

Broadband High-Voltage Dividers

HVT 10 RCR -
HVT 300 RCR



HVT 40 RCR

**broadband
voltage divider
with capacitive compensation**

The Broadband high-voltage dividers series HVT...RCR are state-of-the-art measuring equipment with excellent high-frequency transmission characteristics. The high-voltage impedance consists of a precise metal film resistor and a high-voltage capacitor with series damping resistor in parallel.

The measuring cable with the termination network is an essential part of the divider. The termination network can be adjusted for an oscilloscope input impedance of 1 M Ω // 10 - 30 pF.

The divider can also be used for high-voltage dc measurement with a digital voltmeter (DVM). Connecting a resistor $R_p = 1.11 \text{ M}\Omega$ in parallel to the input terminals of the DVM means that the load resistance at the divider output will be also 1.0 M Ω .

HVT *** RCR	10	20	40	80	120	160
<i>rated input voltage:</i>						
dc voltage [kV]	11	22	40	80	120	160
ac voltage eff. [kV]	8	15	30	60	90	120
pulse voltage 1.2/50 μ s [kV]	20	40	100	160	200	250
divider ratio (DC) \pm 1%	1000:1	2000:1	2500:1	5000:1	5000:1	5000:1
hv-resistor [M Ω]	20	40	150	270	270	300
hv-capacitor [pF]	75	82	50	75	100	140
rise time [ns]	15	15	15	25	30	35
bandwidth [MHz]	23	23	23	14	12	10
<i>Dimensions:</i>						
socket \varnothing / L*B*H [mm]	80*75*60	80*75*60	180	260	360	360
height [mm]	220	310	360	690	1080	1350
Weight [Kg]	1,5	2,5	5.0	8.5	12	20
cable length [m]	2	2	5	10	10	10

HVT *** RCR	240	300
<i>rated input voltage:</i>		
dc voltage [kV]	240	300
ac voltage eff. [kV]	180	230
pulse voltage 1.2/50µs [kV]	360	480
divider ratio (DC) ± 1%	5000:1	5000:1
hv-resistor [MΩ]	360	460
hv-capacitor [pF]	190	220
rise time [ns]	48	60
bandwidth [MHz]	7,3	5,8
<i>Dimensions:</i>		
socket Ø / L*B*H [mm]	1,2x1,2	1,2x1,2
wheels / lockable	4 / 2	4 / 2
height [mm]	1880	2200
Weight [Kg]	40	50
cable length [m]	20	20

HVT 80 - 160 RCR





HVT 240 - 300 RCR

Option 1: Amplification output signal AC, DC

amplification / attenuation

signal input

signal output

measure output

power supply

customer specific

BNC

BNC

BNC

+/- 15 V

In shielded alu case B x H x T

120x60x40 mm

Mounting holes

4 x

Option 2: Mounting on flange plate

Customer specific

Option 3: DC ratio

Customer specific