

Customer Information Sheet

DRAWING No.: M80-5000000MI-XX-XXX-00-000

IF IN DOUBT - ASK

(C)

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:

MOULDING: GLASS FILLED PPS, UL94V-0, BLACK

COAX CONTACT:

BODY, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY

LATCHING COLLAR = BERYLLIUM COPPER

INSULATOR = PTFE

JACKSCREW = STAINLESS STEEL

FINISH:

COAX CONTACT

BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD

LATCHING COLLAR: = NICKEL

ELECTRICAL:

INSULATION RESISTANCE = 100M Ω MIN

COAX CONTACT:

FREQUENCY RANGE = 6GHz

IMPEDANCE = 50 Ω

V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX

CONTACT RESISTANCE 6 m Ω MAX

INSULATION RESISTANCE = 10⁶M Ω @250V AC

OPERATING VOLTAGE = 180V AC @ 500mA

MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:

DURABILITY = 500 OPERATIONS

COAX CONTACT:

INSERTION FORCE = 8N MAX

WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:

TEMPERATURE RANGE = -55°C TO +125°C

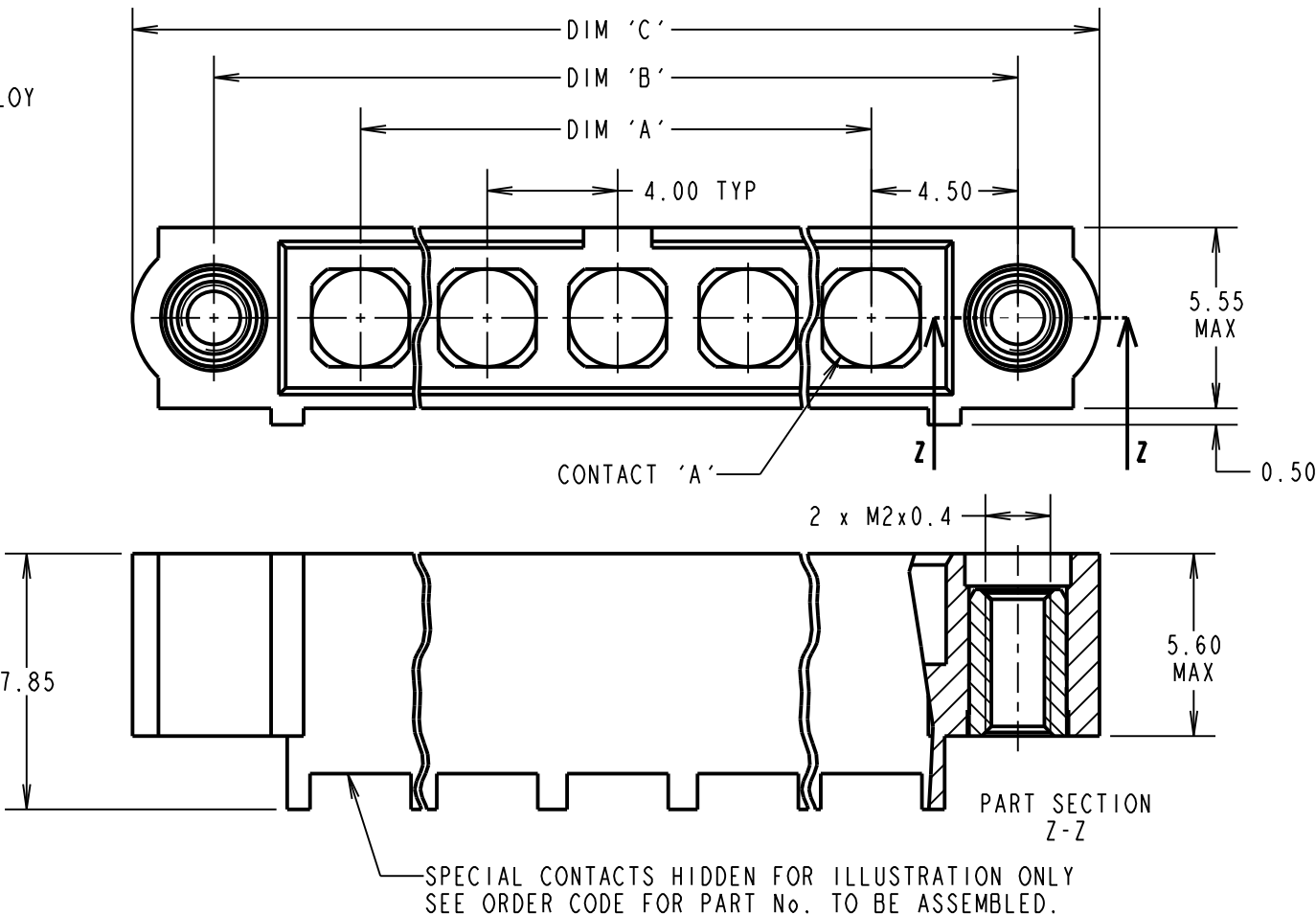
PACKING:

BAG

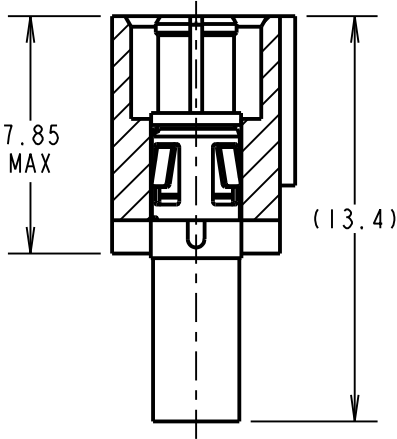
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

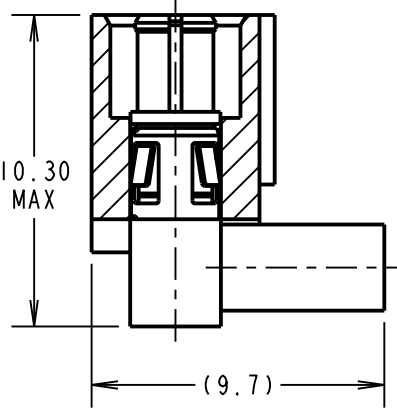
COAX CRIMP/SOLDER CONTACTS ONLY



M80-315/316/317 x No. OF CONTACTS



M80-318/319 x No. OF CONTACTS



ORDER CODE:(COAX CRIMP/SOLDER CONTACTS)

M80-5000000MI-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS (CRIMP)

315 = COAX CONTACT 2.0mm CRIMP M80-315

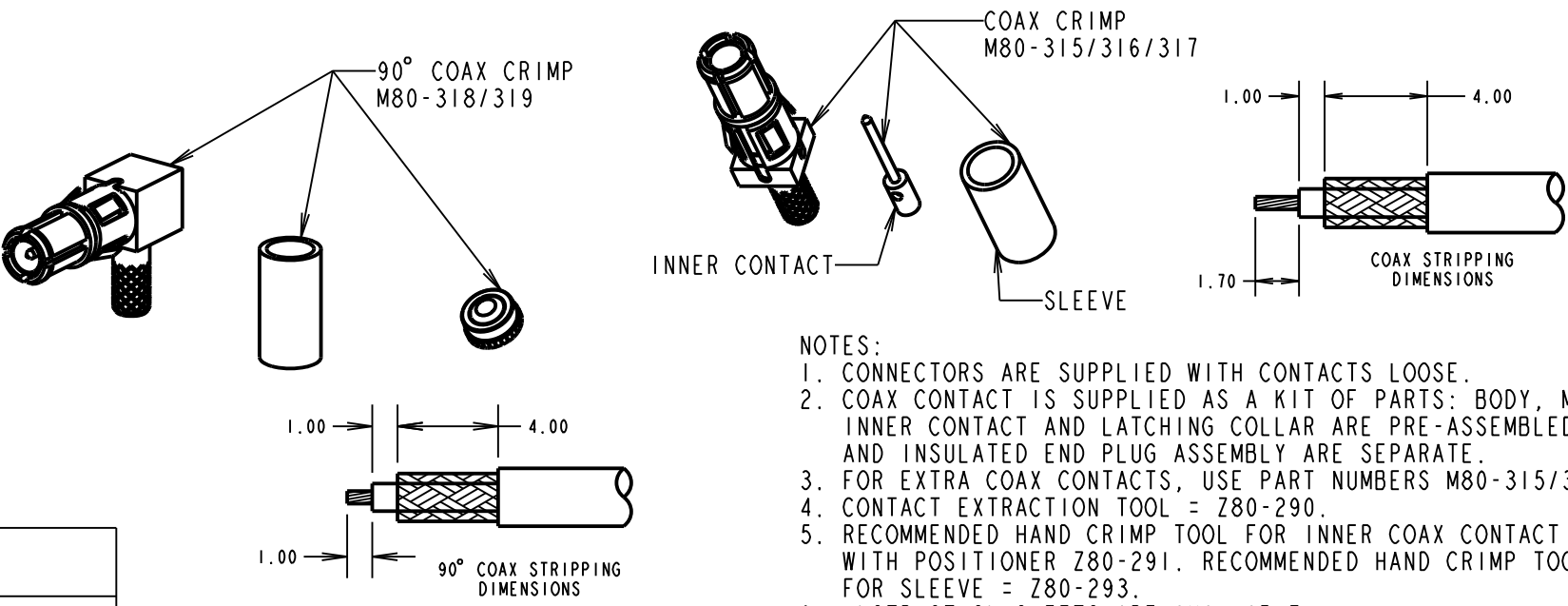
316 = COAX CONTACT 2.4mm CRIMP M80-316

317 = COAX CONTACT 2.7mm CRIMP M80-317

318 = COAX CONTACT 2.0mm HORZ' CRIMP M80-318

319 = COAX CONTACT 2.7mm HORZ' CRIMP M80-319

DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
EXAMPLE: CONNECTOR WITH 08 COAX CONTACTS, M80-5000000MI-08-315-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm	



NOTES:

- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
- COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: BODY, MAIN INSULATOR, INNER CONTACT AND LATCHING COLLAR ARE PRE-ASSEMBLED AND SLEEVE AND INSULATED END PLUG ASSEMBLY ARE SEPARATE.
- FOR EXTRA COAX CONTACTS, USE PART NUMBERS M80-315/316/317/318/319.
- CONTACT EXTRACTION TOOL = Z80-290.
- RECOMMENDED HAND CRIMP TOOL FOR INNER COAX CONTACT = Z80-292 WITH POSITIONER Z80-291. RECOMMENDED HAND CRIMP TOOL AND DIE SET FOR SLEEVE = Z80-293.
- INSTRUCTION SHEETS ARE AVAILABLE.

MGP	6	20.03.14	12429
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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technical@harwin.com

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TOLERANCES
X. = ± 1 mm
X.X = ± 0.25 mm
X.XX = ± 0.10 mm
X.XXX = ± 0.01 mm
ANGLES = $\pm 5^\circ$
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH: SEE ABOVE

S/AREA:

mm²

TITLE:

DATAMATE MIX-TEK
MALE ASSEMBLY
WITH JACKSCREW

DRAWING NUMBER:

M80-5000000MI-XX-XXX-00-000

SHT
5 OF 8

Customer Information Sheet

DRAWING No.: M80-5000000MI-XX-XXX-00-000

IF IN DOUBT - ASK

C

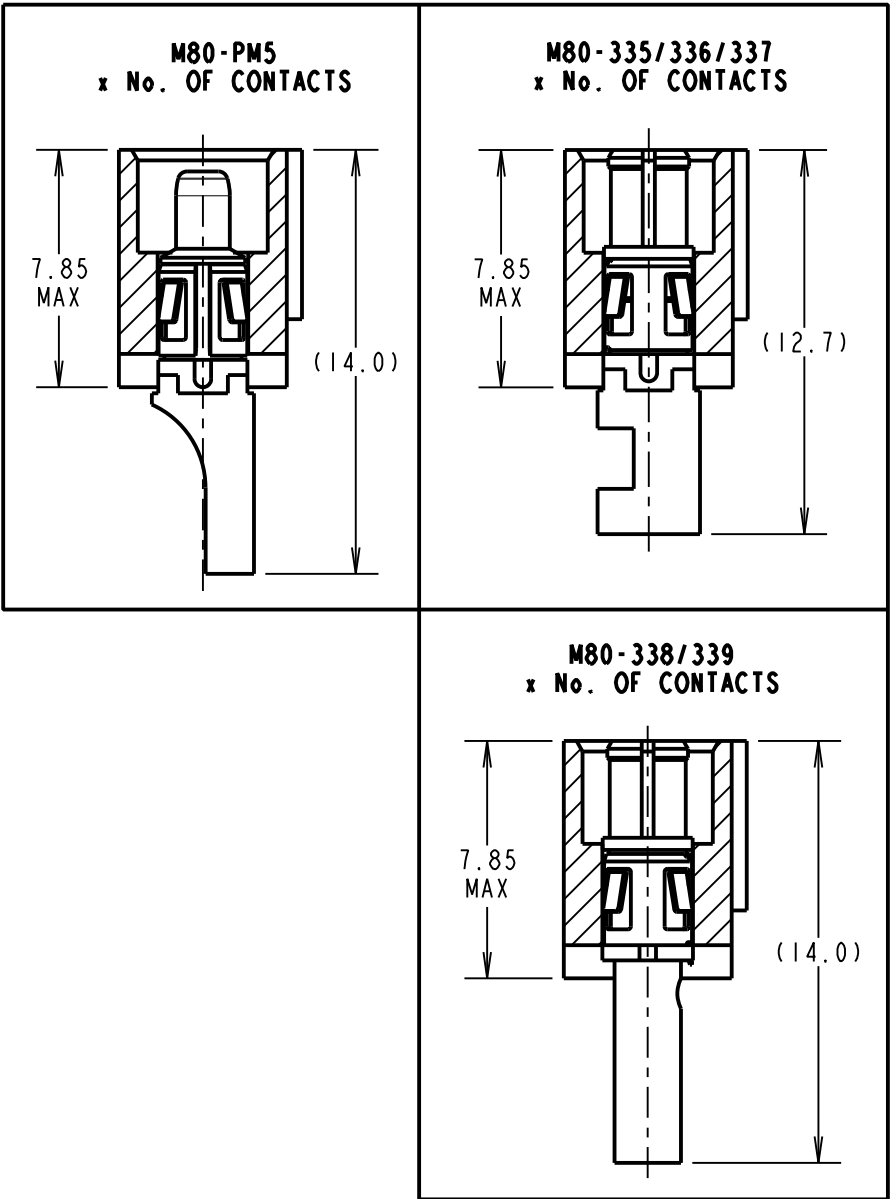
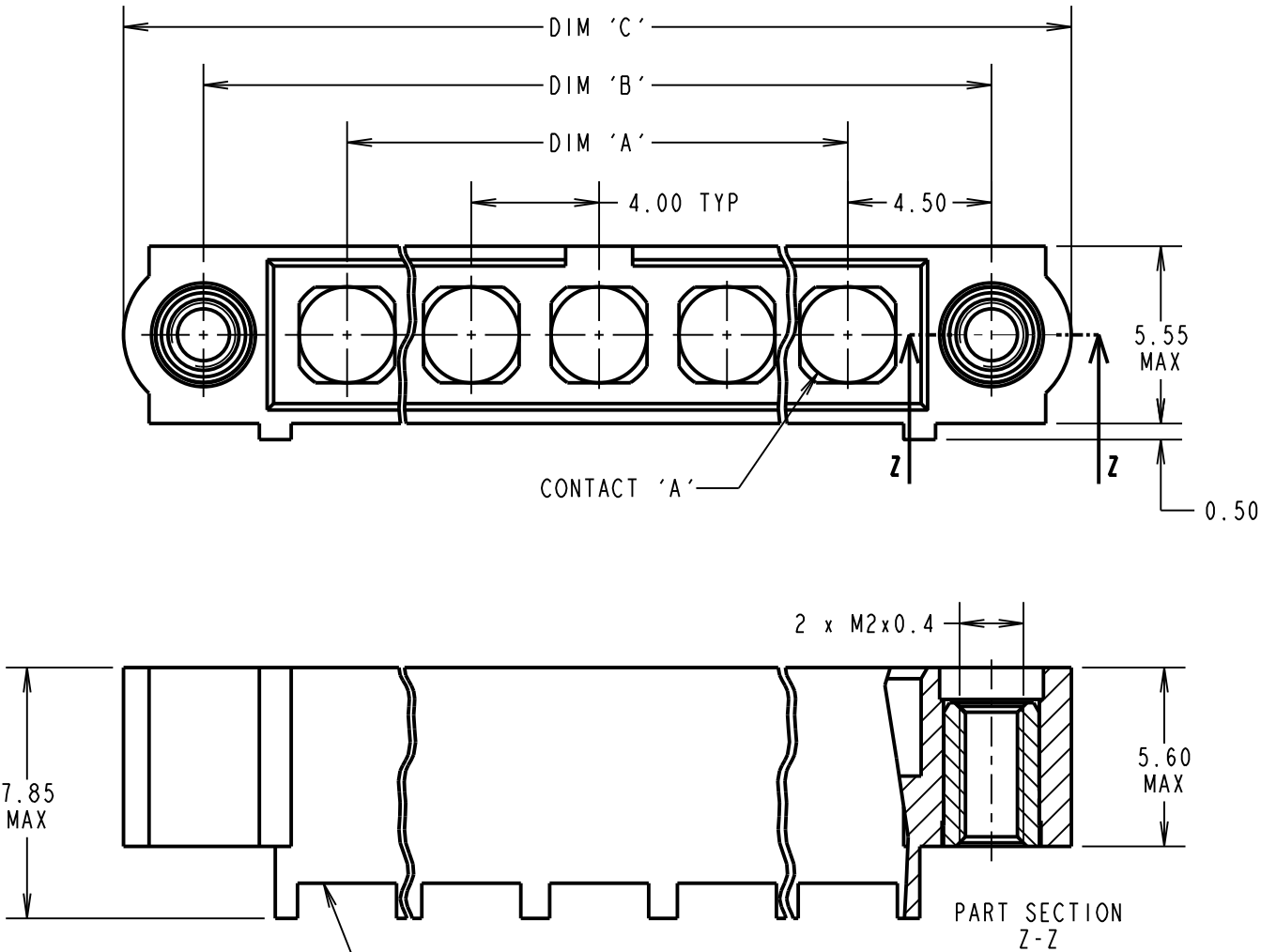
NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:
MATERIAL:
MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
POWER CONTACT:
BODY = COPPER ALLOY
LATCHING COLLAR = BERYLLIUM COPPER
JACKSCREW: STAINLESS STEEL
FINISH:
POWER CONTACT:
8 TO 20A = 0.25µ MIN GOLD OVER NICKEL
40A = 0.76µ MIN GOLD OVER NICKEL
LATCHING COLLAR: = NICKEL
ELECTRICAL:
WORKING VOLTAGE = 800V AC/DC
VOLTAGE PROOF = 1200V AC/DC
INSULATION RESISTANCE = 100MΩ MIN
POWER CONTACT:
CONTACT RESISTANCE = 6mΩ MAX
CURRENT RATING:
M80-PM5 = 40A MAX WITH 10AWG,
M80-335 = 20A MAX WITH 12AWG,
M80-336 = 15A MAX WITH 14AWG,
M80-337 = 10A MAX WITH 16AWG,
M80-338 = 8A MAX WITH 18AWG,
M80-339 = 5A MAX WITH 20AWG,
CONTACT AS SPECIFIED.
MECHANICAL:
DURABILITY = 500 OPERATIONS
POWER CONTACT:
INSERTION FORCE:
8 TO 20A = 8N MAX
40A = 15N MAX
WITHDRAWAL FORCE = 0.5N MIN
ENVIRONMENTAL:
TEMPERATURE RANGE = -55°C TO +150°C
PACKING:
BAG
FOR COMPLETE SPECIFICATION SEE COMPONENT
SPECIFICATION C005XX (LATEST ISSUE)

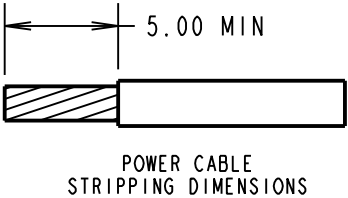
POWER CRIMP/SOLDER CONTACTS ONLY



ORDER CODE: (POWER CRIMP/SOLDER CONTACTS)
M80-5000000MI-XX-XXX-00-000

TOTAL No. OF CONTACTS _____
02 TO 12

SPECIAL CONTACTS (CRIMP)
PM5 = POWER CONTACT 10AWG SOLDER M80-PM5
335 = POWER CONTACT 12AWG SOLDER M80-335
336 = POWER CONTACT 14AWG SOLDER M80-336
337 = POWER CONTACT 16AWG SOLDER M80-337
338 = POWER CONTACT 18AWG SOLDER/CRIMP M80-338
339 = POWER CONTACT 20AWG SOLDER/CRIMP M80-339



- NOTES:**
1. CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
2. FOR EXTRA POWER CONTACTS USE PART NUMBERS: M80-PF5/335/336/337/338/339.
3. CONTACT EXTRACTION TOOL = Z80-290.
4. RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
5. INSTRUCTION SHEETS ARE AVAILABLE.

DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS, M80-5000000MI-10-335-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm	

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TOLERANCES
X. = ±1mm
X.X = ±0.25mm
X.XX = ±0.10mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

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

TITLE: DATAMATE MIX-TEK
MALE ASSEMBLY
WITH JACKSCREW
DRAWING NUMBER: M80-5000000MI-XX-XXX-00-000
SHT 6 OF 8

MGP	6	20.03.14	12429
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-5000000MI-XX-XXX-00-000

IF IN DOUBT - ASK

©

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:

MOULDING: GLASS FILLED PPS, UL94V-0, BLACK

COAX CONTACT:

BODY, INNER CONTACT, = COPPER ALLOY

INSULATOR = PTFE

JACKSCREW: STAINLESS STEEL

FINISH:

COAX CONTACT:

BODY, INNER CONTACT, = GOLD

ELECTRICAL:

INSULATION RESISTANCE = 100MΩ MIN

COAX CONTACT:

FREQUENCY RANGE = 6GHz

IMPEDANCE = 50 Ω

V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX

CONTACT RESISTANCE 6 mΩ MAX

INSULATION RESISTANCE = 10⁶MΩ @250V AC

OPERATING VOLTAGE = 180V AC @ 500mA

MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:

DURABILITY = 500 OPERATIONS

COAX CONTACT:

INSERTION FORCE = 8N MAX

WITHDRAWAL FORCE = 0.5N MIN

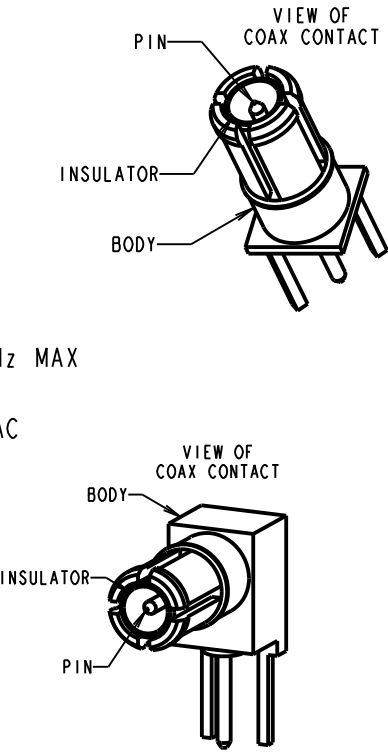
ENVIRONMENTAL:

TEMPERATURE RANGE = -55°C TO +125°C

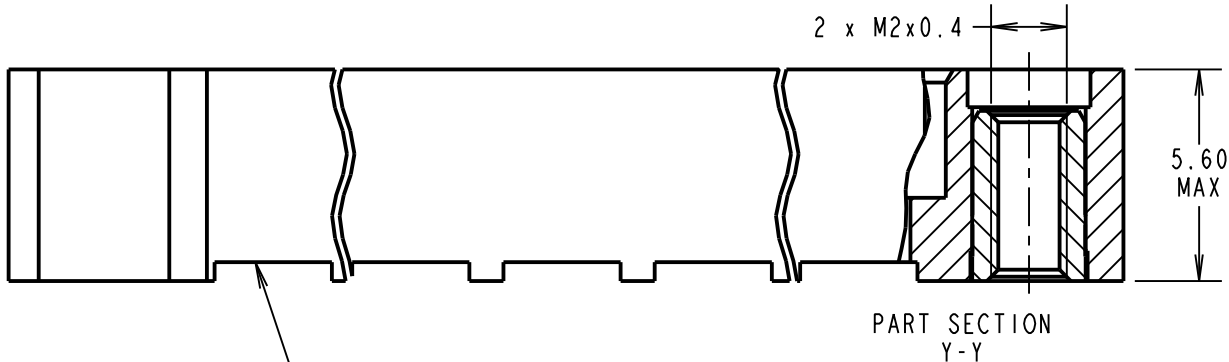
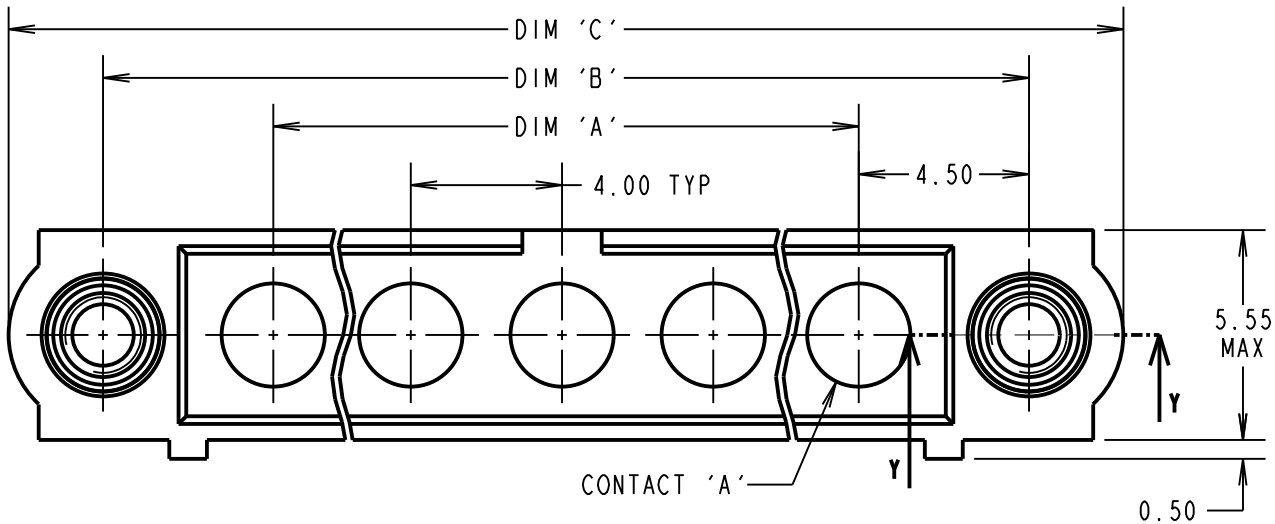
PACKING:

TUBE

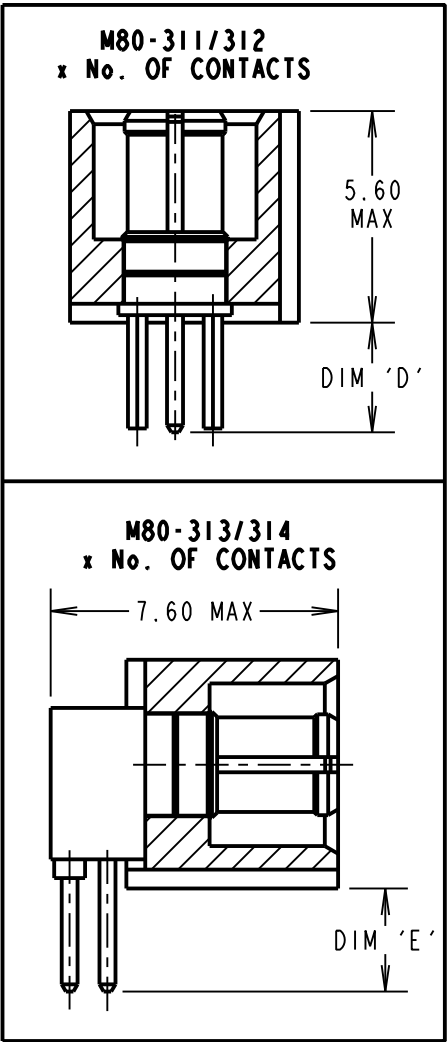
FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)



COAX PC TAIL CONTACTS ONLY



SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY
SEE ORDER CODE FOR PART No. TO BE ASSEMBLED



ORDER CODE:
(COAX PC TAIL CONTACTS ONLY)
M80-5000000MI-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS (PC TAIL)

311 = COAX CONTACT 3.0mm PC TAIL M80-311

312 = COAX CONTACT 4.5mm PC TAIL M80-312

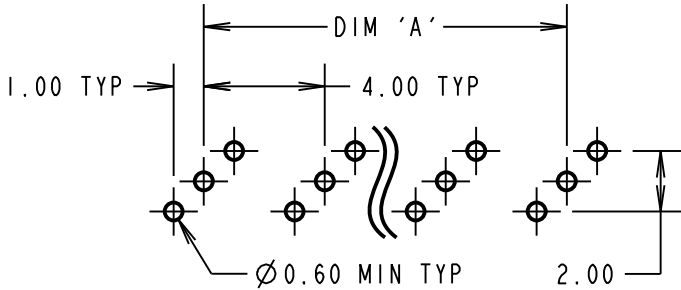
313 = COAX CONTACT 3.0mm HORZ' PC TAIL M80-313

314 = COAX CONTACT 4.5mm HORZ' PC TAIL M80-314

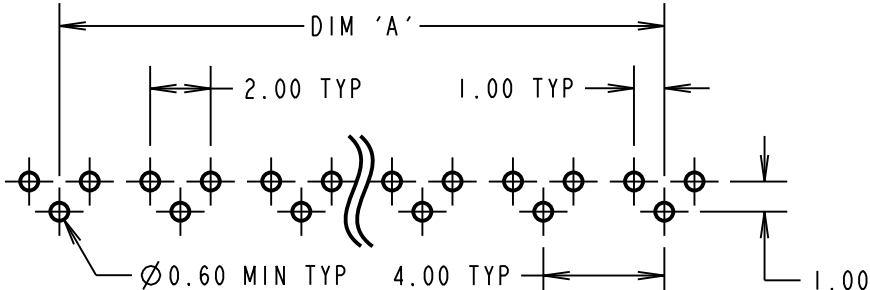
DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
DIM 'D'	M80-311 = 3.0mm, M80-312 = 4.5mm
DIM 'E'	M80-313 = 3.0mm, M80-314 = 4.5mm

EXAMPLE: CONNECTOR WITH 08 COAX CONTACTS,
M80-5000000MI-08-313-00-000
DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm
DIM 'E' = 3.0mm

RECOMMENDED PCB LAYOUTS FOR
COAX CONTACTS: M80-311/312



RECOMMENDED PCB LAYOUTS FOR
COAX CONTACTS: M80-313/314



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TOLERANCES

X. = ±1mm

X.X = ±0.25mm

X.XX = ±0.10mm

X.XXX = ±0.01mm

ANGLES = ±5°

UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE:

DATAMATE MIX-TEK
MALE ASSEMBLY
WITH JACKSCREW

DRAWING NUMBER:

M80-5000000MI-XX-XXX-00-000

SHT
7 OF 8

MGP	6	20.03.14	12429
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-5000000MI-XX-XXX-00-000

IF IN DOUBT - ASK

(C)

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:

MOULDING: GLASS FILLED PPS, UL94V-0, BLACK

POWER CONTACT: COPPER ALLOY

JACKSCREW: STAINLESS STEEL

FINISH:

POWER CONTACT:

20A = 0.25µ MIN GOLD OVER NICKEL

40A = 0.76µ MIN GOLD OVER NICKEL

ELECTRICAL:

WORKING VOLTAGE = 800V AC/DC

VOLTAGE PROOF = 1200V AC/DC

INSULATION RESISTANCE = 100MΩ MIN

POWER CONTACT:

CONTACT RESISTANCE 6mΩ MAX

CURRENT RATING:

M80-331/332/333/334/33A = 20A MAX

M80-PM1/PM2/PM3/PM4 = 40A MAX

MECHANICAL:

DURABILITY = 500 OPERATIONS

POWER CONTACT:

INSERTION FORCE:

M80-331/332/323/324/33A = 8N MAX

M80-PM1/PM2/PM3/PM4 = 15N MAX

WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:

TEMPERATURE RANGE = -55°C TO +150°C

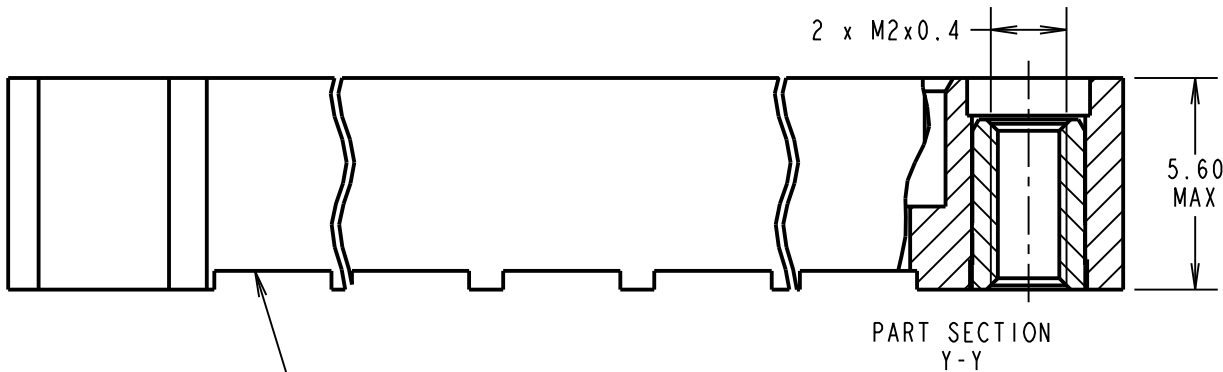
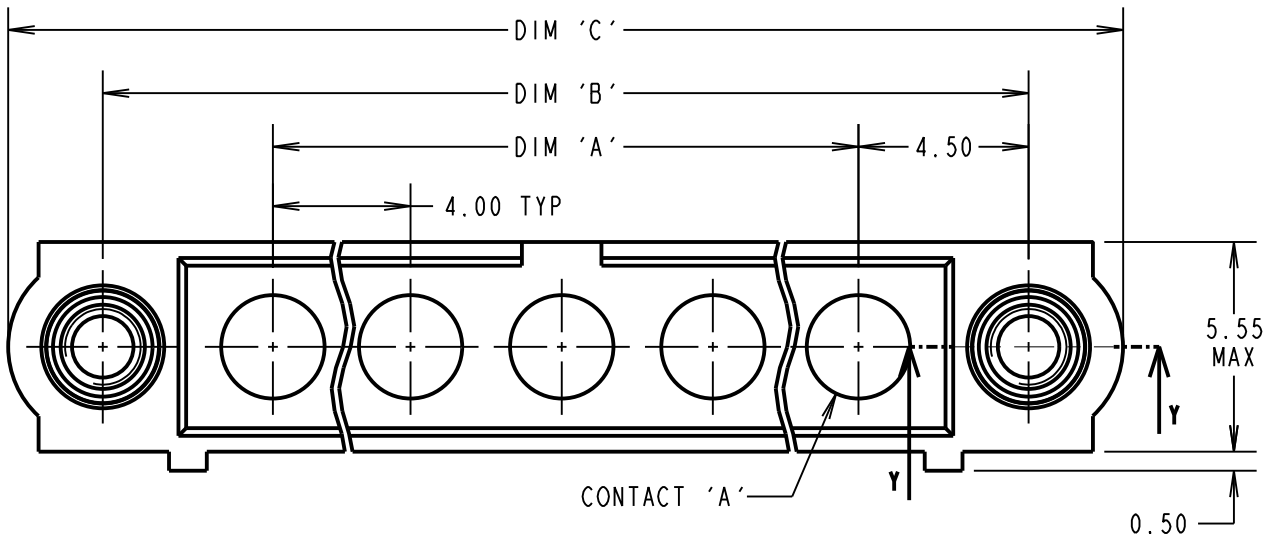
PACKING:

TUBE

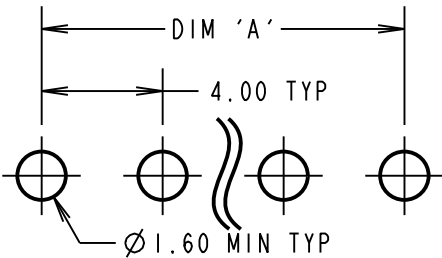
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

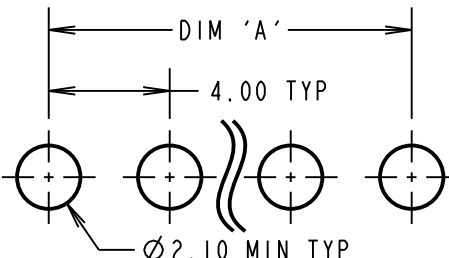
POWER PC TAIL AND SMT CONTACTS ONLY



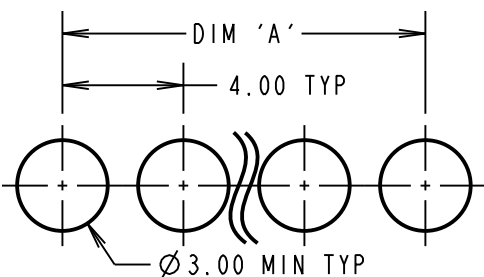
RECOMMENDED PCB LAYOUT FOR
M80-331/332/333/334
PC TAIL POWER CONTACTS



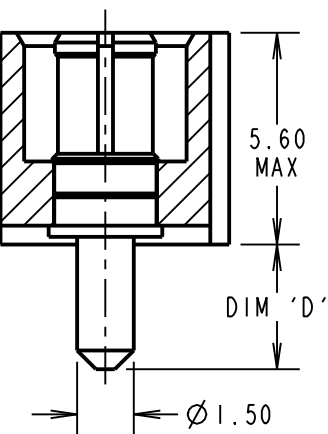
RECOMMENDED PCB LAYOUT FOR
M80-PM1/PM2/PM3/PM4
PC TAIL POWER CONTACTS



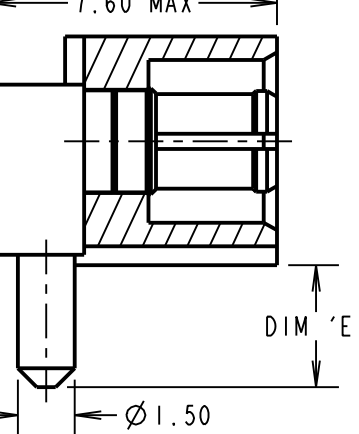
RECOMMENDED PCB LAYOUT FOR
M80-33A SMT POWER CONTACTS



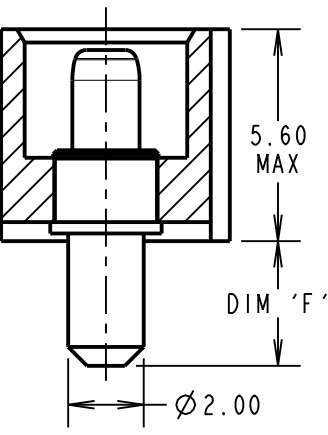
M80-331/332
x No. OF CONTACTS



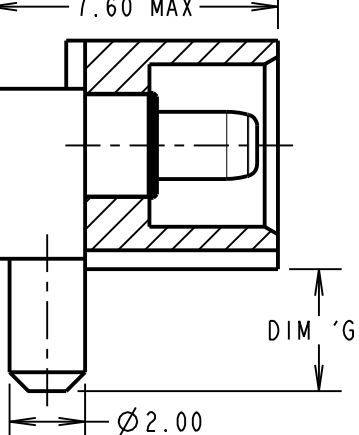
M80-333/334
x No. OF CONTACTS



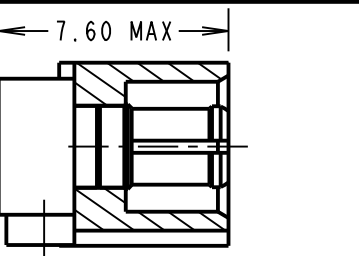
M80-PM1/PM2
x No. OF CONTACTS



M80-PM3/PM4
x No. OF CONTACTS



M80-33A
x No. OF CONTACTS



ORDER CODE:
(POWER PC TAIL AND SMT CONTACTS ONLY)

M80-5000000MI-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS (PC TAIL)

331 = 20A POWER CONTACT 3.0mm VERT' PC TAIL M80-331
332 = 20A POWER CONTACT 4.5mm VERT' PC TAIL M80-332
333 = 20A POWER CONTACT 3.0mm HORZ' PC TAIL M80-333
334 = 20A POWER CONTACT 4.5mm HORZ' PC TAIL M80-334
33A = 20A POWER CONTACT HORIZONTAL SMT M80-33A
PM1 = 40A POWER CONTACT 3.0mm VERT' PC TAIL M80-PM1
PM2 = 40A POWER CONTACT 4.5mm VERT' PC TAIL M80-PM2
PM3 = 40A POWER CONTACT 3.0mm HORZ' PC TAIL M80-PM3
PM4 = 40A POWER CONTACT 4.5mm HORZ' PC TAIL M80-PM4

DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
DIM 'D'	M80-331 = 3.5mm, M80-332 = 5.0mm
DIM 'E'	M80-333 = 3.5mm, M80-334 = 5.0mm
DIM 'F'	M80-PM1 = 3.5mm, M80-PM2 = 5.0mm
DIM 'G'	M80-PM3 = 3.5mm, M80-PM4 = 5.0mm

EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS,
M80-5000000MI-10-334-00-000

DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
DIM 'E' = 4.5mm

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TOLERANCES

X. = ±1mm

X.X = ±0.25mm

X.XX = ±0.10mm

X.XXX = ±0.01mm

ANGLES = ±5°

UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE:

DATAMATE MIX-TEK
MALE ASSEMBLY
WITH JACKSCREW

DRAWING NUMBER:

M80-5000000MI-XX-XXX-00-000

SHT

8 OF 8

MGP 6 20.03.14 12429

NAME ISS. DATE C/NOTE

APPROVED: MGP

CHECKED: SB

DRAWN: R.ADDE

CUSTOMER REF.:

ASSEMBLY DRG:

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Harwin:

[M80-5000000M1-02-331-00-000](#) [M83-LML3M1N96-0000-000](#) [M80-5000000M1-04-331-00-000](#) [M83-LML3M1N60-0000-000](#) [M80-5000000M1-06-312-00-000](#) [M80-5000000M1-04-312-00-000](#) [M80-4000000F1-04-PF5-00-000](#) [M80-5T22442M3-03-312-00-000](#) [M80-5000000M5-08-333-00-000](#) [M80-5000000M5-02-PM3-00-000](#) [M80-5L10405M5-02-333-00-000](#) [M80-5000000M1-06-PM1-00-000](#) [M80-8451745](#) [M80-5000000M5-04-333-00-000](#) [M80-5000000M5-10-333-00-000](#) [M80-4000000F2-10-325-00-000](#) [M83-LFD1F1N96-0000-000](#) [M80-5000000M1-02-PM1-00-000](#) [M83-LMT1M1N60-0000-000](#) [M80-328](#) [M80-4000000F1-06-327-00-000](#) [M80-5000000M1-04-PM1-00-000](#) [M80-5000000M1-08-331-00-000](#) [M80-6110445](#) [M80-329](#) [M80-4000000F1-02-PF5-00-000](#) [M80-5000000M5-06-333-00-000](#) [M80-5000000M1-10-PM1-00-000](#) [M80-5000000M1-08-PM1-00-000](#) [M80-5000000M1-06-331-00-000](#) [M80-5000000M1-06-336-00-000](#)