SB1105

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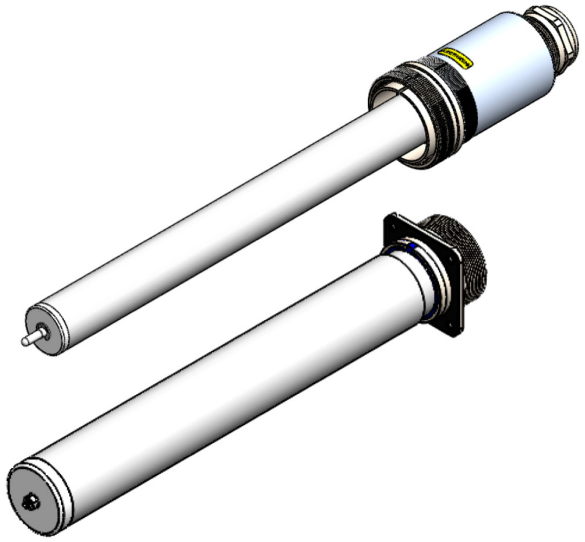
SINGLE POLE HIGH VOLTAGE CONNECTORS
100kV / 80A

FEATURES

- 100kV$_{DC}$ / 80A
- Oil-tight receptacle
- UL94 V-0 flammability rating
- Extended temperature range
- Central attachment
- Made in Germany
- Completed cable assemblies available
- RoHS compliant (exemption 6c)



APPLICATIONS

- Instrument high voltage connections
- Test stations

DESCRIPTION

The single pole high voltage connector pair S1105-9-T/ S1105-9-T-M32 (cable mounting plug) and B1105-9-O-T (instrument mounting receptacle) is rated for operating voltages of up to 100kV$_{DC}$.
The connector is intended for use with shielded/screened high voltage cable. The silver-plated center contact, the robust nickel-plated housing and the screw interlock ensure a safe and reliable connection. The cable is fixed to the connector housing by means of a metric cable gland. The cylindrical wedging results in a strong mechanical connection and an excellent shield connection. The receptacle is oil-tight.

The connectors are RoHS compliant according to 2011/65/EU / 2015/863 / Exemption 6c.

The insulation material is PTFE, which has an extended operating temperature range.

Model		Operating Voltage	Test Voltage	Rated Current	Cable Diameter		Cable Gland
Plug	Receptacle				max. inner	outer	
S1105-9-T-M32	**B1105-9-O-T**	100kV$_{DC}$	150kV$_{DC}$	80A	25mm	18-21mm 21-25mm	**1080.32.210** **1080.32.250**
S1105-9-T						18-25mm	present

S1105-9-T-M32 must be equipped with specific cable glands for the individual 18-21mm and 21-25mm diameter ranges, ensuring a highly reliable cable shield connection. See page 3.
S1105-9-T is equipped with an 18-25mm wide-range cable gland.

SPECIFICATIONS

Termination center contact:	soldering
Shield connection:	cable gland / clamped
Contact surface:	Ag
Case material:	CuZn (brass), nickel plated
Insulation material:	PTFE (Teflon®), white
Operating temperature:	-40°C to +100°C
Contact diameter:	5mm
Wire gauge (plugs):	max. 10mm² / AWG8; contact bore: ø4mm
Mating cycles:	> 100 000
Suitable cable type:	shielded high voltage cable, e.g.:
	HSC-120-1E1SAC-2 (120kV$_{DC}$), AWG8, EPR / EVA, 20.6mm
	2062SVJ (100kV$_{DC}$), AWG8, Silicone / PVC, 20.8mm
	2134 (200kV$_{DC}$), AWG12, LDHMW PE / PVC, 21.6mm

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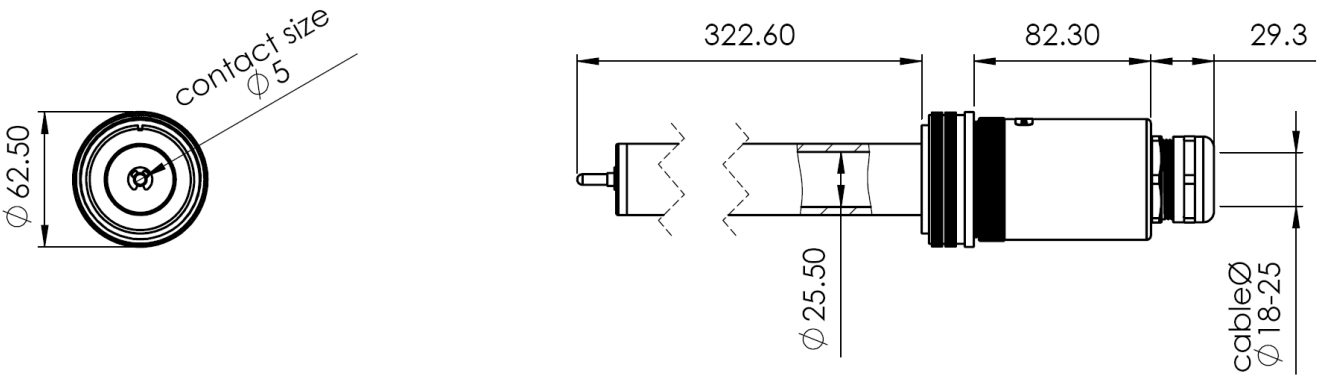
Bespoke ready-to-use high voltage cable assemblies are available on request. The cable assemblies are fully tested. Please contact hivolt.de for details.

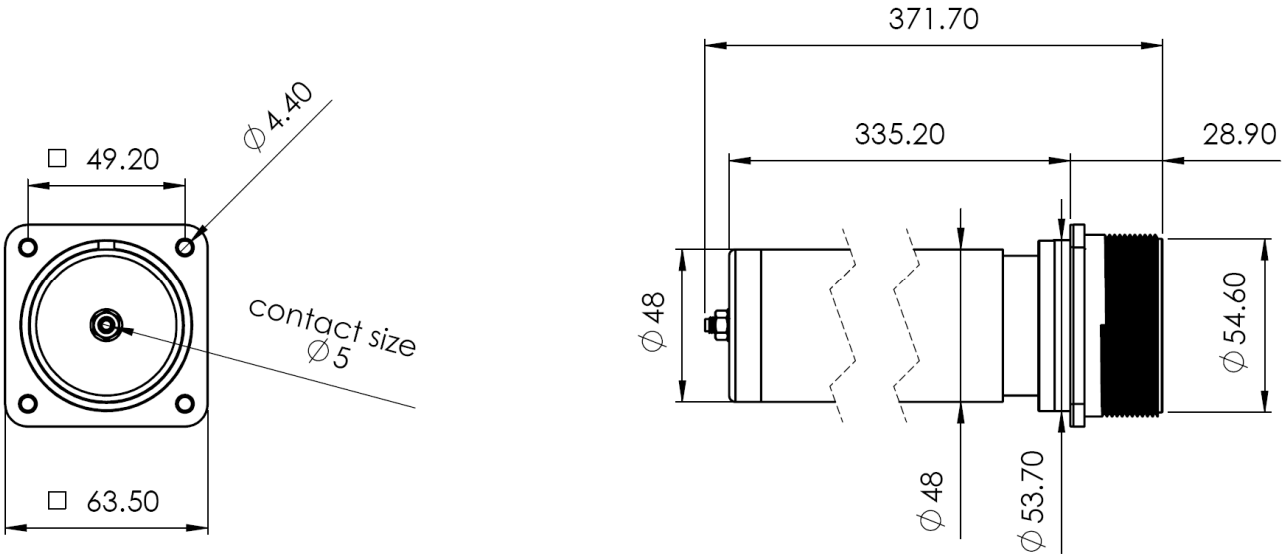
Ratings listed above apply to clean connector pairs in standard atmospheric conditions. When connectors are used in an adverse environment (such as high temperature, humidity, pollution content, extreme mechanical exposure, etc.) the connector should be derated. The fitness for use must be verified by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

▪ DIMENSIONS S1105-9-T, S1105-9-T-M32

S1105-9-T-M32 has no pre-mounted cable gland

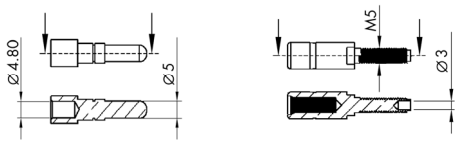


▪ DIMENSIONS B1105-9-O-T



▪ DIMENSIONS CONTACTS

5mm contacts (male / female)



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

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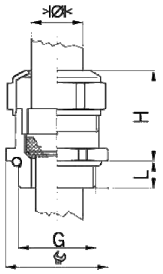
CABLE GLANDS

Part Number	Clamping Range	Body	Contact Sleeve	Wrench Size	Dimension H	Thread-length L	Seal	O-Ring
1080.32.210	18-21mm	CuZn / Ni	CuZn / Ni	36mm	32mm	8mm	TPE	NBR
1080.32.250	21-25mm	CuZn / Ni	CuZn / Ni	36mm	32mm	8mm	TPE	NBR



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