

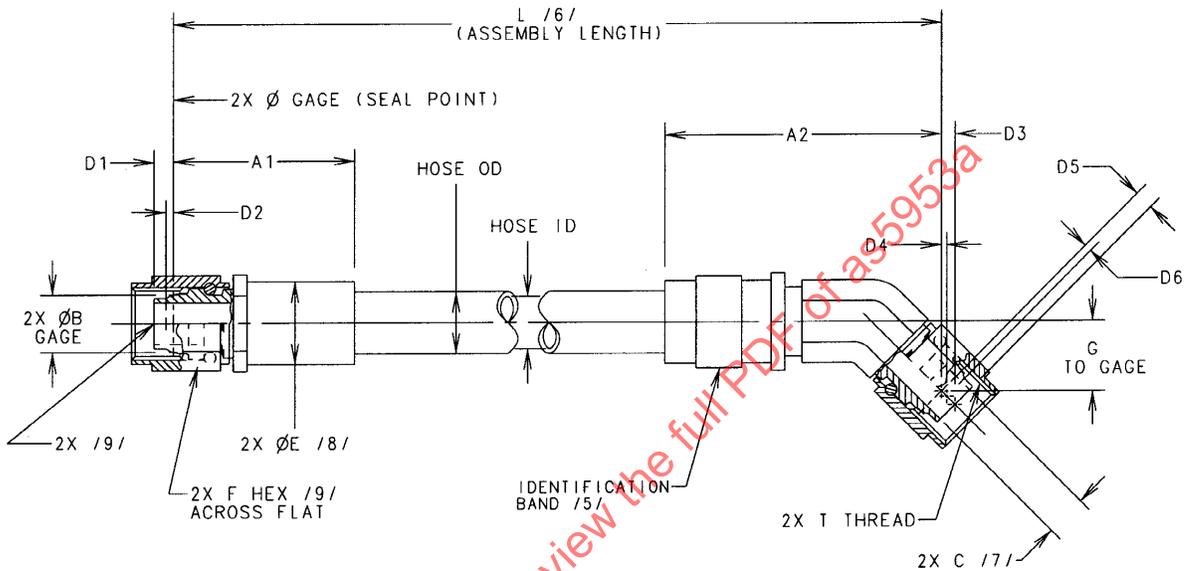
REV.  
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AS5953

FEDERAL SUPPLY CLASS  
4720

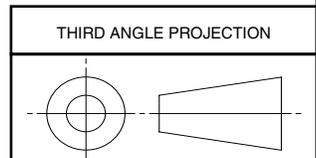
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FIGURE 1 - FLARELESS HOSE ASSEMBLY, STRAIGHT TO 45° ELBOW



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, STRAIGHT TO 45°

**AS5953**  
SHEET 1 OF 6

**REV.  
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ISSUED 2004-12 REVISED 2005-08

TABLE 1 - HOSE AND FITTING DIMENSIONS

BASIC HOSE ASSEMBLY NO. AS5953	SIZE CODE	SIZE	/14/ FITTING TYPE	REF THREAD T PER AS8879	HOSE ID		REF B GAGE BASIC DIA.	C /7/ FITTING DIA. MIN.	REF /9/ D1 & D5	REF /9/ D2 & D6	REF /9/ D3	REF /9/ D4	E MAX	REF F HEX	G1 MIN	G1 MAX	STRAIGHT FITTING		ELBOW FITTING	
					MIN	MAX											BALL SIZE MIN	BALL SIZE THRU /7/ IN	BALL SIZE MIN	BALL SIZE THRU /7/ IN
E	.250																			
E	.250	S		.4375-28UNJEF-3B	.212	1.92	2.33	.2930	.16	.055	.11	.038	.58	.56	.328	.458	.120	.120	.113	.113
E	.250	E		.5625-24UNJEF-3B	.212	2.02	2.37	.4120	.16	.055	.11	.038	.58	.69	.368	.498	.120	.120	.113	.113
G	.375	R		.4375-28UNJEF-3B	.298	2.12	2.51	.2930	.16	.055	.11	.038	.75	.56	.328	.458	.120	.120	.113	.113
G	.375	S		.5625-24UNJEF-3B	.298	2.16	2.55	.4120	.16	.055	.11	.038	.75	.69	.368	.498	.203	.203	.192	.192
G	.375	E		.7500-20UNJEF-3B	.298	2.29	2.68	.5600	.19	.066	.12	.038	.75	.88	.487	.617	.203	.203	.192	.192
H	.500	R		.5625-24UNJEF-3B	.391	2.38	2.81	.4120	.16	.055	.11	.046	.88	.69	.368	.498	.203	.203	.192	.192
H	.500	S		.7500-20UNJEF-3B	.391	2.51	2.92	.5600	.19	.066	.12	.046	.88	.88	.487	.617	.297	.297	.281	.281
H	.500	E		.8750-20UNJEF-3B	.391	2.58	2.94	.6730	.20	.066	.14	.046	.88	1.00	.500	.630	.297	.297	.281	.281
J	.625	R		.7500-20UNJEF-3B	.485	3.02	3.47	.5600	.19	.066	.12	.046	1.00	.88	.487	.617	.297	.297	.281	.281
J	.625	S		.8750-20UNJEF-3B	.485	3.09	3.53	.6730	.20	.066	.14	.046	1.00	1.00	.500	.630	.369	.369	.349	.349
J	.625	E		1.0625-18UNJEF-3B	.485	3.34	3.63	.8100	.23	.066	.16	.046	1.00	1.25	.586	.786	.369	.369	.349	.349
K	.750	R		.8750-20UNJEF-3B	.602	3.90	4.37	.6730	.20	.066	.14	.046	1.30	1.00	.500	.630	.369	.369	.349	.349
K	.750	S		1.0625-18UNJEF-3B	.602	3.96	4.50	.8100	.23	.066	.16	.046	1.30	1.25	.586	.786	.459	.459	.434	.434
K	.750	E		1.3125-16UNJ-3B	.602	4.07	4.54	1.0620	.30	.066	.21	.046	1.30	1.50	.631	.831	.459	.459	.434	.434
M	1.000	R		1.0625-18UNJEF-3B	.852	4.36	5.29	.8100	.23	.066	.16	.046	1.70	1.25	.586	.786	.459	.459	.434	.434
M	1.000	S		1.3125-16UNJ-3B	.852	4.48	5.33	1.0620	.30	.066	.21	.046	1.70	1.50	.631	.831	.675	.675	.638	.638
M	1.000	E																		

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
			420-590	.525-.760	.750-.925	.870-.985	.980-1.180	1.264-1.580	
-	(-) INDICATES HOSE ONLY NO SLEEVE (REF)	275	.250	.375	.500	.625	.750	1.000	
G	FIRE SLEEVE (AS1072 SIL-FG) (5 MIN) /11/ /12/ /13/	275	.97	1.15	1.38	1.5	1.75	2.00	
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%

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TABLE 4 - WEIGHTS /19/

HOSE OR SLEEVE CODE	HOSE, PART OR SLEEVE	UNITS	SIZE .250	SIZE .375	SIZE .500	SIZE .625	SIZE .750	SIZE 1.000
-	HOSE ONLY	LB/IN	.010	.014	.020	.033	.032	.055
G	FIRESLEEVE AS1072 (5 min PER AS1055)	LB/IN	.016	.019	.028	.029	.037	.041
F	PROTECTIVE SLEEVE, SHRINK-ON (POLYOLEFIN AS1073, CODE B) /18/	LB/IN	.002	.003	.003	.003	.005	.007
NONE	FIRESLEEVE CLAMP	LB/EA	.019	.019	.019	.024	.024	.020
NONE	FITTING END (STRAIGHT) /14/ R	LB/EA	---	.091	.137	.221	.539	1.038
	S	LB/EA	.057	.102	.162	.247	.592	1.084
	E	LB/EA	.068	.127	.188	.300	.638	---
NONE	FITTING END (45°) /14/ R	LB/EA	---	.112	.165	.261	.633	1.230
	S	LB/EA	.069	.123	.189	.266	.684	1.273
	E	LB/EA	.091	.155	.230	.406	.849	

## NOTES:

## 1. MATERIALS:

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

/2/ PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE ASSEMBLED BY AN ACCREDITED MANUFACTURER OR ASSEMBLING DISTRIBUTOR LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST FOR PRI-QPL-AS5951 FOR THIS STANDARD. SEE <http://www.pri.sae.org/QPL/AS5951.pdf> FOR CURRENT QPL ONLINE. NOTE THAT MANUFACTURERS AND ASSEMBLING DISTRIBUTORS ARE ACCREDITED BY PART NUMBER, SIZE AND MATERIAL ON THE PRI-QPL-AS5951.

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.