

NOTES: SEE SHEET 2.

1"= 1.50 [38.1]
2"= 2.50 [63.5]

1"= 1.270 [32.26]
2"= 2.270 [57.66]

HOLE CONFIGURATION FOR
"J" TYPE SHELLS. (SEE
SHEET 2, VIEW "Z"
FOR VARIATIONS)

(WITHOUT EARS)
.84 [21.3]
MAXIMUM

(WITH EARS)
1.09 [27.7]
MAXIMUM

.03 [.8] REF

FLANGED
.60 [15.2]
MAXIMUM

FLANGELESS
.394 [10.01]
MAXIMUM

(1"= 2.00 [50.8])
(2"= 3.00 [76.2])
FLANGELESS

(1"= 2.06 [52.3])
(2"= 3.06 [77.7])
FLANGED

RECEPTACLE SHELL

PLUG SHELL

SPECIFICATION CONTROL DRAWING

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES.
METRIC DIMENSIONS ARE
IN BRACKETS.

DECIMALS

.XXX ±.005

.XX ±.02

ANGLES

.X ±

WEIGHT:

DRAWN

LUTTICKEN

87NOV12

CHECKED

J.B.

APPROVED

J.BLAIR

87DEC29

APPROVED

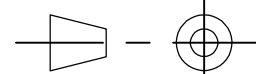
J.CAMERON

88JAN05

CAD NAME

MTC100-XHX-XXX-XXXa

THIRD ANGLE
PROJECTION



TE CONNECTIVITY
300 Constitution Drive
Menlo Park, CA. 94025 USA

Raychem

TITLE

SHELL, PLUG AND RECEPTACLE
MTC100 SERIES

SIZE

CODE IDENT. NO.

DWG. NO.

REV

C

06090

MTC100-XHX-XXX-XXX

V

DO NOT SCALE THIS DRAWING

SHEET 1 OF 3

REVISIONS

LTR	DESCRIPTION	DATE	APPROVED
U1	REVISED PER ECO-11-005139	20APR11	HMR
V	REVISED PER ECO-12-020967	07DEC12	CT

2X CABLE CLAMP (TYPICAL PLUG AND RECEPTACLE)
INCLUDES:

CLAMP BAR
CLAMP INSERT
CABLE CLAMP SCREW
(#1 PHILLIPS DRIVER)

2X RETENTION CLIP

2X ADAPTER SCREW (7/64 ALLEN WRENCH)

RECEPTACLE SHELL

6X PANEL WASHER

2X KEYING PIN

2X ADAPTER NUT

DUST CAP

PANEL GASKET
(FLANGED CONNECTORS ONLY)

INNER GASKET
(FLANGED CONNECTORS ONLY)

2X KEYING PIN
INSERT

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NOTES:

1. PART NUMBER VARIABLES: (NOT ALL POSSIBLE CONFIGURATIONS SHOWN ON THIS DRAWING ARE AVAILABLE AS STANDARD PRODUCTS. PLEASE CHECK WITH RAYCHEM TO CONFIRM AVAILABILITY.)
- MTC100-XHX-XXX-XXX
- MODIFICATIONS (see table I) (THIS SPACE BLANK IF NO MODIFICATION IS APPLICABLE)
- 1= W/O CABLE CLAMP AND W/O EARS ON SHELL
2= WITH CABLE CLAMP AND EARS ON SHELL
3= W/O CABLE CLAMP AND WITH EARS
- 1= BLACK ANODIZED (WHITE MARKING)
2= ELECTROLESS NICKEL (BLACK MARKING)
3= CADMIUM OVER NICKEL UNDERPLATE (BLACK MARKING)
- P= PLUG
R= FLANGELESS RECEPTACLE
F= FLANGED RECEPTACLE: STANDARD ("J" TYPE) HAS NON CONDUCTIVE FLUOROSILICONE GASKET SHIELDED ("S" TYPE) HAS CONDUCTIVE FLUOROSILICONE GASKET
- 1= 1 INCH
2= 2 INCH
- J= STANDARD TYPE
S= SHIELDED
Y= SPECIAL TYPE: REFER TO INDIVIDUAL SPECIFICATION CONTROL DRAWINGS FOR DESCRIPTIONS

2. MATERIAL:
- A) SHELL ALUMINUM ALLOY PER ASTM B85
- B) RETENTION CLIP COPPER ALLOY 172 PER ASTM B194
- C) ADAPTER SCREW OR CAP SCREW STAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES
- D) ADAPTER NUT OR RETAINER BUSHING STAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES
- E) PANEL OR LOCK WASHER STAINLESS STEEL PER SAE-AMS-QQ-S-763 OR ASTM B240, 300 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-R-25988
- K) CAPTIVE SCREW STAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES
- L) RETAINING RING COPPER ALLOY 172 PER ASTM B194

3. FINISH:

	APPLIES TO NICKEL PLATED CONNECTORS	APPLIES TO CADMIUM PLATED CONNECTORS	APPLIES TO BLACK ANODIZED CONNECTORS
A) SHELL	NICKEL PLATED PER SAE-AMS-C-26074 CLASS 3, GRADE B	CADMIUM PLATED PER SAE-AMS-QQ-P-416 OVER NICKEL UNDERPLATE	BLACK ANODIZED PER MIL-A-8625, TYPE II, CLASS 2
B) RETENTION CLIP	NICKEL PLATED PER SAE-AMS-C-26074 CLASS 2, .00002 MINIMUM	CADMIUM PLATED PER SAE-AMS-QQ-P-416	NICKEL PLATED PER SAE-AMS-C-26074 CLASS 2, .00002 MINIMUM
C) ADAPTER OR CAP SCREW	PASSIVATED PER SAE-AMS-2700	CADMIUM PLATED PER SAE-AMS-QQ-P-416	PASSIVATED PER SAE-AMS-2700
D) ADAPTER NUT OR RETAINER BUSHING	PASSIVATED PER SAE-AMS-2700	CADMIUM PLATED PER SAE-AMS-QQ-P-416	PASSIVATED PER SAE-AMS-2700
E) PANEL OR LOCK WASHER	PASSIVATED PER SAE-AMS-2700	CADMIUM PLATED PER SAE-AMS-QQ-P-416	PASSIVATED PER SAE-AMS-2700
F) CLAMP BAR	PASSIVATED PER SAE-AMS-2700	CADMIUM PLATED PER SAE-AMS-QQ-P-416	PASSIVATED PER SAE-AMS-2700
G) CAPTIVE SCREW	PASSIVATED PER SAE-AMS-2700	CADMIUM PLATED PER SAE-AMS-QQ-P-416	PASSIVATED PER SAE-AMS-2700
H) RETAINING RING	NICKEL PLATED PER SAE-AMS-C-26074	CADMIUM PLATED PER SAE-AMS-QQ-P-416	NICKEL PLATED PER SAE-AMS-C-26074

4. FOR MOUNTING / MATING AND KEYING INFORMATION, SEE RAYCHEM DRAWING D652-0012.

5. DUST CAP SUPPLIED WITH EACH PLUG OR RECEPTACLE.
NO DUST CAPS ARE SUPPLIED WHEN SHELLS
ARE SHIPPED TO CUSTOMER SPECIFICATION
NUMBER 991006.

6. APPROPRIATE PART NUMBER AND DATE CODE ARE STAMPED APPROXIMATELY AS SHOWN.

7. THESE PARTS MEET THE REQUIREMENTS OF RAYCHEM SPECIFICATION C-6111.

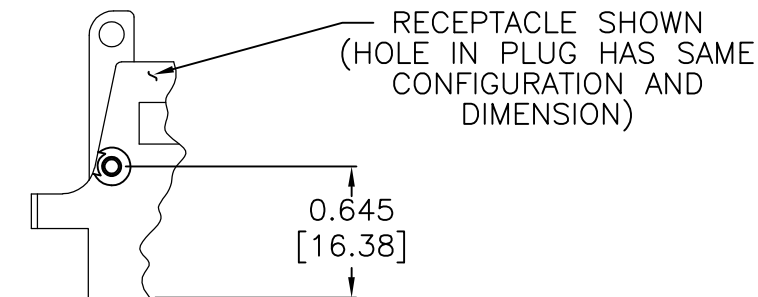
8. FLANGED RECEPTACLE CONNECTORS PROPERLY MATED AND TORQUED TO 9 INCH POUNDS WILL EXHIBIT AN AIR LEAK
RATE NOT EXCEEDING .5 CC / SECOND AT 30 PSI AND 25° C. (APPLICABLE ONLY TO FLANGED RECEPTACLES WITH
PIN INSERTS)

9. THESE ITEMS ARE SUPPLIED UNASSEMBLED.

10. SEE TABLE II & TABLE 4 SHEET 3, WEIGHTS ARE WITHOUT DUST CAP.

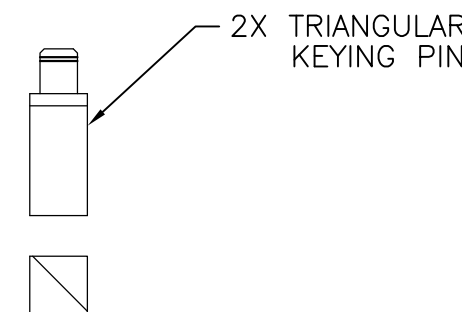
11. THIS RECEPTACLE IS REAR PANEL MOUNTED BY REMOVING AS MANY PANEL WASHERS AS REQUIRED TO ACCOMMODATE
THE THICKNESS OF THE PANEL BEING USED. (SEE TABLE III)

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



HOLE CONFIGURATION FOR
ALL "S" TYPE SHELLS AND
FLANGED "J" TYPE RECEPTACLE SHELLS

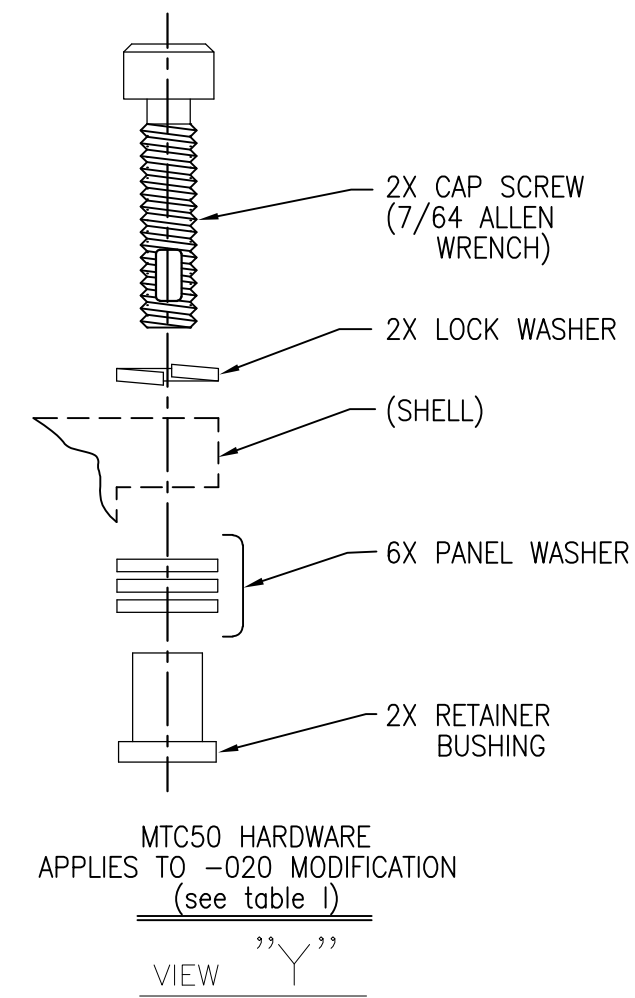
VIEW "Z"



APPLIES TO -014 MODIFICATION
(see table I)

VIEW "W"

TABLE III	
PANEL THICKNESS	NUMBER OF PANEL WASHERS FOR EACH FASTENER
0.031/0.036 [0.8]/[0.9]	2
0.062/0.067 [1.5]/[1.7]	1
0.093/0.097 [2.3]/[2.4]	0



MTC50 HARDWARE
APPLIES TO -020 MODIFICATION
(see table I)

VIEW "Y"

TABLE I (MODIFICATIONS)	
MODIFICATION DASH NUMBER	DESCRIPTION
-001	SAME AS STANDARD ASSEMBLY WITH EARS EXCEPT WITHOUT CABLE CLAMPS
-007	SAME AS STANDARD ASSEMBLY EXCEPT METAL PARTS ARE PLATED CADMIUM OVER NICKEL, SUPPLIED WITH MTC50 MOUNTING/ MATING HARDWARE (SEE VIEW "Y")
-014	SAME AS STANDARD EXCEPT ADDITIONALLY TRIANGULAR KEYING PINS INCLUDED (SEE VIEW "W")
-020	SAME AS STANDARD EXCEPT SUPPLIED WITH MTC50 MOUNTING/MATING HARDWARE (SEE VIEW "Y")
-028	SAME AS STANDARD ASSEMBLY EXCEPT SUPPLIED WITHOUT HARDWARE

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DWG. NO. MTC100-XHX-XXX-XXX	REV V
CAD FILE NO: C061320b.dwg	SHEET 2 OF 3

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

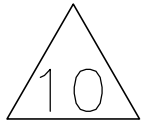
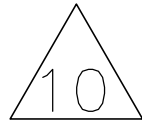
TABLE II 	
PART NUMBER	WEIGHT MAXIMUM GRAMS
MTC100-JH1-F32	30.8
MTC100-JH1-P32	23.8
MTC100-JH1-R32	27.3
MTC100-JH2-F32	43.7
MTC100-JH2-P32	34.2
MTC100-JH2-R32	38.3
MTC100-SH1-F33	24.2 *
MTC100-SH1-P33	16.1 *
MTC100-SH1-R33	20.3 *
MTC100-SH2-F33	32.3 *
MTC100-SH2-P33	22.7 *
MTC100-SH2-R33	27.0 *

TABLE 4 	
PART NUMBER	WEIGHT MAXIMUM GRAMS
MTC100-JH1-F22	30.8
MTC100-JH1-P22	23.8
MTC100-JH1-R22	27.3
MTC100-JH2-F22	43.7
MTC100-JH2-P22	34.2
MTC100-JH2-R22	38.3
MTC100-SH1-F23	24.2 *
MTC100-SH1-P23	16.1 *
MTC100-SH1-R23	20.3 *
MTC100-SH2-F23	32.3 *
MTC100-SH2-P23	22.7 *
MTC100-SH2-R23	27.0 *

* = WEIGHT DOES NOT INCLUDE CABLE CLAMP

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DWG. NO.	REV
MTC100-XHX-XXX-XXX	V
CAD FILE: C061320c.DWG	SHEET 3 OF 3