

# HIGH VOLTAGE PRECISION RESISTORS HPR 969



This series of high voltage precision resistors was designed to simultaneously handle high voltages while providing excellent stability. The reliability and precision in recording measurement values are just two of the outstanding features of this type series. At the same time, the resistors also offer high loading capacity, making them particularly well-suited for applications in energy transmission, electrostatics and as protective resistors in electric drives.

- High loading capacity
- Good stability
- Very low inductance



## SAMPLE ORDERS

HPR 969.54 Type	B Cover	100 M Resistance value	0.1 % tolerance	TC25 Temperature coefficient
	G = glass	R = $\Omega$	0.1 %	15 ppm/ $^{\circ}$ C
	B = operation in air	k = k $\Omega$	0.25 %	25 ppm/ $^{\circ}$ C
	D = operation in oil	M = M $\Omega$	0.5 %	50 ppm/ $^{\circ}$ C
	E = epoxy	G = G $\Omega$	1.0 %	100 ppm/ $^{\circ}$ C
	U = encasing		2.0 %	200 ppm/ $^{\circ}$ C
			5.0 %	
			10.0 %	
			20.0 %	

## GENERAL TECHNICAL SPECIFICATIONS

<b>Tolerance</b>	0.1 % to 20 %*
<b>Temperature coefficient</b>	15 ppm/ $^{\circ}$ C to 200 ppm/ $^{\circ}$ C*
<b>Voltage coefficient</b>	0.08 ppm/V to 0.75 ppm/V (depending on size and layout)

Product drawing and dimensions, refer to pages 8/9. General technical specifications, refer also to type series HVR 969.

\* Other values upon request.

## TYPE SELECTION

TYPES	TCR (ppm/ $^{\circ}$ C)	0.1 %	0.25 %	0.50 %	1 %	2 %	5 %	10 %	20 %
<b>969.11</b> <b>11 W</b> <b>24 kV (air)</b> <b>32 kV (oil)</b>	15/25 50 100 200	50 k – 500 M 500 R – 1 G 500 R – 1 G 500 R – 5 G	50 k – 500 M 500 R – 1 G 500 R – 1 G 500 R – 5 G	50 k – 500 M 500 R – 1 G 500 R – 1 G 500 R – 5 G	50 k – 500 M 500 R – 1 G 500 R – 1 G 500 R – 5 G	50 k – 500 M 500 R – 1 G 500 R – 1 G 500 R – 5 G	50 k – 500 M 500 R – 1 G 500 R – 1 G 500 R – 5 G	50 k – 500 M 500 R – 1 G 500 R – 1 G 500 R – 5 G	50 k – 500 M 500 R – 1 G 500 R – 1 G 500 R – 5 G
<b>969.23</b> <b>23 W</b> <b>48 kV (air)</b> <b>72 kV (oil)</b>	15/25 50 100 200	100 k – 1 G 700 R – 1 G 700 R – 1 G 700 R – 10 G	100 k – 1 G 700 R – 1 G 700 R – 1 G 700 R – 10 G	100 k – 1 G 700 R – 1 G 700 R – 1 G 700 R – 10 G	100 k – 1 G 700 R – 1 G 700 R – 1 G 700 R – 10 G	100 k – 1 G 700 R – 1 G 700 R – 1 G 700 R – 10 G	100 k – 1 G 700 R – 1 G 700 R – 1 G 700 R – 10 G	100 k – 1 G 700 R – 1 G 700 R – 1 G 700 R – 10 G	100 k – 1 G 700 R – 1 G 700 R – 1 G 700 R – 10 G
<b>969.54</b> <b>54 W</b> <b>48 kV (air)</b> <b>72 kV (oil)</b>	15/25 50 100 200	100 k – 1 G 2 R – 1 G 2 R – 1 G 2 R – 10 G	100 k – 1 G 2 R – 1 G 2 R – 1 G 2 R – 10 G	100 k – 1 G 2 R – 1 G 2 R – 1 G 2 R – 10 G	100 k – 1 G 2 R – 1 G 2 R – 1 G 2 R – 10 G	100 k – 1 G 2 R – 1 G 2 R – 1 G 2 R – 10 G	100 k – 1 G 2 R – 1 G 2 R – 1 G 2 R – 10 G	100 k – 1 G 2 R – 1 G 2 R – 1 G 2 R – 10 G	100 k – 1 G 2 R – 1 G 2 R – 1 G 2 R – 10 G
<b>969.71</b> <b>71 W</b> <b>64 kV (air)</b> <b>96 kV (oil)</b>	15/25 50 100 200	100 k – 1.5 G 20 R – 1.5 G 20 R – 1.5 G 20 R – 15 G	100 k – 1.5 G 20 R – 1.5 G 20 R – 1.5 G 20 R – 15 G	100 k – 1.5 G 20 R – 1.5 G 20 R – 1.5 G 20 R – 15 G	100 k – 1.5 G 20 R – 1.5 G 20 R – 1.5 G 20 R – 15 G	100 k – 1.5 G 20 R – 1.5 G 20 R – 1.5 G 20 R – 15 G	100 k – 1.5 G 20 R – 1.5 G 20 R – 1.5 G 20 R – 15 G	100 k – 1.5 G 20 R – 1.5 G 20 R – 1.5 G 20 R – 15 G	100 k – 1.5 G 20 R – 1.5 G 20 R – 1.5 G 20 R – 15 G
<b>969.105</b> <b>105 W</b> <b>96 kV (air)</b> <b>148 kV (oil)</b>	15/25 50 100 200	100 k – 2 G 80 R – 2 G 80 R – 2 G 80 R – 25 G	100 k – 2 G 80 R – 2 G 80 R – 2 G 80 R – 25 G	100 k – 2 G 80 R – 2 G 80 R – 2 G 80 R – 25 G	100 k – 2 G 80 R – 2 G 80 R – 2 G 80 R – 25 G	100 k – 2 G 80 R – 2 G 80 R – 2 G 80 R – 25 G	100 k – 2 G 80 R – 2 G 80 R – 2 G 80 R – 25 G	100 k – 2 G 80 R – 2 G 80 R – 2 G 80 R – 25 G	100 k – 2 G 80 R – 2 G 80 R – 2 G 80 R – 25 G

Other resistance values and temperature coefficients upon request