

Precision High Voltage Dividers

Type: HVT

Standard Sizes: HVT 20 / 25 / 30 / 40 / 50 / 75 / 100

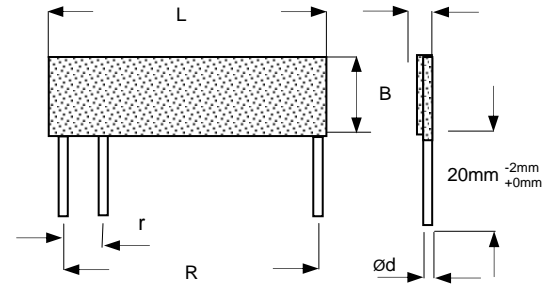
Features:

- Customer specific design, special versions possible
- Radial leads, variable lead spacing by bending
- High precision of ratio (0.25 %)
- Low relative TCR (25 ppm/K)
- High working voltages
- Resistance values up to 1 Tera-Ohm
- Low values of VCR
- Climatic protection by lacquer coating



Dimensions (preference sizes):

| Size | L | B | D | R | r | d |
|---------|--------------|----------|-----|----------------|-----------------|------------|
| HVT 20 | 20 | 6.0 | 1.4 | 17.0 | custom-specific | 0.40 ±0.05 |
| HVT 25 | 25.0 (1") | 9.0 | 1.4 | 22.9 (0.9") | | 0.40 ±0.05 |
| HVT 30 | 30.0 | 6.0 | 1.4 | 27.5 | | 0.40 ±0.05 |
| HVT 40 | 40.0 | 6.0 | 1.4 | 37.8 | | 0.40 ±0.05 |
| HVT 50 | 50.0 | 12.5 | 1.4 | 47.8 | | 0.40 ±0.05 |
| HVT 75 | 75.0 | 9.0 | 1.4 | 72.8 | | 0.40 ±0.05 |
| HVT 100 | 100.0 | 9.0/12.5 | 1.4 | 97.8 | | 0.40 ±0.05 |



L = length, B = width, D = thickness (Tolerance of dimensions: ± 0.5 mm)
 R = standard outer lead spacing (other spacing possible by bending)
 d = wire diameter (in mm), other diameters possible (changes D)
 other custom-specific sizes on request

Packaging:

Bulk in plastic bags or boxes

Minimum quantity: - 30 pieces for existing types/values
 - 100 pieces for new developments

Inquiry / Ordering Data:

Type / Dimensions – Working voltage – Resistance values – Ratio – Outer Lead spacing – Inner Lead spacing - Tolerance absolute – Tolerance ratio – TCR absolute – TCR relative – Stability requirements – Environmental conditions

The standard measuring voltage is 10 V, required different voltages are to indicate explicitly.

Issue 07-2009

Precision High Voltage Dividers

Type: HVT

Standard Sizes: HVT 20 / 25 / 30 / 40 / 50 / 75 / 100

Technical data – depending on size (examples)²⁾:

| Size | HVT 20 | HVT 25 | HVT 30 | HVT 40 | HVT 50 | HVT 75 | HVT 100 |
|--|---------|---------|---------|----------|----------|----------|----------|
| Max. working voltage U (kV) ¹⁾ | 8 | 10 | 8 | 15 | 25 | 36 | 50 |
| Power rating P ₇₀ (W) | 1 | 1 | 1 | 1.2 | 3.0 | 4,5 | 6,0 |
| Lowest value | 1 M | 1 M | 1 M | 5 M | 5 M | 10 M | 20 M |
| Highest value | 100 G | 100 G | 100 G | 100 G | 1 T | 1 T | 1 T |
| Ratio max. | 1:2.000 | 1:3.000 | 1:3.000 | 1:10.000 | 1:15.000 | 1:20.000 | 1:20.000 |

1) Custom specific parts: the maximum working voltage depends on resistance value and ratio

2) Extreme values are not realizable together in all cases

General technical data²⁾:

| | |
|--------------------------------------|-------------------------------|
| Temperature range | -55°C ... +125°C |
| Temperature coefficient abs. | ± 50 ... ± 500 ppm/K |
| Temperature coefficient rel. | ± 25 ... ± 100 ppm/K |
| Tolerances, absolute: | ± 1 ... ± 20 % |
| Tolerances relative (ratio): | ± 0.25... ± 5 % |
| | |
| Climatic category acc. to EN 60068-1 | 55/125/56 |
| Humidity- / contact protection | Lacquer coating ³⁾ |

3) Resistant to most solvents. For cleaning the use of isopropyl alcohol (IPA) is recommended. The use of acetone and methylene chloride is **not** allowed.

More technical data for specific size: on request.

Versions with single in-line leadframes are available on request as well as versions with overglaze.