

2722 & 2723 Precision DC Potentiometers

Models 2722 and 2723 are high-quality DC potentiometers. Utmost care has been taken in the selection of materials, components, and circuit design to insure high accuracy and stability. These potentiometers are recommended for use in test rooms and laboratories as secondary standard instruments or in work shops and inspection departments of factories for fine checking. Model 2722 measures voltages from 10 mV to 1.6V at an accuracy of 0.01% in five or six digits. Model 2723 is especially designed for low-voltage measurement from 0.1 μ V to 111 mV at an accuracy of 0.01% in five or six digits.



2722

310 x 491 x 140 mm 11.8 kg
(12-1/4 x 19-3/8 x 5-1/2" 26 lbs)

- **±0.01% accuracy**
- **Simple operation**
YOKOGAWA's unique circuitry permits large and stable operational current in the potentiometer, assuring ready balance and efficient measurement.
- **Easy readout**
Meter readings are arranged in-line and the decimal point is automatically shifted by range selector operation, giving quick readout without error.
- **Perfect shielding and guarded circuits**
- **Stable operation**
The manganin resistance wire is selected to give a temperature coefficient of $\pm 0.001\%/^{\circ}\text{C}$, and is stabilized by both artificial and natural aging after winding and before calibration of the resistance value.
- **Effects of parasitic emf eliminated**
- **Heat-insulated pushbutton keys**

Optional accessories for 2722 & 2723

Model number and name	Description	Page
2749 standard cell	Essential	5
2854 DC precision current supply	Essential	5
2709 electronic galvanometer	Essential for 2723	13
2707 electronic galvanometer	Essential for 2722 (2707 or 2709)	Rear cover
2781 precision standard resistor	For A, W and Ω measurements	9
2792 standard resistor		9
2743 standard shunt	For A and W measurements	5
2744 volt ratio box	For V and W measurements (for 2722)	5
2745 selector switch	For measurement of up to 6 channels	5

SPECIFICATIONS

Model	2722	2723
Unit	Absolute	Absolute
Measuring Range	1.5V Range: -0.00010 to 1.6111V 0.15V Range: -0.000010 to 0.16111V	100mV Range: -0.010 to 111.110mV 10mV Range: -0.0010 to 11.1110mV 1mV Range: -0.00010 to 1.1110mV
Readout	5 to 6 digits	5 to 6 digits
Measuring Dial	On 1.5V range: Dial I. 100mV x 15 steps Dial II. 10mV x 10 steps Dial III. 1mV x 10 steps Dial IV. -0.10mV to +1.10mV continuously variable (Slide dial: 10 μ V x 120 div.)	On 10mV Range: Dial I. 1mV x 10 steps Dial II. 0.1mV x 10 steps Dial III. 0.01mV x 10 steps Dial IV. -0.0010mV to +0.0110mV continuously variable (Slide dial: 0.1 μ V x 120 div.)
Minimum Division	1.5V Range: 10 μ V 0.15V Range: 1 μ V	100mV Range: 1 μ V 10mV Range: 0.1 μ V 1mV Range: 0.01 μ V
Accuracy (at ambient temperature of 23 \pm 2.5 $^{\circ}$ C)	1.5V Range: \pm (0.01% of reading + 10 μ V) 0.15V Range: \pm (0.02% of reading + 1 μ V)	100mV Range: \pm (0.01% of reading + 1 μ V) 10mV Range: \pm (0.02% of reading + 0.2 μ V) 1mV Range: \pm (0.02% of reading + 0.05 μ V)
Circuit Current	27.5mA adjustable with Coarse, Medium, and Fine Dials	22mA adjustable with Coarse, Medium, and Fine Dials
Standard Cell Dial	1.01770 to 1.01980V continuously variable (one division : 20 μ V)	
Internal Resistance	Approx. 28 to 125 Ω	Approx. 18 Ω constant
Battery Voltage	4 to 4.5V DC (27.5mA)	4 to 4.5V DC (22mA)
Galvanometer Sensitivity Control	By means of four built-in tap keys - three for sensitivity control and one for short-circuiting the galvanometer input	
Polarity Reversing Switch	Built-in, to reverse the galvanometer input.	Built-in, to reverse the polarity of the unknown voltage, standard cell, and battery.