

SHV COAXIAL CONNECTOR SERIES

■ FEATURES

- Rated voltage up to 5kV_{DC}
- Coaxial design
- Bayonet coupling
- Completed cable assemblies available
- RoHS compliant

■ APPLICATIONS

- Instrument high voltage connections
- High voltage power supplies / amplifiers
- Medical electronics
- Nuclear instrumentation
- Test and measurement equipment
- High voltage laboratory wiring
- General high voltage testing

■ DESCRIPTION

5kV safe high voltage connectors compatible with coaxial cable groups RG58, RG59 or RG316.

The series includes straight cable plugs as well as rear mount and front mount bulkhead receptacles.

For suitable cable please see our HRG58-20-2, HRG303-40-B-2, HRG316-10-B-2 and HSL-10S-0.5-A-2 types.

For connectors with crimp termination a suitable crimping tool is available on request.

All HC55 connectors are RoHS compliant.

The connectors must never be mated or unmated when energized.

Please see the HC51 or HC52 series for 10kV_{DC} or 20kV_{DC} models, respectively.

HC55 series connectors are not intermateable with HC51 or HC52 series connectors.

■ SPECIFICATIONS

Operating voltage (at sea level):	up to 5kV _{DC} / 3.5kV _{RMS} @50Hz
Test voltage:	up to 10kV _{DC} / 5kV _{RMS}
Impedance:	50Ω or non constant
Insulation resistance:	> 5000MΩ
Center contact resistance:	≤ 2mΩ
Outer contact resistance:	≤ 1.5mΩ
Current rating:	max. 10A
Operating temperature:	-65 to +165°C
Mating cycles:	≥ 500

Ratings listed above apply to clean mated connector pairs in standard atmospheric conditions. When connectors are used in an adverse environment (such as high temperature, humidity, pollution content, extreme mechanical exposure, etc.) the connector should be derated. The fitness for use must be proved by extended operational tests.



■ MODEL OVERVIEW - PLUGS

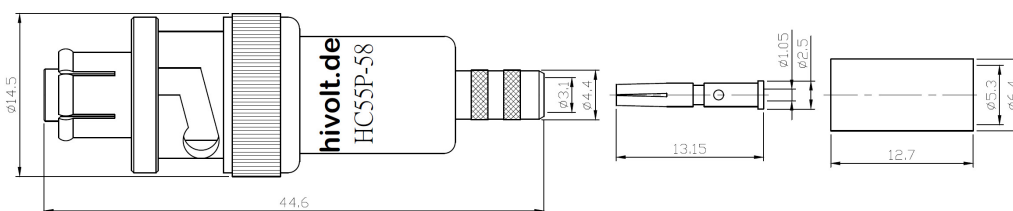
Part Number Description	Termination Center Contact	Contact Pin Material/ Plating	Insulator Material	Body Material/ Plating	Gasket Material	Weight	Cable Group
HC55P-58 Straight Cable Plug 	Solder or Crimp	Phosphor Bronze/ Au over Ni over Cu	PTFE (Teflon®)	Brass/ Sn-Zn-Cu alloy over Cu	Silicone	14.5g	RG58
HC55P-59 Straight Cable Plug 	Solder or Crimp	Phosphor Bronze/ Au over Ni over Cu	PTFE (Teflon®)	Brass/ Sn-Zn-Cu alloy over Cu	Silicone	15.2g	RG59
HC55P-316 Straight Cable Plug 	Solder	Phosphor Bronze/ Au over Ni over Cu	PTFE (Teflon®)	Brass/ Sn-Zn-Cu alloy over Cu	Silicone	14.5g	RG316

MODEL OVERVIEW - RECEPTACLES

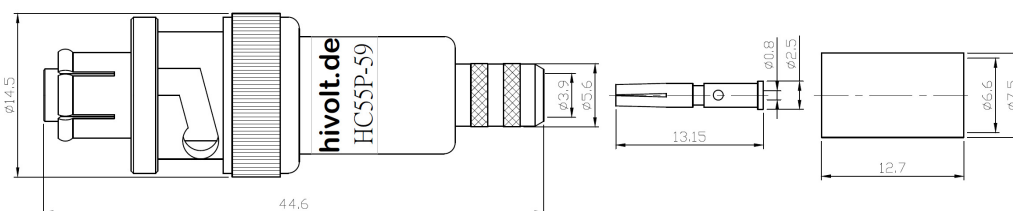
Part Number Description	Termination Center Contact	Contact Pin Material/ Plating	Insulator Material	Body Material/ Plating	Gasket Material	Weight	Cable Group
HC55RB-59 Rear Mount Bulkhead Receptacle 	Solder or Crimp	Brass/ Au over Ni over Cu	PTFE (Teflon®)	Brass/ Sn-Zn-Cu Alloy over Cu	Silicone	26g	RG59
HC55RB-A Front Mount Bulkhead Receptacle 	Solder	Brass/ Au over Ni-P-alloy over Cu	PTFE (Teflon®)	Brass/ Sn-Zn-Cu Alloy over Cu	Silicone		
HC55RB-C Front Mount Bulkhead Receptacle with 4-hole flange	Solder	Brass/ Au over Ni-P-alloy over Cu	PTFE (Teflon®)	Brass/ Sn-Zn-Cu Alloy over Cu	-		
HC55RB-316-A Front Mount Bulkhead Receptacle	Crimp	Brass/ Au over Ni-P-alloy over Cu	PTFE (Teflon®)	Brass/ Sn-Zn-Cu Alloy over Cu	Silicone		RG316

DIMENSIONS

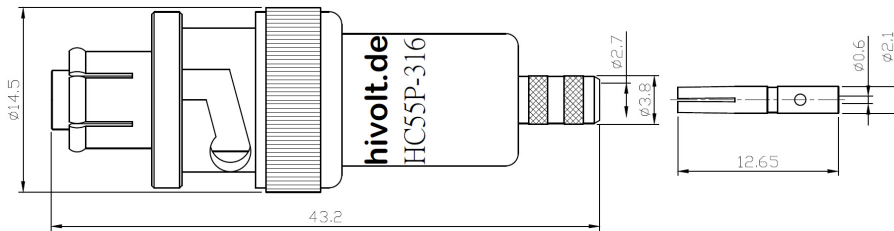
HC55P-58



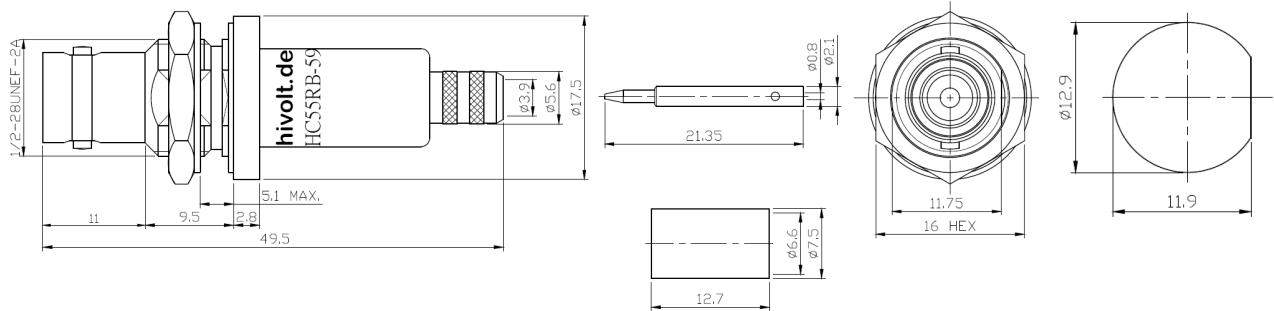
HC55P-59



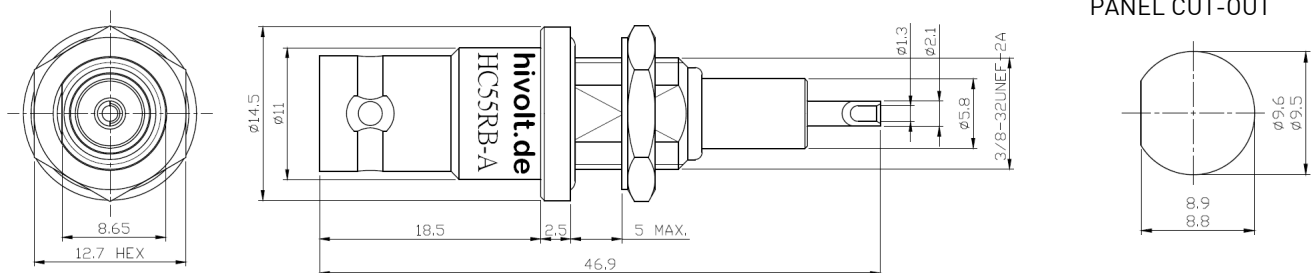
HC55P-316



HC55RB-59



HC55RB-A



HC55RB-C

