### Table 1

<table>
<thead>
<tr>
<th>ELMO P/N</th>
<th>LENGTH IN METERS</th>
<th>LABEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBL-DABSENCL80</td>
<td>2.0</td>
<td>CBL-DABSENCL80</td>
</tr>
<tr>
<td>CBL-DABSENCL80-5</td>
<td>5.0</td>
<td>CBL-DABSENCL80-5</td>
</tr>
</tbody>
</table>

#### Table 1: CBL-DABSENCL80

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WIP-062X2X28</td>
<td>CABLE CONTROL 2X2X28AWG SF/UTP 30V</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>WIP-061X2X28</td>
<td>CABLE CONTROL 1X2X28AWG SF/UTP 30V</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>STB-26350</td>
<td>BLACK SHRINK 1/4&quot;</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>STB-21170</td>
<td>BLACK SHRINK 3/64&quot;</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>JCC-200515OC</td>
<td>METAL HOOD D TYPE 15 PIN</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>JCF-031528G8</td>
<td>ENDING FERRULE 26AWG-28AWG GREY</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>JCW-200115MC</td>
<td>D TYPE CONNECTOR, 15 PIN MALE</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>JCW-M17S17A</td>
<td>M17 SIGNAL CIRCULAR PLUG 17PINS INTERCONTEC P/N: A51A876N0085200A000</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>JCW-M17SCF0</td>
<td>M17 SIGNAL CRIMP TERMINAL SPRING D=0.6MM MM FEMALE INTERCONTEC P/N: 60.205.11</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>LABEL</td>
<td>SEE TABLE 1.</td>
<td></td>
</tr>
</tbody>
</table>

#### CABLE FROM: J1 PIN TO: P1 PORT A

<table>
<thead>
<tr>
<th>CABLE A</th>
<th>FROM: J1 PIN</th>
<th>TO: P1 PORT A</th>
<th>COLOR</th>
<th>TWISTED &amp; SHIELDED WIRE</th>
<th>SIGNAL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>4</td>
<td>BROWN</td>
<td>PAIR 1</td>
<td>VCC + 5V</td>
<td>ENCODER SUPPLY + 5V</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>11</td>
<td>WHITE</td>
<td>PAIR 1</td>
<td>COMRET</td>
<td>SUPPLY RETURN</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>13</td>
<td>DRAIN WIRE</td>
<td>PAIR 1</td>
<td>COMRET</td>
<td>SUPPLY RETURN</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>15</td>
<td>GREEN</td>
<td>PAIR 2</td>
<td>SD +</td>
<td>ABS DATA +</td>
</tr>
<tr>
<td>17</td>
<td>14</td>
<td>14</td>
<td>YELLOW</td>
<td>PAIR 2</td>
<td>SD -</td>
<td>ABS DATA -</td>
</tr>
</tbody>
</table>

#### CABLE B

<table>
<thead>
<tr>
<th>CABLE B</th>
<th>ENDING FERRULE</th>
<th>9 ENDING FERRULE</th>
<th>10 ENDING FERRULE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ENDING FERRULE</td>
<td>RED</td>
<td>PAIR 1</td>
<td>V BATTERY</td>
<td></td>
</tr>
<tr>
<td>10 ENDING FERRULE</td>
<td>BLACK</td>
<td>COMRET</td>
<td>- V BATTERY</td>
<td></td>
</tr>
</tbody>
</table>

#### Notes:
1. SHRINK AFTER SOLDERING WITH ITEM 4.
2. COVER DRAIN WIRES WITH ITEM 4.
GUIDE LINES FOR CABLES MANUFACTURERS

On Drawing NOTES: (General for Cables)

1. DESCRIPTION OF APPLICATION:
   1.1 OPERATION TEMP. RANGE: -30°C TO +80°C 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-EFILE NO. PER ITEM AND MATERIAL
      1.2.6 UL-STYLE

2. GENERAL:
   2.1 FINISHED PRODUCT SHALL 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 REQUIREMENTS PER CONNECTOR MANUFACTURER'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, WHICHER IS GREATER.
      3.1.4 Hot BEND TEST: SAMPLES SHALL WITHSTAND 100 CYCLES, at +80 DEGREES BEND AT THE STRAIN RELIEFS, 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 RELIEFS, WITHOUT INCREASE OF RESISTANCE OF ANY CONDUCTOR.

4. QUALITY ASSURANCE PROVISIONS:
   4.1 PRODUCTION LOTS INSPECTION REQUIREMENTS:
      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 DIMENSIONS
         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 Foxing (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.