FEDERAL SUPPLY CLASS
6150

RATIONALE

REVISION REQUIRED TO CLARIFY DIMENSIONS, TERMINAL USAGE, AND APPLICATION RELATIONSHIPS.

NOTICE

THE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF AS7974.
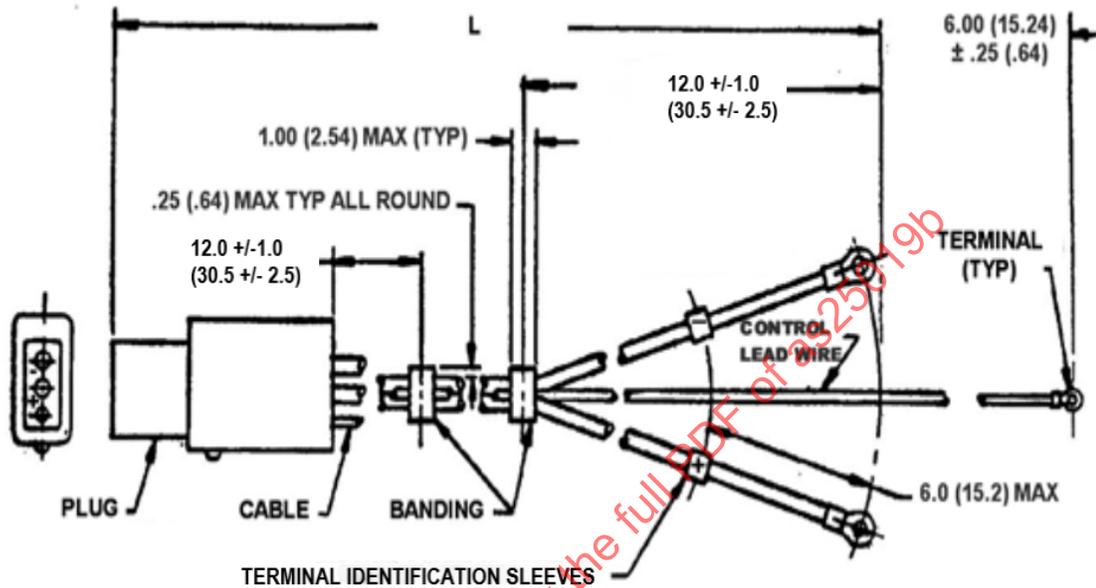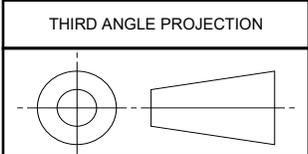

FIGURE 1 - AS25019 CABLE ASSEMBLY

TABLE 1 - AS25019 CABLE ASSEMBLY DIMENSIONS

PART NUMBER MS25019-	CABLE SIZE (+, -) 1/	CONTROL LEAD WIRE SIZE	L ± .5 (FEET)	L ± 0.15 M
20			20	6.10
30			30	9.14
40	0000	8	40	12.19
60			60	18.29
80			80	24.36
100			100	30.48

1/ CABLE TERMINAL IS MS20659-160 FOR NEGATIVE TERMINAL LUG AND MS20659-123 FOR POSITIVE TERMINAL LUG
2/ CONTROL LEAD WIRE TERMINAL IS MS20659-107.

For more information on this standard, visit
https://www.sae.org/standards/content/AS25019B/

THIRD ANGLE PROJECTION

CUSTODIAN: AE-8/AE-8A

PROCUREMENT SPECIFICATION: AS7974

AEROSPACE STANDARD

CABLE ASSEMBLY,
EXTERNAL ELECTRIC POWER,
AIRCRAFT, 28 VOLT DC, JET STARTING

AS25019™
SHEET 1 OF 3

**REV.
B**

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS7974.

1. CONFIGURATION:

   DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED, TOLERANCES ARE ±.25 (0.64 CM). METRIC DIMENSIONS ARE BASED ON 2.54 CM/IN. ENGLISH UNITS TAKE PRECEDENCE OVER METRIC UNITS IN THE EVENT OF A CONFLICT.

   CABLE ASSEMBLY CONFIGURATION AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FIGURE 1, TABLE 1, AND AS7974.

   PLUG AND SOCKET CONTACT CONFIGURATION SHALL BE IN ACCORDANCE WITH AS25487 (SEE TABLE 3). THE PLUG, SPECIFIED BY THE PART IDENTIFICATION NUMBER (PIN), SHALL BE MOLDED OR ATTACHED TO THE CABLES (SEE APPLICATION NOTES).

   CABLE AND CONTROL LEAD WIRE SHALL BE IN ACCORDANCE WITH AS5756/2.

   TERMINALS SHALL BE IN ACCORDANCE WITH AS20659 (SEE TABLE 1 NOTE 1 AND 2).

   CIRCUIT CONTROL IDENTIFICATION SLEEVE (SEE FIGURE 1) SHALL BE IN ACCORDANCE WITH AS7974.
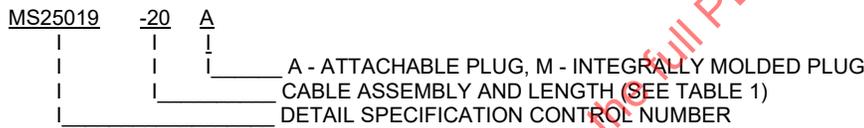
2. MATERIAL:

   PLUG MATERIAL SHALL BE IN ACCORDANCE WITH AS25487.

   BAND MATERIAL SHALL BE IN ACCORDANCE WITH AS7974.

   CABLE AND CONTROL LEAD WIRE MATERIALS SHALL BE IN ACCORDANCE WITH AS5756/2.

3. PART IDENTIFICATION NUMBER (PIN):

   AS25019 CABLE ASSEMBLY PIN SHALL BE AS FOLLOWS (SEE APPLICATION NOTES):

   ```
   MS25019   -20   A
      I       I    I
      I       I    I_____ A - ATTACHABLE PLUG, M - INTEGRALLY MOLDED PLUG
      I       I_____ CABLE ASSEMBLY AND LENGTH (SEE TABLE 1)
      I_____ DETAIL SPECIFICATION CONTROL NUMBER
   ```

4. IDENTIFICATION MARKING REQUIREMENT AND LOCATION:

   THE MARKING REQUIREMENTS AND LOCATIONS SHALL BE IN ACCORDANCE WITH AS7974. PLUG MARKING SHALL INCLUDE THE PIN AND SUPPLIER IDENTIFICATION OR CAGE CODE.

5. CRIMP TOOLS:

   TERMINAL SHALL BE CRIMPED WITH TOOLS SPECIFIED IN TABLE 2.

TABLE 2 - CRIMP TOOLS

| TERMINAL SIZE | CRIMP TOOL | WIRE CONDUCTOR CRIMP DIE | |
		FORM	INDENT
8	MS25441-01 (1/, 2/, 3/) M5259/3-01	MS90485-8	N/A
	M5259/4-01 M5259/5-01	M5259/7-001	M5259/7-010
0000	MS25441-01 (1/, 2/, 3/)	MS90485-04	N/A

1/ REFER TO AS5259/1 FOR TOOL DETAILS AND AS5259/7 FOR DIE DETAILS.
2/ TOOL REQUIRES AS5259/2 HYDRAULIC HOSE AND PUMP.
3/ AN EQUIVALENT MS25441 AND MS90485 DIE APPROVED BY THE QUALIFYING ACTIVITY MAY BE USED ONLY FOR THE INITIAL CABLE ASSEMBLY PURCHASES FOR THE UNITED STATES MILITARY.

APPLICATION NOTES:

1. CABLES ASSEMBLIES SHALL BE INTEGRALLY MOLDED CABLE ASSEMBLIES FOR UNITED STATES AIR FORCE ORIGINAL APPLICATION. THE AS25487 UNMOLDED ATTACHABLE PLUG SHALL BE LIMITED TO REPLACEMENT OF ORIGINAL MOLDED CABLE ASSEMBLY DAMAGED IN SERVICE.

2. THE AS25487 MOLDED OR UNMOLDED ATTACHABLE PLUG MAY BE FOR THE UNITED STATES NAVY APPLICATIONS.