

# AS1910

AN AMERICAN NATIONAL STANDARD

FEDERAL SUPPLY CLASS  
4720

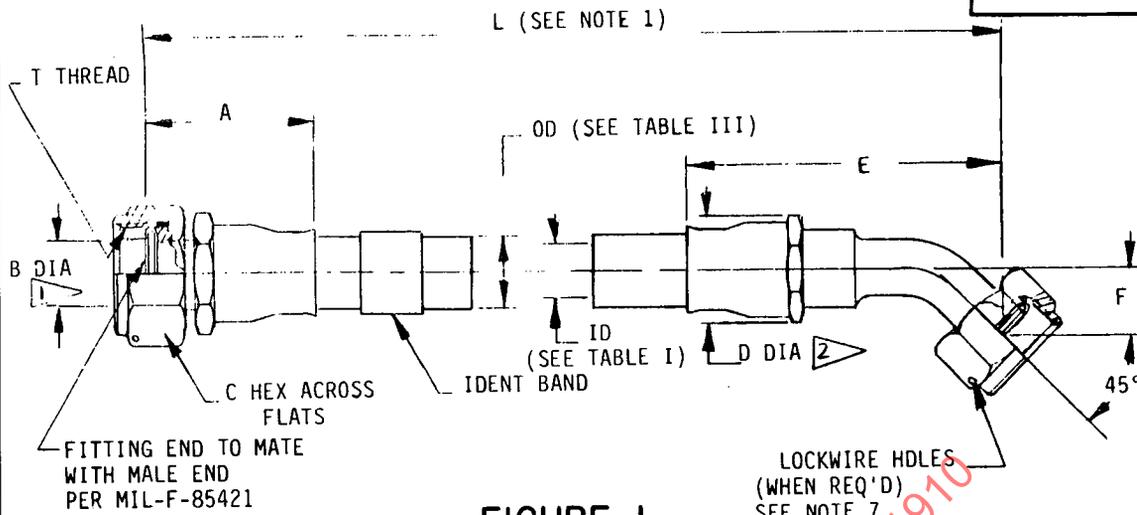


FIGURE 1

TABLE I

HOSE ASSEMBLY NO. CODE	HOSE SIZE	THREAD T PER MIL-S-8879	I.D. MIN	A MAX	B DIA MIN	C HEX REF	D DIA MAX
AS1910-04	1/4	.4375-24 UNJS-3B	.212	1.30	.109	.56	.690
AS1910-06	3/8	.5625-20 UNJS-3B	.298	1.44	.188	.69	.800
AS1910-08	1/2	.7188-20 UNJS-3B	.391	1.60	.313	.88	.970
AS1910-10	5/8	.8438-18 UNJS-3B	.485	1.70	.375	1.00	1.100
AS1910-12	3/4	1.0000-16 UNJ-3B	.602	1.85	.469	1.25	1.380
AS1910-16	1	1.2500-14 UNJS-3B	.852	2.00	.719	1.50	1.660

TABLE I (CONT'D)

HOSE ASSEMBLY NO. CODE	HOSE SIZE	E MAX	F	
			MIN	MAX
AS1910-04	1/4	1.90	.450	.550
AS1910-06	3/8	2.35	.517	.600
AS1910-08	1/2	2.50	.513	.675
AS1910-10	5/8	2.70	.620	.765
AS1910-12	3/4	3.15	.760	.874
AS1910-16	1	3.50	.890	.950

1 A TRUE CIRCULAR CROSS SECTION IS NOT REQUIRED THROUGH THE END FITTING. HOWEVER, THE BALL DIAMETER B LISTED IN TABLE I SHALL PASS THROUGH THE END FITTING AFTER THE END FITTING IS ATTACHED TO THE HOSE ASSEMBLY.

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

CUSTODIAN: SAE G-3/G-3D

PROCUREMENT: AS1339

**SAE** The Engineering Society  
For Advancing Mobility  
Land Sea Air and Space

400 Commonwealth Drive  
Warrendale, PA 15096

**AEROSPACE STANDARD**

HOSE ASSEMBLY, NONMETALLIC, 3000 PSI, TFE  
LIGHTWEIGHT, BEAM SEAL, STRAIGHT TO 45°

# AS1910

SHEET 1 OF 5

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TABLE II

HOSE ASSEMBLY LENGTH	AVAILABLE INCREMENTS	TOLERANCE
UNDER 18 INCHFS	(NOT LESS THAN) 1/8 INCH	(PLUS OR MINUS) .125 INCH
18 TO 36 INCHES	(NOT LESS THAN) 1/4 INCH	(PLUS OR MINUS) .250 INCH
36 TO 50 INCHES	(NOT LESS THAN) 1/2 INCH	(PLUS OR MINUS) .500 INCH
OVER 50 INCHES	(NOT LESS THAN) 1 INCH	(PLUS OR MINUS) 1 PERCENT

TABLE III

HOSE OR SLEEVE CODE	HOSE OR TYPE SLEEVE	TEMP LIMIT °F	HOSE OR SLEEVE ASSEMBLED OUTSIDE DIAMETER						
			TOLERANCE	HOSE SIZE (REF)					
				1/4	3/8	1/2	5/8	3/4	1
-	HOSE ONLY (AS1624)	400	MAX MIN	.390 .360	.490 .455	.615 .585	.730 .690	.990 .950	1.270 1.230
A	ABRASION SLEEVE TUBULAR (TFE-AS1291-B)	400	↑	.500 .440	.600 .540	.730 .670	.840 .780	1.110 1.050	1.400 1.340
B	ABRASION SLEEVE COIL (NYLON AS1294)	275		.450 .390	.550 .490	.695 .635	.810 .750	1.080 1.020	1.360 1.300
C	FIRE SLEEVE (15 MIN) 	400		.625 .500	.750 .625	.875 .750	1.000 .875	1.250 1.125	1.500 1.375
E	SHRINK ABRASION SLEEVE (FEP)	350		.424 .374	.540 .480	.665 .615	.790 .730	1.070 1.010	1.350 1.290
F	SHRINK ABRASION SLEEVE (POLYOLEFIN)	275		.450 .400	.560 .505	.695 .645	.810 .750	1.080 1.020	1.360 1.300
H	INTEGRAL FIRE SLEEVE (15 MIN)	400		.660 .600	.745 .685	.895 .835	1.005 .945	1.220 1.160	1.515 1.455
K	INTEGRAL ABRASION SLEEVE (BRAIDED POLYESTER)	300	↓	.490 .444	.570 .535	.695 .650	.800 .760	1.070 1.030	1.350 1.310
L	ABRASION SLEEVE COIL (PTFE-AS1293)	400	MAX MIN	.550 .440	.600 .540	.730 .670	.862 .802	1.110 1.050	1.400 1.340

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THE 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.

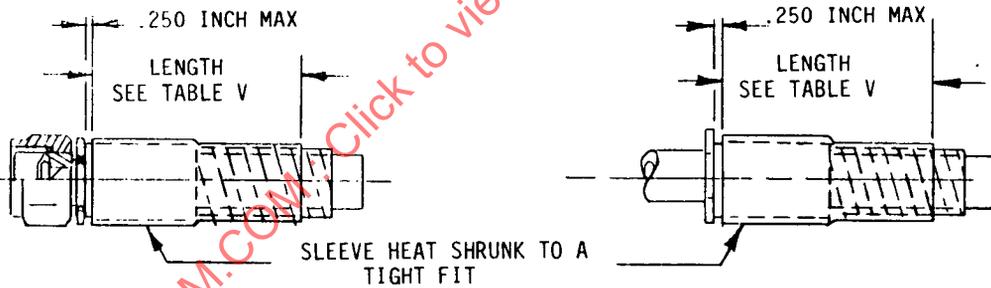
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	<b>AEROSPACE STANDARD</b>	<b>AS1910</b>
	HOSE ASSEMBLY, NONMETALLIC, 3000 PSI, TFE LIGHTWEIGHT, BEAM SEAL, STRAIGHT TO 45°	
		SHEET 2 OF 5

TABLE IV

HOSE OR SLEEVE CODE	HOSE OR TYPE SLEEVE	UNITS	MAXIMUM WEIGHT					
			HOSE SIZE					
			1/4	3/8	1/2	5/8	3/4	1
-	HOSE ONLY	LBS/IN	.009	.015	.020	.027	.055	.085
A	ABRASION SLEEVE (TFE)	↑	.003	.004	.004	.005	.007	.009
B	ABRASION SLEEVE (NYLON)		.001	.002	.003	.003	.004	.005
C	FIRE SLEEVE (15 MIN)		.007	.009	.011	.012	.017	.021
E	SHRINK ABRASION (FEP)	↓	.002	.003	.003	.005	.006	.007
F	SHRINK ABRASION (POLYOLEFIN)		.002	.003	.003	.004	.005	.006
H	INTEGRAL FIRE SLEEVE (15 MIN) WITH HOSE	↓	.019	.027	.035	.047	.099	.117
K	INTEGRAL ABRASION SLEEVE (BRAIDED POLYESTER) W/HOSE		.012	.016	.022	.030	.060	.090
L	COIL ABRASION (PTFE)		LBS/IN	.003	.004	.005	.005	.006
NONE	FIRE SLEEVE CLAMP	LBS EA	.025	.025	.025	.026	.026	.033
NONE	FITTING END (HOSE SIZE-STR)	LBS EA	.060	.088	.142	.225	.355	.530
NONE	FITTING END (HOSE SIZE - 45°)	LBS EA	.065	.095	.160	.240	.420	.700



**FIGURE 2**  
HEAT SHRINKABLE SLEEVES REQUIRED FOR  
COIL AND TUBULAR ABRASION SLEEVES  
(SEE NOTES 3 & 4)

TABLE V

HOSE SIZE	LENGTH (INCHES)
1/4	2.00 ± .25
3/8	
1/2	2.50 ± .25
5/8	
3/4	3.00 ± .25
1	

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CONSTRUCTION AND PERFORMANCE: THESE HOSE ASSEMBLIES SHALL MEET THE CONSTRUCTION AND PERFORMANCE REQUIREMENTS OF AS1339. FITTINGS SHALL BE PERMANENTLY ATTACHED TO THE HOSE.

RATED OPERATING CHARACTERISTICS: SEE AS1339.

MATERIALS: HOSE AND FITTINGS - PER AS1339

TUBULAR ABRASION SLEEVE - BLACK, EXTRUDED SEAMLESS TFE TUBING PER AS1291.

COIL ABRASION SLEEVE - BLACK, NYLON COIL PER AS1294, OR TFE PER AS1293.

INTEGRAL ABRASION SLEEVE - BRAIDED POLYESTER

INTEGRAL FIRESLEEVE - SILICONE COMPOSITE PER AS1722

FIRESLEEVE - FIBERGLASS, IMPREGNATED WITH SILICONE PER AS1072 "SIL" CODED.

SHRINK ABRASION SLEEVE (FEP) - TRANSLUCENT, SHRINKABLE FEP TUBING PER MIL-I-23053/11

SHRINK ABRASION SLEEVE (POLYOLEFIN) - BLACK, SHRINKABLE POLYOLEFIN TUBING PER AS1073 CODE B

MARKING: THE HOSE ASSEMBLIES SHALL HAVE ALL IDENTIFICATION MARKING AS REQUIRED BY AS1339, PERMANENTLY MARKED ON A PERMANENT STAINLESS STEEL BAND NOT MORE THAN 1.0 INCH WIDE OR ON THE END FITTING. THE CHARACTERS SHALL BE A MINIMUM OF 1/16 INCH HIGH. THE BAND SHALL BE SO DESIGNED AS TO REMAIN TIGHT ON THE HOSE TO PREVENT RELATIVE MOVEMENT AND RESULTANT CHAFING AND OF SUFFICIENT STRENGTH TO PREVENT REMOVAL BY HAND.

NOTES:

1. 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 END PT. TO END PT. SEE TABLE II FOR AVAILABLE LENGTH INCREMENTS AND TOLERANCES.
2. THE CUT ENDS OF THE SILICONE/FIBERGLASS 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. THE ENDS OF THE INTEGRAL FIRESLEEVE SHALL BE COVERED WITH A LENGTH OF SILICONE SLEEVE EXTENDING OVER THE END FITTING SOCKET.

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