

# FEP 1.3:1

## *AWG and Fractional Sizes*



*FEP heat shrink is especially preferred for its lower shrink temperature compared to PTFE heat shrink.*

## *Overview*

Heat shrink tubing provides a state-of-the-art method for applying tight and protective encapsulation for a multitude of components. Zeus heat shrink products are provided in their expanded state. Then, with a brief application of heat, they mold snugly over intricate and irregular shapes to form a strong and completely sealed covering.

FEP heat shrink tubing is available with shrink ratios of 1.3:1; 1.6:1; and 2:1. These heat shrinkable products incorporate the same high standards and characteristics of our other heat shrinks and are a customer favorite. Shrinkage is accommodated by a variety of methods from performance heat guns to ovens (though ovens may provide the most uniform shrink results). Micro-miniature dimensions are available, and custom specifications and tolerances can be quoted upon request.

Zeus heat shrink jacketing extends the life of covered parts as it protects in extremes of heat, moisture, corrosion, and shock. FEP heat shrink is a popular choice in many industries including aerospace, electrical, optical, and automotive. In the medical arena, for example, FEP heat shrink is the ideal manufacturing aid during the catheter jacket reflow process and is easily removed afterward. With FEP, Zeus has you covered!



CHEMICAL RESISTANCE



BIOCOMPATIBLE



DIELECTRIC STRENGTH

## *Applications*

- *Encapsulation*
- *Insulation for wiring*
- *Wire harnesses*
- *Catheter manufacturing aid*

## *Capabilities and Sizing*

- *Available as AWG size 24 to 0*
- *Available in fractional sizes 3/8" (9.52 mm) to 1 1/2" (38.10 mm)*
- *Custom sizes available upon request*

## *Key Properties*

- *Biocompatible*
- *Chemically resistant*
- *Excellent dielectric strength*
- *UL 94 V-0 flammability rated*
- *High optical clarity*
- *Sterilizable*
- *Working temperature to 392 °F (200 °C)*
- *Complies with: AS23053/11*



# FEP 1.3:1 Ratio

## Approximate Ratio of Expanded ID to Recovered ID – AWG and Fractional Sizes

FEP heat shrink is supplied in natural color, custom Pantone colors, or Zeus standard colors, all available upon request. Standard lengths are 4 ft.; cut pieces and continuous lengths are also available. This product complies with AMS 23053/11. Free samples are available upon request.

FEP HEAT SHRINK 1.3:1 AWG SIZES (WITH METRIC EQUIVALENTS)								
ORDERED AS AWG SIZE	EXPANDED INSIDE DIAMETER (ID) MIN.		RECOVERED DIMENSION AFTER SHRINKAGE					
			ID MAX.		WALL THICKNESS			
					NOMINAL		TOLERANCE (±)	
in.	mm	in.	mm	in.	mm	in.	mm	
24	0.031	0.787	0.027	0.686	0.008	0.203	0.002	0.051
22	0.036	0.914	0.032	0.813	0.008	0.203	0.002	0.051
20	0.045	1.143	0.039	0.991	0.008	0.203	0.002	0.051
18	0.060	1.524	0.049	1.245	0.008	0.203	0.002	0.051
16	0.075	1.905	0.061	1.549	0.009	0.229	0.002	0.051
14	0.092	2.337	0.072	1.829	0.009	0.229	0.002	0.051
12	0.115	2.921	0.089	2.261	0.009	0.229	0.002	0.051
10	0.141	3.581	0.114	2.896	0.010	0.254	0.003	0.076
9	0.158	4.013	0.124	3.150	0.010	0.254	0.003	0.076
8	0.180	4.572	0.143	3.632	0.010	0.254	0.003	0.076
7	0.197	5.004	0.158	4.013	0.011	0.279	0.004	0.102
6	0.225	5.715	0.180	4.572	0.011	0.279	0.004	0.102
5	0.248	6.299	0.198	5.029	0.011	0.279	0.004	0.102
4	0.290	7.366	0.226	5.740	0.011	0.279	0.004	0.102
3	0.310	7.874	0.249	6.325	0.011	0.279	0.004	0.102
2	0.365	9.271	0.280	7.112	0.012	0.305	0.004	0.102
1	0.400	10.160	0.311	7.899	0.012	0.305	0.004	0.102
0	0.440	11.176	0.349	8.865	0.012	0.305	0.004	0.102

FEP HEAT SHRINK 1.3:1 FRACTIONAL SIZES (WITH METRIC EQUIVALENTS)										
ORDERED AS AWG SIZE			EXPANDED INSIDE DIAMETER (ID) MIN.		RECOVERED DIMENSION AFTER SHRINKAGE					
					ID MAX.		WALL THICKNESS			
							NOMINAL		TOLERANCE (±)	
in.	(dec. in.)	(mm)	in.	mm	in.	mm	in.	mm	in.	mm
3/8	0.375	9.53	0.500	12.700	0.383	9.728	0.015	0.381	0.004	0.102
7/16	0.438	11.11	0.580	14.732	0.448	11.379	0.020	0.508	0.004	0.102
1/2	0.500	12.70	0.666	16.916	0.510	12.954	0.020	0.508	0.004	0.102
5/8	0.625	15.88	0.830	21.082	0.637	16.180	0.025	0.635	0.004	0.102
3/4	0.750	19.05	1.000	25.400	0.764	19.406	0.030	0.762	0.004	0.102
7/8	0.875	22.23	1.170	29.718	0.891	22.631	0.035	0.889	0.004	0.102
1	1.000	25.40	1.330	33.782	1.020	25.908	0.035	0.889	0.004	0.102
1-1/8	1.125	28.58	1.500	38.100	1.145	29.083	0.035	0.889	0.004	0.102
1-1/4	1.240	31.75	1.666	42.316	1.270	32.258	0.035	0.889	0.004	0.102
1-3/8	1.375	34.93	1.833	46.558	1.390	35.306	0.035	0.889	0.004	0.102
1 1/2	1.500	38.10	2.000	50.800	1.570	39.878	0.035	0.889	0.004	0.102