

HIGH-VOLTAGE IMPULSE RESISTOR 969 HVI

This ceramic-based high-voltage resistor perfectly meets all requirements for low-induction, stable and robust passive components. The body carrier is a ceramic tube.

This product is available in a wide variety of configurations. You specify the desired power, dimensions, and resistance value, and we will design the appropriate resistor element based on your specifications.

Advantages

- Extremely high pulse resistance
- Good long-term stability
- Very low inductance
- Excellent mechanical stability

Application Examples

- Charge and discharge resistors (e.g. for capacitors)
- Protective resistor for rectifiers
- Damping resistor for X-ray tubes
- Cable measurement technology



Electrical Data	
Resistance Value	Freely selectable, see table
Tolerances	≥ ± 10% Further values on request
Temperature Coefficient	±100 ppm/°C Further values on request
Insulation Resistance	>10,000 MΩ (500 V, 25 °C, 75 % RH)
Dielectric Strength of the Insulation	>1,000 VDC (25 °C, 75 % RH)
Overload Capacity	1.5 x P _{nom} (W), 5 sec
Long-term Stability	1,000 h at 125 °C and P _{nom} , ΔR ±0.2 %

Mechanical Data	
Dimensions	See table
Diameter of the resistor	Ø 13 / 30 mm

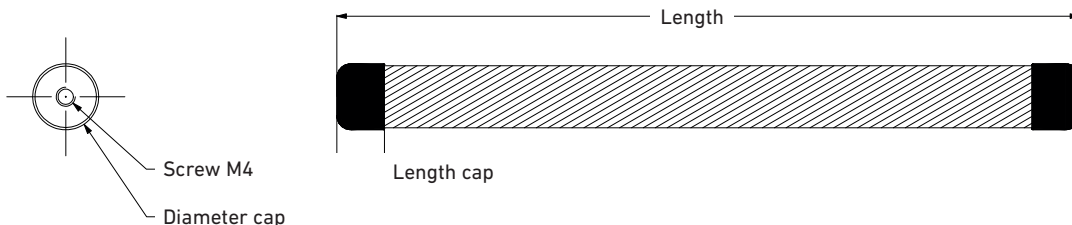
Environmental Data	
Operating Temperature	-50 °C up to +175 °C, max. 220 °C
Storage Temperature	0 °C up to +85 °C at 80 % RH max. for min. 12 months
Thermal Shock	MIL-Std-202, Method 107, Cond C, ΔR 0.4 % max.
Moisture Resistance	MIL-Std-202, Method 106, Cond C, ΔR 0.25 % max.

Produkt Overview										
Series and sizes	Power at 40° C	Operating Voltage DC in Air	Operating Voltage DC in Oil	Resistance Values		Single Pulse	Length	Diameter	Screw caps	Approx. Weight
	W	kV	kV	Min. Ω	Max. Ω	J	mm / inches	mm / inches		g
HVI 969.11	11	24	32	50	500k	171	81 / 3.2	13.0 / 0.51	M4	37
HVI 969.19	19	40	60	50	500k	267	126 / 5.0	13.0 / 0.51	M4	70
HVI 969.23	23	48	72	50	500k	330	156 / 6.1	13.0 / 0.51	M4	85
HVI 969.54	54	48	72	50	500k	678	160 / 6.3	30.0 / 1.2	M8	270
HVI 969.71	71	64	96	50	500k	886	209 / 8.2	30.0 / 1.2	M8	356
HVI 969.105	105	96	148	50	500k	1310	309 / 12.2	30.0 / 1.2	M8	506

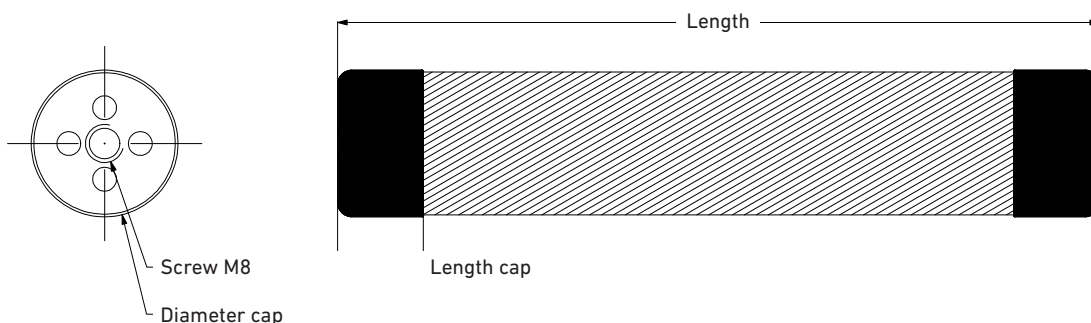
Mechanical Tolerance length max. ±3 mm

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Connection: Screw cap M4



Connection: Screw cap M8



Electrical connection	
	Brass screw cap M4 / M8
	Other connections and lengths on request

Protective Coatings							
	Order No.	Usable in air	Usable in Insulating oil	Usable in Insulating gas SF6	Silicone potting	Epoxy potting	Temperature resistance
Polymer Coating	B	•		•	•	•	175 °C
Polymer Coating	D		•				175 °C
Glass	G	•	•	•	•		250 °C
Silicone Cement*	U	•		•	•	•	250 °C
Without Protective Coating	0	•	•	•	•		

*The color of the silicone cement may vary, but it does not affect the functionality of the resistor.

Order Information									
For an order, we need the following information:									
Series	Size	Connection left	Connection right	Protective Coating 1. layer	Protective Coating 2. layer	Resistance Value	Tolerance	Temperature Coefficient	Product Labeling
HVI	969.11	C	C	G	B	Please specify	±10 % (K)	±100 ppm/°C (S)	P Standard
	969.19	0	0	0	D				0
	969.23	X	X		U				X
	969.54				0				
	969.71				X				
	969.105								

C = Screw cap X = Customer specific 0 = Without

Metallux cannot picture the customer's operating and application conditions and the customer's existing environmental influences. We therefore recommend that you carry out your own investigations into the planned use of the products under the actual operating conditions.

We continuously improve our products and also update our data sheets regularly. In this respect, there may be changes in the specification. These changes will apply to orders received by us from the time of the update, unless otherwise agreed.

Our products comply with Directive 2011/65/EU (RoHS) including Directive 2015/863/EU and Regulation (EC) No. 1907/2006 (REACH).