CALIBRATION SOLUTIONS

N-Type Connector Gage Kit ACUDIAL-N

FEATURES

- Direct Reading
- Quick Startup
- Self-Calibration
- Dial Indication
- Accurate
- Easy to Use

PRODUCT OVERVIEW

Mini-Circuits' ACUDIAL-N Series connector Gage kit is a push on type gage designed to measure the center contact pin location from the outer conductor mating surface of type N female and male connectors per MIL-PRF-39012 class 2. Refer to dimensions A(MP) and B (MF) in Figure 1. A(MP) and B(MF) dimensions are termed as interface matting dimensions.

The ACUDIAL-N Gage kit consists of:
1. a dial indicator assembly graduated in 0.001 increments with integral female and male measurement bushings.
2. female and male master gage
3. Instruction manual all contained in a solid wooden instrument case (8.5 x 7 x 3.5 inches)

Before checking the interface dimensions of any connector the dial indicator is set to zero by means of a master gage. After zeroing , the connector is engaged on the on the male or female bushing of the gage depending upon the gender of connector The resultant reading is the actual deviation from the nominal (mean) dimension as indicated in following table 1.

APPLICATION

All the coaxial connectors mounted on device cables or any test equipment should always be gaged before mating to insure compliance. Such check helps in averting interfered matting and to assure proper electrical performance and produce accurate test data and preventing damage to the device being tested.

The ACUDIAL-N Gage kit is the right tool for all of these situations, and can also be used for performing production checkout, incoming inspections, routine quality control, and general laboratory operations.

COMPLIANCE

- Per ASME B89.1.10M-2001, C5.12
- Per ASME B89.1.10M-2001, Table 3
- Performance standards are in compliance with ANSI/NCSL Z540-1 and iso 10012-1

REV. C
ECO-025796
MCL NY
250616

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SPECIFICATIONS

Table 1. Contact Pin Location for N-Type Connectors				
Specification	FP		MP	
MIL-STD-348A CLASS 2	0.207	+0.000 -0.020	0.210	+0.020 -0.000

N-TYPE CONTACT PIN LOCATION

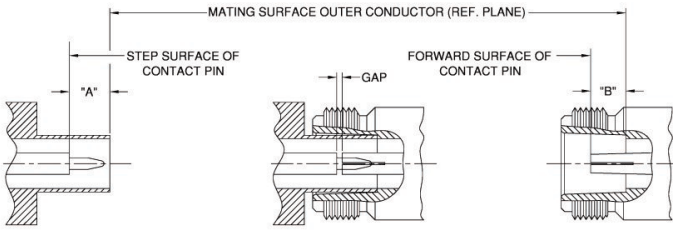

Fig 1. N-Type Contact Pin Location Dimension

N-Type Connector Gage Specifications		
Characteristics	**Limits**	**Comments**
Gage Resolution	0.0002″	1/5 Least dial graduation
Gage Calibration Accuracy	0.00125″	1 Least dial graduation plus 0.000250 measurement guardband
Gage Repeatability	0.0001″	1/5 Least dial graduation
Master Accuracy	0.0000025″	0.0001 Range

MASTER GAGES

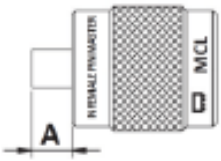

Fig 2. Gaging a Female N-Type Connector

Total Uncertainty		
RSS	0.001270089	(Root sum of squares)
Worst Case	0.001575	(Sum of all units)

Table 2. Gage Dimensions Female				
Specification		Min. "A"	Max. "A"	Mean "A"
0.206	+0.000 -0.001	0.206	0.207	0.2065

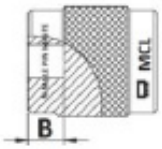

Fig 3. Gaging a Male N-Type Connector

Table 3. Gage Dimensions Male				
Specification		Min. "B"	Max. "B"	Mean "B"
0.210	+0.001 -0.000	0.210	0.211	0.2105

NOTES

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard. Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp