

# RATIONALE

FEDERAL SUPPLY CLASS  
4720

AS1542A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

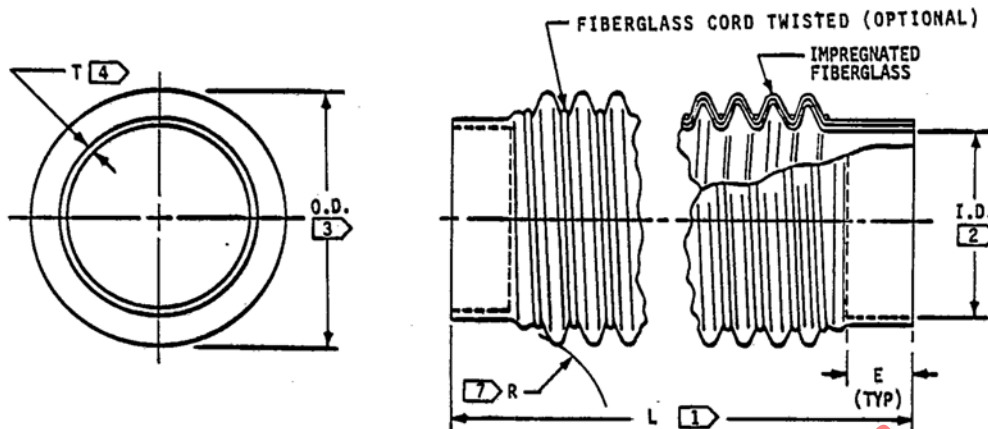


TABLE I  
TABULATION OF OPERATING PRESSURE AND PART NUMBER GRADE


GRADE	TYPE (OPERATING TEMPERATURE)	OPERATING PRESSURE RATING (PSI) ("O" PSI TO PRESSURES LISTED BELOW)						
		HOSE INSIDE DIAMETER (INCHES)						
		1	2	3	4	5		6
A /6/	II	10	5	4	4	3	3	

TABLE II  
TABULATION OF HOSE LENGTH SPECIFICATIONS

I.D. HOSE INSIDE DIAMETER - INCH	L - HOSE LENGTH (INCHES)		E SOFT END LENGTH (INCHES ±0.12)
	MINIMUM	MAXIMUM	
0.75 TO 6.00	3.75	120.00	1.50

TABLE III  
TABULATION OF AVAILABLE HOSE LENGTH INCREMENTS AND TOLERANCES

L - HOSE LENGTH (INCHES)	AVAILABLE INCREMENT (INCH)	L - LENGTH TOLERANCE
3.75 TO 48.00	1.00	±1.00
49.00 TO 120.00	1.00	±1.50

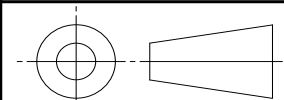
## FLAG NOTES:

- LENGTH "L" IS A THREE DIGIT NUMBER OF WHICH THE THREE DIGITS DESCRIBE THE HOSE ASSEMBLY LENGTH IN WHOLE INCHES. SEE TABLES II AND III FOR LENGTH SPECIFICATIONS AND TOLERANCES.
- DIAMETERS ARE IN 0.25 INCREMENTS. MINIMUM INSIDE DIAMETER (I.D.) IS 0.75 INCH AND MAXIMUM INSIDE DIAMETER (I.D.) IS 6.00 INCHES. TOLERANCE FOR THE CONVOLUTED SECTION I.D. AND FOR THE SOFT END SECTION I.D. IS -0.01 TO +0.03 INCH.
- OUTSIDE DIAMETER (O.D.) OF CONVOLUTION CRESTS SHALL NOT EXCEED THE NOMINAL INSIDE DIAMETER BY MORE THAN THE FOLLOWING AMOUNTS:

NOMINAL I.D. (INCHES)	O.D. INCREASE (INCHES)
0.75 TO 2.75	0.38
3.00 TO 4.75	0.50
5.00 TO 6.00	0.75

SAE values your input. To provide feedback  
on this Technical Report, please visit  
<http://www.sae.org/technical/standards/AS1542A>

## THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: AS1501

**SAE Aerospace**  
An SAE International Group

## AEROSPACE STANDARD

HOSE, AIR DUCT, FLEXIBLE, HELICAL CONVOLUTED,  
SELF EXTINGUISHING

**SAE AS1542**  
SHEET 1 OF 2

REV. A