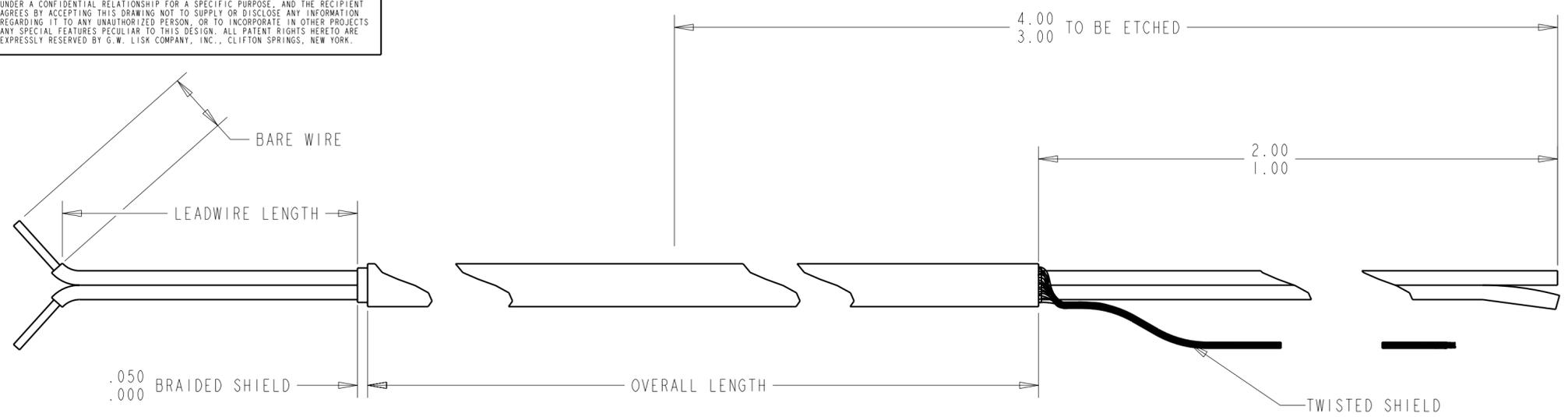


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| REVISIONS | | | | | |
|-----------|---|-----------|----------|--|--|
| REV | DESCRIPTION | DATE | APPROVED | | |
| B | SUPERSEDES CADRA REV A; 1 JUL 98 CWC U | 26 AUG 98 | AJL | | |
| C | MIL-W-22759/11-24... WAS MIL-W-16878F/4-BEE.; 4 FEB 99 CWC U | 5 FEB 99 | AJL | | |
| D | -1 WAS VY1-0206; -2 WAS VY1-0905; ADDED -3 FOR M1-2151; -4 WAS VY1-0454-1; -5 WAS VY1-0454-2; 12 APR 99 CWC U | 13 MAY 99 | AJL | | |
| E | VY1-0206-3 LEADS ...-2 AND ...-0 WERE ...-3 AND ...-1; ADDED VY1-0206-6; 16 JUN 99 CWC U | 22 JUN 99 | AJL | | |
| F | 3.00-4.00 WAS 3.50-4.50; REMOVED GRIT BLAST & REWROTE NOTES TO DO TWO LENGTHS EACH TIME; 22 JAN 01 CWC U | 14 FEB 01 | AJL | | |
| G | ADDED -7; 09 DEC 03 CWC U | 12 DEC 03 | AJL | | |
| H | ADDED -8; 7 MARCH 06 JEAG FINAL U | 1 AUG. 06 | GFH | | |
| J | ADDED -9; MILITARY CABLE NO. WAS M27500D24RC2S09; ADDED "CABLE MANUFACTURED... NOTE; 16 APR 07 CWC U | 17 APR 07 | AJL | | |
| K | ADDED "OR MIL-W-16878" 20 JUL 07 RSL FINAL U | 25 JUL 07 | KJL | | |

| DASH NO. | MILITARY CABLE NO. | CONDUCTOR SIZE | BASIC WIRE SPEC. | NO. WIRES IN CABLE | SHIELD STYLE AND MATERIAL | JACKET | LEADS | COLOR | OVERALL LENGTH | LEADWIRE LENGTH | BARE WIRE |
|----------------|--------------------|----------------|------------------------------------|--------------------|---------------------------------|--------|----------------|--------|----------------|-----------------|--------------|
| -1 | M27500V24RC2S09 | 24 | (RC) MIL-W-22759/11 OR MIL-W-16878 | 2 | (S) SILVER COATED COPPER, ROUND | 09 | M22759/11-24-2 | RED | 58 IN. MIN. | 1.50 | .25 IN. MIN. |
| M22759/11-24-0 | | | | | | | BLACK | | | | |
| -2 | | | | | | | M22759/11-24-3 | ORANGE | 56.0 IN. MIN. | 1.25 | .160 |
| M22759/11-24-1 | | | | | | | BROWN | | | | |
| -3 | | | | | | | M22759/11-24-2 | RED | 12 IN. MIN. | .75 | .100 |
| M22759/11-24-0 | | | | | | | BLACK | | | | |
| -4 | | | | | | | M22759/11-24-2 | RED | 58 IN. MIN. | 1.50 | .25 IN. MIN. |
| M22759/11-24-5 | | | | | | | GREEN | | | | |
| -5 | | | | | | | M22759/11-24-6 | BLUE | 20 IN. MIN. | 1.25 | .25 IN. MIN. |
| M22759/11-24-4 | YELLOW | | | | | | | | | | |
| -6 | M22759/11-24-2 | RED | 12 IN. MIN. | .75 | .100 | | | | | | |
| M22759/11-24-0 | BLACK | | | | | | | | | | |
| -7 | M22759/11-24-3 | ORANGE | 27 IN. MIN. | 3.00 | .25 IN. MIN. | | | | | | |
| M22759/11-24-1 | BROWN | | | | | | | | | | |
| -8 | M22759/11-24-2 | RED | 28 IN. MIN. | 3.25 | .25 IN. MIN. | | | | | | |
| M22759/11-24-0 | BLACK | | | | | | | | | | |
| -9 | M22759/11-24-9 | WHITE | | | | | | | | | |
| | M22759/11-24-0 | BLACK | | | | | | | | | |

CABLE MANUFACTURED IN ACCORDANCE WITH NEMA WC 27500-2005

ANSI Y14.5M-1982
 UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE IN INCHES

| | | | | |
|---|------------------------|-----------|-------------|---------|
| UNLESS OTHERWISE SPECIFIED | THIRD ANGLE PROJECTION | DRAWN | TOTMAN | 13DEC90 |
| 93 Ra FINISH ALL OVER | | CHECK | GLG | 18FEB93 |
| f - SMOOTH FINISH FOR APPEARANCE ONLY | MATERIAL | ENGINEER | G.L. GARCIA | |
| RUNOUT BETWEEN ALL DIAMETERS NOT TO EXCEED .005 FULL INDICATOR MOVEMENT | HEAT TREAT | NEXT ASSY | VARIOUS | |
| BREAK ALL SHARP EDGES-.010 MAXIMUM | FINISH | JOB NO | VARIOUS | |
| † - RADIUS OR CHAMFER ACCEPTABLE | | | | |

| ITEM | PART NUMBER | DESCRIPTION | QTY |
|---|-------------|-------------|--------------|
| G. W. LISK CO. INC. CLIFTON SPRINGS, NEW YORK | | | |
| CABLE | | | |
| SIZE | CAGE CODE | DWG NO. | REV |
| C | 81983 | VY1-0206-* | K |
| DO NOT SCALE | 4.000 | WEIGHT: - | SHEET 1 OF 2 |

VY1-0206-*

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TEFLON JACKET PREPARATION

OBJECTIVE: TO MODIFY SURFACE TEXTURE OF TEFLON CABLE JACKET FOR IMPROVED ADHESION TO POTTING COMPOUND, AND PREPARE CABLE CONFIGURATION IN ACCORDANCE WITH THIS DRAWING.

MATERIALS REQUIRED:

- SHIELDED CABLE AS DEFINED BY THIS DRAWING.
- PAPER TOWELS (SCOTT BRAND UTILITY WIPE, P/N 05320 OR EQUIVALENT).
- METHANOL ALCOHOL.
- ETCHANT SOLUTION (TETRAETCH).
- WATER (ROOM TEMPERATURE).
- ABRASIVE COATED CLOTH, 180 GRIT (THREE-M-ITE ELECTRO CUT, 3M CO., INC. OR EQUIVALENT).
- COTTON TIP SWABS (CHESEBROUGH-PONDS, INC., P/N 5-5405 OR EQUIVALENT).

ABRADING PROCEDURE

1. DETERMINE THE TOTAL LENGTH OF CABLE REQUIRED FROM THE TABLE ON SHEET 1. MULTIPLY THIS LENGTH BY TWO. LOOP THE CABLE LENGTH & MEASURE A DISTANCE OF 4.50 INCHES ON THE CABLE FROM THE CENTER OF THE LOOP, THIS PORTION IS TO BE ETCHED. THE REMAINING PORTION OF CABLE MUST NOT BE EXPOSED TO MEDIA & MUST BE PROTECTED, DO NOT ABRABE.
2. GRASP THE CABLE ABOVE THE LOOP AREA TO BE ETCHED & FIRMLY WRAP THE 180 GRIT ABRASIVE CLOTH AROUND THE CABLE. STROKE ABRASIVE CLOTH OVER AREA TO BE ETCHED ROTATE CABLE SLIGHTLY & REPEAT THIS PROCEDURE A MINIMUM OF 20 TIMES. DISCARD ABRASIVE CLOTH IF TEFLON BUILD-UP IS NOTED.
3. WIPE ABRASIVE AREA OF CABLE(S) WITH PAPER UTILITY TOWELS TO REMOVE ANY LOOSE SURFACE PARTICLES GENERATED DURING ABRASION PROCESS.

ETCHING PROCEDURE:

1. DIP ABRADED END OF CABLE, INTO METHANOL ALCOHOL. OVEN DRY FOR 15 MINUTES MINIMUM AT +200F - 220F.
2. GENTLY SHAKE BOTTLE OF "TETRA-ETCH" ETCHANT PER MANUFACTURERS INSTRUCTIONS. POUR SUFFICIENT QUANTITY INTO CONTAINER TO FULLY IMMERSE ABRADED PORTION OF CABLE(S). AGITATE CABLE(S) FOR ONE MINUTE MINIMUM. DISCARD ETCHANT SOLUTION AFTER EACH BATCH DIPPING. SOLUTION BECOMES NEUTRALIZED & INEFFECTIVE AFTER 1 MINUTE OF ETCHING. FOR ECONOMIC REASONS, IT IS ADVISABLE TO PROCESS MULTIPLE QUANTITIES OF CABLE PER IMMERSION. USE ETCHANT SPARINGLY.
3. IMMEDIATELY FOLLOWING DIPPING IN ETCHANT, IMMERSE ETCHED END OF CABLE(S) INTO METHANOL ALCOHOL AND AGITATE SLIGHTLY FOR 5 - 10 SECONDS TO REMOVE ANY RESIDUE.
4. AFTER CABLE HAS BEEN IMMERSED IN METHANOL ALCOHOL, RINSE CABLE FOR 5 - 10 SECONDS IN WATER. FULLY WIPE CABLES WITH PAPER TOWELS. OVEN DRY CABLE(S) FOR APPROXIMATELY 15 MINUTES AT +200F - +220F... CABLES ARE NOW READY FOR NEXT OPERATION.
5. CUT CABLE IN 1/2 AT ETCHED END. STRIP 1.00 - 2.00 INCHES OF JACKET FROM ETCHED CABLE AND TWIST SHIELDING AS SHOWN.

DESCRIPTION:

CABLE PER MIL-C-27500

LEADS:
SEE TABLE

CABLE JACKET:

- 09 = EXTRUDED WHITE FLUORINATED ETHYLENE PROPYLENE (FEP).
- 11 = TAPE OF NATURAL POLYIMIDE COMBINED WITH CLEAR FLUORINATED ETHYLENE PROPYLENE (FEP) WRAPPED & HEAT SEALED WITH (FEP) OUTER SURFACE.
- 23 = WHITE, CROSSLINKED, EXTRUDED, MODIFIED, ETHYLENE-TETRAFLUOROETHYLENE COPOLYMER (XLETFE).

SUGGESTED SUPPLIER:

ALPHA WIRE CORPORATION; 711 LIDGERWOOD AVENUE
ELIZABETH, N.J. 07207

DIELECTRIC TEST:

CONNECT THE 4 STRIPPED ENDS OF LEADWIRES TO POSITIVE LEAD OF AC HYPOT. CONNECT BRAIDED SHIELD TO NEGATIVE LEAD. APPLY 1500 VRMS, 60 Hz FOR 60 SECONDS. MAX. ALLOWABLE LEAKAGE = 2 mA THIS TEST MUST BE PERFORMED BEFORE FURTHER ASSEMBLY.

| REVISIONS | | | |
|--------------------------------|-------------|------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| SEE SHEET #1 FOR ALL REVISIONS | | | |

ANSI Y14.5M-1982
UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN INCHES

| ITEM | PART NUMBER | DESCRIPTION | QTY |
|---|-------------|-----------------|--------------|
| G. W. LISK CO. INC. CLIFTON SPRINGS, NEW YORK | | | |
| CABLE | | | |
| SIZE | CAGE CODE | DWG NO. | REV |
| C | 81983 | VY1-0206* | K |
| DO NOT SCALE | 4.000 | WEIGHT: &WEIGHT | SHEET 2 OF 2 |

| | | |
|---|------------------------|-------------------|
| UNLESS OTHERWISE SPECIFIED | THIRD ANGLE PROJECTION | DRAWN |
| 93 Ra FINISH ALL OVER | | TOTMAN 13DEC90 |
| f - SMOOTH FINISH FOR APPEARANCE ONLY | | CHECK GLG 18FEB93 |
| RUNOUT BETWEEN ALL DIAMETERS NOT TO EXCEED .005 FULL INDICATOR MOVEMENT | MATERIAL | ENGINEER |
| BREAK ALL SHARP EDGES - .010 MAXIMUM | HEAT TREAT | G.L. GARCIA |
| † - RADIUS OR CHAMFER ACCEPTABLE | FINISH | NEXT ASSY |
| | | VARIOUS |
| | | JOB NO |
| | | VARIOUS |

VY1-0206-K