Anritsu 01-161 Gauging Sets





Anritsu 01-161 Gauging Sets User Guide

Home » Anritsu » Anritsu 01-161 Gauging Sets User Guide



Contents

- 1 Anritsu 01-161 Gauging Sets
- 2 FAQ
- **3 1. INTRODUCTION**
- 4 2. DESCRIPTION OF 01-161 GAUGING SET
- **5 DESCRIPTION OF 01-162 GAUGING SET**
- **6 DESCRIPTION OF 01-163 GAUGING SET**
- 7 DESCRIPTION OF 01-164 GAUGING SET
- **8 CLEANING CONNECTORS**
- 9 PRECAUTIONS FOR USING CONNECTORS
- 10 PIN DEPTH VALUES FOR ANRITSU

CONNECTORS

- 11 Documents / Resources
 - 11.1 References



Anritsu 01-161 Gauging Sets



Specifications

• Model Numbers: 01-161, 01-162, 01-163, 01-164

Manufacturer: ANRITSU

01-161 Gauging Set

The 01-161 Gauging Set contains the necessary tools and gauges to measure the pin depth of GPC-7 connectors.

Components:

- Pin-Depth Gauge (ANRITSU Part No. [insert part number])
- Reference Block (ANRITSU Part No. 01-210)
- Collet Removal Tool (ANRITSU Part No. [insert part number])

Measurement Procedure:

- 1. Turn the gauge coupling nut until the threads are fully retracted.
- 2. Loosen the side lock knob.
- 3. Hold the reference block against the end of the gauge connector and turn the outer ring until the pointer rests on zero.
- 4. Tighten the side lock knob.
- 5. Remove the center conductor contact collet from the connector to be measured using the collet removal tool.
- 6. Attach the gauge to the connector and read the pin depth.
- 7. Remove the gauge and replace the center conductor collet.

01-162 Gauging Set

The 01-162 Gauging Set contains the necessary tools and gauges to measure the pin depth of male and female K, 3.5 mm, and WSMA connectors.

Components:

- Pin-Depth Gauge (ANRITSU Part No. [insert part number])
- Reference Block (ANRITSU Part No. [insert part number])

Measurement Procedure:

- 1. On the pin depth gauge, loosen the side lock knob.
- 2. Hold the reference block against the end of the gauge body and turn the gauge outer ring until the pointer rests on zero.
- 3. Tighten the side lock knob.
- 4. To measure female connectors, unscrew the gauge coupling nut and slide it forward.
- 5. To measure male connectors, leave the gauge coupling attached to the gauge body. Screw the female adapter to the coupling nut.

01-163 Gauging Set

The 01-163 Gauging Set contains the necessary tools and gauges to measure the pin depth of male and female N connectors.

Components:

- Pin-Depth Gauge (ANRITSU Part No. [insert part number])
- Reference Block (ANRITSU Part No. [insert part number])

Measurement Procedure:

- 1. On the pin depth gauge, loosen the side lock knob.
- 2. Hold the reference block against the end of the gauge body and turn the gauge outer ring until the pointer rests on zero.
- 3. Tighten the side lock knob.
- 4. **NOTE:** The gauge reference length for both male and female measurements is 0.207 inches.
- To measure female N connectors, screw the female adapter onto the end of the gauge body. To measure male N connectors, remove the female adapter.

FAQ

Q: What are the model numbers for the gauging sets?

A: The model numbers are 01-161, 01-162, 01-163, and 01-164.

Q: What connectors can be measured with the 01-161 Gauging Set?

A: The 01-161 Gauging Set is used to measure pin depths of GPC-7 connectors.

Q: What connectors can be measured with the 01-162 Gauging Set?

A: The 01-162 Gauging Set is used to measure pin depths of male and female K, 3.5 mm, and WSMA connectors.

Q: What connectors can be measured with the 01-163 Gauging Set?

A: The 01-163 Gauging Set is used to measure pin depths of male and female N connectors.

1. INTRODUCTION

This user's guide provides a description and instructions on how to use the 01-161, -162, -163, and -164 Gauging Sets to measure pin depths of various types of connectors.

2. DESCRIPTION OF 01-161 GAUGING SET

The 01-161 Gauging Set contains the tools and gauges necessary to measure the pin depth of GPC-7 connectors. The 01-161 components (Figure 1 are described below.

1. Pin-Depth Gauge (ANRITSU Part No.

01-220) – measures the depth in mils of the male and female center conductors. The gauge reads from 0.001 inch to 0.015 inch (15 mils) in 0.0001- inch increments.

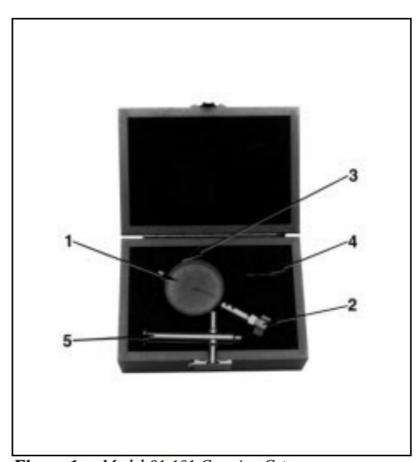


Figure 1. Model 01-161 Gauging Set

- 2. Gauge Coupling Nut Attaches the gauge to the connector.
- 3. Side Lock Knob prevents the gauge face from moving.
- Reference Block (ANRITSU Part No. 01-210)
 provides a smooth surface for setting a zero reference on the pin-depth gauge.
- 5. Collet Removal Tool (ANRITSU Part No. 783-399) –removes the spring contact collet from the GPC-7 connector pin.

To use the 01-161 Gauging Set, do the following.

- 1. Turn the gauge coupling nut (2) until the threads are fully retracted.
- 2. Loosen the side lock knob (3).
- 3. Hold the reference block (4) against the end of the gauge connector and turn the outer ring until the pointer rests on zero.
- 4. Tighten the side lock knob.
- 5. Remove the center conductor contact collet from the connector to be measured using the collet removal tool (5).
- 6. Attach the gauge to the connector and read the pin depth.
- 7. Remove the gauge and replace the center conductor collet.

DESCRIPTION OF 01-162 GAUGING SET

The 01-162 Gauging Set (Figure 2) contains the tools and gauges necessary to measure the pin depth of male and female K, 3.5 mm, and WSMA connectors. The 01-162 components are described below.

- 1. Pin-Depth Gauge (ANRITSU Part No. 01-222) measures the depth in mils of the male and female center conductors. The gauge reads from 0.001 inch to 0.025 inch (25 mils) in 0.0001- inch increments.
- 2. Side Lock Knob prevents the gauge face from moving.
- 3. Reference Block (ANRITSU Part No. 01-210) provides a smooth surface for setting a zero reference on the pin-depth gauge.
- 4. Gauge Coupling Nut connects a female connector to the gauge.
- 5. Female Adapter attaches the gauge to male connectors.

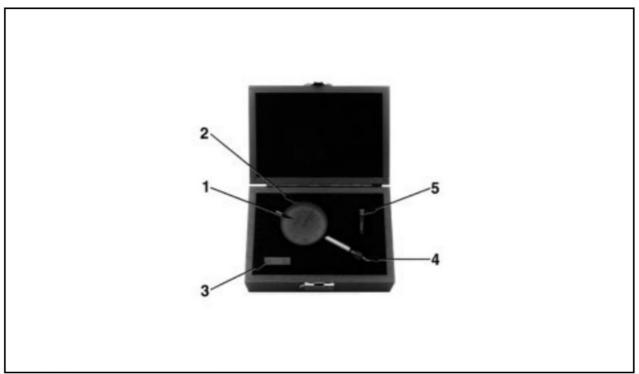


Figure 2. Model 01-162 Gauging Set

A. 01-162 Measurement Procedure

To use the 01-162 Gauging Set, do the following.

- 1. On the pin depth gauge (1), loosen the side lock knob (2).
- 2. Hold the reference block (3) against the end of the gauge body and turn the gauge outer ring until the pointer rests on zero.
- 3. Tighten the side lock knob.
- 4. To measure female connectors, unscrew the gauge coupling nut (4) and slide it forward.
- 5. To measure male connectors, leave the gauge coupling attached to the gauge body. Screw the female adapter (5) to the coupling nut.

DESCRIPTION OF 01-163 GAUGING SET

The 01-163 Gauging Set (Figure 3) contains the tools and gauges necessary to measure the pin depth of male and female N connectors. The 01-163 components are described below.

- 1. Pin-Depth Gauge (ANRITSU Part No. 01-224) measures the depth in mils of the male and female center conductors. The gauge reads from 0.001 inch to 0.010 inch (10 mils) in 0.0001- inch increments.
- 2. Side Lock Knob prevents the gauge face from moving.
- 3. Reference Block (ANRITSU Part No. 01-213) provides a smooth surface for setting a zero reference on the pin-depth gauge.
- 4. Female Adapter used when measuring female connectors.

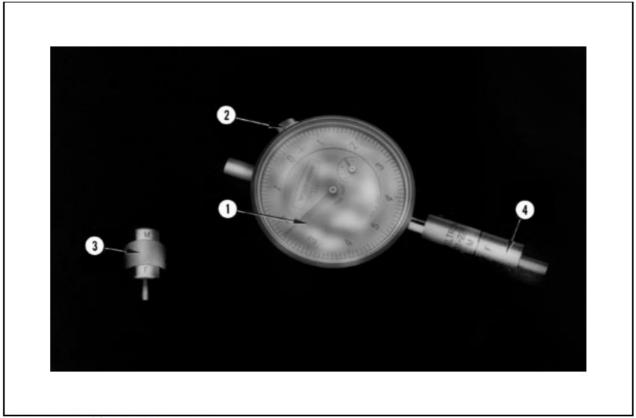


Figure 3. Model 01-163 Gauging Set

01-163 Measurement Procedure

To use the 01-163 Gauging Set, do the following.

- 1. On the pin depth gauge (1), loosen the side lock knob (2).
- 2. Hold the reference block (3) against the end of the gauge body and turn the gauge outer ring until the pointer

rests on zero.

3. Tighten the side lock knob.

NOTE

The gauge reference length for both male and female measurements is 0.207 inches.

4. To measure female N connectors, screw the female adapter (4) onto the end of the gauge body. To measure male N connectors, remove the female adapter.

DESCRIPTION OF 01-164 GAUGING SET

The 01-164 Gauging Set (Figure 4) contains the tools and gauges necessary to measure the pin depth of male and female V connectors. The 01-164 components are described below.

- Pin-Depth Gauge (ANRITSU Part No.
 01-322) measures the depth in mils of the male and female center conductors. The gauge reads from 0.001 inch to 0.010 inch (10 mils) in 0.0001- inch increments.
- 2. Side Lock Knob prevents the gauge face from moving.
- 3. Female Adapter attaches the gauge to male connectors.
- Reference Block (ANRITSU Part No. 01-210)
 provides a smooth surface for setting a zero reference on the pin-depth gauge.
- 5. Male Adapter attaches the gauge to female connectors.

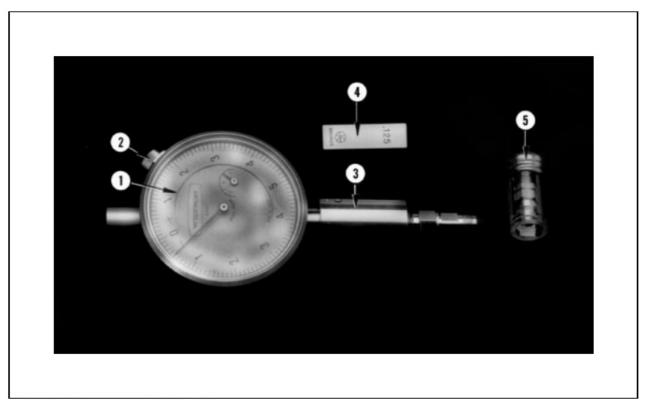


Figure 4. Model 01-164 Gauging Set

01-164 Measurement Procedure

To use the 01-164 Gauging Set, do the following.

- 1. On the pin depth gauge (1), loosen the side lock knob (2).
- 2. Remove the female adapter (3) from the gauge body coupling nut.

- 3. Hold the reference block (4) against the end of the gauge body.
- 4. Turn the gauge outer ring until the pointer rests on zero.
- 5. Tighten the side lock knob.
- 6. To measure V male connectors, screw the female adapter (3) onto the gauge coupling nut.
- 7. To measure V female connectors, screw the male adapter (5) onto the gauge coupling nut.

CLEANING CONNECTORS

Connector interfaces, especially the outer conductors on the GPC-7 and SMA connectors, should be kept clean and free of dirt and other debris. Denatured alcohol is the recommended cleaning agent, and a damp cotton swab is the recommended applicator. Figure 5 illustrates the cleaning of male and female connectors and Figure 6 illustrates some of the proper and improper methods of cleaning connectors.

NOTE

Most cotton swabs are too large to fit in the smaller connector types. In these cases it is necessary to peel off most of the cotton and then twist the remaining cotton tight. Be sure that the remaining cotton does not get stuck in the connector.

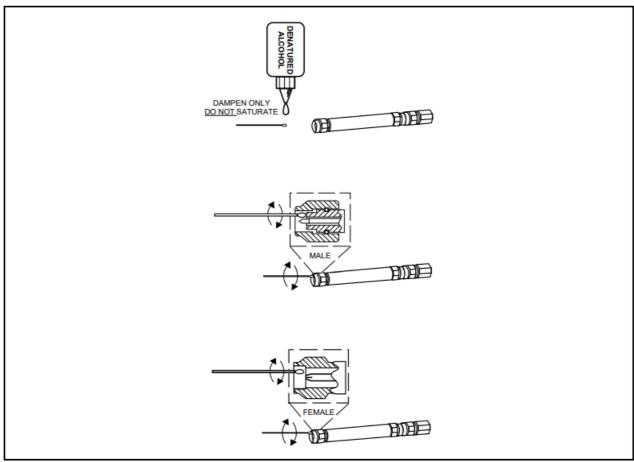


Figure 5. Cleaning Male and Female Connectors

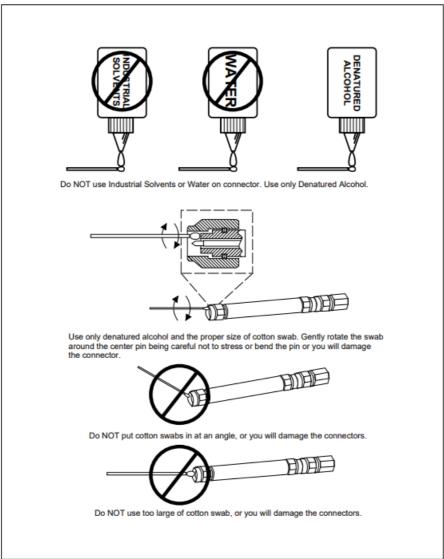


Figure 6. Proper and Improper Cleaning Techniques

The following are some important tips on cleaning connectors:

- Use only denatured alcohol as a solvent.
- Always use an appropriate size of cotton swab. Never use a cotton swab that is too large.
- Never put lateral pressure on the connector's center pin.
- · Verify that no cotton or other foreign material remain in the connector after cleaning it.
- Compressed air can be used to remove foreign particles and to dry the connector.
- Verify that the center pin has not been bent or damaged.

PRECAUTIONS FOR USING CONNECTORS

The following are precautionary notes related to the use of connectors. For specific information about setting pin depths of sliding terminations, see the 360 Operational Manual (360 OM P/N 10410-00022) Table 3-8.

Destructive Pin Depths on Mating Connectors

Before mating, measure the pin depth of the connector that mates with the RF component using a ANRITSU
Pin Depth Gauge or equivalent. Based on RF components returned for repair, destructive pin depth of mating
connectors is the major cause of failure in the field. When an RF component connector is mated with a
connector having a destructive pin depth, damage will likely occur to the RF component connector. (A

destructive pin depth means a center pin that is too long in respect to the connector's reference plane.)

- The center pin of an RF component connector has a precision tolerance measured in mils (1/1000 inch),
 whereas connectors on test devices that mate with RF components may not be precision types and their pins may not have the proper depth. Consequently, they must be measured before mating to ensure suitability.
- When gauging pin depth, if the test device connector measures out of tolerance in the + region, the center pin is too long.
- Mating under this condition will likely damage the RF component connector. On the other hand, if the test device connector measures out of tolerance in the region, the center pin is too short.
- While this will not cause any damage, it will result in a poor connection and a consequent degradation in performance.

Over-Tourquing Connectors

Over-torquing connectors is destructive; it may damage the connector center pin. Finger-tight is usually sufficient, especially on Type N connectors. Use a torgue wrench when unsure whether connector is tight enough. Never use pliers to tighten connectors.

Teflon Tuning Washers on Connector Center Pins

The center conductor on many RF component connectors contains a small teflon tuning washer near the point of mating (interface). This washer compensates for minor impedance discontinuities at the interface. The washer's location is critical to the RF component's performance. Do not disturb it.

Mechanical Shock

RF components are designed to withstand years of normal bench handling. However, do not drop or otherwise treat them roughly. They are laboratory quality devices and require careful handling. Inspection is used to determine the status of an unknown connector and to ensure the serviceability of a connector following repair. If the connector fails inspection, return it to ANRITSU for a replacement. Inspect the connectors as follows:

Visual Inspection.

Inspect the connector visually for a broken or recessed center conductor.

Pin Depth Inspection.

As follows, inspect the center conductor for the correct depth. Pin depth limits for ANRITSU components are listed in Table 1.

PIN DEPTH VALUES FOR ANRITSU CONNECTORS

- Table 1 and 2 provide values for ANRITSU connectors.
- In Table 1 connectors are listed in alpha-numerical order. In Table 2, they are grouped by product.
- When measuring connectors using the ANRITSU or any other gauge, be aware of the following facts that impact on measurement accuracy.
- Connector setback dimensions are difficult to measure. This is primarily due to measurement uncertainties in the connector gauge and differences in measurement technique that vary from person to person.
- Gauging accuracy involves both the accuracy of the gauge and gauging technique. ANRITSU gauges having 0.0001 inch minor scale divisions can achieve 0.0002 inch accuracy when properly used, making them acceptable for their intended purpose. With proper technique, measurement of a connector that has an actual setback of 0.0005 inch may result in a gauge reading of from 0.0003 to 0.0007 inch. Note that this possible deviation from the actual setback is entirely due to the measurement accuracy of the gauge. However, additional errors may be introduced through poor gauging technique and result in a significant outof- tolerance

indication.

- ANRITSU recommends that the user take the following five actions prior to condemning a connector as out of specification.
- 1. Do not torque the connector to the gauge. Instead, tighten the connector finger-tight. This technique ensures a light gauging pressure consistent with the hand pressure used during the zeroing of the gauge. The gauge readings will accurately represent the pin depth of measured connectors that are subsequently torqued to specification in application.
- 2. Clean the connector, the connector gauge, and the gauge block. Re-zero the gauge and repeat the measurement. Out of tolerance indications can be greatly affected by dirt and contamination.
- 3. Measure the connector several times yourself, then have a second person make some measurements in order to determine an average reading. This technique will help reduce uncertainties due to differences of technique and random variations in gauge accuracy.
- 4. Measure the connector using multiple orientations of the gauge within the connector. Averaging several readings, each taken after a quarter-turn rotation of the gauge, reduces measurement variations that result from the gauge or the connector face not being exactly perpendicular to the center axis.
- 5. Hold the connector gauge by the gauge barrel, below the dial indicator. This offers maximum stability. It also improves measurement accuracy by preventing stresses from being applied to the gauge plunger mechanism through the dial indicator housing. Inaccuracies in measurement often results from such forces when the gauge is cradled in the hand or held by the dial indicator. Additionally, maintain records over time of the setback measurements made for each device. Noticeable differences from one set of measurements to the next may indicate errors in measurement technique. Or, they may indicate that the connector is damaged and needs to be replaced.

Table 1. Pin Depth Values for ANRITSU Connectors, Alpha-Numerical Listing (1 of 4)

| MODEL | INPUT* | OUTPUT* | TESTPORT* |
|--------|--------------------|---------|--------------------|
| 17A50 | 0.0000 to -0.0003 | | |
| 17K50 | 0.0000 to -0.0003 | | |
| 17KF50 | 0.0000 to -0.0003 | | |
| 17S50 | 0.0000 to -0.0003 | | |
| 17SF50 | 0.0000 to -0.0003 | | |
| 18A50 | 0.000 to -0.0035 | | 0.0000 to -0.0006 |
| 18N50 | A 0.000 to -0.0035 | | N 0.207 to 0.208 |
| 18NF50 | A 0.000 to -0.0035 | | NF 0.206 to 0.207 |
| 19K50 | 0.000 to -0.0035 | | 0.0000 to -0.001 |
| 19KF50 | 0.000 to -0.0035 | | 0.0000 to -0.001 |
| 19S50 | -0.0023 to -0.0037 | | -0.0025 to -0.0035 |
| 19SF50 | -0.0023 to -0.0037 | | -0.0003 to -0.0008 |

| 21A-1 | | | 0.000 to -0.002 |
|-------------|--------------------|--------------------|-----------------|
| 22K50 | 0.000 to -0.0015 | 0.000 to -0.0015 | |
| 22KF50 | 0.000 to -0.0015 | 0.000 to -0.0015 | |
| 22N SERIES | 0.207 to 0.211 | 0.207 to 0.210 | |
| 22NF SERIES | 0.2035 to 0.207 | 0.235 to 0.207 | |
| 22\$50 | -0.0023 to -0.0037 | -0.0023 to -0.0037 | |
| 22SF50 | 0.000 to -0.001 | 0.000 to -0.001 | |
| 23K50 | -0.0000 to -0.0008 | | |
| 23KF50 | -0.0000 to -0.0008 | | |
| 23N50 | 0.207 to 0.2085 | | |
| 23NF50 | 0.2055 to 0.207 | | |
| 23S50 | -0.0000 to -0.0008 | | |
| 23SF50 | -0.0000 to -0.0008 | | |
| 24A50 | +0.0005 to -0.001 | | |
| 24K50 | -0.0000 to -0.0008 | | |
| 24KF50 | -0.0000 to -0.0008 | | |
| 24N50 | 0.207 to 0.2085 | | |
| 24NF50 | 0.2055 to 0.207 | | |
| 24S50 | -0.0000 to -0.0008 | | |
| 24SF50 | -0.0000 to -0.0008 | | |
| 26N SERIES | 0.207 to 0.211 | | |
| 26NF SERIES | 0.203 to 0.207 | | |
| 28A50,-1 | 0.000 to -0.0035 | | |
| 28A50-2 | -0.0000 to -0.0008 | | |
| 28K50 | 0.000 to -0.0015 | | |
| 28KF50 | 0.000 to -0.0015 | | |
| 28N50-2 | 0.207 to 0.2085 | | |
| 28NF50-2 | 0.2055 to 0.207 | | |

Table 1. Pin Depth Values for ANRITSU Connectors, Alpha-Numerical Listing (2 of 4)

| MODEL | INPUT* | OUTPUT* | TESTPORT* |
|----------|--------------------|---------|-----------|
| 28S50,-1 | -0.0023 to -0.0037 | | |
| 28S50-2 | -0.0000 to -0.0008 | | |

| 28SF50,-1 | 0.000 to -0.001 | |
|-------------|----------------------|-----------------------|
| 28SF50-2 | -0.0000 to -0.0008 | |
| 29A50-20 | 0.000 to -0.0035 | |
| 29K50-15 | 0.000 to -0.0015 | |
| 29KF50-15 | 0.000 to -0.0015 | |
| 29S50-20 | -0.0023 to -0.0037 | |
| 29SF50-20 | 0.000 to -0.001 | |
| 33KFKF50 | -0.0000 to -0.0008 | -0.0000 to -0.0008 |
| 33KK50 | -0.0000 to -0.0008 | -0.0000 to -0.0008 |
| 33KKF50 | K -0.0000 to -0.0008 | KF -0.0002 to -0.0007 |
| 33SFSF50 | -0.0000 to -0.0008 | -0.0000 to -0.0008 |
| 33\$\$50 | -0.0000 to -0.0008 | -0.0000 to -0.0008 |
| 33SSF50 | S -0.0000 to -0.0008 | SF -0.0000 to -0.0008 |
| 34AK50 | A -0.0000 to -0.0008 | K –0.0000 to –0.0008 |
| 34AKF50 | A -0.0000 to -0.0008 | KF -0.0000 to -0.0008 |
| 34AN50 | A 0.000 to -0.0035 | N 0.207 to 0.211 |
| 34ANF50 | A 0.000 to -0.0035 | N 0.2035 to 0.207 |
| 34AN50-2 | A -0.0000 to -0.0008 | N 0.207 to 0.2085 |
| 34ANF50-2 | A -0.0000 to -0.0008 | N 0.2055 to 0.207 |
| 34AS50 | A 0.000 to -0.0035 | S -0.0023 to -0.0037 |
| 34AS50-2 | A -0.0000 to -0.0008 | S -0.0000 to -0.0008 |
| 34ASF50 | A 0.000 to -0.0035 | SF -0.0000 to -0.0008 |
| 34ASF50-2 | A -0.0000 to -0.0008 | SF -0.0000 to -0.0008 |
| 34KFKF50 | 0.000 to -0.0035 | 0.000 to -0.0035 |
| 34NFNF50 | 00.202 to 00.207 | 0.202 to 0.207 |
| 34NFNF75 | 0.202 to 0.207 | 0.202 to 0.207 |
| 34NN SERIES | 0.207 to 0.213 | 0.207 to 0.213 |
| 34SFSF50 | 0.000 to -0.001 | 0.000 to -0.001 |
| 34UK50 | U 0.266 to 0.269 | K -0.0000 to -0.0008 |
| 34UA50 | U 0.266 to 0.269 | A -0.0000 to -0.0008 |
| 34UN50 | U 0.266 to 0.269 | N 0.207 to 0.210 |
| 34UNF50 | U 0.266 to 0.269 | NF 0.2045 to 0.207 |
| 34US50 | U 0.266 to 0.269 | S -0.0000 to -0.0008 |

| 35KF SERIES | 0.000 to -0.0035 | |
|-------------|------------------|--|
| 35K SERIES | 0.000 to -0.0035 | |

Table 1. Pin Depth Values for ANRITSU Connectors, Alpha-Numerical Listing (3 of 4)

| MODEL | INPUT* | OUTPUT* | TESTPORT* |
|--------------|--------------------|---------------------|--------------------|
| 41K SERIES | K 0.000 to -0.0035 | KF 0.000 to -0.0035 | |
| 42A SERIES | 0.000 to -0.0035 | 0.000 to -0.0035 | |
| 42K SERIES | K 0.000 to -0.0035 | KF 0.000 to -0.0035 | |
| 42S SERIES | S0.000 to -0.0035 | SF 0.000 to -0.0035 | |
| 43K SERIES | K 0.000 to -0.0035 | KF 0.000 to -0.0035 | |
| 44K SERIES | K 0.000 to -0.0035 | KF 0.000 to -0.0035 | |
| 45K SERIES | K 0.000 to -0.003 | KF 0.000 to -0.0035 | |
| 46K SERIES | K 0.000 to -0.003 | KF 0.000 to -0.003 | |
| 47K SERIES | K 0.000 to -0.003 | KF 0.000 to -0.003 | |
| 560-7A50 | 0.000 to -0.0035 | | |
| 560-7K50 | 0.000 to -0.0035 | | |
| 560-7N50 | 0.207 to 00.216 | | |
| 560-7S50 | -0.001 to -0.004 | | |
| 560-97A50,-1 | 0.197 to 0.207 | | 0.000 to -0.0035 |
| 560–97N50,–1 | 0.197 to 0.207 | | 0.207 to 0.211 |
| 560-97NF50 | 0.197 to 0.207 | | 0.2035 to 0.207 |
| 560-97NF50-1 | 0.197 to 0.207 | | 0.2035 to 0.207 |
| 560-98K50 | 0.000 to -0.0035 | | 0.000 to -0.0015 |
| 560-98KF50 | 0.000 to -0.0035 | | 0.000 to -0.0015 |
| 560-98\$50 | 0.000 to -0.0035 | | -0.0023 to -0.0037 |
| 560-98SF50 | 0.000 to -0.0035 | | -0.0000 to -0.0008 |
| 560-98\$50-1 | 0.000 to -0.0035 | | -0.0023 to -0.0037 |
| 560-98SF50-1 | 0.000 to -0.0035 | | -0.0000 to -0.0008 |
| 58A50 | 0.197 to 0.207 | 0.197 to 0.207 | 0.000 to -0.0035 |
| 59A50 | 0.197 to 0.207 | | 0.000 to -0.0035 |
| 60A50,-1 | 0.187 to 0.207 | 0.187 to 0.207 | 0.000 to -0.0035 |
| 60N50,-1 | 0.187 to 0.207 | 0.187 to 0.207 | 0.207 to 0.211 |
| 60NF50,-1 | 0.187 to 0.207 | 0.187 to 0.207 | 0.235 to 0.207 |

| 63A SERIES | 0.187 to 0.207 | 0.000 to -0.005 |
|-------------|------------------|-----------------|
| 63N SERIES | 0.187 to 0.207 | 0.207 to 0.211 |
| 63NF SERIES | 0.187 to 0.207 | 0.2035 to 0.207 |
| 70K SERIES | 0.000 to -0.0035 | |
| 73N SERIES | 0.207 to 0.216 | |
| 74N50 | 0.207 to 0.216 | |
| 74N50B | 0.207 to 0.211 | |
| 75A50 | 0.000 to -0.0035 | |
| 75K SERIES | 0.000 to -0.0035 | |
| 75N50 | 0.207 to 0.216 | |
| 75N50B | 0.207 to 0.211 | |

Table 1. Pin Depth Values for ANRITSU Connectors, Alpha-Numerical Listing (4 of 4)

| MODEL | INPUT* | OUTPUT* | TESTPORT* |
|------------|--------------------|---------------------|--------------------|
| 87A50,-1 | 0.207 to 0.197 | 0.207 to 0.197 | 0.000 to -0.0035 |
| 97A50,-1 | 0.197 to 0.207 | | 0.000 to -0.0035 |
| 97N50,-1 | 0.197 to 0.207 | | 0.207 to 0.211 |
| 97NF50,-1 | 0.197 to 0.207 | | 0.2035 to 0.207 |
| 97S50,-1 | 0.197 to 0.207 | | -0.0023 to -0.0037 |
| 97SF50,-1 | 0.197 to 0.207 | | -0.0000 to -0.0008 |
| K101F or M | 0.000 to -0.006 | | |
| K102F or M | 0.000 to -0.006 | | |
| K103F or M | 0.000 to -0.006 | | |
| K104F or M | 0.000 to -0.006 | | |
| K210 | 0.000 to -0.0035 | | |
| K220 | 0.000 to -0.0035 | 0.000 to -0.0035 | |
| K222 | 0.000 to -0.0035 | 0.000 to -0.0035 | |
| K224 | K 0.000 to -0.0035 | KF 0.000 to -0.003 | |
| K230 | 0.000 to -0.0035 | 0.000 to -0.0035 | |
| K232 | 0.000 to -0.0035 | 0.000 to -0.0035 | |
| K234 | K 0.000 to -0.0035 | KF 0.000 to -0.0035 | |
| K240 | 0.000 to -0.006 | 0.000 to -0.006 | 0.000 to -0.006 |
| K250 | 0.000 to -0.006 | 0.000 to -0.006 | 0.000 to -0.006 |
| V101F or M | 0.000 to -0.005 | | |
| V102F or M | 0.000 to -0.005 | | |
| V103F or M | 0.000 to -0.005 | | |
| V104F or M | 0.000 to -0.005 | | |
| V250 | 0.000 to -0.0035 | 0.000 to -0.0035 | 0.000 to -0.0035 |

Table 2. Pin Depth Values for ANRITSU Connectors, Product Listing (1 of 3)

| MODEL | INPUT* | OUTPUT* | TEST PORT* |
|----------|--------------------|--------------------|------------|
| Adapters | | | |
| K210 | 0.000 to -0.0035 | | |
| K220 | 0.000 to -0.0035 | 0.000 to -0.0035 | |
| K222 | 0.000 to -0.0035 | 0.000 to -0.0035 | |
| K224 | K 0.000 to -0.0035 | KF 0.000 to -0.003 | |

| K230 | 0.000 to -0.0035 | 0.000 to -0.0035 | |
|----------------------|--------------------|----------------------|--------------------|
| K232 | 0.000 to -0.0035 | 0.000 to -0.0035 | |
| K234 | K 0.000 to -0.0035 | KF 0.000 to -0.0035 | |
| 34AN50 | A 0.000 to -0.0035 | N 0.207 to 0.211 | |
| 34ANF50 | A 0.000 to -0.0035 | N 0.2035 to 0.207 | |
| 34UK50 | U 0.266 to 0.269 | K -0.0000 to -0.0008 | |
| 34UA50 | U 0.266 to 0.269 | A -0.0000 to -0.0008 | |
| 34UN50 | U 0.266 to 0.269 | N 0.207 to 0.210 | |
| 34UNF50 | U 0.266 to 0.269 | NF 0.2045 to 0.207 | |
| 34US50 | U 0.266 to 0.269 | S -0.0000 to -0.0008 | |
| 35KF SERIES | 0.000 to -0.0035 | | |
| 35K SERIES | 0.000 to -0.0035 | | |
| Air Lines | | | |
| 18A50 | 0.000 to -0.0035 | | 0.0000 to -0.0006 |
| 18N50 | A 0.000 to -0.0035 | | N 0.207 to 0.208 |
| 18NF50 | A 0.000 to -0.0035 | | NF 0.206 to 0.207 |
| 19K50 | 0.000 to -0.0035 | | 0.0000 to -0.001 |
| 19KF50 | 0.000 to -0.0035 | | 0.0000 to -0.001 |
| 19S50 | -0.0023 to -0.0037 | | -0.0025 to -0.0035 |
| 19SF50 | -0.0023 to -0.0037 | | -0.0003 to -0.0008 |
| Bias Tee | | | |
| K250 | 0.000 to -0.006 | 0.000 to -0.006 | 0.000 to -0.006 |
| V250 | 0.000 to -0.0035 | 0.000 to -0.0035 | 0.000 to -0.0035 |
| Coaxial Attenuators | | | |
| 41K SERIES | K 0.000 to -0.0035 | KF 0.000 to -0.0035 | |
| 43K SERIES | K 0.000 to -0.0035 | KF 0.000 to -0.0035 | |
| Coaxial Terminations | | | |
| 26N SERIES | 0.207 to 0.211 | | |
| 26NF SERIES | 0.203 to 0.207 | | |
| 28A50,-1 | 0.000 to -0.0035 | | |
| 28A50-2 | -0.0000 to -0.0008 | | |
| 28K50 | 0.000 to -0.0015 | | |
| 28KF50 | 0.000 to -0.0015 | | |

Table 2. Pin Depth Values for ANRITSU Connectors, Product Listing (2 of 3)

| MODEL | INPUT* | OUTPUT* | TEST PORT* |
|-------------------------|--------------------|------------------|------------|
| 28N50-2 | 0.207 to 0.2085 | | |
| 28NF50-2 | 0.2055 to 0.207 | | |
| 28S50,-1 | -0.0023 to -0.0037 | | |
| 28S50-2 | -0.0000 to -0.0008 | | |
| 28SF50,-1 | 0.000 to -0.001 | | |
| 28SF50-2 | -0.0000 to -0.0008 | | |
| 29A50-20 | 0.000 to -0.0035 | | |
| 29K50-15 | 0.000 to -0.0015 | | |
| 29KF50-15 | 0.000 to -0.0015 | | |
| 29S50-20 | -0.0023 to -0.0037 | | |
| 29SF50-20 | 0.000 to -0.001 | | |
| K and V Sparkplug and F | lange Connectors | | |
| K Series | 0.000 to -0.005 | | |
| V Series | 0.000 to -0.004 | | |
| Microwave Detectors | | | |
| 560-7A50 | 0.000 to -0.0035 | | |
| 560-7K50 | 0.000 to -0.0035 | | |
| 560-7N50 | 0.207 to 00.216 | | |
| 560-7S50 | -0.001 to -0.004 | | |
| 70K SERIES | 0.000 to -0.0035 | | |
| 73N SERIES | 0.207 to 0.216 | | |
| 74N50 | 0.207 to 0.216 | | |
| 74N50B | 0.207 to 0.211 | | |
| 75A50 | 0.000 to -0.0035 | | |
| 75K SERIES | 0.000 to -0.0035 | | |
| 75N50 | 0.207 to 0.216 | | |
| 75N50B | 0.207 to 0.211 | | |
| Open-Shorts | | | |
| 21A-1 | 0.000 to -0.002 | | |
| 22K50 | 0.000 to -0.0015 | 0.000 to -0.0015 | |
| 22KF50 | 0.000 to -0.0015 | 0.000 to -0.0015 | |

| 22N SERIES | 0.207 to 0.211 | 0.207 to 0.210 | | |
|----------------|--------------------|--------------------|--|--|
| 22NF SERIES | 0.2035 to 0.207 | 0.235 to 0.207 | | |
| 22\$50 | -0.0023 to -0.0037 | -0.0023 to -0.0037 | | |
| 22SF50 | 0.000 to -0.001 | 0.000 to -0.001 | | |
| Power Dividers | | | | |
| K240 | | | | |

Table 2. Pin Depth Values for ANRITSU Connectors, Product Listing (3 of 3)

| MODEL | INPUT* | OUTPUT* | TEST PORT* |
|-----------------------------|--------------------|---------------------|--------------------|
| Step Attenuators | | | |
| 44K SERIES | K 0.000 to -0.0035 | KF 0.000 to -0.0035 | |
| 45K SERIES | K 0.000 to -0.003 | KF 0.000 to -0.0035 | |
| 46K SERIES | K 0.000 to -0.003 | KF 0.000 to -0.003 | |
| 47K SERIES | K 0.000 to -0.003 | KF 0.000 to -0.003 | |
| SWR Bridges and Autotesters | | | |
| 560-97A50,-1 | 0.197 to 0.207 | | 0.000 to -0.0035 |
| 560–97N50,–1 | 0.197 to 0.207 | | 0.207 to 0.211 |
| 560-97NF50 | 0.197 to 0.207 | | 0.2035 to 0.207 |
| 560-97NF50-1 | 0.197 to 0.207 | | 0.2035 to 0.207 |
| 560-98K50 | 0.000 to -0.0035 | | 0.000 to -0.0015 |
| 560-98KF50 | 0.000 to -0.0035 | | 0.000 to -0.0015 |
| 560–98S50 | 0.000 to -0.0035 | | -0.0023 to -0.0037 |
| 560-98SF50 | 0.000 to -0.0035 | | -0.0000 to -0.0008 |
| 560-98\$50-1 | 0.000 to -0.0035 | | -0.0023 to -0.0037 |
| 560-98SF50-1 | 0.000 to -0.0035 | | -0.0000 to -0.0008 |
| 60A50,-1 | 0.187 to 0.207 | 0.187 to 0.207 | 0.000 to -0.0035 |
| 60N50,-1 | 0.187 to 0.207 | 0.187 to 0.207 | 0.207 to 0.211 |
| 60NF50,-1 | 0.187 to 0.207 | 0.187 to 0.207 | 0.235 to 0.207 |
| 63A SERIES | 0.187 to 0.207 | | 0.000 to -0.005 |
| 63N SERIES | 0.187 to 0.207 | | 0.207 to 0.211 |
| 63NF SERIES | 0.187 to 0.207 | | 0.2035 to 0.207 |
| 87A50,-1 | 0.207 to 0.197 | 0.207 to 0.197 | 0.000 to -0.003 |
| 87A50,-1 | 0.207 to 0.197 | 0.207 to 0.197 | 0.000 to -0.0035 |
| 97A50,-1 | 0.197 to 0.207 | | 0.000 to -0.0035 |
| 97N50,-1 | 0.197 to 0.207 | | 0.207 to 0.211 |
| 97NF50,-1 | 0.197 to 0.207 | | 0.2035 to 0.207 |
| 97S50,-1 | 0.197 to 0.207 | | -0.0023 to -0.0037 |
| 97SF50,-1 | 0.197 to 0.207 | | -0.0000 to -0.0008 |

Documents / Resources



Anritsu 01-161 Gauging Sets [pdf] User Guide 01-161 Gauging Sets, 01-161, Gauging Sets, Sets

References

- <u>Manual-Hub.com Free PDF manuals!</u>
- User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.