

RATIONALE

REVISED SPHERICAL BALL SIZE REQUIREMENTS TO ELIMINATE THE STRAIGHT FITTINGS BALL SIZE.

REV.
B

AS5962™

SAE Executive Standards Committee Rules provide that: " This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

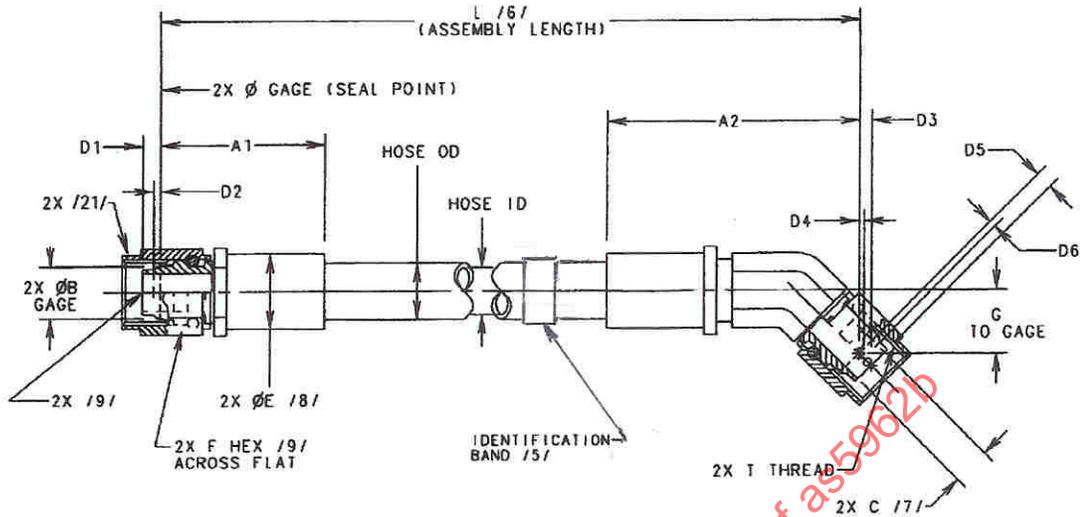


FIGURE 1 - HOSE ASSEMBLY DIMENSIONS

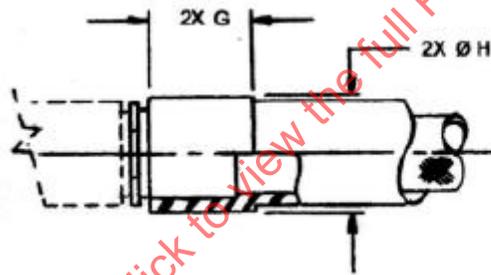
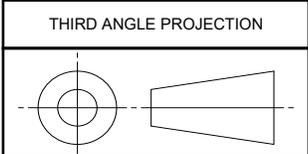


FIGURE 2 - INTEGRAL FIRESLEEVE CUFF / 13/

For more information on this standard, visit
<https://www.sae.org/standards/content/AS5962B/>



CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: AS5960 / 2/



AEROSPACE STANDARD

HOSE ASSEMBLY, POLYTETRAFLUOROETHYLENE
CRES BRAID REINFORCED, 400 °F, 5080 PSI
FLARELESS, STRAIGHT TO 45° ELBOW

AS5962™
SHEET 1 OF 5

**REV.
B**

TABLE 1 - HOSE ASSEMBLY DIMENSIONS

HOSE ASSEMBLY AS5962 SIZE CODE	SIZE	FITTING TYPE /17/	THREAD T PER AS8879	A1 MAX	A2 MAX	ØB GAGE BASIC	C HEX	(D1) /9/	(D2) /9/	(D3) /9/	(D4) /9/
E	.250	--	--	--	--	--	--	--	--	--	--
E	.250	S	.4375-28UNJ EF-3B	2.64	3.05	.2930	.56	.16	.055	.11	.039
E	.250	E	.5625-24UNJ EF-3B	2.74	3.09	.4120	.69	.16	.055	.11	.039
G	.375	R	.4375-28UNJ EF-3B	2.90	3.12	.2930	.56	.16	.055	.11	.039
G	.375	S	.5625-24UNJ EF-3B	2.94	3.16	.4120	.69	.16	.055	.11	.039
G	.375	E	.7500-20UNJ EF-3B	3.07	3.46	.5600	.88	.19	.066	.13	.047
H	.500	R	.5625-24UNJ EF-3B	3.19	3.62	.4120	.69	.16	.055	.11	.039
H	.500	S	.7500-20UNJ EF-3B	3.32	3.73	.5600	.88	.19	.066	.13	.047
H	.500	E	.8750-20UNJ EF-3B	3.39	3.75	.6730	1.00	.20	.066	.14	.047
J	.625	R	.7500-20UNJ EF-3B	3.55	4.00	.5600	.88	.19	.066	.13	.047
J	.625	S	.8750-20UNJ EF-3B	3.62	4.06	.6730	1.00	.20	.066	.14	.047
J	.625	E	1.0625-18UNJ EF-3B	3.87	4.16	.8100	1.25	.23	.066	.16	.047
K	.750	R	.8750-20UNJ EF-3B	3.89	4.36	.6730	1.00	.20	.066	.14	.047
K	.750	S	1.0625-18UNJ EF-3B	3.95	4.49	.8100	1.25	.23	.066	.16	.047
K	.750	E	1.3125-16UNJ-3B	4.06	4.53	1.0620	1.50	.30	.066	.21	.047
M	1.000	R	1.0625-18UNJ EF-3B	4.42	5.35	.8100	1.25	.23	.066	.16	.047
M	1.000	S	1.3125-16UNJ-3B	4.54	5.39	1.0620	1.50	.30	.066	.21	.047
M	1.000	E	1.6250-16UNJ-3B	4.64	5.82	1.3160	1.81	.30	.066	.21	.047
N	1.250	--	--	--	--	--	--	--	--	--	--
N	1.250	S	1.6250-16UNJ-3B	4.72	6.83	1.3160	1.81	.30	--	.21	--
N	1.250	--	--	--	--	--	--	--	--	--	--

TABLE 1 - HOSE ASSEMBLY DIMENSIONS (CONTINUED)

HOSE ASSEMBLY AS5962 - SIZE CODE	SIZE	FITTING TYPE /17/	(D5) /9/	(D6) /9/	E MIN	E MAX	ØF MAX /8/	FITTING BALL SIZE MIN THRU IN /7/
E	.250	--	--	--	--	--	--	--
E	.250	S	.16	.055	.328	.458	.88	.113
E	.250	E	.16	.055	.368	.498	.88	.113
G	.375	R	.16	.055	.328	.458	1.00	.113
G	.375	S	.16	.055	.368	.498	1.00	.192
G	.375	E	.19	.066	.487	.617	1.00	.192
H	.500	R	.16	.055	.368	.498	1.20	.192
H	.500	S	.19	.066	.487	.617	1.20	.281
H	.500	E	.20	.066	.500	.630	1.20	.281
J	.625	R	.19	.066	.487	.617	1.41	.281
J	.625	S	.20	.066	.500	.630	1.41	.349
J	.625	E	.23	.066	.586	.786	1.41	.349
K	.750	R	.20	.066	.500	.630	1.69	.349
K	.750	S	.23	.066	.586	.786	1.69	.434
K	.750	E	.30	.066	.631	.831	1.69	.434
M	1.000	R	.23	.066	.586	.786	2.00	.434
M	1.000	S	.30	.066	.631	.831	2.00	.638
M	1.000	E	.30	.066	.750	.950	2.00	.638
N	1.250	--	--	--	--	--	--	--
N	1.250	S	.30	--	.750	.950	2.25	.786
N	1.250	--	--	--	--	--	--	--

TABLE 2 - HOSE AND SLEEVE OUTSIDE DIAMETER /10/

SLEEVE CODE	SLEEVE MATERAIL	TEMP LIMIT °F	TOLER- ANCE	SIZE	SIZE	SIZE	SIZE	SIZE	SIZE	SIZE
				.250	.375	.500	.625	.750	1.000	1.250
-	(-) INDICATES HOSE ONLY NO SLEEVE (SEE AS5960) REF	400 °F	MAX MIN	.510 .450	.620 .560	.760 .700	.960 .835	1.120 .995	1.430 1.305	1.685 1.560
C	FIRESLEEVE (AS1072 SIL-FG) (15 MIN) /11/ /12/ /14/	400 °F	MAX MIN	.970 .810	1.090 1.000	1.220 1.060	1.500 1.260	1.590 1.470	1.950 1.780	2.190 1.940
F	ABRASION SLEEVE SHRINK-ON (POLYOLEFIN AS1073-CODE B) /16/	275 °F	MAX MIN	.560 .480	.700 .590	.910 .760	1.045 .895	1.205 1.080	1.530 1.370	1.785 1.660
H	FIRESLEEVE, INTEGRAL SILICONE (15 MIN) /14/	400 °F	MAX MIN	.815 .755	.940 .880	1.060 1.000	1.200 1.075	1.420 1.295	1.740 1.615	2.000 1.875
K	INTEGRAL ABRASION SLEEVE (BRAIDED POLYESTER) /15/	300 °F	MAX MIN	.590 .530	.710 .650	.860 .735	1.065 .885	1.205 1.130	1.530 1.405	1.815 1.690

TABLE 3 - HOSE ASSEMBLY LENGTH TOLERANCE

HOSE ASSEMBLY LENGTH	TOLERANCE
UNDER 18 INCHES	±.125 INCH
18 TO 36 INCHES, EXCLUSIVE	±.250 INCH
36 TO 50 INCHES, EXCLUSIVE	±.500 INCH
50 INCHES AND OVER	±1%

TABLE 4 - WEIGHT (MAX)

HOSE OR SLEEVE CODE	HOSE OR TYPE SLEEVE	UNITS	SIZE	SIZE	SIZE	SIZE	SIZE	SIZE	SIZE
			.250	.375	.500	.625	.750	1.000	1.250
-	HOSE ONLY (REF - SEE AS5960)	LB/IN	.022	.037	.046	.070	.095	.160	.220
C	TUBULAR FIRESLEEVE AS1072 (15 min)	LB/IN	.017	.020	.022	.030	.035	.040	.042
F	ABRASION SLEEVE (AS1073-CODE B)	LB/IN	.003	.004	.005	.006	.008	.010	.015
H	FIRESLEEVE INTEGRAL SILICONE ON HOSE (15 min)	LB/IN	.040	.060	.070	.095	.140	.220	.265
K	ABRASION SLEEVE, POLYESTER ON HOSE	LB/IN	.025	.040	.050	.070	.110	.180	.230
NONE	FIRESLEEVE CLAMP	LB/EA	.020	.025	.025	.025	.032	.032	.035
NONE	FITTING END (STRAIGHT) /17/ /18/	R LB/EA	--	.082	.137	.221	.270	.520	--
		S LB/EA	.052	.092	.162	.247	.296	.542	.850
		E LB/EA	.063	.114	.188	.300	.320	.645	--
NONE	FITTING END (45° ELBOW) /17/ /18/	R LB/EA	--	.101	.165	.261	.317	.615	--
		S LB/EA	.063	.111	.189	.266	.342	.637	.955
		E LB/EA	.084	.140	.230	.406	.425	.800	--

TABLE 5 - INTEGRAL FIRESLEEVE CUFF DIMENSIONS /13/

HOSE SIZE	G MAX	H Ø MAX
04	2.56	1.08
06	2.68	1.20
08	2.88	1.40
10	3.32	1.61
12	3.38	1.89
16	3.38	2.20
20	3.81	2.45

NOTES:

1. MATERIALS:

- a. HOSE AND FITTINGS - PER AS5960.
- b. THE COLLARS/SOCKETS MAY BE STAINLESS STEEL.
- c. SLEEVES - SEE APPLICABLE STANDARDS, TABLE 2.

/2/ PROCUREMENT SPECIFICATION: AS5960 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 DISTRIBUTOR LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS5960 FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ONLINE.

3. CONSTRUCTION AND PERFORMANCE PER AS5960. FITTINGS SHALL BE PERMANENTLY ATTACHED TO HOSE.

4. OPERATING CHARACTERISTICS PER AS5960.

/5/ MARKING: MARKING SHALL BE PER AS5960 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.

/6/ LENGTH "L" IS A FOUR DIGIT NUMBER OF WHICH THE FIRST THREE DIGITS DESCRIBE THE HOSE ASSEMBLY LENGTH IN WHOLE INCHES, AND THE FOURTH DIGIT, THE FRACTION OF AN INCH IN EIGHTHS. LENGTH "L" IS MEASURED FROM "GAGE POINT" TO "GAGE POINT". FOR LENGTH TOLERANCES SEE TABLE 3. TO CONVERT "GAGE POINT" TO "GAGE POINT" TO "END TO END" MEASUREMENT, ADD "D1" AND "D3" FOR NAS1760 END STYLE, OR "D2" AND "D4" FOR AS4458 GLOBESEAL END STYLE TO LENGTH "L."

/7/ HOSE ASSEMBLY INSIDE DIAMETER SHALL BE VERIFIED BY PASSING THE DESIGNATED, OR LARGER, SPHERICAL BALL PER TABLE 1 THROUGH THE HOSE ASSEMBLY.

/8/ DISTANCE ACROSS CORNERS OF COUPLING NUT AND NIPPLE OR SOCKET/COLLAR HEX MAY EXCEED THIS DIMENSION.

/9/ FITTING ENDS MUST COMPLY WITH NAS1760, AS4458, OR BE FUNCTIONALLY EQUIVALENT. DIMENSIONS D1, D3, AND D5 APPLY TO NAS1760 AND D2, D4, AND D6 APPLY TO AS4458. FITTINGS SHALL MATE WITH EN6123 OR AS5827. STANDARD COUPLING NUTS SHALL BE FUNCTIONALLY EQUIVALENT TO AS4370 EXCEPT FOR THREAD AND WIRE GROOVE. THREADS AND WIRE GROOVE IN NUT, RETAINER WIRE, AND FITTING END WIRE GROOVE SHALL BE COATED WITH AS5272 TYPE 1 SOLID FILM LUBRICANT.

/10/ DIAMETERS ARE LISTED FOR CLAMP SELECTION.

/11/ THE TABLE 2 SLEEVE DIAMETERS FOR AS1072 SLEEVES APPLY WHEN THE SLEEVE IS COMPRESSED, OR CLAMPED TO CONTACT THE HOSE. IN THIS CASE A WRINKLE MAY OCCUR OVER APPROXIMATELY 10% OF THE SLEEVE CIRCUMFERENCE.

	AEROSPACE STANDARD	AS5962™ SHEET 4 OF 5	REV. B
	HOSE ASSEMBLY, POLYTETRAFLUOROETHYLENE CRES BRAID REINFORCED, 400 °F, 5080 PSI FLARELESS, STRAIGHT TO 45° ELBOW		