

## VERY FLEXIBLE POLYVINYLIDENE FLUORIDE 2 : 1 Shrink Ratio

### MILITARY SPECIFICATION & UL



RoHS Compliant



Lead-Free

TYPICAL FEATURES	
<p>1) SUMITUBE K3 is an extremely flexible, transparent, inherently flame retarded heat-shrinkable PVDF tubing that meets or exceeds the requirements of AMS-DTL-23053/18, Class 3.</p> <p>2) SUMITUBE K3 is tough and abrasion resistant in mechanical environments. It also has excellent resistance to solvents.</p> <p>3) Shrink temperature is 90° C. It has the lowest shrink temperature and greatest flexibility of any PVDF type tubing available.</p>	<p>4) Operating temperature range is -55° C to +150° C.</p> <p>5) SUMITUBE K3 is recommended for applications requiring clarity, flexibility and low shrink temperature, combined with the excellent fluid resistant capabilities of fluoropolymers.</p>

### STANDARD SIZES

SIZE	INSIDE DIAMETER AS SUPPLIED (MIN)		INSIDE DIAMETER AFTER RECOVERY (MAX)		WALL THICKNESS AFTER RECOVERY (NOM)	
	INCH	(MM)	INCH	(MM)	INCH	(MM)
3/64	.046	1.2	.023	0.6	.010	0.25
1/16	.063	1.6	.031	0.8	.010	0.25
3/32	.093	2.4	.046	1.2	.010	0.25
1/8	.125	3.2	.062	1.6	.010	0.25
3/16	.187	4.8	.093	2.4	.010	0.25
1/4	.250	6.4	.125	3.2	.010	0.25
3/8	.375	9.5	.187	4.8	.012	0.30
1/2	.500	12.7	.250	6.4	.012	0.30
3/4	.750	19.1	.375	9.5	.017	0.43
1	1.000	25.4	.500	12.7	.019	0.48

**Standard Colors:** Clear. Colors available subject to factory acceptance and quote.

**Standard Package:** Spooled (S)

**How to Order:** (Type of Material)                      (Size)                      (Color)                      (Packaging)

**Example:**                      K3                      1/4                      Clear                      S

# K3 SPECIFICATION VALUES

PROPERTY (UNITS)	TEST METHOD	REQUIREMENT
<b>Physical:</b> Tensile strength (psi) Elongation (%) Specific gravity Low temperature flex. (-55° C) Heat shock (275° C, 4 hrs.) Heat resistance (250° C, 168 hrs.) Elongation (%) Secant modulus (psi) Longitudinal change (%)	ASTM D 638 ASTM D 638 ASTM D 792 AMS-DTL-23053 AMS-DTL-23053  ASTM D638 ASTM D882 AMS-DTL-23053	1500 min. 200 min. 1.9 max. no cracking no cracking  100 min. 2.5 x 10 <sup>4</sup> max. ±10
<b>Electrical:</b> Dielectric strength (volts/mil) Volume resistivity (ohm-cm)	ASTM D 876 ASTM D 876	500 min. 1.0 X 10 <sup>12</sup> min.
<b>Chemical:</b> Copper stability (180° C, 168 hrs.) Elongation (%) Water absorption (%) Fluid resistance (23° C, 24 hrs.) Tensile strength (psi) Flammability Shrink temperature, nominal	UL 224 ASTM D570  AMS-DTL-23053 UL-224 VW-1	70% of unaged value min. 0.5 max.  1000 min. Pass 90° C

**Specification references:** AMS-DTL-23053/18B, Class 3  
 UL224 File E70631 YDQS2



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