

AS4501

FEDERAL SUPPLY CLASS

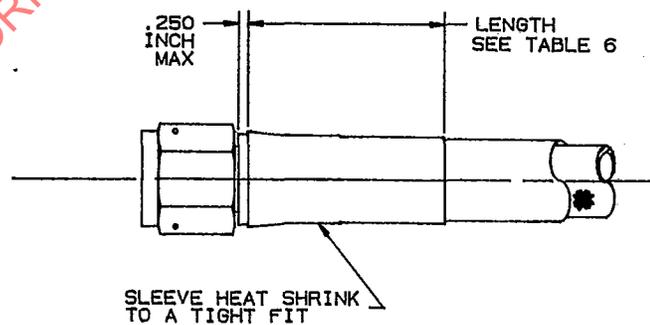
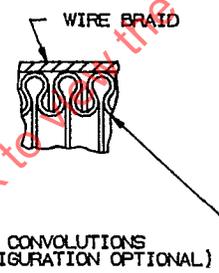
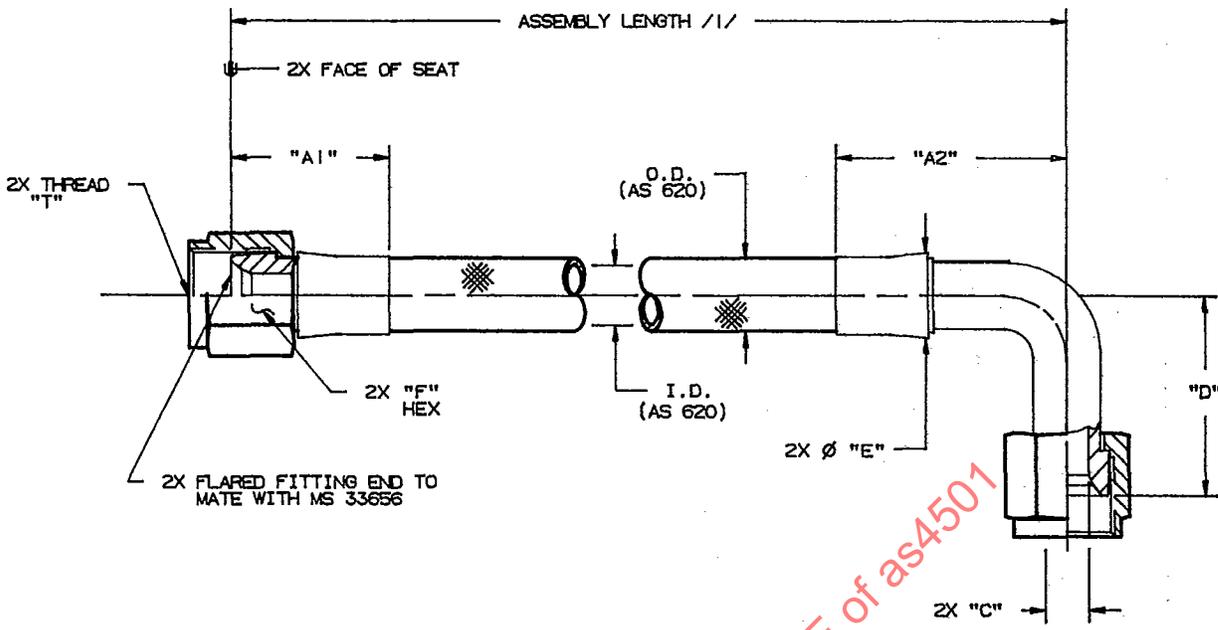


FIGURE 2

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AEROSPACE STANDARD
HOSE ASSEMBLY, CONVOLUTED,
POLYTETRAFLUOROETHYLENE, CONDUCTIVE,
MEDIUM PRESSURE, FLARED, STRAIGHT TO 90°, AS620

AS4501
SHEET 1 OF 5

ISSUED 12-30-91 REVISED

AS4501

TABLE 1

HOSE ASSEMBLY NO. AND SIZE CODE	HOSE ASSEMBLY SIZE (REF)	THREAD T PER MIL-S-8879 REF	ID MIN (REF)	A ₁ MAX	A ₂ MAX	C /4/ DRILL DIA MIN (REF)	D MIN	D MAX	E /5/ DIA MAX WITHOUT SLEEVING (REF)	F HEX (REF)
AS4501-04	1/4	.4375-20UNJF-3B	.270	1.05	1.24	.132	.607	.677	.55	.56
AS4501-06	3/8	.5625-18UNJF-3B	.355	1.28	1.56	.256	.855	.925	.65	.69
AS4501-08	1/2	.7500-16UNJF-3B	.510	1.44	1.85	.345	1.072	1.142	.86	.88
AS4501-10	5/8	.8750-14UNJF-3B	.600	1.58	2.00	.430	1.246	1.316	.95	1.00
AS4501-12	3/4	1.0625-12UNJ-3B	.765	1.74	2.53	.635	1.370	1.440	1.28	1.25
AS4501-16	1	1.3125-12UNJ-3B	.980	1.79	2.87	.835	1.673	1.743	1.47	1.50
AS4501-20	1-1/4	1.6250-12UNJ-3B	1.220	2.29	3.39	1.085	2.015	2.085	1.70	2.00
AS4501-24	1-1/2	1.8750-12UNJ-3B	1.480	2.38	3.65	1.310	2.335	2.405	2.00	2.25

TABLE 2 (REF)

HOSE ASSEMBLY LENGTH	AVAILABLE INCREMENTS	TOLERANCE
UNDER 18 in	(NOT LESS THAN) .125 in	±.125 in
18 TO 36 in	(NOT LESS THAN) .250 in	±.250 in
36 TO 50 in	(NOT LESS THAN) .500 in	±.500 in
OVER 50 in	(NOT LESS THAN) 1.000 in	±1%

AS4501

TABLE 3

HOSE OR COVER CODE	HOSE OR TYPE OF PROTECTIVE COVER	HOSE OR COVER O.D. HOSE SIZE -04		HOSE OR COVER O.D. HOSE SIZE -06		HOSE OR COVER O.D. HOSE SIZE -08		HOSE OR COVER O.D. HOSE SIZE -10		HOSE OR COVER O.D. HOSE SIZE -12		HOSE OR COVER O.D. HOSE SIZE -16		HOSE OR COVER O.D. HOSE SIZE -24		UPPER TEMP. LIMIT °F
		HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE	HOSE OR COVER O.D. HOSE SIZE		
NONE (REF)	HOSE ONLY PER AS620 /5/	.505	.615	.825	.935	1.140	1.330	1.630	1.890	2.000	2.130	2.130	2.130	2.130	2.130	275
B (REF)	SPIRAL ABRASION /2/	.760	.830	1.010	1.170	1.360	1.510	1.750	1.870	1.870	1.870	1.870	1.870	1.870	1.870	400
H ± .032	INTEGRAL FRESLEEVE	.760	.870	1.030	1.130	1.370	1.630	1.870	1.870	1.870	1.870	1.870	1.870	1.870	1.870	400
N (REF)	FRESLEEVE SIL/FG	.500	.630	.840	.920	1.135	1.345	1.600	1.870	1.870	1.870	1.870	1.870	1.870	1.870	400
K ± .032	/8/ /5/ (AS1072) INTEGRAL ABRASION /3/ (BRAIDED POLYESTER)	.500	.630	.840	.920	1.135	1.345	1.600	1.870	1.870	1.870	1.870	1.870	1.870	1.870	300

TABLE 4 - PHYSICAL REQUIREMENTS OF HOSE ASSEMBLIES (REF)

HOSE SIZE (REF)	OPERATING PRESSURE MAX PSI	PROOF PRESSURE MIN PSI	BURST PRESSURES		BURST PRESSURES HIGH TEMP MIN PSI	BEND RADIUS AT INSIDE OF BEND INCHES (HOSE ONLY)
			ROOM TEMP MIN PSI	TEMP MIN PSI		
-04	1000	2000	4000	2800	2800	1.25
-06	1000	2000	4000	2800	2800	2.25
-08	1000	2000	4000	2800	2800	2.88
-10	1000	1800	3600	2500	2500	3.00
-12	1000	1800	3600	2500	2500	3.75
-16	1000	1800	3600	2500	2500	5.00
-20	1000	1800	3600	2500	2500	6.25
-24	750	1500	3000	2100	2100	7.50

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AS4501

SHEET 3 OF 5

AS4501

TABLE 5 - NOMINAL WEIGHTS

HOSE SIZE (REF)	HOSE ONLY LB-IN (REF)	HOSE WITH SLEEVING LB-IN SPIRAL ABRASION CODE B	HOSE WITH SLEEVING LB-IN INTEGRAL FIRESLEEVE CODE H	HOSE WITH SLEEVING LB-IN TUBULAR FIRESLEEVE CODE N	HOSE WITH SLEEVING LB-IN POLYEST. ABRASION CODE K	STR END FITTING LB EACH	90° END FITTING LB EACH	HOSE LENGTH CORRECTION FACTOR-IN // STR	HOSE LENGTH CORRECTION FACTOR-IN // 90°
-04	.007	.010	--	.017	.008	.06	.06	.45	.61
-06	.010	.014	--	.021	.012	.10	.12	.57	.82
-08	.015	.020	.032	.030	.018	.16	.19	.72	1.10
-10	.020	.025	.042	.035	.022	.25	.30	.72	1.10
-12	.025	.030	.050	.042	.026	.34	.42	.71	1.48
-16	.030	.036	.055	.054	.035	.49	.66	.78	1.84
-20	.050	.060	.070	.077	.045	.90	1.00	.94	2.01
-24	.060	.071	.082	.107	.058	1.28	1.41	.94	2.28

TABLE 6

HOSE SIZE (REF)	LENGTH (in)
-04/-06	2.00 ± .25
-08/-10	2.50 ± .25
-12/-16	3.00 ± .25
-20/-24	3.50 ± .25

TABLE 7 (REF)
SPHERICAL BALL SIZE FOR DETERMINING MINIMUM I.D. /4/

HOSE SIZE (REF)	STRAIGHT END FITTING MS19059-DASH NO.	STRAIGHT END FITTING DIA IN	ELBOW END FITTING MS19059-DASH NO.	ELBOW END FITTING DIA IN
-04	1008	.125	1006	.094
-06	1014	.250	1013	.219
-08	1017	.344	1015	.281
-10	1019	.406	1018	.375
-12	1626	.625	1624	.562
-16	1632	.812	1631	.781
-20	1639	1.062	1638	1.001
-24	--	1.281	1642	1.250

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SHEET 4 OF 5