

REV.  
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AS622™

FEDERAL SUPPLY CLASS  
4720

RATIONALE

ADD CONFIGURATION FOR A NEW "N" CODE THIN WALL INTEGRAL FIRESLEEVE (15 MINUTE); TABLE 2 DIMENSIONS CHANGED TO ALIGN WITH AS604 AND AS627-632 STANDARDS; NOTE 2 CHANGED TO CURRENT PRI STANDARD.

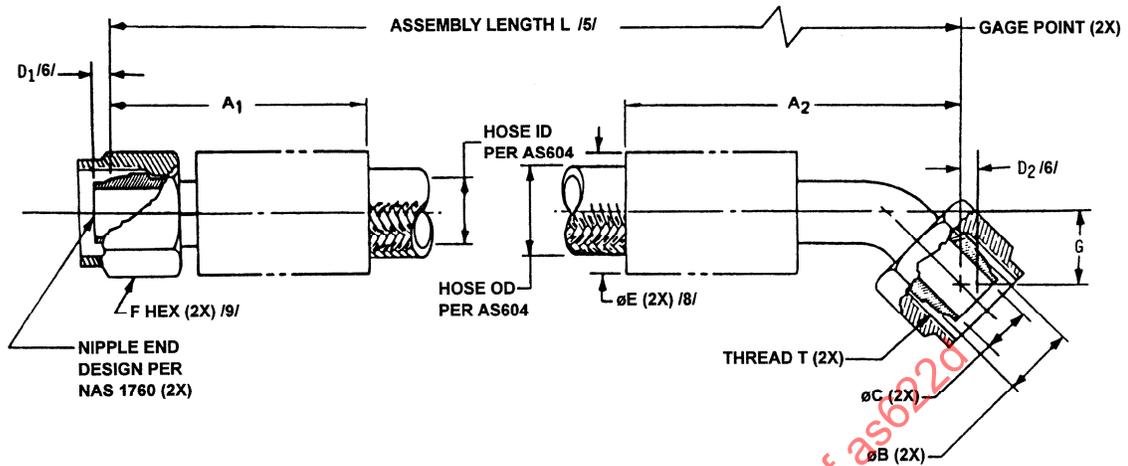


FIGURE 1 - HOSE AND FITTING DIMENSIONS

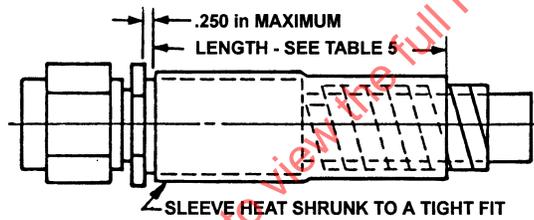
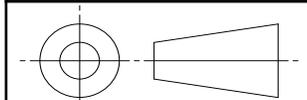


FIGURE 2 - TUBULAR/COIL ABRASION END /10/ /11/

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS622D/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: AS604 /2/



**AEROSPACE STANDARD**

HOSE ASSEMBLY, 3000 PSI,  
PTFE, FLARELESS,  
STRAIGHT TO 45°, HEAVYWEIGHT

AS622™  
SHEET 1 OF 6

REV.  
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ISSUED 1984-07 REAFFIRMED 2013-01 REVISED 2022-05

**TABLE 1 - ASSEMBLY DIMENSIONS**

HOSE ASSEMBLY AS622 SIZE CODE	HOSE ASSEMBLY SIZE (REF)	THREAD T PER AS8879 (REF)	A <sub>1</sub> MAX	A <sub>2</sub> MAX	B GAGE BASIC	C /7/ MIN	D <sub>1</sub> (REF)	D <sub>2</sub> (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

**TABLE 1 - ASSEMBLY DIMENSIONS (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

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	<b>AEROSPACE STANDARD</b>	<b>AS622™</b> SHEET 2 OF 6	<b>REV.</b> <b>D</b>
	HOSE ASSEMBLY, 3000 PSI, PTFE, FLARELESS, STRAIGHT TO 45°, HEAVYWEIGHT		

**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	.465 .405	.595 .535	.735 .675	.935 .875	1.090 1.030	1.410 1.350	1.650 1.560
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	FIRESLEEVE (AS1072 SIL-FG) (15 MINUTES) /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	FIRESLEEVE (AS1072 SIL-FG) (5 MINUTES) /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	FIRESLEEVE INTEGRAL SILICONE (15 MINUTES) /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	FIRESLEEVE INTEGRAL SILICONE (5 MINUTES) /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
N	THIN WALL FIRSLEEVE INTEGRAL SILICONE (15 MINUTES) /18/	400	.650 .590	.790 .730	.930 .870	1.130 1.070	1.295 1.235	1.630 1.570	1.860 1.800

**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	FIRESLEEVE (15 MINUTES) 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 MINUTES) AS1072	LB/IN	.007	.010	.011	.015	.017	.021	.025
H	FIRESLEEVE INTEGRAL (15 MINUTES) ON HOSE	LB/IN	.022	.042	.056	.081	.102	.154	.190
J	FIRESLEEVE INTEGRAL (5 MINUTES) 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
N	THIN WALL FIRESLEEVE INTEGRAL (15 MINUTES) ON HOSE	LB/IN	.020	.038	.052	.072	.101	.163	.173
NONE	FIRESLEEVE 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: 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

NOTES:

1. MATERIALS:

- a. HOSE AND FITTINGS: PER AS604.
- b. SLEEVES: SEE APPLICABLE STANDARD PER TABLE 2.

/2/ PROCUREMENT SPECIFICATION: AS604, EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. ORIGINAL COMPONENT MANUFACTURERS (OCM) AND VALUE ADDED DISTRIBUTORS (VAD) SHALL BE LISTED IN THE PRI QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS604 FOR THIS STANDARD. SEE [www.eAuditNet.com](http://www.eAuditNet.com) FOR CURRENT QPL ONLINE.

3. MARKING SHALL BE PER AS604 ON A STAINLESS STEEL BAND NOT OVER 1.0 INCH WIDE, OR ON THE COLLAR. THE CHARACTERS SHALL BE A MINIMUM OF .06 INCH HIGH. THE BAND SHALL BE SO DESIGNED AS TO REMAIN TIGHT ON THE HOSE TO PREVENT RELATIVE MOVEMENT AND RESULTANT CHAFING. IT SHALL BE OF SUFFICIENT STRENGTH TO PREVENT REMOVAL BY HAND. HOSE ASSEMBLY DATE AND "PT" SYMBOL SHALL BE PERMANENTLY MARKED ON THE BAND OR ON AN END FITTING OR A FIRESLEEVE CLAMP.

	<b>AEROSPACE STANDARD</b>	<b>AS622™</b> SHEET 4 OF 6	<b>REV.</b> <b>D</b>
	HOSE ASSEMBLY, 3000 PSI, PTFE, FLARELESS, STRAIGHT TO 45°, HEAVYWEIGHT		