FEDERAL SUPPLY CLASS
4720

RATIONALE

ADD CONFIGURATION FOR A NEW "N" CODE THIN WALL INTEGRAL FIRESLEEVE (15 MINUTE); ADD DRY FILM LUBE CONFIGURATION; RE-ADD FIRESLEEVE CLAMP ROW TO TABLE 4 (ACCIDENTLY DELETED IN REV. J).

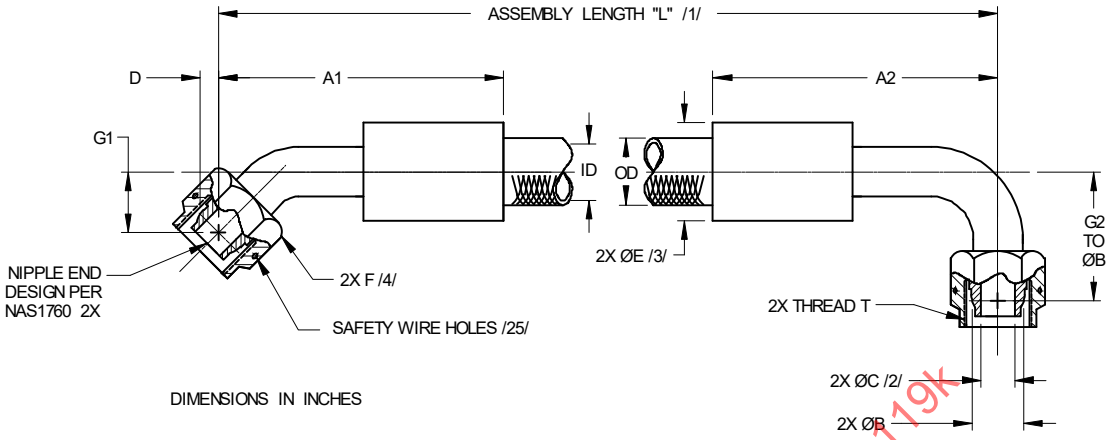


FIGURE 1 - HOSE AND FITTING DIMENSIONS

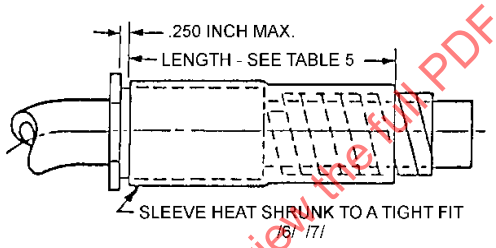


FIGURE 2 - TUBULAR/COIL ABRASION END

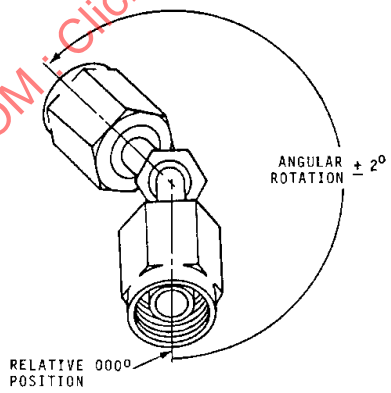
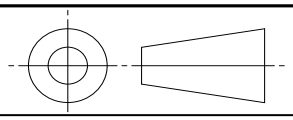


FIGURE 3 - FITTING ANGULAR ORIENTATION

For more information on this standard, visit
https://www.sae.org/standards/content/AS119K

THIRD ANGLE PROJECTION



ISSUED 1976-08 REAFFIRMED 2007-07 REVISED 2021-05

CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: AS1339 /20/

AEROSPACE STANDARD

HOSE ASSEMBLY, PTFE, CRES REINFORCED, 3000 PSI, 400 °F, 45 TO 90°, FLARELESS, LIGHTWEIGHT

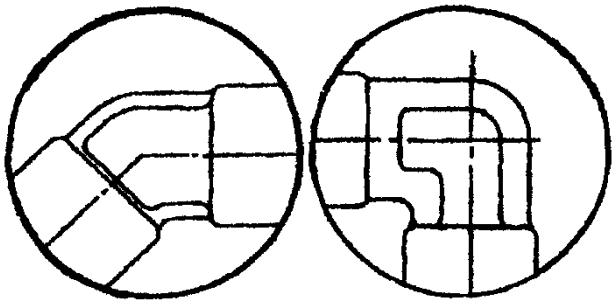


FIGURE 4 - ALTERNATE ELBOW ONFIGURATION /21/

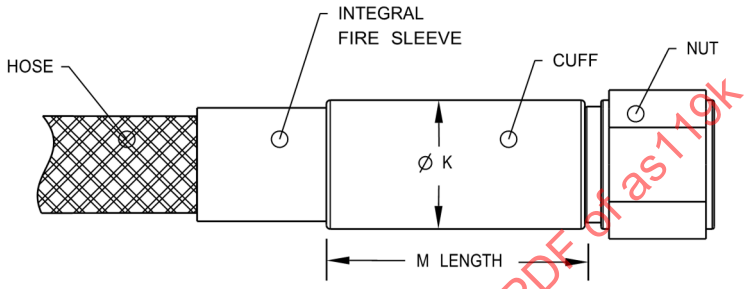


FIGURE 5 - INTEGRAL FIRESLEEVE CUFF DIMENSIONS - SEE TABLE 6 /30/

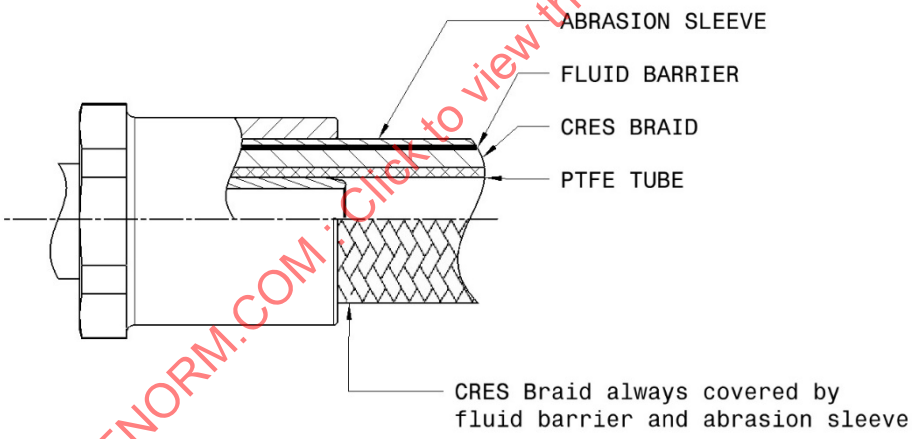


FIGURE 6 - FITTING CAPTURED INTEGRAL ABRASION SLEEVE WITH FLUID BARRIER /31/

TABLE 1 - DIMENSIONS (ALL JUMP SIZES ARE NEW)

HOSE ASSEMBLY NO. & SIZE /27/	HOSE SIZE (REF)	FITTING TYPE (REF) /28/	FITTING MATL	THREAD T PER AS8879 (REF)	HOSE ID MIN (REF)	A1 MAX	A2 MAX	B GAGE DIA BASIC	C BALL DIA /2/	D (REF)	E MAX WITHOUT SLEEVING /3/	F HEX (REF)	G1 MIN	G1 MAX	G2 MIN	G2 MAX
AS119E	.250	R (-03)	CRES	.3750-24UNJF-3B	.212	2.12	1.75	.2930	.095	.11	.69	.50	.31	.54	.69	.97
AS119E	.250	S	CRES	.4375-20UNJF-3B	.212	2.12	1.75	.2930	.115	.11	.69	.56	.31	.50	.69	.88
AS119E	.250	E (06)	CRES	.5625-18UNJF-3B	.212	2.44	2.00	.4120	.115	.12	.80	.69	.44	.66	.88	1.09
AS119G	.375	R (-04)	CRES	.4375-20UNJF-3B	.298	2.12	1.84	.4120	.115	.12	.80	.69	.38	.62	.71	1.09
AS119G	.375	S	CRES	.5625-18UNJF-3B	.298	2.44	2.00	.4120	.204	.12	.80	.69	.44	.62	.88	1.09
AS119G	.375	E (-08)	CRES	.7500-16UNJF-3B.	.298	2.75	2.38	.5600	.204	.13	.80	.88	.50	.75	1.00	1.31
AS119H	.500	R (-06)	CRES	.5625-18UNJF-3B	.391	2.62	2.12	.5600	.204	.13	.97	.69	.50	.75	.88	1.31
AS119H	.500	S	CRES	.7500-16UNJF-3B	.391	2.75	2.38	.5600	.289	.13	.97	.88	.50	.75	1.00	1.31
AS119H	.500	E (-10)	CRES	.8750-14UNJF-3B	.391	3.25	2.81	.6730	.289	.14	.97	1.00	.56	.83	1.16	1.50
AS119J	.625	R (-08)	CRES	.7500-16UNJF-3B	.485	3.07	2.48	.6730	.289	.14	1.11	.88	.56	.81	1.00	1.50
AS119J	.625	S	CRES	.8750-14UNJF-3B	.485	3.25	2.81	.6730	.349	.14	1.11	1.00	.56	.81	1.19	1.50
AS119J	.625	E (-12)	CRES	1.0625-12UNJ-3B	.485	3.75	3.25	.8100	.349	.16	1.11	1.25	.62	.88	1.25	1.75
AS119K	.750	R (10)	CRES	.8750-14UNJF-3B	.602	3.50	2.81	.8100	.349	.16	1.38	1.00	.62	.88	1.38	1.75
AS119K	.750	S	CRES	1.0625-12UNJ-3B	.602	3.75	3.25	.8100	.434	.16	1.38	1.25	.62	.88	1.38	1.75
AS119K	.750	E (-16)	CRES	1.3125-12UNJ-3B	.602	4.50	4.00	1.0620	.434	.21	1.38	1.50	.79	1.14	1.69	2.19
AS119M	1.000	R (-12)	CRES	1.0625-12UNJ-3B	.852	3.75	3.25	.9350	.434	.21	1.66	1.25	.72	1.09	1.69	2.06
AS119M	1.000	S	CRES	1.3125-12UNJ-3B	.852	4.50	4.00	1.0620	.646	.21	1.66	1.50	.81	1.09	1.69	2.06
AS119M	1.000	E (-20)	CRES	1.6250-12UNJ-3B	.852	4.60	4.00	1.3160	.646	.22	1.79	1.81	1.57	1.63	1.82	2.40

TABLE 2 - HOSE AND SLEEVE OUTSIDE DIAMETER

SLEEVE CODE	SLEEVE MATERIAL	TEMP LIMIT °F	TOLE-RANCE	HOSE OR SLEEVE OUTSIDE DIAMETER /5/ HOSE SIZE .250	HOSE OR SLEEVE OUTSIDE DIAMETER /5/ HOSE SIZE .375	HOSE OR SLEEVE OUTSIDE DIAMETER /5/ HOSE SIZE .500	HOSE OR SLEEVE OUTSIDE DIAMETER /5/ HOSE SIZE .625	HOSE OR SLEEVE OUTSIDE DIAMETER /5/ HOSE SIZE .750	HOSE OR SLEEVE OUTSIDE DIAMETER /5/ HOSE SIZE 1.000
-	(-) INDICATES HOSE ONLY, NO SLEEVE (REFER TO AS1339)	400	MAX	.390	.490	.615	.730	.990	1.270
			MIN	.360	.455	.585	.690	.950	1.230
A	ABRASION SLEEVE TUBULAR (TFE-AS1291-CODE B) /6/	400	MAX	.500	.600	.730	.840	1.110	1.400
			MIN	.440	.540	.670	.780	1.050	1.340
B	ABRASION SLEEVE COIL (NYLON AS1294) /7/	275	MAX	.450	.550	.695	.810	1.080	1.360
			MIN	.390	.490	.635	.750	1.020	1.300
C	FIRESLEEVE (AS1072 SIL-FG) (15 MINUTES) /8/ /9/ /13/	400	MAX	.625	.750	.875	1.000	1.250	1.500
			MIN	.500	.625	.750	.875	1.125	1.375
D	ABRASION SLEEVE INTEGRAL SILICONE COMPOSITE /10/ /14/	350	MAX	.500	.600	.700	.830	1.120	1.400
			MIN	.460	.560	.660	.790	1.070	1.350
E	ABRASION SLEEVE SHRINK-ON (FEP) /11/	350	MAX	.424	.540	.665	.790	1.070	1.350
			MIN	.374	.480	.615	.730	1.010	1.290
F	ABRASION SLEEVE SHRINK-ON (POLYOLEFIN AS1073 - CODE B) /11/	275	MAX	.450	.560	.695	.810	1.080	1.360
			MIN	.400	.505	.645	.750	1.020	1.300
G	FIRESLEEVE (AS1072 SIL-FG) (5 MINUTES) /8/ /9/ /12/	400	MAX	.625	.750	.875	1.000	1.250	1.500
			MIN	.500	.625	.750	.875	1.125	1.375
H	FIRESLEEVE INTEGRAL SILICONE (15 MINUTES) /13/	400	MAX	.660	.745	.895	1.005	1.240	1.515
			MIN	.600	.685	.835	.945	1.160	1.455
J	FIRESLEEVE INTEGRAL SILICONE (5 MINUTES) /12/	400	MAX	.660	.745	.895	1.005	1.240	1.515
			MIN	.600	.685	.835	.945	1.160	1.455
K	INTEGRAL ABRASION SLEEVE (BRAIDED) POLYESTER /10/	300	MAX	.490	.570	.695	.800	1.070	1.350
			MIN	.444	.535	.650	.760	1.030	1.310
L	ABRASION SLEEVE COIL (PTFE-AS1293) /7/	400	MAX	.500	.600	.730	.862	1.110	1.400
			MIN	.440	.540	.670	.802	1.050	1.340
M	FITTING CAPTURED INTEGRAL ABRASION SLEEVE (BRAIDED) WITH FLUID BARRIER /31/	275	MAX	.530	.610	.740	.870	1.105	1.450
			MIN	.444	.530	.650	.760	1.025	1.300
N	THIN WALL FIRESLEEVE INTEGRAL SILICONE (15 MINUTES) /13/	400	MAX	.625	.725	.850	.955	1.230	1.515
			MIN	.490	.585	.715	.820	1.080	1.370

TABLE 3 - 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 - HOSE WEIGHT MAX - ALL OTHERS REF

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 1.000
-	HOSE ONLY	LB/IN	.009	.015	.020	.027	.058	.085
A	ABRASION SLEEVE (TFE-AS1291-CODE B)	LB/IN	.003	.004	.004	.005	.007	.009
B	ABRASION SLEEVE (NYLON AS1294)	LB/IN	.001	.002	.003	.003	.004	.005
C	FIRESLEEVE (15 MINUTES) AS1072	LB/IN	.007	.009	.011	.012	.017	.021
D	ABRASION SLEEVE INTEGRAL WITH HOSE	LB/IN	.012	.016	.024	.034	.067	.110
E	ABRASION SLEEVE (FEP)	LB/IN	.002	.003	.003	.005	.006	.007
F	ABRASION SLEEVE (AS1073-CODE B)	LB/IN	.002	.003	.003	.004	.005	.006
G	FIRESLEEVE (5 MINUTES) AS1072	LB/IN	.007	.009	.011	.012	.017	.021
H	FIRESLEEVE INTEGRAL (15 MINUTES) WITH HOSE	LB/IN	.019	.027	.035	.047	.099	.117
J	FIRESLEEVE INTEGRAL (5 MINUTES) WITH HOSE	LB/IN	.019	.027	.035	.047	.099	.117
K	ABRASION SLEEVE POLYESTER WITH HOSE	LB/IN	.012	.016	.022	.030	.060	.090
L	ABRASION SLEEVE (PTFE-AS1293)	LB/IN	.003	.004	.005	.005	.006	.007
M	FITTING CAPTURED INTEGRAL ABRASION SLEEVE (BRAIDED) WITH FLUID BARRIER	LB/IN	.004	.005	.006	.007	.010	.015
N	THIN WALL FIRESLEEVE INTEGRAL SILICONE (15 MINUTES) WITH HOSE	LB/IN	.018	.026	.034	.045	.098	.117
NONE	FIRESLEEVE CLAMP	LB/EA	.020	.020	.025	.026	.026	.033
NONE	FITTING END (HOSE SIZE - 45°) /32/	LB/EA	.078	.126	.218	.327	.597	.860
NONE	FITTING END (HOSE SIZE - 90°) /32/	LB/EA	.078	.126	.218	.327	.615	.945

TABLE 5 - SLEEVE LENGTH

HOSE SIZE	LENGTH (INCHES)
E G	2.00 ± .25
H J	2.50 ± .25
K M	3.00 ± .25

TABLE 6 - INTEGRAL FIRE SLEEVE CUFF DIMENSIONS /30/

HOSE SIZE	"K" MAX (INCHES)	"M" MAX (INCHES)
04	.96	2.05
06	1.08	2.18
08	1.22	2.55
10	1.37	2.67
12	1.54	2.67
16	1.87	3.10

NOTES:

/1/ LENGTH “L” IS A THREE DIGIT NUMBER OF WHICH THE FIRST TWO DIGITS DESCRIBE THE HOSE ASSEMBLY LENGTH IN WHOLE INCHES, AND THE THIRD DIGIT, THE FRACTION OF AN INCH IN EIGHTHS. IF HOSE LENGTH IS AN EXACT WHOLE NUMBER IN INCHES (NO FRACTIONAL LENGTH ADDITIONS), FOURTH DIGIT SHALL BE SPECIFIED AS “0.”

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 “D” TO LENGTH “L.”

/2/ HOSE ASSEMBLY INSIDE DIAMETER SHALL BE VERIFIED BY PASSING THE DESIGNATED, OR LARGER, SPHERICAL BALL PER TABLE 1 THROUGH THE HOSE ASSEMBLY.

/3/ DISTANCE ACROSS CORNERS OF THE COUPLING NUT MAY EXCEED THIS DIMENSION.

/4/ STANDARD COUPLING NUTS SHALL BE IN ACCORDANCE WITH AS21921 OR AS4370 AND MATE WITH AS33514 OR AS4375 FITTING ENDS. NONSTANDARD COUPLING NUTS MAY BE USED, PROVIDED THEY ARE DIMENSIONALLY AND FUNCTIONALLY EQUIVALENT, AND PROVIDED THEY CANNOT BE REMOVED FROM THE FITTING. NUTS SHALL MEET TORQUE TEST REQUIREMENTS PER AS1339.

/5/ DIAMETERS ARE LISTED FOR CLAMP SELECTION. TUBULAR SLEEVES MAY NOT BE A PERFECT ROUND AND SHALL BE MEASURED WITH A DIAMETER TAPE RULE (OFTEN REFERRED TO AS A PI-TAPE).

/6/ TUBULAR ABRASION (TFE) SLEEVES SHALL HAVE AN ID NO GREATER THAN HOSE OD +.05 INCH. AXIAL MOVEMENT OF THE SLEEVE INSTALLED ON THE HOSE SHALL NOT EXCEED .05 INCH. ENDS OF THE TUBULAR SLEEVE SHALL BE TERMINATED WITH A LENGTH OF AMS-DTL-23053/11 (FEP) CLASS 1 OR 2, COLOR CLEAR, PER TABLE 5 FIGURE 2.

/7/ COIL ABRASION SLEEVES, WHEN ASSEMBLED ON A STRAIGHT HOSE, SHALL HAVE AN AVERAGE GAP BETWEEN COILS NOT EXCEEDING .05 INCH. DISPLACEMENT OF THE COILS OF THE SLEEVE, CAUSING A GREATER GAP, SHALL NOT BE CAUSE FOR REJECTION IF THE COILS CAN BE REPOSITIONED TO MEET THE GAP REQUIREMENTS. ENDS OF THE COIL SLEEVE SHALL BE TERMINATED WITH A LENGTH OF HEAT SHRINKABLE SLEEVING IN ACCORDANCE WITH TABLE 5 AND FIGURE 2. CODE “B” (NYLON COIL) ABRASION SLEEVES SHALL BE TERMINATED WITH AMS-DTL-23053/5 CLASS 1 OR 3, COLOR BLACK. CODE “L” (COIL ABRASION) SLEEVES SHALL BE TERMINATED WITH AMS-DTL-23053/12 CLASS 1, COLOR TRANSPARENT, PTFE (OPTIONAL AMS-DTL-23053/11 (FEP) CLASS 1 OR 2, COLOR CLEAR).

/8/ 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.

/9/ THE CUT ENDS OF THE FIRESLEEVE SHALL BE COATED WITH RTV SILICONE RUBBER, PRIOR TO INSTALLATION, TO PREVENT WICKING OF FLUIDS. THE FIRESLEEVE ENDS SHALL BE SECURED TO THE HOSE ASSEMBLY END FITTINGS WITH CORROSION RESISTANT STEEL BANDS. AFTER INSTALLATION, CRACKS OR VOIDS IN THE FIRESLEEVE, WHICH EXPOSE THE FIBERGLASS, SHALL BE COATED WITH RTV SILICONE RUBBER.

/10/ INTEGRAL ABRASION SLEEVE SHALL FORM AN INTEGRAL, PERMANENT PART OF THE HOSE AND SHALL TERMINATE A MAXIMUM OF .200 INCH FROM THE END OF THE COLLAR.

/11/ FEP AND POLYOLEFIN SHRINK ABRASION SLEEVES SHALL BE SHRUNK TO A SNUG FIT OVER THE HOSE AND END FITTING COLLARS.

/12/ ADD “AS1055 TYPE IIb CLASS A-S/P” OR “AS150 TYPE IX bA” TO IDENTIFICATION MARKING TO SHOW LEVEL OF COMPLIANCE, “FIRE RESISTANT” (5 MINUTES), WITH AS1055.

/13/ ADD “AS1055 TYPE IIb CLASS B-S/P” OR “AS150 TYPE IX bB” TO IDENTIFICATION MARKING TO SHOW LEVEL OF COMPLIANCE, “FIRE PROOF” (15 MINUTES), WITH AS1055.

/14/ SLEEVES CODED “D” ARE INACTIVE FOR FUTURE DESIGN AND SUPERSEDED BY CODE “K”, AS OF THE RELEASE DATE OF REVISION “B” OF THIS STANDARD.

15. CONSTRUCTION AND PERFORMANCE: REFER TO AS1339. FITTINGS SHALL BE PERMANENTLY ATTACHED TO THE HOSE.

16. OPERATING CHARACTERISTICS: REFER TO AS1339.