

DWG NO
422-4001/4030-000 SH 1

REVISIONS

| LTR | DESCRIPTION | DATE | APVD |
|-----|-------------|------|------|
|-----|-------------|------|------|

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 | | ROCKWELL COLLINS, INC. | | | |
| PREP S.K. MCKEE 83-01-27 | | 400 COLLINS ROAD NE | | CEDAR RAPIDS, IA 52498 | |
| CHK S.G. GILES 83-01-27 | | WIRE, ELECTRICAL | | | |
| APVD G.J. HABERKORN 83-01-27 | SIZE A | CAGEC 13499 | DWG NO 422-4001-000 THRU 422-4030-000 | REV AA | |
| 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 \pm .001 INCHES.

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|-------|-------|-----------------------------------|-----|
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| SCALE | NONE | SHEET | 2 |

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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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| 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

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422-4001-000

REV

THRU 422-4030-000

AA

SCALE NONE

SHEET

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