Preliminary Specification of COAXIAL CONNECTOR
Preliminary SPEC No. : NMM04-PV0159C
Part Number : MM126330

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Checked by A. Morita
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SPECIFICATION

Revised A: 30/Oct./'20 YM B: 21/Dec./'22 NS, C:8/Dec./25 KA

1. MECHANICAL

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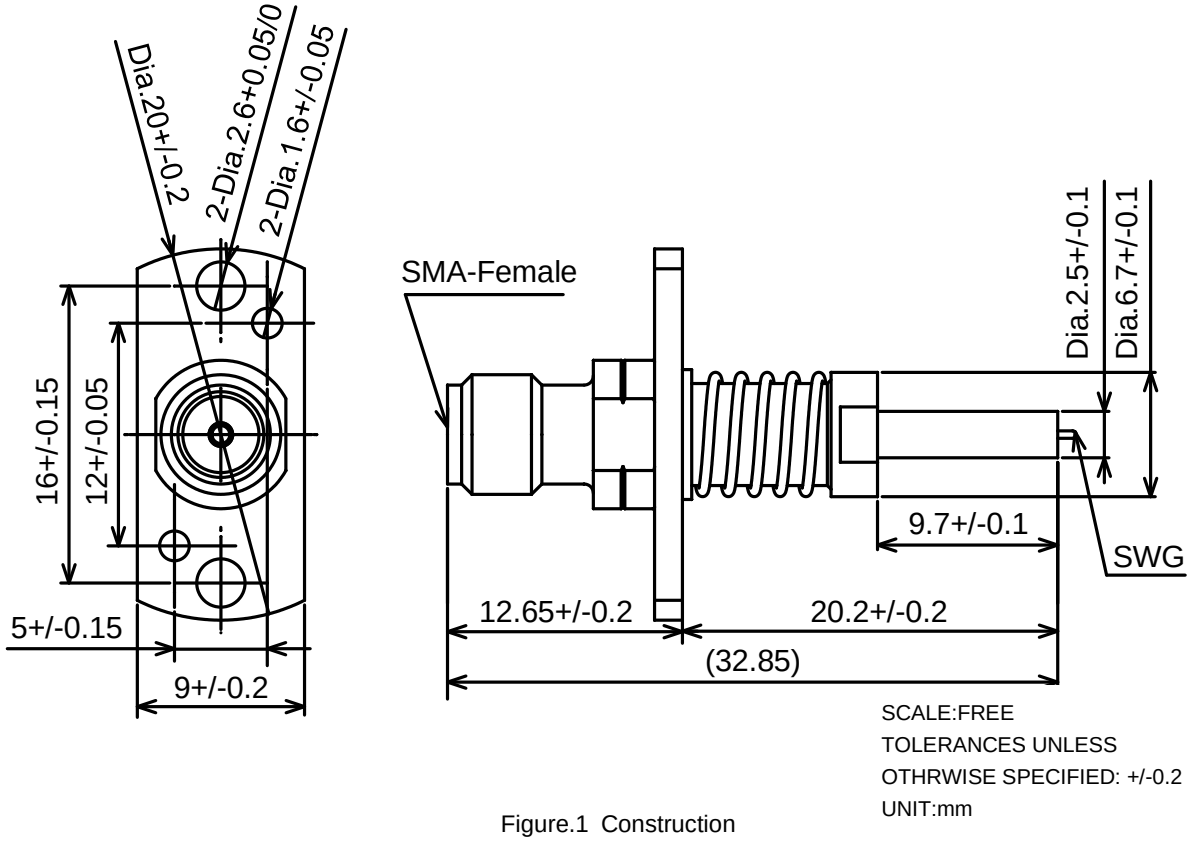
Automatic measurement probe for SWG.
MM126317 and MM126312 are used as calibration adapter.
SOP of this probe setting in the fixture is VG20-SOP-MM049.

A>




SCALE:FREE
TOLERANCES UNLESS OTHRWISE SPECIFIED: +/-0.2
UNIT:mm

Figure.1 Construction

2. RATING:

| Item | Specification |
|---|---|
| Voltage Rating | 30Vr.m.s. maximum |
| Nominal Frequency Range | DC to 11GHz |
| Nominal Impedance | 50Ω |
| Temperature Rating | 25°C +/- 15°C |
| Insulation Resistance | 500 MΩ minimum |
| Withstanding Voltage | No evidence of breakdown<br>in AC 300V r.m.s, 1 minute |
| Initial Contact Resistance<br>(without conductor resistance) | 70mΩ max. |
| Voltage Standing Wave Ratio (V.S.W.R.) | 1.6max (DC~3GHz)<br>1.7max (3~6GHz)<br>2.1max (6~11GHz) |
| Insertion Loss | 0.5dB max (DC~3GHz)<br>0.85dB max (3~6GHz)<br>1.4dB max (6~11GHz) |
| Durability | 1M cycles |

3. USE THIS PRODUCTS

3.1 Attach to fixture

The probe must be attached to fixture at the two screw holes in probe flange. (Figure 2)

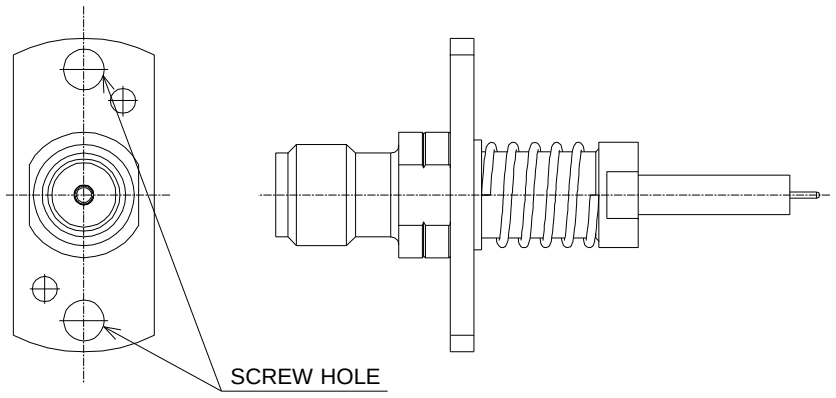



Figure.2 Screw hole position

3.2 The tolerance of position against SWG type receptacle.

3.2.1 MM126330 has a centering function by its design, 0.5(Typical)mm is permitted against the hole center of SWG type receptacle.

Please avoid needless force to SMA interface when MM126330 is disengaged from SWG type receptacle and comes back to its original position.

To avoid the needless force, please use extension cable assembly, MXHQ87HR3000 (Figure 3).

Centering function 0.5(Typical)mm may not be permitted against the hole center of SWG type receptacle, when MM126330 is affected by the needless force.

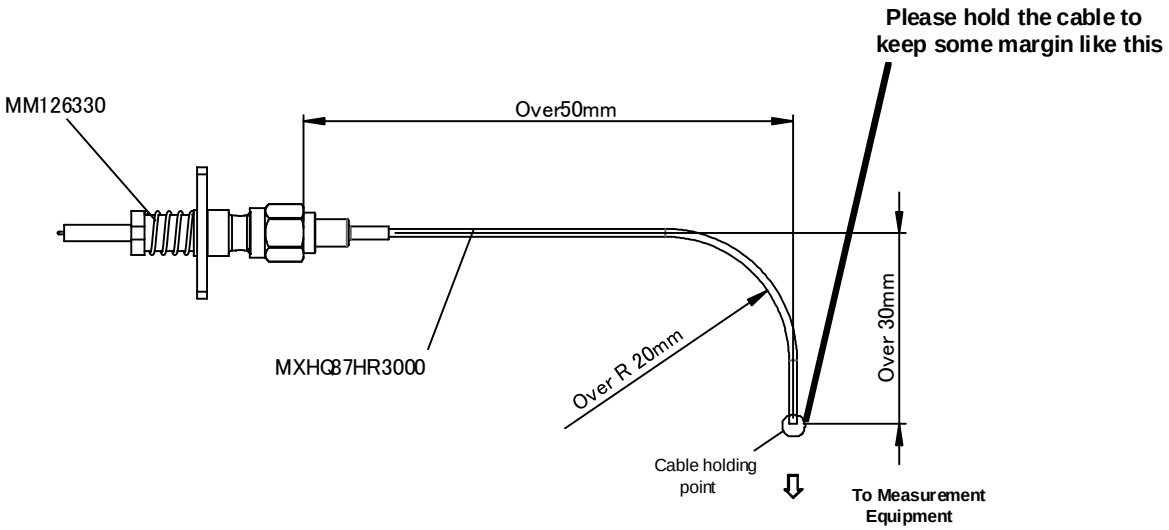
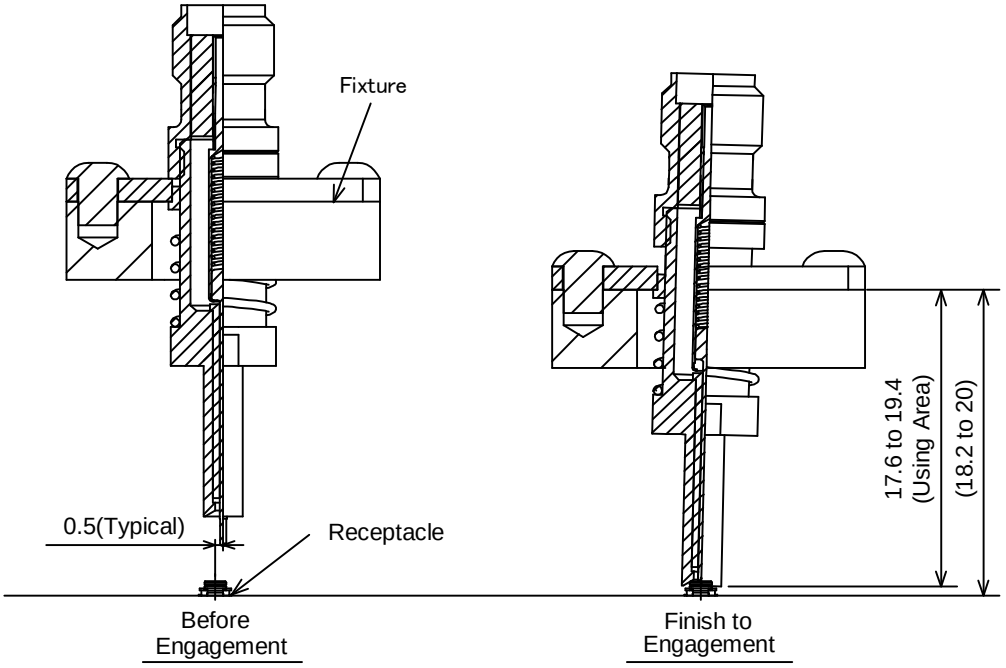



Figure.3 Instruction of MXHQ87HR3000

B>

3.2.2 To get the 10dB or higher isolation (up to 11GHz), the engagement strokes from the bottom surface of

flange to the tip of probe is 17.6mm to 19.4mm. (Figure 4)




UNIT: mm

Figure.4 Acceptable Engagement range to SWG

3.3 The slant angle tolerance of probe against SWG. (Figure 5)
To have the stable measurement, MM126330 slant angle must be +/-2degree.

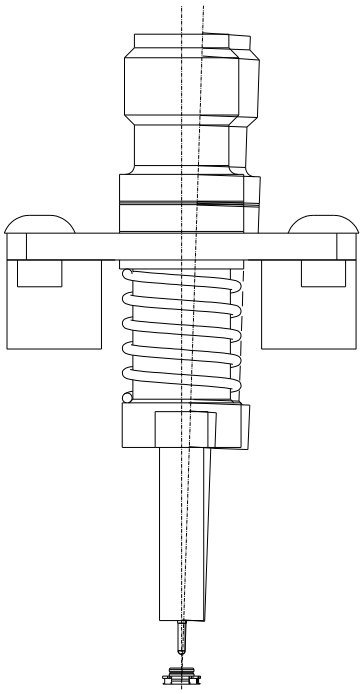


Figure.5 Probe Shape Operation Manual for Auto Measurement probe (MM126330)

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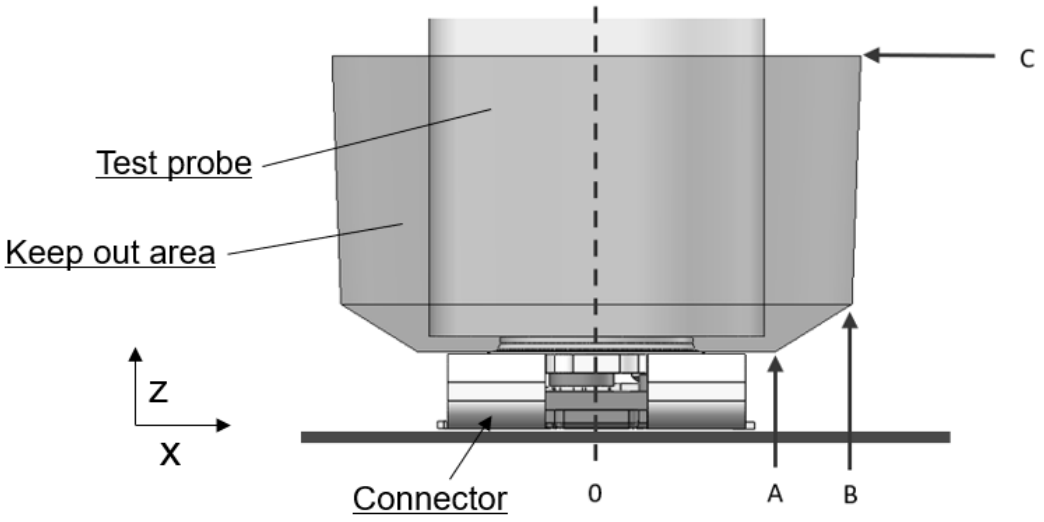
4 Keep out area of test probe

Following is keep out area of test probe tip. Please do not put any parts or devices in that area in order to ensure proper alignment.




Keep out coordinates from connector center

| | x | z |
|---|---|---|
| A | 1.32 | 0.50 |
| B | 1.83 | 0.82 |
| C | 1.87 | 2.00 |

UNIT: mm

Figure.6 Keep out area of test probe