FEDERAL SUPPLY CLASS
5975

RATIONALE

REVISION REQUIRED TO CLARIFY TECHNICAL REQUIREMENTS AND ADDRESS REFERENCES

NOTICE

AS25064 PROVIDES PERFORMANCE REQUIREMENTS FOR AS25067 ASSEMBLIES, REQUIRES NO QUALIFICATION, AND HAS NO PROCUREMENT SPECIFICATION

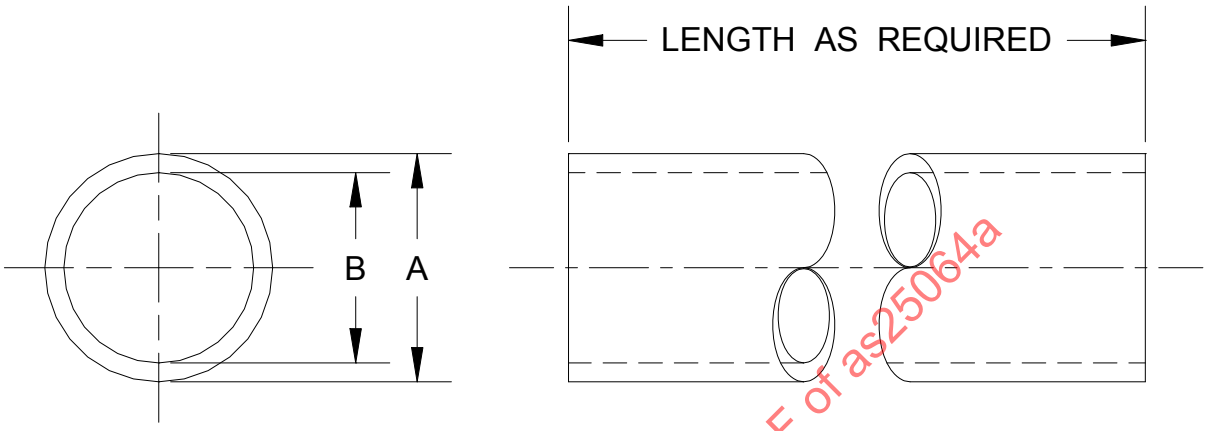
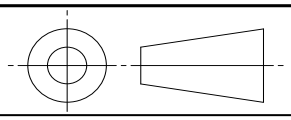


FIGURE 1 – CONDUIT, FLEXIBLE, RADIO FREQUENCY SHIELDING

TABLE 1 – AS25064 CONDUIT CONFIGURATION

MS PART NO.	INSIDE DIA (NOMINAL)	A		B		BENDING RADIUS (INSIDE) MAX	WEIGHT MAX LB PER FT
		MAX	MIN	MAX	MIN		
MS25064-3	3/16	.373	.350	.188	.172	1.625	.140
MS25064-4	1/4	.435	.401	.250	.235	2.000	.180
MS25064-5	5/16	.513	.490	.328	.313	2.000	.205
MS25064-8	3/8	.560	.538	.375	.360	2.125	.242
MS25064-10	5/8	.833	.810	.625	.610	2.500	.406
MS25064-12	3/4	.958	.935	.750	.745	3.000	.457
MS25064-16	1	1.256	1.236	1.000	.985	3.875	.710
MS25064-18	1-1/8	1.411	1.387	1.156	1.141	5.125	.820
MS25064-22	1-3/8	1.688	1.658	1.375	1.360	5.625	.950

THIRD ANGLE PROJECTION



ISSUED 1999-07 REAFFIRMED 2009-11 REVISED 2011-07

CUSTODIAN: AE-8A

PROCUREMENT SPECIFICATION: NONE

SAE Aerospace
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AEROSPACE STANDARD

(R) CONDUIT, FLEXIBLE, RADIO FREQUENCY SHIELDING

SAE AS25064

REV. A

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REQUIREMENTS:

1. DIMENSIONS ARE INCHES

2. PERFORMANCE: IN ACCORDANCE WITH A-A-52440 (*CID=COMMERCIAL ITEM DESCRIPTION) AND MIL-STD-464, THE FOLLOWING REQUIREMENTS APPLY:

   A. RADIATED INTERFERENCE. THE SHIELDING PROPERTIES TEST OF THE CONDUIT SHALL BE CONDUCTED IN ACCORDANCE WITH THE TEST REQUIREMENTS FOR RADIATED INTERFERENCE LIMITS OUTLINED IN MIL-STD-464. A 10-FOOT LENGTH OF CONDUIT, HAVING A AS25065 FERRULE AND A AS25066 NUT ASSEMBLED ON EACH END, SHALL BE INSERTED IN A SIMULATED ENGINE TEST SETUP. THE TEST SHALL CONSIST OF REPEATEDLY FIRING A SHIELDED SPARK PLUG WITH THE CONDUIT IN THE HIGH-TENSION SIDE OF THE SETUP. THE SPARK PLUG SHALL BE OPERATED IN A PRESSURE BOMB UNDER A SPARK PLUG SETTING AND BOMB PRESSURE APPROXIMATING THAT NORMALLY ENCOUNTERED IN AN ENGINE. THE MAGNETO USED SHALL BE A BENDIX-SCINTILLA MODEL NO. DF18LN, OR EQUAL, AND SHALL BE SUITABLY SHIELDED. THE CONDUIT SHALL BE CAPABLE OF SATISFACTORILY LIMITING ANY RADIATED INTERFERENCE TO WITHIN THE LIMITS SPECIFIED.

   B. VIBRATION ENDURANCE. THE VIBRATION APPARATUS SHALL CONSIST OF A SUITABLE DEVICE FOR MOUNTING AND VIBRATING THE CONDUIT ASSEMBLY THROUGH THE FOLLOWING RANGES (SEE FIGURE 2 AND 3):

      (1) 0.100-INCH DOUBLE AMPLITUDE (TOTAL EXCURSION) FROM 5 TO 10 HZ.

      (2) 0.060-INCH DOUBLE AMPLITUDE FROM 10 TO 60 HZ.

      (3) ±11G VIBRATORY ACCELERATION FROM 60 TO 75 HZ.

      (4) ±15G VIBRATORY ACCELERATION FROM 75 TO 100 HZ.

      (5) ±20G VIBRATORY ACCELERATION FROM 100 TO 500 HZ.

   C. THE SAME CONDUIT SAMPLE AS USED IN THE SHIELDING PROPERTIES TEST SHALL BE MOUNTED ON THE VIBRATION STAND AS SHOWN IN FIGURE 3. THE CONDUIT SHALL BE SECURED TO THE STAND AT THE TWO BENDING POINTS AND AT THE FERRULES ON EACH END. THE FREQUENCY OF VIBRATION SHALL BE VARIED SLOWLY FROM 5 TO 500 AND BACK TO 5 HZ WITH THE AMPLITUDES SHOWN IN FIGURE 2. IF RESONANT FREQUENCIES ARE ENCOUNTERED, THE STAND SHALL BE VIBRATED FOR A PERIOD OF 12 HOURS WITH THE APPLIED DOUBLE AMPLITUDE OR VIBRATORY ACCELERATION AS SHOWN ABOVE. WHEN MORE THAN ONE RESONANT FREQUENCY IS ENCOUNTERED, THE TEST MAY BE CARRIED OUT AT THE MOST SEVERE RESONANCE, OR THE PERIODS MAY BE DIVIDED AMONG THE RESONANT FREQUENCIES, WHICHEVER IS CONSIDERED MOST LIKELY TO PRODUCE FAILURE. AT THE END OF THE 12-HOUR PERIOD, THE STAND SHALL BE VIBRATED WITH AN APPLIED DOUBLE AMPLITUDE OF 0.018 INCH AND A FREQUENCY OF 150 HZ FOR AN ADDITIONAL PERIOD OF 138 HOURS. AT THE END OF THIS TEST, THE CONDUIT SHALL BE AGAIN SUBJECTED TO THE SHIELDING PROPERTIES TEST AND SHALL MEET THE REQUIREMENTS SPECIFIED THEREIN.

QUALITY ASSURANCE:

FOR EACH DELIVERY, THE SUPLIER MUST CERTIFY ALL REQUIREMENTS OF PARAGRAPHS 2.3 TO 2.6.2 OF A-A-52440 AND REQUIREMENTS 2A AND 2B HAVE BEEN VERIFIED BY TEST DATA GENERATED NO LONGER THAN 2 YEARS PRIOR TO PRODUCTION OF THE PART SUPPLIED.

APPLICATION:

CONDUIT IS ASSEMBLED IN ACCORDANCE AS25067 USING AS25066 LOCKNUTS, AS25065 COLLAR AND FERRULES.

SPECIFICATION NOTE:

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