

- Brightly colored
- General purpose

Thermofit® CGPE-105

Heat-shrinkable tubing

General-purpose CGPE-105 tubing is made of crosslinked, heat-shrinkable polyolefin. It has a shiny surface and is manufactured in bright colors, making the product an attractive covering for many automotive, appliance, and consumer goods applications. The material is not flame-retardant.

CGPE-105 tubing is as economical in many applications as PVC tubing, yet offers the improved performance of crosslinked material. Because it's heatshrinkable, the product conforms to substrates more uniformly than does PVC tubing. The longitudinal change of CGPE-105 tubing does not exceed 10 percent, while that of some PVC tubing often reaches 25 percent or more.

And unlike some PVC tubing, which can shrink at room temperature, CGPE-105 tubing has excellent shelf life. The crosslinked material is unaffected by storage time at room temperature, reducing scrap rates.

CGPE-105 tubing is available in five standard colors, as well as in a clear version that is exceptionally transparent. This transparency makes the product ideal for protecting marked substrates.

CGPE-105 tubing can be easily hotstamped.

Temperature rating

Minimum shrink temperature	Black 110°C; all other colors 100°C
Continuous operating temperature	-70°C to 105°C

Specifications*

Туре	Raychem	
CGPE-105	CGPE-105 SCD	
*When ordering, always specify latest issue.		W
<u> </u>	Expanded as supplied	
D	+	Fully recovered after heating
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Dimensions (inches/millimeters)

Size	ze Inside diameter Wall thickness		Size	Size Inside diamete			er Wall thickness						
	D (min Expan suppli	ded as	d (max Recove heating	red after	W Recovered heating**	after		D (min Expan suppli	ded as	d (max Recov heatin	éred after	W Recovered heating**	d after
3/64	.046	1.2	.023	0.6	.016±.003	.40±.08	3/8	.375	9.5	.187	4.8	.025±.003	.64±.08
1/16	.063	1.6	.031	0.8	.017±.003	.43±.08	1/2	.500	12.7	.250	6.4	.025±.003	.64±.08
3/32	.093	2.4	.046	1.2	.020±.003	.51±.08	3/4	.750	19.1	.375	9.5	.035±.005	.76±.08
1/8	.125	3.2	.062	1.6	.020±.003	.51±.08	1	1.000	25.4	.500	12.7	.035±.005	.89±.12
3/16	.187	4.8	.093	2.4	.020±.003	.51±.08	1 1/2	1.500	38.1	.750	19.1	.040±.006	1.02±.15
1/4	.250	6.4	.125	3.2	.025±.003	.64±.08	2	2.000	50.8	1.000	25.4	.045±.007	1.14±.18

^{**} Wall thickness will be less if tubing recovery is restricted during shrinkage.

Ordering information

Colors	Standard Nonstandard	Black, white, clear, red, blue, yellow Green		
Size selection	Always order the	argest size that will shrink snugly over the component being covered.		
Standard packaging	On spools			
Ordering description	Specify product na	Specify product name, size, and color; e.g., CGPE-105 1/4-0 (0=Black)		
Special order sizes	1 1/2" and 2" size be made available	s are by special order only. In addition, other special sizes may e upon request.		

Raychem specification values

	Property	Unit	Requirement	Method of test	
Physical	Dimensions	inches (mm)	See reverse	ASTM D 2671	
	Longitudinal change	percent	+0, -10	ASTM D 2671	
	Tensile strength	psi	1800 minimum	ASTM D 2671 20 in/min.	
	Ultimate elongation	percent	200 minimum	ASTM D 2671 20 in/min.	
	Secant modulus (as supplied)	psi	2.5 x 10 ⁴ maximum	ASTM D 2671	
	Specific gravity		1.0 maximum	ASTM D 2671	
	Low-temperature flexibility 4 hours at -70°C (-94°F)		No cracking	ASTM D 2671 Procedure C	
	Heat shock 4 hours at 200°C (392°F)		No dripping, flowing, or cracking	ASTM D 2671	
	Heat resistance 168 hours at 125°C (257°F)			ASTM D 2671	
	Followed by test for:				
	Ultimate elongation	percent	100 minimum	ASTM D 2671	
Electrical	Dielectric strength	volts/mil	500 minimum	ASTM D 2671	
	Volume resistivity	ohm-cm	1 x 10 ¹⁶ minimum	ASTM D 2671	
Chemical	Corrosive effect 16 hours at 125°C (257°F)		No pitting or blackening of copper	ASTM D 2671 Procedure B	