

TABLE I

|  |                                 |  |  |  |  |  | · · · · · · · · · · · · · · · · · · · | 7,                                     |   |  |   |   |   |
|--|---------------------------------|--|--|--|--|--|---------------------------------------|--|---|--|---|---|---|
| HOSE<br>ASSEMBLY<br>ND. AND<br>SIZE CODE                 | HOSE<br>ASSEMBLY<br>SIZE<br>REF | THREAD T<br>PER MIL-S-8879<br>REF  | I.D.<br>MIN                                  | A <sub>I</sub><br>MAX                        | A <sub>2</sub><br>Max                        | B<br>GAGE<br>DIA<br>BASIC                  | C 11/<br>DRILL<br>DIA<br>MIN          | MIN                                    | MAX                                     | D  | MAX   | E 12/<br>DIA MAX<br>WITHOUT<br>SLEEVING   | F<br>HEX<br>REF                           |
| AS119E<br>AS119G<br>AS119H<br>AS119J<br>AS119K<br>AS119M | 1/4<br>3/8<br>1/2<br>5/8<br>3/4 | .4375-2D UNJF-3B<br>.5625-18 UNJF-3B<br>.7500-16 UNJF-3B<br>.8750-14 UNJF-3B<br>1.0625-12 UNJ -3B<br>1.3125-12 UNJ -3B | .212<br>.298<br>.391<br>.485<br>.602<br>.852 | 2.12<br>2.44<br>2.75<br>3.25<br>3.75<br>4.50 | I.75<br>2.00<br>2.38<br>2.81<br>3.25<br>4.00 | .4120<br>.5600<br>.6730<br>.8100<br>I.D620 | .135<br>.240<br>.340<br>.410<br>.510  | .31<br>.44<br>.50<br>.56<br>.62<br>.81 | .50<br>.62<br>.75<br>.81<br>.88<br>1.09 | .69<br>.8B<br>1.00<br>1.19<br>1.3B<br>1.69 | .88<br>1.09<br>1.31<br>1.50<br>1.75<br>2.06 | .69<br>.80<br>.97<br>1.11<br>1.38<br>1.66 | .56<br>.69<br>.88<br>1.00<br>1.25<br>1.50 |

TABLE II

| HOSE ASSEMBLY LENGTH   | AVAILABLE (NCREMENTS  | TOLERANCE  |
|--|---|--|
| UNDER 18 INCHES 18 TO 36 INCHES 36 TD 50 INCHES OVER 50 INCHES | (NOT LESS THAN) .125 INCH<br>(NOT LESS THAN) .250 INCH<br>(NDT LESS THAN) .500 INCH<br>(NDT LESS THAN) 1.000 INCH | (PLUS OR MINUS) .125 INCH<br>(PLUS OR MINUS) .250 INCH<br>(PLUS OR MINUS) .500 INCH<br>(PLUS OR MINUS) I PERCENT |

(A) TABLE III

| SLEEVING TYPE OF CODE SLEEVING |  | HDSE OR SLEEVE O.D. MAX  |  |   |  |   |  |  |  |  |
|--------------------------------|--|--|--|---|--|---|--|--|--|--|
| OR                             |  |  | HOSE SIZE  |   |  |   |  |  |  |  |
| HOSE                           | HOSE   | 1/4  | 3/8  | 1/2   | 5/8  | 3/4   | 1  | °F   |  |  |
| NONE A B C D E F G H J K       | HOSE ONLY TUBULAR ABRASION (TFE) SPIRAL ABRASION FIRESLEEVE 10/ INTEGRAL ABRASION SHRINK ABRASION (FEP) SHRINK ABRASION (POLYDLEFIN) FIRESLEEVE 9/ INTEGRAL FIRE COVER-SILICONE 10/ INTEGRAL FIRE COVER-SILICONE 9/ BRAIDED ABRASION (POLYESTER) | .410<br>.580<br>.508<br>.875<br>.500<br>.470<br>.480<br>.875<br>.781<br>.656 | .540<br>.678<br>.612<br>I.032<br>.625<br>.600<br>.632<br>I.032<br>.891<br>.766 | .640<br>.800<br>.754<br>1.152<br>.708<br>.700<br>.722<br>1.152<br>1.016<br>.905<br>.680 | .745<br>.850<br>.847<br>1.230<br>.832<br>.813<br>.837<br>1.230<br>1.141<br>1.016 | .990 1.184 1.080 1.480 1.112 1.050 1.050 1.480 1.328 1.206 .959 | 1.270<br>1.514<br>1.375<br>1.840<br>1.390<br>1.350<br>1.375<br>1.840<br>1.593<br>1.500 | 400<br>400<br>275<br>400<br>350<br>400<br>275<br>400<br>400<br>300 |  |  |

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

Society of Automotive Engineers, Inc.

AEROSPACE STANDARD

HOSE ASSEMBLY, NONMETALLIC--3000 PSI, TFE, FLARELESS,

45° TO 90°, LIGHTWEIGHT

**AS119** 

SH 1 OF 3

| WAS 0155WEND WASS                             |                    |              | MAX  | IMUM WEIGHT  |      |      |      |  |  |
|---|--------------------|--------------|------|--------------|------|------|------|--|--|
| HOSE, SLEEVING, HOSE<br>WITH PROTECTIVE COVER |                    | HOSE SIZE    |      |              |      |      |      |  |  |
| OR END FITTING.                               | UNITS              | 1/4          | 3/B  | 1/2          | 5/8  | 3/4  | 1    |  |  |
| HOSE ONLY                                     | LBS/IN.            | .010         | .015 | .021         | .028 | .055 | .089 |  |  |
| TUBULAR ABRASION (TFE) SPIRAL ABRASION        | LBS/IN.<br>LBS/IN. | .003<br>.001 | .003 | .004<br>.003 | .004 | .006 | .009 |  |  |
| FIRESLEEVE 10/                                | LBS/IN.            | .010         | .014 | .016         | .017 | .022 | .026 |  |  |
| INTEGRAL ABRASION WIH 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 |  |  |
| FIRESLEEVE 9/                                 | LBS/IN.            | .010         | .014 | .016         | .017 | .022 | .026 |  |  |
| INTEGRAL FIRE COVER WITH HOSE 10/             | LBS/IN.            | .030         | .037 | .046         | .060 | .091 | .130 |  |  |
| INTEGRAL FIRE COVER WITH HOSE 9/              | LBS/IN.            | .020         | .030 | .037         | .048 | .080 | .117 |  |  |
| BRAIDED ABRASION WITH HOSE                    | LBS/IN.            | .012         | .017 | .023         | .027 | .040 |      |  |  |
| FIRESLEEVE CLAMP                              | LBS EA.            | .025         | .025 | .025         | .026 | .026 | .033 |  |  |
| STD END FITTING-45°                           | LBS EA.            | .078         | .126 | .218         | .327 | .597 | .B60 |  |  |
| STD END FITTING-90°                           | LBS EA             | .078         | .126 | .218         | -327 | Q615 | 945  |  |  |

TABLE V ⑻

TABLE VI

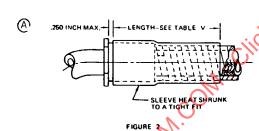
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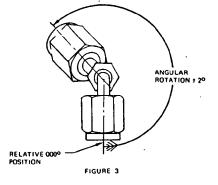
TABLE VII LENGTH CORRECTION FACTORS

| HOSE SIZE | LENGTH (INCHES) |  |  |  |  |  |
|-----------|-----------------|--|--|--|--|--|
| 04<br>06  | 2.0D ±.25       |  |  |  |  |  |
| 08<br>10  | 2.50 ±.25       |  |  |  |  |  |
| 12<br>16  | 3.00 ±.25       |  |  |  |  |  |

| HOSE<br>SIZE | SPHERICAL BALL SIZE<br>FOR DETERMINING MIN<br>THRU DIAMETER <u>11</u> / |             |  |  |  |  |
|--------------|---|-------------|--|--|--|--|
| REF          | MS19059<br>DASH NO.   | DIA.<br>IN. |  |  |  |  |
| 0.1          | 1007  | .109        |  |  |  |  |
| 04           |   |             |  |  |  |  |
| 06           | 1012  | . 1B8       |  |  |  |  |
| 08           | 1016  | .313        |  |  |  |  |
| 10           | 1018  | .375        |  |  |  |  |
| 12           | 1021  | 469         |  |  |  |  |
| 16           | 1029  | 719         |  |  |  |  |
|              |   |             |  |  |  |  |

HOSE STZE END FITTING CONF. 45° 90 04 .11 0 80 .13 0 10 .14 0 Õ 12 .16





CONSTRUCTION AND PERFORMANCE:

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

RATED OPERATING CHARACTERISTICS: See AS 1339.

HOSE AND FITTINGS - PER 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.

FIRESLEEVE - ASBESTOS, IMPREGNATED WITH SILICONE RUBBER PER AS 1072 "SIL" CODED.

INTEGRAL ABRASION SLEEVE - BLACK, INTEGRALLY BONDED SILICONE/TFE COMPOSITE.

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

SHRINK ABRASION SLEEVE (POLYOLETIN) - BLACK, SHRINKABLE POLYOLEFIN TUBING PER AMS 3587 DR MIL-R-46846 TYPE 5.

INTEGRAL FIRE COVER - EXTRUDED SILICONE

BRAIDED ABRASION (PDLYESTER)

MARKING:

(À)

(A)

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 FIRESLEEVE CLAMP.

Society of Automotive Engineers, Inc.

AEROSPACE STANDARD HOSE ASSEMBLY, NONMETALLIC--3000 PSI, TFE, FLARELESS, 45° TO 90°, LIGHTWEIGHT

**AS119**