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June 16, 1998



Pulse Tronic Connectors Inc.
Mr. George Lengyel
113 N.W. 43rd St.
Boca Raton, FL 33431

Our Reference: E192933, 98NK15672

Subject: Special Service Investigation Utilizing the Dimensioning Requirements Outlined in the FCC Part 68, Subpart F Document for the Model MP8P8C Series 8-Position Modular Plug Manufactured by Coble Enterprises Co. Ltd.

Dear Mr. Lengyel,

We have completed our investigation of the subject products and this letter constitutes our report. Please refer to the attached appendix for details regarding the test methods and results obtained during our investigation. For testing purposes, the tests conducted on the Model MP8P8C were considered representative of the Models CH102 8P8C, CH103 8P8C, and CH104 8P8C manufactured by Coble Enterprises Co. Ltd.

The scope of this investigation was to evaluate the subject products to the Angle Measurement, Insertion and Latch, Insertion Force, and Dimensioning Tests of the FCC Part 68, Subpart F Document. The test results obtained during this investigation only apply to the samples tested.

Please note, in no event shall UL be responsible to anyone for whatever use or nonuse is made of the information contained in this report and in no event shall UL, its employees or its agents incur any obligation or liability for damages, including, but not limited to consequential damages, arising out of or in connection with the use, inability to use the information contained in this report.

This letter serves to close project 98NK15672 and we have instructed our accounting department to bill you for all the engineering charges incurred to date.

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dedicated to public safety and
committed to quality service

Should you have any questions or comments, please do not hesitate to contact us.

Regards,

A handwritten signature in black ink, appearing to read "Andrew Jimenez", with a large, stylized flourish extending to the right.

ANDREW JIMENEZ (x43572)
Senior Project Engineer
Engineering Services

Reviewed by:

A handwritten signature in black ink, appearing to read "Yeo Fong", with a large, stylized flourish extending to the right.

YEO FONG
Senior Project Engineer
Engineering Services

APPENDIX A

ANGLE MEASUREMENT TEST:

Method

The test sample plug with telecommunication cord was inserted into a compatible mating jack. A measurement of the contact angle between plug and jack conductors, with the plug latch into the jack, was then recorded.

Results

The results are considered acceptable if the maximum angle is no greater than 24 degrees and the minimum angle is no less than 13 degrees. The result for each test sample is shown in the following table.

Angle Measurement Results		
Model No.	Sample No.	Angle (deg.)
MP8P8C	1	15.5

INSERTION AND LATCH TEST:

Method

The test sample plug shall be capable of insertion and latching into a calibrated gauge. The insertion force shall be 5 lbs. or less. During the test, the sample was placed in a position of normal use. It's latching bar was depressed to prevent interference with the entry of the sample into the gauge. Using a compatible gauge, the plug was inserted into the jack until the latch locked in place. During this procedure, the maximum force was measured and recorded.

The sample was then withdrawn, and again the force was measured. During removal, the required force shall not exceed 10 lbs.

Results

The results are shown in the following table.

Insertion and Withdrawal Force			
Model No.	Sample No.	Insert (lbs)	Withdraw (lbs)
MP8P8C	1	4	3

INSERTION FORCE TEST:

Method

The test sample plug was subjected to an insertion force test by applying a gradual force to the plug while in the insertion position. The insertion force was started at zero and increased until the plug moved beyond the Datum -A- position with a maximum force of two pounds. During this test, the sample was placed in a position of normal use and the force applied in the direction required to insert the plug into the compatible jack.

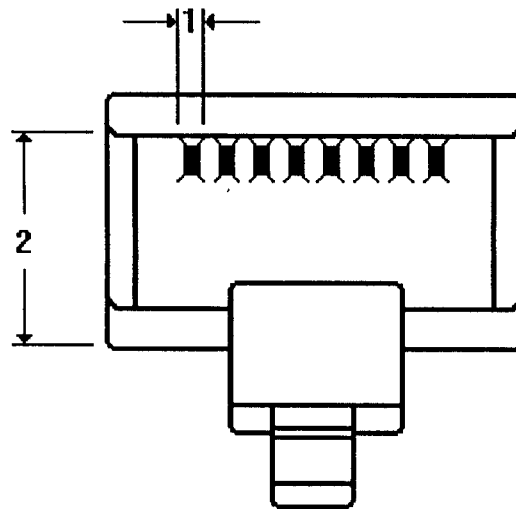
The results are considered acceptable when the test sample does exceed 0.07 inch beyond the Datum -A- position.

Result

The results are shown in the following table.

Insertion Force Results		
Model No.	Sample No.	Distance (lbs)
MP8P8C	1	0.11 (2)

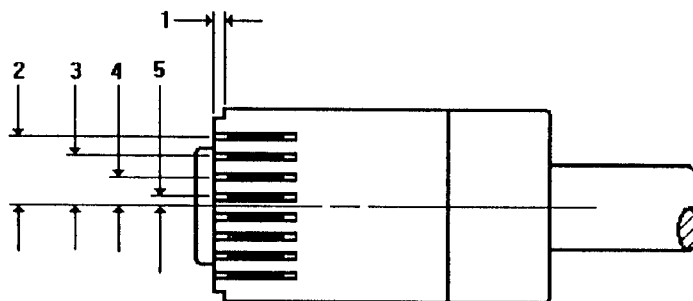
Fig 68.500(c)(2)(ii)
Unkeyed Plug - 8 Position
Bottom View



Point of Measurement	Requirement	Results
1	.022 Max.	0.0205
2	.260 REF	0.2553

Fig 68.500(c)(2)(ii)

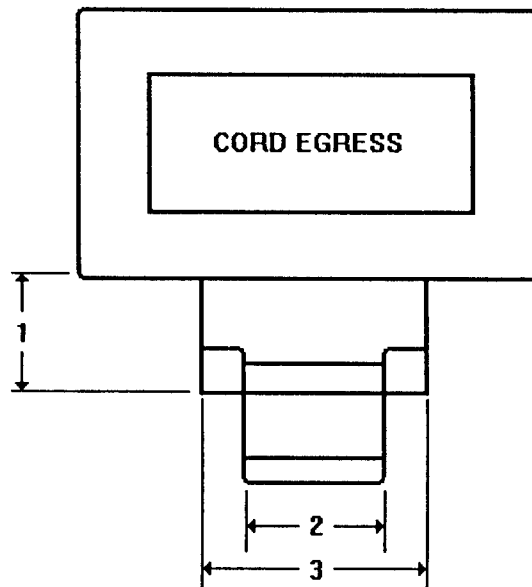
Unkeyed Plug - 8 Position Bottom View



Point of measurement	Requirement	Results
1	.043 Max.	0.0053
2	.138 to .142	0.13725
3	.098 to .102	0.0994
4	.058 to .062	0.0592
5	.018 to .022	0.0187

Note: All dimensions are expressed in inches.

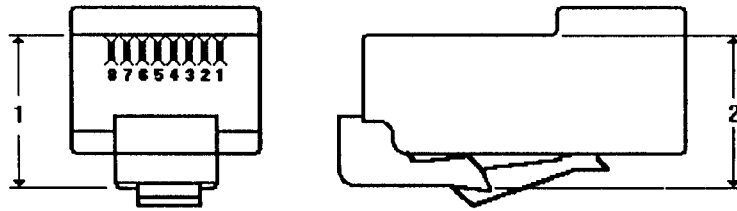
Fig 68.500(c)(2)(ii) Unkeyed Plug - 8 Position Back View



Point of Measurement	Requirement	Results
1	.105 to .113	0.1072
2	.123 to .133	0.1293
3	.237 to .243	0.2383

Note: All dimensions are expressed in inches.

Fig 68.500(c)(2)(ii) Unkeyed Plug - 8 Position Front and Side View

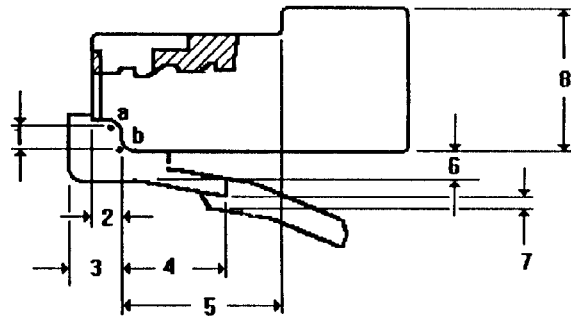


Point of Measurement	Requirement	Results
1	.329 Max.	0.3020
2	.329 Max.	0.3095

Note: All dimensions are expressed in inches.

Fig 68.500(c)(2)(ii) Unkeyed Plug - 8 Position Side View

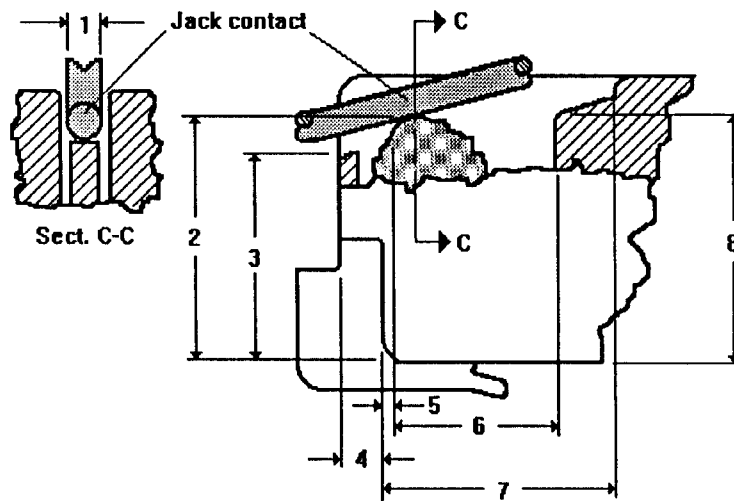
a and b are the center points for the radius of the curves shown at the front of the plug. The dimension lines point to these center points.



Point of Measurement	Requirement	Results
1	0.049 Min.	0.0501
2	0.035 Min.	0.0655
3	0.092 Max.	0.0918
4	0.227 to 0.237	0.2323
5	0.485 Min.	0.4859
6	0.052 Max.	0.0471
7	0.025 max.	0.0112
8	0.315 max.	0.3124

Note 1: All dimensions are expressed in inches.

Fig 68.500(c)(3)(i) Unkeyed Plug - 6 or 8 Position Plug/Jack Contact Specification



Point of Measurement	Requirement	Results
1	.0177 to .0195	0.0180
2	.232 to .243	0.2334
3	.200 Max.	0.1782
4	.035 to .057	0.0432
5	.001 to .018	0.0106
6	.110 Min.	0.11415
7	.162 Min.	0.2206
8	.245 Max.	0.2380

Note: All dimensions are expressed in inches.