

**REV. B**  
**AS140**

FEDERAL SUPPLY CLASS

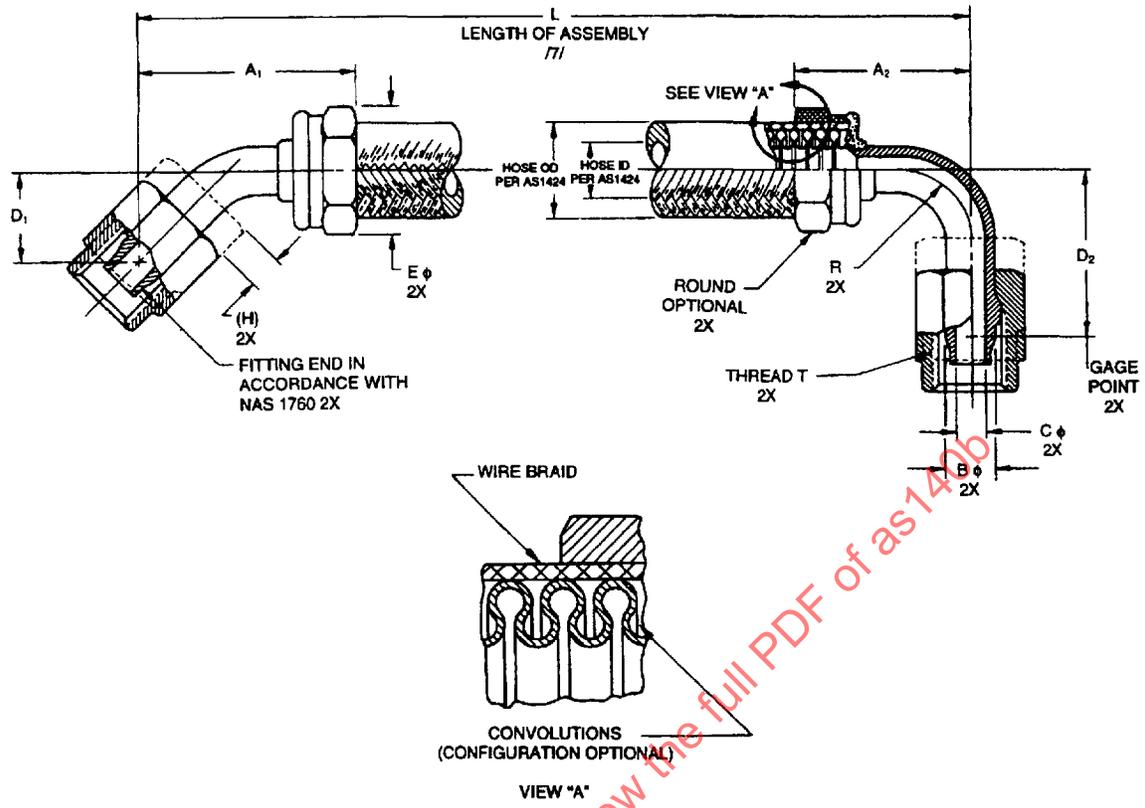


FIGURE 1 - HOSE ASSEMBLY

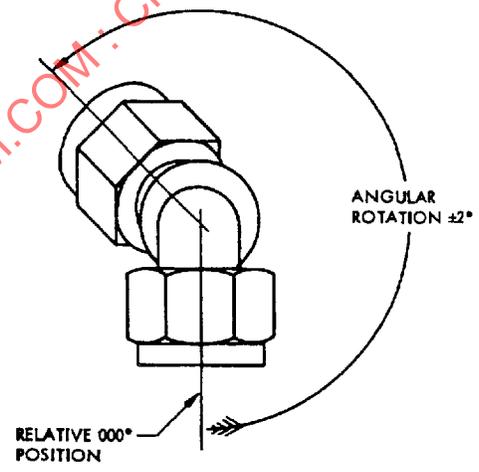


FIGURE 2 - FITTING ANGULAR ORIENTATION /11/

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

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, 45° TO 90°

**AS140**  
SHEET 1 OF 3

**REV. B**

ISSUED 1977-02      REVISED 1998-05

TABLE 1 - ASSEMBLY DIMENSIONS

HOSE ASSEMBLY SIZE CODE	HOSE SIZE (REF)	A <sub>1</sub> MAX	A <sub>2</sub> MAX	B GAGE BASIC	C THRU /6/ MIN	D <sub>1</sub> MIN	D <sub>1</sub> MAX	D <sub>2</sub> MIN	D <sub>2</sub> MAX	E MAX	(H) NOM	R (REF)	THREAD T PER MIL-S-8879 (REF)
E	.250	1.62	1.18	.2930	.141	.49	.61	.83	1.08	.900	.40	.250	.4375-20UNJF-3B
F	.312	1.75	1.24	.3500	.197	.51	.63	.84	1.09	1.100	.40	.312	.5000-20UNJF-3B
G	.375	1.88	1.31	.4120	.250	.54	.73	.98	1.23	1.200	.40	.375	.5625-18UNJF-3B
H	.500	2.12	1.50	.5600	.360	.67	.92	1.23	1.54	1.300	.47	.500	.7500-16UNJF-3B
J	.625	2.38	1.75	.6730	.455	.83	1.08	1.56	1.87	1.500	.53	.625	.8750-14UNJF-3B
K	.750	2.69	2.06	.8100	.568	.86	1.11	1.67	2.05	1.740	.53	.750	1.0625-12UNJ-3B
M	1.000	3.19	2.50	1.0620	.760	.90	1.15	1.84	2.22	2.300	.53	1.000	1.3125-12UNJ-3B
N	1.250	3.69	2.97	1.3160	.920	.94	1.32	2.09	2.59	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%

TABLE 3 - HOSE ASSEMBLY PHYSICAL CHARACTERISTIC

HOSE SIZE CODE	70 °F /5/ OPERATING PRESSURE PSI MAX	70 °F /5/ PROOF PRESSURE PSI MIN	70 °F /5/ BURST PRESSURE 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	ELBOW FITTING
04	.120
05	.167
06	.212
08	.306
10	.387
12	.483
16	.646
20	.782

TABLE 5 - WEIGHTS (NOM)

HOSE SIZE	HOSE LB/IN	STANDARD FITTING (LB)	
		45° ELBOW	90° ELBOW
-04	.016	.05	.05
-05	.018	.08	.08
-06	.020	.09	.09
-08	.028	.14	.15
-10	.038	.22	.24
-12	.042	.42	.44
-16	.058	.61	.68
-20	.072	.97	1.02