HCK Series
Mini joystick

Features
- Standard delivery time 2-3 weeks
- Single-axis rotary controller
- Shallow profile for low impact design
- Spring return incorporated
- Standard IP67 grade protection above panel
- Easy mounting hardware included

Applications
- (Outdoor) control panels
- Security systems
- Factory machinery

Description
This is our only linear operation control knob that is based on contactless hall effect technology. It provides a smooth proportional voltage output for industrial applications that require precision rotary single-axis control. Due to its standard IP67 grade protection, it is ideal for both indoor and outdoor environments and the incorporated spring return ensures reliable dead-man prevention. Included in the package are below panel mounting screws and a 28AWG cable

Specification

MECHANICAL (X & Y AXIS)	
Angle Of Movement	90° (45° Each Direction)
Expected Cycle Life	5 million
Centering	spring return
Material	glass / mineral filled nylon
Break out Torque	0.01 N (0.13 lbFin)
Max. allowable Torque	5.6 N (50 lbFin)

| ELECTRICAL	
Sensor type	hall effect
Resolution	12 bit
Supply voltage	5VDC ± 0.01 VDC
Output voltage	see options
Return to Center voltage	± 50 mV
Overvoltage max.	20VDC
Reverse polarity max.	-10VDC

■ Specification

ENVIRONMENTAL	Page 2 / 4
Operating Temperature	-23°C to 85°C (-10°F to 185°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
IP Sealing Above Panel	IP67
EMC Immunity level	EN61000-4-3 *Compliance to 30A/m
EMC Emissions level	EN61000-6-3
ESD Immunity level	EN61000-4-2 *Compliance to ±15kV/±8kV
Vibration testing	Per SAE J1455 Section 4.9 & MIL-STD810G 514.6
Mechanical shock	Per SAE J1455 Section 4.10 & MIL-STD-202G

* Extended Testing Levels

MOLEX 510210400 CONNECTOR		
PIN	Wire colour	Description
1	n/a	n/a
2	yellow	sensor
3	black	ground
4	red	power (+5V)
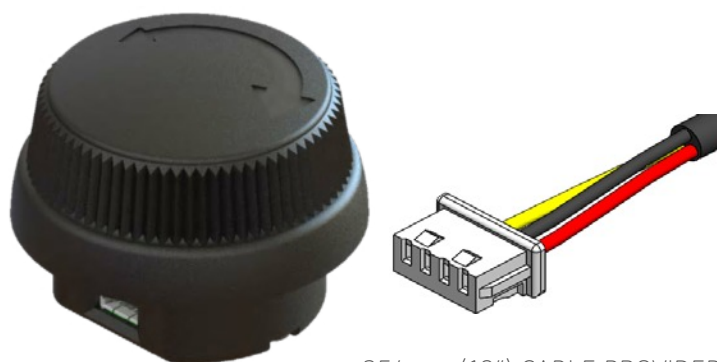
254mm (10") CABLE PROVIDED

MATERIALS	
Plastic housing	Mineral & glass filled nylon
Metal housing	Gold anodized aluminium
Boot & actuators	Silicone

IP RATING: IP67 (ABOVE PANEL)

Product Configuration Guide

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SERIES

OUTPUT OPTION:
1	0V-5V
2	0.5V to 4.5V
3	0.25V to 4.75V
4	1V to 4V

KNOB OPTION:
1	KNURLED KNOB (STANDARD)

KNOB COLOR:
BK	BLACK
GY	GREY
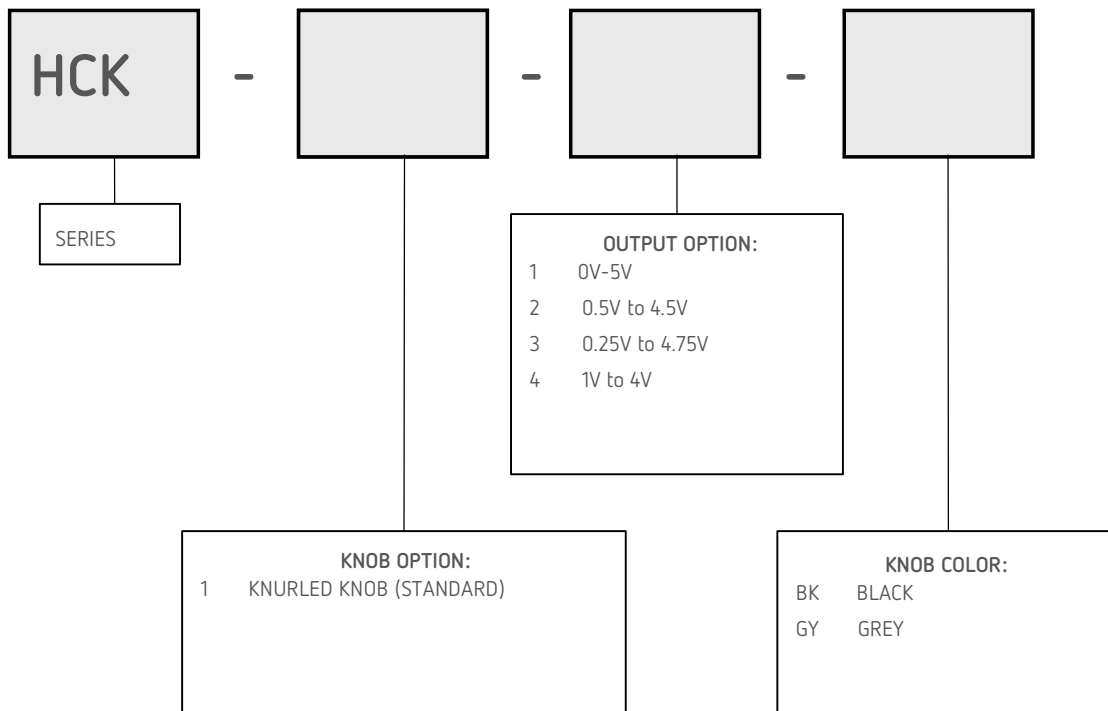
Mounting Options
Dimensions in millimeters (inches).

MOUNTING DIRECTIONS:

1. Install panel gasket.
2. Drop control knob into panel cutout.
3. Install 2 mounting screws under panel.
4. Install supplied cable to unit - see specifications for pinout information

Supplied
Panel Gasket

+ high
Voltage

Ø41.40 (1.63)

22.61 (0.89)

8.69 (0.342)

3.17 (0.125) (REF.)

2x #2 SCREWS, SUPPLIED

2x Ø 2.39 (0.094)

4x R3.17 (0.125)

Ø 31.75 (1.250)

30.48 (1.200)

25.65 (1.010)

Mounting panel cutout

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Althen Controls – Your expert partner for customized joystick controllers, footpedals, and position feedback sensors.
Althen stands for high quality solutions, flexibility in customization, and is known for its long experience.

Please visit our website althencontrols.com
or contact us by email at info@althencontrols.com