MTE-1 *Resistance/Capacitance Standards*

Tracebility of quantities calibration of meters

- **Calibration uncertainty 0.005 %**
- **Low time constant**
- **Three/four terminal or four pair terminal connection**

Resistance/Capacitance/Inductance standards are designed for calibration of RCL meters and ohmmeters. Low time constant enable to use them in wide frequency range. The standards are equipped with BNC coaxial connectors respecting four-pair terminal technique or with standard gold plated terminals for DC applicat ions.

Technical data

Capacitance standards

Connection **Four pair terminal**

Type of terminals **BNC coaxial connectors for AC applications**

Frequency range **20 Hz - 20 kHz to 1 nF, 20 Hz – 10 kHz to 100 uF**

Model	*Nominal value*	*Accuracy*	*1 kHz calibration uncertainty*	*Temperature coefficient **	*Dissipation factor*	*Note*
		[%]	*[%]*	*[± ppm / °C]*	*[-]*	*Type*
CP – 1p	1 pF	2	0.05	15	≤0.001	Ceramic multilyer Silver mica
CP – 10p	10 pF	1	0.01	15	≤0.001	Ceramic multilyer Silver mica
CP – 100p	1 00 pF	0.1	0.01	15	≤0.001	Ceramic multilyer Silver mica
CP – 1n	1 000 pF	0.1	0.01	15	≤0.0005	Silver mica
CP – 10n	10 000 pF	0.1	0.01	15	≤0.0005	Silver mica
CP – 100n	100 000 pF	0.1	0.01	15	≤0.0005	Silver mica
CP – 1u	1 uF	0.1	0.01	50	≤0.0005	Polypropylen
CP – 10u	10 uF	0.2	0.1	50	≤0.005	Polypropylen
CP – 100u	100 uF	0.2	0.1	50	≤0.005	Polypropylen

Resistance standards

Connection **3-terminals (above 10 MOhm), 4-terminals or 4 pair-terminals (bellow 10 Mohm)**

Type of terminals **BNC coaxial connectors for AC applications**
Gold plated terminals for DC applications
Standard terminals with additional ertallyte isolaltion (above 10 Mohm)

Frequency range **DC, DC to 20 kHz for nominal value 0.1 Ohm to 10 MOhm (with BNC connectors)**

Model	*Nominal Value*	*Accuracy*	*DC calibration uncertainty*	*Temperature coefficient **	*Power rating ***	*Note*
		[%]	*[%]*	*[± ppm / °C]*	*[W]*	*Resistance segment*
RP - 0.1	100 mΩ	0.1	0.05	10	3	Foil resistor
RP - 1.0	1 Ω	0.05	0.01	10	3	Foil resistor
RP - 1.0	1 Ω	0.05	0.01	1	3	Foil resistor
RP - 10	10 Ω	0.01	0.005	1	0.3	Foil resistor
RP - 100	100 Ω	0.01	0.005	1	0.3	Foil resistor
RP - 1k	1 kΩ	0.01	0.005	1	0.3	Foil resistor
RP - 10k	10 kΩ	0.01	0.005	1	0.3	Foil resistor
RP - 100k	100 kΩ	0.01	0.005	1	0.3	Foil resistor
RP - 1M	1 MΩ	0.01	0.005	1	0.3	Foil resistor
RP - 10M	10MΩ	0.05	0.01	100	2500 V***	Ceramic resistor
RP - 100M	100 MΩ	0.5	0.1	100	2500 V***	Ceramic resistor
RP – 1G	1 GΩ	1	0.3	100	5 000 V***	Ceramic resistor
RP – 10G	10 GΩ	3	0.5	100	5000 V***	Ceramic resistor

* in temperature range 0 - 50 °C, ** for temperature 25 °C, *** maximal voltage