

DWG NO  
422-4001/4030-000 SH 1

REVISIONS

LTR	DESCRIPTION	DATE	APVD
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**NOTES:**  
DRAWING PREPARED IN  
ACCORDANCE WITH  
DOD-STD-100.

Y	BW8363 - A&C CONSOLIDATION REINSTATED DOCUMENT TO PREFERRED	98-04-29	JMD
AA	BX3971 - MISCELLANEOUS	01-03-20	JMD

**STATEMENT A, UNLIMITED**

1.0 **SCOPE:** THIS DRAWING DETAILS THE REQUIREMENTS FOR  
POLYTETRAFLUOROETHYLENE (TEFLON) INSULATED ELECTRICAL  
AMERICAN WIRE GAUGE (AWG) #26 HOOK-UP WIRE IN  
ACCORDANCE WITH MIL-W-16878/6.

- THE PART NUMBER IS THE TEN (10) DIGIT DRAWING NUMBER AS SPECIFIED IN TABLE I.
- PARAGRAPH(S), TABLE(S) AND/OR FIGURE(S) FOLLOWED BY "I" INDICATE A CHANGE BY THE LATEST REVISION.
- ALL SHEETS ARE THE SAME REVISION STATUS.

FOR APPROVED SOURCES OF SUPPLY, SEE  
ROCKWELL COLLINS SPECIFICATION 126-8035-010,  
LIST NO. II

USE RCPN TA

**SUGGESTED SOURCES OF SUPPLY                      CAGE CODE    VENDOR PART NO    CAL**

U/M: FEET (FT)

SPECIFICATION CONTROL DRAWING

CONTRACT NO		<b>ROCKWELL COLLINS, INC.</b>			
PREP S.K. MCKEE 83-01-27		400 COLLINS ROAD NE		CEDAR RAPIDS, IA 52498	
CHK S.G. GILES 83-01-27		<b>WIRE, ELECTRICAL</b>			
APVD G.J. HABERKORN 83-01-27		SIZE <b>A</b>	CAGEC <b>13499</b>	DWG NO 422-4001-000 THRU 422-4030-000	REV <b>AA</b>
SCALE NONE			SHEET 1 OF 4		

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2.0 APPLICABLE DOCUMENTS: THE FOLLOWING DOCUMENTS OF THE ISSUE IN EFFECT ON THE DATE OF INVITATION FOR BIDS FORM A PART OF THIS DRAWING TO THE EXTENT SPECIFIED HEREIN.

MILITARY SPECIFICATIONS

MIL-W-16878 (NAVY) WIRE, ELECTRICAL, INSULATED, GENERAL SPECIFICATION FOR

MIL-W-16878/6 (NAVY) WIRE, ELECTRICAL 200 DEGREES C, 250 VOLTS, EXTRUDED PTFE INSULATION.

INDUSTRY STANDARDS

ASTM D1457 MATERIALS, PTFE MOLDING AND EXTRUSION

3.0 REQUIREMENTS: SHALL BE IN ACCORDANCE WITH MIL-W-16878/6 UNLESS SPECIFIED HEREIN.

3.1 ELECTRICAL:

3.1.1 RATED WORKING VOLTAGE: 250 VOLTS, ROOT MEAN SQUARE (RMS), MAXIMUM.

3.1.2 DIELECTRIC STRENGTH: 1500 VOLTS RMS.

3.1.3 CONDUCTOR RESISTANCE: 107 Ω /1000 FEET.

3.2 MECHANICAL:

3.2.1 CONDUCTORS: COPPER WELD WIRE, COATED WITH COMMERCIALY PURE SILVER, MINIMUM THICKNESS, 40 MICROINCHES, AND 40% MINIMUM CONDUCTIVITY.

3.2.1.1 WIRE SIZE: 26 AWG, 7 STRANDS OF 34 AWG.

3.2.1.2 ELONGATION: 10% MINIMUM.

3.2.1.3 BREAKING STRENGTH: 11.6 POUNDS MINIMUM.

3.2.1.4 CONDUCTOR DIAMETER: .019 ± .001 INCHES.

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3.2.2 INSULATION: POLYTETRAFLUOROETHYLENE (TEFLON) IN ACCORDANCE WITH ASTM D1457.

3.2.2.1 ELONGATION: 150% MINIMUM

3.2.3 OVERALL DIAMETER: 0.031 ± .002 INCH (IN).

3.2.4 COLOR CODE: SEE TABLE I.

3.2.5 CONCENTRICITY: 70% MINIMUM.

3.2.6 MARKINGS: SPOOLS OR REELS SHALL BE PERMANENTLY AND LEGIBLY MARKED WITH THE LENGTH (IN FEET), THE PURCHASE ORDER NO., DATE OF MANUFACTURE, MANUFACTURER'S NAME, MANUFACTURER'S PART NUMBER AND PROCURING ACTIVITY'S PART NUMBER AS A MINIMUM.

3.3 ENVIRONMENTAL:

3.3.1 TEMPERATURE RANGE: -65°C TO +200°C.

4.0 QUALITY ASSURANCE PROVISIONS: SHALL BE IN ACCORDANCE WITH MIL-W-16878/6.

5.0 PREPARATION FOR DELIVERY: SHALL BE IN ACCORDANCE WITH MIL-W-16878/6.

6.0 NOTES: THE INFORMATION CONTAINED IN THIS SECTION IS FOR REFERENCE ONLY.

6.1 IDENTIFICATION OF THE SUGGESTED SOURCE(S) OF SUPPLY HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM(S).

6.2 OBSERVE PRECAUTIONS ON APPLICATION WHERE ROUGH HANDLING AND ABRASION IS EXCESSIVE.

6.3 FOR PREFERRED PART FOR NEW DESIGN SEE MIL-W-22759/22.

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A	13499	422-4001-000 THRU 422-4030-000	AA
SCALE	NONE	SHEET	3

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TABLE I

**PART NUMBER, BODY COLOR, TRACER**

ROCKWELL COLLINS PART NUMBER	BODY COLOR	1ST TRACER	2ND TRACER
422-4001-000	BLACK		
422-4002-000	BROWN		
422-4003-000	RED		
422-4004-000	ORANGE		
422-4005-000	YELLOW		
422-4006-000	GREEN		
422-4007-000	BLUE		
422-4008-000	WHITE		
422-4009-000	WHITE	BLACK	
422-4010-000	WHITE	BROWN	
422-4011-000	WHITE	RED	
422-4012-000	WHITE	ORANGE	
422-4013-000	WHITE	GREEN	
422-4014-000	WHITE	BLUE	
422-4015-000	WHITE	BLACK	RED
422-4016-000	WHITE	BLACK	ORANGE
422-4017-000	WHITE	BLACK	GREEN
422-4018-000	WHITE	BLACK	BLUE
422-4019-000	WHITE	BROWN	RED
422-4020-000	WHITE	BROWN	ORANGE
422-4021-000	WHITE	BROWN	GREEN
422-4022-000	WHITE	BROWN	BLUE
422-4023-000	WHITE	RED	ORANGE
422-4024-000	WHITE	RED	GREEN
422-4025-000	WHITE	RED	BLUE
422-4026-000	WHITE	ORANGE	GREEN
422-4027-000	WHITE	ORANGE	BLUE
422-4028-000	WHITE	GREEN	BLUE
422-4029-000	VIOLET		
422-4030-000	GRAY (SLATE)		

SIZE

A

CAGEC

13499

DWG NO

422-4001-000

REV

THRU 422-4030-000

AA

SCALE NONE

SHEET

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