



# 1-TURN CONTACTLESS POTENTIOMETER

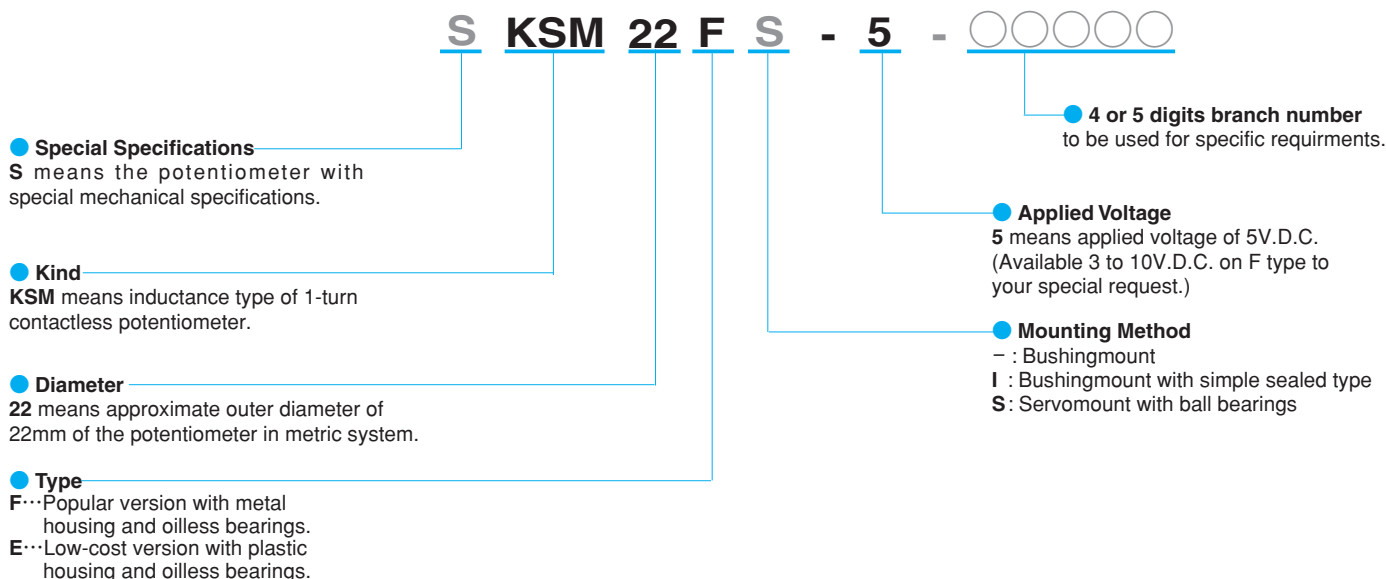
(Inductance Type)

This is a 1-turn Contactless Potentiometer using inductance coil technology, which has been developed based on our own technical know how (Japan pat.No.3009764). This Contactless Potentiometer has various excellent features such as semipermanent life expectancy, being completely free from sliding noise, high speed tracking

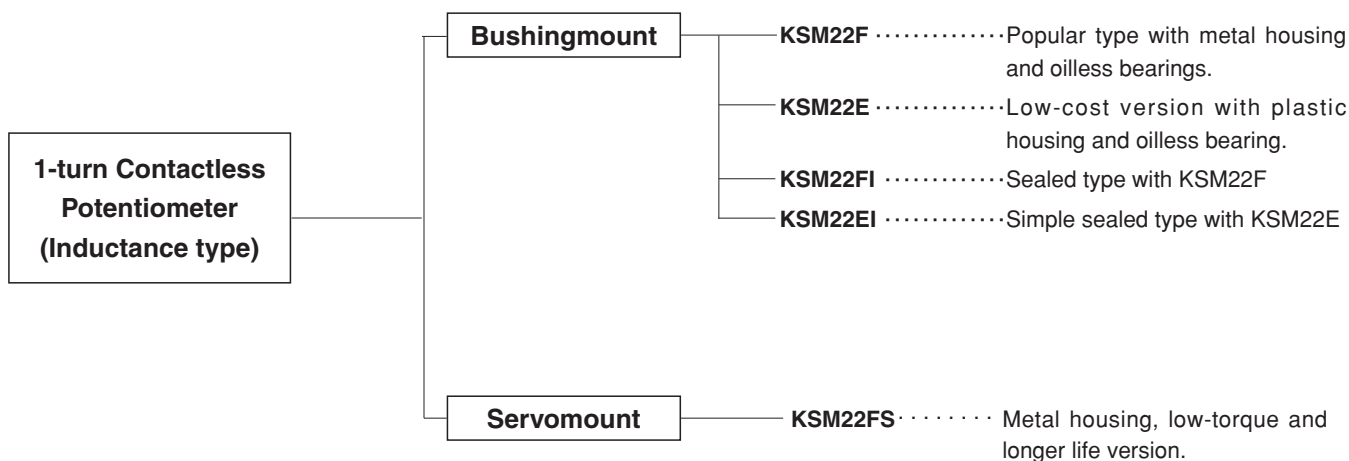
ability, essentially infinite resolution, etc. and can be used as an angle detecting sensor or mechanical linear displacement sensor for various kinds of mechanical and electrical devices as well as robot devices, medical equipments, measure control instruments, etc.

1-Turn ▶ Contactless type ▶ Inductance type

## THE NOMENCLATURE OF SAKAE 1-TURN CONTACTLESS POT. SERIES



## SELECTION GUIDE



## Technical Explanation on Inductance Type Contactless Potentiometer

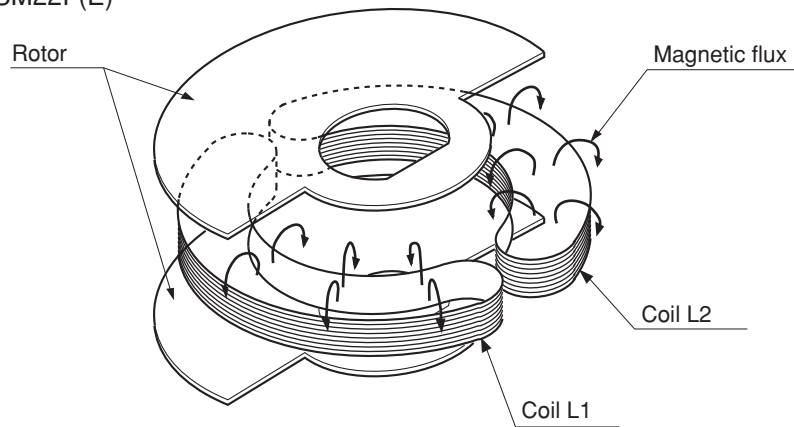
### ● Principle · Construction · Function

This contactless potentiometer has a pair of semicircle rotor connected to the operating shaft, a pair of detective coil putted between the semicircle rotor, high frequency oscillator to apply the coil, and a detection circuit which takes an inductance change of the coil from an eddy

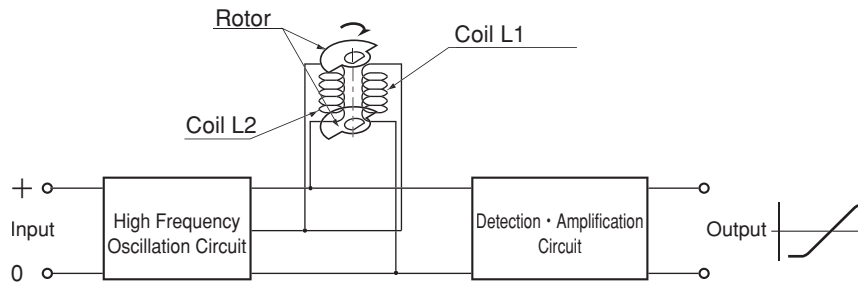
current on the semicircle rotor caused by high frequency oscillator, in the housing case. When rotating the shaft, the area volume opposed between the semicircle rotor and the coil varies, which brings on output change in response to the rating angle.

### ● Relationship between the semicircle rotor and the detection coil

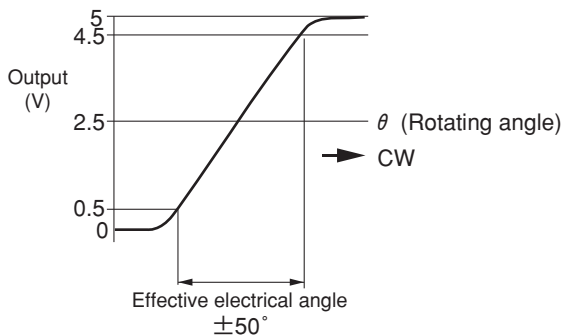
Construction of model KSM22F(E)



### ● Oscillator and Detection Circuit



### ● Output Characteristic



### ● Leadwire (Terminal) Connection Diagram

