

ECO NO.	REV.
ECO-07942	A
ECO-08218	B
ECO-08704	C
ECO-10710	D

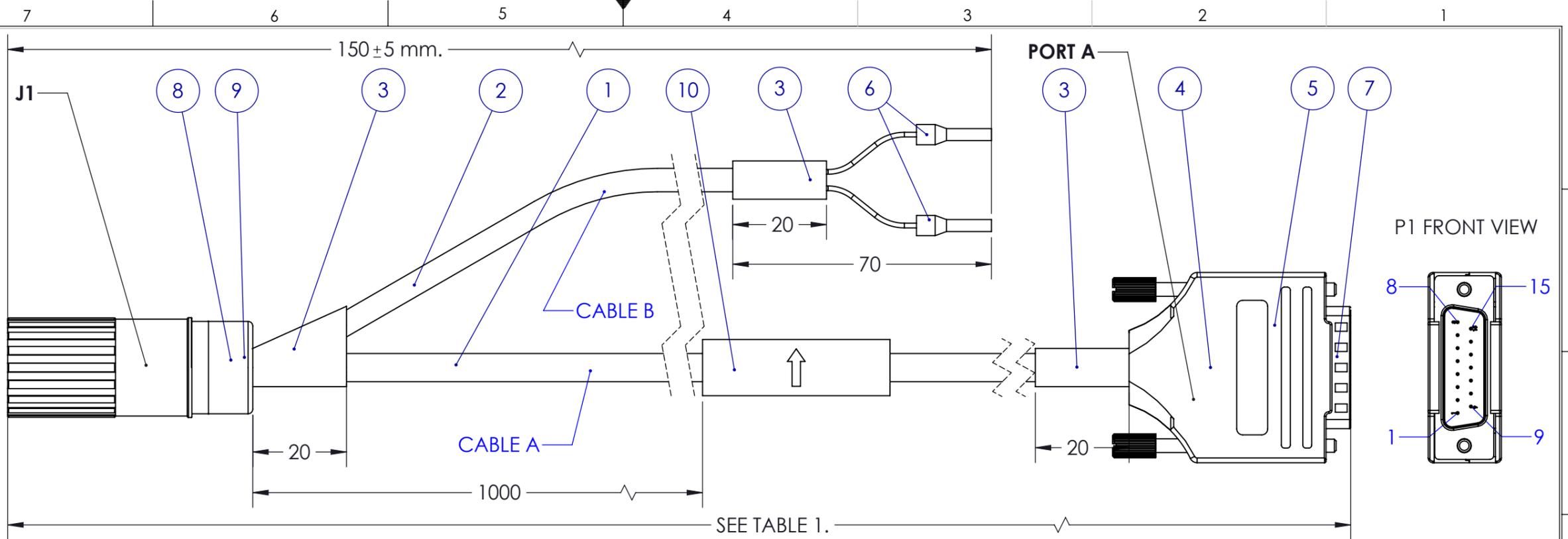


TABLE 1

ELMO P/N	LENGHT IN METERS	LABEL
CBL-DABSENCL80	2.0	CBL-DABSENCL80
CBL-DABSENCL80-5	5.0	CBL-DABSENCL80-5

CABLE	FROM: J1 PIN	TO: P1 PORT A	COLOR	TWISTED & SHIELDED WIRE	SIGNAL	DESCRIPTION
CABLE A	1	4	BROWN	PAIR 1	VCC + 5V	ENCODER SUPPLY + 5V
	2	11	WHITE		COMRET	SUPPLY RETURN
	13	13	DRAIN WIRE	DRAIN WIRE	COMRET	
	16	15	GREEN	PAIR 2	SD +	ABS DATA +
17	14	YELLOW	SD -		ABS DATA -	
CABLE B	9	ENDING FERRULE	RED	PAIR 1	VB	+ V BATTERY
	10	ENDING FERRULE	BLACK		COMRET	- V BATTERY

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	WIP-062X2X28	CABLE CONTROL 2X2X28AWG SF/UTP 30V	SEE TABLE 1
2	WIP-061X2X28	CABLE CONTROL 1X2X28AWG SF/UTP 30V	150 mm.
3	STB-26350	BLACK SRINK 1/4 "	60 mm.
4	STB-21170	BLACK SHRINK 3/64 "	120 mm.
5	JCC-200515OC	METAL HOOD D TYPE 15 PIN	1
6	JCF-031528G8	ENDING FERRULE 26AWG-28AWG GREY	2
7	JCW-200115MC	D TYPE CONNECTOR, 15 PIN MALE	1
8	JCW-M17S17A	M17 SIGNAL CIRCULAR PLUG 17PINS INTERCONTEC P/N: ASTA876NN0085200A000	1
9	JCW-M17SCF0	M17 SIGNAL CRIMP TERMINAL SPRING D=0.6MM FEMALE INTERCONTEC P/N: 60.205.11	7
10	LABEL	SEE TABLE 1.	1

NOTES:

- SHRINK AFTER SOLDERING WITH ITEM 4.
- COVER DRAIN WIRES WITH ITEM 4.

ALL DIMENSIONS ARE IN MM. (+/- 5 %)	RoHS Compliance						
		NAME	SIG	DATE	TITLE		
	DO NOT MEASURE THE DRAWING.	DRAWN	A.C.	21/08/2014	CABLE FBK A W/BAT D-SUB&M17		
	FILE NAME: MD-00647D.sldprt	DESIGN	RamiCH	21/08/2014			
	CHECK			SIZE A3	SCALE 1:1	DWG. NO. MD-00647	REV. D
	APVD.	-	-	PAGE: 1	OF: 2	CAT. NO. CBL-DABSENCL80	

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GUIDE LINES FOR CABLES MANUFACTURERS

On Drawing NOTES: (General for Cables)

1. DESCRIPTION OF APPLICATION:

- 1.1 OPERATION TEMP. RANGE: -30C TO +80C DEGREES, if not otherwise specified.
- 1.2 VENDOR IS RESPONSIBLE TO PROVIDE A SPECIFICATION APPROVAL INCLUDING:
 - 1.2.1 Mechanical DRAWING (Structure, Dimensions, Tolerance)
 - 1.2.2 Electrical Drawing
 - 1.2.3 PART LIST
 - 1.2.4 ELECTRICAL,MECHANICAL,MATERIAL,SPEC, of parts
 - 1.2.5 UL-FILE NO. PER ITEM AND MATERIAL
 - 1.2.6 UL-STYLE

2. GENERAL:

- 2.1 FINISHED PRODUCT SHAL BE CLEAN AND FREE OF FOREIGN MATERIAL.
- 2.2 Any change from drawing or spec, must be approved in writing by Elmo.

3. CHARACTERISTICS OF CABLES / WIRES:

- 3.1 MECHANICAL (ACCORDING TO WIRES SPEC):
 - 3.1.1 ALL CRIMPED CONNECTIONS SHALL MEET PULL TEST AND CRIMP HEIGHT REQUIRMENTS PER CONNECTOR MANUFACTURE'S SPECIFICATION (MINIMUM OF 5 KG. PULL OF FORCE).
 - 3.1.2 MINIMUM PULL-OUT FORCE FOR WIRE WITH PINCH CRIMP TERMINAL:
 - 3.1.3 5 LB (2.3KG) OR TERMINAL SPEC. WHICHEVER IS GREATER.
 - 3.1.4 Hot BEND TEST: SAMPLES SHALL WITHSTAND 100 CYCLES , at +80 DEGREES BEND AT THE STRAIN RELIEFFS, WITHOUT INCREASE OF RESISTANCE OF ANY CONDUCTOR.
 - 3.1.5 COLD BEND TEST: SAMPLES SHALL WITHSTAND 100 CYCLES , at -40 DEGREES BEND AT THE STRAIN RELIEFFS, WITHOUT INCREASE OF RESISTANCE OF ANY CONDUCTOR.

4. QUALTY ASSURACE PROVISIONS:

4.1 PRODUCTION LOTS INSPECTION REQUIRMENTS:

- 4.1.1 THE SUPPLIER INSPECTION DEPARTMENT (QA), SHALL INSPECT EACH PRODUCTION LOT IN ACCORDANCE WITH SAMPLING PLAN.
- 4.1.2 THE SUPPLIER SHALL PROVIDE, ATTACHED TO EVERY LOT, A TEST REPORT C.O. T. (Certificate Of Testing), AND C.O.C., (CERTIFICATE OF CONFORMANCE).
- 4.1.3 THE FOLLOWING ITEMS ARE TO BE CHECKED on the sampling cables:
 - 4.1.3.1 PHYSICAL DIMENTIONS
 - 4.1.3.2 Pull Test results
 - 4.1.3.3 Shrinking Tubes
 - 4.1.3.4 Marking sustainability
 - 4.1.3.5 Pin to Pin connection Test results
 - 4.1.3.6 Pin to all other Pins Insulation Test (at 100 V) by automatic wiring tester.
 - 4.1.3.7 Visual Inspection per IPC-A-620 Class 2 or Class 3 against specific ELMO definitions.
 - 4.1.3.8 Molding (Appearance, Location, Dimensions, etc.), if applicable.
 - 4.1.3.9 Other MANUFACTURING PRACTICE.

4.2 QUALIFICATION REQUIREMENTS:

- 4.2.1 SOLDERABILITY: PROVIDE 95% SOLDER COVERAGE ON ALL SOLDER TERMINATION ACCORDING TO IPC-A-610 LEVEL 2 or class 3 against specific ELMO definitions.

5. PACKING REQUIREMENTS:

- 5.1 PARTS ARE TO BE PACKED SO AS TO PREVENT DAMAGE IN SHIPMENT AND HANDLING AND MEET ELMO STANDART.
- 5.2 PACKAGE LABELING MUST MEET RECEIVING BARCODE SPECIFICATION.
- 5.3 EACH CABLE SHOULD BE PACKED INDIVIDUALLY IN Static Free PLASTIC BAG WITH A MAXIMUM OF 10 PCS IN BUNDLE BAG PACKAGE.
- 5.4 ELMO KIT NUMBER, DATE CODE, VENDOR I.D., AND BARCODE LABEL MUST BE MARKED ON THE OUTSIDE OF EACH BAG AND BOX AS PER ELMO SPEC.
- 5.5 Bags carrying cables, are to be packed in a transportation box; Each Transportation Box Weight not exceed 25 Kg

6. MARKING LABEL:

- 6.1 CABLE MARKING METHOD:
 - 6.1.1 ACCORDING TO DRAWING DOCUMENTS P/N
 - 6.1.2 THE MARKING LABEL SHALL INCLUDE as human readable:
 - 6.1.2.1 ELMO P/N
 - 6.1.2.2 VENDOR I.D Number
 - 6.1.2.3 Manufacturing Lot DATE CODE
 - 6.1.3 Barcoded Type 39 or 128: Cable P/N Number

7. Isolation and Shrink SLEEVE:

- 7.1 ANY DAMAGE TO THE CABLE SLEEVE, CABLE INSULATION, OR CABLE WIRES SHALL CONSTITUTE AS FAILURE.
- 7.2 After sleeves shrinking process, THE SLEEVE SHALL NOT SLIDE easily ON THE CABLE INSULATION.

8. REGULATION:

- 8.1 PLASTIC PARTS TO BE UL 94VO.
- 8.2 CABLE PARTS TO BE UL2464 VW-1.

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