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REV. A

AS21981™

FEDERAL SUPPLY CLASS
5940

RATIONALE

ADDITION OF REFERENCE TO ARP7053 AND MINOR TECHNICAL NOTES.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS21608.

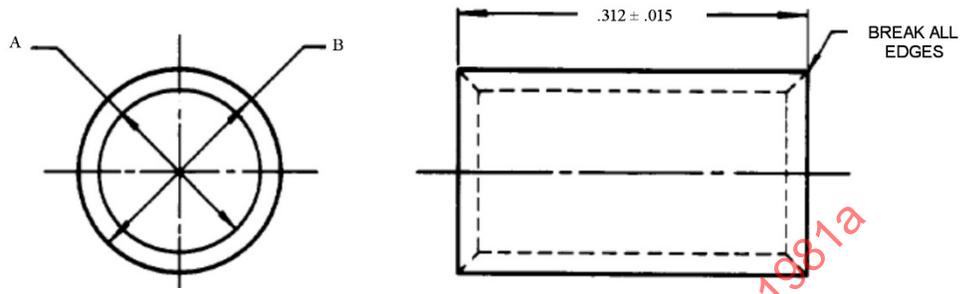
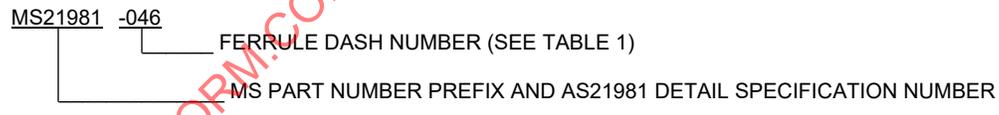


FIGURE 1 - INNER FERRULE CONFIGURATION

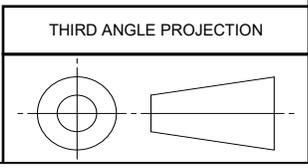
REQUIREMENT (REFER TO AS21608):

1. BASE MATERIAL SHALL BE BRASS ALLOY WITH ROCKWELL HARNNESS 15T 78 TO 90. FINISH SHALL BE TIN IN ACCORDANCE WITH ASTM B545 TIN OR ASTM B339 AS APPLICABLE.
2. DIMENSIONS IN INCHES SHALL BE IN ACCORDANCE WITH TABLE 1 AND FIGURE 1.
3. MARKING SHALL BE COLOR CODED IN ACCORDANCE WITH TABLE 1.
4. REMOVE ALL BURRS AND SHARP EDGES. CHAMFER OR ROUND EDGES IS ACCEPTABLE.
5. REQUIRED CRIMP TOOLS ARE M22520/5 OR /10 WITH VARIOUS DIES AS SPECIFIED. IF CLASS II TOOLS ARE USED (QUALIFICATION CERTIFICATION REQUIRED), SUPPLIER SHALL MAKE AVAILABLE TO THE USER, COMPLETE DETAILS OF THE TOOLS REQUIRED FOR TERMINATION OF FERRULE.
6. SUPPLIER NAME OR SYMBOL IN ACCORDANCE AIR1351 AND PART NUMBER REQUIRED ON UNIT PACKAGING.
7. PART NUMBER:



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CUSTODIAN: AE-8C2 PROCUREMENT SPECIFICATION: AS21608

	<p>AEROSPACE STANDARD</p> <p>(R) FERRULE, INNER, UNINSULATED, SHIELD TERMINATING , TYPE I, TWO PIECE, CLASS I, FOR SHIELDED CABLES</p>	<p>AS21981™</p> <p>SHEET 1 OF 3</p>	<p>REV. A</p>
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ISSUED 2011-09 REVISED 2021-09

TABLE 1 - INNER FERRULE DIMENSIONS AND MARKING

MS21981 DASH NO.	COLOR CODE	A DIA		B DIA	
		MIN	MAX	MIN	MAX
-046	NO COLOR	.043	.049	.067	.073
-058	YELLOW	.055	.061	.080	.086
-063	RED	.060	.066	.085	.091
-071	GREEN	.068	.074	.093	.099
-080	BLUE	.077	.083	.101	.107
-090	ORANGE	.087	.093	.111	.117
-096	PURPLE	.093	.099	.116	.122
-101	YELLOW	.098	.104	.121	.127
-109	RED	.106	.112	.128	.134
-115	NO COLOR	.112	.118	.143	.149
-124	GREEN	.121	.127	.142	.148
-128	NO COLOR	.125	.131	.149	.155
-134	ORANGE	.131	.137	.153	.159
-149	BLUE	.146	.152	.176	.182
-156	RED	.153	.159	.189	.195
-165	NO COLOR	.162	.168	.191	.197
-175	GREEN	.172	.178	.212	.218
-187	YELLOW	.184	.190	.224	.230
-194	BLUE	.191	.197	.222	.229
-205	ORANGE	.202	.208	.242	.248
-219	NO COLOR	.216	.222	.247	.253
-225	YELLOW	.222	.228	.253	.259
-232	RED	.229	.235	.260	.266
-250	GREEN	.247	.253	.278	.284
-261	BLUE	.258	.264	.294	.300
-266	NO COLOR	.263	.269	.294	.300
-275	ORANGE	.272	.278	.303	.309
-281	YELLOW	.278	.284	.328	.334
-287	NO COLOR	.284	.290	.324	.330
-297	RED	.294	.300	.332	.338
-312	PURPLE	.309	.315	.359	.365
-348	ORANGE	.345	.351	.397	.403
-375	BLUE	.372	.378	.403	.409

APPLICATIONS:

- AS18121 OUTER FERRULE IS USED WITH AS21981 INNER FERRULE AS INSULATION REPLACEMENT.
- AS21980 OUTER FERRULE IS USED WITH AS21981 INNER FERRULE AS UN-INSULATED REPLACEMENT.
- AS21981 INNER FERRULE SELECTION SHALL BE SELECTED BASED ON THE SMALLEST INNER DIAMETER (DIMENSION A) THAT CLEARS THE OUTER DIAMETER OF THE CABLE OR SHIELD BASED ON THE INSTALLATION METHOD CHOSEN. FOR INSTALLATION METHODS AND ADDITIONAL INSTALLATION INSTRUCTIONS REFER TO ARP7503.
- TIN PLATED FERRULES SHOULD NOT BE EXPOSED TO TEMPERATURES ABOVE 150 °C.
- AS21981 IS ONLY USED FOR REPLACEMENT IN U.S. MILITARY APPLICATIONS (REFER TO AS83519).
- TIN PLATE CONFIGURATIONS NOT FOR SPACE APPLICATIONS. AS21608 DOES NOT RESTRICT THE USE OF PURE TIN FINISHES WHICH MAY CAUSE TIN WHISKER GROWTH. FOR MORE INFORMATION ON TIN WHISKERS, REFER TO AIR5444.

	AEROSPACE STANDARD	AS21981™ SHEET 2 OF 3	REV. A
	(R) FERRULE, INNER, UNINSULATED, SHIELD TERMINATING , TYPE I, TWO PIECE, CLASS I, FOR SHIELDED CABLES		