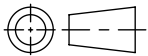
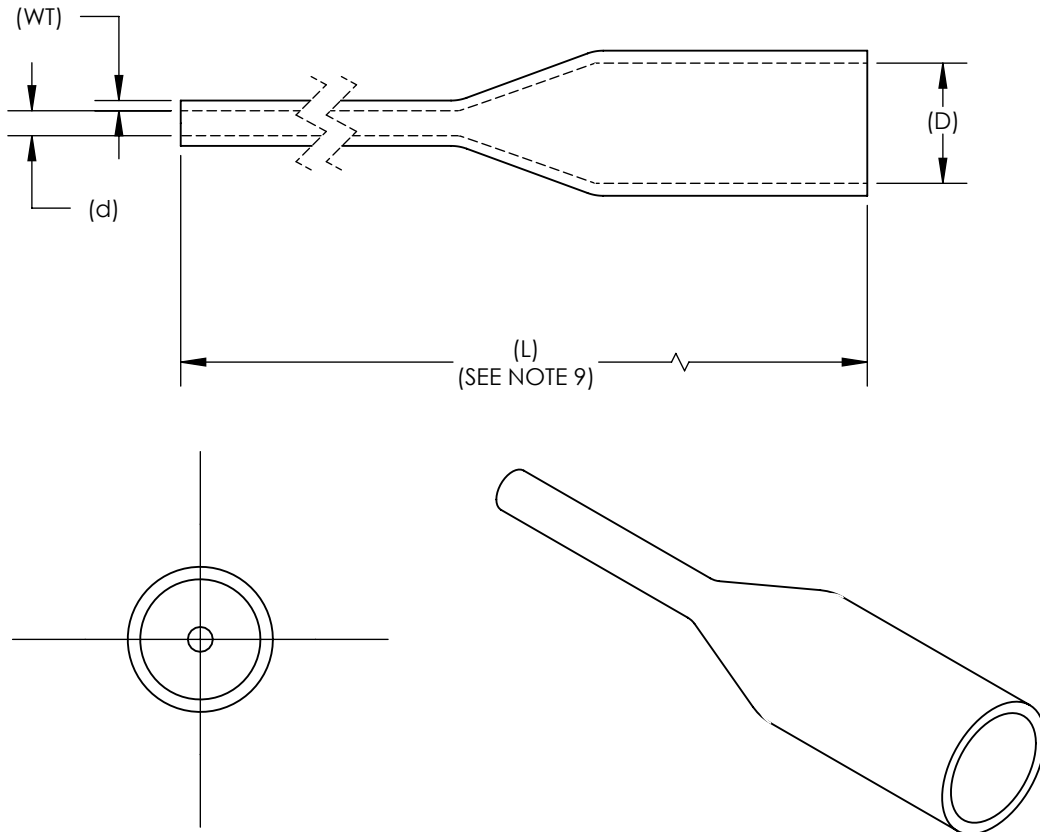


SW2015



Revision level			Revision Record	Changed	Date	Approved	Date
Drawing	State	Part					
00.0	Design Release		SEE ECN# 013647	GRW	12/9/2016	KAC	12/9/2016



Type	Shrink Ratio	Nominal Trade Size	Supplied Diameter (D)		Recovered Diameter (d)		Wall Thickness Recovered (WT)		Color
		in	in	mm	in	mm	in	mm	
<b>Mini Reels: 2:1 Thin Wall</b>									
TFN21 1.6/0.8 CL	2:1	1/16	0.063	1.6	0.032	0.8	0.016	0.40	Clear
TFN21 1.6/0.8 BK	2:1	1/16	0.063	1.6	0.032	0.8	0.016	0.40	Black
TFN21 2.4/1.2 CL	2:1	3/32	0.094	2.4	0.047	1.2	0.019	0.48	Clear
TFN21 2.4/1.2 CL	2:1	3/32	0.094	2.4	0.047	1.2	0.019	0.48	Black
TFN21 3.2/1.6 CL	2:1	1/8	0.125	3.2	0.063	1.6	0.019	0.48	Clear
TFN21 3.2/1.6 RD	2:1	1/8	0.125	3.2	0.063	1.6	0.019	0.48	Red
TFN21 3.2/1.6 BU	2:1	1/8	0.125	3.2	0.063	1.6	0.019	0.48	Blue
TFN21 4.8/2.4 CL	2:1	3/16	0.188	4.8	0.094	2.4	0.019	0.48	Clear
TFN21 4.8/2.4 RD	2:1	3/16	0.188	4.8	0.094	2.4	0.019	0.48	Red
TFN21 4.8/2.4 BU	2:1	3/16	0.188	4.8	0.094	2.4	0.019	0.48	Blue
TFN21 6.4/3.2 CL	2:1	1/4	0.25	6.4	0.125	3.2	0.022	0.56	Clear
TFN21 6.4/3.2 RD	2:1	1/4	0.25	6.4	0.125	3.2	0.022	0.56	Red
TFN21 6.4/3.2 BU	2:1	1/4	0.25	6.4	0.125	3.2	0.022	0.56	Blue
TFN21 9.5/4.8 CL	2:1	3/8	0.375	9.5	0.188	4.8	0.024	0.62	Clear
TFN21 9.5/4.8 RD	2:1	3/8	0.375	9.5	0.188	4.8	0.024	0.62	Red
TFN21 9.5/4.8 BU	2:1	3/8	0.375	9.5	0.188	4.8	0.024	0.62	Blue
TFN21 12.7/6.4 CL	2:1	1/2	0.5	12.7	0.25	6.4	0.024	0.62	Clear
TFN21 12.7/6.4 RD	2:1	1/2	0.5	12.7	0.25	6.4	0.024	0.62	Red
TFN21 12.7/6.4 BU	2:1	1/2	0.5	12.7	0.25	6.4	0.024	0.62	Blue
TFN21 19.1/9.5 CL	2:1	3/4	0.75	19.1	0.38	9.5	0.027	0.68	Clear
TFN21 19.1/9.5 RD	2:1	3/4	0.75	19.1	0.38	9.5	0.027	0.68	Red
TFN21 19.1/9.5 BU	2:1	3/4	0.75	19.1	0.38	9.5	0.027	0.68	Blue
TFN21 25.4/12.7 CL	2:1	1	1	25.4	0.5	12.7	0.034	0.87	Clear
TFN21 25.4/12.7 RD	2:1	1	1	25.4	0.5	12.7	0.034	0.87	Red
TFN21 25.4/12.7 BU	2:1	1	1	25.4	0.5	12.7	0.034	0.87	Blue
<b>Bulk Reels: 2:1 Thin Wall</b>									
TFN21 3.2/1.6 BK	2:1	1/8	0.125	3.2	0.063	1.6	0.019	0.48	Black
TFN21 4.8/2.4 BK	2:1	3/16	0.188	4.8	0.094	2.4	0.019	0.48	Black
TFN21 6.4/3.2 BK	2:1	1/4	0.25	6.4	0.125	3.2	0.022	0.56	Black
TFN21 9.5/4.8 BK	2:1	3/8	0.375	9.5	0.188	4.8	0.024	0.62	Black
TFN21 12.7/6.4 BK	2:1	1/2	0.5	12.7	0.25	6.4	0.024	0.62	Black
TFN21 19.1/9.5 BK	2:1	3/4	0.75	19.1	0.38	9.5	0.027	0.68	Black
TFN21 25.4/12.7 BK	2:1	1	1	25.4	0.5	12.7	0.034	0.87	Black
TFN21 38.1/19.1 BK	2:1	1-1/2	1.5	38.1	0.75	19.1	0.039	1.00	Black
<b>4 Foot Sticks: 2:1 Thin Wall</b>									
TFN21-ST 2.4/1.2 BK	2:1	3/32	0.094	2.4	0.047	1.2	0.019	0.48	Black
TFN21-ST 3.2/1.6 BK	2:1	1/8	0.125	3.2	0.063	1.6	0.019	0.48	Black
TFN21-ST 4.8/2.4 BK	2:1	3/16	0.188	4.8	0.094	2.4	0.019	0.48	Black
TFN21-ST 6.4/3.2 BK	2:1	1/4	0.250	6.4	0.125	3.2	0.022	0.56	Black
TFN21-ST 9.5/4.8 BK	2:1	3/8	0.375	9.5	0.188	4.8	0.024	0.62	Black
TFN21-ST 12.7/6.4 BK	2:1	1/2	0.500	12.7	0.250	6.4	0.024	0.62	Black
TFN21-ST 19.1/9.5 BK	2:1	3/4	0.750	19.1	0.375	9.5	0.027	0.68	Black
TFN21-ST 25.4/12.7 BK	2:1	1	1.000	25.4	0.500	12.7	0.034	0.87	Black

- NOTES:**
- SHRINK RATIO 2:1
  - LONGITUDINAL CHANGE AFTER SHRINKAGE ± 5%
  - MINIMUM SHRINK TEMPERATURE 212° F (100° C)
  - OPERATING TEMPERATURES -67° F TO 275° F (-55° C TO 135° C)
  - DIELECTRIC STRENGTH >20KV/MM ACCORDING TO ASTM D 150
  - RoHS
  - FLAMMABILITY UL224 600V VW-1 (EXCEPT CLEAR)
  - MEETS SAE-AMS-DTL-23053/5 CLASS 1 & 3
  - CONSULT FACTORY OR WEBSITE FOR AVAILABLE LENGTHS

Material  
**POLYOLEFIN, CROSS LINKED**

Units: **inches**  
 Dimension without tolerances details to:  
 .xxxx = ± .0005  
 .xxx = ± .005  
 .xx = ± .01  
 .x = ± .03  
 None = ± .06  
 ∠ = ± 0.5°  
 Dimension Formatted in [mm]

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Drawn GRW 12/9/2016  
 Approved KAC 12/9/2016

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Article/Type-No **TFN21 SERIES**  
 Title **HEAT SHRINK TUBING, 2:1 SHRINK RATIO, NON-ADHESIVE THIN WALL**  
 Drawing-No **PRODUCTION : Phase**  
**16-1991-001-CSU**  
 Scale  
 Project Number **PRP 16-1991**  
 Format **AH**  
 Sheet **1/1**