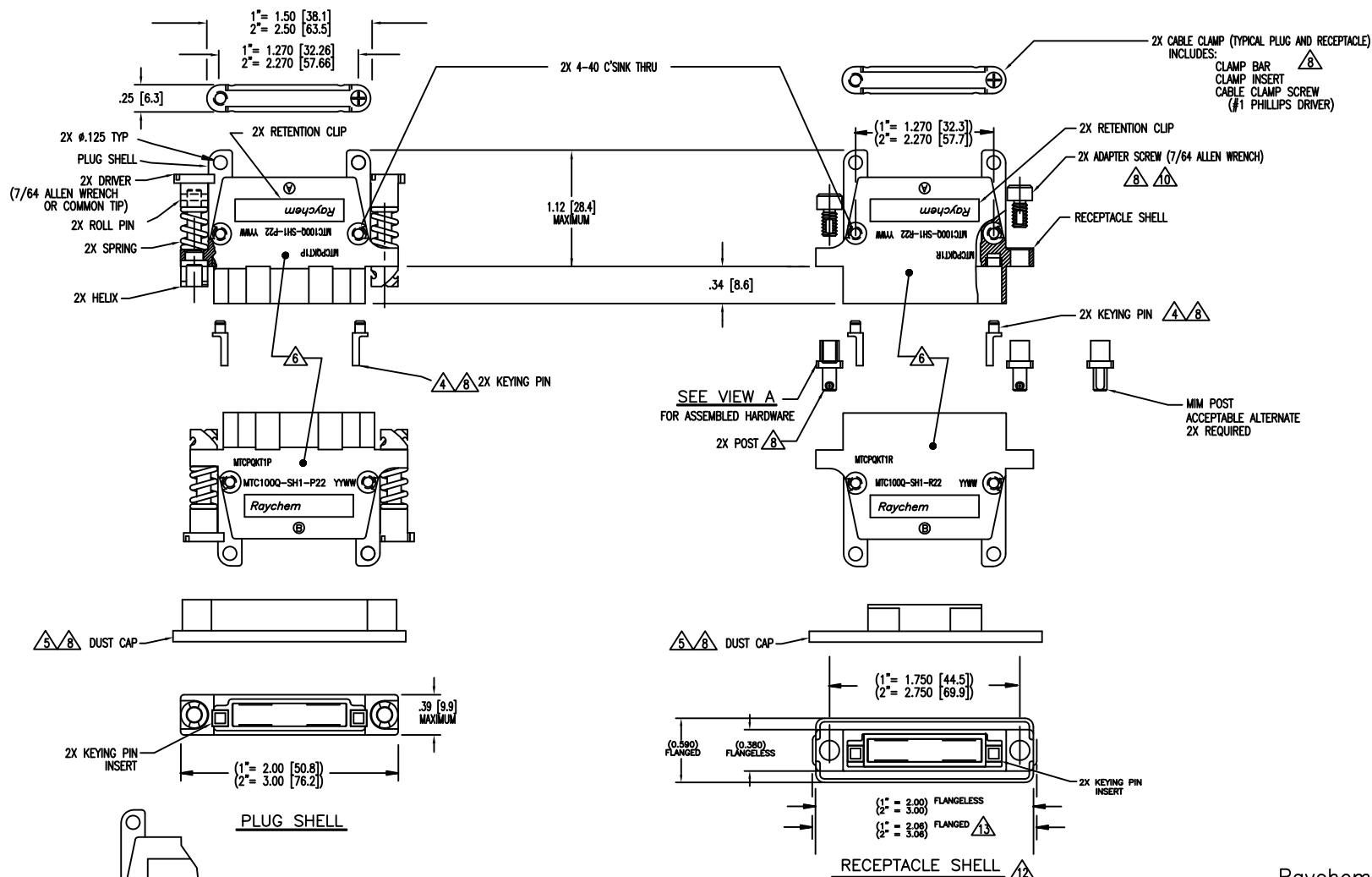


NOTES: SEE SHEET 2.

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REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
H	REVISED PER DCR# C061468	Jan/11/07	M.HIGGY
J	PER ECO-09-004669	Feb/24/09	M.HIGGY
K	PER ECO-11-008915	Apr/28/2011	M.HIGGY



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Raychem MTC
CUSTOMER DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. METRIC DIMENSIONS ARE IN BRACKETS.			
DECIMALS	.XXX ±.005	.13 mm	
	.XX ±.02	.5 mm	
ANGLES	.X ±		
WEIGHT:			
DRAWN	T.SEATON	96JUN28	
CHECKED			
APPROVED	P.DUTTON	96JUL03	
APPROVED			
CAD NAME	MTC100Q-SHX-X2X-XXX		
THIRD ANGLE PROJECTION			
TITLE		TE Connectivity	
		SHELL, PLUG AND RECEPTACLE MTC100Q SERIES	
SIZE	C	CAGE CODE:	06090
DWG. NO.	MTC100Q-SHX-X2X-XXX		REV
SCALE: NONE	SHEET 1 OF 3		

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VIEW A
ASSEMBLED HARDWARE

THE POST CAN BE .01 [0.3] MAX. ABOVE THE SHELL EDGE OR .02 [0.6] MAX. BELOW THE SURFACE.

DWG NO. MTC100Q-SHX-X2X-XXX SHEET 1

4

3

2

1

NOTES:

1. SHELL PART NUMBER VARIABLES: (NOT ALL POSSIBLE CONFIGURATIONS SHOWN ON THIS DRAWING ARE AVAILABLE AS STANDARD PRODUCTS. PLEASE CHECK WITH RAYCHEM TO CONFIRM AVAILABILITY.)

MTC100Q-SHX-X2X-XXX

MODIFICATIONS (see table I) (THIS SPACE BLANK IF NO MODIFICATION IS APPLICABLE)

2= WITH CABLE CLAMP AND EARS ON SHELL

3= W/O CABLE CLAMP AND EARS ON SHELL

2= ELECTROLESS NICKEL (BLACK MARKING)

P= PLUG

F= FLANGED

R= FLANGELESS RECEPTACLE

1= 1 INCH

2= 2 INCH

S= SHELL / GROUNDING BUSBAR

2. MATERIAL:

A) SHELL	ALUMINUM ALLOY PER ASTM B85
B) RETENTION CLIP	COPPER ALLOY 172 PER ASTM B194
C) CAP SCREW	STAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES
D) POST *	STAINLESS STEEL , PER AISI 17-4 PH
E) ROLL PIN	STAINLESS STEEL PER SAE-AMS 5673, 400 SERIES
F) KEYING PIN	HIGH GRADE POLYARYLENE THERMOPLASTIC, MOLDED
G) KEY PINS INSERT	HIGH GRADE POLYARYLENE THERMOPLASTIC, MOLDED
H) CLAMP BAR	STAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES
J) CLAMP INSERT	SILICONE ELASTOMER PER MIL-DTL-25988B
K) DRIVER *	STAINLESS STEEL , PER AISI 17-4 PH
L) SPRING	STAINLESS STEEL PER AMS 5673, 17-7 PH
L) HELIX *	STAINLESS STEEL , PER AISI 17-4 PH

* ACCEPTABLE ALTERNATE, STAINLESS STEEL,
PER MPIF STD 35, MIM-17-4 PH

3. FINISH:

APPLIES TO NICKEL
PLATED CONNECTORS

A) SHELL	NICKEL PLATED PER SAE-AMS-C-26074 CLASS 3, GRADE B
B) RETENTION CLIP	NICKEL PLATED PER SAE-AMS-C-26074 CLASS 2, .00002 MINIMUM
C) POST CAP SCREW	PASSIVATED PER SAE-AMS-QQ-P-35
D) POST	NICKEL TEFLON PLATED PER TECHMETALS 117C
E) HELIX	NICKEL TEFLON PLATED PER TECHMETALS 117C
F) ROLL PIN	PASSIVATED PER SAE-AMS-QQ-P-35
G) DRIVER	PASSIVATED PER SAE-AMS-QQ-P-35

4

KEYING PIN IS SUPPLIED UNINSTALLED, USER TO PRESS INTO PROPER KEYING POSITION.
SEE TABLE 5 FOR STANDARD KEYING PIN POSITIONS.
FOR ADDITIONAL KEYING OPTIONS REFER TO D-659-0080.

5

STANDARD (RED) DUST CAP ARE SUPPLIED WITH EACH PLUG AND RECEPTACLE. SEE TABLE VI FOR MORE INFORMATION.

6

APPROPRIATE PART NUMBERS AND DATE CODES ARE STAMPED APPROXIMATELY AS SHOWN ON "B" SIDE.
ALL "A" SIDE MARKINGS ARE OPTIONAL.

7.

THESE PARTS MEET THE REQUIREMENTS OF TE SPECIFICATION C-6114.

8

THESE ITEMS ARE SUPPLIED UNASSEMBLED.

9

SEE TABLE II SHEET 3, WEIGHTS ARE WITHOUT DUST CAP.

10

RECEPTACLE POST SCREWS (CAP SCREWS) ARE TO BE TORQUED TO 15±1 INCH-LBS (1.0±0.07 N-M)

11

PLUG AND RECEPTACLE SHELLS ARE DESIGNED TO ACCEPT EITHER PIN OR SOCKET INSERTS.
OR MIXED IN THE TWO INCHES STYLE.

12

THIS RECEPTACLE IS RECOMMENDED FOR REAR PANEL MOUNTING APPLICATION. REMOVING AS MANY PANEL WASHERS AS REQUIRED TO ACCOMMODATE THE THICKNESS OF THE PANEL BEING USED. SEE SHEET 3, TABLE 4, FIGURE 1. USE ONLY SCREWS SUPPLIED WITH CONNECTOR. POST TO BE FLUSH WITHIN TOLERANCE AS SHOWN SEE VIEW 'A' PAGE # 1.

13

WHEN MOUNTING FLANGELESS CONNECTORS ADJACENT TO ONE ANOTHER AND USING THE .400 MINIMUM CENTERLINE LOCATION, THERE WILL BE NO WEB BETWEEN PANEL CUT-OUTS.
SEE SHEET 3, TABLE 3, FOR DETAILS.

14

THE HARDWARE FOR THIS CONNECTOR IS DESIGNED TO BE USED ON 0.063 INCH PANEL THICKNESS.
OTHERWISE 2 THIN WASHERS (PANEL WASHERS) ARE REQUIRED FOR EACH POST. USE PART D-659-0042.

TABLE I (MODIFICATIONS)

MODIFICATION DASH NUMBER	DESCRIPTION
-022	SAME AS STANDARD ASSEMBLY, EXCEPT CONTACTS AND SEALING PLUGS ARE INCLUDED.
-023	SAME AS STANDARD ASSEMBLY, EXCEPT CONTACTS SEALING PLUGS AND INSERTION / EXTRACTION TOOL ARE INCLUDED.

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DWG. NO.	REV
MTC100Q-SHX-X2X-XXX	K
CAD FILE: MTC100Q-SHX-X2X-XXX	SHEET 2 OF 3

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4

3

2

1

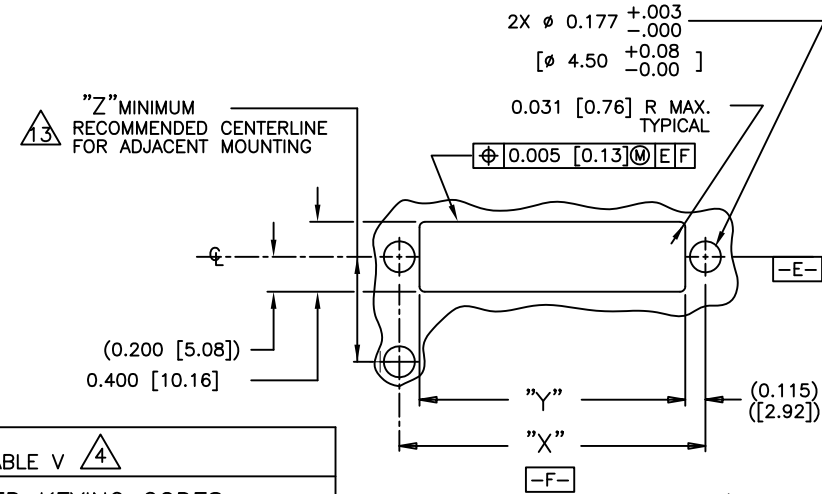
THE FOLLOWING TABLE CONSISTS OF WEIGHTS FOR THESE SPECIFIC PART NUMBERS.

TABLE II	
PART NUMBER	WEIGHT MAXIMUM GRAMS
MTC100Q-SH1-F22	29.9
MTC100Q-SH1-P22	29.5
MTC100Q-SH1-R22	26.2
MTC100Q-SH2-F22	40.5
MTC100Q-SH2-P22	39.7
MTC100Q-SH2-R22	36.4
MTC100Q-SH1-F23	19.0
MTC100Q-SH1-P23	21.9
MTC100Q-SH1-R23	18.6
MTC100Q-SH2-F23	28.9
MTC100Q-SH2-P23	28.1
MTC100Q-SH2-R23	24.7

TABLE VI					
RECOMMENDED DUST CAP					
ITEM	PART NUMBER	USED WITH SHELL		DUCT CAP MATERIAL	
		SIZE	TYPE	POLYETHYLENE RED	ELECTROSTATIC PINK
1	D-659-0060	1"	PLUG	X	
2	D-659-0062	2"	PLUG	X	
3	CHA-1603	1"	RECEPTACLE	X	
4	CHA-1604	2"	RECEPTACLE	X	
5	CHA-0098	1"	PLUG		X
6	CHA-0100	2"	PLUG		X
7	CHA-0311	1"	RECEPTACLE		X
8	CHA-0312	2"	RECEPTACLE		X

TABLE IV	
PANEL THICKNESS	NUMBER OF PANEL WASHERS FOR EACH FASTENER
0	2
0.031/0.036 [0.8]/[0.9]	1
0.062/0.067 [1.5]/[1.7]	0

TABLE V		
SUGGESTED KEYING CODES		
	-A A-	
	-A B-	
	-A C-	
	-A D-	
	-B A-	
	-B B-	
	-B C-	
	-B D-	
	-C A-	
	-C B-	
	-C C-	
	-C D-	
	-D A-	
	-D B-	
	-D C-	
	-D D-	
RECEPTACLE FACE		PLUG FACE
WHEN USING STANDARD RECTANGULAR KEYING PINS		



RECOMMENDED PANEL CUT-OUT
FIGURE 1

TABLE III				
CONNECTOR SIZE	TYPE:	"X"	"Y"	"Z" (MIN)
1 INCH	FLANGELESS	1.750 [44.5]	1.520 [38.6]	0.400 [10.16]
	FLANGED	1.750 [44.5]	1.520 [38.6]	0.600 [15.24]
2 INCH	FLANGELESS	2.750 [69.9]	2.520 [64.0]	0.400 [10.16]
	FLANGED	2.750 [69.9]	2.520 [64.0]	0.600 [15.24]

Raychem MTC
CUSTOMER DRAWING

DWG. NO.	REV
MTC100Q-SHX-X2X-XXX	K
CAD FILE: MTC100Q-SHX-X2X-XXX	SHEET 3 OF 3

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