

IB-K Interface Board

Electronic Circuit Board



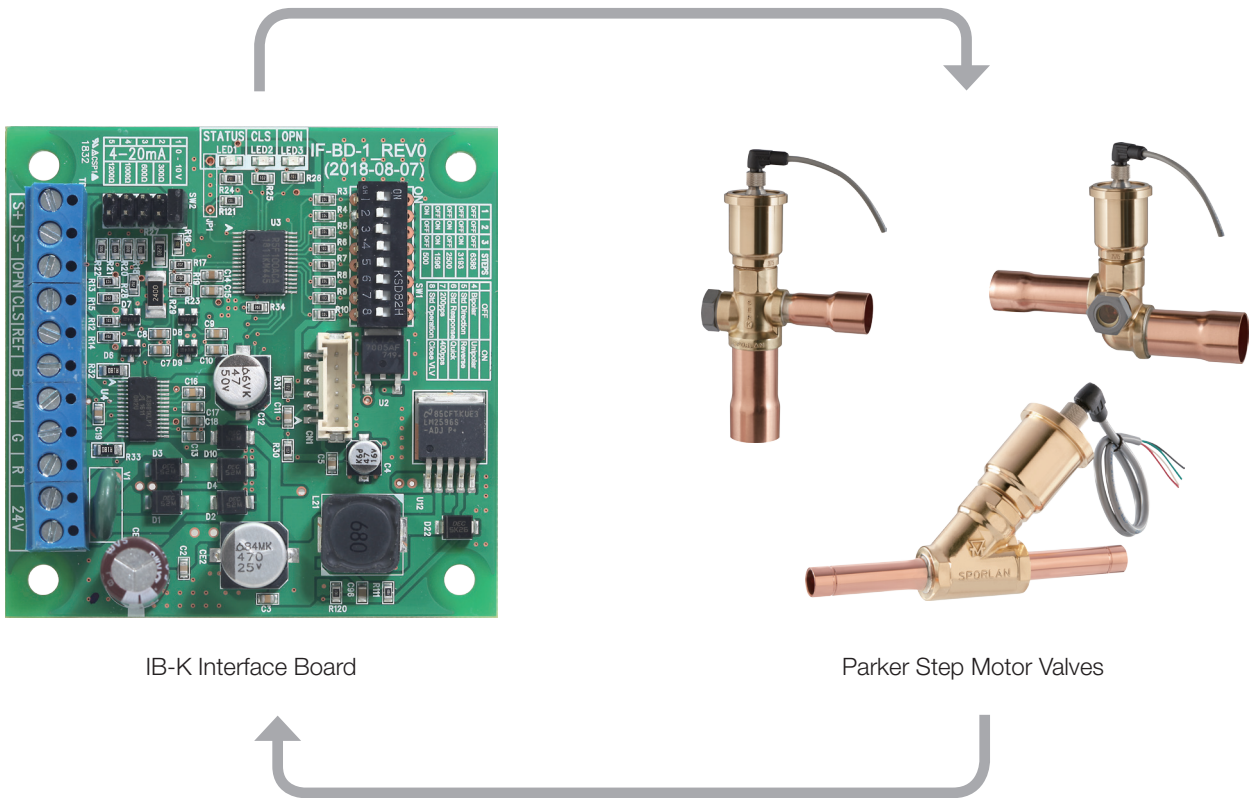
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Introduction

The IB-K is developed to be applicable in Korea and various markets. It is also applicable to Parker Sporlan products and all step motor valves manufactured in Korea and China.

The IB-K is a small electronic circuit board that extends the functionality of an external system controller to drive step motor valves.

The external controller must provide an analog 0-10VDC or 4-20mA signal to the IB-K.



IB-K Interface Board

Parker Step Motor Valves

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Proposition 65 Warning: This product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

Features

- The IB-K Interface Board is available for all Parker step motor valves.
- Precise control of various stepping motors is possible.
- Applicable to all valves with bipolar and unipolar control of 4 phases
- The compact size allows you to minimize the mounting space.

Specifications

Part number	Connections	Input Voltage	Output Voltage	Control Signal	Excitation Speed	Excitation Method	
	Type	[DC V]	[DC V]	[V,mA]	[pps]	Bipolar	Unipolar
IB-K	Lead Wire	24	12	0-10V, 4-20mA	30~400	2 phase excitation	1-2 phase excitation

Applications

- Air conditioner
- Heat pump system
- Refrigerator cargo vehicles
- Supermarket system
- Semiconductor Chiller
- Other refrigerant devices

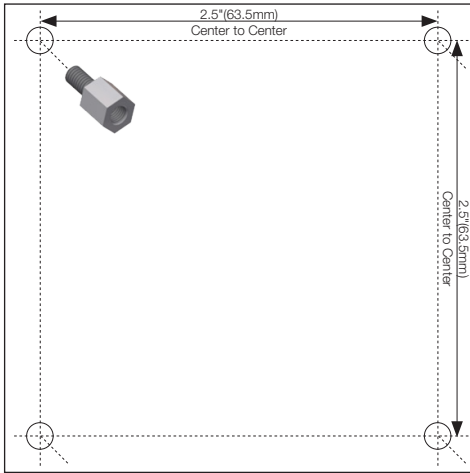
Applicable Valve Type & Step Stroke

VALVE TYPE	STEP STROKE	MOTOR TYPE
SDR-1x, SDR-2, SDR-2x, SEI-1/2 thru SEI-11	1596	Bipolar
CDS-2,4,7, SER-AA, SER-A, SER-B, SER-C, SER(I)-G, SER(I)-F, SER(I)-J, SER(I)-K	2500	Bipolar
SDR-3, SDR-3x, SEI-30	3193	Bipolar
CDS-9, CDS-16, CDS-17, SDR-4, SHE	6386	Bipolar
SER-B-U, SER-C-U, SER-D-U, SER-E-U	1596	Unipolar
ESX, SEV, CEV	500	Unipolar
PEV, WEV	2000	Bipolar, Unipolar

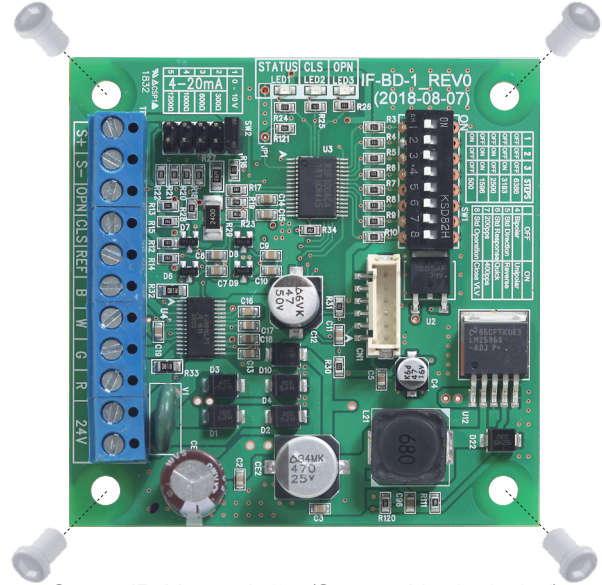
Installation

Mounting Instructions

- Non metallic standoffs (Not included with IB-K)



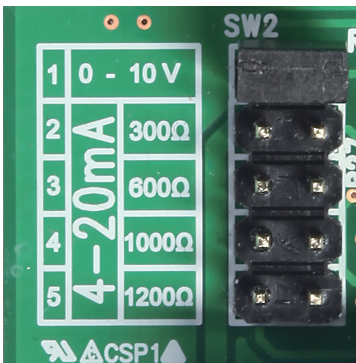
Screw standoffs in place (8-32 thread or smaller)



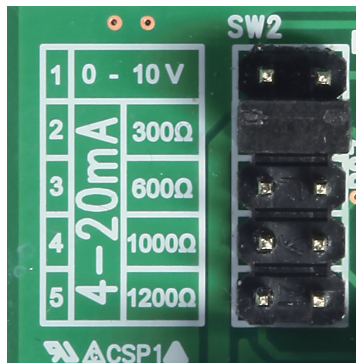
Screw IB-K standoffs. (Screws Not included)

SETUP IB-K

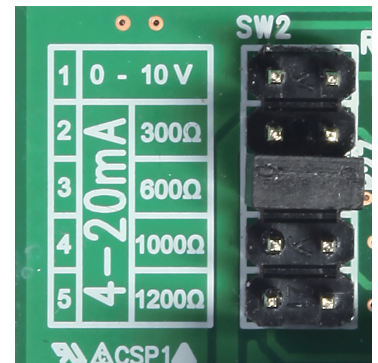
Install jumper to see control signal



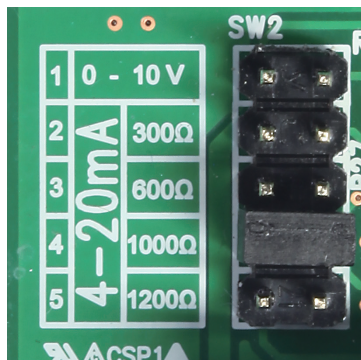
0-10V



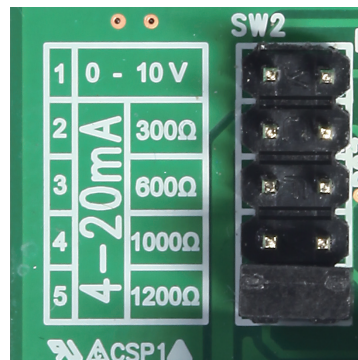
4~20mA 300Ω



4~20mA 600Ω



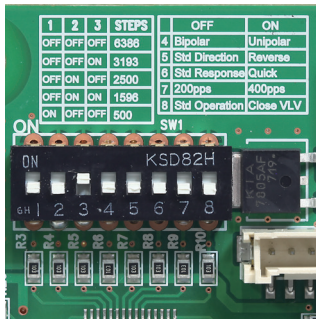
4~20mA 1,000Ω



4~20mA 1,200Ω

SETUP IB-K

Set dip switches for valve type and operation



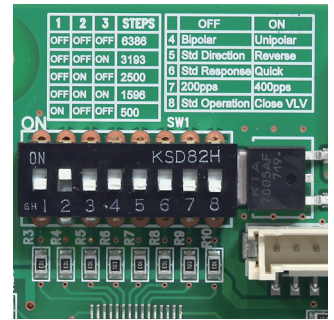
3193 steps/Bipolar



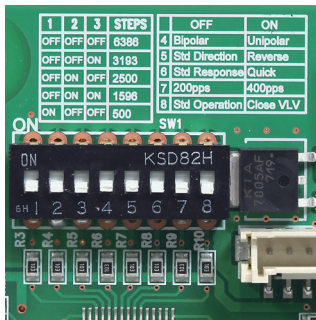
2000 steps/Unipolar



2000 steps/Bipolar



2500 steps/Bipolar



6386 steps/Bipolar



500 steps/Unipolar

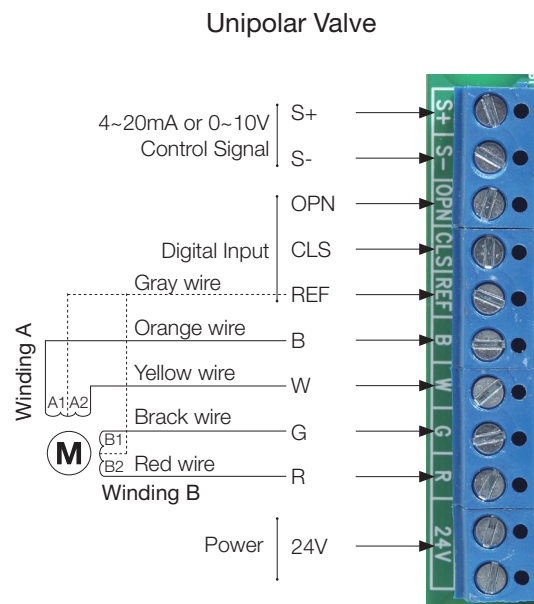
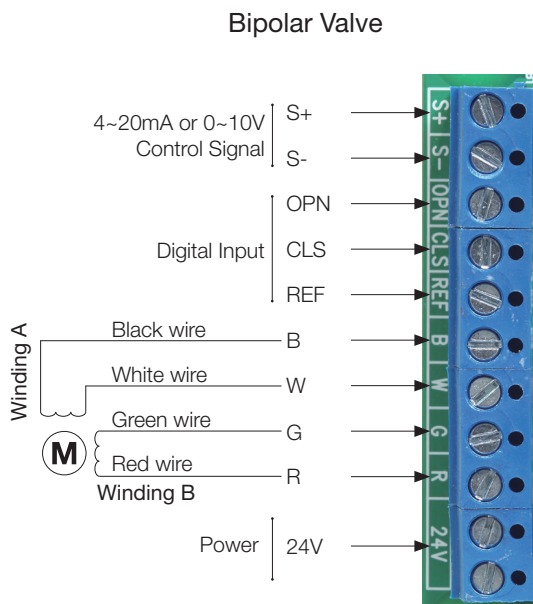


1596 steps/Unipolar



1596 steps/Bipolar

WIRE IB-K



Notes

Transformer requirements: One stepper motor valve per IB-K (30VA per IB-K Board)

Two stepper motor valves per IB-K (40VA per IB-K board). Only one unipolar valve can driven per IB-K.

Power supply requirements: The 24V power supply is non-polar and has no +, - distinction.

3.5 in.-lbs. maximum torque on all screw terminals.

Notes



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Key Markets

Aftermarket services
Commercial transports
Engines
General & business aviation
Helicopters
Launch vehicles
Military aircraft
Missiles
Power generation
Regional transports
Unmanned aerial vehicles

Key Products

Control systems & actuation products
Engine systems & components
Fluid conveyance systems & components
Fluid metering, delivery & atomization devices
Fuel systems & components
Fuel tank inerting systems
Hydraulic systems & components
Thermal management
Wheels & brakes



Climate Control

Key Markets

Agriculture
Air conditioning
Construction Machinery
Food & beverage
Industrial machinery
Life sciences
Oil & gas
Precision cooling
Process
Refrigeration
Transportation

Key Products

Accumulators
Advanced actuators
CO₂ controls
Electronic controllers
Filter driers
Hand shut-off valves
Heat exchangers
Hose & fittings
Pressure regulating valves
Refrigerant distributors
Safety relief valves
Smart pumps
Solenoid valves
Thermostatic expansion valves



Electromechanical

Key Markets

Aerospace
Factory automation
Life science & medical
Machine tools
Packaging machinery
Paper machinery
Plastics machinery & converting
Primary metals
Semiconductor & electronics
Textile
Wire & cable

Key Products

AC/DC drives & systems
Electric actuators, gantry robots & slides
Electrohydraulic actuation systems
Electromechanical actuation systems
Human machine interface
Linear motors
Stepper motors, servo motors, drives & controls
Structural extrusions



Filtration

Key Markets

Aerospace
Food & beverage
Industrial plant & equipment
Life sciences
Marine
Mobile equipment
Oil & gas
Power generation & renewable energy
Process
Transportation
Water Purification

Key Products

Analytical gas generators
Compressed air filters & dryers
Engine air, coolant, fuel & oil filtration systems
Fluid condition monitoring systems
Hydraulic & lubrication filters
Hydrogen, nitrogen & zero air generators
Instrumentation filters
Membrane & fiber filters
Microfiltration
Sterile air filtration
Water desalination & purification filters & systems



Fluid & Gas Handling

Key Markets

Aerial lift
Agriculture
Bulk chemical handling
Construction machinery
Food & beverage
Fuel & gas delivery
Industrial machinery
Life sciences
Marine
Mining
Mobile
Oil & gas
Renewable energy
Transportation

Key Products

Check valves
Connectors for low pressure fluid conveyance
Deep sea umbilicals
Diagnostic equipment
Hose couplings
Industrial hose
Mooring systems & power cables
PTFE hose & tubing
Quick couplings
Rubber & thermoplastic hose
Tube fittings & adapters
Tubing & plastic fittings



Hydraulics

Key Markets

Aerial lift
Agriculture
Alternative energy
Construction machinery
Forestry
Industrial machinery
Machine tools
Marine
Material handling
Mining
Oil & gas
Power generation
Refuse vehicles
Renewable energy
Truck hydraulics
Turf equipment

Key Products

Accumulators
Cartridge valves
Electrohydraulic actuators
Human machine interfaces
Hybrid drives
Hydraulic cylinders
Hydraulic motors & pumps
Hydraulic systems
Hydraulic valves & controls
Hydrostatic steering
Integrated hydraulic circuits
Power take-offs
Power units
Rotary actuators
Sensors



Pneumatics

Key Markets

Aerospace
Conveyor & material handling
Factory automation
Life science & medical
Machine tools
Packaging machinery
Transportation & automotive

Key Products

Air preparation
Brass fittings & valves
Manifolds
Pneumatic accessories
Pneumatic actuators & grippers
Pneumatic valves & controls
Quick disconnects
Rotary actuators
Rubber & thermoplastic hose & couplings
Structural extrusions
Thermoplastic tubing & fittings
Vacuum generators, cups & sensors



Process Control

Key Markets

Alternative fuels
Biopharmaceuticals
Chemical & refining
Food & beverage
Marine & shipbuilding
Medical & dental
Microelectronics
Nuclear Power
Offshore oil exploration
Oil & gas
Pharmaceuticals
Power generation
Pulp & paper
Steel
Water/wastewater

Key Products

Analytical Instruments
Analytical sample conditioning products & systems
Chemical injection fittings & valves
Fluoropolymer chemical delivery fittings, valves & pumps
High purity gas delivery fittings, valves, regulators & digital flow controllers
Industrial mass flow meters/ controllers
Permanent no-weld tube fittings
Precision industrial regulators & flow controllers
Process control double block & bleeds
Process control fittings, valves, regulators & manifold valves



Sealing & Shielding

Key Markets

Aerospace
Biological processing
Consumer
Fluid power
General industrial
Information technology
Life sciences
Microelectronics
Military
Oil & gas
Power generation
Renewable energy
Telecommunications
Transportation

Key Products

Dynamic seals
Elastomeric o-rings
Electro-medical instrument design & assembly
EMI shielding
Extruded & precision-cut, fabricated elastomeric seals
High temperature metal seals
Homogeneous & inserted elastomeric shapes
Medical device fabrication & assembly
Metal & plastic retained composite seals
Shielded optical windows
Silicone tubing & extrusions
Thermal management
Vibration dampening

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