

REV.
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AS5952

FEDERAL SUPPLY CLASS
4720

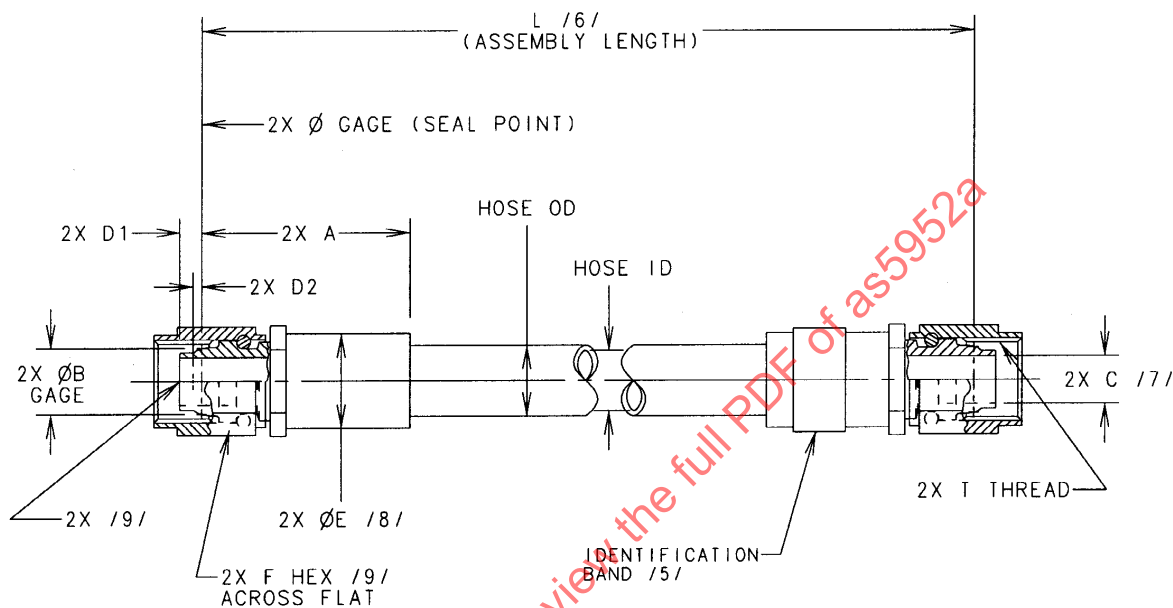
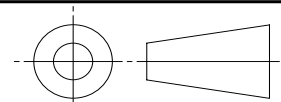


FIGURE 1 - FLARELESS HOSE ASSEMBLY, STRAIGHT TO STRAIGHT



THIRD ANGLE PROJECTION



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 STRAIGHT

AS5952
SHEET 1 OF 6

**REV.
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TABLE 1 - HOSE AND FITTING DIMENSIONS

BASIC HOSE ASSEMBLY NO. AS5952 SIZE CODE	/14/ FITTING TYPE	SIZE	REF THREAD T PER AS8879	HOSE ID MIN	A MAX	REF Φ B GAGE BASIC	C /7/ FITTING DIA. MIN.	REF /9/ D1	REF /9/ D2	Φ E /8/ MAX	REF F HEX	BALL SIZE MIN THRU 7/ IN
E	--	.250	--	--	--	--	--	--	--	--	--	--
E	S	.250	.4375-28UNJEF-3B	.212	1.92	.2930	.133	.16	.055	.58	.56	.120
E	E	.250	.5625-24UNJEF-3B	.212	2.02	.4120	.133	.16	.055	.58	.69	.120
G	R	.375	.4375-28UNJEF-3B	.298	2.12	.2930	.133	.16	.055	.75	.56	.120
G	S	.375	.5625-24UNJEF-3B	.298	2.16	.4120	.226	.16	.055	.75	.69	.203
G	E	.375	.7500-20UNJEF-3B	.298	2.29	.5600	.226	.19	.066	.75	.88	.203
H	R	.500	.5625-24UNJEF-3B	.391	2.38	.4120	.226	.16	.055	.88	.69	.203
H	S	.500	.7500-20UNJEF-3B	.391	2.51	.5600	.330	.19	.066	.88	.88	.297
H	E	.500	.8750-20UNJEF-3B	.391	2.58	.6730	.330	.20	.066	.88	1.00	.297
J	R	.625	.7500-20UNJEF-3B	.485	3.02	.5600	.330	.19	.066	1.00	.88	.297
J	S	.625	.8750-20UNJEF-3B	.485	3.09	.6730	.410	.20	.066	1.00	1.00	.369
J	E	.625	1.0625-18UNJEF-3B	.485	3.34	.8100	.410	.23	.066	1.00	1.25	.369
K	R	.750	.8750-20UNJEF-3B	.602	3.90	.6730	.410	.20	.066	1.30	1.00	.369
K	S	.750	1.0625-18UNJEF-3B	.602	3.96	.8100	.510	.23	.066	1.30	1.25	.459
K	E	.750	1.3125-16UNJ-3B	.602	4.07	1.0620	.510	.30	.066	1.30	1.50	.459
M	R	1.000	1.0625-18UNJEF-3B	.852	4.36	.8100	.510	.23	.066	1.70	1.25	.459
M	S	1.000	1.3125-16UNJ-3B	.852	4.48	1.0620	.750	.30	.066	1.70	1.50	.675
M	E	1.000	--	--	--	--	--	--	--	--	--	--

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

SLEEVE CODE	SLEEVE MATERIAL	TEMP LIMIT °F	SIZE					
			275	.420-.590	.525-.760	.750-.925	.870-.985	.980-1.180
-	(-) INDICATES HOSE ONLY NO SLEEVE (REF)							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	2.00
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%

TABLE 4 - WEIGHT /19/

HOSE OR SLEEVE CODE	HOSE, PART OR SLEEVE	SIZE					
		UNITS	.250	.375	.500	.625	.750
-	HOSE ONLY	LB/IN	.010	.014	.020	.023	.032
G	FIRE SLEEVE AS1072 (5 min PER AS1055)	LB/IN	.016	.019	.028	.029	.037
F	PROTECTIVE SLEEVE, SHRINK-ON (POLYOLEFIN AS1073, CODE B) /18/	LB/IN	.002	.003	.003	.003	.005
NONE	FIRE SLEEVE CLAMP	LB/EA	.019	.019	.019	.024	.028
NONE	FITTING END (STRAIGHT) /14/R	LB/EA	---	.091	.137	.221	.539
	S	LB/EA	.057	.102	.162	.247	.592
	E	LB/EA	.068	.127	.188	.300	.638

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.

/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 TWO TIMES "D1" FOR NAS1760 END STYLES OR TWO TIMES D2 FOR AS4458 GLOBE SEAL END STYLES TO LENGTH "L".

/7/ HOSE ASSEMBLY 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. DIMENSION D1 APPLIES TO NAS1760 AND D2 APPLIES TO AS4458. FITTINGS SHALL MATE WITH EN6123 OR AS5827. COUPLING NUTS SHALL BE FUNCTIONAL EQUIVALENT TO AS4370 EXCEPT FOR THREAD AND WIRE GROOVE. THREADS AND WIRE GROOVE IN NUT, RETAINER WIRE AND FITTING END WIRE GROOVE SHALL BE COATED WITH AS5272 TYPE 1 SOLID FILM LUBRICANT.