

REV.  
A

SAE AS4804

FEDERAL SUPPLY CLASS  
4720

RATIONALE

AS4804A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

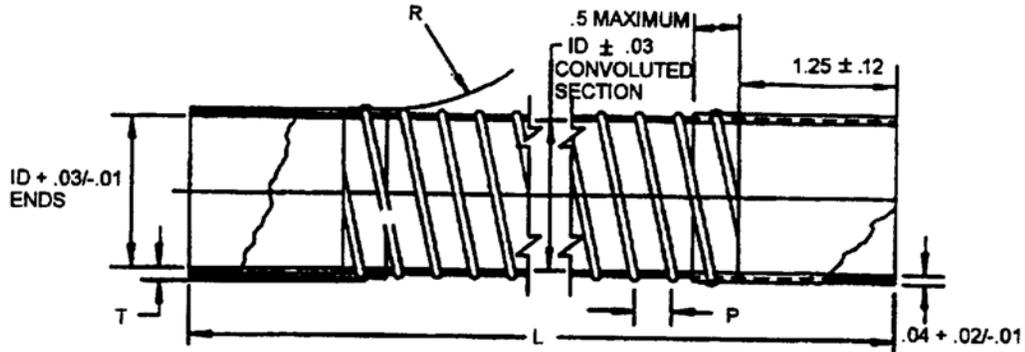


FIGURE 1 - DUCT WITH CUFF ENDS

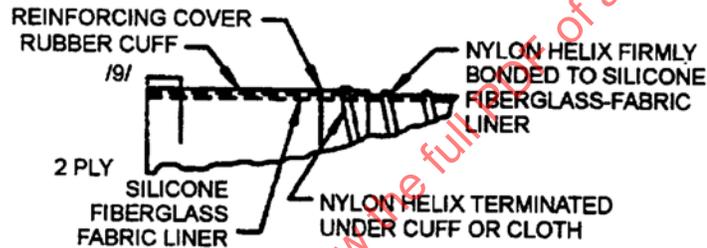


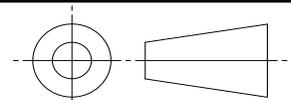
FIGURE 2 - CUFF END

Table 1- PERFORMANCE CRITERIA

OPERATING TEMPERATURE °F	R/5/ BEND RADIUS MIN	HOSE LEAKAGE SCFM/FT/IN DIA	JOINT LEAKAGE /8/ SCFM/IN DIA
-65 TO +250	1.0 X DIA	.015	.1

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS4804A>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: /11/ AS1501

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

HOSE, AIR DUCT, FLEXIBLE, SILICONE-COATED FABRIC, EXTERNAL NYLON HELIX, LOW-NOISE

**SAE AS4804**  
SHEET 1 OF 3

**REV. A**

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ISSUED 1993-02 REVISED 1996-05 REAFFIRMED 2013-01

(R) TABLE 2 - PRESSURES, SIZES, LENGTHS, AND WEIGHTS

HOSE INSIDE DIAMETER	MAXIMUM PRESSURE PSI	NEGATIVE PRESSURE PSI	HOSE LENGTH MINIMUM	HOSE LENGTH MAXIMUM	BODY MAXIMUM LB/IN DIA	CUFF MAXIMUM LB/IN DIA (NO CODE)	CUFF MAXIMUM LB/IN DIA ("A")/13/
.50 TO 1.00	13	.5	4.00	240.00	.0042	--	.016
1.25 TO 2.00	7	.5	4.00	240.00	.0047	--	.012
2.25 TO 3.00	5	.5	4.00	240.00	.005	--	.013
3.25 TO 4.00	4	.5	4.00	240.00	.005	--	
4.25 TO 5.00	3	.5	4.00	240.00	.007	--	.013
5.25 TO 6.00	2	.5	4.00	240.00	.007	--	
6.25 TO 8.00	2	.5	4.00	240.00	.013	--	.017
8.25 TO 10.00	2	.5	4.00	240.00	.015	--	.017
10.25 TO 12.00	2	.5	4.00	240.00	.017	--	.017

TABLE 3 - HOSE LENGTH INCREMENTS

L HOSE LENGTH	AVAILABLE LENGTH INCREMENT	L LENGTH TOLERANCE
4.00 TO 12.00	.25	+ .25/- .00
12.50 TO 24.00	.50	+ .50/- .00
24.50 TO 60.00	.50	+ .75/- .00
60.50 TO 96.00	.50	+1.00/- .00
97.00 TO 144.00	1.00	+1.50/- .00
145.00 TO 240.00	1.00	+2.00/- .00

(R) TABLE 4 - PITCH, NYLON HELIX

HOSE INSIDE DIAMETER	P (NO CODE)	P ("A")	T MAX (NO CODE)	T MAX ("A")/13/
.500 TO 1.000	.237 TO --	.237 TO .390	--	.125
1.250 TO 2.000	.300 TO --	.300 TO .462	--	.135
2.250 TO 3.000	-- TO --	.340 TO .543	--	.153
3.250 TO 5.000	-- TO --	.330 TO .632	--	.180
5.250 TO 8.000	-- TO --	.515 TO .750	--	.243
8.250 TO 12.000	-- TO --	.587 TO .863	--	.320

## NOTES:

- MATERIAL: SILICONE-COATED FIBERGLASS FABRIC, EXTERNALLY BONDED ON NYLON HELIX REINFORCEMENT.
- FINISH: AS MANUFACTURED, COLOR: RED.
- MARKING: AS1501 AS APPLICABLE, INK JET OR PAD PRINT.
- HOSE BENDABILITY IS NOT REQUIRED IN THE HELIX TERMINATION AREA.
- R IS THE MINIMUM BEND RADIUS THAT THE HOSE IS REQUIRED TO BEND UNIFORMLY, WHEN TESTED IN ACCORDANCE WITH AS1501.
- HOSE CUFF ENDS SHALL BE SUITABLE FOR INSTALLATION OVER A RIGID TUBE END WITH MS33660 TYPE "A" BEADS AND USING NAS1922 CLAMPS OR EQUIVALENT.
- INNER AND OUTER SURFACE SHALL BE CLEAN TO FACILITATE SEALING AND HOSE INSTALLATION WITH PRESSURE-SENSITIVE TAPE AND/OR CLAMPING.
- JOINT LEAKAGE PER END, USING CLAMPS AS SPECIFIED IN AS1501.
- CUFFS IN SIZES 6.25 IN AND OVER SHALL HAVE BEADED ENDS, SEE AS1501.
- DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS  $\pm .010$ .

 An SAE International Group	<b>AEROSPACE STANDARD</b>	<b>SAE AS4804</b> SHEET 2 OF 3	<b>REV.</b> <b>A</b>
	HOSE, AIR DUCT, FLEXIBLE, SILICONE-COATED FABRIC, EXTERNAL NYLON HELIX, LOW-NOISE		