

SUMITUBE® K2

SAE-AS23053, Cl. 1
UL 224

FLEXIBLE POLYVINYLDENE FLUORIDE 2 : 1 Shrink Ratio

MILITARY SPECIFICATION & UL



RoHS/RoHS2/RoHS3 Compliant



Lead-Free

TYPICAL FEATURES

- 1) SUMITUBE K2 is a clear, flexible, inherently flame retarded heat-shrinkable PVDF tubing.
- 2) Because it is flexible, SUMITUBE K2 is packaged in continuous lengths on spools. This provides long lengths, not available with standard PVDF tubing.
- 3) SUMITUBE K2 is tough and abrasion resistant in mechanical environments and has excellent resistance to cut-through, solvents and fluids, including Skydrol®.
- 4) Sumitube K2 is NAVAIR QPL listed.
- 5) SUMITUBE K2 meets or exceeds the requirements of AS23053/18, Class 1 and UL-224, VW-1. The continuous operating temperature is -55° C to +175° C.
- 6) The shrink temperature of SUMITUBE K2 is 150° C compared with 170° C for standard Kynar.
- 7) SUMITUBE K2 is recommended for applications where the properties of standard PVDF are desirable, but with the added benefits of flexibility, greater clarity, reduced shrink temperature and long continuous lengths.

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	.012	0.30
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
1 1/2	1.500	38.1	.750	19.1	.020	0.51
2	2.000	50.8	1.000	25.4	.020	0.51

Standard Color: Clear (Black and white available as non-standard colors)

Standard Package: Spooled

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

Example: K2 1/4 Clear S

K2 SPECIFICATION VALUES

PROPERTY (UNITS)	TEST METHOD	REQUIREMENT
Physical: 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) Deformation (150° C, 1 hr.) (%) Longitudinal change (%)	ASTM D 638 ASTM D 638 ASTM D792 AS23053 AS23053 ASTM D638 ASTM D882 UL 224 AS23053	3500 min. 200 min. 2.0 max. no cracking no cracking 100 min. 100,000 min. 50 max. ±10
Electrical: Dielectric strength (volts) Volume resistivity (ohm-cm)	ASTM D 2671 ASTM D 876	400 min. 1.0 X 10 ¹¹ min.
Chemical: Copper stability (180° C, 168 hrs.) Elongation (%) Water absorption (%) Fluid resistance (23° C, 24 hrs.) Tensile strength (psi) *Fluid resistance, Skydrol® (23° C, 24 hrs.) Tensile strength (psi) Flammability Shrink temperature, nominal Vacuum Outgassing TML, % CVCM, %	 UL 224 ASTM D570 AS23053 AS23053 AS23053 AS23053 UL-224 VW-1 --- ASTM-E-595 ASTM-E-595	70% of unaged value min. 0.5 max. 2000 min. 2000 min. Pass 150° C 1.0 max. 0.1 max.

Specification reference: UL-224, 150° C, VW-1
File E-70631 YDQS2, Cat. No. SUMITUBE K2 or 875
AS23053/18, Class 1
***Note:** Skydrol resistance is not required by AS23053



915 Armorlite Drive
San Marcos, CA 92069

Telephone: (800) 758-3515
FAX: (800) 758-3517