

# AS117

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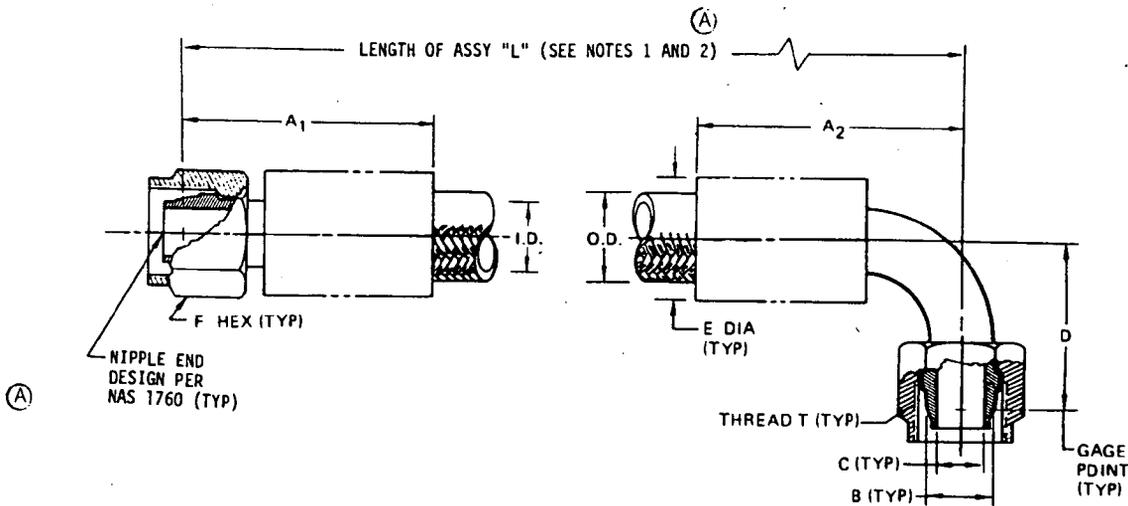


FIGURE 1

TABLE I

HOSE ASSEMBLY NO. AND SIZE CODE	HOSE ASSEMBLY SIZE REF	THREAD T PER MIL-S-8879 REF	I.D. MIN	A <sub>1</sub> MAX	A <sub>2</sub> MAX	B GAGE DIA BASIC	C 10/DRTEL DIA MIN	D		E 11/ DIA MAX WITHOUT SLEEVING	F HEX REF
								MIN	MAX		
AS117-04	1/4	.4375-20 UNJF-3B	.212	1.56	1.75	.2930	.135	.69	.88	.69	.56
AS117-06	3/8	.5625-18 UNJF-3B	.298	1.75	2.00	.4120	.240	.88	1.09	.80	.69
AS117-08	1/2	.7500-16 UNJF-3B	.391	2.00	2.38	.5600	.340	1.00	1.31	.97	.88
AS117-10	5/8	.8750-14 UNJF-3B	.485	2.25	2.81	.6730	.410	1.19	1.50	1.11	1.00
AS117-12	3/4	1.0625-12 UNJ -3B	.602	2.50	3.25	.8100	.510	1.38	1.75	1.38	1.25
AS117-16	1	1.3125-12 UNJ -3B	.852	3.00	4.00	1.0620	.760	1.69	2.06	1.66	1.50

TABLE II

HOSE ASSEMBLY LENGTH	AVAILABLE INCREMENTS	TOLERANCE
UNDER 18 INCHES	(NOT LESS THAN) .125 INCH	(PLUS OR MINUS) .125 INCH
18 TO 36 INCHES	(NOT LESS THAN) .250 INCH	(PLUS OR MINUS) .250 INCH
36 TO 50 INCHES	(NOT LESS THAN) .500 INCH	(PLUS OR MINUS) .500 INCH
OVER 50 INCHES	(NOT LESS THAN) 1.000 INCH	(PLUS OR MINUS) 1 PERCENT

TABLE III

SLEEVING CODE OR HOSE	TYPE OF SLEEVING OR HOSE	HOSE OR SLEEVE O.D. MAX						TEMP LIMIT °F
		HOSE SIZE						
		1/4	3/8	1/2	5/8	3/4	1	
NONE	HOSE ONLY	.410	.540	.640	.745	.990	1.270	400
A	TUBULAR ABRASION (TFE)	.580	.678	.800	.850	1.184	1.514	400
B	SPIRAL ABRASION	.508	.612	.754	.847	1.080	1.375	275
C	FIRE SLEEVE 9/	.875	1.032	1.152	1.230	1.480	1.840	400
D	INTEGRAL ABRASION	.500	.625	.708	.832	1.112	1.390	350
E	SHRINK ABRASION (FEP)	.470	.600	.700	.813	1.050	1.350	400
F	SHRINK ABRASION (POLYOLEFIN)	.480	.632	.722	.837	1.050	1.375	275
G	FIRE SLEEVE 8/	.875	1.032	1.152	1.230	1.480	1.840	400
H	INTEGRAL FIRE COVER-SILICONE 9/	.781	.891	1.016	1.141	1.328	1.593	400
J	INTEGRAL FIRE COVER-SILICONE 8/	.656	.766	.905	1.016	1.206	1.500	400
K	BRAIDED ABRASION (POLYESTER)	.490	.565	.680	.800	.959	—	300

Prepared by SAE Committee G-3, Aerospace Fittings, Hose and Tubing Assemblies

Society of Automotive Engineers, Inc.  
400 COMMONWEALTH DRIVE WARRENDALE, PA 15096

**AEROSPACE STANDARD**  
HOSE ASSEMBLY, NONMETALLIC--3000 PSI, TFE, FLARELESS,  
STRAIGHT TO 90°, LIGHTWEIGHT

**AS117**

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(A) TABLE IV

HOSE, SLEEVING, HOSE WITH PROTECTIVE COVER OR END FITTINGS.	UNITS	MAXIMUM WEIGHT					
		HOSE SIZE					
		1/4	3/8	1/2	5/8	3/4	1
HOSE ONLY	LBS/IN.	.010	.015	.021	.028	.055	.089
TUBULAR ABRASION (TFE)	LBS/IN.	.003	.003	.004	.004	.006	.009
SPIRAL ABRASION	LBS/IN.	.001	.002	.003	.003	.004	.005
FIRESLLEEVE 9/	LBS/IN.	.010	.014	.016	.017	.022	.026
INTEGRAL ABRASION WITH HOSE	LBS/IN.	.014	.021	.026	.035	.067	.104
SHRINK ABRASION (FEP) ONLY	LBS/IN.	.001	.003	.003	.004	.005	.006
SHRINK ABRASION (POLYOLEFIN) ONLY	LBS/IN.	.002	.003	.003	.004	.005	.006
FIRESLLEEVE 8/	LBS/IN.	.010	.014	.016	.017	.022	.026
INTEGRAL FIRE COVER WITH HOSE 9/	LBS/IN.	.030	.037	.046	.060	.091	.130
INTEGRAL FIRE COVER WITH HOSE 8/	LBS/IN.	.020	.030	.037	.048	.080	.117
BRAIDED ABRASION WITH HOSE	LBS/IN.	.012	.017	.023	.027	.040	.053
FIRESLLEEVE CLAMP	LBS EA.	.025	.025	.025	.026	.026	.033
STD END FITTING-STRAIGHT	LBS EA.	.064	.110	.182	.274	.467	.735
STD END FITTING-90°	LBS EA.	.078	.126	.218	.327	.615	.945

(A) TABLE V

HOSE SIZE	LENGTH (INCHES)
04 06	2.00 ±.25
08 10	2.50 ±.25
12 16	3.00 ±.25

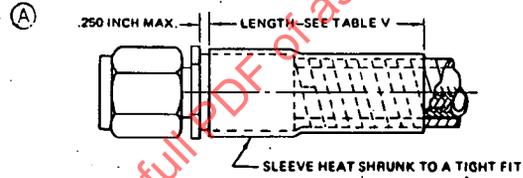


FIGURE 2

(A) TABLE VI

HOSE SIZE (REF)	SPHERICAL BALL SIZE FOR DETERMINING MIN THRU DIAMETER 10/	
	MS19059 OASH NO.	DIA IN.
04	1007	.109
06	1012	.188
08	1016	.313
10	1018	.375
12	1021	.469
16	1029	.719

(A) TABLE VII - LENGTH CORRECTION FACTORS

HOSE SIZE (REF)	END FITTING CONF.	
	STRAIGHT	90°
04	.16	0
06	.16	0
08	.19	0
10	.20	0
12	.23	0
16	.30	0

CONSTRUCTION AND PERFORMANCE: THESE HOSE ASSEMBLIES SHALL MEET THE CONSTRUCTION AND PERFORMANCE REQUIREMENTS OF AS 1339. FITTINGS SHALL BE PERMANENTLY ATTACHED TO THE HOSE.

RATED OPERATION CHARACTERISTICS: See AS 1339.

MATERIALS: HOSE AND FITTINGS - PER AS 1339.  
 TUBULAR ABRASION SLEEVE (TFE) - BLACK, EXTRUDED SEAMLESS TFE TUBING PER AS 1291.  
 SPIRAL ABRASION SLEEVE - BLACK, NYLON COIL PER AS 1294.  
 FIRESLLEEVE - ASBESTOS, IMPREGNATED WITH SILICONE RUBBER PER AS 1072 "SIL" COOED.  
 INTEGRAL ABRASION SLEEVE - BLACK, INTEGRALLY BONDED SILICONE/TFE COMPOSITE.  
 SHRINK ABRASION SLEEVE (FEP) - TRANSLUCENT, SHRINKABLE FEP TUBING PER MIL-I-23D53/11.  
 SHRINK ABRASION SLEEVE (POLYOLEFIN) - BLACK, SHRINKABLE POLYOLEFIN TUBING PER AMS 3587 OR MIL-R-46846 TYPE 5.  
 INTEGRAL FIRE COVER - EXTRUDED SILICONE  
 BRAIDED ABRASION (POLYESTER)

MARKING: THE HOSE ASSEMBLIES SHALL HAVE ALL IDENTIFICATION MARKING, AS REQUIRED BY AS 1339, 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. VARIABLE DATA, SUCH AS MANUFACTURING DATE AND "PT" SYMBOL, MAY BE ELECTROETCHED ON ONE END FITTING OR FIRESLLEEVE CLAMP.