

APPLICATION		REVISIONS					
QTY	NEXT ASSY	REV.	DESCRIPTION	DATE	BY	APPROVED	
		NC	Initial Release	5/17/99	D.	SPC.	

NOTES: UNLESS OTHERWISE SPECIFIED



- TAG WITH "8050329 (APPL. DASH NO.) / (APPL. REV. LTR.)" AND APPLICABLE EIC SERIAL NUMBER.
- SUBSTITUTE SUPPLIERS MAY BE USED AS LONG AS THE ITEMS MEET THE REQUIREMENTS DEFINED IN THE DESCRIPTION. SUBJECT TO APPROVAL BY CRYODYNAMICS ENGINEERING.
- IDENTIFICATION OF THE APPROVED SOURCE(S) HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY OF THE ITEMS DESCRIBED ON THIS DRAWING.
- CERTIFICATE OF CONFORMANCE TO BE PROVIDED.
- CABLE SIZING TO BE IN ACCORDANCE WITH EIC TECHNICAL MEMORANDUM, TM-1512, AND APPLICABLE PROJECT GENERAL ARRANGEMENT DRAWING.
- CABLE RECEIVING INSPECTION TESTING TO BE IN ACCORDANCE WITH SECTION II. RECORDS TO BE PROVIDED.
- CABLE TO BE SUPPLIED IN CONTINUOUS LENGTH UNLESS OTHERWISE APPROVED BY EIC ENGINEERING DEPARTMENT. IF CABLE SECTIONS ARE SUPPLIED THEN CABLE SPLICING INSTRUCTIONS AND SPLICING KIT TO BE SUPPLIED BY VENDOR WITH CABLE.

-01	PN 139366 16 AWG, 1 triad, 7 strand, tinned individual triads overall shield type PLTC, steel armor	Control Master Products, Inc. 1062 Shary Circle Concord, California 94518 Ph: 925-939-3600 Fax: 925-686-4371 Contact: Gary S. James
-02	PN 129366 16 AWG, 1 triad, 7 strand, tinned individual triads overall shield type PLTC, aluminum armor	
DASH NO.	DESCRIPTION	SUGGESTED SUPPLIER
APPROVED SOURCE(S) OF SUPPLY		

## SPECIFICATION CONTROL DRAWING

REV. STATUS OF SHEETS	REV	NC	NC	NC	NC																
	SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES <b>TOLERANCES</b> DECIMALS    FRACTIONS .X ± .1        ± 1/4 .XX ± .03     ANGULAR .XXX ± .01    ± 5° <b>DO NOT SCALE DRAWING</b>	JOB NUMBER		<b>EBARA INTERNATIONAL CORPORATION</b> <b>CRYODYNAMICS DIVISION</b> 350 SALOMON CIRCLE, SPARKS, NV 89434		
	CATALOG ITEM				
	TREATMENT	DRAWN TDS CHECK <i>[Signature]</i>	DATE 05/17/99 5-21-99	TITLE  Wire, Lead, #16 AWG, 3 Conductor, 1 Triad, PVC Jacket with Armor	
	FINISH	DESIGN <i>[Signature]</i> PROJECT <i>[Signature]</i> APPROVED <i>[Signature]</i>	5/21/99 5/21/99 5/21/99		

**I DESCRIPTION :**

POWER LIMITED TRAY CABLE - 1 TRIAD + COMMUNICATION WIRE  
 TRIAD IS 16 AWG (7 X 24) TINNED COPPER, PVC INSULATION, COPPER DRAIN WIRE,  
 POLYESTER ISOLATION WRAP, COMMUNICATION WIRE IS 22 AWG (7 X 30) BARE COPPER, PVC  
 INSULATION, OVERALL BELDFOIL SHIELD WITH 16 AWG (7 X 24) TINNED COPPER DRAIN WIRE,  
 PVC JACKET WITH NYLON RIPCORD, STEEL OR ALUMINUM INTERLOCKED ARMOR, OVERALL  
 PVC JACKET

**A) ELECTRICAL CHARACTERISTICS :**

MAX. OPERATING VOLTAGE : 300 V RMS  
 NOM. CONDUCTOR DC RESISTANCE  
 @ 20 DEG. C (20/22 AWG) : 4.2 / 14.7 OHMS / 1000 FT.  
 NOM SHIELD DC RESISTNACE  
 @ 20 DEG. C :  
 (INDIVIDUAL) : 5.9 OHMS / 1000 FT.  
 (OVERALL) : 3.7 OHMS / 1000 FT.

**B) PHYSICAL CHARACTERISTICS :**

TEMPERATURE RATING : -30 TO +105 DEG. C  
 INSULATION MATERIAL : PVC  
 INNER JACKET MATERIAL (COLOR) : PVC (BLACK), SUN RESISTANT  
 TYPE SHIELDS AND % COVERAGE : POLY / AL FOIL, 100 %  
 CABLE DIAMETER (CORE) : 0.49 INCHES AVERAGE  
 APPLICABLE SPECIFICATIONS (CORE) : UL NEC TYPE PLTC, CL3  
 COLOR CODE : ALL TRIADS BLACK & WHITE  
 RED NUMBERED CONSECUTIVELY,  
 ORANGE COMMUNICATION WIRE  
 AN INTERLOCKED STEEL OR ALUMINUM ARMOR AND PVC JACKET ARE APPLIED OVER THE  
 BELDEN 3045B CORE.  
 DIAMETER OVER ARMOR : 0.69 INCHES  
 DIAMETER OVER PVC JACKET : 0.82 INCHES (BLACK), SUN RESISTANT  
 MIN. BENDING RADIUS : 9.8 INCHES  
 NOM. WEIGHT / 1000 FT. : 325 LBS.  
 MAX. PULLING TENSION : 124 LBS.  
 SPECIFICATIONS : UL TYPE PLTC  
 FLAME RATING : UL 1581 VERTICAL TRAY (70,000 BTU / HR)

**C) REFER TO ATTACHMENT FOR CABLE MANUFACTURERS DETAILS.**

**EBARA INTERNATIONAL CORPORATION**  
**CRYODYNAMICS DIVISION**  
 350 SALOMON CIRCLE, SPARKS, NV 89434

TITLE  
 Wire, Lead, #16 AWG, 3 Conductor, 1 Triad,  
 PVC Jacket with Armor

<b>A</b>	<b>8050329</b>	REV. NC
SCALE NONE	RELEASE DATE	SHEET 2 OF 4

## II RECEIVING AT EIC INSPECTION TESTING

### A) CONTINUITY TESTING

#### PROCEDURE :

OVERALL CABLE ASSEMBLY IS TO BE TESTED AT AMBIENT TEMPERATURE BY CHECKING EACH CABLE CONDUCTOR WIRE AND OVERALL CABLE SHIELD AS FOLLOWS:

CONDUCTOR CONTINUITY (6 PLACES) :	CONNECT THE METER TO EACH END OF THE CONDUCTOR
DRAIN WIRE CONTINUITY (3 PLACES) :	CONNECT THE METER TO EACH END OF THE DRAIN WIRE
COMMUNICATION WIRE CONTINUITY (1 PLACE) :	CONNECT THE METER TO EACH END OF THE COMMUNICATION WIRE
CABLE DISCONTINUITY :	CONNECT THE METER TO ONE END OF THE CONDUCTOR AND THE END OF EACH ADJACENT CONDUCTOR, DRAIN WIRE, COMMUNICATION WIRE AND OUTER ARMOR.

#### ACCEPTANCE CRITERIA :

CONTINUITY SHOULD INDICATE THAT THERE ARE NO BREAKS IN THE CONDUCTOR, DRAIN WIRE, AND COMMUNICATION WIRE. DISCONTINUITY SHOULD INDICATE THAT THERE IS NO DISCONTINUITY BETWEEN THE CONDUCTOR AND EACH ADJACENT CONDUCTOR, DRAIN WIRE, COMMUNICATION WIRE OR OUTER SHIELD.

### B) INSULATION RESISTANCE TEST

#### PROCEDURE :

USING A MEGGER, CHECK THE INSULATION RESISTANCE BETWEEN THE OUTER ARMOR AND EACH CONDUCTOR WIRE AT 250 VDC. HOLD THIS VOLTAGE FOR SIXTY (60) SECONDS. REPEAT THIS TEST FOR EACH CONDUCTOR IN THE ASSEMBLY

#### ACCEPTANCE CRITERIA :

RESISTANCE TO STABILIZE AFTER INITIAL CHARGE UP AND THE MINIMUM ALLOWABLE RESISTANCE OF FIVE THOUSAND (5K) MEGAOHMS.

## III PACKAGING AND HANDLING

- A) CABLE TO BE PROTECTED AT ALL TIMES FROM HANDLING DAMAGE.
- B) WOODEN CABLE REEL TO BE CLADDED ON OUTSIDE DIAMETER TO AVOID EXTERNAL DAMAGE DURING SHIPMENT.

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**CRYODYNAMICS DIVISION**  
350 SALOMON CIRCLE, SPARKS, NV 89434

TITLE

Wire, Lead, #16 AWG, 3 Conductor, 1 Triad  
PVC Jacket with Armor

**A**

**8050329**

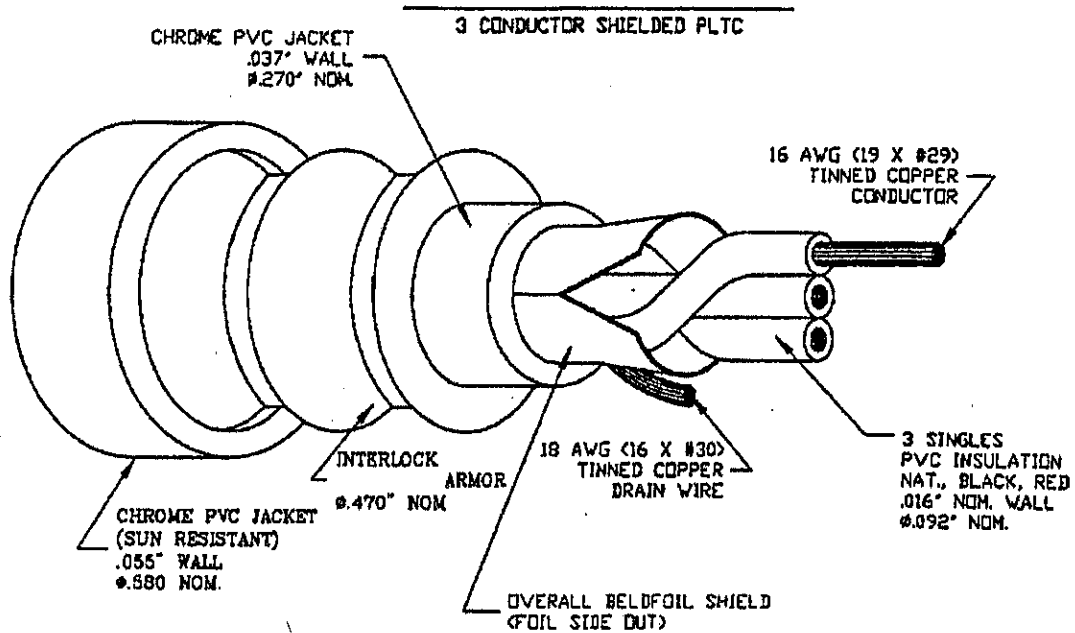
REV.  
NC

SCALE  
NONE

RELEASE DATE

SHEET  
3 OF 4

8050329-01 CABLE, BELDEN PN 139366  
 8050329-02 CABLE, BELDEN PN 129366



8050329-01 CABLE, STEEL INTERLOCKED ARMOR  
 8050329-02 CABLE, ALUMINUM INTERLOCKED ARMOR

<b>EBARA INTERNATIONAL CORPORATION</b> <b>CRYODYNAMICS DIVISION</b> 360 SALOMON CIRCLE, SPARKS, NV 89434		
TITLE Wire, Lead, #16 AWG, 3 Conductor, 1 Triad PVC Jacket with Armor		
<b>A</b>	<b>8050329</b>	REV. NC
SCALE NONE	RELEASE DATE	SHEET 4 OF 4