

ADOPTION NOTICE

SAE-AS622, "HOSE ASSEMBLY, 3000 PSI, TFE, FLARELESS, STRAIGHT TO 45 DEG., HEAVYWEIGHT", was adopted on 20-JUN-86 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Defense Supply Center Columbus, P.O. Box 3990, Attn: DSCC-VAI, Columbus, OH 43216-5000. Copies of this document may be purchased from the Society of Automotive Engineers 400 Commonwealth Drive Warrendale, Pennsylvania, United States, 15096-0001. <http://www.sae.org/>

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FSC 4720

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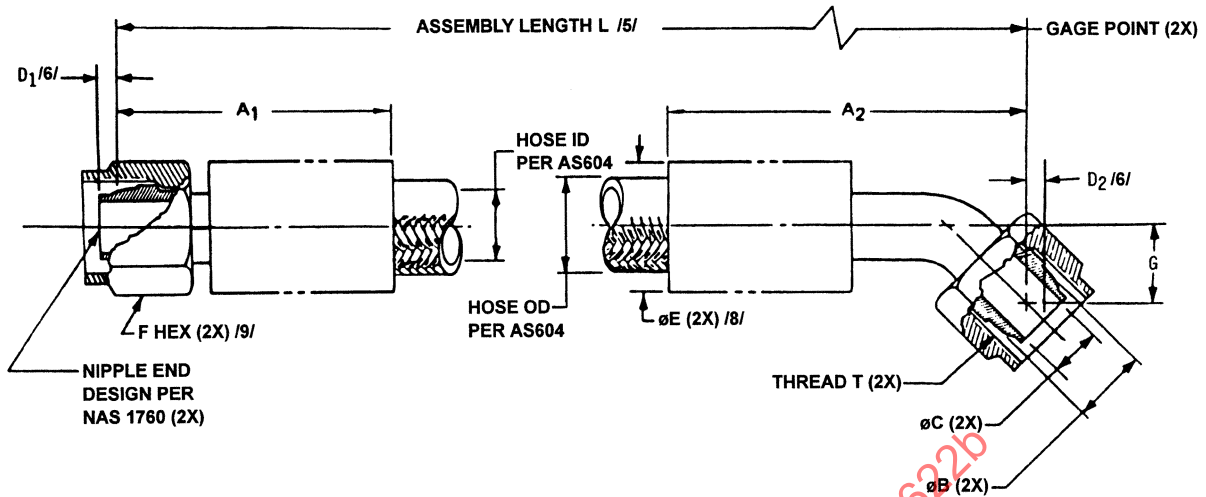


FIGURE 1 - HOSE AND FITTING DIMENSIONS

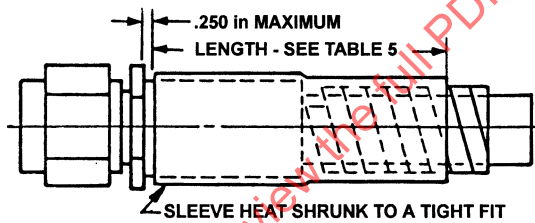


FIGURE 2 - TUBULAR/COIL ABRASION END /10/ /11/

TABLE 1 - ASSEMBLY DIMENSIONS

HOSE ASSEMBLY AS622 SIZE CODE	HOSE ASSEMBLY SIZE (REF)	THREAD T PER AS8879 (REF)	A ₁ MAX	A ₂ MAX	B GAGE BASIC	C /7/ MIN	D ₁ (REF)	D ₂ (REF)	E MAX WITHOUT SLEEVING	F HEX (REF)
04	.250	.4375-20 UNJF-3B	1.56	2.17	.2930	.135	.16	.11	.88	.56
06	.375	.5625-18 UNJF-3B	1.80	2.68	.4120	.240	.16	.12	1.00	.69
08	.500	.7500-16 UNJF-3B	2.06	3.11	.5600	.340	.19	.13	1.20	.88
10	.625	.8750-14 UNJF-3B	2.44	3.59	.6730	.410	.20	.14	1.41	1.00
12	.750	1.0625-12 UNJ-3B	2.56	3.67	.8100	.510	.23	.16	1.69	1.25
16	1.00	1.3125-12 UNJ-3B	3.00	4.44	1.0620	.760	.30	.21	2.00	1.50
20	1.25	1.6250-12 UNJ-3B	3.00	4.65	1.3160	.925	.30	.21	2.13	2.00

CUSTODIAN: SAE G-3/G-3D

PROCUREMENT SPECIFICATION: AS604 /2/

SAE The Engineering Society
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400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

(R) HOSE ASSEMBLY, 3000 psi, PTFE, FLARELESS,
STRAIGHT TO 45°, HEAVYWEIGHT

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SHEET 1 OF 5

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TABLE 1 (CONTINUED)

HOSE ASSEMBLY AS622 SIZE CODE	HOSE ASSEMBLY SIZE (REF)	G MIN	G MAX	INSPECTION BALL SIZE /7/ STRAIGHT END FITTING DIA IN	INSPECTION BALL SIZE /7/ ELBOW END FITTING DIA IN
04	.250	.31	.50	.122	.115
06	.375	.44	.62	.216	.204
08	.500	.50	.75	.306	.289
10	.625	.56	.81	.369	.349
12	.750	.62	.88	.459	.434
16	1.00	.81	1.09	.684	.646
20	1.25	1.24	1.31	.833	.786

TABLE 2 - HOSE OR SLEEVE OUTSIDE DIAMETER /14/

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) /10/	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) /11/	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) /12/ /13/ /18/	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) /16/	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) /16/	275	.490 .440	.670 .610	.795 .745	.997 .937	1.174 1.112	1.482 1.428	1.740 1.680
G	FIRE SLEEVE (AS1072 SIL-FG) (5 min) /12/ /13/ /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
H	FIRE SLEEVE INTEGRAL SILICONE (15 min) /18/	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) /17/	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 /15/	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) /11/	400	.522 .449	.692 .622	.817 .747	1.007 .937	1.172 1.102	1.492 1.422	1.750 1.690

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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	HOSE SIZE .375	HOSE SIZE .500	HOSE SIZE .625	HOSE SIZE .750	HOSE SIZE 1.00	HOSE SIZE 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	FIRESLLEEVE (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	FIRESLLEEVE (5 min) AS1072	LB/IN	.007	.010	.011	.015	.017	.021	.025
H	FIRESLLEEVE INTEGRAL (15 min) ON HOSE	LB/IN	.022	.042	.056	.081	.102	.154	.190
J	FIRESLLEEVE 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	FIRESLLEEVE CLAMP (*)	LB/EA	.020	.020	.025	.026	.026	.033	.038
NONE	FITTING END (STRAIGHT) (*)	LB/EA	.070	.117	.172	.266	.520	.713	1.400
NONE	FITTING END (45°) (*)	LB/EA	.078	.130	.221	.327	.597	.860	1.581

(*) NOTE: FIRESLLEEVE 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