|--------------|--------------|--------------|-----------------------------|-----|-----------------------------|-----|
| | L* | F * | a* (Min.) | b* (Max.) | a* (Min.) | b* (Max.) | L | F | Dw | lw |
| 2-core cable breakouts | | | | | | | | | | |
| TSGBK205-22/8 | 55 | 16 | 22 | 12 | 11 | 3.5 | 60 | 18 | 2.2 | 1.8 |
| TSGBK210-30/12 | 80 | 22 | 30 | 14 | 14 | 4.5 | 84 | 21 | 2.6 | 2.4 |
| TSGBK215-40/16 | 100 | 30 | 40 | 16 | 15 | 5 | 110 | 30 | 2.2 | 2.2 |
| TSGBK220-60/23 | 95 | 21 | 60 | 23 | 25 | 8 | 105 | 25 | 2.4 | 2.4 |
| TSGBK230-90/60 | 165 | 45 | 90 | 60 | 30 | 8 | 170 | 48 | 3 | 3 |
| TSGBK250-160/90 | 290 | 170 | 160 | 92 | 50 | 30 | 310 | 160 | 4.5 | 4.5 |



| Size (mm) | As supplied (mm) ± 10% | | D (mm) | | I (mm) | | Recovered wall (mm) ±10% | | Recovered wall (mm) ±20% | |
|-----------------------|------------------------|-----|--------------|--------------|--------------|--------------|-----------------------------|----|-----------------------------|-----|
| | L* | F * | a* (Min.) | b* (Max.) | a* (Min.) | b* (Max.) | L | F | Dw | lw |
| 3-core cable breakout | | | | | | | | | | |
| TSGBK310-38/16 | 100 | 35 | 38 | 16 | 15 | 5 | 110 | 30 | 2.3 | 2 |
| TSGBK320-60/25 | 170 | 40 | 60 | 25 | 26 | 8 | 175 | 45 | 3.2 | 2.8 |
| TSGBK325-70/28 | 175 | 45 | 70 | 28 | 32 | 10 | 180 | 45 | 3.3 | 3 |
| TSGBK330-80/38 | 19 0 | 50 | 80 | 38 | 34 | 16 | 195 | 55 | 3.5 | 3.3 |
| TSGBK340-110/5 0 | 22 0 | 55 | 110 | 50 | 46 | 19 | 230 | 60 | 3.8 | 3.5 |
| TSGBK350-125/ 57 | 23 0 | 58 | 125 | 57 | 55 | 20 | 240 | 65 | 3.7 | 3.3 |
| TSGBK360-140/ 70 | 25 0 | 58 | 140 | 70 | 62 | 26 | 270 | 68 | 3.9 | 3.6 |
| TSGBK370-170/ 77 | 25 0 | 55 | 170 | 77 | 75 | 28 | 270 | 68 | 3.9 | 3.6 |
| 4-core cable breakout | | | | | | | | | | |
| TSGBK410-40/15 | 95 | 23 | 40 | 15 | 12 | 5 | 100 | 24 | 2.2 | 2 |
| TSGBK420-55/21 | 14 5 | 40 | 55 | 21 | 20 | 5.5 | 150 | 42 | 2.9 | 2.7 |
| TSGBK425-65/26 | 17 0 | 45 | 65 | 26 | 25 | 7.5 | 180 | 50 | 3.3 | 3.1 |
| TSGBK430-75/26 | 18 0 | 45 | 75 | 26 | 28 | 7.5 | 190 | 50 | 3.3 | 3.1 |
| TSGBK440-82/37 | 17 0 | 46 | 82 | 37 | 30 | 11 | 180 | 45 | 3.3 | 3 |
| TSGBK445-90/37 | 17 0 | 46 | 90 | 37 | 32 | 11 | 180 | 50 | 3.3 | 3 |
| TSGBK450-100/4 7 | 18 0 | 55 | 100 | 47 | 38 | 12 | 190 | 55 | 3.9 | 3.3 |
| TSGBK460-125/5 2 | 21 5 | 50 | 125 | 52 | 50 | 15 | 240 | 68 | 4 | 4 |
| TSGBK470-160/7 0 | 24 0 | 50 | 160 | 70 | 64 | 20 | 270 | 68 | 3.8 | 3.7 |



| Size (mm) | As supplied (mm) ± 10% | | D (mm) | | I (mm) | | Recovered wall (mm) ±10% | | Recovered wall (mm) ±20% | |
|-----------------------|---------------------------|-----|--------------|--------------|--------------|--------------|--------------------------|----|--------------------------|-----|
| | L* | F * | a* (Min.) | b* (Max.) | a* (Min.) | b* (Max.) | L | F | Dw | lw |
| 5-core cable breakout | | | | | | | | | | |
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| TSGBK510-40/19 | 90 | 20 | 40 | 19 | 13 | 4.5 | 85 | 20 | 2.5 | 2.2 |
| TSGBK520-55/24 | 145 | 36 | 55 | 24 | 18 | 5.5 | 150 | 40 | 3 | 2.6 |
| TSGBK530-80/33 | 160 | 46 | 80 | 33 | 26 | 8 | 175 | 50 | 3.2 | 3 |
| TSGBK540-100/4 2 | 185 | 52 | 100 | 42 | 35 | 10 | 195 | 55 | 3.5 | 3.2 |

Technical Properties

| Property | Test Method | Typical Data |
|---|------------------------------|--------------|
| Tensile strength | ASTM D 2671 | ≥13 MPa |
| Tensile strength after thermal aging | ASTM D 2671 /120°C, 168 hrs. | ≥10 MPa |
| Ultimate elongation | ASTM D 2671 | ≥300% |
| Ultimate elongation after thermal aging | ASTM D 2671 /120°C, 168 hrs. | ≥250% |
| Dielectric strength | IEC 243 | ≥15 kV/mm |
| Volume resistance | IEC 93 | ≥1013 Ω.cm |
| Water absorption | O 62 | ≤1% |

TSGBK tubing shall be homogeneous and essentially free from flaws, defects, pinholes, bubbles, seams, cracks and inclusions. Standard color is black.

Standard color: Black

Availability 2, 3, 4, 5-core cable breakouts

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