

RATIONALE

AS631C HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

REV.  
C

SAE AS631

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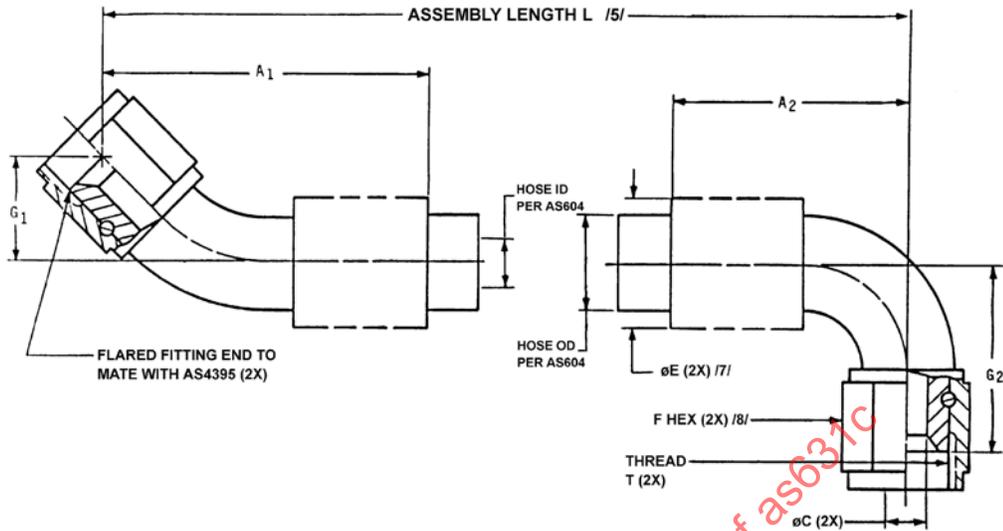


FIGURE 1 - HOSE AND FITTING DIMENSIONS

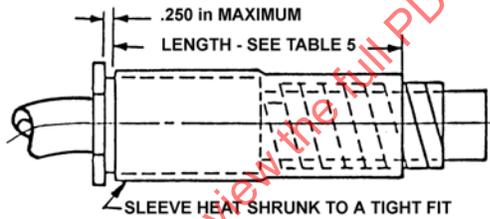


FIGURE 2 - TUBULAR/COIL ABRASION END /9/ /10/

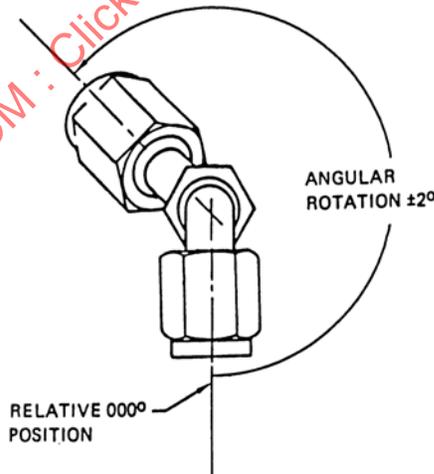
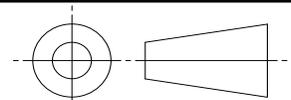


FIGURE 3 - FITTING ANGULAR ORIENTATION /18/

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THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: AS604 /2/

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

HOSE ASSEMBLY, 3000 psi, PTFE, FLARED, 45° TO 90°, HEAVYWEIGHT

**SAE AS631**  
SHEET 1 OF 6

**REV. C**

TABLE 1 - ASSEMBLY DIMENSIONS

HOSE ASSEMBLY AS631 SIZE CODE	HOSE ASSEMBLY SIZE (REF)	THREAD T PER AS8879 (REF)	A <sub>1</sub> MAX	A <sub>2</sub> MAX	C /6/ MIN	E MAX WITHOUT SLEEVING	F HEX (REF)
E	.250	.4375-20 UNJF-3B	1.90	1.58	.135	.88	.56
G	.375	.5625-18 UNJF-3B	2.25	1.80	.240	1.00	.69
H	.500	.7500-16 UNJF-3B	2.65	2.40	.340	1.20	.88
J	.625	.8750-14 UNJF-3B	3.19	3.04	.410	1.41	1.00
K	.750	1.0625-12 UNJ-3B	3.56	3.35	.510	1.69	1.25
M	1.00	1.3125-12 UNJ-3B	4.35	4.26	.760	2.00	1.50
N	1.25	1.6250-12 UNJ-3B	4.50	4.50	.925	2.13	2.00

TABLE 1 (CONTINUED)

HOSE ASSEMBLY AS631 SIZE CODE	HOSE ASSEMBLY SIZE (REF)	G <sub>1</sub> MIN	G <sub>1</sub> MAX	G <sub>2</sub> MIN	G <sub>2</sub> MAX	INSPECTION BALL SIZE DIA IN
E	.250	.280	.450	.615	.740	.115
G	.375	.370	.565	.830	.920	.204
H	.500	.430	.645	.910	1.140	.289
J	.625	.510	.675	1.110	1.310	.349
K	.750	.590	.720	1.340	1.500	.434
M	1.00	.760	.820	1.805	1.865	.646
N	1.25	1.120	1.180	2.34	2.400	.786

TABLE 2 - HOSE OR SLEEVE OUTSIDE DIAMETER /13/

SLEEVE CODE	SLEEVE MATERIAL	TEMP. LIMIT °F	HOSE SIZE .250	HOSE SIZE .375	HOSE SIZE .500	HOSE SIZE .625	HOSE SIZE .750	HOSE SIZE 1.00	HOSE SIZE 1.25
NONE	(-) INDICATES HOSE ONLY, NO SLEEVE	400	.455 .395	.595 .535	.735 .675	.935 .875	1.090 1.030	1.410 1.350	1.650 1.590
A	ABRASION SLEEVE TUBULAR (TFE-AS1291-CODE B) /9/	400	.540 .468	.715 .635	.855 .770	1.025 .960	1.195 1.125	1.515 1.445	1.825 1.755
B	ABRASION SLEEVE COIL (NYLON AS1294) /10/	275	.509 .413	.684 .584	.809 .733	1.005 .923	1.170 1.088	1.492 1.408	1.750 1.690
C	FIRE SLEEVE (AS1072 SIL-FG) (15 min) /11/ /12/ /17/	400	.688 .562	.875 .750	1.000 .875	1.250 1.125	1.375 1.250	1.750 1.625	2.000 1.875
E	ABRASION SLEEVE SHRINK-ON (FEP) /15/	350	.458 .417	.638 .592	.773 .727	.973 .927	1.148 1.102	1.438 1.392	1.688 1.632
F	ABRASION SLEEVE SHRINK-ON (POLYOLEFIN AS1073 - CODE B) /15/	275	.490 .443	.670 .618	.795 .745	.997 .937	1.174 1.112	1.482 1.428	1.740 1.680
G	FIRE SLEEVE (AS1072 SIL-FG) (5 min) /11/ /12/ /16/	400	.688 .562	.875 .750	1.000 .875	1.250 1.125	1.375 1.250	1.750 1.625	2.000 1.875
H	FIRE SLEEVE INTEGRAL SILICONE (15 min) /17/	400	.700 .640	.880 .820	1.000 .940	1.203 1.143	1.343 1.283	1.656 1.596	1.906 1.846
J	FIRE SLEEVE INTEGRAL SILICONE (5 min) /16/	400	.705 .645	.880 .820	1.005 .945	1.217 1.143	1.382 1.280	1.748 1.593	1.906 1.846
K	INTEGRAL ABRASION SLEEVE (BRAIDED) POLYESTER /14/	300	.505 .480	.675 .645	.795 .765	.985 .955	1.150 1.120	1.470 1.440	1.720 1.680
L	ABRASION SLEEVE COIL (PTFE-AS1293) /10/	400	.522 .449	.692 .622	.817 .747	1.007 .937	1.172 1.102	1.492 1.422	1.750 1.690

TABLE 3 - ASSEMBLY LENGTH TOLERANCE

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 (NOMINAL)

HOSE OR SLEEVE CODE	HOSE OR TYPE SLEEVE	UNITS	HOSE SIZE						
			.250	.375	.500	.625	.750	1.00	1.25
NONE	HOSE ONLY	LB/IN	.012	.028	.040	.062	.086	.140	.154
A	ABRASION SLEEVE (TFE-AS1291-CODE B)	LB/IN	.003	.004	.004	.005	.007	.009	.011
B	ABRASION SLEEVE (NYLON AS1294)	LB/IN	.001	.002	.003	.003	.004	.005	.007
C	FIRESLEEVE (15 min) AS1072	LB/IN	.007	.010	.011	.015	.017	.021	.025
E	ABRASION SLEEVE (FEP)	LB/IN	.002	.003	.003	.005	.006	.007	.009
F	ABRASION SLEEVE (AS1073-CODE B)	LB/IN	.002	.003	.003	.004	.005	.006	.008
G	FIRESLEEVE (5 min) AS1072	LB/IN	.007	.010	.011	.015	.017	.021	.025
H	FIRESLEEVE INTEGRAL (15 min) ON HOSE	LB/IN	.022	.042	.056	.081	.102	.154	.190
J	FIRESLEEVE INTEGRAL (5 min) ON HOSE	LB/IN	.022	.042	.056	.081	.102	.154	.190
K	ABRASION SLEEVE POLYESTER WITH HOSE	LB/IN	.013	.028	.039	.060	.082	.130	.160
L	ABRASION SLEEVE (PTFE-AS1293)	LB/IN	.003	.004	.005	.005	.006	.007	.009
NONE	FIRESLEEVE CLAMP (*)	LB/EA	.020	.020	.025	.026	.026	.033	.038
NONE	FITTING END (45°) (*)	LB/EA	.075	.135	.220	.306	.584	.820	1.510
NONE	FITTING END (90°) (*)	LB/EA	.075	.140	.230	.315	.584	.840	1.630

(\*) NOTE: FIRESLEEVE CLAMP AND FITTING END ARE IN POUNDS EACH.

TABLE 5 - SLEEVE LENGTH

HOSE SIZE	LENGTH (INCHES)
.250	2.00 ± .25
.375	
.500	2.50 ± .25
.625	
.750	3.00 ± .25
1.00	
1.25	3.50 ± .25