

Customer Information Sheet

DRAWING No.: M80-F1XXXXX-XXX-XXX

IF IN DOUBT - ASK

©

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

ORDER CODE:

M80-F1XXXXX-XXX-XXX

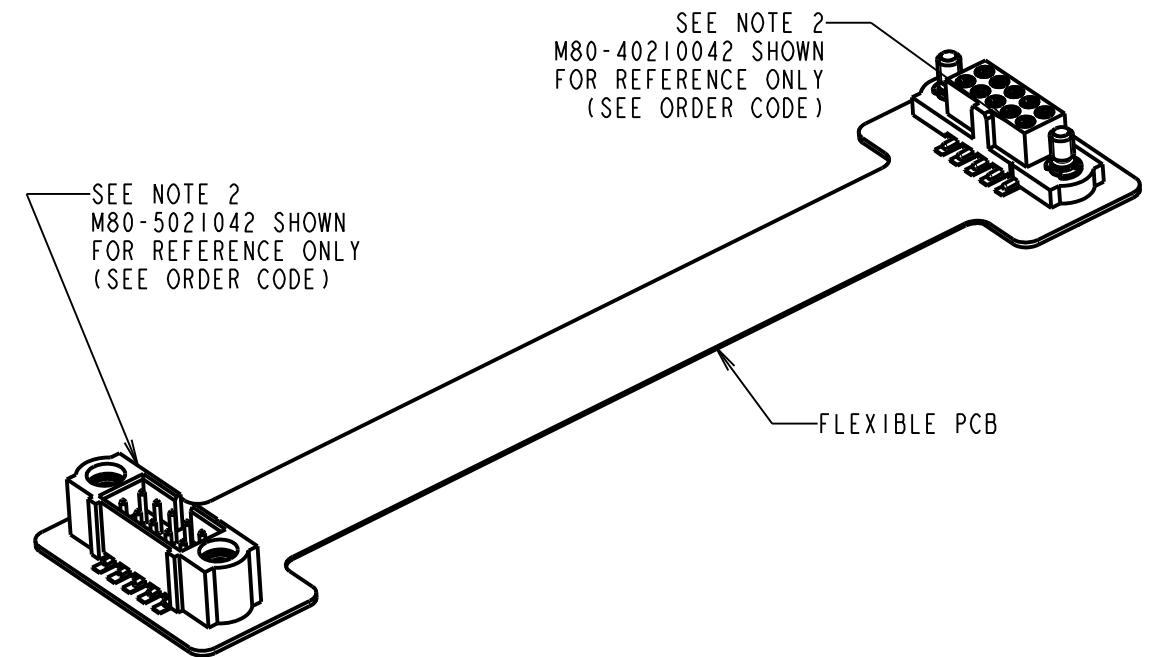
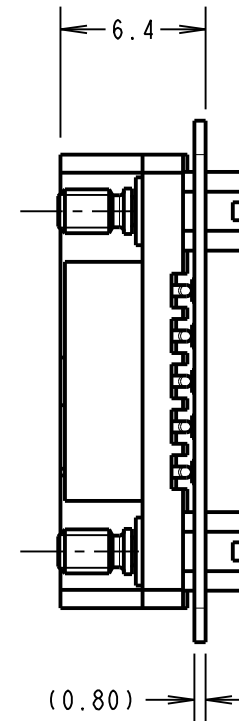
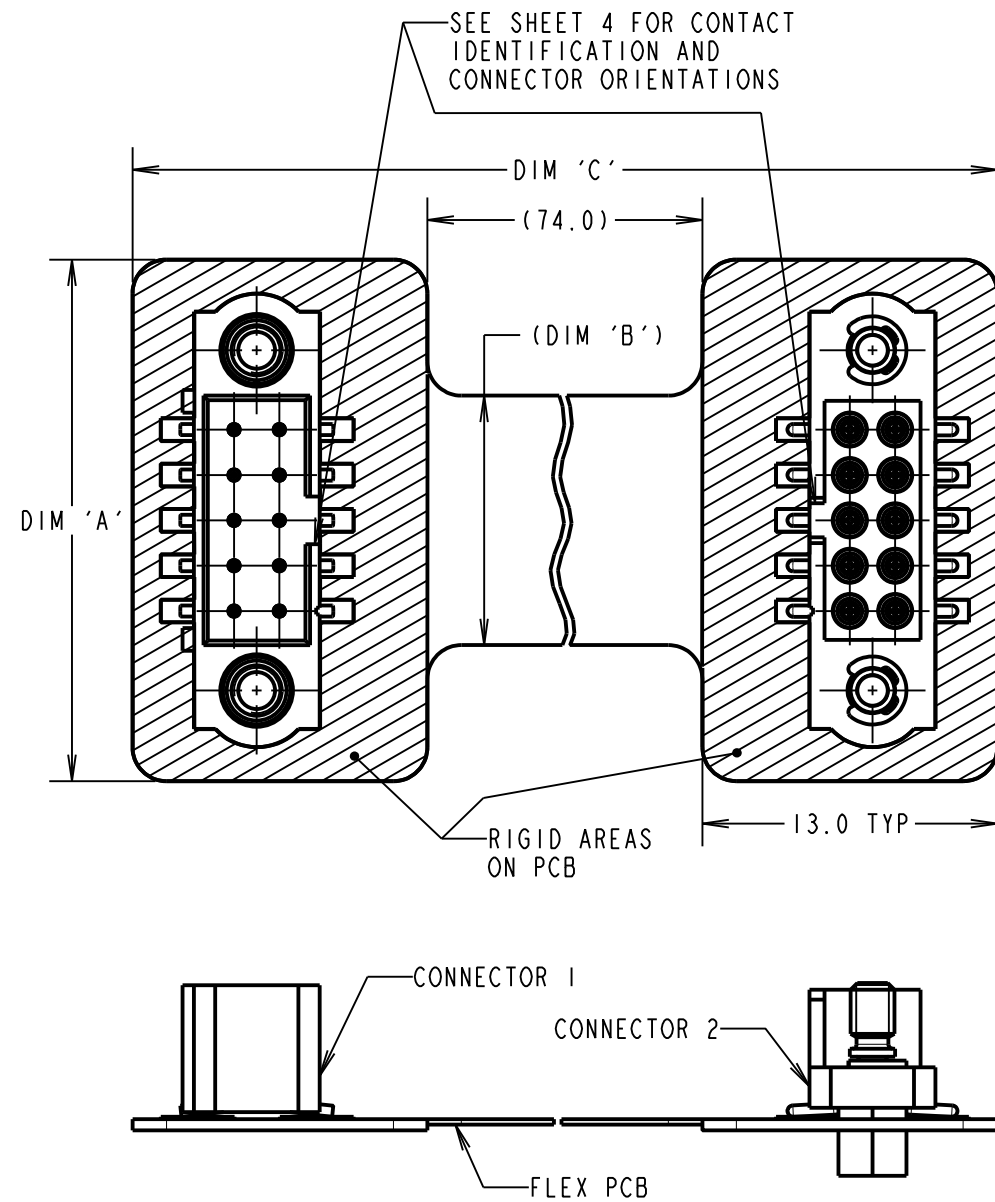
CONNECTOR 1 PART No.:
 402 = M80-402XX42
 422 = M80-422XX42
 502 = M80-502XX42
 512 = M80-512XX42

CONNECTOR 2 PART No.:
 402 = M80-402XX42
 422 = M80-422XX42
 502 = M80-502XX42
 512 = M80-512XX42

TOTAL No. OF CONTACTS:
 06, 10, 12, 16, 20, 26, 34, 50.

DIM 'C' (OVERALL LENGTH):
 999 = 999mm MAX.

CONNECTOR ASSEMBLIES AVAILABLE IN MALE-TO-MALE, FEMALE-TO-FEMALE, AND MALE-TO-FEMALE CONFIGURATIONS.



FLEX PCB SPECIFICATION:

- BOARD CONSTRUCTION:
 SINGLE LAYER FLEXIBLE PCB
 50µm BASE POLYIMIDE
 35µm (1oz) COPPER CLAD TO IPC-4204/1
 50µm BONDED COVERLAY TO IPC-4203/1
 0.8mm HTG FR4 TO IPC-4101/126 LOCALLY RIGIDISED IN CONNECTOR AREAS
- SURFACE FINISH:
 ENIG TO IPC-4552 ON EXPOSED COPPER
- IPC CLASSIFICATION:
 BARE CIRCUIT - IPC-A-600/IPC-6013 CLASS 3
 ASSEMBLY - IPC-A-610/J-STD-001 CLASS 3
- MECHANICAL PROPERTIES:
 NOMINAL FLEX THICKNESS = 0.185mm
 MINIMUM STATIC BEND RADIUS (IPC-2223) = 1.85mm
 SUITABLE FOR DYNAMIC OPERATION ON BEND RADII ABOVE 3.70mm
- ELECTRICAL PROPERTIES:
 MAX. CURRENT PER TRACK = 1.0A
 INSULATION RESISTANCE = 1GΩ MIN
 VOLTAGE PROOF (AT 1013mbar, SEA LEVEL): 1200V DC OR AC PEAK

NOTES:

1. FOR COMPLETE CONNECTOR SPECIFICATION, SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE).
2. CONNECTORS SHOWN FOR REFERENCE ONLY. SEE TABLE 2 ON SHEET 4 AND ORDER CODE FOR POSSIBLE CONFIGURATIONS.
3. JACKSCREWS MUST BE FASTENED TO 21±2cmN (AS PER C005XX).

TABLE 1

| DIMENSION | CALCULATION |
|-----------|-------------------------------------|
| DIM 'A' | TOTAL No. OF CONTACTS + 13 |
| DIM 'B' | TOTAL No. OF CONTACTS + 1 |
| DIM 'C' | OVERALL PCB LENGTH (SEE ORDER CODE) |

EXAMPLE:
 100mm FLEX PCB WITH 10 CONTACT CONNECTORS (M80-5021042, M80-4021042)

PART NUMBER = M80-F150210-100-402
 DIM 'A' = 23mm, DIM 'B' = 11mm, DIM 'C' = 100mm

| | | | |
|----------------|------|------------|-------|
| RTP | 4 | 06.07.20 | 30088 |
| NAME | ISS. | DATE | CN/CO |
| APPROVED: | | R.PORTLOCK | |
| CHECKED: | | M.RUDKIN | |
| DRAWN: | | R.PORTLOCK | |
| CUSTOMER REF.: | | | |
| ASSEMBLY DRG: | | | |

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TOLERANCES
 X. = ±1mm
 X.X = ±0.50mm
 X.XX = ±0.20mm
 X.XXX = ±0.01mm
 ANGLES = ±5°
 UNLESS STATED

MATERIAL:
 SEE ABOVE
FINISH: SEE ABOVE
S/AREA: mm²

TITLE:
 DATAMATE FLEX PCB
 ASSEMBLY - DOUBLE-ENDED

DRAWING NUMBER:
M80-F1XXXXX-XXX-XXX

SHT
 3 OF 4

Customer Information Sheet

DRAWING No.: M80-F1XXXXX-XXX-XXX

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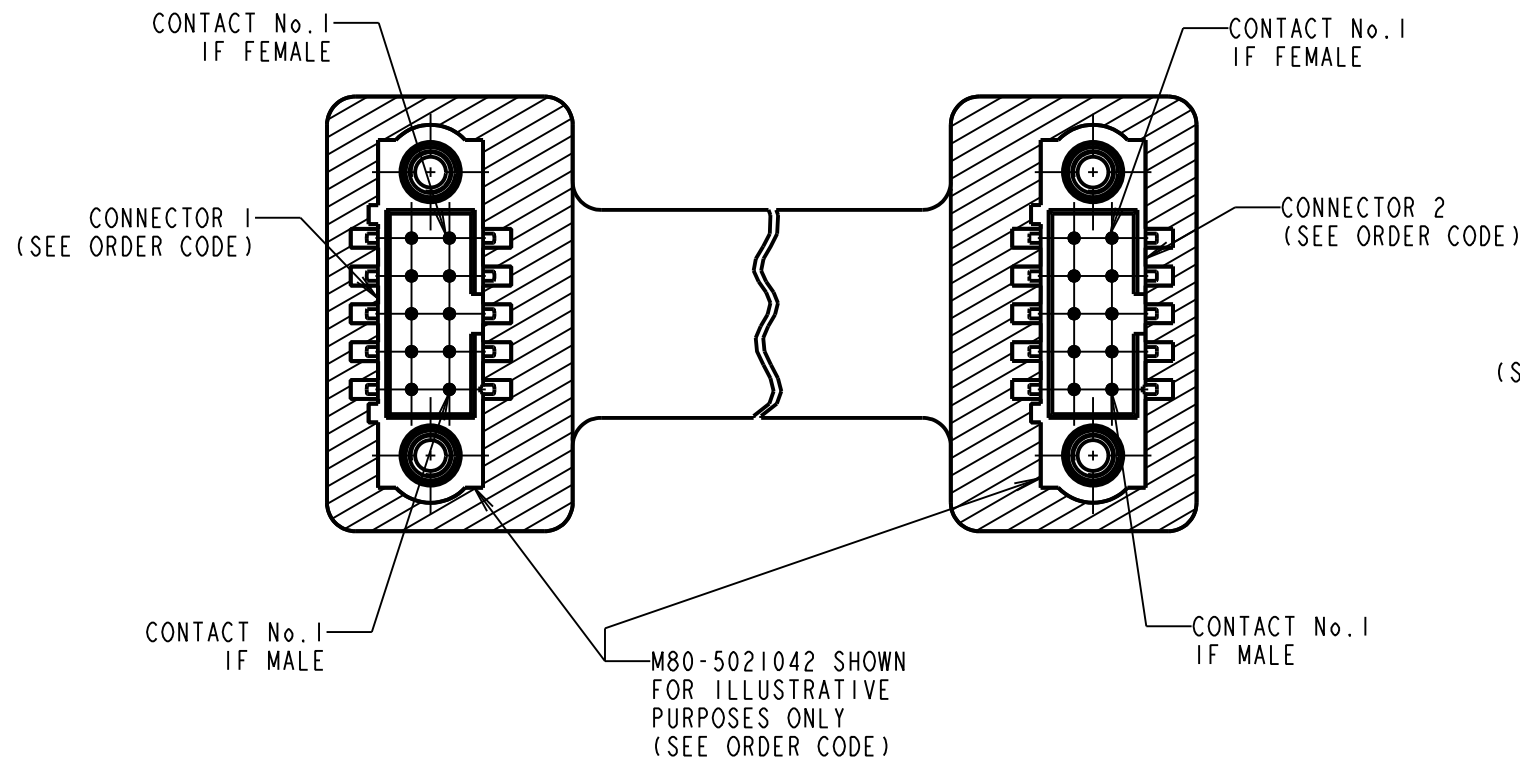
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PINOUT A



PINOUT B

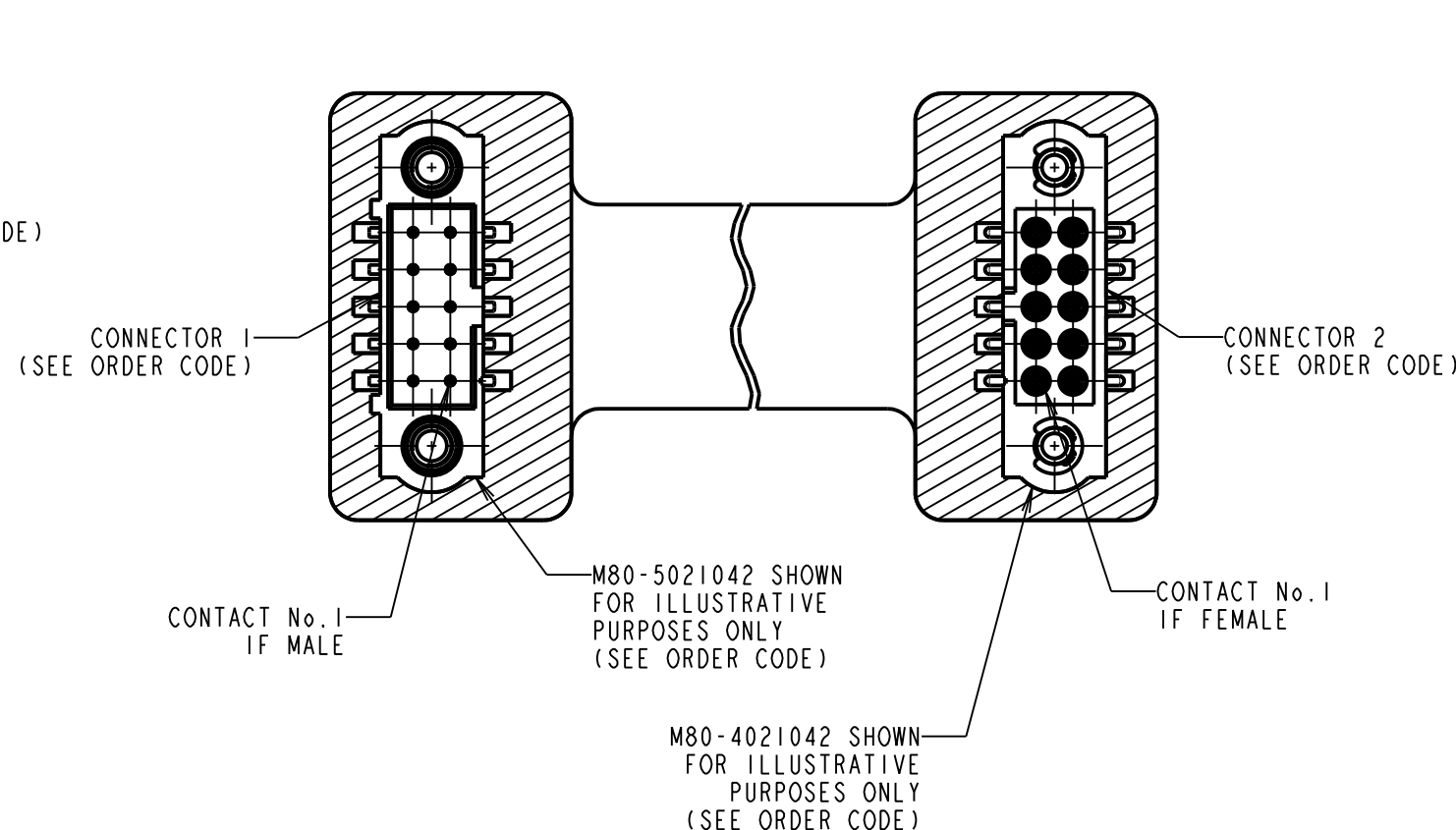


TABLE 2

| CONNECTOR 1 | | CONNECTOR 2 | | PINOUT |
|-------------|-------------|-------------|-------------------------|----------|
| PART No. | ORIENTATION | PART No. | ORIENTATION | |
| M80-402XX42 | AS SHOWN | M80-402XX42 | SAME AS CONNECTOR 1 | PINOUT A |
| M80-422XX42 | AS SHOWN | M80-422XX42 | SAME AS CONNECTOR 1 | PINOUT A |
| M80-502XX42 | AS SHOWN | M80-502XX42 | SAME AS CONNECTOR 1 | PINOUT A |
| M80-502XX42 | AS SHOWN | M80-402XX42 | OPPOSITE TO CONNECTOR 1 | PINOUT B |
| M80-512XX42 | AS SHOWN | M80-512XX42 | SAME AS CONNECTOR 1 | PINOUT A |
| M80-512XX42 | AS SHOWN | M80-422XX42 | OPPOSITE TO CONNECTOR 1 | PINOUT B |

PINOUT ROUTING

| | |
|----------|--|
| PINOUT A | FOR ALL FIRST ROW CONTACTS: CONTACT X TO CONTACT ((TOTAL/2 + X) (WHERE X IS CONTACT POSITION) FOR ALL SECOND ROW CONTACTS: CONTACT Y TO CONTACT (Y - (TOTAL/2)) (WHERE Y IS CONTACT POSITION) |
| PINOUT B | FOR ALL CONTACTS: CONTACT Z TO CONTACT Z (WHERE Z IS CONTACT POSITION) |

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AND MALE-TO-FEMALE CONFIGURATIONS.

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SEE SHEET 3

FINISH: SEE SHEET 3

S/AREA:

mm²

TITLE:

DATAMATE FLEX PCB
ASSEMBLY - DOUBLE-ENDED

DRAWING NUMBER:

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