

AS5956

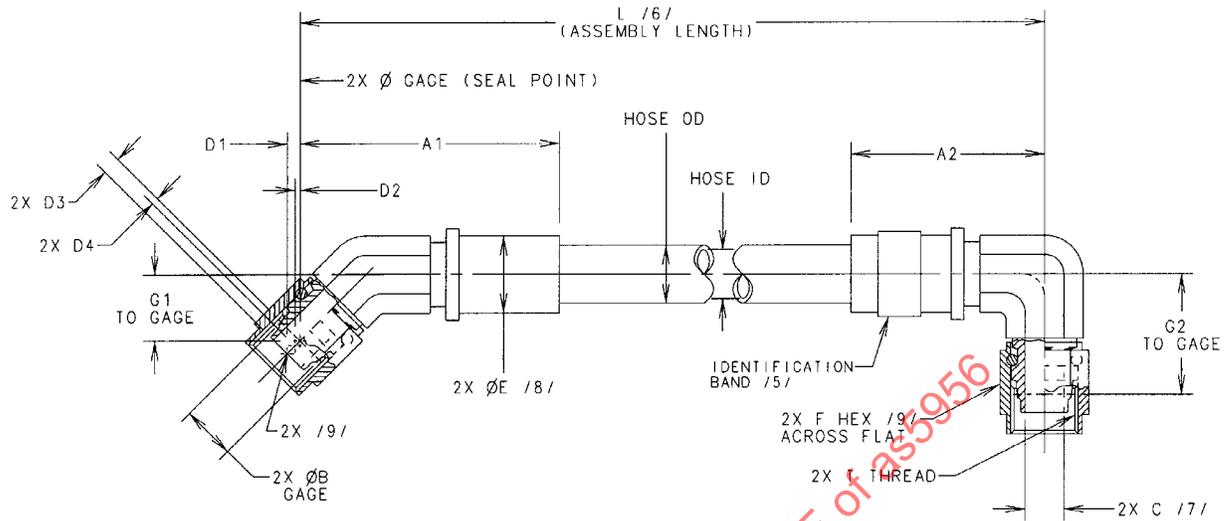


FIGURE 1 - FLARELESS HOSE ASSEMBLY, 45° TO 90° ELBOW

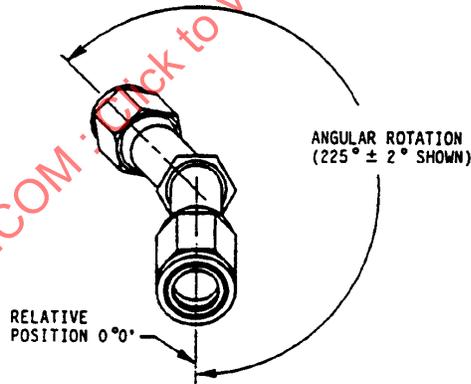
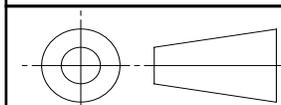


FIGURE 2 - FITTING ORIENTATION /17/

THIRD ANGLE PROJECTION



ISSUED 2004-12

CUSTODIAN: SAE G-3/G-3D

PROCUREMENT SPECIFICATION: /2/ AS5951

**SAE Aerospace**  
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**AEROSPACE STANDARD**

HOSE ASSEMBLY, POLYTETRAFLUOROETHYLENE,  
PARA ARAMID REINFORCED, 275 °F, 5080 PSI,  
FLARELESS, TITANIUM FITTINGS, 45° TO 90°

**AS5956**  
SHEET 1 OF 5

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TABLE 1 - HOSE AND FITTING DIMENSIONS

BASIC HOSE ASSEMBLY NO. AS5956 SIZE CODE	REF	THREAD T PER AS8879	HOSE ID MIN	A1 MAX BASIC DIA.	A2 GAGE DIA. MIN.	C / I / FITTING	REF			REF			REF			ELBOW FITTING BALL SIZE MIN THRU / I / IN		
							D1	D2	D3	D4	D1	D2	D3	D4	E / 8 / MAX	F / 8 / MAX	G1 MIN	G2 MAX
E	.250	.4375-28UNJEF-3B	.212	2.33	2.06	.2930	.133	.11	.038	.16	.055	.58	.56	.458	.328	.87	.74	.113
G	.375	.5625-24UNJEF-3B	.298	2.55	2.27	.4120	.226	.11	.038	.16	.055	.75	.69	.498	.368	.94	.81	.192
H	.500	.7500-20UNJEF-3B	.391	2.92	2.58	.5600	.330	.13	.046	.19	.066	.88	.88	.617	.487	1.12	.99	.281
J	.625	.8750-20UNJEF-3B	.485	3.53	3.16	.6730	.410	.14	.046	.20	.066	1.00	1.00	.630	.509	1.34	1.14	.349
K	.750	1.0625-18UNJEF-3B	.602	4.50	4.06	.8100	.510	.16	.046	.23	.066	1.30	1.25	.786	.586	1.55	1.33	.434
M	1.000	1.3125-16UNJ-3B	.852	5.33	4.86	1.0620	.750	.21	.046	.30	.066	1.70	1.50	.831	.631	1.77	1.57	.630

TABLE 2 - HOSE OR SLEEVE OUTSIDE DIAMETERS /10/  
(DIAMETERS ARE MAXIMUM UNLESS OTHERWISE NOTED)

SLEEVE CODE	SLEEVE MATERIAL	TEMP LIMIT °F	SIZE			SIZE			SIZE									
			SIZE	SIZE	SIZE	SIZE	SIZE	SIZE	SIZE	SIZE	SIZE							
-	(-) INDICATES HOSE ONLY NO SLEEVE (REF)	275	.420-.590	.525-.760	.750-.925	.870-.985	.980-1.180	1.264-1.580										
G	FIRE SLEEVE (AS1072 SIL-FG) (5 MIN) /11/ /12/ /13/	275	.97	1.15	1.38	1.5	1.75	2.06										
F	ABRASION SLEEVE SHRINK-ON (POLYOLEFIN AS1073-CODE B) /18/	275	.65	.83	.99	1.06	1.26	1.67										

TABLE 3 - HOSE ASSEMBLY LENGTH TOLERANCES

HOSE ASSEMBLY LENGTH	TOLERANCE
UNDER 18 in	±.125 in
18 TO 36 in EXCLUSIVE	±.250 in
36 TO 50 in EXCLUSIVE	±.500 in
50 in AND OVER	±1%

TABLE 4 - WEIGHTS /19/

HOSE OR SLEEVE CODE	HOSE, PART OR SLEEVE	UNITS		SIZE	SIZE	SIZE	SIZE	SIZE	SIZE
		LB/IN	LB/IN	.250	.375	.500	.625	.750	1.000
-	HOSE ONLY (SEE AS5951)	.010	.014	.020	.023	.032	.055		
G	FIRE SLEEVE AS1072 (5 min PER AS1055)	.016	.019	.028	.037	.041			
F	PROTECTIVE SLEEVE, SHRINK-ON (POLYOLEFIN AS1073, CODE B) /18/	.002	.003	.003	.003	.005	.007		
NONE	FIRE SLEEVE CLAMP	.019	.019	.019	.024	.024	.028		
NONE	FITTING END (45°)	.069	.123	.189	.286	.684	1.273		
NONE	FITTING END (90°)	.072	.129	.198	.300	.718	1.337		

## NOTES:

## 1. MATERIALS:

- a. HOSE AND FITTINGS - PER AS5951.
- b. THE COLLARS MAY BE STAINLESS STEEL.
- c. SLEEVES - SEE APPLICABLE STANDARDS, TABLE 2.

/2/ THIS HOSE ASSEMBLY STANDARD SHALL BE QUALIFIED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION AS5951. USERS OF THIS STANDARD SHALL PROCURE THE PRODUCT FROM ACCREDITED MANUFACTURERS, OR ACCREDITED DISTRIBUTORS, AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED VENDORS LIST PRI-QPL-AS5951 FOR THIS STANDARD WHEN ISSUED. SEE <http://www.pri.sae.org/as5951/> FOR CURRENT PRI-QPL ONLINE. NOTE: PRIOR TO PRI-QPL ISSUE, USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL BY STANDARD SUPPLEMENT SHEET OR SIMILAR MEANS.

3. CONSTRUCTION AND PERFORMANCE PER AS5951. FITTINGS SHALL BE PERMANENTLY ATTACHED TO HOSE.

4. OPERATING CHARACTERISTICS PER AS5951.

/5/ MARKING: MARKING SHALL BE PER AS5951 ON A STAINLESS STEEL BAND NOT OVER 1.0 IN WIDE OR ON THE COLLAR. IF A BAND IS USED, IT SHALL BE LOCATED OVER THE COLLAR. THE CHARACTERS SHALL BE A MINIMUM OF .06 IN HIGH. THE BAND SHALL BE SO DESIGNED AS TO REMAIN TIGHT ON THE COLLAR TO PREVENT RELATIVE MOVEMENT AND SHALL BE OF SUFFICIENT STRENGTH TO PREVENT REMOVAL BY HAND. MARKING BAND SHALL BE COVERED WITH TRANSPARENT POLYOLEFIN SHRINK SLEEVE PER AS1073 CODE A.

/6/ HOSE LENGTH: LENGTH "L" IS A FOUR-DIGIT NUMBER OF WHICH THE FIRST THREE DIGITS DESCRIBE THE HOSE ASSEMBLY LENGTH IN WHOLE INCHES, AND THE FOURTH DIGIT, THE FRACTION OF AN INCH IN EIGHTHS. LENGTH "L" IS MEASURED FROM "GAGE DIAMETER" TO "GAGE DIAMETER". FOR LENGTH TOLERANCES SEE TABLE 3. TO CONVERT "GAGE DIAMETER" TO "GAGE DIAMETER" TO "END TO END" MEASUREMENT, ADD D1 TO LENGTH "L" FOR NAS1760 END STYLES OR D2 TO LENGTH "L" FOR AS4458 GLOBE SEAL END STYLES.

/7/ HOSE FITTING INSIDE DIAMETER SHALL BE VERIFIED BY PASSING THE DESIGNATED, OR LARGER, SPHERICAL BALL PER TABLE 1 THROUGH THE HOSE ASSEMBLY.

/8/ DISTANCE ACROSS CORNERS OF COUPLING NUT, COLLAR OR NIPPLE MAY EXCEED THIS DIMENSION.

/9/ FITTING ENDS MUST COMPLY WITH NAS1760, AS4458 OR EQUIVALENT. DIMENSIONS D1 AND D3 APPLY TO NAS1760 AND D2 AND D4 APPLY TO AS4458. FITTINGS SHALL MATE WITH EN6123 OR AS5827. STANDARD COUPLING NUTS SHALL BE IN ACCORDANCE WITH OR FUNCTIONALLY EQUIVALENT TO AS4370, AS1790 OR AS1792 EXCEPT FOR THREAD PITCH. FOR ELBOW FITTINGS, THE INSIDE CORNER SHALL BE RADIUSSED IN ACCORDANCE WITH ARP4266.

/10/ CLAMP DIAMETERS: DIAMETERS ARE LISTED FOR CLAMP SELECTION. TUBULAR SLEEVES MAY NOT BE A PERFECT ROUND AND SHALL BE MEASURED WITH A DIAMETER MEASUREMENT TAPE.