

**HF66-0002 JSC 6 S M-SMP**

**Contacting  
JSC-Male**

**NEW**

|                           |               |
|---------------------------|---------------|
| <b>Centers (mm/mil)</b>   | 4,50/ 177     |
| <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 ±20%)**

|                | <b>Preload</b> | <b>Nominal</b> |
|----------------|----------------|----------------|
| Total          | -              | 535            |
| Internal Cont. | 95             | 120            |
| Circular Cont. | 280            | 415            |

**Travel (mm)**

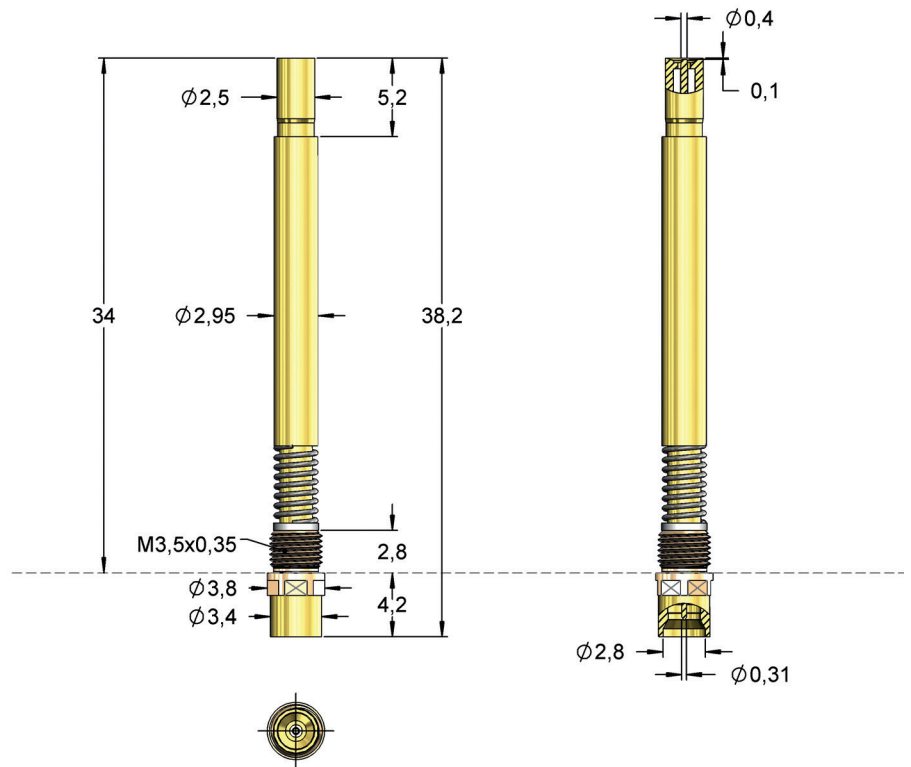
|                | <b>Nominal</b> | <b>Maximum</b> |
|----------------|----------------|----------------|
| Internal Cont. | 0,5            | 0,8            |
| Circular Cont. | 1,4            | 2,2            |
| Thread         |                | M3,5x0,35      |
| Wrench Size    |                | 3,5            |

**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 |

**Drill Size (mm)**

|        |           |
|--------|-----------|
| Thread | M3,5x0,35 |
|--------|-----------|



Cable connection with standard connector Mini SMP female.

**RADIO FREQUENCY PERFORMANCE**

| <b>Typical insertion loss</b> | <b>DC up to 3 GHz</b> | <b>3 GHz up to 6 GHz</b> |
|-------------------------------|-----------------------|--------------------------|
| Maximum                       | 0,5 dB                | 0,7 dB                   |
| <b>Typical return loss</b>    | <b>DC up to 3 GHz</b> | <b>3 GHz up to 6 GHz</b> |
| Minimum                       | 18 dB                 | 13 dB                    |

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

| Order Code | Description             | Sensepin | Tip Style | $\phi A$ | $\phi B$ | C     | H     | L     | Version |
|------------|-------------------------|----------|-----------|----------|----------|-------|-------|-------|---------|
| HF66-0002  | HF66-0002 JSC 6 S M-SMP |          | 16        | 0,40     | 2,50     | -0,10 | 34,00 | 38,20 | -       |


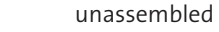



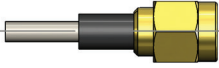
# CONNECTION CABLES


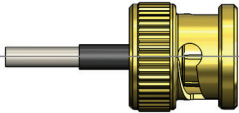
## for Types HF860/HF66

### Connection Cables for HF860


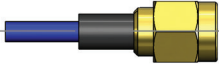
**Connection element with pre-assembled coaxial cable RG 316.**  
Impedance: 50 Ohm  
Cutoff frequency: recommended up to **3 GHz**


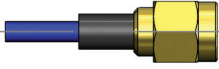
**H86oAE1**  Coax cable 3GHz 700 mm  **unassembled**  
MCX-M straight


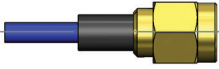
**H86oAE3**  Coax cable 3GHz 700 mm  **SMA-M straight**  
MCX-M straight

**H86oAE4**  Coax cable 3GHz 700 mm  **BNC--M straight**  
MCX-M straight

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

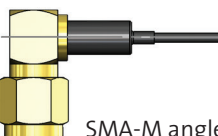

**H86oAE2**  Coax cable 10GHz 700 mm  **SMA-M straight**  
MCX-M straight



**H86oAE5**  Coax cable 10GHz 1500 mm  **SMA-M straight**  
MCX-M straight

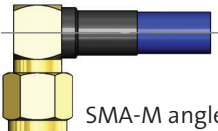

**H86oAE6**  Coax cable 10GHz 800 mm  **SMA-M grade**  
MCX-M angled

### 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  **mSMP-F straight**  
SMA-M angled

**H66AE2**  Coax cable 6GHz 700 mm  **mSMP-F straight**  
SMA-M straight

**H66AE3**  Coax cable 6GHz 300 mm  **SMA-M straight**  
SMA-M angled



# Mounting of the new RF series

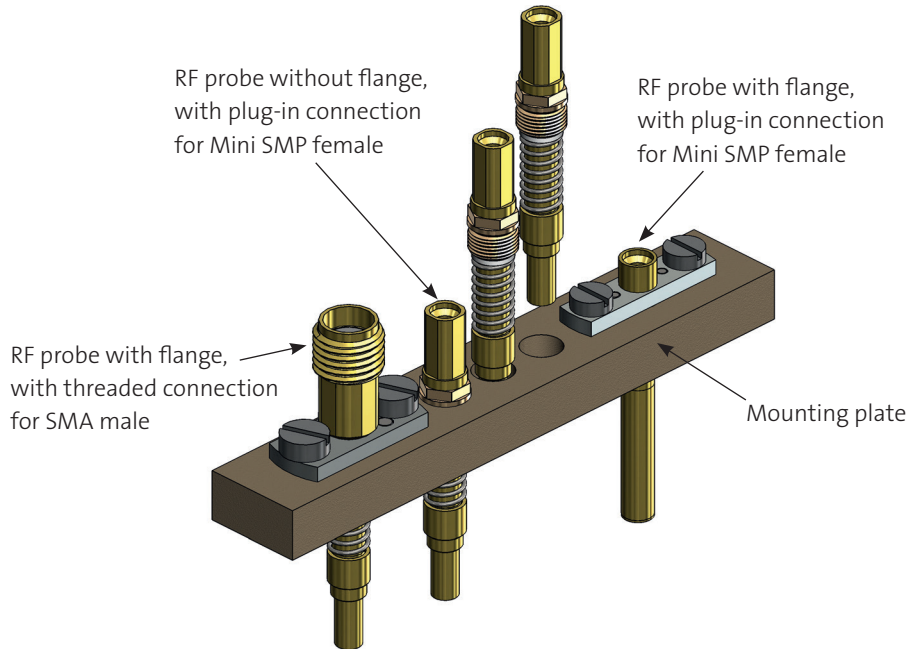
## Mounting Options

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

