



LOC		DIST		REVISIONS						
—		—		P	LTR	DESCRIPTION		DATE	DWN	APVD
					P	REV PER ECO 14-001211		1-27-13	CT	KH

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN C.C.THOMAS 27JAN2014	TE Connectivity	
DIMENSIONS: INCHES		CHK K.HOGAN 1-27-13		
	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD K.HOGAN 1-27-13	NAME HOUSING ASSEMBLY, PLUG AND RECEPTACLE MTC50 SERIES	
	0. PLC ± .01	PRODUCT SPEC	SIZE A1	
	1. PLC ± .02 [0.5]	APPLICATION SPEC	CAGE CODE 00779	
	2. PLC ± .005 [0.13]	WEIGHT	DRAWING NO. MTC50-XHX-XXX-XXX	
MATERIAL		FINISH	CUSTOMER DRAWING	
		SCALE NTS	SHEET 1 OF 2	
		REV P		

8

7

6

5

4

3

2

1

THIS DRAWING IS UNPUBLISHED.

RELEASED FOR PUBLICATION

ALL RIGHTS RESERVED.

LOC

DIST

P

LTR

DESCRIPTION

DATE

DWN

APVD

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

MTC50-XHX-XXX-XXX

MODIFICATIONS: REFER TO APPLICABLE MOD DESCRIPTION SHEET.  
(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 BUT WITH EARS ON SHELL  
4= WITH FLAT CABLE CLAMP (SEE VIEW "V") AND EARS ON SHELL

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 FLUOROSILICONE GASKET  
SHIELDED ("S" TYPE) HAS CONDUCTIVE GASKET

1= 1 INCH  
2= 2 INCH

J= STANDARD  
S= SHIELDED  
Y= SPECIAL: REFER TO INDIVIDUAL SPECIFICATION CONTROL DRAWINGS FOR DESCRIPTIONS

2. MATERIAL:

A) SHELLALUMINUM ALLOY PER ASTM B85

B) RETENTION CLIPCOPPER ALLOY 172 PER ASTM B194

C) CAP SCREWSTAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES

D) JACK SOCKET OR JACK SCREWSTAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES

E) PANEL OR LOCK WASHERSTAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES

F) KEYING PINPOLYARYLENE THERMOPLASTIC, MOLDED

G) KEY PINS INSERTPOLYARYLENE THERMOPLASTIC, MOLDED

H) CLAMP BARSTAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES

J) CLAMP INSERTSILICONE ELASTOMER PER MIL-R-25988B

K) CAPTIVE SCREWSTAINLESS STEEL PER SAE-AMS-QQ-S-763, 300 SERIES

3. FINISH:

APPLIES TO NICKEL PLATED CONNECTORS

APPLIES TO CADMIUM PLATED CONNECTORS

APPLIES TO BLACK ANODIZED CONNECTORS

A) SHELLNICKEL PLATED PER SAE-AMS-C-26074 CLASS 3, GRADE B

B) RETENTION CLIPNICKEL PLATED PER SAE-AMS-C-26074 CLASS 2, .00002 MINIMUM

C) CAP SCREWPASSIVATED PER SAE-AMS-QQ-P-35

D) JACK SOCKET OR JACK SCREWPASSIVATED PER SAE-AMS-QQ-P-35

E) PANEL OR LOCK WASHERPASSIVATED PER SAE-AMS-QQ-P-35

F) CLAMP BARPASSIVATED PER SAE-AMS-QQ-P-35

G) CAPTIVE SCREWPASSIVATED PER SAE-AMS-QQ-P-35

CADMIUM PLATED PER SAE-AMS-QQ-P-416 OVER NICKEL UNDERPLATE

CADMIUM PLATED PER SAE-AMS-QQ-P-416

CADMIUM PLATED PER SAE-AMS-QQ-P-416

CADMIUM PLATED PER SAE-AMS-QQ-P-416

CADMIUM PLATED PER SAE-AMS-QQ-P-416

CADMIUM PLATED PER SAE-AMS-QQ-P-416

CADMIUM PLATED PER SAE-AMS-QQ-P-416

BLACK ANODIZED PER MIL-A-8625, TYPE II, CLASS 2

NICKEL PLATED PER SAE-AMS-C-26074 CLASS 2, .00002 MINIMUM

PASSIVATED PER SAE-AMS-QQ-P-35

PASSIVATED PER SAE-AMS-QQ-P-35

PASSIVATED PER SAE-AMS-QQ-P-35

PASSIVATED PER SAE-AMS-QQ-P-35

PASSIVATED PER SAE-AMS-QQ-P-35

PASSIVATED PER SAE-AMS-QQ-P-35

PASSIVATED PER SAE-AMS-QQ-P-35

4. APPLICATION INFORMATION:

A) FOR RECEPTACLE MOUNTING INFORMATION, SEE RAYCHEM DRAWING D652-0012.

B) FOR CONNECTOR KEYING CODES, SEE RAYCHEM DRAWING D-659-0080.

C) RECEPTACLE CAP SCREWS ARE TO BE TORQUED TO 15 LBF-INCH (1.7 N-m).

D) PLUG JACK SOCKETS ARE TO BE TORQUED TO 9 LBF-INCH (1.0 N-m).

5. DUST CAP SUPPLIED WITH EACH PLUG AND RECEPTACLE.

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

7. THE APPLICABLE RAYCHEM SPECIFICATION FOR THIS PART IS C6111. THIS PART IS NOT QUALIFIED TO C6111.

8. FLANGED RECEPTACLE CONNECTORS CORRECTLEY ASSEMBLED AND THE PLUG CONNECTOR PROPERLY ASSEMBLED AND MATEDED 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 FOR WEIGHTS. WEIGHTS SHOWN ARE WITHOUT DUST CAP.

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

12. THE CORRECT MATING PART FOR A RAYCHEM MTC50 PLUG SHELL IS A RAYCHEM MTC50 RECEPTACLE SHELL. THE SPECIFIED PERFORMANCE OF THIS CONNECTOR IS BASED ON TEST PERFORMANCE WHEN ASSEMBLED WITH THE CORRECT MATING PART.

EME STYLE PLUG SHELL

VIEW "Y"

EME STYLE RECEPTACLE SHELL

VIEW "X"

FLAT CABLE CLAMP

VIEW "V"

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

TABLE II

CONNECTOR SIZE		PLUG	RECEPTACLE	
			FLANGED	FLANGELESS
1 INCH	W/EARS	.0514 [23.315]	.0731 [33.158]	.0606 [27.488]
	W/O EARS	.0422 [19.196]	.0555 [25.174]	.0430 [19.504]
2 INCH	W/EARS	.0765 [34.699]	.1292 [58.604]	.1021 [46.312]
	W/O EARS	.0494 [22.407]	.0851 [38.601]	.0580 [26.308]

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

TABLE II

CONNECTOR SIZE		PLUG	RECEPTACLE	
			FLANGED	FLANGELESS
1 INCH	W/EARS	.0514 [23.315]	.0731 [33.158]	.0606 [27.488]
	W/O EARS	.0422 [19.196]	.0555 [25.174]	.0430 [19.504]
2 INCH	W/EARS	.0765 [34.699]	.1292 [58.604]	.1021 [46.312]
	W/O EARS	.0494 [22.407]	.0851 [38.601]	.0580 [26.308]

THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN C.C.THOMAS 27JAN2014

CHK K.HOGAN 1-27-13

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ± -

1 PLC ± -

2 PLC ± .02 [0.5]

3 PLC ± .005 [0.13]

4 PLC ± -

ANGLES ± - ± -

MATERIAL -

FINISH -

WEIGHT -

APPROVED K.HOGAN 1-27-13

PRODUCT SPEC

APPLICATION SPEC

SIZE

CAGE CODE

DRAWING NO

RESTRICTED TO

00779

MTC50-XHX-XXX-XXX

CUSTOMER DRAWING

SCALE NTS

SHEET 2 OF 2

REV P

TE Connectivity

HOUSING ASSEMBLY, PLUG AND RECEPTACLE MTC50 SERIES

4805 (3/11)

10:53am

# Mouser Electronics

Authorized Distributor

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

[TE Connectivity:](#)

[776307-000](#)