

# HIGH VOLTAGE PULSE RESISTORS HVI 967 / 968 / 969



The generously-dimensioned design of the high voltage pulse resistors promotes energy distribution, providing an ideal solution for pulse applications. Whether for single pulses or pulse sequences – for all applications in high voltage engineering, high voltage protection systems and high voltage network components HVI pulse resistors are the right choice.



- Flat designs
- High pulse stability
- Very low inductance

Technical drawing and specifications:  
refer to type series HVR 967, HVR 968 and HVR 969.



## GENERAL TECHNICAL SPECIFICATIONS

<b>Tolerance</b>	from 5 %*
<b>Temperature coefficient</b>	100 ppm/°C*
<b>Insulation resistance</b>	>10,000 MΩ (500 V 25 °C 75 % relative humidity)
<b>Dielectric strength of the insulation</b>	>1,000 V (25 °C 75 % relative humidity) ΔR/R 0.25 % max.
<b>Thermal shock</b>	ΔR/R 0.25 % max.
<b>Overload capacity</b>	1.5 x P[nom], 5s (not 1.5 x V[max])
<b>Moisture resistance</b>	ΔR/R 0.25 % max.
<b>Long-term stability</b>	ΔR/R 0.25 % max.
<b>Temperature range (operation / storage)</b>	–55 °C to +175 °C (–55 °C to +100 °C)
<b>Cover</b>	Epoxy-based varnishes (glass, silicone-based encasing)
<b>Connection type</b>	Tinned copper wire Cu vz Ø 0.8 mm, axial or radial; on request pin 10 mm, brass caps with inner thread M4 / M8

Depending on ambient conditions, the characteristics of resistors can change.  
We recommend a suitability test under operational conditions.

\* Other values upon request.

TYPE SELECTION HVI 967				
TYPES	TOLERANCE			
	TCR (ppm/°C)	5 %	10 %	20 %
967.5.13 1 W 5 kV (air) 7.5 kV (oil)	100	50 R – 500 k	50 R – 500 k	50 R – 500 k
967.15.51 4.5 W 30 kV (air) 45 kV (oil)	100	50 R – 500 k	50 R – 500 k	50 R – 500 k
967.28.38 7 W 10 kV (air) 15 kV (oil)	100	50 R – 500 k	50 R – 500 k	50 R – 500 k
TYPE SELECTION HVID 967 – PRINTED ON BOTH SIDES				
967.6.9 0.5 W 3 kV (air) 5 kV (oil)	100	50 R – 500 K	50 R – 500 K	50 R – 500 K
	Dimension: 9.0 mm x 5.5 mm			
967.6.11 0.5 W 5 kV (air) 7.5 kV (oil)	100	50 R – 500 K	50 R – 500 K	50 R – 500 K
	Dimension: 11.0 mm x 5.5 mm			
967.6.13 0.8 W 5 kV (air) 7.5 kV (oil)	100	50 R – 500 K	50 R – 500 K	50 R – 500 K
	Dimension: 13.0 mm x 5.5 mm			
967.8.21 1.0 W 10 kV (air) 15 kV (oil)	100	50 R – 500 K	50 R – 500 K	50 R – 500 K
	Dimension: 21.0 mm x 8.0 mm			
967.11.21 1.5 W 10 kV 15 kV (oil)	100	50 R – 500 K	50 R – 500 K	50 R – 500 K
	Dimension: 21.0 mm x 10.5 mm			
967.11.26 2.0 W 10 kV 15 kV (oil)	100	50 R – 500 K	50 R – 500 K	50 R – 500 K
	Dimension: 24.0 mm x 10.5 mm			
Other resistance values and temperature coefficients upon request.				

TYPE SELECTION HVI 968				
TYPES	TOLERANCE			
	TCR (ppm/°C)	5 %	10 %	20 %
968.3 5 W 12 kV (air) 18 kV (oil)	100	50 R – 500 K	50 R – 500 K	50 R – 500 K
968.5 7.5 W 18 kV (air) 27 kV (oil)	100	80 R – 500 K	80 R – 500 K	80 R – 500 K
968.10 12 W 36 kV (air) 54 kV (oil)	100	100 R – 500 K	100 R – 500 K	100 R – 500 K
TYPE SELECTION HVI 969				
969.11 11 W 24 kV (air) 32 kV (oil)	25 50 100 200	50 R – 500 K	50 R – 500 K	50 R – 500 K
969.54 54 W 48 kV (air) 72 kV (oil)	25 50 100 200	50 R – 500 K	50 R – 500 K	50 R – 500 K
969.71 71 W 64 kV (air) 96 kV (oil)	25 50 100 200	50 R – 500 K	50 R – 500 K	50 R – 500 K
969.105 105 W 96 kV (air) 144 kV (oil)	25 50 100 200	50 R – 500 K	50 R – 500 K	50 R – 500 K
Other resistance values and temperature coefficients upon request, cover with glass: Tolerance ±20%				

Other resistance values and temperature coefficients upon request.

SAMPLE ORDER					
HVI 967.5.13 Type	A Connections	B Cover	150R Resistance value	10 % Tolerance	TC25 Temperature coefficient
	A = axial	G = glass	R = Ω	5.0 %	50 ppm/°C
	R = radial	B = operation in air	K = KΩ	10.0 %	100 ppm/°C
		D = operation in oil	M = MΩ	20.0 %	200 ppm/°C
		U = encasing			

HVI 968.5 Type	C Connections	B Cover	100M Resistance value	1 % Tolerance	TC25 Temperature coefficient
	A = axial	G = glass	R = Ω	5.0 %	50 ppm/°C
	C = caps	B = operation in air	K = KΩ	10.0 %	100 ppm/°C
		D = operation in oil	M = MΩ	20.0 %	200 ppm/°C
		U = encasing			

HVI 969.23 Type	B Cover	100M Resistance value	1 % Tolerance	TC25 Temperature coefficient
	G = glass	R = Ω	5.0 %	50 ppm/°C
	B = operation in air	K = KΩ	10.0 %	100 ppm/°C
	D = operation in oil	M = MΩ	20.0 %	200 ppm/°C
	U = encasing			