

## SHV - COAXIAL WITHIN SERIES ADAPTERS 50Ω / 300MHz

### FEATURES

- SHV interface standard IEC 60498 / MIL-STD-348A/314
- Operating temperature -65°C to 165°C
- Wide range of different configurations
- Effective and reliable interconnection solutions
- RoHS compliant

### DESCRIPTION

SHV (Safe High Voltage – Nuclear Instrumentation Module Standard) reverse polarity, coaxial high voltage connector adapters.

The within-series adapters **31\_SHV-50-0-1/133\_N** and **34\_SHV-50-0-1/133\_N** have SHV receptacles on both sides. The former can be used for a continuous extension of a high voltage cable, the latter features bulkhead panel mounting. Both types are RoHS compliant and can operate in a wide range of temperatures.

The outer ground connection is maintained during unintended mating/unmating. The center contacts are recessed to prevent shock hazard when the connectors are mated. For personal safety the connectors must not be mated or unmated when energized!

Remark: SHV connectors are not intermateable with BNC or MHV connectors.

### SPECIFICATIONS

Operating Voltage:	max. 5000V <sub>DC</sub>
Test Voltage:	max. 10000V <sub>DC</sub>
Impedance:	50Ω
Frequency:	DC to 300MHz
Mating cycles:	min. 500
Operating temperature:	-65 to +165°C
Weight <b>31_SHV 50 0 1/133_N</b>	18.4g
<b>34_SHV 50 0 1/133_N</b>	26.1g



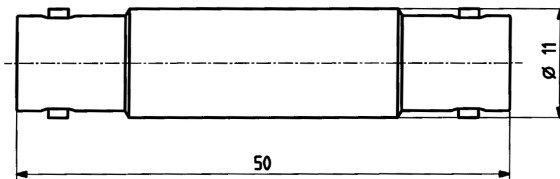
### Material and plating

SHV Straight Inline Adapter (receptacle / receptacle)		31_SHV-50-0-1/133_N
Adapter part	Material	Plating
Center contact	Brass	Gold over nickel
Outer contact	Brass	SUCOPLATE (R)
Body	Brass	SUCOPLATE (R)
Dielectric	PFA / PTFE	

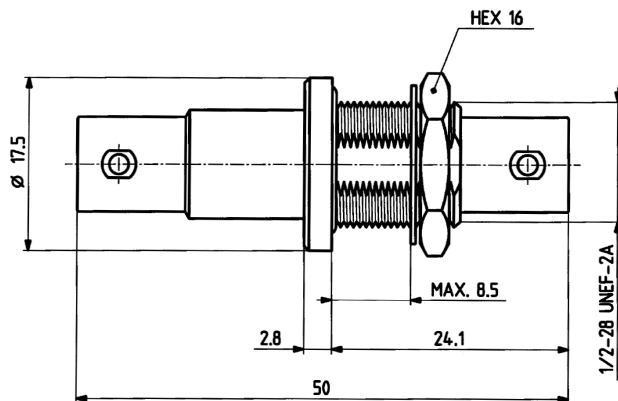
SHV Straight Inline Bulkhead Adapter (receptacle / receptacle)		34_SHV-50-0-1/133_N
Adapter part	Material	Plating
Center contact	Brass	Gold over nickel
Outer contact	Brass	SUCOPLATE (R)
Body	Brass	SUCOPLATE (R)
Dielectric	PFA / PTFE	
Gasket	VMQ (silicone rubber)	
Fastening nut	Brass	SUCOPLATE (R)
Washer	Bronze	SUCOPLATE (R)

## ■ DIMENSIONS

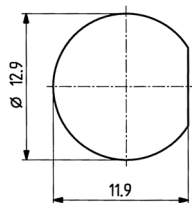
- STRAIGHT INLINE ADAPTER 31\_SHV-50-0-1/133\_N



- STRAIGHT INLINE BULKHEAD ADAPTER 34\_SHV-50-0-1/133\_N



## ■ PANEL CUT-OUT



- All dimensions are in mm; drawings not to scale.
- All values and dimensions without given tolerances are nominal.

## ■ ORDERING INFORMATION

SHV Straight Inline Adapter (receptacle / receptacle):

**31\_SHV-50-0-1/133\_N**

SHV Straight Inline Bulkhead Adapter (receptacle / receptacle):

**34\_SHV-50-0-1/133\_N**

### Disclaimer

The information given in this data sheet is technical data, not assured product characteristics. It has been carefully checked and is believed to be accurate; however, no responsibility is assumed for inaccuracies. The user has to ensure by adequate tests that the product is suitable for his application regarding safety and technical aspects. hivolt.de GmbH & Co. KG does not assume any liability arising out of the application or use of any product described.

### Safety Advice

Design, installation and inspection of machinery and devices carrying high voltage require accordingly trained and qualified personnel. Appropriate safety rules and directives must be complied with.

Improper handling of high voltage can mean severe injuries or death and may cause serious collateral damage!