

# HF66-0003 KSC 6 F SMA

## Contacting KSC-Male

NEW

<b>Centers (mm/mil)</b>	10,0 / 394
<b>Current (Circular)</b>	0,5 A
<b>Current (Internal)</b>	0,1 A
<b>Impedance [Z]</b>	50 Ohm
<b>Frequency</b>	6 GHz
<b>Temperature</b>	-20°C...+80°C

**Spring Force (cN  $\pm 20\%$ )**

	<b>Preload</b>	<b>Nominal</b>
Total	-	480
Internal Cont.	95	120
Circular Cont.	240	360

## Travel (mm)

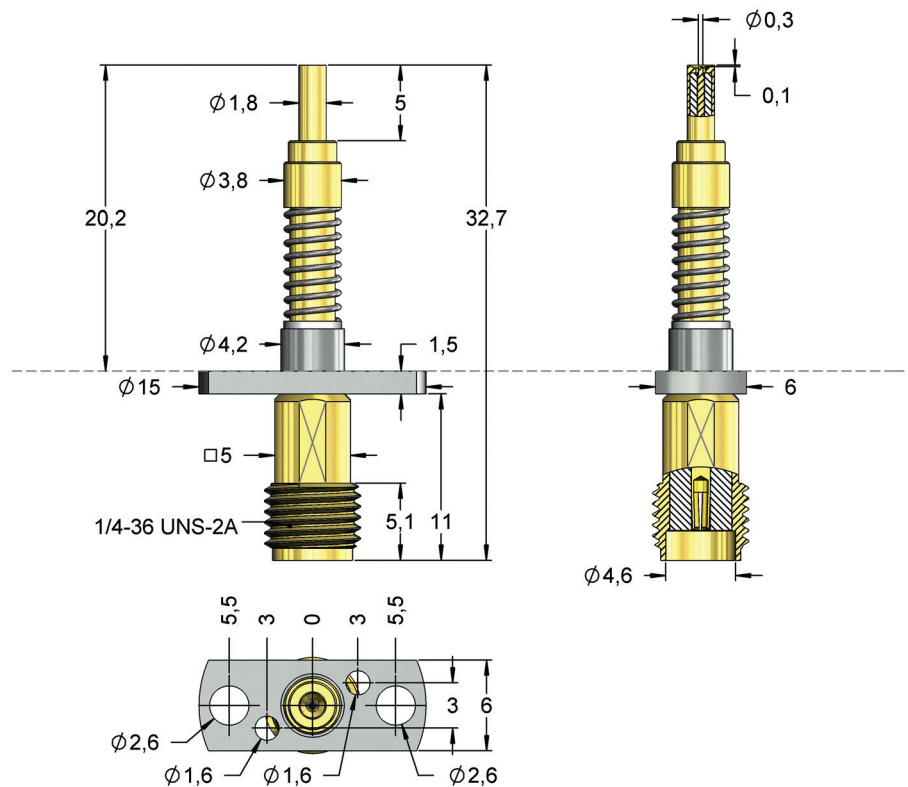
	Nominal	Maximum
Internal Cont.	0,5	0,8
Circular Cont.	2,0	3,0
Thread		1/4"
Wrench Size		5,0

## Materials and Plating

Internal Cont.	BeCu, gold plated
Circular Cont.	Brass, gold plated
Barrel	Brass, gold plated
Spring Internal Cont.	Music Wire, gold plated
Spring Circular Cont.	Stainless steel, unplated

## Accessories

Connection element up to 6 GHz	H66AE1
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The probe can be mounted using the flange.  
Cable connection with standard connector SMA-Male.

## RADIO FREQUENCY PERFORMANCE

<b>Typical insertion loss</b>	<b>DC up to 3 GHz</b>	<b>3 GHz up to 6 GHz</b>
Maximum	0,4 dB	0,6 dB
<b>Typical return loss</b>	<b>DC up to 3 GHz</b>	<b>3 GHz up to 6 GHz</b>
Minimum	18 dB	15 dB

This table shows the reference values in the middle and at the end of the recommended frequency.

Order Code	Description	Sensepin	Tip Style	Ø A	Ø B	C	H	L	Version
HF66-0003	HF66-0003 KSC 6 F SMA		16	0,30	1,80	-0,10	21,70	32,70	-



## CONNECTION CABLES

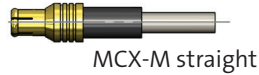
### for Types HF860/HF66

#### Connection Cables for HF860

**Connection element with pre-assembled coaxial cable RG 316.**  
Impedance: 50 Ohm  
Cutoff frequency: recommended up to **3 GHz**

**Connector with pre-assembled coaxial cable Multiflex 86.**  
Impedance: 50 Ohm  
Cutoff frequency: recommended up to **10 GHz**

H86oAE1



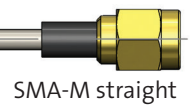
Coax cable 3GHz 700 mm

unassembled

H86oAE3



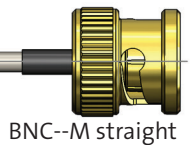
Coax cable 3GHz 700 mm



H86oAE4



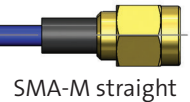
Coax cable 3GHz 700 mm



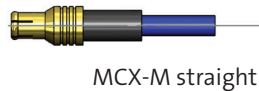
H86oAE2



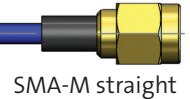
Coax cable 10GHz 700 mm



H86oAE5



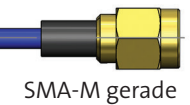
Coax cable 10GHz 1500 mm



H86oAE6



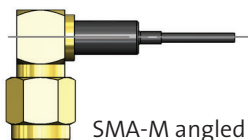
Coax cable 10GHz 800 mm



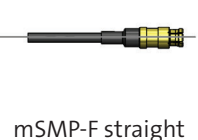
#### Connection Cables for HF66

**Connector with pre-assembled highly flexible coaxial cable.**  
Impedance: 50 Ohm  
Cutoff frequency: recommended up to **6 GHz**

H66AE1



Coax cable 6GHz 700 mm



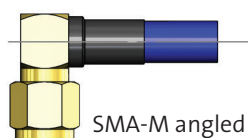
H66AE2



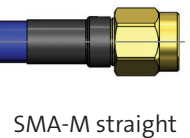
Coax cable 6GHz 700 mm



H66AE3



Coax cable 6GHz 300 mm





# Mounting of the new RF series

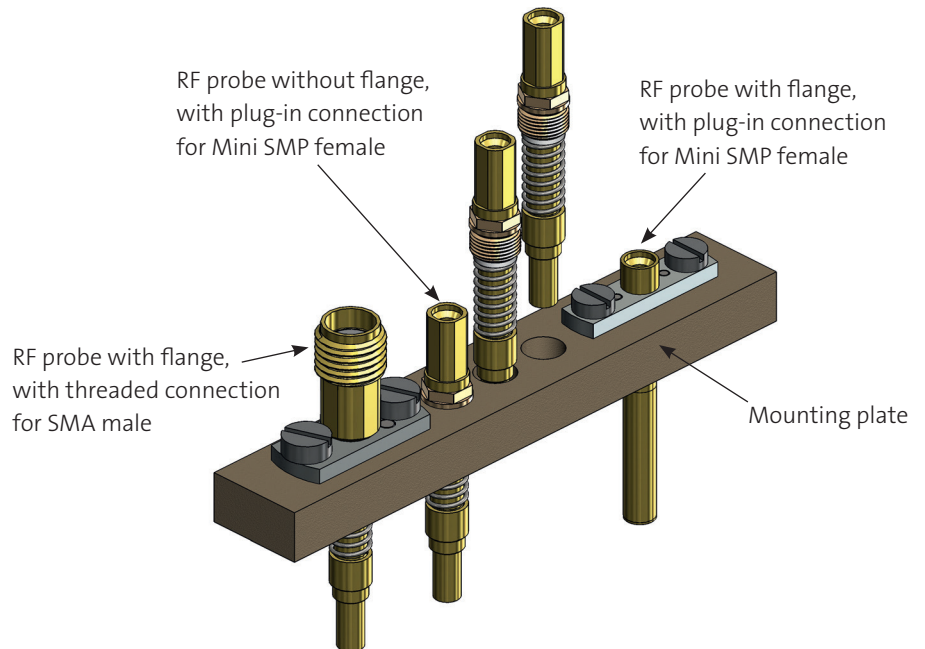
## Mounting Options

For the new RF probe series HF66 and HF05 different mounting options are possible.

Some probes can be threaded directly into the mounting plate.

Some versions have a flange that is screwed to the mounting plate, this version allows a simple adjusting and contacting of the DUT. The drill hole for mounting needs to have a sufficient diameter to allow a movement of the probe.

## Mounting example 1



## Mounting with Flange

For mounting RF probes with flange drill holes for the centering pins, threaded holes for the fixing screws as well as guiding holes for the probe are needed. These need to correspond with the pattern of the flange.

At first, the RF probe is inserted into the guiding hole and brought into the correct position with the alignment pins.

Afterwards the RF probe can be fixed with the screws.

The last step is the connection of the probe with a suitable connection cable. We recommend coaxial cables with low attenuation and low stiffness, because the cables move with the end of the probe when the probe is compressed and they need to allow a certain movement of the probes.

## Mounting example 2

