



Technical data's Heat shrink HTI 55X and HTI 300 X

Meet the standard UL224 and CSA C22.2

Free from environment harmful substances as PBB's, PBBO's, PBBE,s and toxic heavy metal compounds in its components, make it meet the requirement of environment protection.

Minimum shrink temperature; 70°C

Minimum fully recovery temperature: 100°C

Approvals: 125°C VW-1 600 V File No E204071

Material: Meet standard of Sony-SS-00259, RoHS

Colour possibilities: black, red, blue, yellow, green, white,

Technical Data HTI55X Polyolefin shrink ratio 2:1

| Property | Test Method | Typical Data |
|--|----------------|------------------|
| Operating temperature | UL 224 | -55°C to + 125°C |
| Tensile strenght | ASTM D 2671 | 14 MPa |
| Ultimate elongation | ASTM D 2671 | 400% |
| Longitudinal shrinkage | UL 224 | Approximately 5% |
| Eccentricity | ASTM D 2671 | < 20% |
| Heat aging tensile strenght Ultimate elongation | 158°C, 168 hrs | 14 MPa 350% |
| Flammability | VW-1 | Pass |
| Dielectric strenght | IEC 243 | 20KV/mm |
| Volume resistance | IEC 93 | 10,14 Ohm.cm |
| Copper stability | ASTM D 2671 | Pass |

Technical Data HTI300X polyolefin shrink ratio 3:1

| Property | Test Method | Typical Data |
|--------------------------------------|----------------|------------------|
| Operating temperature | UL 224 | -55°C to + 125°C |
| Tensile strenght | ASTM D 2671 | > 14 MPa |
| Elongation strenght | ASTM D 2671 | > 400% |
| Longitudinal shrinkage | UL 224 | 0....-10% |
| Eccentricity | ASTM D 2671 | < 30% |
| A Elongation at break after aging | 158°C, 168 hrs | > 300% |
| Flammability | VW-1 | Pass |
| Dielectric strenght | IEC 243 | > 20KV/mm |
| Volume resistance | IEC 93 | > 10,14 Ohm.cm |
| Copper stability | ASTM D 2671 | Pass |



Technical data's Heat shrink HTI 201X

Outstanding physical, chemical and electrical properties make it easily to install and indentify to ground conductors.

Free from environment harmful substances as PBB's, PBBO's, PBBE,s and toxic heavy metal compounds in its components, make it meet the requirement of environment protection.

Flame retardant

Minimum shrink temperature; 70°C

Minimum fully recovery temperature: 100°C

Approvals: 125°C VW-1 600 V File No E204071

Meet: SAE-AMS-DTL-23053/5 Class 1&3

Material: Meet standard of Sony-SS-00259, RoHS

Operating temperature: -55°C to + 135°C

Technical Data HTI201X Polyolefin shrink ratio 2:1 (3:1 available)

| Property | Test Method | Typical Data |
|--|------------------------------------|--------------|
| Tensile strenght | ASTM D 2671 | 14MPa |
| Elongation at break | ASTM D 2671 | 800% |
| Tensile strenght after aging at 175°C for 168 hrs. | ASTM D 2671 | 14 MPa |
| Elongation after aging at 175°C for 168 hrs | ASTM D 2671 | 350% |
| Flammability | UL 224 VW 1 SAE-AMS-DTL-23053/5 | Pass |
| Heat shock (250°C / 4 hrs) | ASTM D 2671 | No cracking |
| Cold bend test (-55°C / 4 hrs) | ASTM D 2671 | No cracking |
| Dielectric strenght | ASTM D 150 | 20KV/mm |
| Volume resistance | ASTM D 876 | 10,14ohm.cm |
| Copper corrosion | UL 224 | Pass |
| Water absorbtion | ASTM D 570 | 0.15% |
| Chemical resistance | SAE-AMS-DTL-23053/5 | Pass |
| Longitudinal shrinkage | UL 224 | 0 ± 5% |
| Eccentricity | UL 224 | 30% |



Technical data's HTI 100A and HTI 400A

This shrinkable tubing is manufactured by co-extrusion of Polyolefin and hot melt adhesive.

Operating temperature: -55°C to + 125°C

Minimum shrink temperature: 100°C

Standard colour: black

Approvals: 125°C VW-1 600 V file No E204071

Meet SAE-AMS-DTL-23053/5 class 1 & 3

Material: meet standard of Sony-SS-00259, RoHS

Technical Data

Shrink ratio HTI100A is 3:1

Shrink ratio HTI400A is 4:1

| Property | Test method | Typical Data |
|---|---|---|
| Tensile strenght | ASTM D 2671 | 10.4 Mpa (min) |
| Tensile strenght after aging 158°C, 168 hrs | ASTM D 2671 | Remains 70% |
| Elongation at break | ASTM D 2671 | 300% (min) |
| Elongation at break after aging 158°C, 168 hrs | ASTM D 2671 | 150% (min) |
| Longitudinal shrinkage | UL 224 | 0 to -10% |
| Heat shock | 225°C, 4 hrs | No cracking, no dropping |
| Cold bend -30°C, 1 hr | ASTM D 2671 | No cracking |
| Voltage withstand AC 2500 V, 60 seconds | ASTM D 2671 | No breakdown |
| Volume resistance | ASTM D 2671 | 10,14 Ohm. Cm (min) |
| Flammability | SAE-AMS-DTL-23053/5 | Self extinguish in 30 sec. |
| Copper corrosion 158°C, 168 hrs | *UL 224 | Pass |
| Water absorption | ASTM D 570 | < 0,5% |
| Adhesive to aluminium | ASTM D 2671 | 60N/25mm |
| Fluid resistance | Tensile strenght: 7 Mpa (min) Elongation: 300% (min) | 24 hrs at 23°C in diesel and lubricating oil |
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CROSS REFERENCES HTI (heat shrink tubing/Schrumpfschlauche)

| HTI | Raychem | Sumitomo | DSG- Canusa | Alpha | 3M | LG |
|-----------|--------------|----------|-------------------|---------|--------|------------------|
| HTI 55 X | Versafit V2 | F2(z) | Deray-H CPX 55 | | | GSHS- 16265G |
| HTI 300 X | Versafit 3 X | F2(3X) | | | | |
| HTI 201 X | DCPT 2:1 | B2(Y/G) | CPX 201 | FIT260 | GYS | GSHS- 1635Y/G |
| HTI LSB | LSTT | | Deray LSB | | | |
| HTI 100A | Atum | W3B2 | Deray IAKT | FIT 321 | EPS300 | |
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