

REV.
A

AS5978

RATIONALE

ADDED BLUE COLOR CODE /13/ TO THE NUT, -20 SIZE, REVISED THE FIGURE, TABLE HEADERS, NOTES 1, 3, 4, 8 AND DELETED PREVIOUS NOTE 10.

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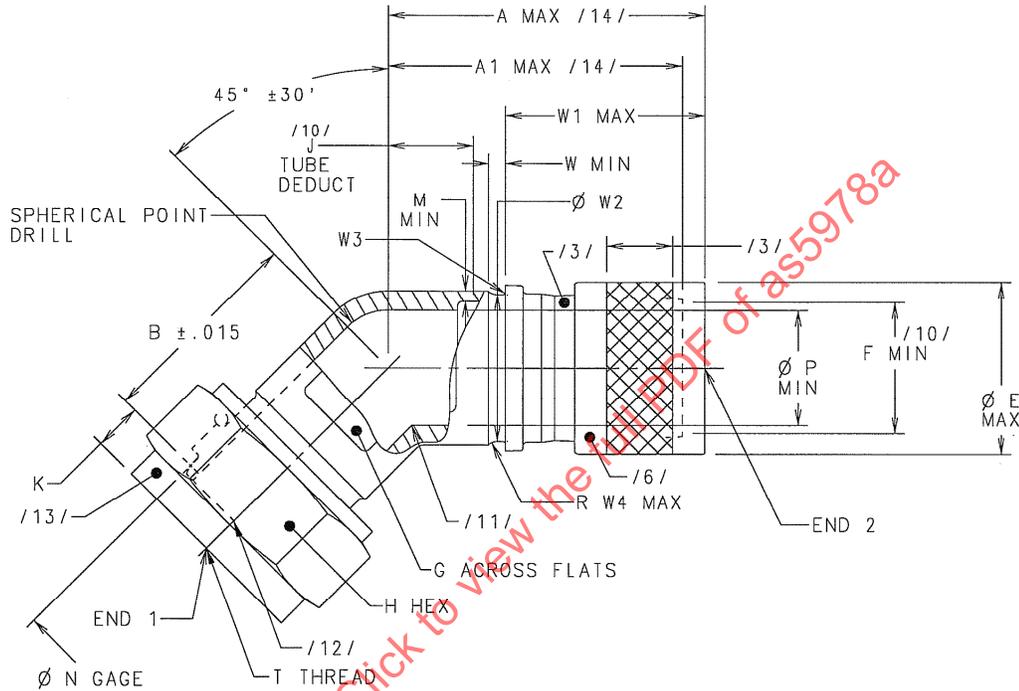
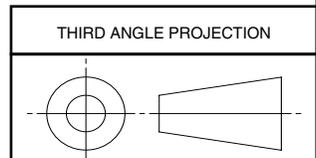


FIGURE 1 - ADAPTER, 45°, SWAGE

(SEE TABLE 1A AND 1B FOR DIMENSIONAL INFORMATION)



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: AS5958 /4/

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) FITTING ASSEMBLY, 45°, FEMALE
FLARELESS, AXIALLY SWAGED,
HYDRAULIC, 5080 PSI

AS5978
SHEET 1 OF 4

**REV.
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TABLE 1A - DIMENSIONS A THROUGH K

BASIC NO. AS5978 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	A MAX.	A1 MAX.	B +/- .015	E MAX.	F MIN.	G	(H)	J /10/ TUBE DEDUCT	K MAX.	
0404	.2500	.2500	.934	.847	.898	.466	.253	.348- .380	.563	.352	+/- .150	.325
0604	.3750	.2500	1.013	.926	1.055	.466	.253	.477- .509	.688	.431	+/- .150	.337
0406	.2500	.3750	1.230	1.114	.977	.609	.378	.477- .509	.563	.431	+/- .150	.325
0606	.3750	.3750	1.230	1.114	1.055	.609	.378	.477- .509	.688	.431	+/- .150	.337
0806	.5000	.3750	1.269	1.153	1.208	.609	.378	.615- .647	.875	.470	+/- .150	.380
0608	.3750	.5000	1.477	1.331	1.097	.783	.504	.615- .647	.688	.478	+/- .175	.337
0808	.5000	.5000	1.477	1.331	1.208	.783	.504	.615- .647	.875	.478	+/- .175	.380
1008	.6250	.5000	1.556	1.410	1.412	.783	.504	.751- .783	1.000	.557	+/- .175	.407
0810	.5000	.6250	1.850	1.646	1.287	.939	.629	.751- .783	.875	.557	+/- .175	.380
1010	.6250	.6250	1.850	1.646	1.412	.939	.629	.751- .783	1.000	.557	+/- .175	.407
1210	.7500	.6250	1.929	1.725	1.538	.939	.629	.893- .925	1.250	.636	+/- .175	.433
1012	.6250	.7500	2.080	1.875	1.491	1.122	.754	.893- .925	1.000	.643	+/- .175	.407
1212	.7500	.7500	2.080	1.875	1.538	1.122	.754	.893- .925	1.250	.643	+/- .175	.433
1612	1.0000	.7500	2.198	1.993	1.766	1.122	.754	1.181-1.213	1.500	.761	+/- .175	.437
1216	.7500	1.0000	2.496	2.282	1.656	1.495	1.004	1.181-1.213	1.250	.768	+/- .200	.433
1616	1.0000	1.0000	2.496	2.282	1.766	1.495	1.004	1.181-1.213	1.500	.768	+/- .200	.437
1620	1.0000	1.2500	2.965	2.741	1.943	1.758	1.255	1.609-1.641	1.500	.954	+/- .200	.437
2020	1.2500	1.2500	2.965	2.741	2.036	1.758	1.255	1.609-1.641	2.000	.954	+/- .200	.460

TABLE 1B - DIMENSIONS M THROUGH W4 AND WEIGHTS

BASIC NO. AS5978 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	M MIN.	N GAGE	P MIN.	T THREAD PER AS8879	W MIN.	W1 MAX.	W2 ±.0015	W3 MAX.	W4 MAX.	WEIGHT LB/EA APP. REF.
0404	.2500	.2500	.043	.2930	.198	.4375-28UNJEF-3B	.123	.488	.3005	.018	.065	.036
0604	.3750	.2500	.045	.4160	.198	.5625-24UNJEF-3B	.123	.488	.3005	.018	.065	.058
0406	.2500	.3750	.045	.2930	.302	.4375-28UNJEF-3B	.153	.675	.4475	.033	.065	.045
0606	.3750	.3750	.045	.4160	.302	.5625-24UNJEF-3B	.153	.675	.4475	.033	.065	.066
0806	.5000	.3750	.052	.5600	.302	.7500-20UNJEF-3B	.153	.675	.4475	.033	.065	.106
0608	.3750	.5000	.052	.4160	.401	.5625-24UNJEF-3B	.165	.871	.5945	.033	.129	.083
0808	.5000	.5000	.052	.5600	.401	.7500-20UNJEF-3B	.165	.871	.5945	.033	.129	.121
1008	.6250	.5000	.057	.6860	.401	.8750-20UNJEF-3B	.165	.871	.5945	.033	.129	.153
0810	.5000	.6250	.057	.5600	.507	.7500-20UNJEF-3B	.140	1.190	.7365	.021	.078	.144
1010	.6250	.6250	.057	.6860	.507	.8750-20UNJEF-3B	.140	1.190	.7365	.021	.078	.173
1210	.7500	.6250	.065	.8100	.507	1.0625-18UNJEF-3B	.140	1.190	.7365	.021	.078	.276
1012	.6250	.7500	.065	.6860	.604	.8750-20UNJEF-3B	.154	1.327	.8805	.024	.089	.255
1212	.7500	.7500	.065	.8100	.604	1.0625-18UNJEF-3B	.154	1.327	.8805	.024	.089	.272
1612	1.0000	.7500	.084	1.0620	.604	1.3125-16UNJ-3B	.154	1.327	.8805	.024	.089	.471
1216	.7500	1.0000	.084	.8100	.802	1.0625-18UNJEF-3B	.167	1.612	1.1725	.027	.099	.370
1616	1.0000	1.0000	.084	1.0620	.802	1.3125-16UNJ-3B	.167	1.612	1.1725	.027	.099	.480
1620	1.0000	1.2500	.174	1.0620	1.011	1.3125-16UNJ-3B	.185	1.886	1.4345	.030	.113	.640
2020	1.2500	1.2500	.174	1.3160	1.011	1.6250-16UNJ-3B	.185	1.886	1.4345	.030	.113	.798

NOTES:

/1/ MATERIALS:

CODE LETTER "T"

RING - AMS 4965 TITANIUM ALLOY, 6.0Al 4.0V SOLUTION HEAT TREATED AND AGED OR AMS 4928 TITANIUM ALLOY 6.0Al 4.0V ANNEALED WITH HIGH STRENGTH CARBON FIBER/EPOXY RESIN COMPOSITE REINFORCEMENT.

BODY - AMS 4928 TITANIUM ALLOY, 6.0Al 4.0V ANNEALED

NUT - AMS 4965 TITANIUM ALLOY, 6.0Al 4.0V SOLUTION TREATED

WIRE - AMS 5637 STEEL, CORROSION RESISTANT, 18Cr - 9.0Ni (UNS 30302) SOLUTION TREATED AND COLD DRAWN 125 ksi TENSILE STRENGTH

- AMS 5685 STEEL, CORROSION RESISTANT, SAFETY WIRE 18Cr - 11.5Ni, 305 WIRE, SOLUTION TREATED, COLD FINISHED

- ASTM A 580 STEEL, CORROSION RESISTANT, WIRE, 302 OR 305 CONDITION A

2. FINISH:

TITANIUM - NONE REQUIRED

CRES - PASSIVATION PER AMS 2700, TYPE 6 or 7.

/3/ COATINGS/LUBRICANTS:

RING - THE OUTER SURFACE SHALL HAVE A .125 in MINIMUM WIDTH BLUE COLORED RING OR COMPLETELY COLORED BLUE TO INDICATE 5080 psi MAXIMUM OPERATION PRESSURE. AN AS1241 FLUID RESISTANT PTFE COATING OR PAINT MUST BE USED.

BODY - SOLID FILM LUBRICANT PER AS5272, TYPE I OR II, PTFE OR PETROLEUM-BASED LUBRICANT MAY BE APPLIED TO PORTIONS OF THE ID AND OD. THE PETROLEUM-BASED LUBRICANT AND OR AS5272 LUBRICANT SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

NUT - LUBRICATE ID THREADS AND WIRE GROOVE LOAD BEARING SHOULDER OR MATING WIRE GROOVE LOAD BEARING SHOULDER WITH SOLID FILM LUBRICANT PER AS5272, TYPE 1 OR TYPE 2.

/4/ PRODUCT SPECIFICATION: AS5958 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED AND ASSEMBLED BY AN ACCREDITED MANUFACTURER OR ASSEMBLED BY AN ACCREDITED ASSEMBLING DISTRIBUTOR LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS5958 FOR THIS STANDARD. See www.eauditnet.com FOR THE CURRENT QPL ON-LINE.

5. DIMENSIONS AND TOLERANCES NOT DEFINED ON THIS STANDARD SHALL BE SPECIFIED AND CONTROLLED BY THE MANUFACTURER. THE MANUFACTURER IS RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PROCUREMENT SPECIFICATION.

/6/ IDENTIFICATION SHALL BE IN ACCORDANCE WITH AS5958 AND SHALL BE IDENTIFIED ON RING IN THE AREA SHOWN.

7. FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH AS5959.

8. SURFACE TEXTURE SHALL BE IN ACCORDANCE WITH AMERICAN SOCIETY OF MECHANICAL ENGINEERS, ASME Y14.1 AND THE SYMBOLS IN ACCORDANCE WITH ASME 14.36M. UNLESS OTHERWISE SPECIFIED, THE MAXIMUM MACHINED SURFACES SHALL BE 125 µin Ra AND THE FORGED SURFACES SHALL BE 250 µin Ra.

 An SAE International Group	AEROSPACE STANDARD	AS5978 SHEET 3 OF 4	REV. A
	(R) FITTING ASSEMBLY, 45°, FEMALE FLARELESS, AXIALLY SWAGED, HYDRAULIC, 5080 PSI		