INCH-POUND

MIL-DTL-25579/1 25 September 2003

#### **DETAIL SPECIFICATION SHEET**

HOSE ASSEMBLY LENGTH MEASUREMENT for NAS 1760 and MS8000 SERIES SEAL, (GLOBE SEAL, or RADIUS SEAL) to FLARELESS FITTING END DESIGN

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-DTL-25579.

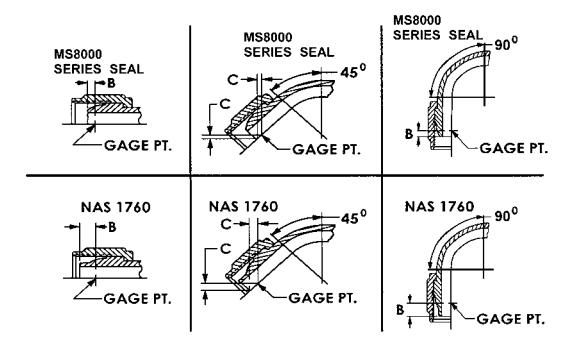


FIGURE 1. MS8000 series seal (globe seal or radius seal) and NAS1760 seal design.

TABLE I. Differences between NAS1760 and MS8000 series seal (globe seal or radius seal) design.

B <u>1/</u> Straight and 90° angle				C 45 <sup>°</sup> angle			
Dash size	NAS 1760	MS8000 series	Differences (see figures 2 and 3)	Dash size	NAS 1760	MS8000 series	Differences (see figure 4)
3	.140	.085	.055	3	.099	.060	.039
4	.155	.062	.093	4	.110	.044	.066
5	.157	.058	.099	5	.111	.041	.070
6	.164	.059	.105	6	.116	.042	.074
8	.189	.064	.125	8	.134	.045	.089
10	.201	.078	.123	10	.142	.055	.087
12	.228	.069	.159	12	.161	.049	.112
16	.297	.132	.165	16	.210	.093	.117
20	.300	.090	.210	20	.212	.064	.148
24	.365	.134	.231	24	.258	.095	.163

<sup>1/</sup> See NAS 1760 dimension "F" for tolerance.

## Requirements:

All hose fittings are measured at the centerline for length and drop dimensions.

Figure 1 and table 1 show both the NAS 1760 nipple end design and the MS8000 series seal (globe seal or radius seal) nipple end design. Both are acceptable. Figure 1 and table 1 also show the comparison.

The flareless hose assembly length "L" in the appropriate hose assembly document is measured from end of MS8000 series seal nipple (globe seal or radius seal nipple) to other end of MS8000 series seal nipple (globe seal or radius seal nipple), (see figure 2).

To convert "end to end" to "gage point to gage point" measurement, subtract from "L" the appropriate "B" or "C" dimension shown in table I for each end fitting.

To convert MS assembly length from MS8000 series seal (globe seal or radius seal) design to NAS 1760 design, add B or C difference from table 1 for each fitting to the assembly length. However, the MS PIN designation "L" for hose length shall be from the MS8000 series seal, (globe seal or radius seal) end(s). This must be done correctly to assure mating with the next higher assembly.

Adjust both ends to allow interchangeable assemblies with either MS8000 series seal, (globe seal and radius seal) or NAS 1760 ends (see figure 2).

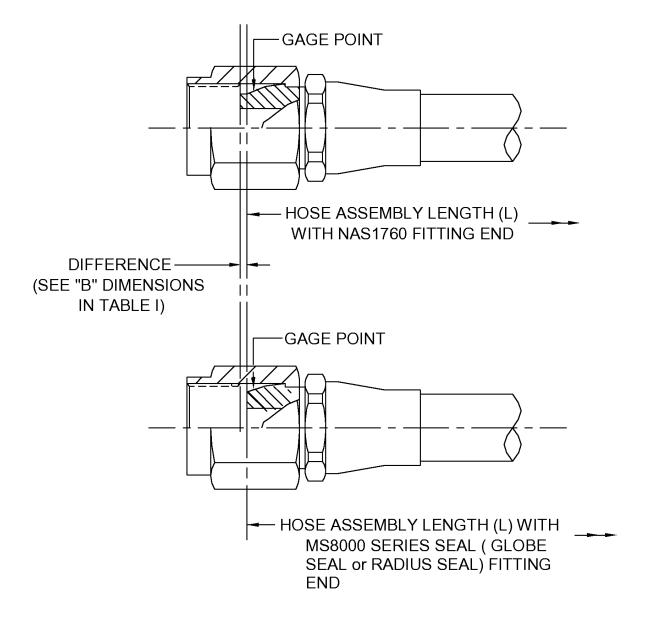
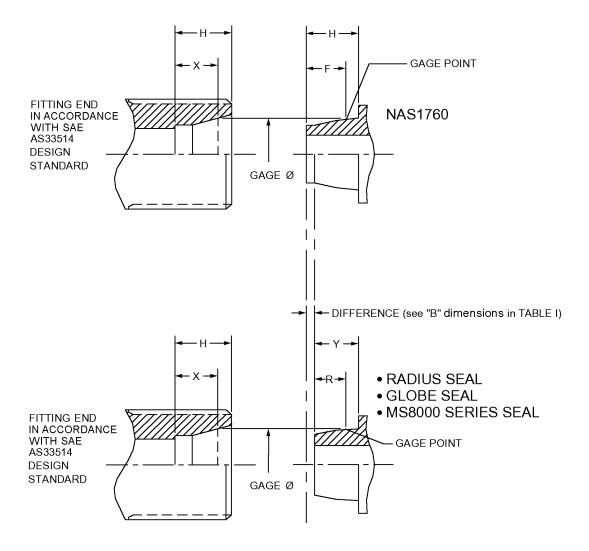


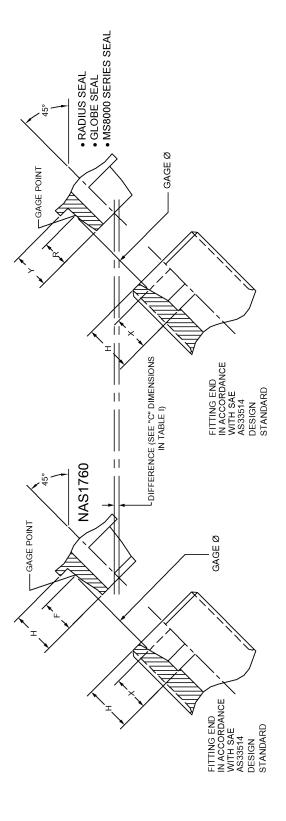
FIGURE 2. <u>Difference "B" shown in straight hose assembly</u>.



# NOTE:

 THE DIFFERENCE "B" DIMENSION AS SHOWN IS THE SAME FOR 90° ELBOW EXCEPT THE DRAWINGS ARE AT A 90° ANGLE. (For calculating fitting drop)

FIGURE 3. <u>Difference for dimension "B" shown with SAE AS33514 mating end.</u>



# NOTES

- 1. Dimensions are in inches.
- 2. Unless otherwise specified, tolerances are in decimals ±.007.
- 3. An alternate nut may be used with NAS1760, but must mate with SAE AS33514 (see figure 3).
- fitting end designs with respect to mating with the SAE AS33514 design standard. The hose assembly length for NAS 1760 is Figures 2, 3, and 4 show the difference in hose length between NAS1760 and MS8000 series seal (globe seal or radius seal) from a common gage point. The gage point is the sealing point mated with SAE AS33514. The PIN hose assembly length, longer than the MS8000 series seal (globe seal or radius seal) design. Dimensions "F" and "R" show the length difference which is always based on the MS8000 series seal (globe seal or radius seal), cannot be changed to maintain system configuration and Federal Logistics Information Systems (FLIS) compatibility.

FIGURE 4. Difference for dimension "C" shown with SAE AS33514 mating end.

# **CONCLUDING MATERIAL**

Custodians:

Army - AV Navy - AS Air Force - 99

DLA - CC

Review activities:

Army - AR, AT, EA, MI Navy - MC, SA, SH Air Force - 71

Preparing activity: DLA - CC

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