Conversion from imperal to metrics									
Zoll	1/32"	3/64"	1/16"	5/64"	3/32"	1/8"	3/16"	1/4"	3/8"
mm	0.8	1.2	1.6	2.0	2.4	3.2	4.8	6.4	9.5
Zoll	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"
mm	12.7	15.9	19.1	25.4	31.8	38.1	50.8	76.2	101.6

The right heat shrink tube

The 80:20 rule means that a heat shrink tube should shrink by a maximum of 80% and a minimum of 20%. For example: A cable with a diameter of 5 mm is to be wrapped in heat shrinkable tubing. In theory both sizes 6/2 and 12/4 would be suitablesince the required diameter of 5 mm lies with in the shrink range of both tube sizes.

Maximum shrink (100%)

Maximum shrinkage = 4 mm

Otimum shrink max. (80%)

Shrinkage of 3.2 mm

Otimum shrink min. (20%)

Shrinkage of 0.8 mm

Size 6/2 has a range of application of between 2.8 mm and 5.2 mm and is therefore suitable for the cable diameter of 5 mm.

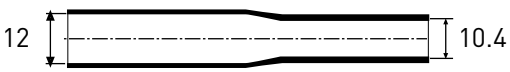
Maximum shrink (100%)

Maximum shrinkage = 8 mm

Otimum shrink max. (80%)

Shrinkage of 6.4 mm

Otimum shrink min. (20%)



Shrinkage of 1.6 mm

The smallest application diameter of size 12/4 is 5.6 mm. This size is therefore unsuitable for a cable diameter of 5 mm.

ST4XA

ShrinkTech® dual wall tubing with adhesive

Manufactured by co-extrusion of polyolefin and hot-melt adhesive. Suitable for electronics and automotive industry where components are of irregular sizes, shapes and protection against water and moisture are important. Provides both insulation and sealing for protected articles.

- **Material:**
  modified polyolefin
- **Colour:**
  black,other colors available on request
- **Packaging:**
  spool or per meter

- High shrink ratio
- Flame retardant
- Waterproof
- UL 224, 125C, VW-1
- Environmental friendly, free from toxic heavy metal compounds
- Very flexible

Property	Method of test	Value
Tensile strength	ASTM D 2671	10.4MPa
Tensile strength after ageing (158°C / 168 hrs)	ASTM D 2671	70%
Elongation at break	ASTM D 2671	min.200%
Elongation at break after ageing (158°C / 168 hrs)	ASTM D 2671	min. 100%
Heat shock (250 / °C 4 hrs)	ASTM D 2671	No cracking
Cold tolerance (-30 /°C 1 hrs)	ASTM D 2671	No cracking
Water absorption	ASTM D 570	<0,5%
Volume resistance	ASTM D 876	$10^{14}\Omega$.cm
Copper stability	UL 224 158°C /168 h	Pass
Flammability	SAE-AMS-DTL-23035/5	Self-extinghuis in 30sec
Longitudinal shrinkage	UL 224	0% - 10%
Voltage withstand AC2400V / 60sec	ASTM D 2671	No breakdown

Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
ST4XA-040	4.0	1.0	1.0 + 0.50	150/1.22	O
ST4XA-060	6.0	1.5	1.2 + 0.60	100/1.22	O
ST4XA-080	8.0	2.0	1.6 + 0.75	50/1.22	O
ST4XA-120	12.0	3.0	1.9 + 1.00	50/1.22	O
ST4XA-160	16.0	4.0	2.1 + 1.05	50/1.22	O
ST4XA-180	18.0	4.5	2.4 + 1.20	25/1.22	O
ST4XA-240	24.0	6.0	2.5 + 1.25	25/1.22	O
ST4XA-320	32.0	8.0	2.5 + 1.25	25/1.22	O