

H80FCL

New Product

Potentiometer with a hall effect
IC type resistive element

Nomenclature

S H 80 FCL - S 2 DF K - 0 0 0 0 0

● **S**
means special
mechanical
specifications not
applicable
to our standard.

● **H**
means hall effect IC type
potentiometer is incorpo-
rated.

● **80**
means approx. size of
base housing in mm.

● **FC**
means Foot controller.
L means small and compact-
sized pedal type.

● **Special part number:**
In case we produce
customized product, we add
4-digit or 5-digit branch
number.

● **With kick-down device:**
The operating force is
increased at about 5° from
the end of stepping.

● **① Number of switches to be incorporated(Option).**

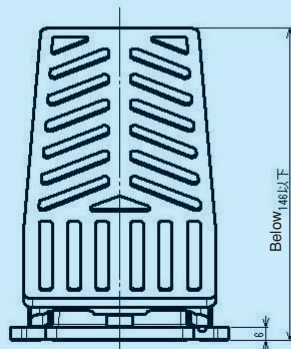
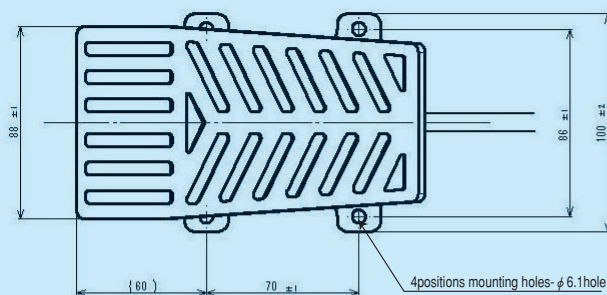
1...1 switch incorporated.
2...2 switches incorporated.

● **② Rating of switch:**
D·F...micro-switch

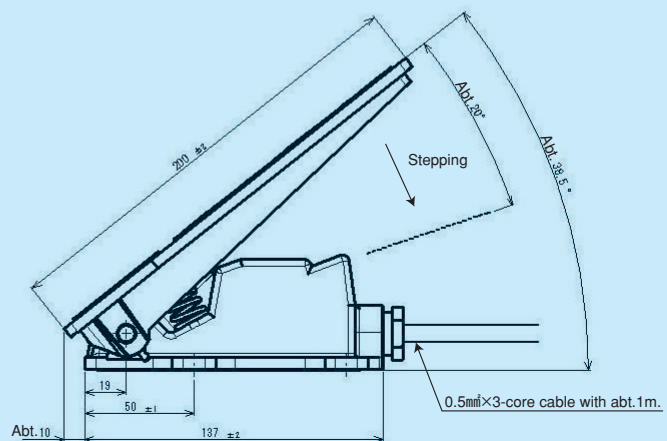
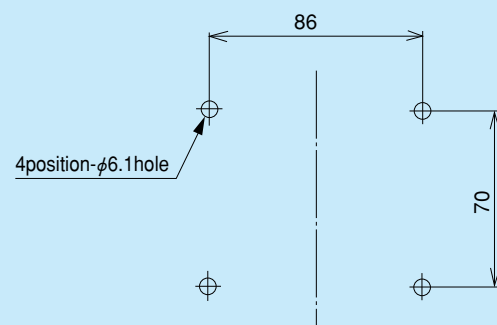
● **Output characteristic**

S...single output X...dual cross output P...dual parallel
output

Standard Dimensions



Panel Arrangement



(unit : mm)

STANDARD SPECIFICATIONS

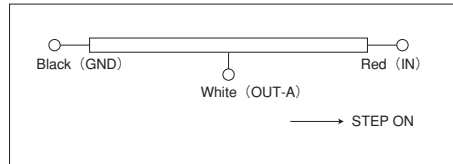
● Mechanical performance

Operating method: Stepping pedal type.
Operating angle: Approx. 20°.
Operating force: Standard automatic spring return device.
 Abt. 10N~60N (Abt. 1,000gf.~6,000gf.)
Operating temperature range: -20°C ~ +65°C
Vibration: 10~55Hz 98m/s²
Shock: 294m/s² (11ms)
Life expectancy: Approx. 2,000,000 operations.
Mass: Approx. 850g

● Electrical performance

Hall effect IC type potentiometer is incorporated: SHSM18E, hall effect IC type single-turn contactless potentiometer.
 ● Applied voltage: 5V±10% D.C.
 ● Output range: Apporx. 10%~90% V_{in}
 ● Independent linearity tolerance: ±3%
Dielectric strength: 1 minute at 250V.A.C.
Insulation resistance: Over 100MΩ at 250V.D.C.
EMC durability: 100V/m (80MHz~1GHz 1KHz sine-wave 80%AM modulation)
ESD durability: ± 8 KV contact discharge/± 15KV aerial discharge.

● Terminal Connection Diagram



● Optional specifications

With switch mounted:

D version switch: SW "ON" at about 3° from the beginning of stepping under 1V±0.3V.D.C. output.

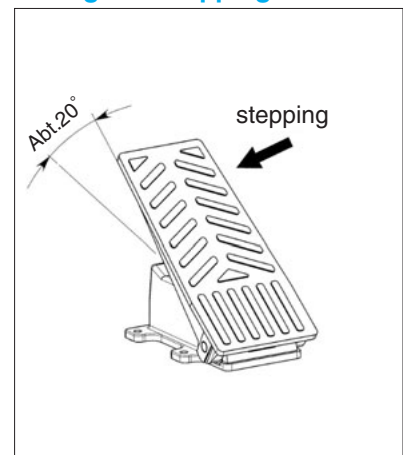
F version switch: SW "ON" at about 3° from the end of stepping under 4V±0.3V.D.C. output.

With kick-down device: Operating force is increased at about 5° from the end of stepping (Max.approx.250N)

With special output: Dual parallel output, Dual cross output.

Note: For output characteristics, activation points of switch and terminal connection diagrams, please see below.

● Angle of stepping



H80FCL-S

● Output Characteristics

