

Submitted for recognition as an American National Standard

FEDERAL SUPPLY CLASS

REV.  
C

AS137

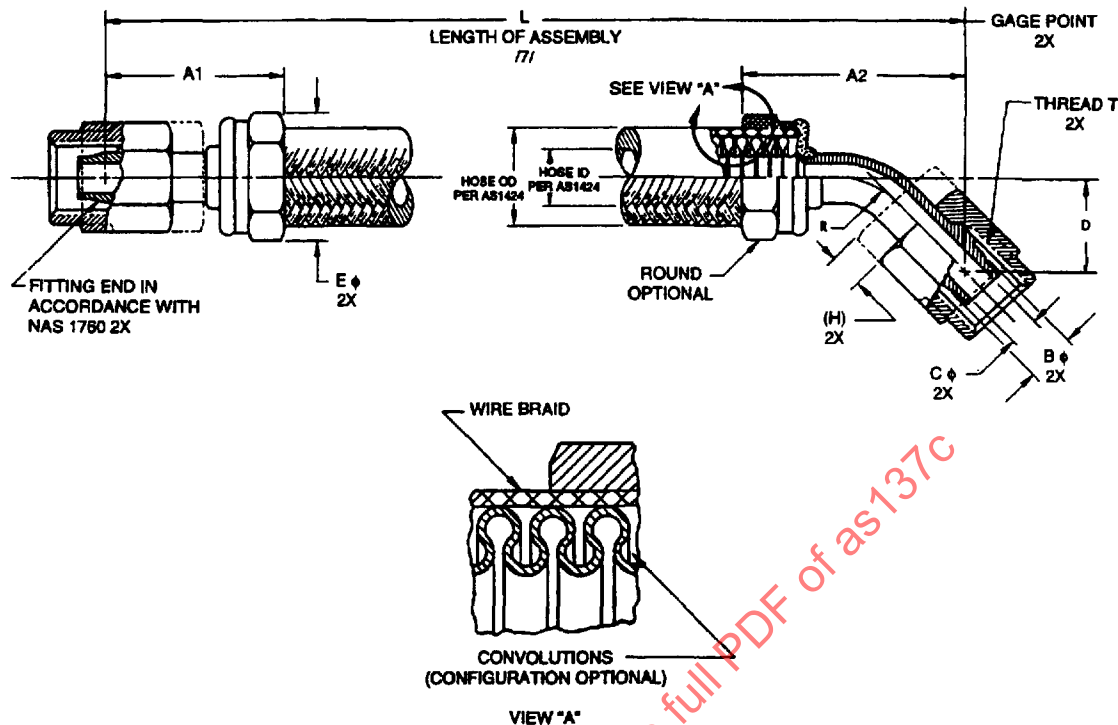


FIGURE 1 - HOSE ASSEMBLY

TABLE 1 - ASSEMBLY DIMENSIONS

| HOSE<br>ASSEMBLY<br>SIZE<br>CODE | HOSE<br>SIZE<br>(REF) | A <sub>1</sub><br>MAX | A <sub>2</sub><br>MAX | B<br>GAGE<br>BASIC | C<br>MIN<br>THRU<br>/B/ | D<br>MIN | D<br>MAX | E<br>MAX | (H)<br>NOM | R<br>(REF) | THREAD T<br>PER AS8879 (ISO 3161)<br>(REF) |
|----------------------------------|-----------------------|-----------------------|-----------------------|--------------------|-------------------------|----------|----------|----------|------------|------------|--------------------------------------------|
| 04                               | .250                  | 1.25                  | 1.62                  | .2930              | .141                    | .49      | .61      | .900     | .40        | .250       | .4375-20UNJF-3B                            |
| 05                               | .312                  | 1.38                  | 1.75                  | .3500              | .197                    | .51      | .63      | 1.100    | .40        | .312       | .5000-20UNJF-3B                            |
| 06                               | .375                  | 1.38                  | 1.88                  | .4120              | .250                    | .54      | .73      | 1.200    | .40        | .375       | .5625-18UNJF-3B                            |
| 08                               | .500                  | 1.56                  | 2.12                  | .5600              | .360                    | .67      | .92      | 1.300    | .47        | .500       | .7500-16UNJF-3B                            |
| 10                               | .625                  | 1.75                  | 2.38                  | .6730              | .455                    | .83      | 1.08     | 1.500    | .53        | .625       | .8750-14UNJF-3B                            |
| 12                               | .750                  | 1.94                  | 2.69                  | .8100              | .568                    | .86      | 1.11     | 1.740    | .53        | .750       | 1.0625-12UNJ-3B                            |
| 16                               | 1.000                 | 2.12                  | 3.19                  | 1.0620             | .760                    | .90      | 1.15     | 2.300    | .53        | 1.000      | 1.3125-12UNJ-3B                            |
| 20                               | 1.250                 | 2.38                  | 3.69                  | 1.3160             | .920                    | .94      | 1.32     | 2.850    | .54        | 1.250      | 1.6250-12UNJ-3B                            |

TABLE 2 - ASSEMBLY LENGTH TOLERANCE

| HOSE ASSEMBLY LENGTH   | LENGTH TOLERANCE |
|------------------------|------------------|
| UNDER 10 in            | ±.062 in         |
| 10 TO 36 in, EXCLUSIVE | ±.125 in         |
| 36 TO 50 in, EXCLUSIVE | ±.250 in         |
| 50 in AND OVER         | ±1%              |

CUSTODIAN: SAE G-3/G-3D

PROCUREMENT SPECIFICATION: /2/ AS1424

**SAE** The Engineering Society  
For Advancing Mobility  
Land Sea Air and Space  
**INTERNATIONAL**  
400 Commonwealth Drive, Warrendale, PA 15096-0001

**AEROSPACE STANDARD**HOSE ASSEMBLY, METAL - MEDIUM PRESSURE,  
FLARELESS, WELDED, STRAIGHT TO 45°**AS137**  
SHEET 1 OF 3**REV.**  
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TABLE 3 - HOSE ASSEMBLY PHYSICAL CHARACTERISTIC

| HOSE<br>SIZE<br>CODE | 70 °F /5/<br>OPERATING<br>PRESSURE<br>PSI MAX | 70 °F /5/<br>PROOF<br>PRESSURE<br>PSI MIN | 70 °F /5/<br>BURST<br>PRESSURE<br>PSI MIN |
|----------------------|-----------------------------------------------|-------------------------------------------|-------------------------------------------|
| 04                   | 2000                                          | 3000                                      | 8000                                      |
| 05                   | 1800                                          | 2700                                      | 7200                                      |
| 06                   | 1600                                          | 2400                                      | 6400                                      |
| 08                   | 1400                                          | 2100                                      | 5600                                      |
| 10                   | 1200                                          | 1800                                      | 4800                                      |
| 12                   | 1050                                          | 1575                                      | 4200                                      |
| 16                   | 800                                           | 1200                                      | 3200                                      |
| 20                   | 550                                           | 825                                       | 2200                                      |

TABLE 4 - SPHERICAL BALL SIZE  
FOR DETERMINING MINIMUM  
HOSE ASSEMBLY ID /8/

| HOSE SIZE | STRAIGHT FITTING | ELBOW FITTING |
|-----------|------------------|---------------|
| 04        | .127             | .120          |
| 05        | .177             | .167          |
| 06        | .225             | .212          |
| 08        | .324             | .306          |
| 10        | .410             | .387          |
| 12        | .511             | .483          |
| 16        | .684             | .646          |
| 20        | .828             | .782          |

TABLE 5 - WEIGHTS (NOM)

| HOSE<br>SIZE | HOSE<br>LB/IN | STANDARD FITTING (LB)<br>STRAIGHT | STANDARD FITTING (LB)<br>45° ELBOW |
|--------------|---------------|-----------------------------------|------------------------------------|
| -04          | .016          | .05                               | .05                                |
| -05          | .018          | .07                               | .08                                |
| -06          | .020          | .08                               | .09                                |
| -08          | .028          | .13                               | .14                                |
| -10          | .038          | .20                               | .22                                |
| -12          | .042          | .39                               | .42                                |
| -16          | .058          | .52                               | .61                                |
| -20          | .072          | .79                               | .97                                |

## NOTES:

## /1/ MATERIALS:

- a. CLASS "N": INNERTUBE - NICKEL ALLOY TYPE 625  
ALL OTHER COMPONENTS - 321 CORROSION RESISTANT STEEL
- b. CLASS "S": ALL COMPONENTS - 321 CORROSION RESISTANT STEEL

- /2/ THIS HOSE ASSEMBLY STANDARD SHALL BE QUALIFIED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION AS1424; EXCEPT FLEXURE PRESSURE CYCLING ENDURANCE REQUIREMENT IS NOT APPLICABLE FOR SIZE -04 CLASS "S". SEE NOTE /13/. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.

**AEROSPACE STANDARD**

HOSE ASSEMBLY, METAL - MEDIUM PRESSURE,  
FLARELESS, WELDED, STRAIGHT TO 45°

**AS137**  
SHEET 2 OF 3

**REV.**  
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