



AEROSPACE STANDARD

AS4897™

REV. A

Issued 1994-07
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Revised 2019-08

Superseding AS4897

Hose Assembly, Polytetrafluoroethylene (PTFE), Low Pressure,
450 °F and Fireproof, Procurement Specification for

RATIONALE

Change Low Temperature Flexing failure criteria.

1. SCOPE

1.1 Application

This SAE Aerospace Standard (AS) covers the requirements for polytetrafluoroethylene (PTFE) hose assemblies for use in aerospace fuel and lubricating oil systems at temperatures between -67 °F and 450 °F and at operating pressures per Table 1. The hose assemblies are also suitable for use within the same temperature and pressure limitations in aerospace pneumatic systems where some gaseous diffusion through the wall of the PTFE liner can be tolerated.

The use of these hose assemblies in pneumatic storage systems is not recommended. In addition, installations in which the limits specified herein are exceeded, or in which the application is not covered specifically by this document, for example oxygen, shall be subject to the approval of the purchaser.

Table 1 - Physical requirements of hose assemblies

Hose Size	Hose Weight ¹ Max lb/in	Oper. Press. psig	Proof Press. psig	Burst Press. Room Temp Min psig	Burst Press. 450 °F Min psig	Bend Radius at Inside of Bend Min Inches	Effuss. 1/2 hour cc/ft Max	Effuss. After Stress Degrad' cc/in/min Max	Neg. Press. in Hg	Vol. Expan. ² cc/in Max
03	0.008	1000	2000	4000	3200	0.75	2.0	2.0	28	0.028
04	0.010	1000	2000	4000	3200	1.00	2.0	2.0	28	0.042
05	0.012	800	1600	3200	2500	1.25	2.0	2.0	28	0.042
06	0.014	750	1500	3000	2400	2.00	2.0	2.0	28	0.075
08	0.017	750	1500	3000	2250	2.00	2.0	2.0	28	--
10	0.022	700	1400	2800	2100	3.00	2.0	2.0	28	--
12	0.027	600	1200	2400	1800	4.50	2.0	2.0	20	--

¹ Hose weight shall be determined on a minimum length of 12 inches.

² Verified per 3.10.3.

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