

Customer Information Sheet

DRAWING No.: M80-4000000FI-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, SLEEVE, END PLUG = COPPER ALLOY

INNER CONTACT, LATCHING COLLAR = BERYLLIUM COPPER

INSULATOR = PTFE

JACKSCREW, CIRCLIP = 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 = 6m 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

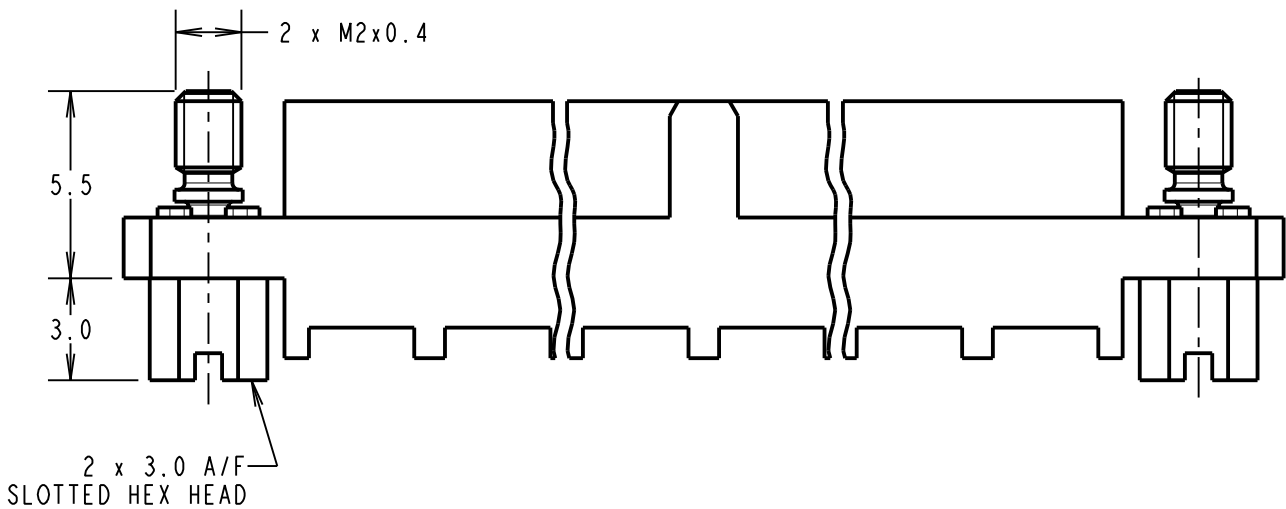
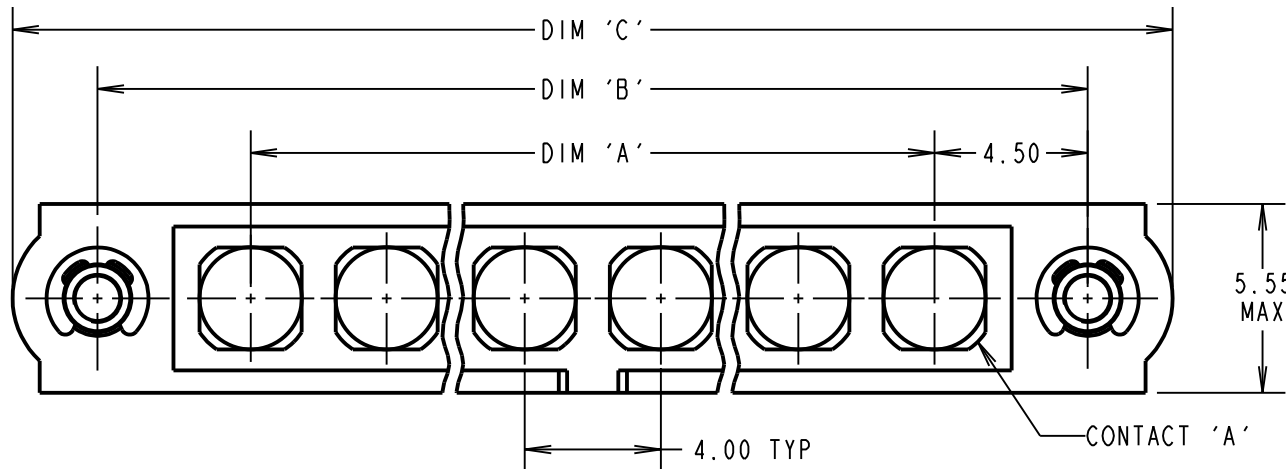
PACKING:

BAG

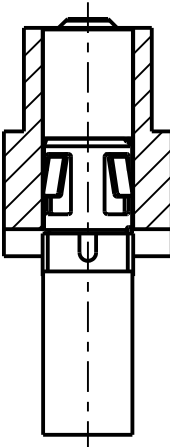
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

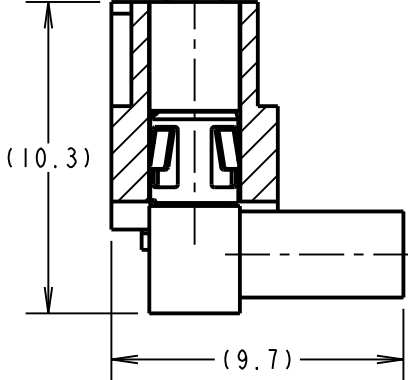
COAX CRIMP/SOLDER CONTACTS ONLY



M80-305/~~306~~/307
x No. OF CONTACTS



M80-308/309
x No. OF CONTACTS



ORDER CODE: (COAX CRIMP/SOLDER)

M80-4000000FI-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS

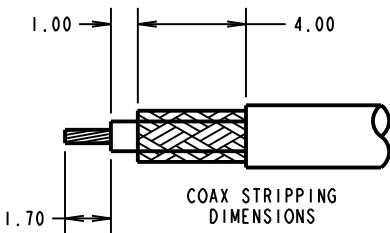
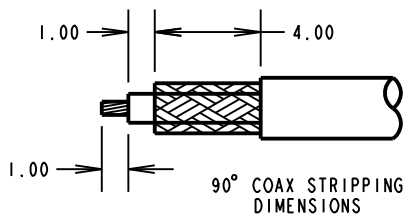
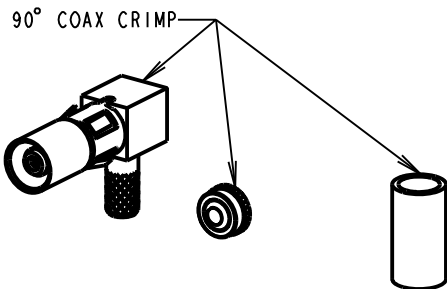
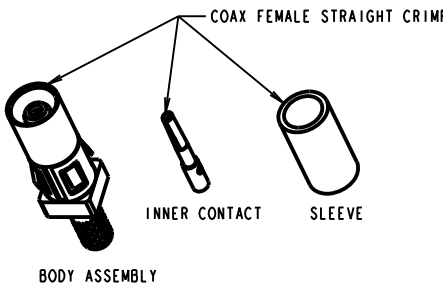
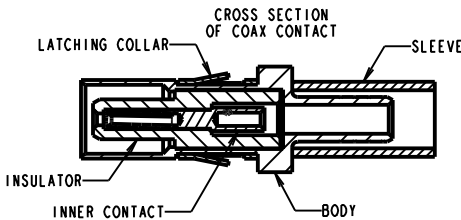
305 = COAX CONTACT CRIMP 2.0mm M80-305

~~306 = COAX CONTACT CRIMP 2.4mm M80-306~~

307 = COAX CONTACT CRIMP 2.7mm M80-307

308 = 90° COAX CONTACT CRIMP/SOLDER 2.0mm M80-308

309 = 90° COAX CONTACT CRIMP/SOLDER 2.7mm M80-309



NOTES:

- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
- COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: BODY, INSULATOR AND LATCHING COLLAR ARE PRE-ASSEMBLED. SLEEVE AND INNER CONTACT ARE SEPARATE.
- FOR EXTRA COAX CONTACTS, USE PART NUMBER M80-305/~~306~~/307/308/309
- RECOMMENDED HAND CRIMP TOOL FOR COAX INNER CONTACT = Z80-292 WITH POSITIONER Z80-291 AND RECOMMENDED HAND CRIMP TOOL AND DIE SET FOR COAX SLEEVE = Z80-293.
- COAX CONTACT EXTRACTION TOOL = Z80-290.
- INSTRUCTION SHEETS ARE AVAILABLE.

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TOLERANCES

X. = ± 1 mm
X.X = ± 0.50 mm
X.XX = ± 0.20 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
FEMALE ASSEMBLY
WITH JACKSCREW

DRAWING NUMBER:
M80-4000000FI-XX-XXX-00-000

SHT
5
OF
8

MGP	9	04.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: MR			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-4000000FI-XX-XXX-00-000

IF IN DOUBT - ASK

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NOT TO SCALE

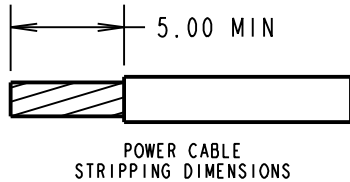
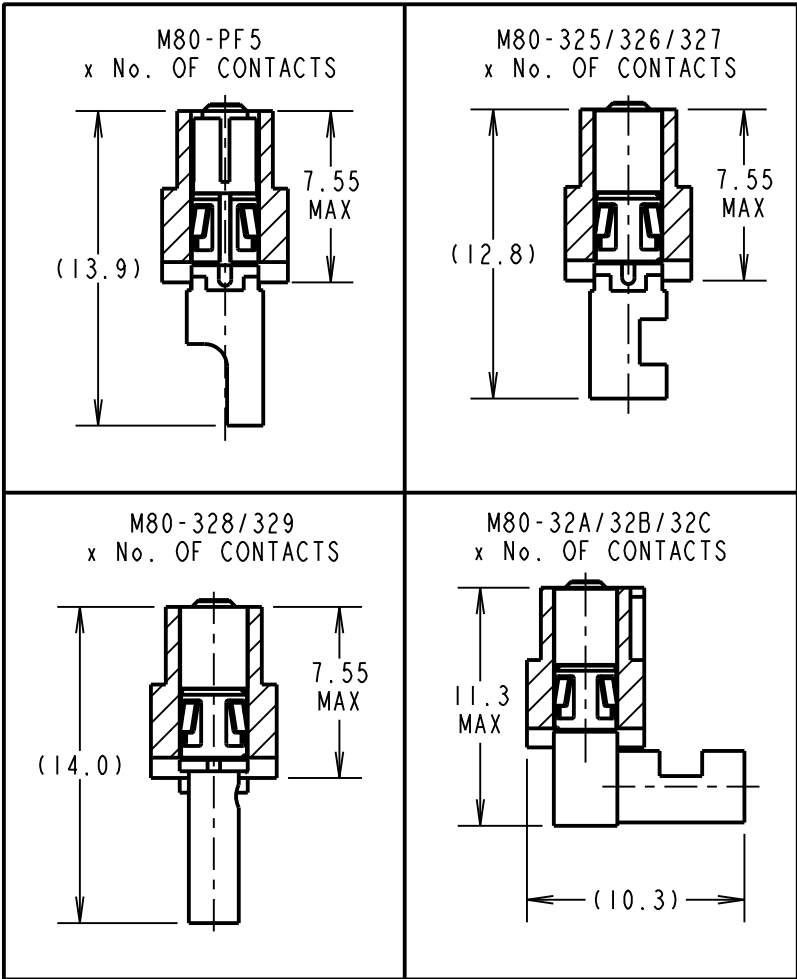
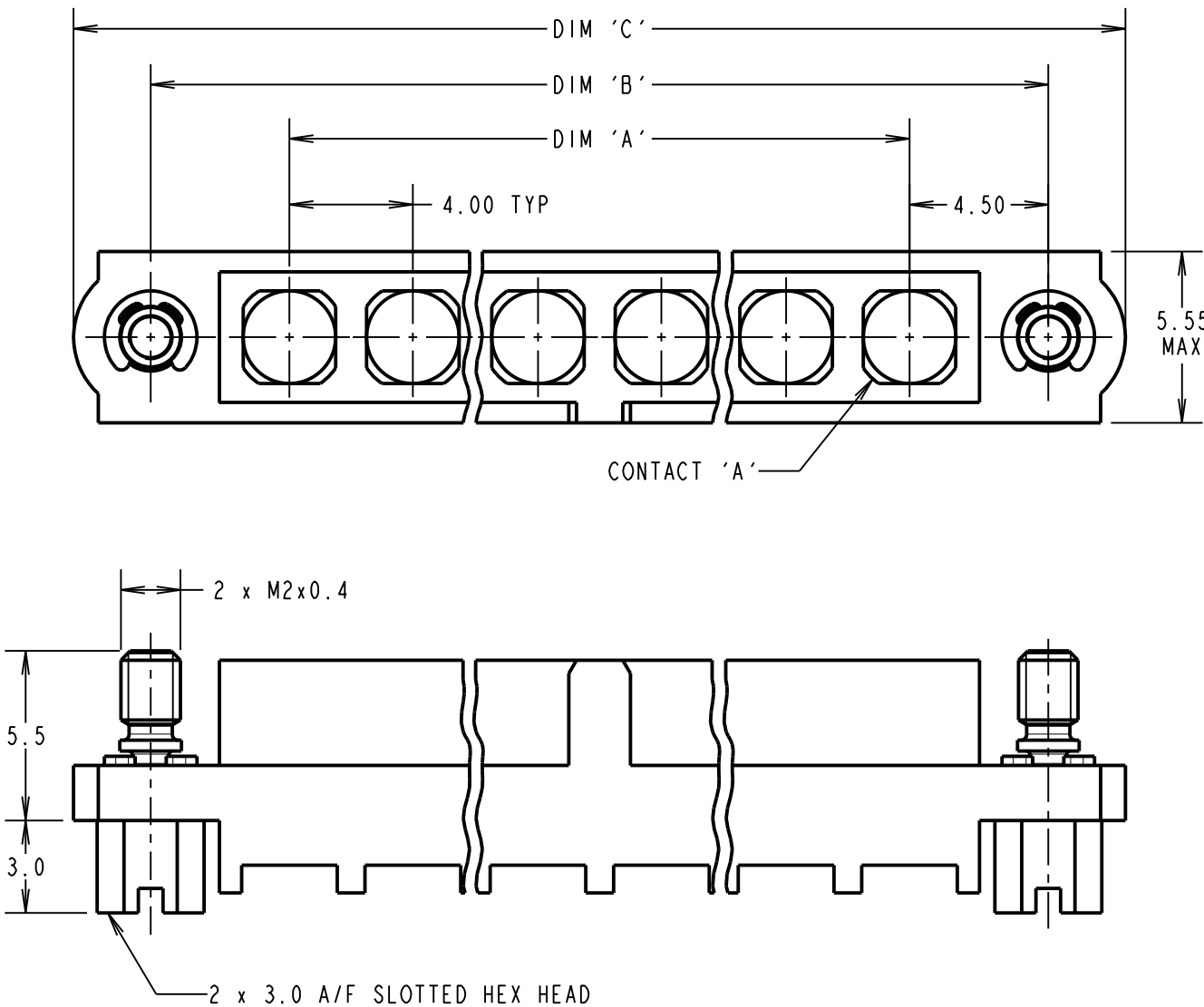
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:
MATERIAL:
MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
POWER CONTACT:
BODY = COPPER ALLOY
LATCHING COLLAR = BERYLLIUM COPPER
JACKSCREW, CIRCLIP = STAINLESS STEEL
FINISH:
POWER CONTACT:
BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD
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 = M80-325 = 20A MAX WITH 12AWG
M80-326 = 15A MAX WITH 14AWG
M80-327 = 10A MAX WITH 16AWG
M80-328 = 8A MAX WITH 18AWG
M80-329 = 5A MAX WITH 20AWG
M80-32A = 20A MAX WITH 12AWG
M80-32B = 15A MAX WITH 14AWG
M80-32C = 10A MAX WITH 16AWG
M80-PF5 = 40A MAX WITH 10AWG
CONTACT AS SPECIFIED

MECHANICAL:
DURABILITY = 500 OPERATIONS
POWER CONTACT:
INSERTION FORCE:
M80-325/326/327/328/329/
32A/32B/32C = 8N MAX
M80-PF5 = 15N MAX
WITHDRAWAL FORCE = 0.5N MIN
ENVIRONMENTAL:
TEMPERATURE RANGE:
M80-325/326/327/328/329/
32A/32B/32C = -55°C TO +125°C
M80-PF5 = -55°C TO +150°C
PACKING:
BAG
FOR COMPLETE SPECIFICATION SEE COMPONENT
SPECIFICATION C005XX (LATEST ISSUE)

POWER CRIMP AND SOLDER CONTACTS ONLY



ORDER CODE: (POWER CRIMP/SOLDER)
M80-4000000FI-XX-XXX-00-000
TOTAL No. OF CONTACTS _____
02 TO 12
SPECIAL CONTACTS _____
325 = POWER CONTACT SOLDER 12AWG M80-325
326 = POWER CONTACT SOLDER 14AWG M80-326
327 = POWER CONTACT SOLDER 16AWG M80-327
328 = POWER CONTACT SOLDER OR CRIMP 18AWG M80-328
329 = POWER CONTACT SOLDER OR CRIMP 20AWG M80-329
32A = 90° POWER CONTACT SOLDER 12AWG M80-32A
32B = 90° POWER CONTACT SOLDER 14AWG M80-32B
32C = 90° POWER CONTACT SOLDER 16AWG M80-32C
PF5 = POWER CONTACT SOLDER 10AWG M80-PF5

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 + 10.0
EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS, M80-4000000FI-10-325-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm	

- NOTES:
- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
 - FOR EXTRA POWER CONTACTS, USE PART NUMBER M80-325/326/327/328/329/32A/32B/32C/PF5.
 - POWER AND CONTACT EXTRACTION TOOL = Z80-290.
 - INSTRUCTION SHEETS ARE AVAILABLE.
 - 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.

MGP	9	04.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: MR			
DRAWN: R.ADDE			
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 MIX-TEK
FEMALE ASSEMBLY
WITH JACKSCREW
DRAWING NUMBER:
M80-4000000FI-XX-XXX-00-000
SHT 6 OF 8

Customer Information Sheet

DRAWING No.: M80-4000000F1-XX-XXX-00-000

IF IN DOUBT - ASK

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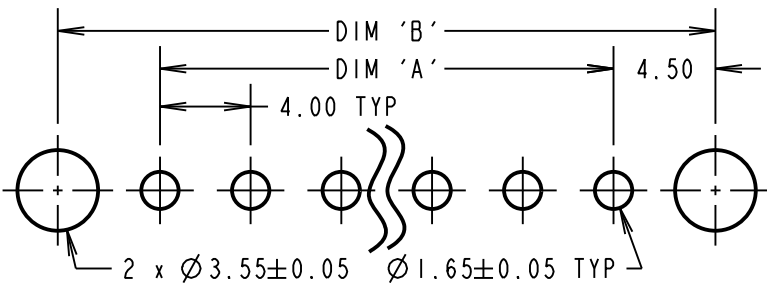
NOT TO SCALE

THIRD ANGLE PROJECTION

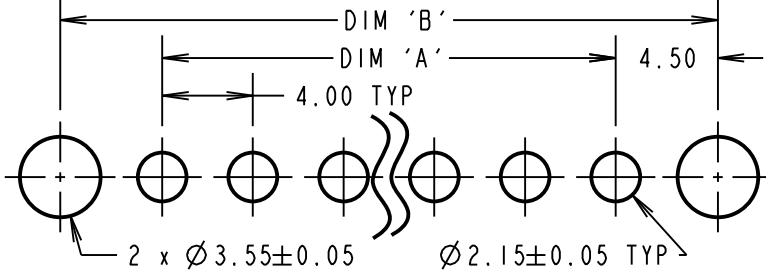
ALL DIMENSIONS IN mm

SPECIFICATIONS:
MATERIAL:
MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
POWER CONTACT: COPPER ALLOY
COAX CONTACT:
BODY = COPPER ALLOY
INNER CONTACT = COPPER ALLOY
INSULATOR = PTFE
JACKSCREW, CIRCLIP = STAINLESS STEEL
FINISH:
POWER CONTACT: GOLD
COAX CONTACT: BODY, INNER CONTACT = GOLD
ELECTRICAL:
WORKING VOLTAGE = 800V AC/DC
VOLTAGE PROOF = 1200V AC/DC
INSULATION RESISTANCE = 100MΩ MIN
POWER CONTACT:
CONTACT RESISTANCE = 6mΩ MAX
CURRENT RATING:
M80-321/322 = 20A MAX
M80-PF1/PF2 = 40A MAX
COAX CONTACT:
FREQUENCY RANGE = 6GHz
IMPEDANCE = 50Ω
V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX
CONTACT RESISTANCE = 6mΩ MAX
INSULATION RESISTANCE = 10⁶MΩ @250V AC
OPERATING VOLTAGE = 180V AC @ 500mA
MAXIMUM VOLTAGE = 1000V AC
MECHANICAL:
DURABILITY = 500 OPERATIONS
POWER CONTACT:
INSERTION FORCE:
M80-321/322 = 8N MAX
M80-PF1/PF2 = 15N MAX
WITHDRAWAL FORCE = 0.5N MIN
COAX CONTACT:
INSERTION FORCE = 8N MAX
WITHDRAWAL FORCE = 0.5N MIN
ENVIRONMENTAL:
TEMPERATURE RANGE:
M80-301/302/321/322 = -55°C TO +125°C
M80-PF1/PF2 = -55°C TO +150°C
PACKING:
TUBE
FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

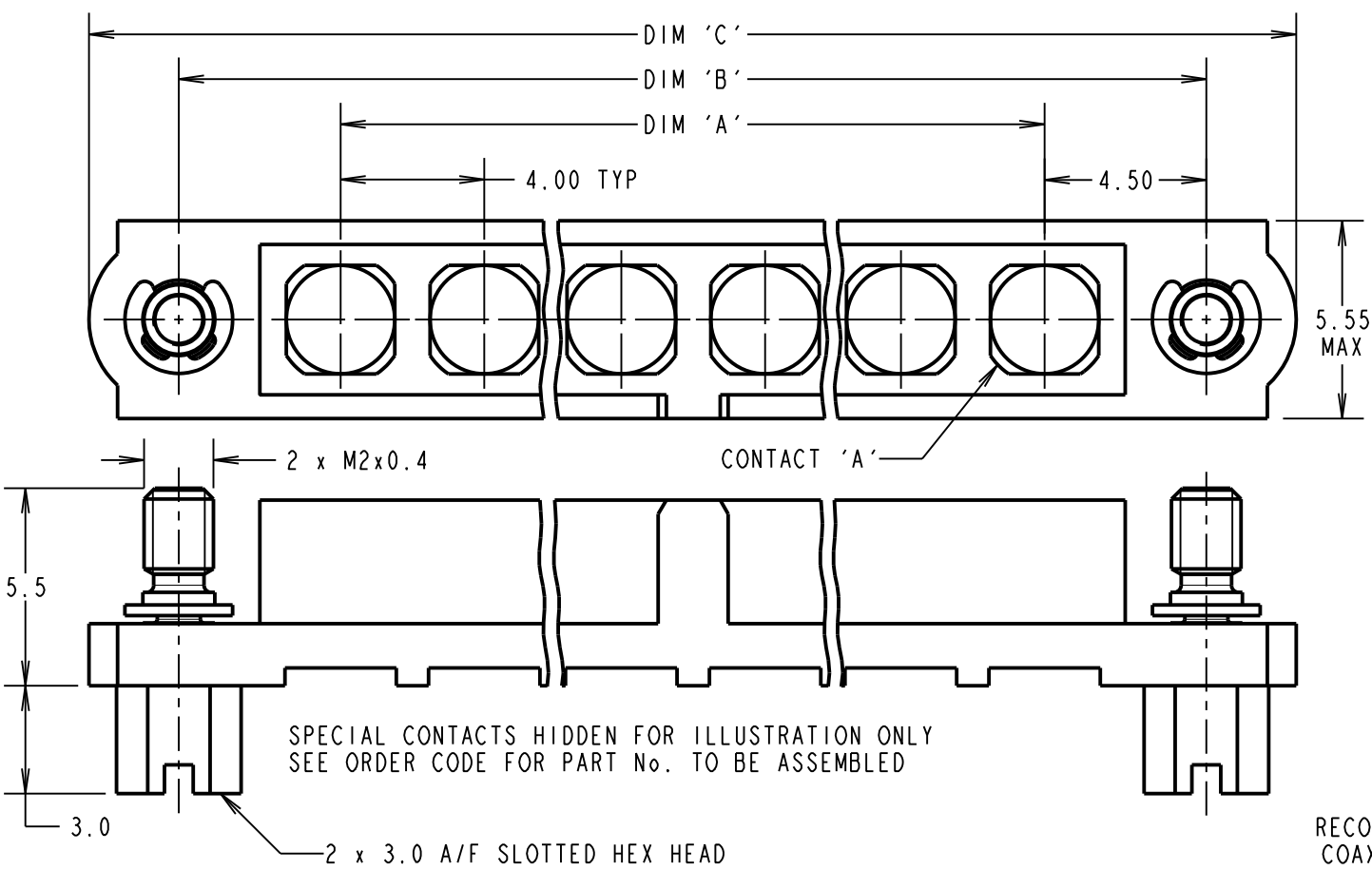
RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-321/322



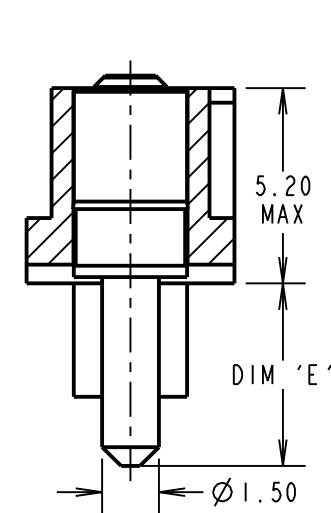
RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-PF1/PF2



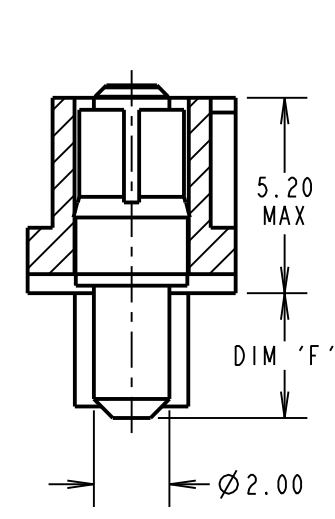
VERTICAL PC TAIL CONTACTS ONLY



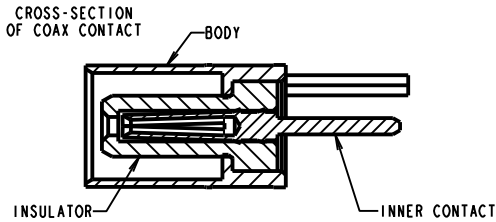
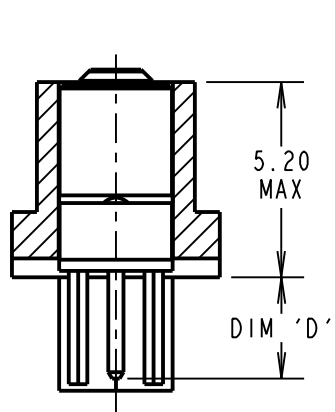
M80-321/322
x No. OF CONTACTS



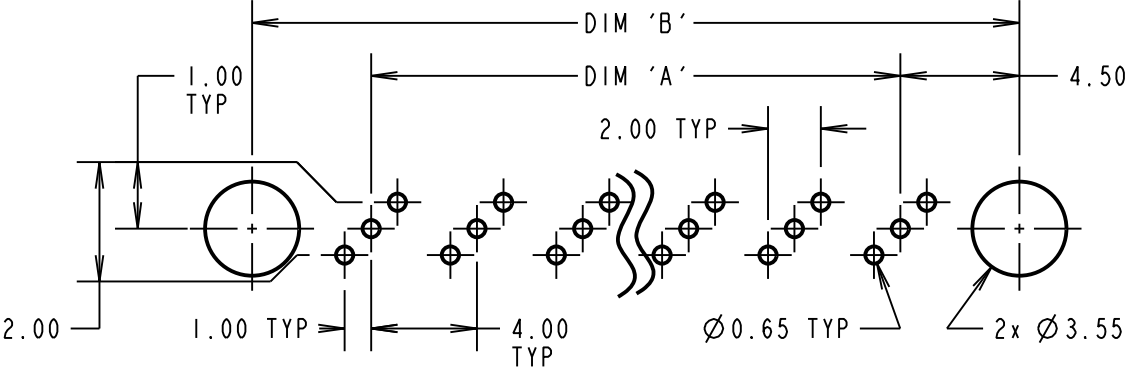
M80-PF1/PF2
x No. OF CONTACTS



M80-301/302
x No. OF CONTACTS



RECOMMENDED PCB LAYOUT FOR
COAX CONTACTS: M80-301/302
TOLERANCE = ±0.05



ORDER CODE:
(COAX PC TAIL VERTICAL CONTACTS ONLY)
M80-4000000F1-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS
301 = COAX CONTACT PC TAIL 3.0mm M80-301
302 = COAX CONTACT PC TAIL 4.5mm M80-302
321 = 20A POWER CONTACT PC TAIL 3.5mm M80-321
322 = 20A POWER CONTACT PC TAIL 5.0mm M80-322
PF1 = 40A POWER CONTACT PC TAIL 3.5mm M80-PF1
PF2 = 40A POWER CONTACT PC TAIL 5.0mm M80-PF2

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 + 10.0
DIM 'D'	M80-301 = 3.00mm, M80-302 = 4.50mm
DIM 'E'	M80-321 = 3.50mm, M80-322 = 5.00mm
DIM 'F'	M80-PF1 = 3.50mm, M80-PF2 = 5.00mm

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,
M80-4000000F1-08-301-00-000
DIM 'A' = 28.00mm, DIM 'B' = 37.00mm,
DIM 'C' = 42.0mm, DIM 'D' = 3.00mm

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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 MIX-TEK
FEMALE ASSEMBLY
WITH JACKSCREW
DRAWING NUMBER:
M80-4000000F1-XX-XXX-00-000
SHT 7 OF 8

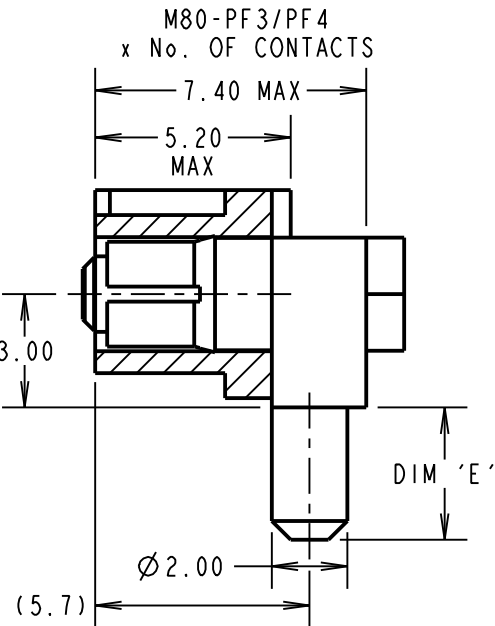
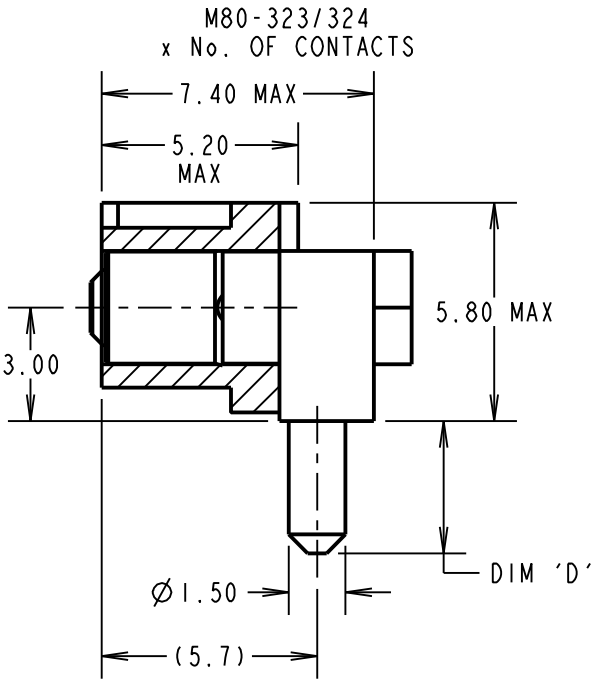
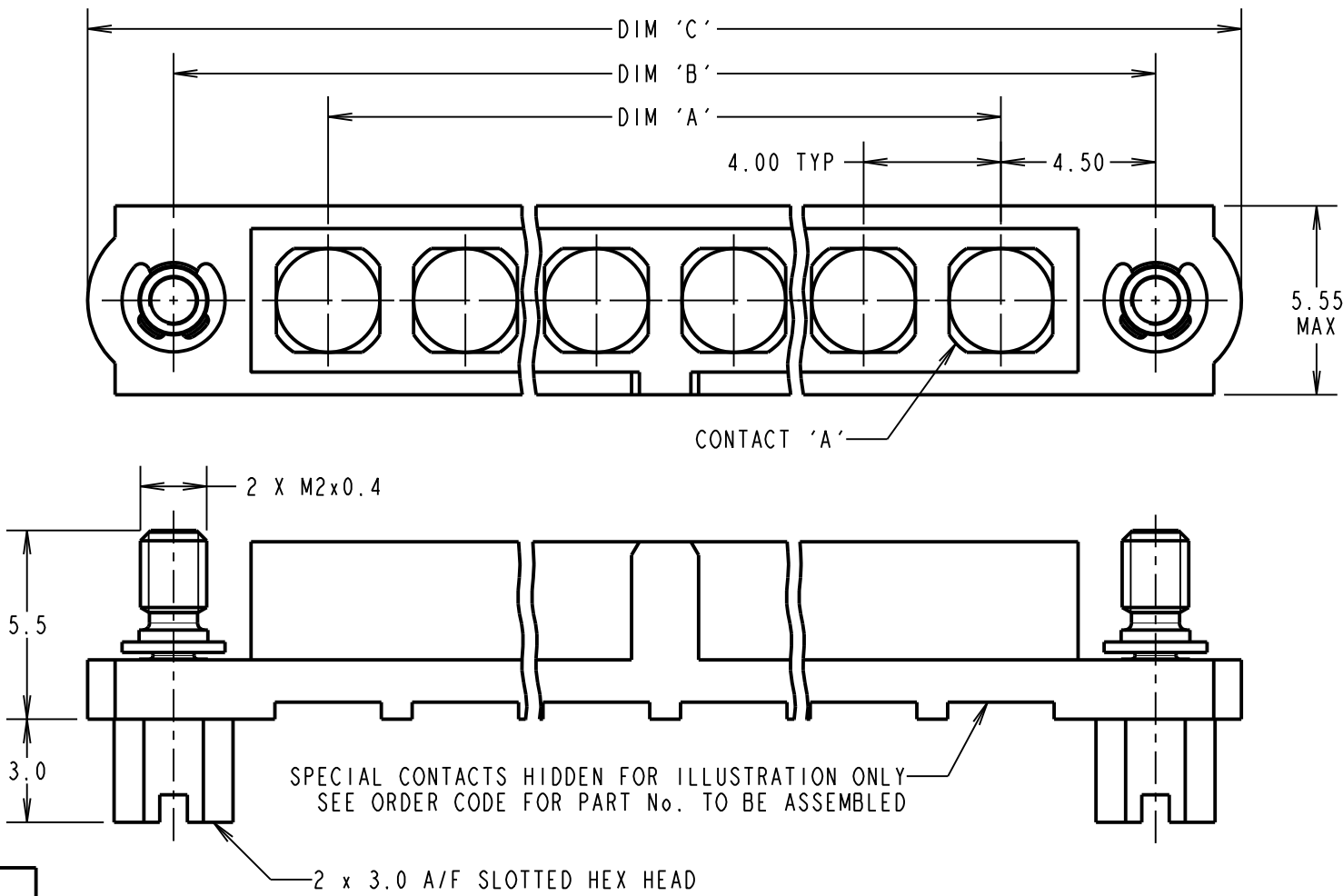
MGP	9	04.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED:	MGP		
CHECKED:	MR		
DRAWN:	R. ADDE		
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-4000000FI-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
POWER CONTACT: COPPER ALLOY
JACKSCREW, CIRCLIP: STAINLESS STEEL
FINISH:
POWER CONTACT:
20A = 0.25µm MIN GOLD OVER NICKEL
40A = 0.76µm 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:
M80-323/324 = 20A MAX
M80-PF4/PF4 = 40A MAX
MECHANICAL:
DURABILITY = 500 OPERATIONS
POWER CONTACT:
INSERTION FORCE:
M80-323/324 = 8N MAX
M80-PF3/PF4 = 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)

HORIZONTAL POWER PC TAIL CONTACTS ONLY



ORDER CODE:
(POWER PC TAIL HORIZONTAL CONTACTS ONLY)

M80-4000000FI-XX-XXX-00-000

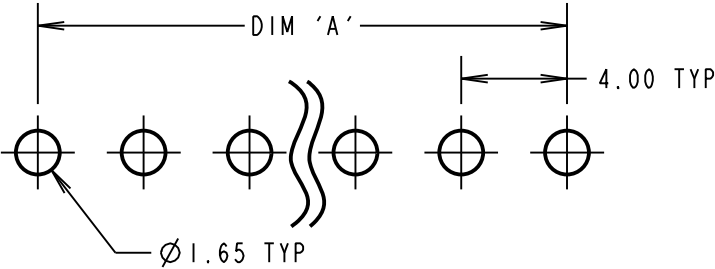
TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS
323 = 20A POWER CONTACT PC TAIL 3.5mm M80-323
324 = 20A POWER CONTACT PC TAIL 5.0mm M80-324
PF3 = 40A POWER CONTACT PC TAIL 3.5mm M80-PF3
PF4 = 40A POWER CONTACT PC TAIL 5.0mm M80-PF4

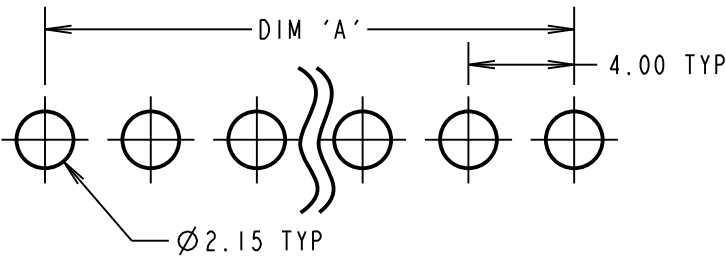
DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.0
DIM 'D'	M80-323 = 3.50mm, M80-324 = 5.00mm
DIM 'E'	M80-PF3 = 3.50mm, M80-PF4 = 5.00mm

EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS,
M80-4000000FI-10-323-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm,
DIM 'C' = 50.0mm, DIM 'D' = 3.50mm

RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-323/324
TOLERANCE = ±0.05



RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-PF3/PF4
TOLERANCE = ±0.05



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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 MIX-TEK
FEMALE ASSEMBLY
WITH JACKSCREW

DRAWING NUMBER:
M80-4000000FI-XX-XXX-00-000

SHT
8 OF 8

MGP	9	04.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: MR			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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