

PRECISION MOTOR- POTENTIOMETER

SAKAE Motor-Potentiometer Series are a kind of servo units consisting of a precision potentiometer of our manufacture combined with a reduction gear mechanism and a coreless D.C. motor.

Their housing is compact and strong based on our own design and there are versatile items in this series among which you can choose ones to be suitably convenient for the design of your own applications.

Precise mechanism, high reliability, extreme stability, high

power for input as well as output and long life expectancy can satisfy your various requirements.

THE NOMENCLATURE OF SAKAE MOTOR-POTENTIOMETER SERIES

S MPH 22 B 7 25HP-10 5 k Ω 0.25

● **Special Specifications**

S means the potentiometer with special mechanical specifications not applicable to our standard.

● **Model No.**

MPH means motor-potentiometer.

● **Diameter**

22 means approximate outer diameter of the housing in metric system.

The 4 standard diameters are available: 22mm, 30mm, 35mm and 46mm.

● **Code of Coupled Motor**

B means the code of a coupled motor. There are 3 codes for coupled motor: **A, B & C**.

● **Accuracy of Coupled Potentiometer**

0.25 means independent linearity tolerance $\pm 0.25\%$ of the coupled potentiometer.

● **Coupled Potentiometer's Model No.**

25HP-10 5k Ω means a coupled potentiometer's model number and total resistance value, namely, our model 25HP-10, 5k Ω .

● **Code of Coupled Reduction Gear**

7 means the code a reduction gear incorporated in the housing. There are many kinds of reduction gears, of which details please refer to the specific tables of each models.

SELECTION GUIDE

● **Motor Potentiometer**

Model No.	Coupled Motor	Reduction Gear	Features
MPH22	A, B	5~11	Small sized unit for general and universal use. Panel mounting type for 1-turn and 10-turn.
MPH30	A, B	5~11	Chassis mounting type for 1-turn and 10-turn. Use only for electrical circuits. (i.e. Automatic-balancer, etc.)
MPH35	C	25~32	Panel mounting type for 1-turn use. Mechanical output is big.
MPH46	C	25~32	Panel mounting type for 10-turn use. Mechanical output is big.

● **Servo Amplifier**

Model No.	Power Rating	Features
AP1231	$\pm 6V, \pm 12V, \pm 18V$ Approx. 1A, respectively	Save-energy type with Pulse Width Modulated Control.

● **D.C. Power Supply**

Model No.	Rated Output		Model No. of Combinable Servo Amplifier
	For Supplying Potentiometer	For Operating Servo Amplifier	
AP9201A	Approx. $\pm 10mA$	Approx. 700mA	AP1231