

04 | Process Valve



2 Port Small Type Solenoid Valve

HDA 021	[4] - 3
HDA 031 ~ 032	[4] - 4
HDA 031G ~ 032G	[4] - 5
KAB 21	[4] - 6
HDA 0201NO ~ 0202NO	[4] - 7

2 Port Solenoid Valve (Water, Air/Normally Closed)

HDW 021~022	[4] - 8
HDW 042~043	[4] - 9
HDW 012H	[4] - 10
HDW 154	[4] - 11
HAW 154	[4] - 12
HPW 102~103	[4] - 13
HPW 102DC~103DC	[4] - 14
HPW 154	[4] - 15
HPW 206~2510	[4] - 16
HPW 206DC~2510DC	[4] - 17
HPW 3212~5020	[4] - 18
HPW 6524	[4] - 19
HPW 2510F~5020F	[4] - 20
HPW 6524F	[4] - 21

2 Port Solenoid Valve (Water, Air/Normally Open)

HVD 022NO~052NO	[4] - 22
HPW 102NO~154NO	[4] - 23
HPW 102DNO~103DNO	[4] - 24
HPW 154DNO	[4] - 25
HPW 206NO~2510NO	[4] - 26
HPW 3212NO~5020NO	[4] - 27

HPW 6524NO	[4] - 28
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HPW 3212FO~5020FO	[4] - 29
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HPW6524FO	[4] - 30
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2 Port Solenoid Valve (Steam, Hot Water/Normally Closed)

HDS 021~022	[4] - 31
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HDS 042~043	[4] - 32
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HPS 102~154	[4] - 33
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HPS 102DC~154DC	[4] - 34
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HPS 206~5020	[4] - 35
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HPS 6524	[4] - 36
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HPS 2510F~5020F	[4] - 37
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HPS 6524F	[4] - 38
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2 Port Solenoid Valve (Steam, Hot Water/Normally Open)

HSV 102NO~154NO	[4] - 39
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HPS 102NO~103NO	[4] - 40
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HPS 154NO	[4] - 41
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HPS 206NO~5020NO	[4] - 42
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HPS 6524NO	[4] - 43
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HPS 3212FO~5020FO	[4] - 44
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HPS 6524FO	[4] - 45
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2 Port High Pressure Type (0.5kgf/cm² ~ 20kgf/cm²)

HPW 102-20~5020-20	[4] - 46
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HPW 3212F-20~5020F-20	[4] - 47
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HPM 206-20~5020-20	[4] - 48
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2 Port High Pressure Type (0.5kgf/cm² ~ 60kgf/cm²)

HPW 154-60K	[4] - 49
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2 Port Piston Pilot Kick, Direct Acting (Water, Air)

HKW 154B~2510B	[4] - 50
HKW 3212B~5020B	[4] - 51
HKW 2510BF~5020BF	[4] - 52

2 Port Piston Pilot Kick, Direct Acting (Steam, Hot Water)

HKS 154B~2510B	[4] - 53
HKS 3212B~5020B	[4] - 54
HKS 3212BF~5020BF	[4] - 55

2 Port SUS Solenoid Valve

HDA 021S-032S	[4] - 56
HDW 032S~033S	[4] - 57
HVS 042~043	[4] - 58
HVS 042NO~043NO	[4] - 59
HSR 053S~063S	[4] - 60
HSR 102P~104P	[4] - 61
HDC 042	[4] - 62
HPW 103S~2510S	[4] - 63

2 Port SUS Piston Pilot Kick, Direct Acting (Water, Air)

HKW 154S~2510S	[4] - 64
HKW 3212S~5020S	[4] - 65
HKW 2510SF~5020SF	[4] - 66

2 Port SUS Piston Pilot Kick, Direct Acting (Steam, Hot Water)

HKS 154S~2510S	[4] - 67
HKS 3212S~5020S	[4] - 68
HKS 3212SF~5020SF	[4] - 69

3 Port Solenoid Valve

HDA 032-3 (<i>Discontinued Product</i>)	*
HDW 011B-3~012B-3	[4] - 71
HDW 022B-3~023B-3	[4] - 72
HDW 022T-3	[4] - 73
HDW 052-3	[4] - 74

3 Port SUS Solenoid Valve

HDA 021S-3	[4] - 75
HDA 032S-3	[4] - 76
HDW 032S-3~033S-3	[4] - 77

Special Solenoid Valve

HPW 103P	[4] - 78
HPW 5020C	[4] - 79
HVV 12FL	[4] - 80
HDW 154B	[4] - 81
SV1430	[4] - 82
HCV 201~402	[4] - 83
HCV 201-3~402-3	[4] - 84

Teflon Solenoid Valve

HTV 0201-C~0502-O	[4] - 85
HTV 04L2-C~09L4-C	[4] - 86
HTV 0301-3	[4] - 87
HCTV 0201-C~0904-O	[4] - 88
HCTV 0201-3~0502-3	[4] - 89

Pinch Valve (Chemical Proof)

HPV 406~406D	[4] - 90
HPV 810~810D	[4] - 91

Coolant Valve

KLCV 093~094NO	[4] - 92
KLCV 154-3	[4] - 93

Cylinder Valve

HAV 8A~65A	[4] - 94
HAV 32AF~65AF	[4] - 95

Motor Actuated Valve

HMV 40BU~125BU	[4] - 96
HMV 40BUS(BUV)~125BUS(BUV)	[4] - 97
HMV 15SC~50SC	[4] - 98
HMV 15SC-3T(L)~50SC-3T(L)	[4] - 99
HMV 15FL~65FL	[4] - 100
HMV 15FL-3T(L)~65FL-3T(L)	[4] - 101
HMV 15FLP~50FLP	[4] - 102
HMV 02SC~10SC	[4] - 103
HMV 02SC-15~18SC-15	[4] - 104
HMV 02SC-P~18SC-P	[4] - 105
HMV 02BSC~06BSC	[4] - 106
HMV 02BSC-3~06BSC-3	[4] - 107

- W : Water
- A : Air

- S : Steam
- H : Hot Water

- C : Chemical

Selection

1. Be sure to check the specification.
Please use the valves in accordance with the specifications set forth in the catalogues while carefully considering the uses, kinds of fluids, the environments and other working condition, etc.
2. Kinds of fluids that can be used
 - (1) As for the fluids that can be used, be sure to check the material of each valve and whether it is chemical resistance or not before using it. The viscosity of the fluid with chemical resistance is recommended to be below 50 cSt.
 - (2) As for the leakage of inflammable oil or gas, check the specifications.
 - (3) Corrosive gases can not be used as they may be the causes of accidents such as stress corrosion cracking, etc.
 - (4) If no oil or foreign matters are permitted in the oil furnace, use the specification of "Use no oil"
 - (5) The fluid with chemical resistance can not be used sometimes according to the working condition of valves.
Please select the proper one after confirming its specifications.
3. The quality of the fluid used
When a fluid containing foreign substances is used, malfunctions caused by abrasion of the valve sheets' iron cores, iron cores' adherence to the passage, seal leakage, etc. may happen. Thus, suitable strainers need to be attached to the inlet of the valve.
A strainer of 80~100 mesh is a general standard for use. In case of using valves for boiler pumps, hard scale and sludge such as calcium, magnesium, etc. may permeate into the valve, which can cause malfunctions. Thus, install at the inlet of the valve the water softer and filters(strainers) that can filter out the impurities.
4. The quality of the air used
 - (1) Use clean air.
Do not use compressed air that contains chemicals, synthetic oils, salt, corrosive gases, etc. It may leads to the destruction or malfunctions of the valve.
 - (2) Affix air filter at the inlet of the valve. The filtration of air filter should be below 5 μ m.
 - (3) Install an after-cooler or air drier.
Compressed air containing lots of drain can cause malfunctions of valves or other air compressors. Install an after-cooler or air drier.
 - (4) In case carbon powder is produced much, remove it by installing a mist separator at the inlet of the valve. The carbon powder from the compressor can cause malfunctions when it permeate into the valve.
5. Ambient conditions
Use it within the permitted ambient temperature. First confirm the compatibility between the valves' materials and ambient conditions, then be careful that the fluids should not stain the outside of them.
6. Anti-static measures
As some fluids may produces static electricity, take appropriate measures.
7. Use at low temperature
 - (1) Be careful that waste, dregs, moisture, etc. should not be solidified or frozen, though the permitted ambient temperature is -5 $^{\circ}$ C as set forth in the valve specification.
 - (2) When using it in cold climate areas, take antifreezing measures such as emptying the pipes. When warming it with heaters, etc., keep it away from the coil.
If dew point temperature is high and the ambient temperature is low, or lots of fluids flows, a freeze can occur.
Please take suitable actions such as installment of air driers and warming the main body, etc.

Affix

1. Stop using the machine when it does not work well or the amount of leakage increases. Be sure to check whether the valve is correctly affixed by providing electricity or compressed air to test necessary functions.
2. Do not apply outside pressure to the coil.
3. Do not place the coil downwards.
If the coil are affixed downwards, it may cause malfunctions as impurities in the fluids can be attached to the iron cores.
4. Do not warm the accessory part of the coil. It may damage the coil. Thus, antifreezing tapes and heaters should be used just for the body of machines and pipes.
5. Everything needs to be fastened with brackets except steel pipes and fittings of copper tubes.
6. Refrain from using the valves in places where vibration occurs.
7. In case of painting: Be careful not to damage the warning instructions, specifications, etc. that are attached or printed on the products.

Piping

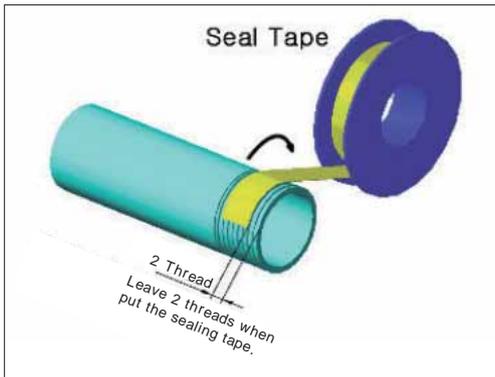
1. Measures prior to piping

Before piping, clean or flush fully the pipes by an air-blower to remove cutting scrap, oil, dirt, etc. In piping, be careful that the tensile and compressive force as well as bending strength should not be added on the body of valves.

2. When connecting an earth to the pipes, be cautious that the system can be corroded by the corrosive pipes.

3. How to put seal tape around pipes

When connecting pipes or fittings with screws, be cautious that cutting scrap or sealing materials do not fall into the inside of the valves. And leave 1.5 ~ 2 threads of a screw when using seal tape.



Thread size	Tightening torque (N · m)
R(PT) 1/8	7~9
R(PT) 1/4	12~14
R(PT) 3/8	22~24
R(PT) 1/2	28~30
R(PT) 3/4	28~30
R(PT) 1	36~38
R(PT) 1 1/4	40~42
R(PT) 1 1/2	48~50
R(PT) 2	48~50

4. When connecting pipes to the valve, be cautious not to be confused with the supply ports(inlet/outlet) (no check functions)

5. Steam from the boiler contains lot of waste, dregs. Be sure to install a dreg trap.

6. As for the vacuum, non-leak specifications, pay special attention to permeation of foreign substances or the sealing of fitting.

7. Be sure to install filters or strainers in front of the pipe inlets so that foreign substances should not flow into them.

8. Never fail to install water hammer arrestor or water hammer cushion if there is water hammering in the pipes.

Wiring

1. As for the wires used, the cross-sectional area of the conductors should be more than 0.5~1.25mm².

Be careful that excessive force should not be applied to the wires.

2. Select electrical circuits that do not make chattering at the electrical contacts.

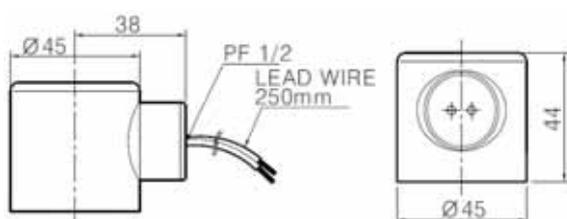
3. The voltage should be ±10%(AC) and ±5%(DC) of the rated voltage.

4. In case of using a relay circuit, the lifetime could be longer if surge protection circuits are added. The relays with big-enough capacity of voltage and current are recommended.

5. As for the circuits of electronic control(TRIAC, SCR, IC), be sure to install surge protection circuits to prevent the circuits from being broken by the inverse voltage of the coil.

Electrical Wiring

Conduit type grommet



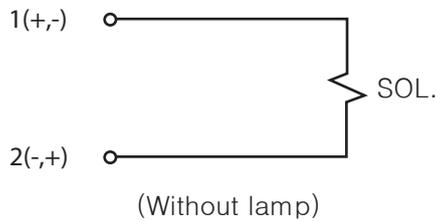
Rated voltage	Wire color	
DC 12V	Black	Red
DC 24V	Blue	Red
AC 100V, 110V	Blue	Blue
AC 200V, 220V	Red	Blue
AC 24V	Yellow	Yellow

※ There is no polarity.

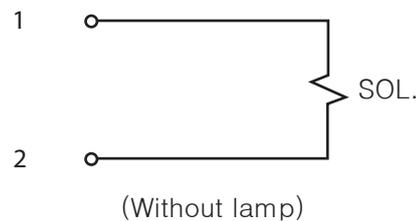
Electrical Circuits

- Grommet, Conduit, DIN Connector

DC Circuit

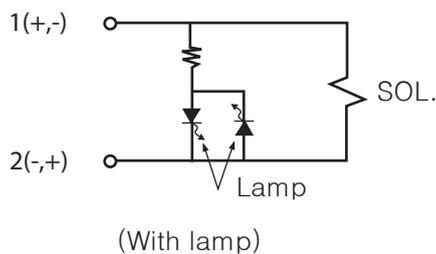


AC Circuit

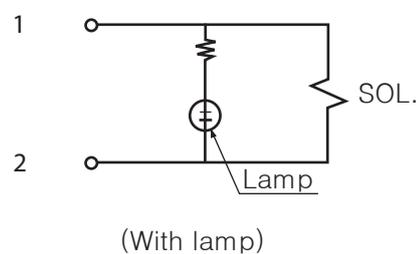


- DIN Connector

DC Circuit



AC Circuit



Environment For Use

1. Do not use it in places where there are corrosive gases, chemicals, seawater, water, steam.
2. Do not use in places where there are explosive substances.
3. Refrain from using it in places where vibration or shocks may occurs.
4. Do not use in places where there are radiant heat.
5. In places where there are water drops, oil and weld spatter, take protective measures from them.

Maintenance & Inspection

1. Disassembling valves

The hot fluids such as steam makes the valve hot. Be sure to confirm whether the temperature of the valve falls enough before disassembling it. If not, there is a danger of burns.

- (1) Shut off the provision of the fluids, then reduce the pressure in the system.
- (2) In case of an air-pilot or air-operated valves, shut off the air supply, then discharge the compressed air in the pilot pipes.
- (3) Cut off the power supply.
- (4) Separate the valve from the system.

2. Remove the remaining chemicals and clean them with pure air before entering into the next procedure.

3. Use with low frequency

Change the valves once a month to prevent malfunctions. And inspect them regularly every half so as to keep them in optimal condition.

4. As for filters and strainers

- (1) Be careful that the filters and strainers should not being blocked.
- (2) Change filter elements that have been used in one year, or when the pressure drop reaches $1\text{kgf/cm}^2(0.1\text{MPa})$ though they have been used less than one year.
- (3) Wash strainers if the pressure drop becomes $1\text{kgf/cm}^2(0.1\text{MPa})$

5. Storage

If you keep the valve in long time after using them in steam, you should remove the moisture completely to prevent rust, rubber degradation, etc.

6. Clean the drain of air filters regularly.

7. The valves get hot due to the hot fluids. Be careful not to be scalded by contacting them directly.

Design Instruction

1. It can not be used as an emergency shut-off valve.
The electronic valve with 2.3 port for controlling fluids has no safety gear such as an emergency shut-off valve. Thus, you need to take necessary measures to ensure safety before using it for that purpose.
2. Continuous current of for long time
When you want to apply continuous current for long time, please check it out to us.
3. It can not be used for blast-proof. A blast-proof type is specially ordered.
4. Reserving maintenance room : Please make necessary room for inspection and maintenance.
5. Closed circuit: install an inlet valve not to make the circuit closed in the system in case of leakage.
6. As the valve may leak air, it can not be used to keep the pressure (including vacuum) in the pressure vessels.
(The valves for vacuum vessels can be made if specially ordered)

Overview & Introduction

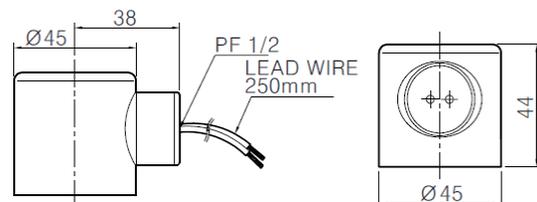
The valves produced by KCC is excellent in pressure, flow and the lifetime of the products in comparison with the existing valves. Besides, the performance is outstanding in broad range of applications.

1. The solenoid coil of KCC is designed to be used all types of solenoid valves. The voltage drift is $\pm 10\%$ of the general rated voltage. By adopting B or H class of coil insulation(DC $\pm 5\%$), the lifetime of coil is extended while the application of coil is widened.
2. Solenoid valves may be adopted to diverse specifications of rated voltage in a variety of industrial sites. The shock-absorbing springs reduce vibration, which improves the lifetime and reliability of the valve.
3. All the coil is designed and produced to withstand dust, moisture and other unfavorable conditions.

Conduit (Standard)



Solid, excellent durability, and replaceable.
AC 220V \Rightarrow AC 110V (Interchangeable)

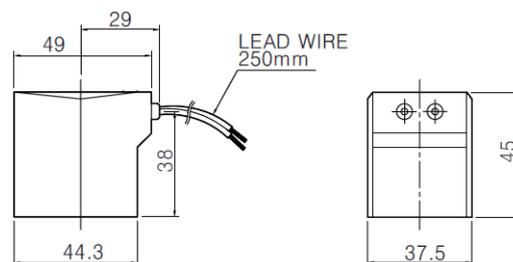


Voltage : AC220V, AC240V, AC110V, AC24V, DC24, DC12

Grommet



Solid, excellent durability, and replaceable.
Moisture and dust-resistant design.
Available for HPW, HPS and HDW series.



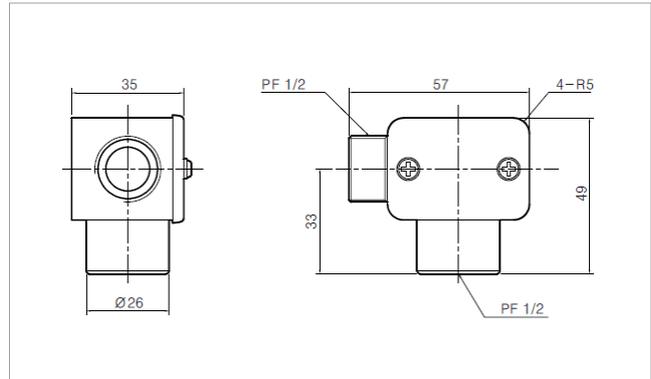
Voltage : AC220V, AC240V, AC110V, AC24V, DC24, DC12

Conduit Terminal



(With neon lamp: Option)

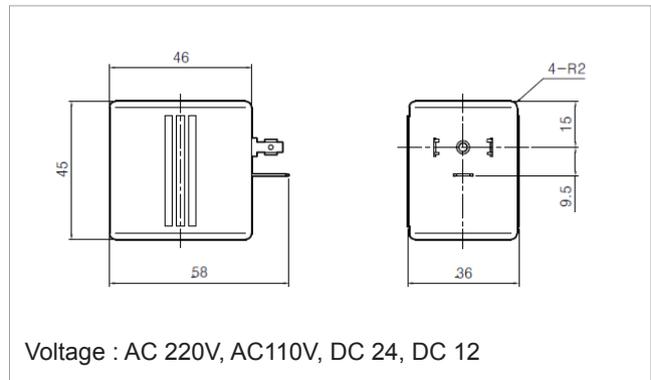
Suitable for environment which has risk of short circuit, electric shock. Easy and convenient in installation and free in wiring. Used where safety is required and used in various industrial fields. Mounted on the housing (PF1 / 2)



DIN Coil



Solid, excellent durability, and replaceable. Moisture and dust-resistant design.

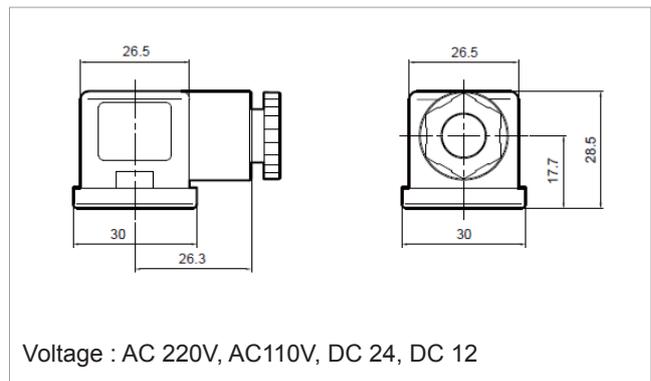


Voltage : AC 220V, AC110V, DC 24, DC 12

DIN Connector

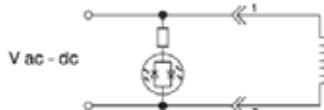


Suitable for environment which has risk of short circuit, electric shock. Easy and convenient in installation and free in wiring.

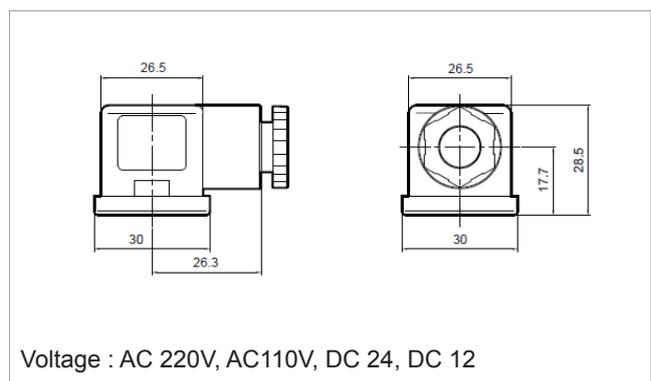


Voltage : AC 220V, AC110V, DC 24, DC 12

DIN Connector With Lamp

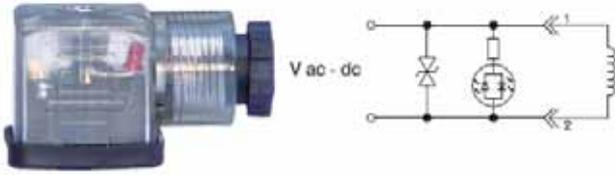


Suitable for environment which has risk of short circuit, electric shock. (With lamp) Easy and convenient in installation and free in wiring.

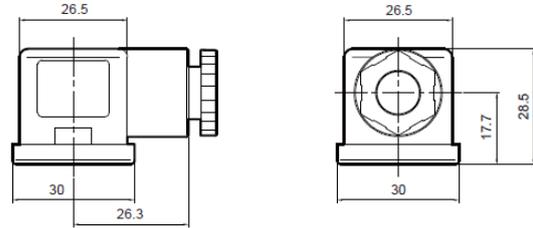


Voltage : AC 220V, AC110V, DC 24, DC 12

DIN Connector With Lamp & Surge Suppressor



Suitable for environment which has risk of overvoltage, inverse voltage, short circuit, electrical shock. (With lamp)
Easy and convenient in installation and free in wiring.

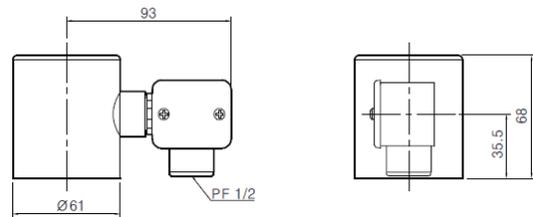


Voltage : AC 220V, AC110V, DC 24, DC 12

HKW · HKS Coil(Small)



Coil only for KICK type
Standard conduit type, Small(1/2", 3/4", 1")

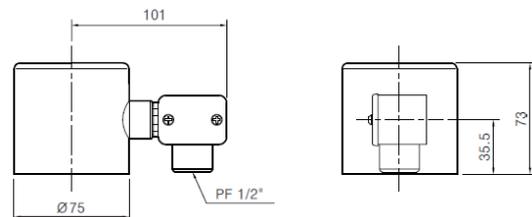


Voltage : AC 220V, AC110V, DC 24V
Steam type voltage: 220V 50/60Hz

HKW · HKS Coil(Large)



Coil only for KICK type
Standard conduit type, large(1 1/4", 1 1/2", 2")



Voltage : AC 220V, AC110V, DC 24, DC 12
Steam type voltage: 220V 50/60Hz

B Class Coil(Water & Air)



Wire : Irradiated wire
Voltage : AC 220V, AC110V, DC 24V, DC 12V

H Class Coil(Steam)



Wire : Silicone braided wire
Voltage : AC 220V, AC110V, DC 24V, DC 12V

Coil for HKW(Water & air)



Wire : Irradiated wire
Voltage : AC 220V, AC110V, DC 24V

Coil for HKS(Steam)

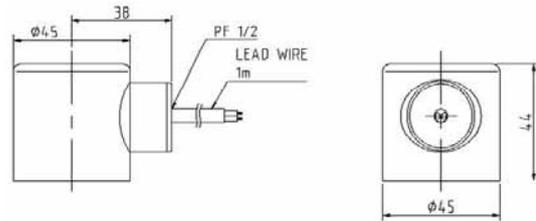


Wire : Silicone braided wire
Voltage : AC 220V
Steam type voltage : 220V 50/60Hz

Waterproof Coil



Coil only for HPW (HPW 1/4"~ 2 1/2")

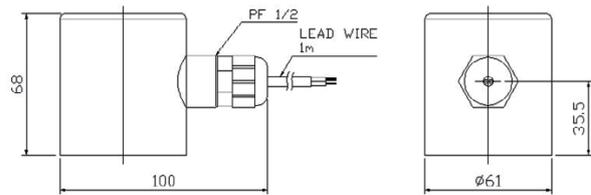


Voltage : DC 24V

Waterproof Coil



Coil only for KICK type (HKW 1/2" ~ 1")

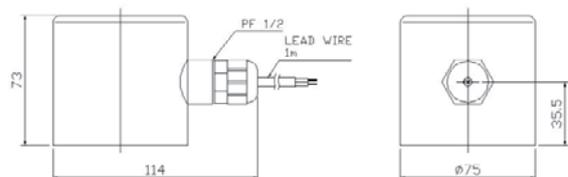


Voltage : DC 24V

Waterproof Coil



Coil only for KICK type (HKW 1 1/4" ~ 2")



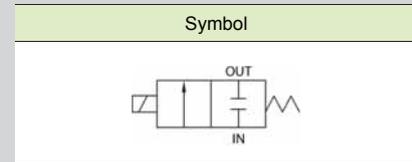
Voltage : DC 24V



HDA 021 series



HDA 021



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

02	Ø1 (Standard)
02A	Ø1.5

③ Port size

1	1/8
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④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
SL	SILICONE	Clean water -5~60°C
E	EPDM	Hot water 100°C

⑤ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
DC6V	DC6V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 60Hz AC220V 60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 30kgf/cm ² (0 ~ 3MPa) Vacuum(10 ⁻³ Torr)		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC : 6W, DC : 8W	
Electrical connection	Lead wire		Body material	Brass	
Port size	Rc(PT) 1/8		Seal material	NBR	SILICONE, EPDM, FPM
Orifice	Ø1	Ø1.5	Weight	0.21Kg	

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

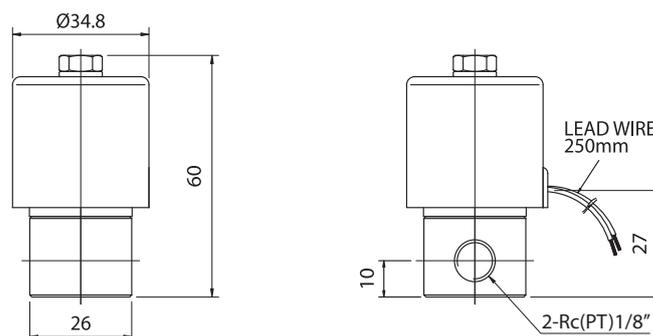
Features

- Direct acting type
- Normally closed type
- Easy to attach, compact size, light weight
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Compressor
- Medical instrument
- Water purifier
- Welding machine
- Vacuum packing machine

Dimensions



Process Valve

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

S, H (N.C)

HDS

HPS

S, H (N.O)

HSV

HPS

High Pressure

HPW

(20kgf/cm²)

HPM

(20kgf/cm²)

HPW

(60kgf/cm²)

Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HVS

HSR

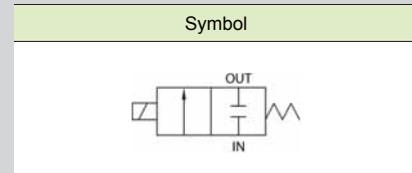
HDC

HPW

HDA031, 032 series



HDA 032



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

03	Ø2.5 (Standard)
03A	Ø2
03B	Ø3

③ Port size

1	1/8
2	1/4

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
SL	SILICONE	Clean water -5~60°C
E	EPDM	Hot water 100°C

⑤ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
DC6V	DC6V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC6V, 24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC:6W, DC:8W	
Electrical connection	Lead wire		Body material	Brass	
Port size	Rc(PT) 1/8, 1/4		Seal material	NBR	SILICONE, EPDM, FPM
Orifice	Ø2.5	Ø2, Ø3	Weight	0.22Kg	

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

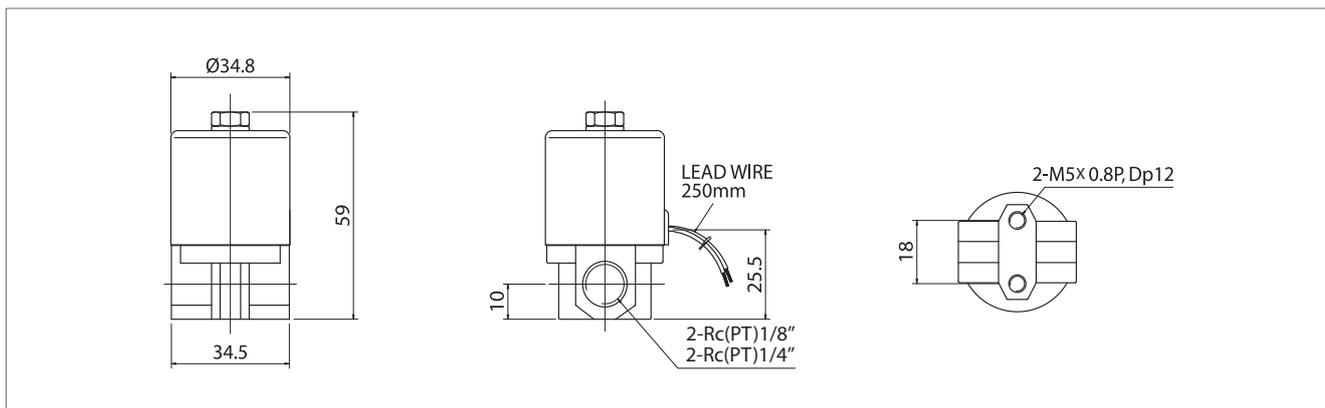
Features

- Direct acting type
- Normally closed type
- Easy to attach, compact size, light weight
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Compressor
- Medical instrument
- Water purifier
- Welding machine
- Vacuum packing machine

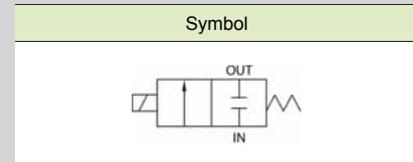
Dimensions



HDA031G, 032G series



HDA 031G



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Option

03	Ø2.5 (Standard)
03A	Ø2
03B	Ø3

③ Port size

1	1/8
2	1/4

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
SL	SILICONE	Clean water -5~60°C
E	EPDM	Hot water 100°C

⑤ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC6V	DC6V
DC24V	DC24V
DC12V	DC12V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC6V, 24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC: 6W, DC: 8W	
Electrical connection	Lead wire		Body material	Brass	
Port size	Rc(PT) 1/8, 1/4		Seal material	NBR	SILICONE, EPDM, FPM
Orifice	Ø2.5	Ø2, Ø3	Weight	0.22Kg	

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

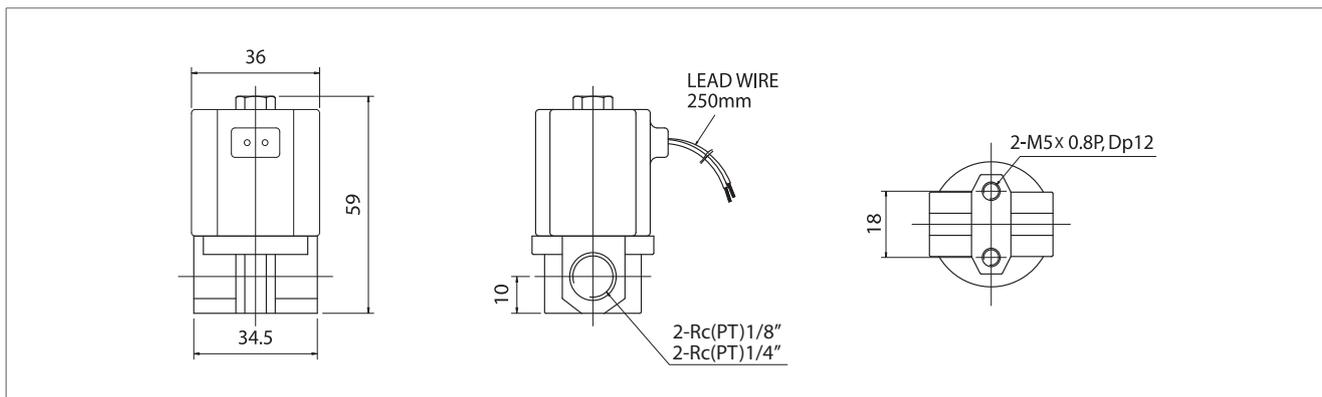
Features

- Direct acting type
- Normally closed type
- Grommet coil type
- Easy to attach, compact size, light weight
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Compressor
- Medical instrument
- Water purifier
- Welding machine
- Vacuum packing machine

Dimensions

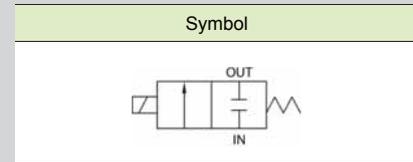


Process Valve
2Port Small
HDA
HDA G
KAB
HDA N.O
W, A (N.C)
HDW
HAW
HPW
W, A (N.O)
HVD
HPW
S, H (N.C)
HDS
HPS
S, H (N.O)
HSV
HPS
High Pressure
HPW (20kgf/cm ²)
HPM (20kgf/cm ²)
HPW (60kgf/cm ²)
Direct Acting
HKW
HKS
SUS Type
HDA
HDW
HVS
HSR
HDC
HPW

KAB21 series



KAB21-02-02-AC110V



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Port size

02	1/4
----	-----

③ Orifice

01	Ø1.5
02	Ø2 Standard
03	Ø3
04	Ø4

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
SL	SILICONE	Clean water -5~60°C
E	EPDM	Hot water 100°C

⑤ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	Refer to the table below		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC: 8W, DC: 7.5W	
Electrical connection	Lead wire		Body material	Brass	
Port size	Rc(PT) 1/4		Seal material	NBR	SILICONE, EPDM, FPM
Orifice	Ø1.5, Ø2(Standard), Ø3, Ø4		Weight	0.32Kg	

* Not available in explosive atmosphere.
* If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

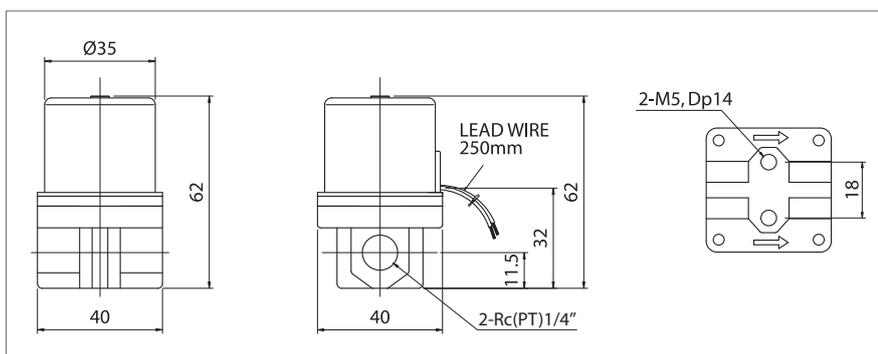
Features

- Direct acting type
- Normally closed type
- Easy to attach
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Wire cutting machine
- Medical instrument
- Water purifier
- Air conditioner
- Welding machine
- Compressor

Dimensions

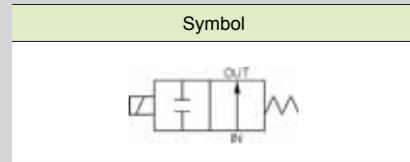


Model	Orifice	Max. operating pressure (kgf/cm ²)					
		Air		Water		Oil	
		AC	DC	AC	DC	AC	DC
KAB21-02-01	Ø1.5	30	25	30	25	30	25
KAB21-02-02	Ø2	15	15	15	15	7	7
KAB21-02-03	Ø3	10	10	10	10	7	7
KAB21-02-04	Ø4	7	7	7	7	5	5

HDA0201NO, 0202NO series



HDA 0201NO



How to Order

HDA 02 01 **NO** - - AC220V

① ② ③ ④ ⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

02	Ø2
----	----

③ Port size

01	1/8
02	1/4

④ Seal material

	Material	Applications
Nil	SILICONE	Standard Clean water -5~60℃
N	NBR	Water, Air, Oil
E	EPDM	Hot water 100℃

⑤ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 60Hz AC220V 60Hz DC 12V, 24V	
Fluid temp.	0 ~ 60℃			Allowable voltage fluctuation	±10% (AC), ±5% (DC)
Ambient temp.	50℃ (Max.)		Power consumption		AC : 6W, DC : 8W
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Body material	Brass	
Coil insulation	Class B		Seal material	SILICONE	NBR, EPDM
Electrical connection	Lead wire		Weight	0.25Kg	
Port size	Rc(PT) 1/8, 1/4				
Orifice	Ø2				

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

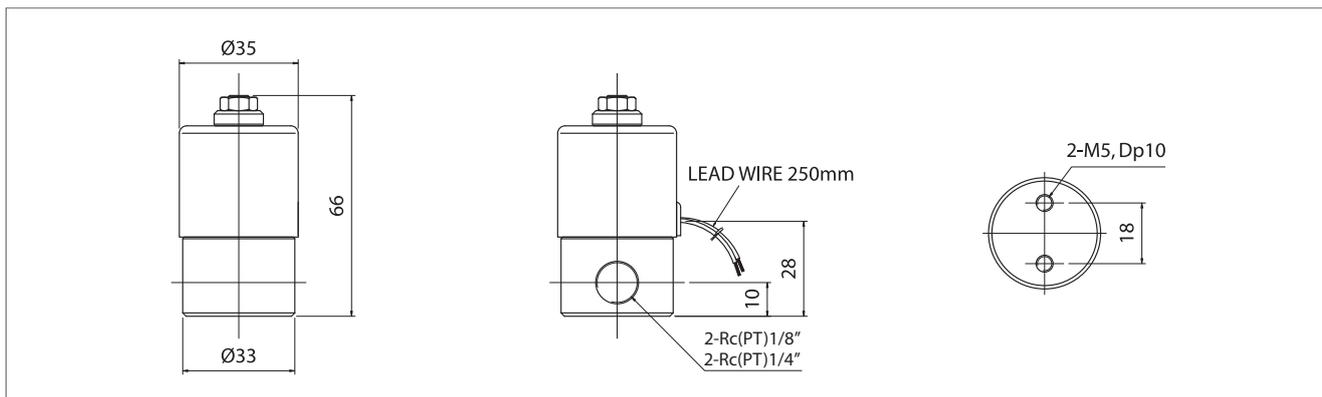
Features

- Direct acting type
- Normally open type
- Easy to attach, compact size, light weight
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Wire cutting machine
- Medical instrument
- Water purifier
- Air conditioner
- Welding machine
- Compressor

Dimensions



Process Valve
2Port Small
HDA
HDA G
KAB
HDA N.O
W, A (N.C)
HDW
HAW
HPW
W, A (N.O)
HVD
HPW
S, H (N.C)
HDS
HPS
S, H (N.O)
HSV
HPS
High Pressure
HPW (20kgf/cm ²)
HPM (20kgf/cm ²)
HPW (60kgf/cm ²)
Direct Acting
HKW
HKS
SUS Type
HDA
HDW
HVS
HSR
HDC
HPW

HDW021, 022 series



HDW 021

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

02	Ø1.5 (Standard)
02A	Ø2

③ Port size

1	1/8
2	1/4

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC12V, 24V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60°C			Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Ambient temp.	50°C (Max.)					
Pressure range	0 ~ 20kgf/cm ² (0 ~ 2MPa)	DC:0~20kgf/cm ² (0 ~ 2MPa) Vacuum(10 ⁻³ Torr)	Power consumption	AC, DC : 14W		
Coil insulation	Class B		Body material	Brass		
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Seal material	NBR	EPDM, FPM	
Port size	Rc(PT) 1/8, 1/4		Weight	0.5Kg		
Orifice	Ø1.5	Ø2				

Features

- Direct acting type
- Normally closed type
- Easy to attach
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

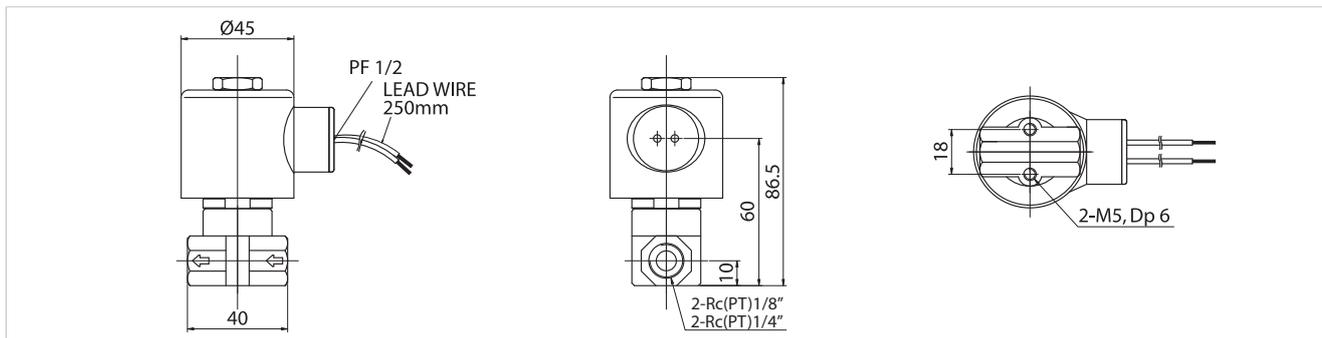
Applications

- Water piping
- Wire cutting machine
- Medical instrument
- Water purifier
- Vacuum packing machine

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

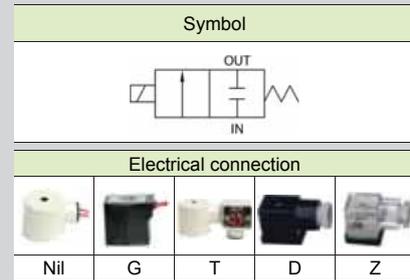
Dimensions



HDW042, 043 series



HDW 042



Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

04	Ø5 (Standard)
04A	Ø2
04B	Ø3

* Orifice Ø3 only available for port size 3/8.

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
SL	SILICONE	Clean water -5~60°C
E	EPDM	Hot water 100°C

⑥ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

2Port Small

- HDA
- HDA G
- KAB
- HDA N.O

W, A (N.C)

- HDW
- HAW
- HPW

W, A (N.O)

- HVD
- HPW

S, H (NC)

- HDS
- HPS

S, H (NO)

- HSV
- HPS

High Pressure

- HPW (20kgf/cm²)
- HPM (20kgf/cm²)
- HPW (60kgf/cm²)

Direct Acting

- HKW
- HKS

SUS Type

- HDA
- HDW
- HVS
- HSR
- HDC
- HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC110V 50Hz
Fluid temp.	0 ~60°C			AC110V 60Hz	AC220V 50Hz
Ambient temp.	50°C (Max.)			AC200V 50/60Hz	AC240V 50Hz
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1MPa)	DC:0~7kgf/cm ² (0 ~ 0.7MPa) Vacuum	Allowable voltage fluctuation	AC220V 60Hz	AC 24V 50Hz
Coil insulation	Class B			Power consumption	±10% (AC), ±5% (DC)
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 1/4, 3/8		Seal material	NBR	EPDM, SILICONE
Orifice	Ø5	Ø2, Ø3	Weight	0.5Kg	

Features

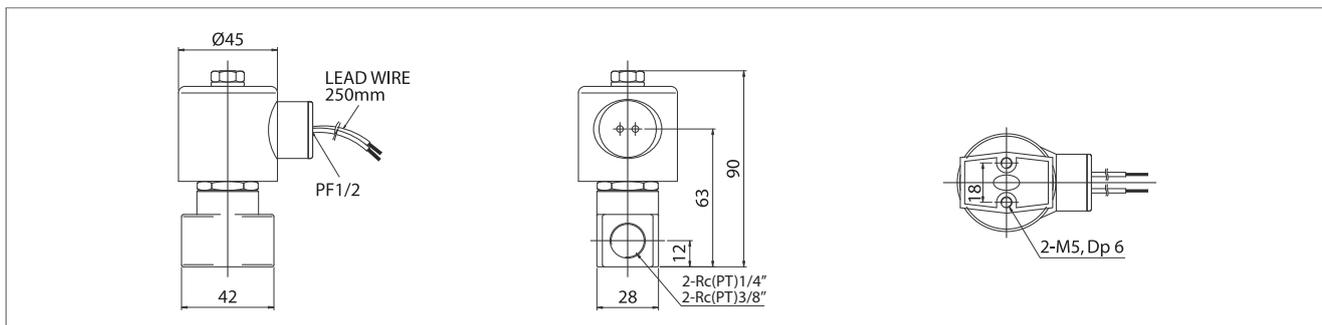
- Direct acting type
- Normally closed type
- Easy to attach
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Wire cutting machine
- Medical instrument
- Water purifier
- Vacuum packing machine

* Not available in explosive atmosphere. * If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HDW012H series



HDW 012H

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

01	Ø1
----	----

③ Port size

2	1/4
---	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
T	PTFE	Chemical, Hot water 180°C
E	EPDM	Hot water 100°C

⑥ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC24V 50Hz	
Fluid temp.	0 ~ 60°C			Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0 ~ 100kgf/cm ² (0 ~ 10MPa)	DC:0 ~ 50kgf/cm ² (0~5MPa) Vacuum	Body material	Brass		
Coil insulation	Class B			Seal material	NBR	EPDM, PTFE, FPM
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Weight		0.5Kg	
Port size	Rc(PT) 1/4					
Orifice	Ø1					

Features

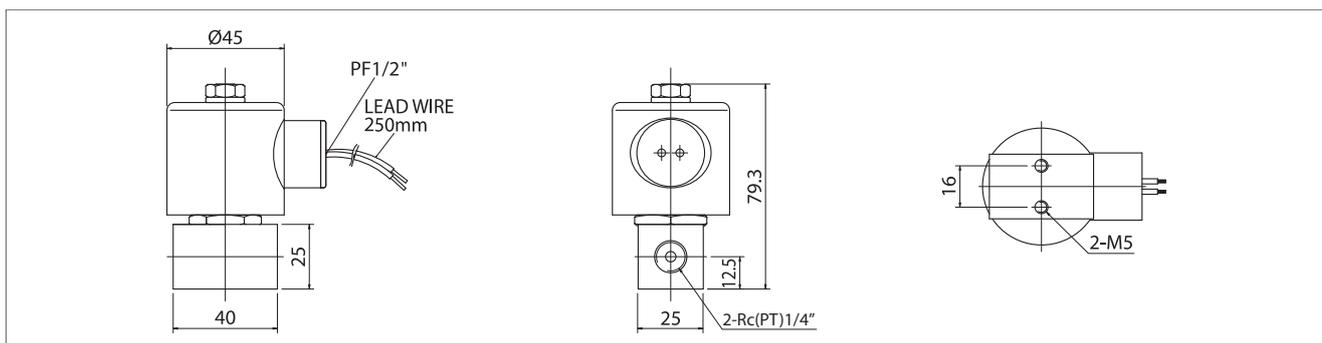
- Direct acting type
- Normally closed type
- Easy to attach
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Medical instrument
- Water purifier
- Vacuum packing machine
- Wire cutting machine

* Not available in explosive atmosphere. * If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HDW154 series



HDW 154

Symbol				
Electrical Connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

15	Ø15
----	-----

③ Port size

4	1/2
---	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Voltage

DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard
Fluid	Air, Water, Clean oil, Inert gas		Voltage	DC24V, 12V
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		
Ambient temp.	50°C (Max.)			
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1MPa)	Max.: 15kgf/cm ² (1.5MPa)	Allowable voltage fluctuation	±5% (DC)
Coil insulation	Class B		Power consumption	DC : 14W
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass
Port size	Rc(PT) 1/2		Seal material	NBR EPDM, FPM
Orifice	Ø15		Weight	0.8Kg

Features

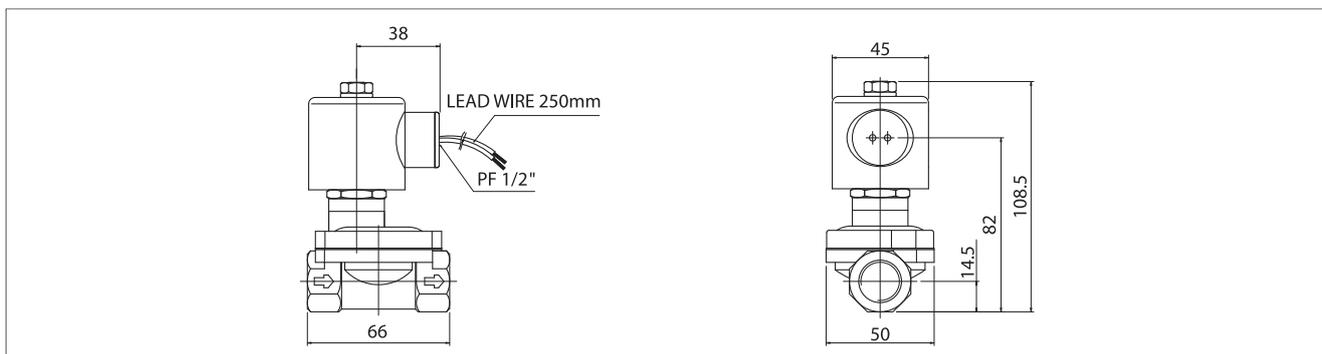
- Diaphragm type
- Normally closed type
- DC valve
- Seal material can be changed depending on fluid specifications.
- Fire resistant structure, high durability

Applications

- Water piping
- Medical instrument
- Boiler
- Industrial cleaner
- Water purifier
- Compressor

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Process Valve

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

S, H (N.C)

HDS

HPS

S, H (N.O)

HSV

HPS

High Pressure

HPW (20kgf/cm²)

HPM (20kgf/cm²)

HPW (60kgf/cm²)

Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HVS

HSR

HDC

HPW

HAW154 series



HAW 154

Symbol	
Electrical connection	
Nil	G T D Z

How to Order

HAW 15 4 - - DC24V

① ② ③ ④ ⑤ ⑥

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

15	Ø15
----	-----

③ Port size

4	1/2
---	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM		AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Ambient temp.	50°C (Max.)			
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1MPa)	Vacuum	Allowable voltage fluctuation	±10% (AC), ±5%(DC)
Coil insulation	Class B		Power consumption	AC, DC : 14W
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass
Port size	Rc(PT) 1/2		Seal material	NBR EPDM, FPM
Orifice	Ø10		Weight	0.5Kg

Features

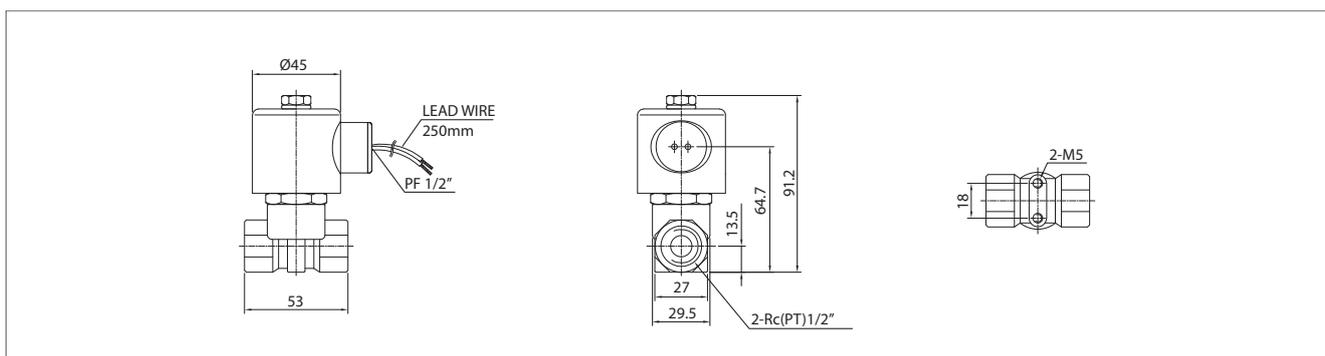
- Piston pilot type
- Normally closed type
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Boiler
- Medical instrument
- Water purifier
- Vacuum packing machine

* Not available in explosive atmosphere. * If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions





HPW102, 103 series

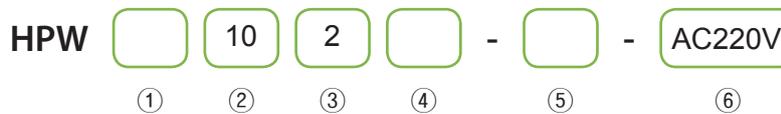


HPW 102
HPW 103

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

10	Ø10
----	-----

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
SL	SILICONE	Clean water -5~60°C
E	EPDM	Hot water 100°C

⑥ Rated voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

2Port Small

HDA
HDA G
KAB
HDA N.O

W, A (N.C)

HDW
HAW
HPW

W, A (N.O)

HVD
HPW

S, H (NC)

HDS
HPS

S, H (NO)

HSV
HPS

High Pressure

HPW (20kgf/cm²)
HPM (20kgf/cm²)
HPW (60kgf/cm²)

Direct Acting

HKW
HKS

SUS Type

HDA
HDW
HVS
HSR
HDC
HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC24V 50Hz
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)			
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1MPa)	Vacuum(10 ⁻³ Torr)	Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 1/4, 3/8		Seal material	NBR	EPDM, FPM, SILICONE
Orifice	Ø10		Weight	0.53Kg	

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

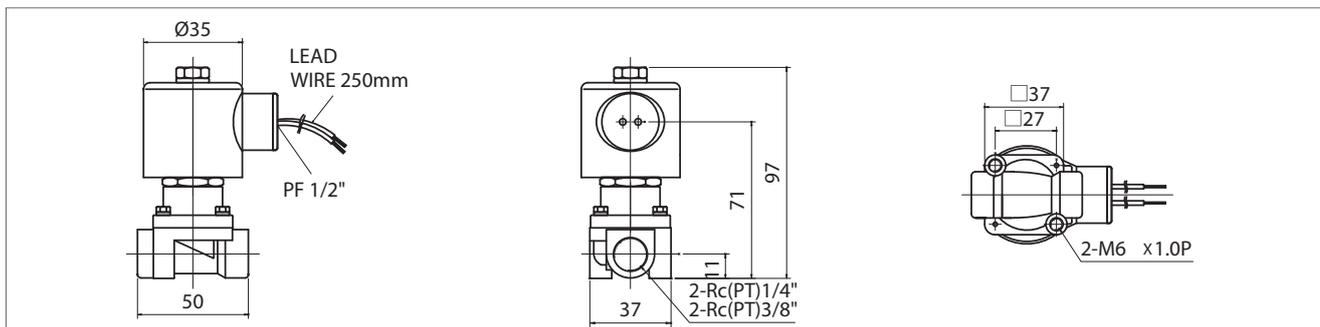
Features

- Diaphragm type
- Normally closed type
- Fire resistant structure, high durability
- Combines the strengths of pilot type and direct acting type
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Medical instrument
- Water purifier
- Vacuum packing machine
- Wire cutting machine

Dimensions



HPW102DC, 103DC series



HPW 102DC

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

10	Ø10
----	-----

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
SL	SILICONE	Clean water -5~60°C
E	EPDM	Hot water 100°C

⑥ Rated voltage

DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	DC12V, DC24V		
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		Allowable voltage fluctuation	±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	DC : 14W
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1MPa)		Body material	Brass		
Coil insulation	Class B			Seal material	NBR	EPDM, FPM, SILICONE
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Weight		0.53Kg	
Port size	Rc(PT) 1/4, 3/8					
Orifice	Ø10					

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

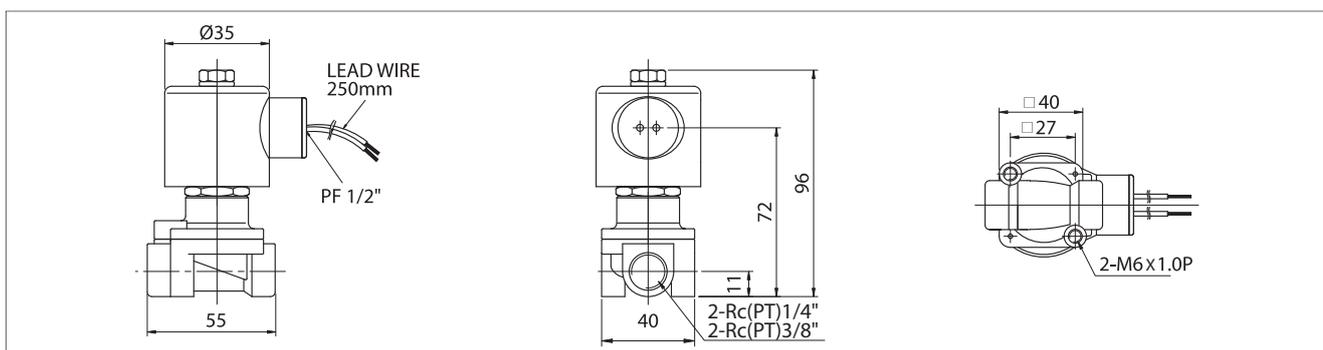
Features

- Pilot diaphragm type
- Normally closed type
- DC valve
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Medical instrument
- Water purifier
- Vacuum packing machine
- Wire cutting machine

Dimensions



HPW154 series



HPW 154

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

15	Ø15
----	-----

③ Port size

4	1/2
---	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

2Port Small

HDA
HDA G
KAB
HDA N.O

W, A (N.C)

HDW
HAW
HPW

W, A (N.O)

HVD
HPW

S, H (N.C)

HDS
HPS

S, H (N.O)

HSV
HPS

High Pressure

HPW (20kgf/cm²)
HPM (20kgf/cm²)
HPW (60kgf/cm²)

Direct Acting

HKW
HKS

SUS Type

HDA
HDW
HVS
HSR
HDC
HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60°C	EPDM FPM		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	DC : 14W
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1MPa)	DC:0.3~10kgf/cm ² (0.03 ~ 1MPa) Vacuum	Body material	Brass		
Coil insulation	Class B			Seal material	NBR	EPDM, FPM
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Weight		0.75Kg	
Port size	Rc(PT) 1/2					
Orifice	Ø15					

Features

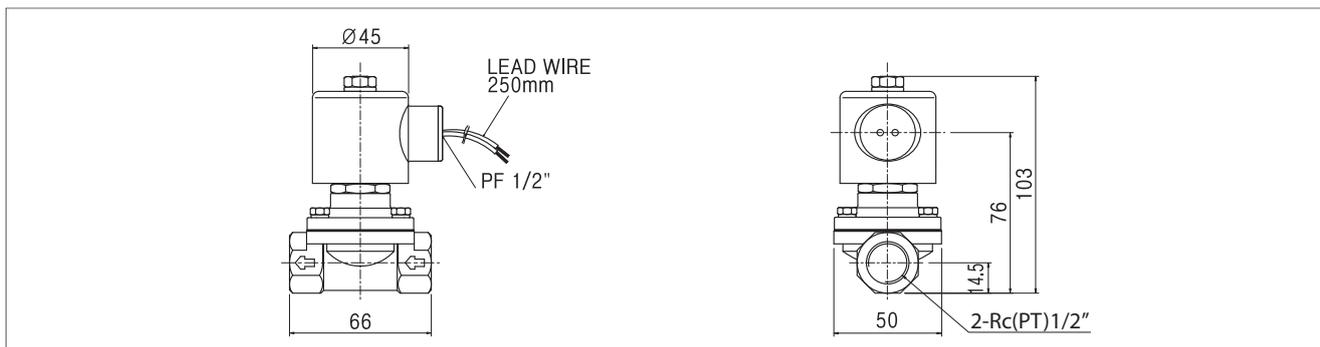
- Diaphragm type
- Normally closed type
- Combines the strengths of pilot type and direct acting type
- Seal material can be changed depending on fluid specifications.
- Fire resistant structure, high durability

Applications

- Water piping
- Boiler
- Water purifier
- Medical instrument
- Industrial cleaner

※ Not available in explosive atmosphere. ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HPW206, 2510 series



HPW 206

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
206	Ø20	3/4
2510	Ø25	1

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)			
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1MPa)	Vacuum	Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 3/4, 1		Seal material	NBR	EPDM, FPM
Orifice	Ø20, Ø25		Weight	Refer to the table below	

Features

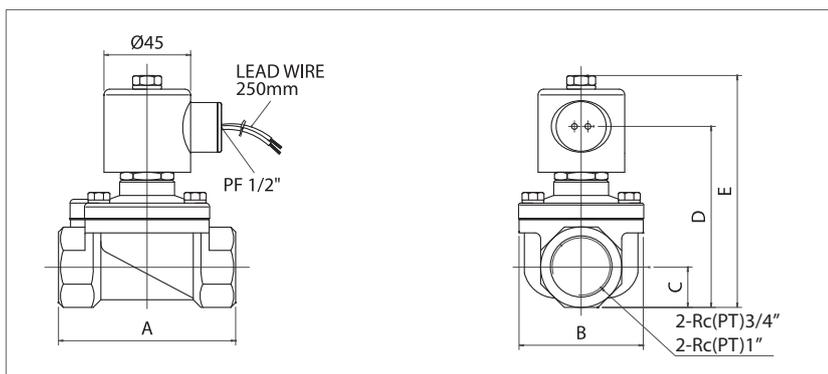
- Diaphragm type
- Normally closed type
- Combines the strengths of pilot type and direct acting type
- Seal material can be changed depending on fluid specifications.
- Fire resistant structure, high durability

Applications

- Water piping
- Medical instrument
- Boiler
- Air conditioner
- Water purifier
- Compressor

* Not available in explosive atmosphere. * If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



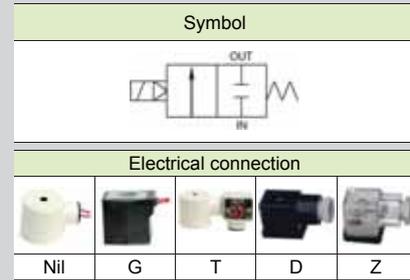
Model	A	B	C	D	E	Weight (kg)
HPW 206	92	65.5	18	88	114	1.2
HPW 2510	92	64.5	21	95	121	1.3



HPW206DC, 2510DC series



HPW 206DC



Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

② Orifice & Port size

	Orifice	Port size
206	Ø20	3/4
2510	Ø25	1

⑤ Voltage

DC24V	DC24V
DC12V	DC12V

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	DC24V, DC12V	
Fluid temp.	0 ~ 60°C	EPDM FPM			
Ambient temp.	50°C (Max.)				
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1MPa)		Allowable voltage fluctuation	±5% (DC)	
Coil insulation	Class B		Power consumption	DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 3/4, 1		Seal material	NBR	EPDM, FPM,
Orifice	Ø20, Ø25		Weight	Refer to the table below	

Features

- Pilot diaphragm type
- Normally closed type
- DC Valve
- Seal material can be changed depending on fluid specifications.
- Fire resistant structure, high durability

Applications

- Water piping
- Medical instrument
- Boiler
- Air conditioner
- Ventilator
- Compressor

S, H (NC)

HDS

HPS

S, H (NO)

HSV

HPS

High Pressure

HPW

(20kgf/cm²)

HPM

(20kgf/cm²)

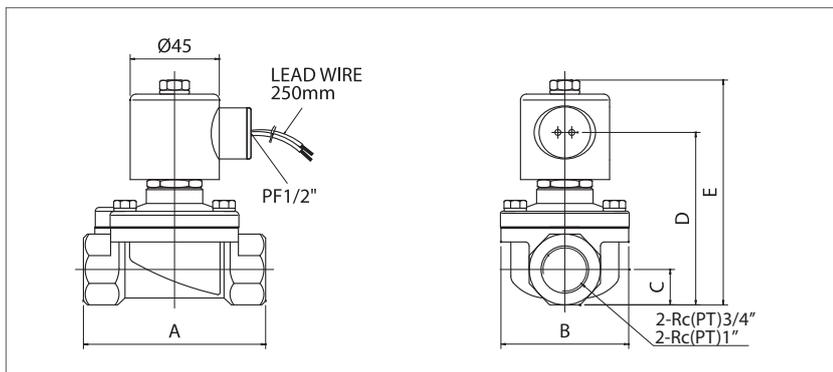
HPW

(60kgf/cm²)

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Weight (kg)
HPW 206	92	65	18	88	114	1.2
HPW 2510	92	65	21	95	121	1.3

Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HVS

HSR

HDC

HPW

HPW3212, 4014, 5020 series



HPW 4014

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC110V 50Hz
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		AC110V 60Hz	AC220V 50Hz
Ambient temp.	50°C (Max.)			AC200V 50/60Hz	AC240V 50Hz
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1MPa)		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 1 1/4, 1 1/2, 2		Seal material	NBR	EPDM, FPM
Orifice	Ø32, Ø40, Ø50		Weight	Refer to the table below	

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

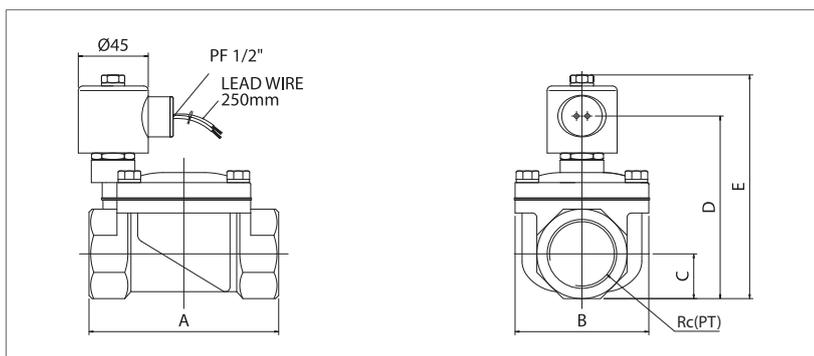
Features

- Diaphragm type
- Normally closed type
- Designed to operate with low differential pressure of (0.3kgf/cm²)
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Industrial cleaner
- Ventilator
- Air conditioner
- Compressor

Dimensions



Model	A	B	C	D	E	Rc(PT)	Weight (kg)
HPW 3212	122	86	26	112	139	1 1/4	2.2
HPW 4014	122	86	29	118	145	1 1/2	2.47
HPW 5020	140	100	36	133	160	2	3.57

HPW6524 series



HPW 6524

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

65	Ø65
----	-----

③ Port size

24	2 1/2
----	-------

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

2Port Small

HDA
HDA G
KAB
HDA N.O

W, A (N.C)

HDW
HAW
HPW

W, A (N.O)

HVD
HPW

S, H (NC)

HDS
HPS

S, H (NO)

HSV
HPS

High Pressure

HPW (20kgf/cm²)
HPM (20kgf/cm²)
HPW (60kgf/cm²)

Direct Acting

HKW
HKS

SUS Type

HDA
HDW
HVS
HSR
HDC
HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60°C	EPDM FPM			
Ambient temp.	50°C (Max.)				
Pressure range	0.5 ~ 10kgf/cm ² (0.05 ~ 1MPa)		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Bronze	
Port size	Rc(PT) 2 1/2		Seal material	PISTON NBR	EPDM, FPM
Orifice	Ø65		Weight	8.3kg	

Features

- Piston pilot type
- Normally closed type
- Large capacity structure
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

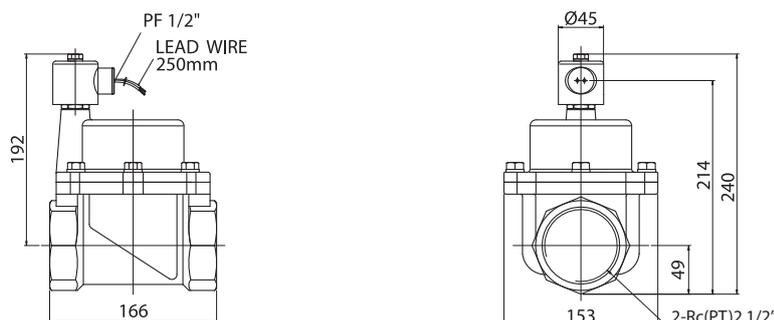
Applications

- Water piping
- Medical instrument
- Ventilator
- Air conditioner
- Boiler
- Blower
- Compressor

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HPW2510F, 3212F, 4014F, 5020F series



HPW 5020F

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPW 5020 **F** - - AC220V

①
②
③
④

① Orifice & Port size

	Orifice	Port size
2510	Ø25	1
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

② Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

③ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1MPa)		Body material	Brass, Bronze		
Coil insulation	Class B		Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	
End connection	JIS 10K FF		Seal material	NBR	EPDM, FPM	
Orifice	Ø25, Ø32, Ø40, Ø50		Weight	Refer to the table below		

Features

- Diaphragm type
- Normally closed type
- Designed to operate with low differential pressure of (0.03kgf/cm²)
- Seal material can be changed depending on fluid specifications.

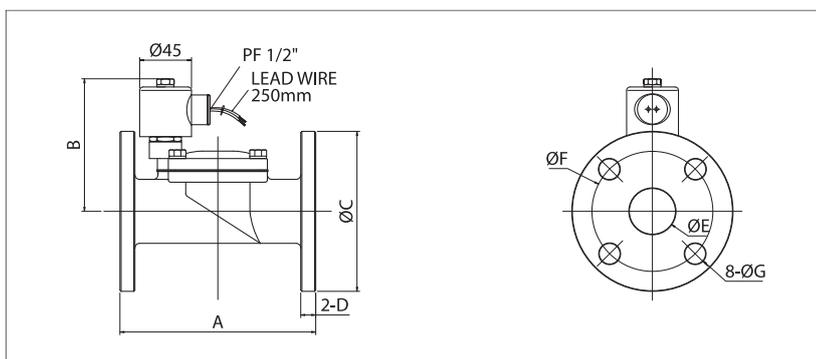
Applications

- Water piping
- Medical instrument
- Ventilator
- Air conditioner
- Compressor

* Not available in explosive atmosphere.

* If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	F	G	Weight (kg)
HPW 2510F	127	99.2	125	13	25	90	18	4.4
HPW 3212F	170	117	135	13	40	100	18	6.2
HPW 4014F	170	117	140	13	40	105	18	6.15
HPW 5020F	180	123	155	14	50	120	18	8.0

HPW6524F series



HPW 6524F

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPW 65 24 **F** - - AC220V

①
②
③
④
⑤

① Orifice

65	Ø65
----	-----

② Port size

24	2 1/2
----	-------

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑤ Voltage

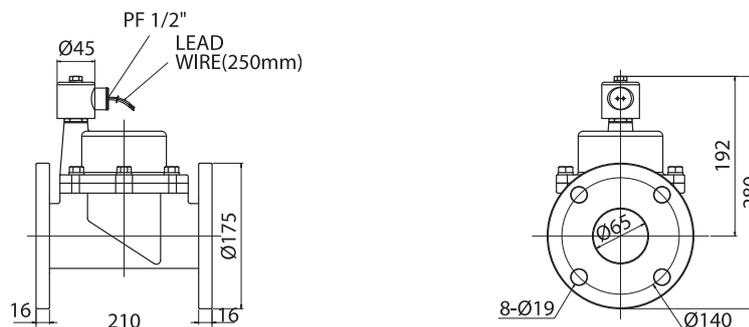
AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60°C	EPDM FPM			
Ambient temp.	50°C (Max.)				
Pressure range	0.5 ~ 10kgf/cm ² (0.05 ~ 1MPa)		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Bronze	
End connection	JIS 10K FF		Seal material	PISTON NBR	EPDM, FPM
Orifice	Ø65		Weight	14.3kg	

※ Not available in explosive atmosphere. ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions

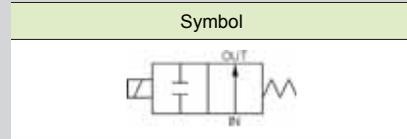


Process Valve
2Port Small
HDA
HDA G
KAB
HDA N.O
W, A (N.C)
HDW
HAW
HPW
W, A (N.O)
HVD
HPW
S, H (N.C)
HDS
HPS
S, H (N.O)
HSV
HPS
High Pressure
HPW (20kgf/cm ²)
HPM (20kgf/cm ²)
HPW (60kgf/cm ²)
Direct Acting
HKW
HKS
SUS Type
HDA
HDW
HVS
HSR
HDC
HPW

HVD022NO~052NO series



HVD 022NO



How to Order

HVD 02 2 NO - AC220V

①
 ②
 ③
 ④
 ⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

02	Ø2
03	Ø3
04	Ø4
05	Ø5

③ Port size

2	1/4
---	-----

④ Seal material

	Material	Applications
Nil	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C
N	NBR	Water, Air & Oil

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
AC 24V	AC 24V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Steam, Water, Clean oil, Inert gas		Voltage	AC200V 50/60Hz DC24V, 12V	AC110V 50/60Hz AC 24V 50/60Hz
Fluid temp.	0 ~ 120°C				
Ambient temp.	40°C (Max.)				
Pressure range	Refer to the table below		Allowable voltage fluctuation	±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 12W	
Electrical connection	Grommet coil		Body material	Brass	
Port size	Rc(PT) 1/4		Seal material	FPM	EPDM, NBR
Orifice	Ø2, Ø3, Ø4, Ø5		Weight	0.42kg	

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

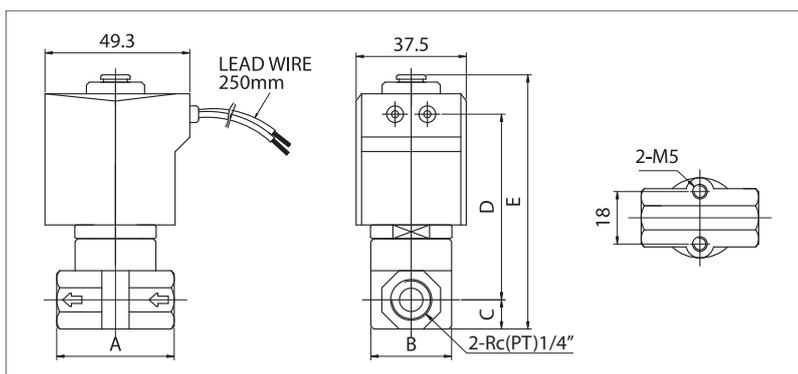
Features

- Direct acting type
- Normally open type
- Fluorine seat (Standard)
- Rectifier attached
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Medical instrument
- Compressor
- Vacuum packin machine
- Ventilator

Dimensions



Model	A	B	C	D	E	Pressure (kgf/cm ²)	Weight (kg)
HVD 022NO	40	27.5	10	63.7	87.2	15	0.42
HVD 032NO	40	27.5	10	63.7	87.2	12	
HVD 042NO	40	27.5	10	63.7	87.2	9	
HVD 052NO	40	27.5	10	63.7	87.2	6.5	

HPW102NO, 103NO, 154NO series



HPW 102NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
102	Ø5	1/4
103	Ø4.5	3/8
154	Ø4.5	1/2

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Body material	Brass		
Coil insulation	Class B			Seal material	NBR	EPDM, FPM
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Weight		Refer to the table below	
Port size	Rc(PT) 1/4, 3/8, 1/2					
Orifice	Ø4.5, Ø5					

Features

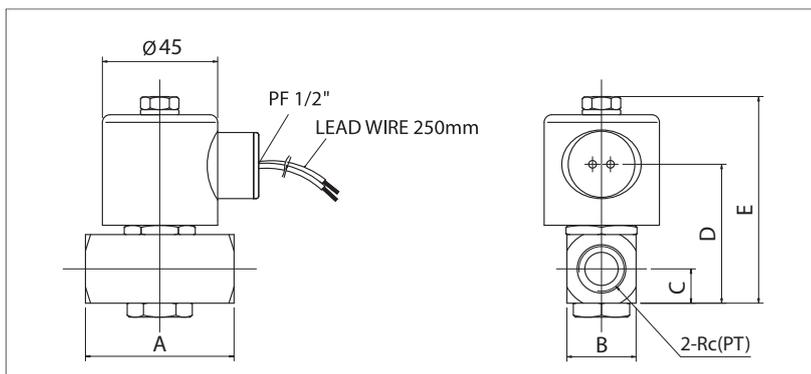
- Direct acting type
- Normally open type
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid Specifications.

Applications

- Water piping
- Medical instrument
- Water purifier
- Washing machine
- Welding machine

※ Not available in explosive atmosphere. ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Rc(PT)	Weight (kg)
HPW 102NO	43	25	12	54	79	1/4	0.5
HPW 103NO	58	27	13.5	54.5	81	3/8	0.6
HPW 154NO	58	27	13.5	54.5	81	1/2	0.6

HPW102DNO, 103DNO series



HPW 102DNO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

10	Ø10
----	-----

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC110V 50Hz
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		AC110V 60Hz	AC220V 50Hz
Ambient temp.	50°C (Max.)			AC200V 50/60Hz	AC240V 50Hz
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 1/4, 3/8		Seal material	NBR	EPDM, FPM
Orifice	Ø10		Weight	0.6kg	

Features

- Diaphragm type
- Normally open type
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

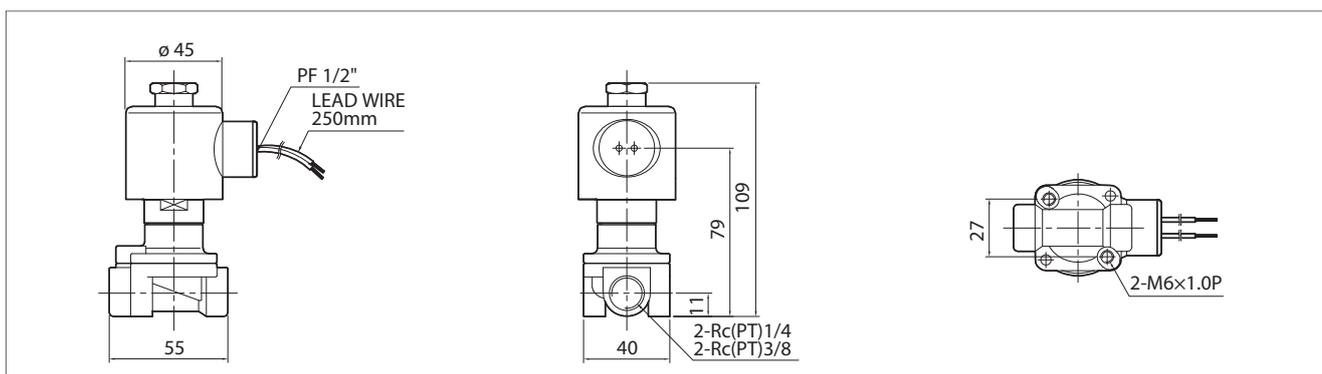
Applications

- Water piping
- Industrial cleaner
- Compressor
- Water purifier
- Medical instrument
- Air conditioner

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HPW154DNO series



HPW 154DNO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPW
15
4
DNO - - AC220V

①
②
③
④
⑤
⑥

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

15	Ø15
----	-----

③ Port size

4	1/2
---	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120℃
E	EPDM	Hot water 100℃

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60℃	EPDM(100℃) FPM(120℃)			
Ambient temp.	50℃ (Max.)				
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2		Body material	Brass	
Port size	Rc(PT) 1/2		Seal material	NBR DIAPRAGM	EPDM, FPM
Orifice	Ø15		Weight	0.8kg	

Features

- Diaphragm type
- Normally open type
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Water purifier
- Compressor
- Industrial cleaner
- Medical instrument
- Air conditioner

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Process Valve
2Port Small
HDA
HDA G
KAB
HDA N.O
W, A (N.C)
HDW
HAW
HPW
W, A (N.O)
HVD
HPW
S, H (N.C)
HDS
HPS
S, H (N.O)
HSV
HPS
High Pressure
HPW (20kgf/cm ²)
HPM (20kgf/cm ²)
HPW (60kgf/cm ²)
Direct Acting
HKW
HKS
SUS Type
HDA
HDW
HVS
HSR
HDC
HPW

HPW206NO, 2510NO series



HPW206NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPW
206
NO
 -
 - AC220V

①
②
③
④
⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
206	Ø20	3/4
2510	Ø25	1

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1MPa)		Body material	Brass		
Coil insulation	Class B		Seal material	NBR	EPDM, FPM	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Weight	Refer to the table below		
Port size	Rc(PT) 3/4, 1					
Orifice	Ø20, Ø25					

Features

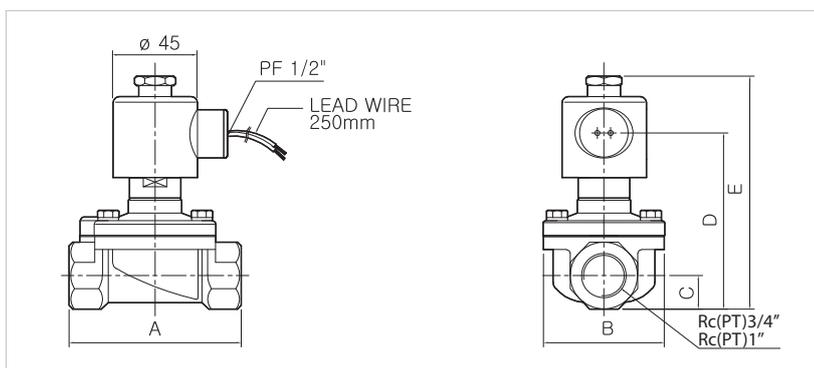
- Diaphragm type
- Normally open type
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Industrial cleaner
- Compressor
- Boiler
- Medical instrument
- Air conditioner

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Weight (kg)
HPW 206NO	93	65	19	95	124	1.2
HPW 2510NO	93	65	21	102	130	1.3

HPW3212NO, 4014NO, 5020NO series



HPW 3212NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

② Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC110V 50Hz
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		AC110V 60Hz	AC220V 50Hz
Ambient temp.	50°C (Max.)			AC200V 50/60Hz	AC240V 50Hz
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~1MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 1 1/4, 1 1/2, 2		Seal material	NBR	EPDM, FPM
Orifice	Ø32, Ø40, Ø50		Weight	Refer to the table below	

Features

- Diaphragm type
- Normally open type
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

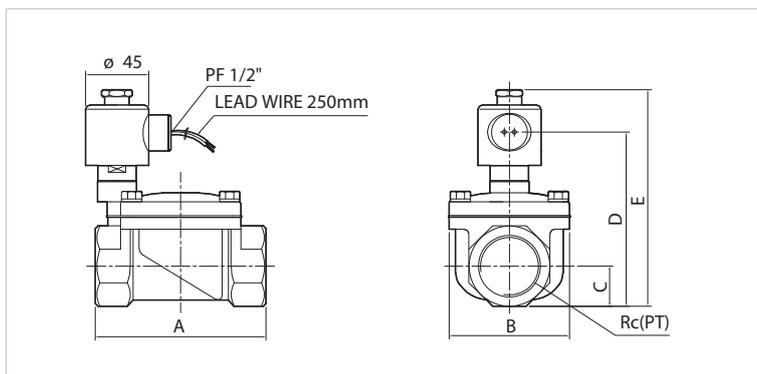
Applications

- Water piping
- Industrial cleaner
- Compressor
- Boiler
- Medical instrument
- Air conditioner

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Rc(PT)	Weight (kg)
HPW 3212NO	122	86	26	119	150	1 1/4	2.2
HPW 4014NO	122	86	29	125	156	1 1/2	2.5
HPW 5020NO	140	100	36	140	171	2	3.7

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

S, H (NC)

HDS

HPS

S, H (NO)

HSV

HPS

High Pressure

HPW

(20kgf/cm²)

HPM

(20kgf/cm²)

HPW

(60kgf/cm²)

Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HVS

HSR

HDC

HPW

HPW6524NO series



HPW 6524NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPW
65
24
NO
 -
 - AC220V

①
②
③
④
⑤
⑥

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

65	Ø65
----	-----

③ Port size

24	2 1/2
----	-------

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC110V 50Hz
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		AC110V 60Hz	AC220V 50Hz
Ambient temp.	50°C (Max.)			AC200V 50/60Hz	AC240V 50Hz
Pressure range	0.5 ~ 10kgf/cm ² (0.05 ~ 1MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Bronze	
Port size	Rc(PT) 2 1/2		Seal material	NBR	EPDM, FPM
Orifice	Ø65		Weight	8.3kg	

Features

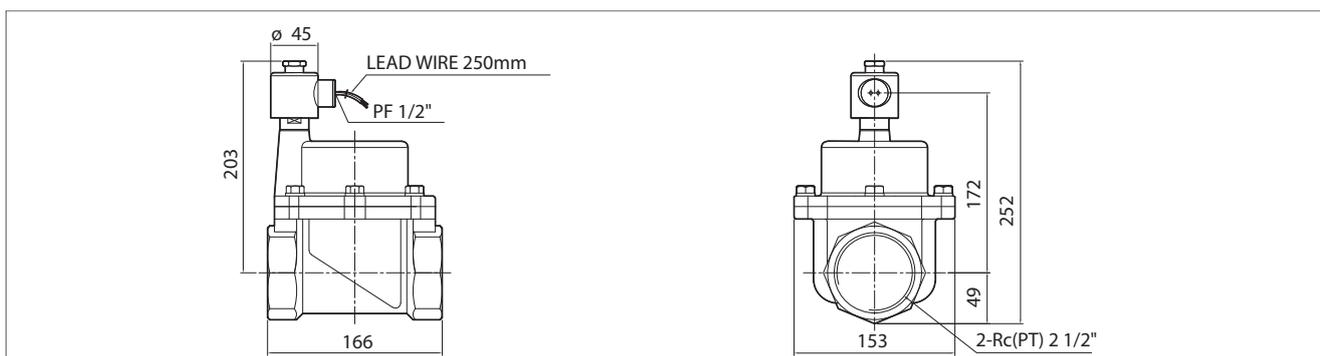
- Piston pilot type
- Normally open type
- Fire resistant structure, large capacity
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Industrial cleaner
- Ventilator
- Boiler
- Medical instrument
- Air conditioner

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HPW3212FO, 4014FO, 5020FO series



HPW 3212FO

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order

HPW 3212 FO - - AC220V

① ② ③ ④

① Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

② Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

③ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

S, H (NC)

HDS

HPS

S, H (NO)

HSV

HPS

High Pressure

HPW (20kgf/cm²)

HPM (20kgf/cm²)

HPW (60kgf/cm²)

Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HVS

HSR

HDC

HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC110V 50Hz
Fluid temp.	0 ~ 60 °C	EPDM(100 °C) FPM(120 °C)		AC110V 60Hz	AC220V 50Hz
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	AC240V 50Hz
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~1MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Bronze, Brass	
End connection	JIS 10K FF		Seal material	NBR	EPDM, FPM
Orifice	Ø32, Ø40, Ø50		Weight	Refer to the table below	

Features

- Diaphragm type
- Normally open type
- Fire resistant structure, Large capacity
- Seal material can be changed depending on fluid specifications.
- Designed to operate with low differential pressure of (0.3kgf/cm²)

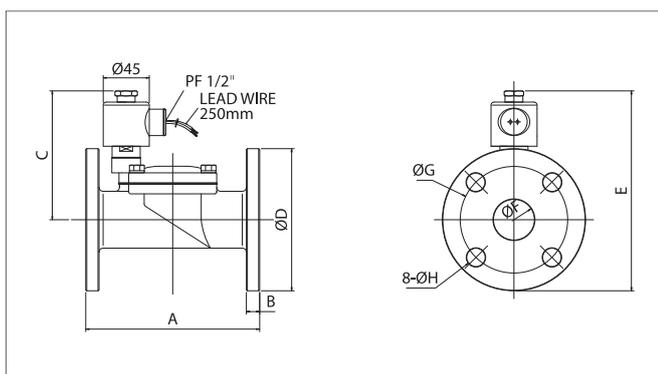
Applications

- Water piping
- Compressor
- Ventilator
- Boiler
- Medical instrument
- Air conditioner

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	F	G	H	Weight (kg)
HPW 3212FO	170	13	127	Ø135	194	Ø40	Ø100	Ø18	6.2
HPW 4014FO	170	13	127	Ø140	197	Ø40	Ø105	Ø18	6.15
HPW 5020FO	180	14	135	Ø155	212	Ø50	Ø120	Ø18	8

HPW6524FO series



HPW 6524FO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPW 65 24 **FO** - - AC220V

① ② ③ ④ ⑤

① Orifice

65	Ø65
----	-----

② Port size

24	2 1/2
----	-------

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC110V 50Hz
Fluid temp.	0 ~ 60 °C	EPDM (100 °C) FPM (120 °C)		AC110V 60Hz	AC220V 50Hz
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	AC240V 50Hz
ressure range	0.5 ~ 10kg/cm ² (0.05 ~ 1.0MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC: 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Bronze	
End connection	JIS 10K FF		Seal material	NBR	EPDM, FPM
Orifice	Ø65		Weight	14.3kg	

Features

- Piston pilot type
- Normally open type
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid specifications.

Applications

- Water piping
- Compressor
- Ventilator
- Industrial cleaner
- Medical instrument
- Air conditioner

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

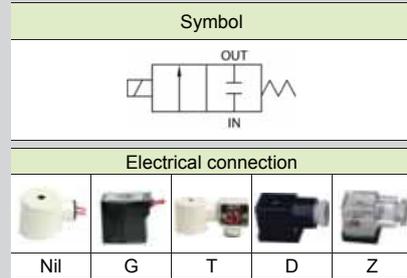
Dimensions



HDS021, 022 series

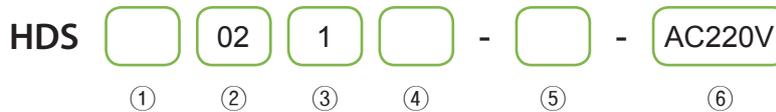


HDS 021



Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

02	Ø1.5 (Standard)
02A	Ø2

③ Port size

1	1/8
2	1/4

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

Nil	FPM	Chemical, Hot water 120°C
T	PTFE	Chemical, Hot water 180°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Steam, Hot water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC220V 50Hz	
Fluid temp.	0 ~ 140°C			AC110V 60Hz		AC240V 50Hz
Ambient temp.	50°C (Max.)			AC200V 50/60Hz		AC 24V 50Hz
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)	DC:0~10kgf/cm ² (0 ~ 1.0MPa)	Allowable voltage fluctuation	±10% (AC), ±5% (DC)		
Coil insulation	Class H		Power consumption	AC, DC : 14W		
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Brass		
Port size	Rc(PT)1/8, 1/4		Seal material	FPM	PTFE	
Orifice	Ø1.5	Ø2	Weight	0.5kg		

Features

- Direct acting type
- Normally closed type
- Easy to attach
- Fire resistant structure, high durability

Applications

- Steam piping
- Steam cooker
- Sterilizer
- Wire cutting machine
- Industrial cleaner
- Medical instrument
- Water purifier

S, H (NC)

HDS

HPS

S, H (NO)

HSV

HPS

High Pressure

HPW

(20kgf/cm²)

HPM

(20kgf/cm²)

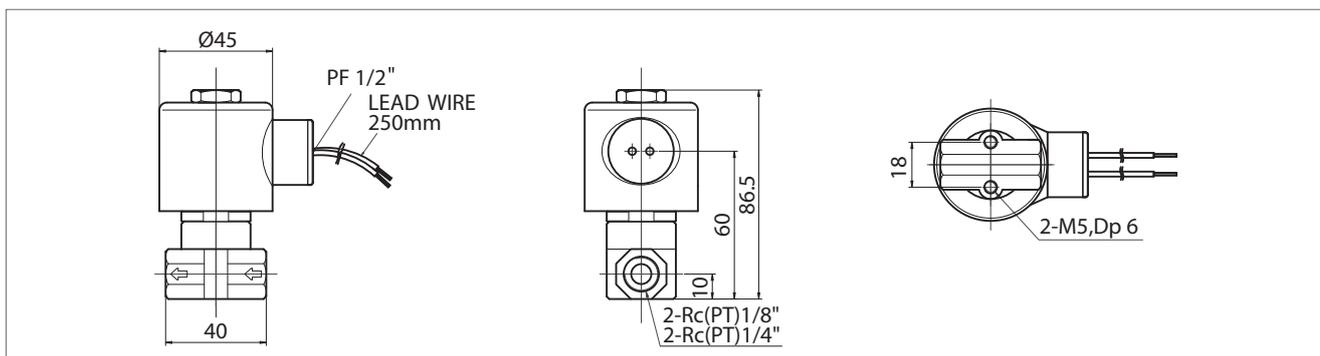
HPW

(60kgf/cm²)

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HVS

HSR

HDC

HPW

HDS042, 043 series



HDS 042

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

04	Ø5 (Standard)
04A	Ø2
04B	Ø3

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

Nil	FPM	Chemical, Hot water 120 °C
T	PTFE	Chemical, Hot water 180 °C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Steam, Hot water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC220V 50Hz
Fluid temp.	0 ~ 140 °C			AC110V 60Hz	AC240V 50Hz
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	AC 24V 50Hz
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)	DC: 0 ~ 7kgf/cm ² (0 ~ 0.7MPa)	Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT)1/4, 3/8		Seal material	FPM	PTFE
Orifice	Ø5	Ø2, Ø3	Weight	0.5kg	

Features

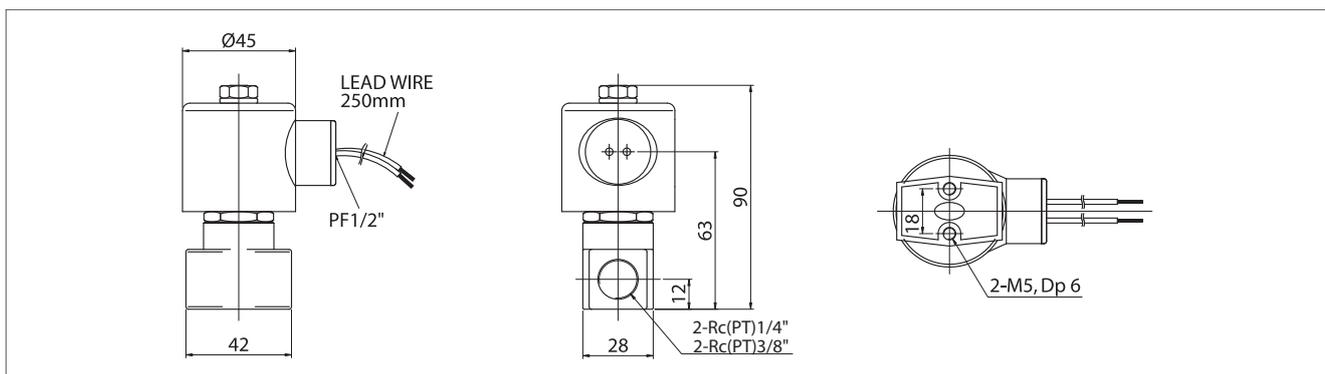
- Direct acting type
- Normally closed type
- Easy to attach
- Fire resistant structure, high durability

Applications

- Steam piping
- Steam cooker
- Sterilizer
- Wire cutting machine
- Industrial cleaner
- Medical instrument
- Water purifier

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HPS102, 103, 154 series



HPS 103

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
102	Ø10	1/4
103	Ø10	3/8
154	Ø15	1/2

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

2Port Small

- HDA
- HDA G
- KAB
- HDA N.O

W, A (N.C)

- HDW
- HAW
- HPW

W, A (N.O)

- HVD
- HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz	AC220V 50Hz
Fluid temp.	0 ~ 180 °C			AC110V 60Hz	AC240V 50Hz
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	AC 24V 50Hz
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~ 0.7MPa)		Allowable voltage fluctuation	±10% (AC)	
Coil insulation	Class H		Power consumption	AC: 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT)1/4, 3/8, 1/2		Seal material	PTFE + SUS 304 PISTON	
Orifice	Ø10, Ø15		Weight	0.53kg , 0.77kg	

Features

- Piston pilot type
- Normally closed type
- Max temperature 180 °C
- Fire resistant structure, high durability

Applications

- Steam piping
- Washing machine
- Sterilizer
- Heating system
- Heat exchanger

S, H (NC)

- HDS
- HPS

S, H (NO)

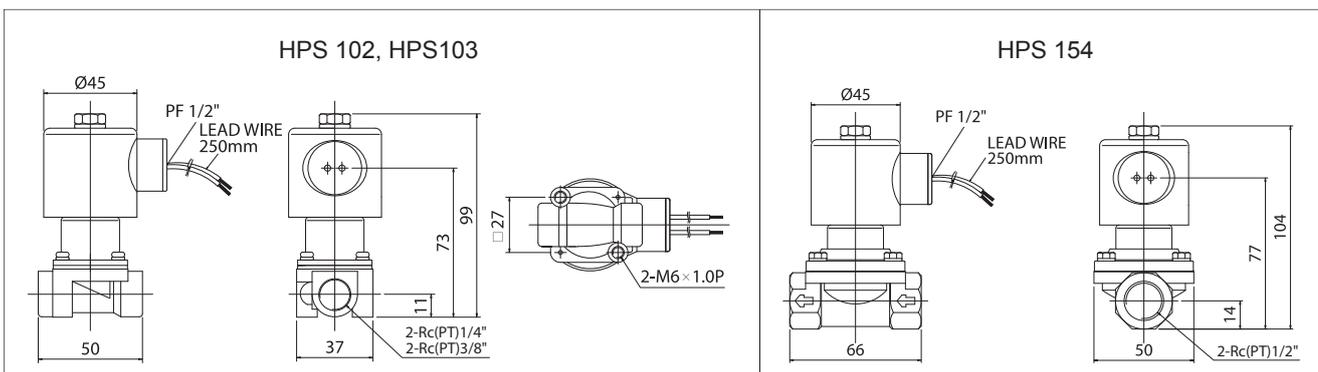
- HSV
- HPS

High Pressure

- HPW (20kgf/cm²)
- HPM (20kgf/cm²)
- HPW (60kgf/cm²)

※ Not available in explosive atmosphere.

Dimensions



Direct Acting

- HKW
- HKS

SUS Type

- HDA
- HDW
- HVS
- HSR
- HDC
- HPW

HPS102DC, 103DC, 154DC series



HPS 103DC

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPS 103 DC - DC24V

①
 ②
 ③
 ④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
102	Ø10	1/4
103	Ø10	3/8
154	Ø15	1/2

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

DC24V	DC24V
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Specifications

Classification	Standard	Option	Classification	Standard
Fluid	Air, Steam, Hot water		Voltage	DC24V
Fluid temp.	0 ~ 180 °C			
Ambient temp.	50 °C (Max.)			
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~ 0.7MPa)		Allowable voltage fluctuation	±5% (DC)
Coil insulation	Class H		Power consumption	DC : 14W
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass
Port size	Rc(PT)1/4, 3/8, 1/2		Seal material	PTFE + SUS 304 PISTON
Orifice	Ø10, Ø15		Weight	Refer to the table below

* Not available in explosive atmosphere.

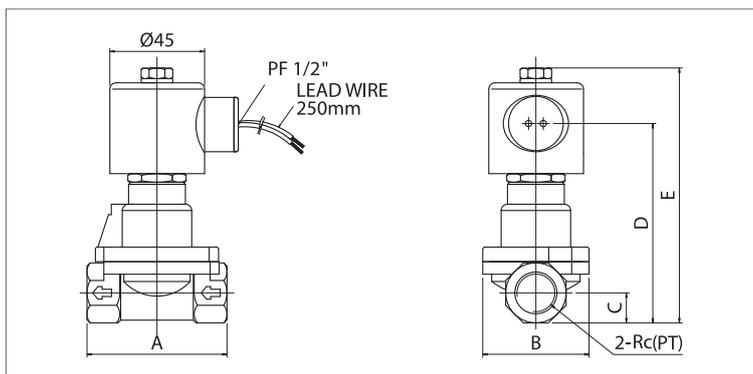
Features

- Piston pilot type
- Normally closed type
- Max temperature 180 °C
- Fire resistant structure, high durability

Applications

- Steam piping
- Washing machine
- Sterilizer
- Heating system
- Heat exchanger

Dimensions



Model	A	B	C	D	E	Rc(PT)	Weight (kg)
HPS 102DC	55	40	11	89	115	1/4	0.7
HPS 103DC	55	40	11	89	115	3/8	0.7
HPS 154DC	66	50	14	95	122	1/2	0.9

HPS206~5020 series



HPS 206

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
206	Ø20	3/4
2510	Ø25	1
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 180 °C			Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	Max. 50 °C				Power consumption	AC, DC : 14W
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~ 0.7MPa)		Coil insulation	Class H		
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass		
Port size	Rc(PT) 3/4, 1, 1 1/4, 1 1/2, 2		Seal material	PTFE + SUS 304 PISTON		
Orifice	Ø20, Ø25, Ø32, Ø40, Ø50		Weight	Refer to the table below		

※ Not available in explosive atmosphere.

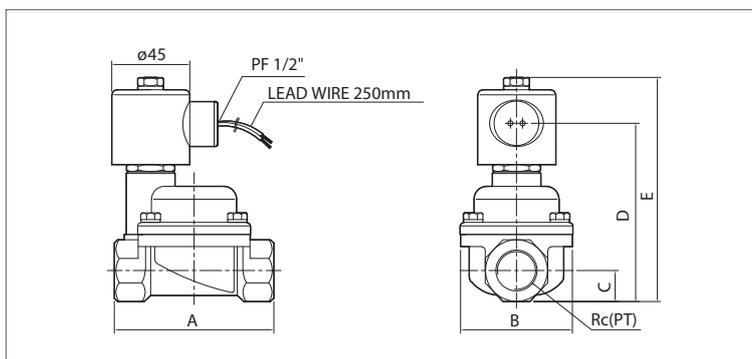
Feature

- Piston pilot type
- Normally closed
- High temperature(Max. 180 °C), large capacity
- Explosion proof, long service life

Application

- Steam pipes
- Dyeing machinery
- Heat exchangers
- Industrial cleaner
- Sterilizer

Dimensions



Model	A	B	C	D	E	Rc(PT)	Weight (kg)
HPS 206	92	64.5	18	104	130	3/4	1.55
HPS 2510	92	64.5	21	110	137	1	1.57
HPS 3212	122	86	26	131	157	1 1/4	2.55
HPS 4014	122	86	29	137	163	1 1/2	2.75
HPS 5020	140	100	36	154	180	2	3.92

HPS6524 series



HPS 6524

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPS 65 24 - AC220V

① ② ③ ④ ⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

65	Ø65
----	-----

③ Port size

24	2 1/2
----	-------

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 180℃			AC110V 60Hz	
Ambient temp.	50℃ (Max.)			AC200V 50/60Hz AC220V 60Hz DC24V	
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Bronze	
				Port size	Rc(PT) 2 1/2
Orifice	Ø65		Seal material	PTFE + SUS 304 PISTON	
			Weight	8.3kg	

Features

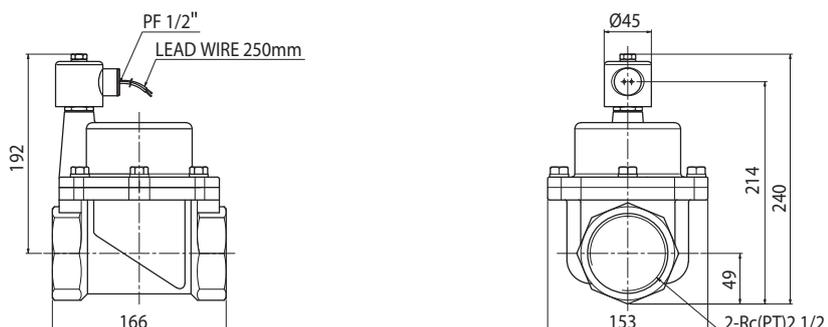
- Piston pilot type
- Normally closed type
- Max temperature 180℃
- Fire resistant structure, high durability

Applications

- Steam piping
- Industrial cleaner
- Sterilizer
- Ventilator
- Steam presser
- Heat exchanger

※ Not available in explosive atmosphere.

Dimensions



HPS2510F, 3212F, 4014F, 5020F series



HPS 5020F

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order

HPS 3212 F - AC220V

① ② ③

① Orifice & Port size

	Orifice	Port size
2510	Ø25	1
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

② Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

③ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

2Port Small

HDA
HDA G
KAB
HDA N.O

W, A (N.C)

HDW
HAW
HPW

W, A (N.O)

HVD
HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 180 °C				
Ambient temp.	50 °C (Max.)				
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Bronze, Brass	
		End connection		JIS 10K FF	
Orifice	Ø25, Ø32, Ø40, Ø50		Seal material	PTFE + SUS 304 PISTON	
			Weight	Refer to the table below	

Features

- Piston pilot type
- Normally closed type
- Max temperature 180 °C, large capacity
- Fire resistant structure

Applications

- Steam piping
- Dyeing machine
- Sterilizer
- Steam presser
- Heat exchanger
- Industrial cleaner

S, H (NC)

HDS
HPS

S, H (NO)

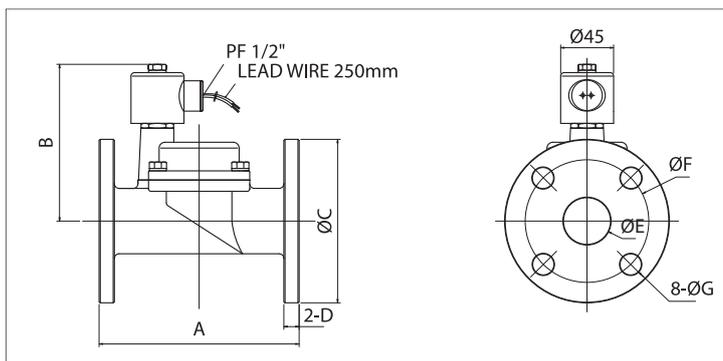
HSV
HPS

High Pressure

HPW (20kgf/cm²)
HPM (20kgf/cm²)
HPW (60kgf/cm²)

※ Not available in explosive atmosphere.

Dimensions



Model	A	B	C	D	E	F	G	Weight (kg)
HPS 2510	127	115.1	Ø125	13	Ø25	Ø90	Ø18	4.4
HPS 3212	170	135	Ø135	13	Ø40	Ø100	Ø18	6.6
HPS 4014	170	135	Ø140	13	Ø40	Ø105	Ø18	6.55
HPS 5020	180	145	Ø145	14	Ø50	Ø120	Ø18	8.5

Direct Acting

HKW
HKS

SUS Type

HDA
HDW
HVS
HSR
HDC
HPW

HPS6524F series



HPS 6524F

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPS 65 24 F - AC220V

① ② ③ ④

① Orifice

65	Ø65
----	-----

② Port size

24	2 1/2
----	-------

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz	AC220V 50Hz
Fluid temp.	0 ~ 180 °C			AC110V 60Hz	
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Bronze	
End connection	JIS 10K FF		Seal material	PTFE + SUS 304 PISTON	
Orifice	Ø65		Weight	14.3kg	

* Not available in explosive atmosphere.

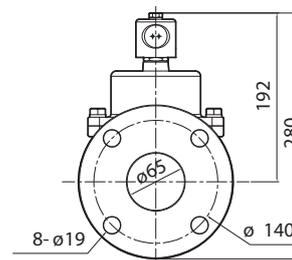
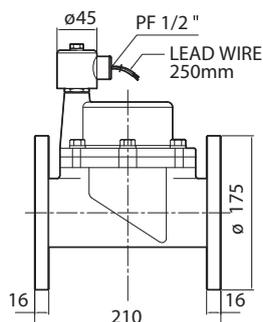
Features

- Piston pilot type
- Normally closed type
- Max temperature 180 °C, large capacity
- Fire resistant structure

Applications

- Steam piping
- Steam presser
- Industrial cleaner
- Heat exchanger
- Sterilizer
- Ventilator

Dimensions



HSV102NO, 103NO, 154NO



HSV 102NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
102	Ø5	1/4
103	Ø4.5	3/8
154	Ø4.5	1/2

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Steam		Voltage	AC100V 50/60Hz	AC220V 50Hz AC240V 50Hz AC24V 50Hz
Fluid temp.	0 ~ 140 °C			AC110V 60Hz	
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	
Pressure range	0 ~ 5kgf/cm ² (0 ~0.5MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil	Body material	Brass	
		Terminal box			
Port size	Rc(PT) 1/4, 3/8, 1/2		Seal material	FPM	
Orifice	Ø4.5, Ø5		Weight	0.75kg	

Features

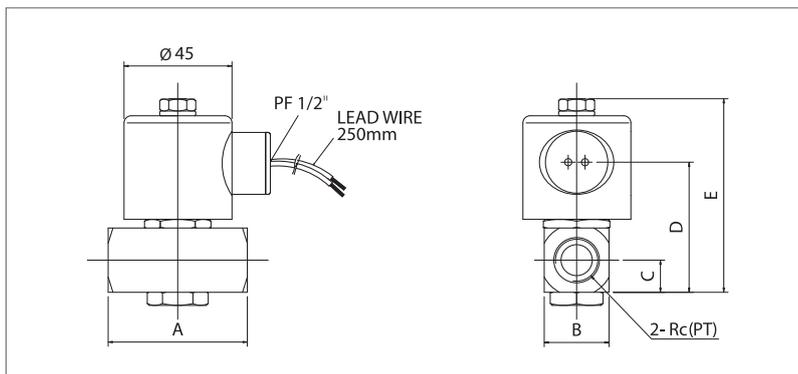
- Direct acting type
- Normally open type
- Fire resistant structure, high durability

Applications

- Steam piping
- Sterilizer
- Industrial cleaner
- Medical instrument

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Rc(PT)
HSV 102NO	43	25	12	54	79	1/4
HSV 103NO	58	27	13.5	54.5	81	3/8
HSV 154NO	58	27	13.5	54.5	81	1/2

HPS102NO, 103NO



HPS 102NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPS 10 2 **NO** - AC220V

①
②
③
④
⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

10	Ø10
----	-----

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 180℃			DC24	
Ambient temp.	50℃ (Max.)			Allowable voltage fluctuation	±10%(AC), ±5% (DC)
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~0.7MPa)		Power consumption	AC, DC : 14W	
Coil insulation	Class H		Body material	Brass	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Seal material	PTFE + SUS 304 PISTON	
Port size	Rc(PT) 1/4, 3/8		Weight	0.7kg	
Orifice	Ø10				

Features

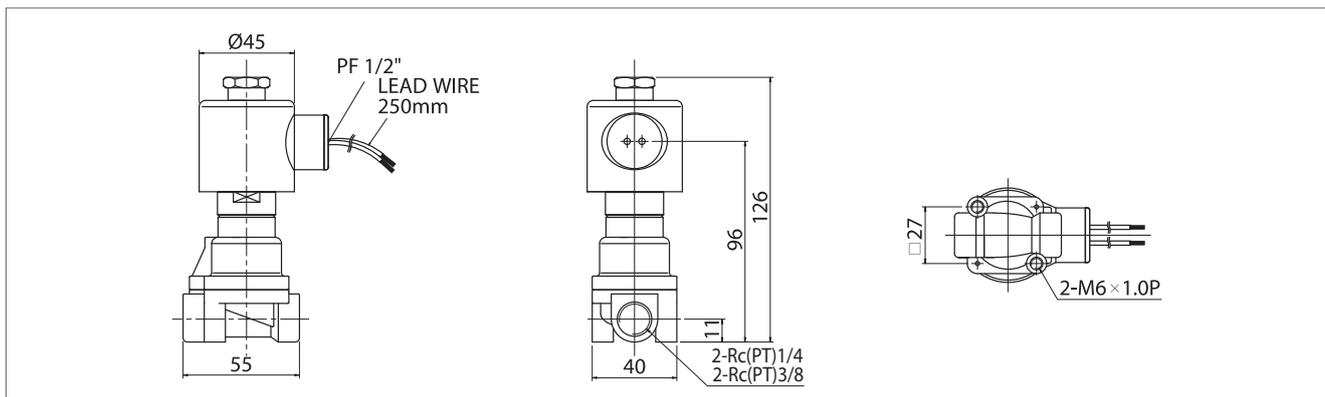
- Piston pilot type
- Normally open type
- Max. temperature 180℃, large capacity
- Fire resistant structure, high durability

Applications

- Steam piping
- Steam presser
- Sterilizer
- Industrial cleaner
- Dyeing machine
- Medical instrument

※ Not available in explosive atmosphere.

Dimensions



HPS154NO



HPS 154NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order

HPS 15 4 **NO** - AC220V

①
②
③
④
⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

15	Ø15
----	-----

③ Port size

4	1/2
---	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

2Port Small

HDA
HDA G
KAB
HDA N.O

W, A (N.C)

HDW
HAW
HPW

W, A (N.O)

HVD
HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 180 °C			AC110V 60Hz	
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 1/2		Seal material	PTFE + SUS 304 PISTON	
Orifice	Ø15		Weight	0.9kg	

Features

- Piston pilot type
- Normally open type
- Max. temperature 180 °C, large capacity
- Fire resistant structure, high durability

Applications

- Steam piping
- Steam presser
- Sterilizer
- Industrial cleaner
- Ventilator
- Medical Instrument

S, H (NC)

HDS
HPS

S, H (NO)

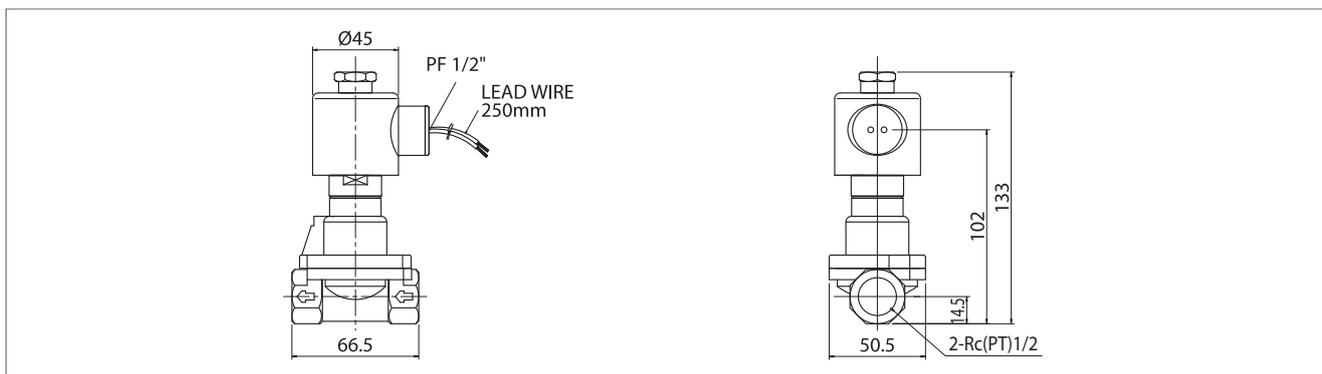
HSV
HPS

High Pressure

HPW (20kgf/cm²)
HPM (20kgf/cm²)
HPW (60kgf/cm²)

※ Not available in explosive atmosphere.

Dimensions



Direct Acting

HKW
HKS

SUS Type

HDA
HDW
HVS
HSR
HDC
HPW

HPS206NO~5020NO



HPS 3212NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPS 3212 NO - AC220V

①
②
③
④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
206	Ø20	3/4
2510	Ø25	1
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 180 °C				
Ambient temp.	50 °C (Max.)				
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 3/4, 1, 1 1/4, 1 1/2, 2		Seal material	PTFE + SUS 304 PISTON	
Orifice	Ø20, Ø25, Ø32, Ø40, Ø50		Weight	Refer to the table below	

* Not available in explosive atmosphere.

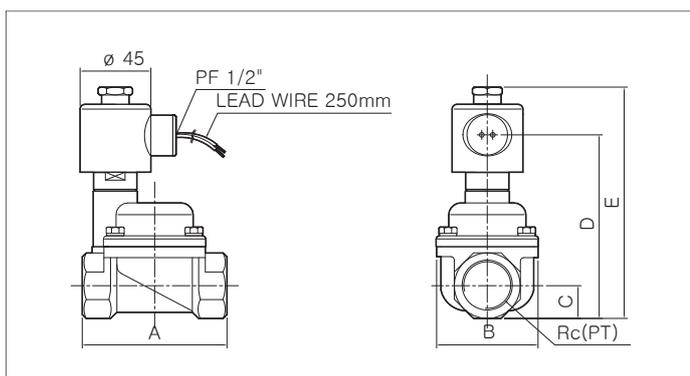
Features

- Piston pilot type
- Normally open type
- Max. temperature 180 °C
- Fire resistant structure, high durability

Applications

- Steam piping
- Steam presser
- Sterilizer
- Industrial cleaner
- Dyeing machine
- Medical instrument

Dimensions



Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HPS 206NO	92	64	19	111	141	3/4	Ø20	1.55
HPS 2510NO	92	64	21	123	147	1	Ø25	1.57
HPS 3212NO	122	86	26	140	170	1 1/4	Ø32	2.55
HPS 4014NO	122	86	29	150	174	1 1/2	Ø40	2.75
HPS 5020NO	140	100	36	166	190	2	Ø50	3.92

HPS6524NO



HPS 6524NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order

HPS 65 24 **NO** - AC220V

①
②
③
④
⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

65	Ø65
----	-----

③ Port size

24	2 1/2
----	-------

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

2Port Small

HDA
HDA G
KAB
HDA N.O

W, A (N.C)

HDW
HAW
HPW

W, A (N.O)

HVD
HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 180 °C			AC110V 60Hz	
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire	Grommet coil Terminal box DIN connector	Body material	Bronze	
Port size	Rc(PT) 2 1/2		Seal material	PTFE + SUS 304 PISTON	
Orifice	Ø65		Weight	8.3kg	

Features

- Piston pilot type
- Normally open type
- Max. temperature 180 °C, large capacity
- Fire resistant structure, high durability

Applications

- Steam piping
- Steam presser
- Sterilizer
- Industrial cleaner
- Ventilator
- Heat exchanger

S, H (NC)

HDS
HPS

S, H (NO)

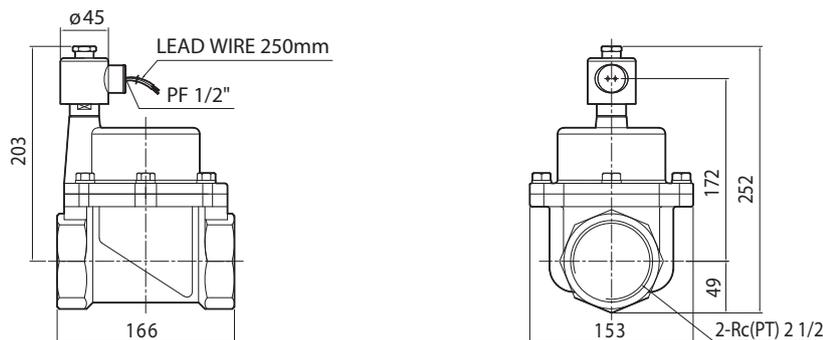
HSV
HPS

High Pressure

HPW (20kgf/cm²)
HPM (20kgf/cm²)
HPW (60kgf/cm²)

※ Not available in explosive atmosphere.

Dimensions



Direct Acting

HKW
HKS

SUS Type

HDA
HDW
HVS
HSR
HDC
HPW

HPS3212FO, 4014FO, 5020FO



HPS 3212FO

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPS 3212 **FO** - AC220V

① ② ③

① Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

② Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

③ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz	AC220V 50Hz AC240V 50Hz AC 24V 50Hz DC24V
Fluid temp.	0 ~ 180 °C			AC110V 60Hz	
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Bronze, Brass	
End connection	JIS 10K FF		Seal material	PTFE + SUS 304 PISTON	
Orifice	Ø32, Ø40, Ø50		Weight	Refer to the table below	

※ Not available in explosive atmosphere.

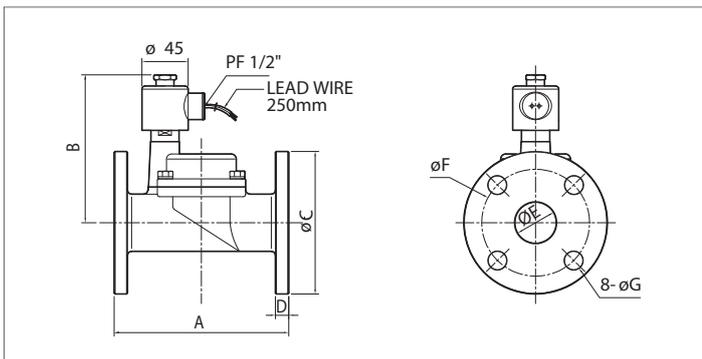
Features

- Piston pilot type
- Normally open type
- Fire resistant structure, high durability
- High temperature type(MAX 180 °C)

Applications

- Steam piping
- Medical instrument
- Steam presser
- Industrial cleaner
- Sterilizer
- Dyeing machine

Dimensions



Model	A	B	C	D	E	F	G	Weight (kg)
HPS 3212FO	170	145	ø135	13	ø40	ø100	ø18	6.6
HPS 4014FO	170	145	ø140	13	ø40	ø105	ø18	6.55
HPS 5020FO	180	155	ø155	14	ø50	ø120	ø18	8.5

HPS6524FO



HPS 6524FO

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order

HPS 65 24 FO - AC220V

① ② ③ ④

① Orifice

65	Ø65
----	-----

② Port size

24	2 1/2
----	-------

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

2Port Small

- HDA
- HDA G
- KAB
- HDA N.O

W, A (N.C)

- HDW
- HAW
- HPW

W, A (N.O)

- HVD
- HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC100V 50/60Hz	AC220V 50Hz
Fluid temp.	0 ~ 180 °C			AC110V 60Hz	
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	
Pressure range	0.5 ~ 7kgf/cm ² (0.05 ~0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Bronze	
End connection	JIS 10K FF		Seal material	PTFE + SUS 304 PISTON	
Orifice	Ø65		Weight	14.3kg	

Features

- Piston pilot type
- Normally open type
- Fire resistant structure, high durability
- High temperature type(MAX 180 °C)
- Large capacity

Applications

- Steam piping
- Industrial cleaner
- Heat exchanger
- Sterilizer
- Steam presser
- Ventilator

S, H (NC)

- HDS
- HPS

S, H (NO)

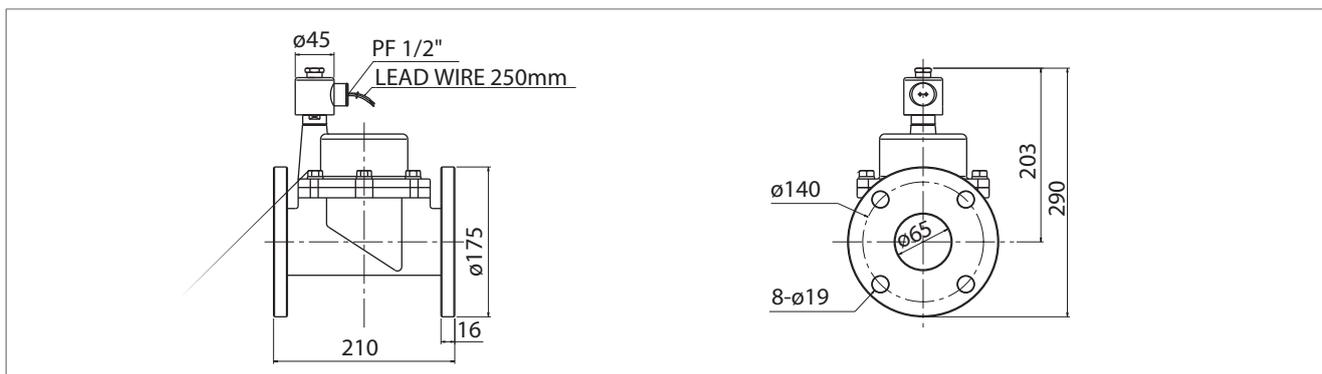
- HSV
- HPS

High Pressure

- HPW (20kgf/cm²)
- HPM (20kgf/cm²)
- HPW (60kgf/cm²)

* Not available in explosive atmosphere.

Dimensions



Direct Acting

- HKW
- HKS

SUS Type

- HDA
- HDW
- HVS
- HSR
- HDC
- HPW

HPW102-20 ~ 5020-20



HPW 102

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPW 10 - 20 - - AC220V

①
②
③
④
⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
102	Ø10	1/4
103	Ø10	3/8
154	Ø15	1/2
206	Ø20	3/4
2510	Ø25	1
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60 °C			Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	50 °C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0.5 ~ 20kgf/cm ² (0.05 ~ 2MPa)		Coil insulation	Class B		
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass		
Port size	Rc(PT) 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2		Seal material	NBR + SUS 304 PISTON	EPDM FPM	
Orifice	Refer to the table below		Weight	Refer to the table below		

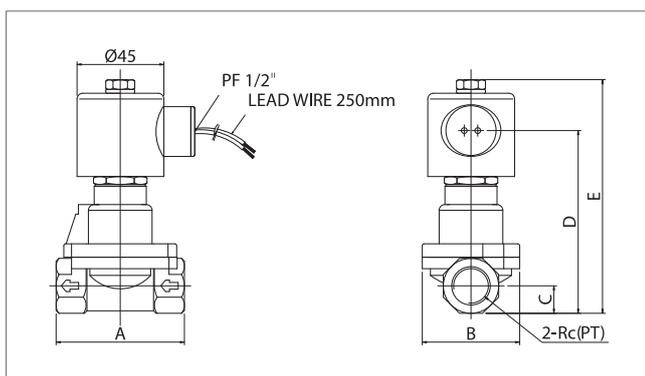
Features

- Piston pilot type
- Normally closed type
- Decrease water hammering effect
- Fire resistant structure, high durability
- Waterproof(for fountain) type is available (DC24V)

Applications

- Water piping
- Medical instrument
- High pressure cleaner
- Wire cutting machine
- Compressor

Dimensions



Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HPW 102-20	55	40	11	89	115	1/4	Ø10	0.7
HPW 103-20	55	40	11	89	115	3/8	Ø10	0.7
HPW 154-20	66	50	14	95	122	1/2	Ø15	0.9
HPW 206-20	92	64	18.5	103	131	3/4	Ø20	1.55
HPW 2510-20	92	65	21	115	137	1	Ø25	1.57
HPW 3212-20	122	86	26	132	160	1 1/4	Ø32	2.55
HPW 4014-20	123	87	29	142	164	1 1/2	Ø40	2.75
HPW 5020-20	140	100	36	158	180	2	Ø50	3.92

HPW3212F-20 ~ 5020F-20



HPW 3212F-20

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order

HPW **3212** **F** - **20** - - - **AC220V**

① ② ③ ④

① Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

② Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

③ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

S, H (N.C)

HDS

HPS

S, H (N.O)

HSV

HPS

High Pressure

HPW

(20kgf/cm²)

HPM

(20kgf/cm²)

HPW

(60kgf/cm²)

Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HVS

HSR

HDC

HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60 °C				
Ambient temp.	50 °C (Max.)				
Pressure range	0.5 ~ 20kgf/cm ² (0.05 ~ 2MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Bronze, Brass	
End connection	JIS 10K FF		Seal material	NBR + SUS 304 PISTON	EPDM FPM
Orifice	Ø32, Ø40, Ø50		Weight	Refer to the table below	

Features

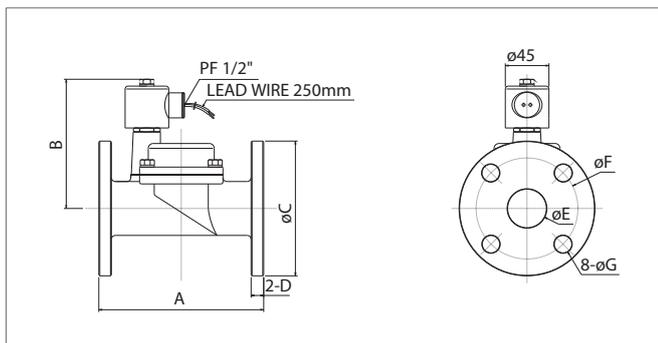
- Piston pilot type
- Normally closed type
- Decrease water hammering effect
- Fire resistant structure, high durability
- Waterproof(for fountain) type is available (DC24V)

Applications

- Water piping
- Medical instrument
- High pressure cleaner
- Wire cutting machine
- Compressor

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	F	G	Weight (kg)
HPW 3212F-20	170	135	Ø135	13	Ø40	Ø100	Ø18	6.6
HPW 4014F-20	170	135	Ø140	13	Ø40	Ø105	Ø18	6.55
HPW 5020F-20	180	145	Ø155	14	Ø50	Ø120	Ø18	8.5

HPM206-20 ~ 5020-20



HPM 206-20



Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPM 206 - 20 - AC220V

①
②
③
④
⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
206	Ø20	3/4
2510	Ø25	1
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

③ Electrical connection

Nil	Console box (Standard)	
G	Grommet coil	
T	Terminal box	
D	DIN coil + DIN connector	
Z	DIN coil + DIN connector & lamp	

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0~60 °C			Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	50 °C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0.5~ 20kgf/cm ² (0.05 ~ 2.0MPa)		Body material	Brass		
Coil insulation	Class B		Seal material	NBR + SUS 304 PISTON	EPDM FPM	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Weight	Refer to the table below		
Port size	Rc(PT) 3/4, 1, 1 1/4, 1 1/2, 2					
Orifice	Refer to the table below					

Features

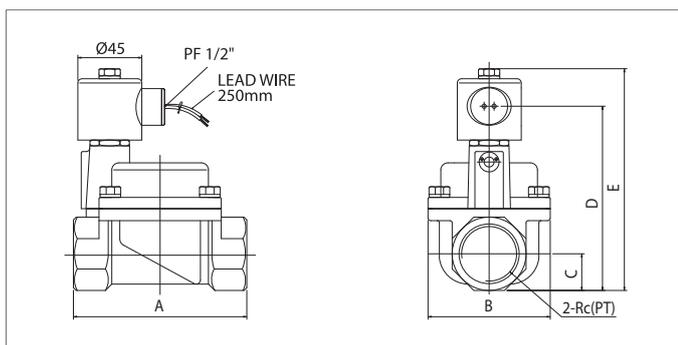
- Manual lever type
- Normally closed type
- Max. operating pressure: 20kgf/cm²
- Fire resistant structure, high durability
- Decrease water hammering effect
- Waterproof(for fountain) type is available (DC24V)

Applications

- Medical instrument
- High pressure cleaner
- Wire cutting machine
- Water piping
- Compressor

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HPM 206-20	92	64	18.5	103	131	3/4	ø20	1.55
HPM 2510-20	92	65	21	115	137	1	ø25	1.57
HPM 3212-20	122	86	26	132	160	1 1/4	ø32	2.55
HPM 4014-20	123	87	29	142	164	1 1/2	ø40	2.75
HPW 5020-20	140	100	36	158	180	2	ø50	3.92

HPW154-60K



HPW 154-60K

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPW 154 - **60K** - AC220V

①
②
③
④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

154	Ø15	1/2
-----	-----	-----

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC110V 50Hz
Fluid temp.	0 ~ 120℃			AC110V 60Hz	AC220V 50Hz
Ambient temp.	50℃ (Max.)			AC200V 50/60Hz	AC240V 50Hz
Pressure range	0.5 ~ 60kgf/cm ² (0.05 ~ 6.0MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2		Body material	Brass	
Port size	Rc(PT) 1/2		Seal material	MC NYLON	
Orifice	Ø15		Weight	1.5Kg	

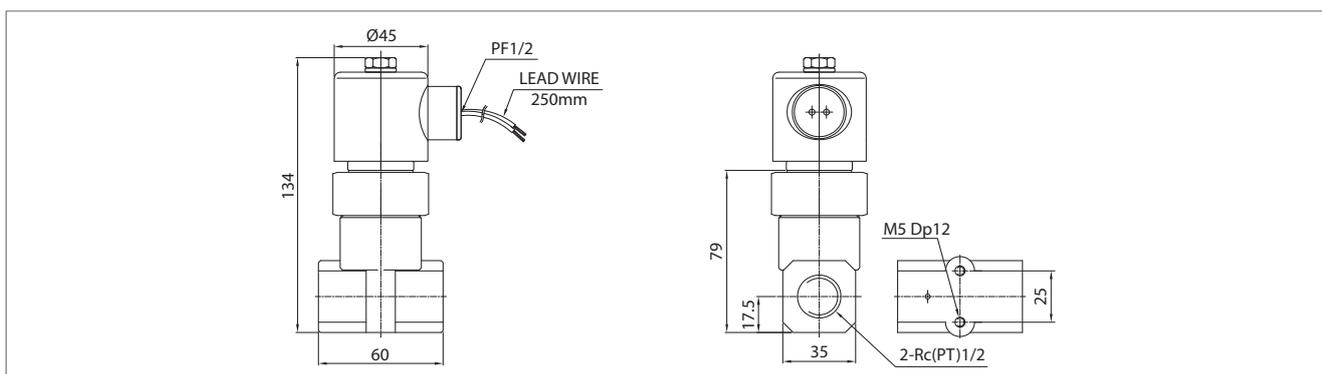
Features

- Piston pilot type
- Normally closed type
- Max. operating pressure: 60kgf/cm²
- Fire resistant structure, high durability

Applications

- Water piping
- Medical instrument
- High pressure cleaner
- Wire cutting machine
- Compressor

Dimensions



Process Valve

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

S, H (N.C)

HDS

HPS

S, H (N.O)

HSV

HPS

High Pressure

HPW (20kgf/cm²)

HPM (20kgf/cm²)

HPW (60kgf/cm²)

Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HVS

HSR

HDC

HPW

HKW154B, 206B, 2510B



HKW 154B

Symbol	
N.C	
N.O	

How to Order

HKW 154 B - AC220V

① ② ③ ④ ⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

③ Initial status

Nil	Normally close (Standard)
NO	Normally open

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V

② Orifice & Port size

	Orifice	Port size
154	Ø15	1/2
206	Ø20	3/4
2510	Ø25	1

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 60Hz AC220V 60Hz DC24V		
Fluid temp.	0 ~ 60 °C	EPDM FPM		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	50 °C (Max.)				Power consumption	AC, DC : 30W
Pressure range	0~ 10kgf/cm ² (0 ~ 1.0MPa)	DC : 0~ 7kgf/cm ² (0 ~ 0.7MPa)	Body material	Brass		
Coil insulation	Class B		Seal material	NBR	EPDM FPM	
Electrical connection	Terminal box lead wire G(PF1/2)		Weight	Refer to the table below		
Port size	Rc(PT) 1/2, 3/4, 1					
Orifice	Refer to the table below					

Features

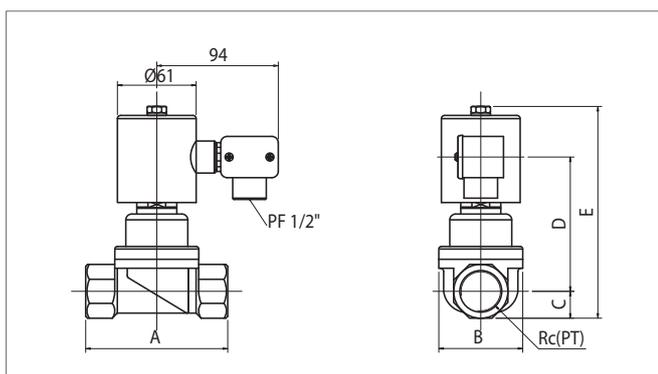
- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Seal material can be changed depending on fluid specifications.
- Fire resistant structure, large capacity
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Medical instrument
- Ventilator
- Air conditioner
- Water piping
- Compressor

※ Not available in explosive atmosphere.
※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HKW 154B(NO)	66	51	14	110	148	1/2	Ø15	1.73
HKW 206B(NO)	92	65	17	120	157	3/4	Ø20	2.34
HKW 2510B(NO)	92	65	20	125	162	1	Ø25	2.34



HKW3212B, 4014B, 5020B



HKW 3212B

Symbol	
N.C	
N.O	

How to Order

HKW 3212 B - AC220V

① ② ③ ④ ⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

③ Initial status

Nil	Normally close (Standard)
NO	Normally open

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 50/60Hz AC220V 60Hz DC24V		
Fluid temp.	0 ~ 60°C	EPDM FPM		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 30W
Pressure range	0~10kgf/cm ² (0~1.0MPa)	Vacuum(10 ⁻³ Torr)	Body material	Brass		
Coil insulation	Class B		Seal material	NBR	EPDM FPM	
Electrical connection	Terminal box lead wire G(PF)1/2		Weight	Refer to the table below		
Port size	Rc(PT) 1 1/4, 1 1/2, 2					
Orifice	Refer to the table below					

Features

- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Seal material can be changed depending on fluid specifications.
- Fire resistant structure, large capacity
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

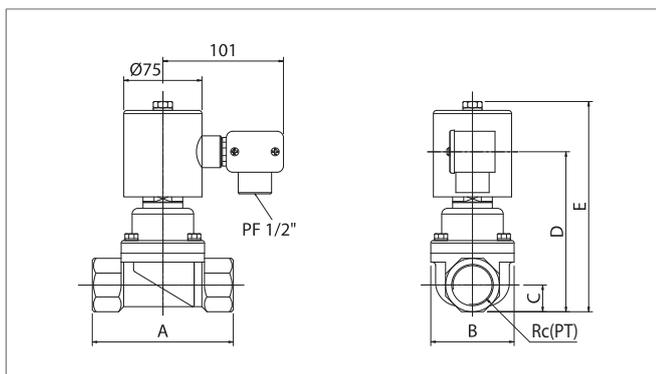
Applications

- Medical instrument
- Ventilator
- Air conditioner
- Water piping
- Compressor

* Not available in explosive atmosphere.

* If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HKW 3212B(NO)	122	86	26	156	204	1 1/4	ø32	4.16
HKW 4014B(NO)	122	86	29	162	210	1 1/2	ø40	4.36
HKW 5020B(NO)	140	100	36	174	222	2	ø50	5.30

Process Valve
2Port Small
HDA
HDA G
KAB
HDA N.O
W, A (N.C)
HDW
HAW
HPW
W, A (N.O)
HVD
HPW
S, H (N.C)
HDS
HPS
S, H (N.O)
HSV
HPS
High Pressure
HPW (20kgf/cm ²)
HPM (20kgf/cm ²)
HPW (60kgf/cm ²)
Direct Acting
HKW
HKS
SUS Type
HDA
HDW
HVS
HSR
HDC
HPW

HKW2510BF, 3212BF, 4014BF, 5020BF



HKW 3212

Symbol	
N.C	
N.O	

How to Order

HKW **3212** **BF** - AC220V

① ② ③ ④

① Orifice & Port size

	Orifice	Port size
2510	Ø25	1
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

③ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V

② Initial status

Nil	Normally close (Standard)
O	Normally open

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V		
Fluid temp.	0 ~ 60°C	EPDM FPM		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 30W
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)	Vacuum(10 ⁻³ Torr)	Body material	Brass		
Coil insulation	Class B		Seal material	NBR	EPDM FPM	
Electrical connection	Terminal box lead wire G(PF1/2)		Weight	Refer to the table below		
End connection	JIS 10K FF					
Orifice	Ø25, Ø32, Ø40, Ø50					

Features

- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Seal material can be changed depending on fluid specifications.
- Fire resistant structure, large capacity
- Waterproof (for fountain) type is available (DC24V)
- Terminal box type electrical connection

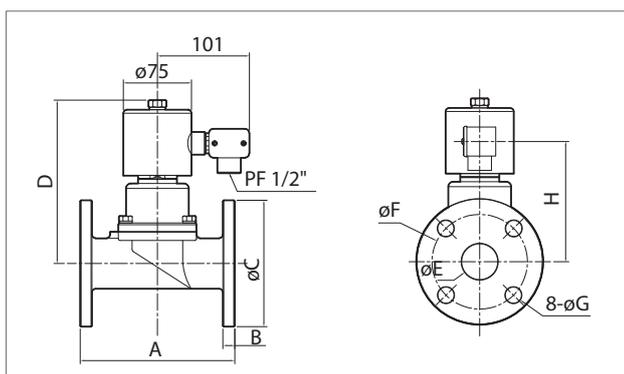
Applications

- Medical instrument
- Water piping
- Ventilator
- Compressor
- Air conditioner
- Industrial cleaner

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



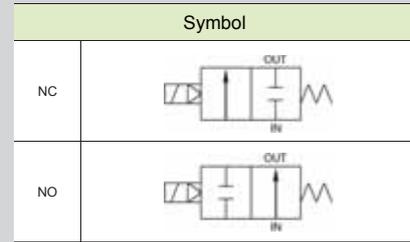
Model	A	B	C	D	E	F	G	H	Weight (kg)
HKW 2510BF(O)	127	13	Ø125	143	Ø25	Ø90	Ø18	104	5.8
HKW 3212BF(O)	170	13	Ø135	181	Ø40	Ø100	Ø18	133	7.7
HKW 4014BF(O)	170	13	Ø140	181	Ø40	Ø105	Ø18	133	7.86
HKW 5020BF(O)	180	14	Ø155	186	Ø50	Ø120	Ø18	138	9.7



HKS154B, 206B, 2510B



HKS 154B



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

③ Initial status

Nil	Normally close (Standard)
NO	Normally open

⑤ Voltage

AC220V	AC220V 50Hz/60Hz
--------	------------------

② Orifice & Port size

	Orifice	Port size
154	Ø15	1/2
206	Ø20	3/4
2510	Ø25	1

④ Seal material

	Material	Applications
Nil	PTFE	Standard
M	FPM	Chemical, Hot water 120℃
E	EPDM	Hot water 100℃

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC200V 50/60Hz	
Fluid temp.	0 ~ 150℃	FPM, EPDM			
Ambient temp.	50℃ (Max.)				
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 30W	
Electrical connection	Terminal box lead wire G(PF1/2)		Body material	Brass	
Port size	Rc(PT) 1/2, 3/4, 1		Seal material	PTFE + PISTON	FPM + PISTON
Orifice	Refer to the table below		Weight	Refer to the table below	

※ Not available in explosive atmosphere.

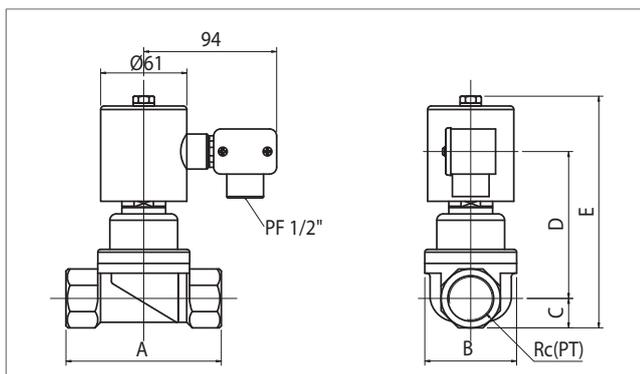
Features

- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Seal material can be changed depending on fluid Specifications.
- Fire resistant structure, large capacity
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Building humidifier
- Industrial cleaner
- Water purifier
- Sterilizer
- Boiler

Dimensions



Model	A	B	C	D	E	F	G	Rc(PT)	Orifice	Weight (kg)
HKS 154B	66	50	15	110	148	Ø61	94	1/2	Ø15	1.72
HKS 206B	92	65	18	120	156	Ø61	94	3/4	Ø20	2.34
HKS 2510B	92	65	21	125	162	Ø61	94	1	Ø25	2.34

Process Valve
2Port Small
HDA
HDA G
KAB
HDA N.O
W, A (N.C)
HDW
HAW
HPW
W, A (N.O)
HVD
HPW
S, H (NC)
HDS
HPS
S, H (NO)
HSV
HPS
High Pressure
HPW (20kgf/cm ²)
HPM (20kgf/cm ²)
HPW (60kgf/cm ²)
Direct Acting
HKW
HKS
SUS Type
HDA
HDW
HVS
HSR
HDC
HPW

HKS3212B, 4014B, 5020B



HKS 3212B

Symbol	
NC	
NO	

How to Order

HKS 3212 **B** - AC220V

①
 ②
 ③
 ④
 ⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

③ Initial status

Nil	Normally close (Standard)
NO	Normally open

⑤ Voltage

AC220V	AC220V 50Hz/60Hz
--------	------------------

② Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

④ Seal material

	Material	Applications
Nil	PTFE	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC220V 50/60Hz	
Fluid temp.	0 ~ 150 °C	FPM, EPDM			
Ambient temp.	50 °C (Max.)				
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class H		Power consumption	AC, DC : 30W	
Electrical connection	Terminal box lead wire G(PF)1/2		Body material	Brass	
Port size	Rc(PT) 1 1/4, 1 1/2, 2		Seal material	PTFE + PISTON	FPM + PISTON
Orifice	Refer to the table below		Weight	Refer to the table below	

※ Not available in explosive atmosphere.

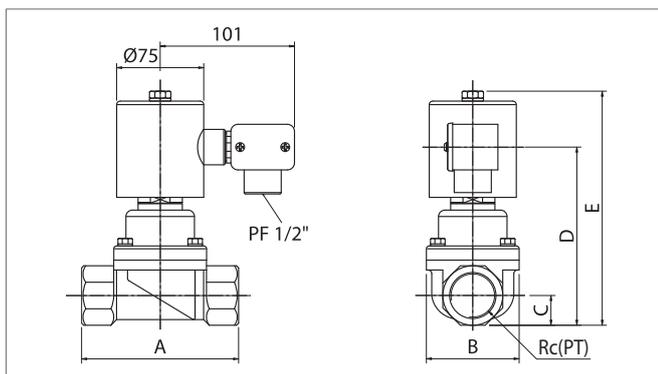
Features

- Piston pilot kick type-Direct acting type
- Operate in 0kg/cm² of differential pressure (Vacuum)
- Seal material can be changed depending on fluid specifications.
- Fire resistant structure, large capacity
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Building humidifier
- Industrial cleaner
- Water purifier
- Sterilizer
- Boiler

Dimensions



Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HKS 3212B	122	86	26	156	204	1 1/4	ø32	4.16
HKS 4014B	122	86	29	162	210	1 1/2	ø40	4.36
HKS 5020B	140	100	36	174	222	2	ø50	5.30

HKS3212BF, 4014BF, 5020BF



HKS 3212BF

Symbol	
N.C	
N.O	

How to Order

HKS 3212 BF - AC220V

① ② ③ ④

① Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

② Initial status

Nil	Normally close (Standard)
O	Normally open

③ Seal material

Nil	NBR	Standard
E	EPDM	Hot water 100 °C
M	FPM	Chemical, Hot water 120 °C

④ Voltage

AC220V	AC220V 50Hz/60Hz
--------	------------------

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC220V 50/60Hz	
Fluid temp.	0 ~ 150 °C	EPDM(100 °C) FPM(120 °C)			
Ambient temp.	50 °C (Max.)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Pressure range	0~ 7kgf/cm ² (0 ~ 0.7MPa)	Vacuum(10 ⁻³ Torr)			
Coil insulation	Class H		Power consumption	AC, DC : 30W	
Electrical connection	Terminal box lead wire G(PF1/2)		Body material	Brass	
End connection	JIS 10K FF		Seal material	PTFE + PISTON	EPDM FPM
Orifice	Ø32, Ø40, Ø50		Weight	Refer to the table below	

※ Not available in explosive atmosphere.

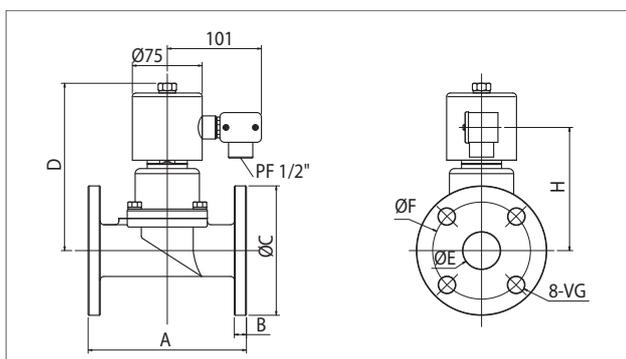
Features

- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Seal material can be changed depending on fluid Specifications.
- Fire resistant structure, large capacity
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Building humidifier
- Industrial cleaner
- Water purifier
- Sterilizer
- Boiler

Dimensions



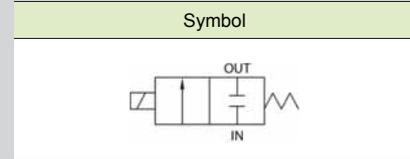
Model	A	B	C	D	E	F	G	H	Weight (kg)
HKS 3212BF	170	13	Ø135	181	Ø40	Ø100	Ø18	133	7.70
HKS 4014BF	180	13	Ø140	181	Ø40	Ø105	Ø18	133	7.86
HKS 5020BF	180	14	Ø155	186	Ø50	Ø120	Ø18	138	9.70

Process Valve
2Port Small
HDA
HDA G
KAB
HDA N.O
W, A (N.C)
HDW
HAW
HPW
W, A (N.O)
HVD
HPW
S, H (NC)
HDS
HPS
S, H (NO)
HSV
HPS
High Pressure
HPW (20kgf/cm ²)
HPM (20kgf/cm ²)
HPW (60kgf/cm ²)
Direct Acting
HKW
HKS
SUS Type
HDA
HDW
HVS
HSR
HDC
HPW

HDA021S, 032S



HDA 021S



How to Order

HDA 021 S - - AC220V

① ② ③ ④

① Thread type

Nil	Rc(PT) Thread (Standard)
G	G Thread

② Orifice & Port size

	Orifice	Port size
021	Ø1.6	1/8
032	Ø2.5	1/4

③ Material of seal

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
SL	SILICONE	Clear water -5~60°C
E	EPDM	Hot water 100°C

④ Rated Voltage

AC110V	AC110V 60Hz
AC220V	AC220V 60Hz
DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, water, oil, inert gas		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC6V, 24V, 12V		
Fluid temp.	0 ~ 60°C			Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC:8W
Pressure range	HDA032S: 0~7kgf/cm ² (0~0.7MPa) HDA021S: 0~10kgf/cm ² (0~1MPa)		Body material	Stainless steel		
Coil insulation	Class B		Seal material	NBR	EPDM, SILICONE, FPM	
Electrical connection	Lead wire		Weight	0.16kg, 0.22kg		
Port size	Rc(PT) 1/8, 1/4					
Orifice	Ø1.6, Ø2.5					

Features

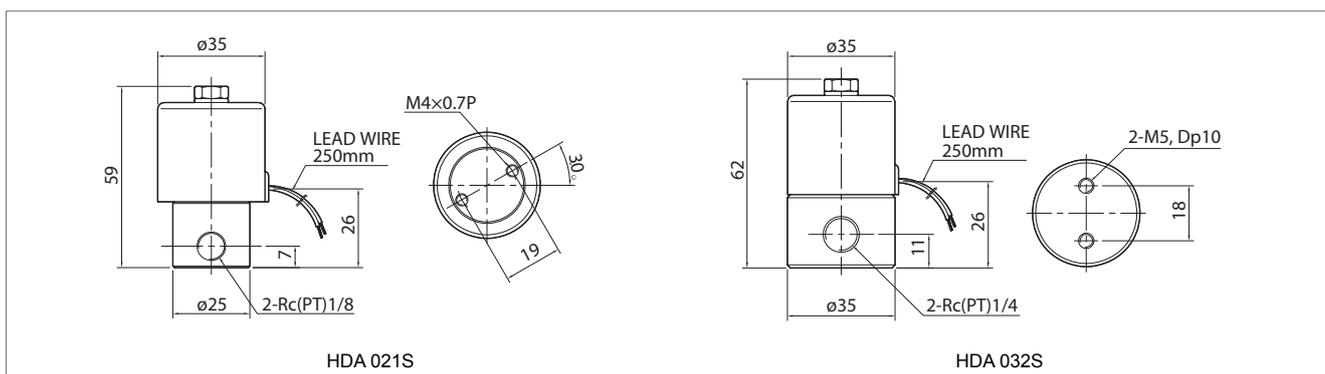
- Direct acting
- Stainless steel body
- Seal materials vary depending upon fluid
- Easy to attach
- Normally close
- Burst proof coil, long life

Applications

- Building humidifier
- Sterilizer
- Boiler
- Water purifier

* Not applicable in explosive atmosphere.

Dimensions



HDW032S, 033S



HDW 032S

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HDW 03 2 **S** - - AC220V

①
②
③
④
⑤
⑥

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

03	Ø2.5
----	------

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60°C			Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0 ~ 20kgf/cm ² (0 ~ 2.0MPa)	DC:0~10kgf/cm ² (0~1.0MPa) Vacuum	Coil insulation	Class B		
Coil insulation	Class B			Body material	Stainless steel	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Port size		Rc(PT) 1/4, 3/8	
Port size	Rc(PT) 1/4, 3/8			Seal material	NBR	EPDM, FPM
Orifice	Ø2.5				Weight	0.5kg

Features

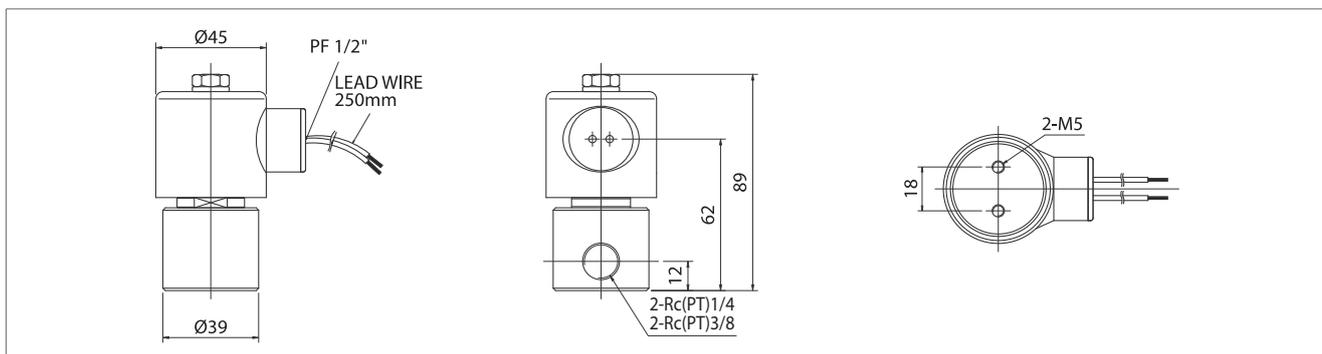
- Direct acting type
- Normally closed type
- Fire resistant structure
- Seal material can be changed depending on fluid Specifications.
- Stainless steel body

Applications

- Water piping
- Compressor
- Medical instrument
- Beverage processing
- Air piping
- Air conditioner

* Not available in explosive atmosphere. * If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Process Valve

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

S, H (NC)

HDS

HPS

S, H (NO)

HSV

HPS

High Pressure

HPW (20kgf/cm²)

HPM (20kgf/cm²)

HPW (60kgf/cm²)

Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HVS

HSR

HDC

HPW

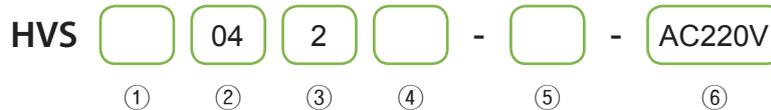
HVS042, 043



HVS 042
HVS 043

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

04	Ø5
----	----

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C
T	PTFE	Chemical, Hot water 180°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60°C	EPDM, PTFE, FPM		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)	DC:0~7kgf/cm ² (0 ~ 0.7MPa) Vacuum(10 ⁻³ Torr)	Body material	Stainless steel		
Coil insulation	Class B			Seal material	NBR	EPDM, FPM, PTFE
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Weight		0.6kg	
Port size	Rc(PT) 1/4, 3/8					
Orifice	Ø5					

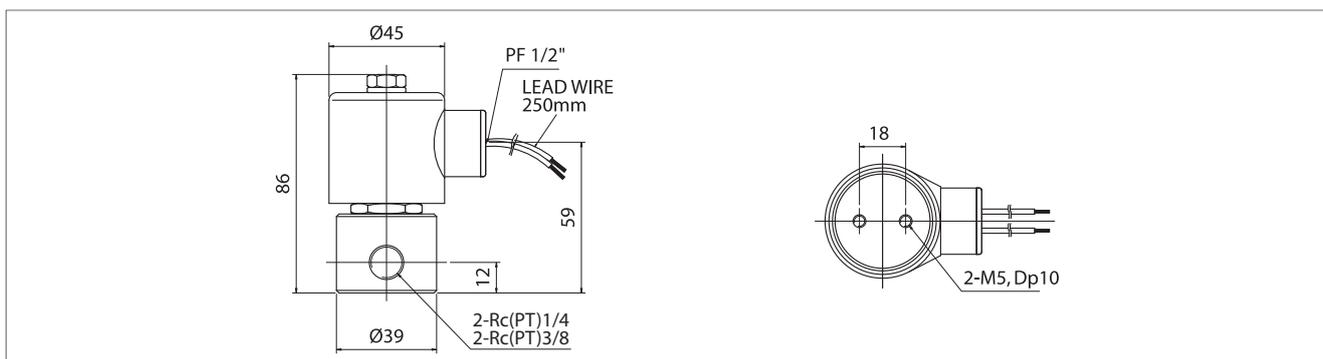
Features

- Direct acting type
- Normally closed type
- Easy to attach
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid Specifications.
- Stainless steel body

Applications

- Water piping
- Compressor
- Medical instrument
- Beverage processing
- Air piping
- Air conditioner

Dimensions



HVS042NO, 043NO



HVS 042NO
HVS 043NO

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

04	Ø5
----	----

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C
T	PTFE	Chemical, Hot water 180°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

2Port Small

- HDA
- HDA G
- KAB
- HDA N.O

W, A (N.C)

- HDW
- HAW
- HPW

W, A (N.O)

- HVD
- HPW

S, H (N.C)

- HDS
- HPS

S, H (N.O)

- HSV
- HPS

High Pressure

- HPW (20kgf/cm²)
- HPM (20kgf/cm²)
- HPW (60kgf/cm²)

Direct Acting

- HKW
- HKS

SUS Type

- HDA
- HDW
- HVS
- HSR
- HDC
- HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60°C	EPDM, FPM, PTFE		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0 ~ 4kgf/cm ² (0 ~ 0.4MPa)		Body material	Stainless steel		
Coil insulation	Class B			Seal material	NBR	EPDM, FPM, PTFE
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Weight		0.6kg	
Port size	Rc(PT) 1/4	Rc(PT) 3/8				
Orifice	Ø5					

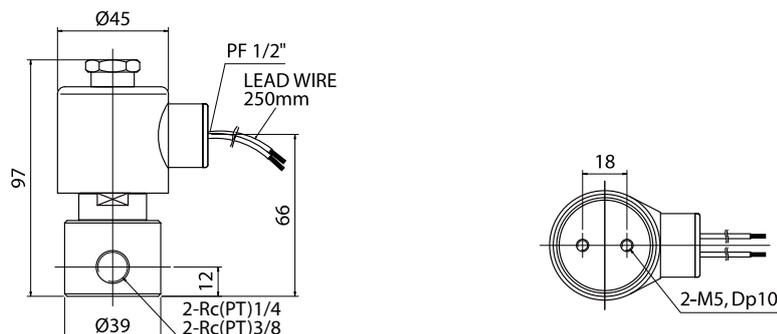
Features

- Direct acting type
- Normally open type
- Easy to attach
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid Specifications.
- Stainless steel body

Applications

- Water piping
- Compressor
- Medical instrument
- Vacuum packing machine
- Air piping
- Air conditioner

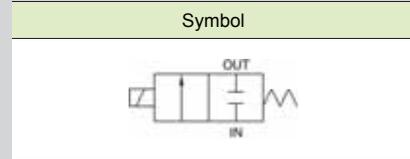
Dimensions



HSR053S, 063S



HSR 053S



How to Order

HSR 05 3 S - AC220V

① ② ③ ④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

05	Ø5
06	Ø6

③ Port size

3	3/8
---	-----

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	R-12, R-22, R502, Argon, Oxygen, Nitrogen, Refrigerant		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	-190℃ ~ 50℃ (No Freezing)				
Ambient temp.	50℃ (Max.)				
Pressure range	0 ~ 5kgf/cm ² (0 ~0.5MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	DIN Connector		Body material	Stainless steel	
Port size	Rc(PT) 3/8		Seal material	PTFE	
Orifice	Ø5, Ø6		Weight	0.55kg	

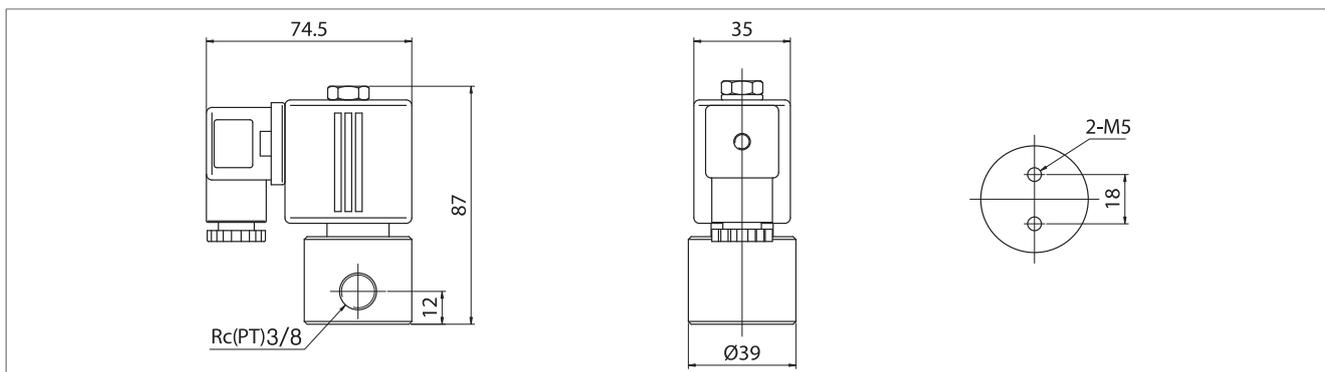
Features

- Applicable fluid: Argon, Oxygen, Nitrogen, Carbon dioxide
- Ideal for controlling refrigerant in the refrigerant pipe

Applications

- Beverage processing
- Chemical instrument
- Medical instrument

Dimensions



HSR102P, 103P, 104P



HSR 102P

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HSR 10 2 **P** - - AC220V

①
②
③
④
⑤
⑥

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

10	Ø10.2
----	-------

③ Port size

2	1/4
3	3/8
4	1/2

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V

⑤ Seal material

	Material	Applications
Nil	PTFE	Standard
N	NBR	Water, Air 100°C
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Refrigerant		Voltage	AC110V AC220V DC24V, 12V	
Fluid temp.	-20 ~ 120°C				
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)	DC: 0 ~ 7kgf/cm ² (0 ~ 0.7MPa)	Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC : 14W, DC : 12W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Stainless steel	
Port size	Rc(PT) 1/4, 3/8, 1/2		Seal material	PTFE	EPDM, FPM, NBR
Orifice	Ø10.2		Weight	0.8kg	

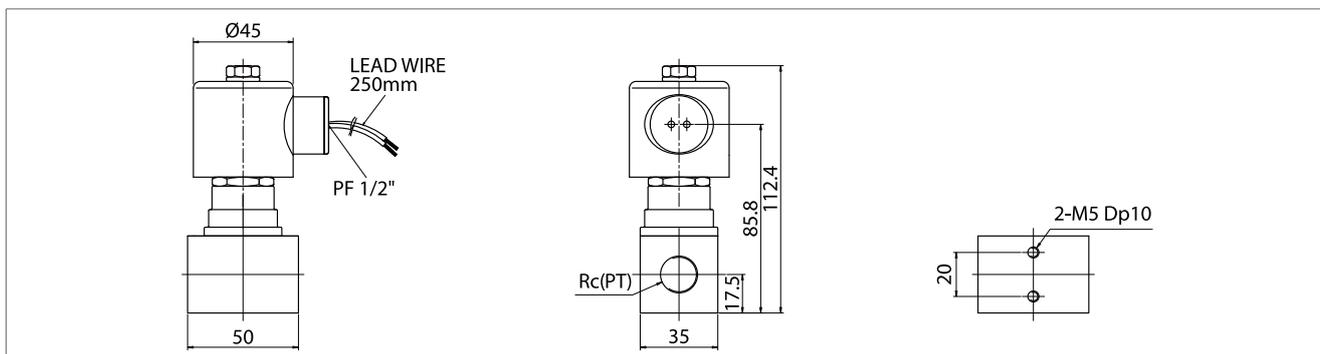
Features

- Piston pilot kick type-Direct acting type
- Normally closed type
- Easy to attach
- Seal material can be changed depending on fluid Specifications.
- Fire resistant structure, high durability

Applications

- Medical instrument
- Chemical instrument
- Beverage & food processing

Dimensions



Process Valve
2Port Small
HDA
HDA G
KAB
HDA N.O
W, A (N.C)
HDW
HAW
HPW
W, A (N.O)
HVD
HPW
S, H (N.C)
HDS
HPS
S, H (N.O)
HSV
HPS
High Pressure
HPW (20kgf/cm ²)
HPM (20kgf/cm ²)
HPW (60kgf/cm ²)
Direct Acting
HKW
HKS
SUS Type
HDA
HDW
HVS
HSR
HDC
HPW

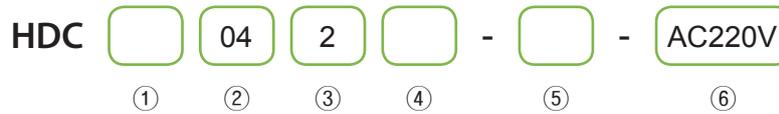
HDC042 series



HDC 042

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

04	Ø4
----	----

③ Port size

2	1/4
---	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	PTFE	Standard
M	FPM	Chemical, Hot water 120°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Chemical		Voltage	AC100V 50/60Hz	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 50°C			AC110V 60Hz	
Ambient temp.	50°C (Max.)			AC200V 50/60Hz	
Pressure range	0 ~ 2.5kgf/cm ² (0 ~0.25MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	SUS 316	
Port size	Rc(PT) 1/4		Seal material	PTFE + DIAPHRAGM	FPM
Orifice	Ø4		Weight	0.5kg	

※ Not available in explosive atmosphere.

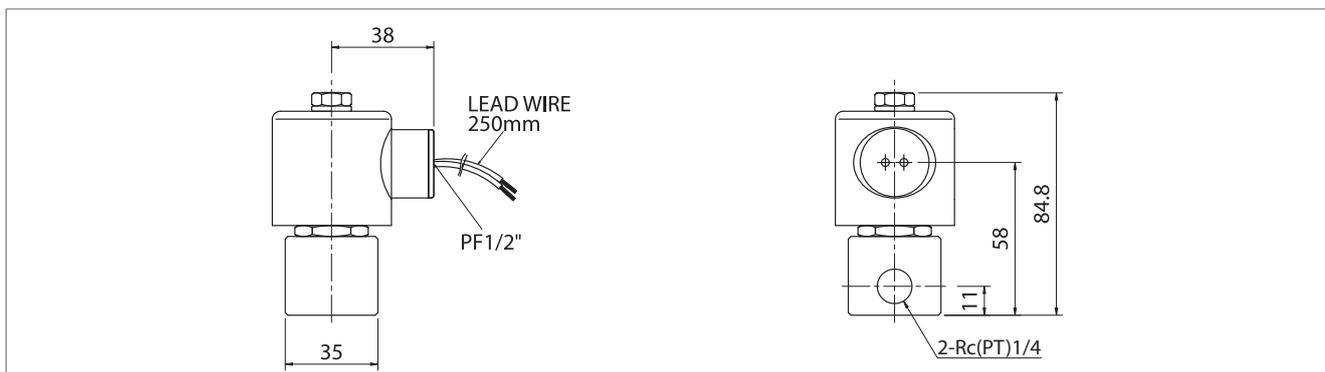
Features

- Fluid will not enter operating section
- Diaphragm consists of NBR with Teflon coating
- Only fluid in teflon tube is controllable

Applications

- Pure water piping
- Chemical instrument
- Medical instrument
- Tester
- Ozone water line

Dimensions



HPW103S ~ 2510S



HPW 103S

Symbol				
Electrical connection				
Nil	G	T	D	Z

Process Valve

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
103	Ø10	3/8
154	Ø10	1/2
206	Ø20	3/4
2510	Ø20	1

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

2Port Small

HDA

HDA G

KAB

HDA N.O

W, A (N.C)

HDW

HAW

HPW

W, A (N.O)

HVD

HPW

S, H (NC)

HDS

HPS

S, H (NO)

HSV

HPS

High Pressure

HPW

(20kgf/cm²)

HPM

(20kgf/cm²)

HPW

(60kgf/cm²)

Direct Acting

HKW

HKS

SUS Type

HDA

HDW

HSV

HSR

HDC

HPW

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60°C	EPDM, FPM		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)	DC : 0~7kgf/cm ² (0 ~ 0.7MPa) Vacuum(10 ⁻³ Torr)	Body material	BODY : SUS 316 TRIM : SUS 304		
Coil insulation	Class B		Seal material	NBR + DIAPHRAGM	EPDM FPM	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Weight	Refer to the table below		
Port size	Rc(PT) 3/8, 1/2, 3/4, 1					
Orifice	Refer to the table below					

Features

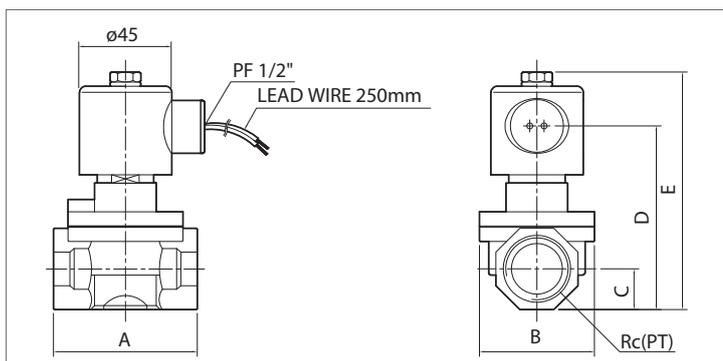
- Diaphragm type
- Stainless steel body
- Normally closed type
- Seal material can be changed depending on fluid Specifications.
- Fire resistant structure, high durability
- DC type available (0 ~ 7kgf/cm²)

Applications

- Water piping
- Medical instrument
- Beverage processing
- Vacuum packing machine
- Air conditioner
- Water purifier

※ Not available in explosive atmosphere. ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HPW 103S	70	56	13	81	106	3/8	Ø10	0.85
HPW 154S	70	56	13	81	106	1/2	Ø10	0.82
HPW 206S	70	56	20	90	117	3/4	Ø20	1.03
HPW 2510S	70	56	20	90	117	1	Ø20	0.93

HKW154S, 206S, 2510S



HKW 154S

Symbol	
NC	
NO	

How to Order

HKW 154 **S** - AC220V

①
②
③
④
⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

③ Initial status

Nil	Normally closed (Standard)
NO	Normally open

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V

② Orifice & Port size

	Orifice	Port size
154	Ø15	1/2
206	Ø20	3/4
2510	Ø25	1

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 60Hz AC220V 60Hz DC24V	
Fluid temp.	0 ~ 60 °C	EPDM(100 °C) FPM(120 °C)			
Ambient temp.	50 °C (Max.)				
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)	DC : 0~7kgf/cm ² (0 ~ 0.7MPa)	Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC, DC : 30W	
Electrical connection	Terminal box lead wire G(PF1/2)		Body material	BODY: SUS316 TRIM: SUS304	
Port size	Rc(PT) 1/2, 3/4, 1		Seal material	NBR + PISTON	EPDM FPM
Orifice	Ø15, Ø20, Ø25		Weight	Refer to the table below	

Features

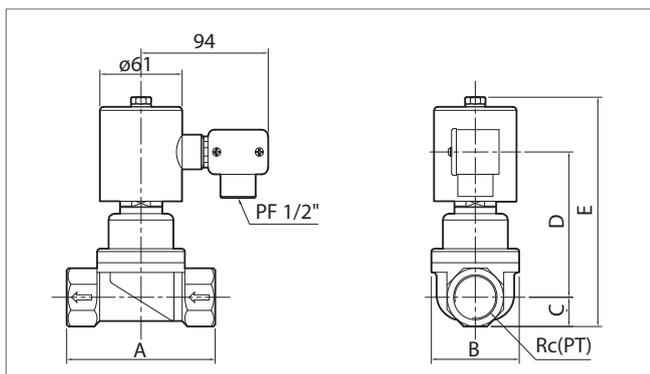
- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Seal material can be changed depending on fluid Specifications.
- Fire resistant structure, large capacity
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Water piping
- Medical instrument
- Air conditioner
- Industrial cleaner
- Ventilator
- Compressor

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions

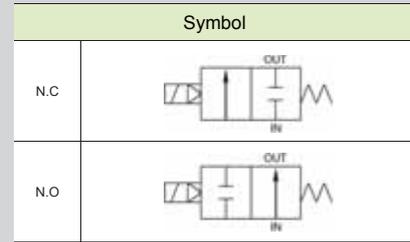


Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HKW 154S(NO)	90	50	14.5	97	151	1/2	Ø15	1.66
HKW 206S(NO)	100	65	18	101	159	3/4	Ø20	2.10
HKW 2510S(NO)	110	65	21	105	166	1	Ø25	2.24

HKW3212S, 4014S, 5020S



HKW 3212S



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

③ Initial status

Nil	Normally closed (Standard)
NO	Normally open

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V

② Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V		
Fluid temp.	0 ~ 60 °C	EPDM(100 °C) FPM(120 °C)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Ambient temp.	50 °C (Max.)				Power consumption	AC, DC : 30W
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)	DC : 0~7kgf/cm ² (0 ~ 0.7MPa)	Body material	BODY: SUS 316 TRIM: SUS 304		
Coil insulation	Class B		Seal material	NBR + PISTON	EPDM FPM	
Electrical connection	Terminal box lead wire G(PF)1/2		Weight	Refer to the table below		
Port size	Rc(PT) 1 1/4, 1 1/2, 2					
Orifice	Ø32, Ø40, Ø50					

Features

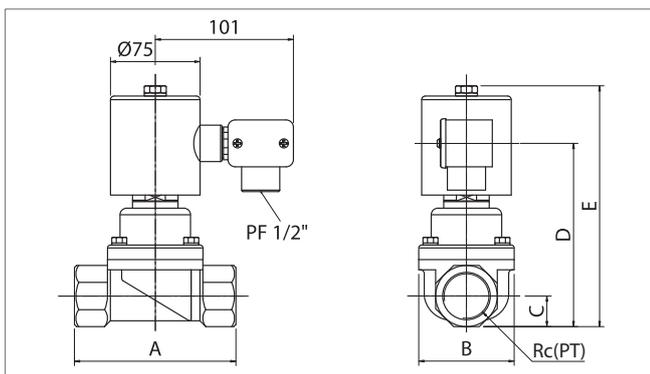
- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Seal material can be changed depending on fluid Specifications.
- Fire resistant structure
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Water piping
- Medical instrument
- Air conditioner
- Industrial cleaner
- Ventilator
- Compressor

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HKW 3212S(NO)	122	86	26	156	204	1 1/4	ø32	4.2
HKW 4014S(NO)	122	86	29	162	210	1 1/2	ø40	4.3
HKW 5020S(NO)	140	100	36	174	222	2	ø50	5.6

Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Tefflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV

HKW2510SF, 3212SF, 4014SF, 5020SF



HKW 3212SF

Symbol	
N.C	
N.O	

How to Order

HKW 3212 SF - AC220V

① ② ③ ④

① Orifice & Port size

	Orifice	Port size
2510	Ø25	1
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

③ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V

② Initial status

Nil	Normally closed (Standard)
O	Normally open

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V	
Fluid temp.	0 ~ 60°C	EPDM(100°C) FPM(120°C)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)
Ambient temp.	50°C (Max.)		Power consumption		AC, DC : 30W
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)	DC : 0~7kgf/cm ² (0 ~ 0.7MPa)		Body material	BODY: SUS 316 TRIM: SUS 304
Coil insulation	Class B		Seal material		NBR + PISTON
Electrical connection	Terminal box lead wire G(PF)1/2			Weight	Refer to the table below
End connection	JIS 10K FF				
Orifice	Ø25, Ø32, Ø40, Ø50				

Features

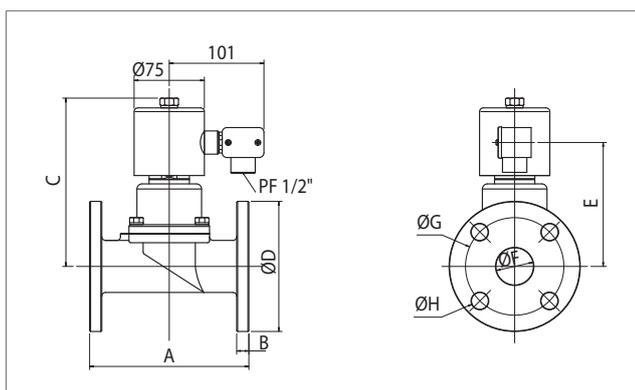
- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Seal material can be changed depending on fluid Specifications.
- Stainless steel body
- Fire resistant structure, large capacity
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Water piping
- Medical instrument
- Air conditioner
- Industrial cleaner
- Ventilator
- Compressor

※ Not available in explosive atmosphere.
※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Model	A	B	C	D	E	F	G	H	Weight (kg)
HKW 2510SF(O)	127	13	143	Ø125	104	Ø25	Ø90	Ø18	5.80
HKW 3212SF(O)	170	13	182	Ø135	133	Ø35	Ø100	Ø19	7.40
HKW 4014SF(O)	180	13	184	Ø140	136	Ø40	Ø105	Ø19	7.46
HKW 5020SF(O)	180	14	189	Ø155	137.5	Ø50	Ø120	Ø19	9.34

HKS154S, 206S, 2510S



HKS 154S

Symbol	
N.C	
N.O	

How to Order

HKS 154 S - AC220V

① ② ③ ④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
154	Ø15	1/2
206	Ø20	3/4
2510	Ø25	1

③ Initial status

Nil	Normally closed (Standard)
NO	Normally open

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC110V 50/60Hz AC220V 50/60Hz	
Fluid temp.	0 ~ 180 °C				
Ambient temp.	50 °C (Max.)				
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC)	
Coil insulation	Class H		Power consumption	AC: 30W	
Electrical connection	Terminal box lead wire G(PF)1/2		Body material	BODY: SUS 316 TRIM: SUS 304	
Port size	Rc(PT) 1/2, 3/4, 1		Seal material	PTFE + PISTON	
Orifice	Refer to the table below		Weight	Refer to the table below	

* Not available in explosive atmosphere.

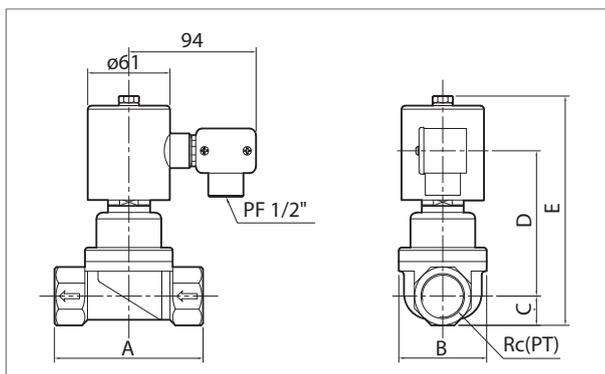
Features

- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Fire resistant structure
- Stainless steel body
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Steam piping
- Dyeing machine
- Heat exchanger
- Sterilizer
- Industrial cleaner
- Ventilator

Dimensions



Model	A	B	C	D	E	F	G	Rc(PT)	Orifice	Weight (kg)
HKS 154S(NO)	90	50	14.5	97	151	Ø61	94	1/2	Ø15	1.66
HKS 206S(NO)	100	65	18	101	159	Ø61	94	3/4	Ø20	2.10
HKS 2510S(NO)	110	65	21	105	166	Ø61	94	1	Ø25	2.24

Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV

HKS3212S, 4014S, 5020S



HKS 3212S

Symbol	
N.C	
N.O	

How to Order

HKS 3212 S - AC220V

① ② ③ ④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

③ Initial status

Nil	Normally closed (Standard)
NO	Normally open

④ Voltage

AC220V	AC220V 50Hz/60Hz
--------	------------------

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC220V 50Hz, 60Hz	
Fluid temp.	0 ~ 180 °C				
Ambient temp.	50 °C (Max.)				
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10%	
Coil insulation	Class H		Power consumption	AC: 30W	
Electrical connection	Terminal box lead wire G(PF)1/2		Body material	BODY: SUS 316 TRIM: SUS 304	
Port size	Rc(PT) 1 1/4, 1 1/2, 2		Seal material	PTFE + PISTON	
Orifice	Refer to the table below		Weight	Refer to the table below	

※ Not available in explosive atmosphere.

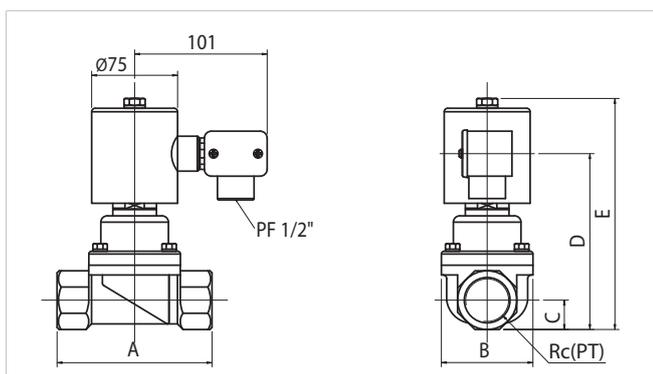
Features

- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Fire resistant structure
- Stainless steel body
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Steam piping
- Dyeing machine
- Heat exchanger
- Sterilizer
- Industrial cleaner
- Ventilator

Dimensions



Model	A	B	C	D	E	Rc(PT)	Orifice	Weight (kg)
HKS 3212S	122	86	26	156	204	1 1/4	Ø32	4.20
HKS 4014S	122	86	29	162	210	1 1/2	Ø40	4.30
HKS 5020S	140	100	36	174	222	2	Ø50	5.60

HKS3212SF, 4014SF, 5020SF



HKW 3212SF

Symbol	
NC	
NO	

How to Order

HKS 32 SF - AC220V

① ② ③

① Orifice & Port size

	Orifice	Port size
3212	Ø32	1 1/4
4014	Ø40	1 1/2
5020	Ø50	2

② Initial status

Nil	Normally closed (Standard)
O	Normally open

③ Voltage

AC220V	AC220V 50Hz/60Hz
--------	------------------

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Steam, Hot water		Voltage	AC220V 50/60Hz	
Fluid temp.	0 ~ 180 °C				
Ambient temp.	50 °C (Max.)				
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC)	
Coil insulation	Class H		Power consumption	AC: 30W	
Electrical connection	Terminal box lead wire G(PF)1/2		Body material	BODY: SUS 316 TRIM: SUS 304	
End connection	JIS 10K FF		Seal material	PTFE + PISTON	
Orifice	Ø32, Ø40, Ø50		Weight	Refer to the table below	

※ Not available in explosive atmosphere.

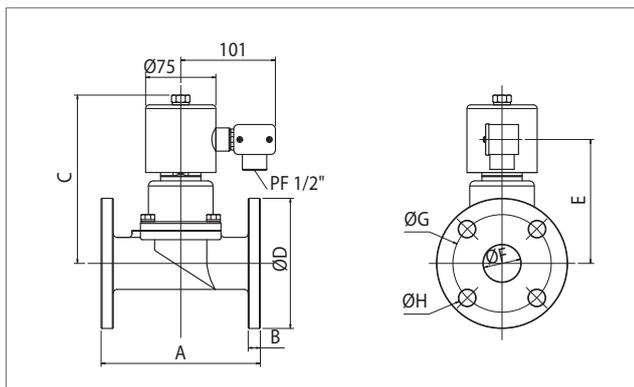
Features

- Piston pilot kick type-Direct acting type
- Operate in 0kgf/cm² of differential pressure (Vacuum)
- Stainless steel body
- Fire resistant structure, large capacity
- Horizontal pipe (30° or less) installation
- Terminal box type electrical connection

Applications

- Steam piping
- Dyeing machine
- Heat exchanger
- Sterilizer
- Industrial cleaner
- Ventilator

Dimensions



Model	A	B	C	D	E	F	G	H	Weight (kg)
HKS 3212SF	170	13	182	Ø135	133	Ø35	Ø100	Ø19	7.40
HKS 4014SF	180	13	184	Ø140	136	Ø40	Ø105	Ø19	7.46
HKS 5020SF	180	14	189	Ø155	137.5	Ø50	Ø120	Ø19	9.34

Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV

HDW011B-3, 012B-3 series



HDW 011B-3

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port Type

Nil	Rc(PT) (Standard)
G	G

② Orifice

01	Ø1.5
----	------

③ Port size

1	1/8
2	1/4

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60 °C	EPDM FPM			
Ambient temp.	50 °C (Max.)				
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 1/8, 1/4		Seal material	NBR	EPDM FPM
Orifice	Ø1.5		Weight	0.26kg	

Features

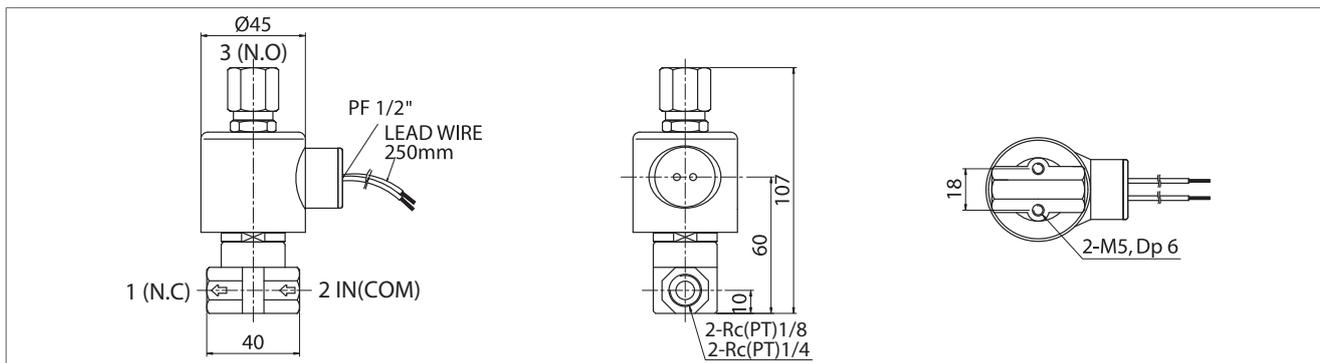
- 3 Way direct acting Type
- Light weight, various coils is applicable
- Fire resistant structure, high durability
- Easy to attach
- Seal material can be changed depending on fluid Specifications.

Applications

- Water piping
- Medical instrument
- Air conditioner
- Water purifier
- Boiler
- Welding machine
- Compressor

※ Not available in explosive atmosphere. ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Tefflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV

HDW022B-3, 023B-3 series



HDW 022B-3

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

02	Ø2
----	----

③ Port size

02	1/4
03	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60 °C	EPDM FPM			
Ambient temp.	50 °C (Max.)				
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 1/4, 3/8		Seal material	NBR	EPDM FPM
Orifice	Ø2		Weight	0.26kg	

Features

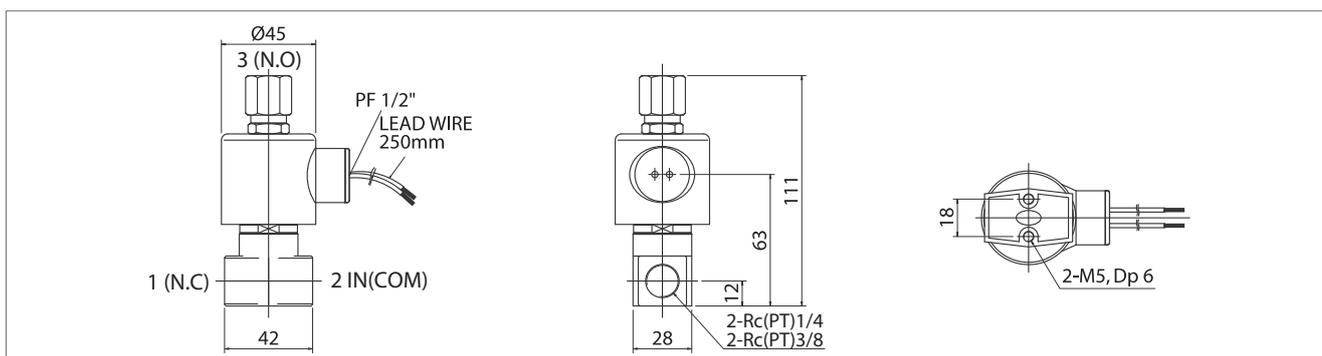
- 3 Way direct acting type
- Light weight, various coils is applicable
- Fire resistant structure, high durability
- Easy to attach
- Seal material can be changed depending on fluid Specifications.

Applications

- Water piping
- Medical instrument
- Air conditioner
- Water purifier
- Boiler
- Welding machine
- Compressor

* Not available in explosive atmosphere. * If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HDW022T-3 series



HDW 022T-3

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HDW 02 2 T - 3 - AC220V

① ② ③ ④ ⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

02	Ø2.5
----	------

③ Port size

2	1/4
---	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 120 °C			Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Ambient temp.	50 °C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0~10kgf/cm ² (0 ~ 1.0MPa)	15kgf/cm ² (1.5MPa)	Body material	Brass		
Coil insulation	Class B			Seal material	FPM	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Weight		0.26kg	
Port size	Rc(PT) 1/4					
Orifice	Ø2.5					

* Not available in explosive atmosphere. * If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

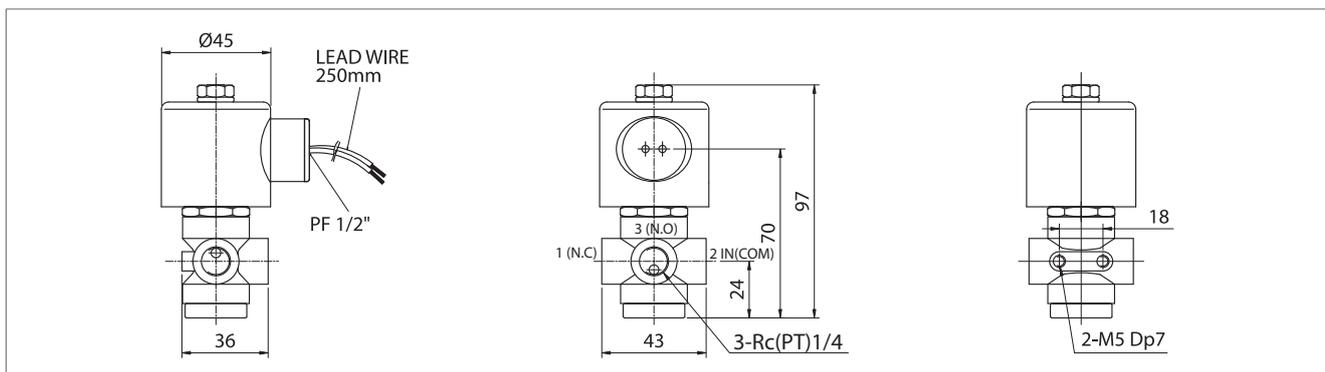
Features

- 3 Way direct acting type
- Light weight, various coils applicable
- Fire resistant structure, high durability
- Easy to attach
- Seal material can be changed depending on fluid Specifications.

Applications

- Water piping
- Medical instrument
- Compressor

Dimensions



Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV

HDW052-3 series



HDW 052-3

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

05	Ø4.5
----	------

③ Port size

02	1/4
----	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120 °C
E	EPDM	Hot water 100 °C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC 24V 50Hz	
Fluid temp.	0 ~ 60 °C	EPDM FPM		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Ambient temp.	50 °C (Max.)				Power consumption	AC, DC : 14W
Pressure range	0~10kgf/cm ² (0 ~ 1.0MPa)	DC:0~7kgf/cm ² (0 ~ 0.7MPa)	Coil insulation	Class B		
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass		
Port size	Rc(PT) 1/4		Seal material	NBR	EPDM FPM	
Orifice	Ø4.5		Weight	0.63kg		

Features

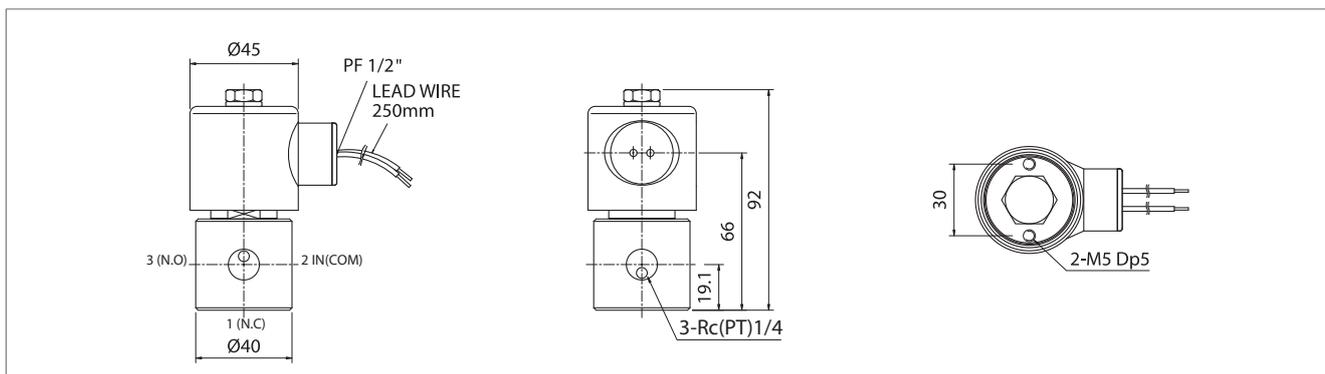
- 3 Way direct acting type
- Directional switching type
- Fire resistant structure, high durability
- Various coils applicable
- Seal material can be changed depending on fluid Specifications.

Applications

- Water piping
- Medical instrument
- Air conditioner
- Vacuum packing machine
- Pneumatic machinery
- Welding machine

※ Not available in explosive atmosphere. ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions

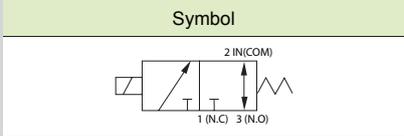




HDA021S-3 series



HDA 021S-3



How to Order

HDA 02 1 S - 3 - - AC220V

① ② ③ ④ ⑤

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

02	Ø1.6 (Standard)
02A	Ø2

③ Port size

01	1/8
----	-----

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
SL	SILICONE	Clean water -5~60°C
E	EPDM	Hot water 100°C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC : 8W, DC : 7.5W	
Electrical connection	Lead wire		Body material	Stainless steel	
Port size	Rc(PT) 1/8		Seal material	NBR	EPDM, FPM
Orifice	Ø1.6	Ø2	Weight	0.23kg	

※ Not available in explosive atmosphere.
※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

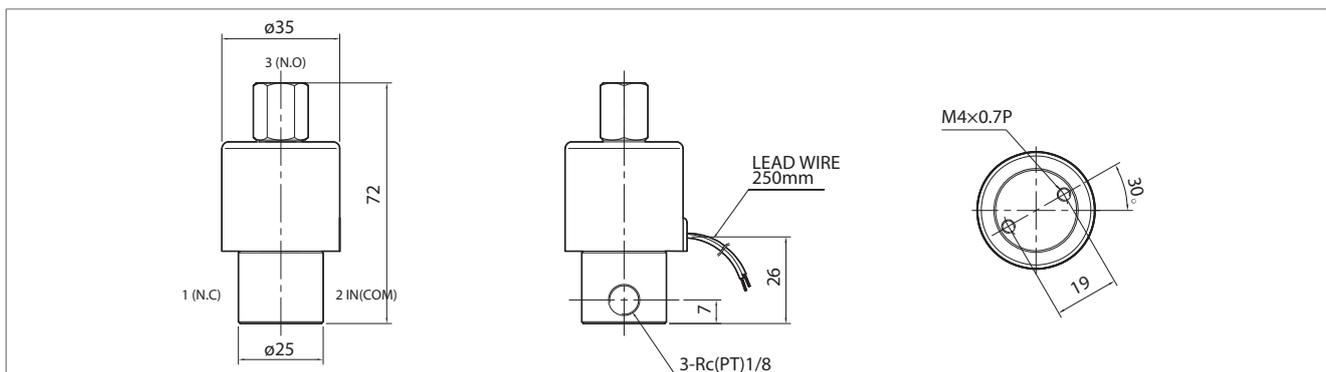
Features

- 3 Way direct acting type
- Light weight, compact size
- Fire resistant structure, high durability
- Easy to attach, stainless steel body
- Seal material can be changed depending on fluid Specifications.

Applications

- Water piping
- Medical instrument
- Air conditioner
- Water purifier
- Pneumatic machinery
- Welding machine
- Compressor

Dimensions



Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

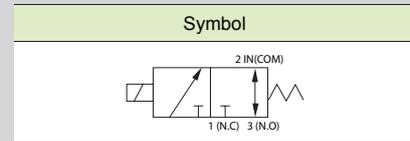
Actuated Valve

HMV

HDA032S-3 series



HDA 032S-3



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

03	Ø2.5
----	------

③ Port size

2	1/4
---	-----

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC, DC : 8W	
Electrical connection	Lead wire		Body material	Stainless steel	
Port size	Rc(PT) 1/4		Seal material	NBR	EPDM, FPM
Orifice	Ø2.5 (TOP: Ø1.6)		Weight	0.31kg	

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

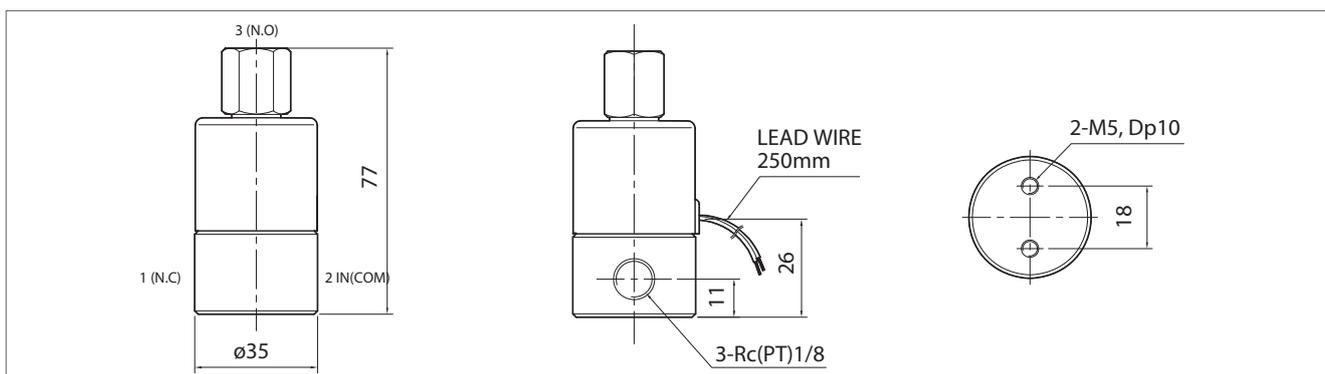
Features

- 3 Way direct acting type
- Light weight, compact size
- Fire resistant structure, high durability
- Easy to attach, stainless steel body
- Seal material can be changed depending on fluid Specifications.

Applications

- Water piping
- Medical instrument
- Air conditioner
- Water purifier
- Pneumatic machinery
- Welding machine
- Compressor

Dimensions



HDW032S-3, 033S-3 series



HDW 032S-3

Symbol	
Electrical connection	
Nil	G T D Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

03	Ø2.5
----	------

③ Port size

2	1/4
3	3/8

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60°C			AC110V 60Hz	
Ambient temp.	50°C (Max.)			AC200V 50/60Hz	
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Stainless steel	
Port size	Rc(PT) 1/4, 3/8		Seal material	NBR	EPDM, FPM
Orifice	Ø2.5 (TOP: Ø2.5)		Weight	0.51kg	

Features

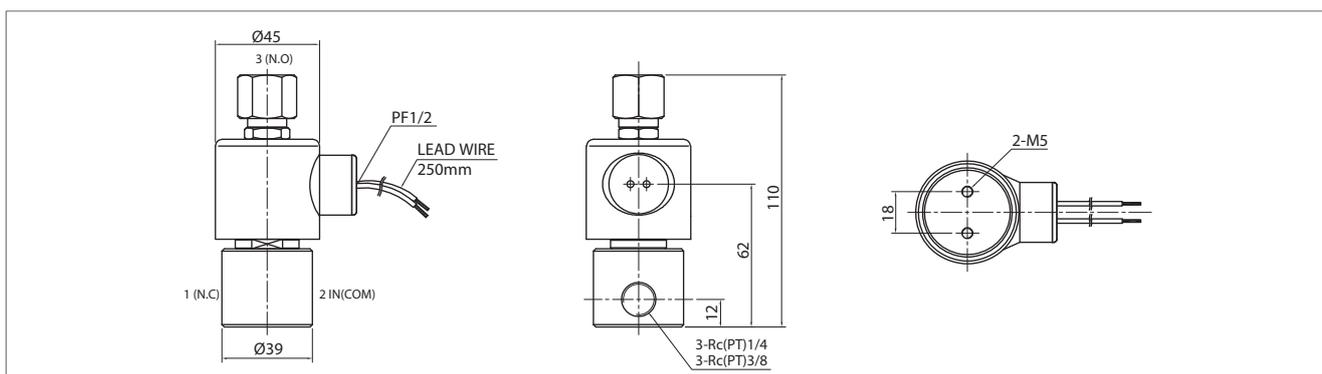
- 3 way direct acting type
- Fire resistant structure, easy to attach
- Seal material can be changed depending on fluid Specifications.
- Stainless body

Applications

- Medical instrument
- Water piping
- Single acting cylinder
- Air conditioner
- Beverage processing
- Compressor

※ Not available in explosive atmosphere. ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV

HPW103P series



HPW 103C

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
103	Ø10	3/8

※ Consult KCC for 1/4 port size.

③ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

④ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120℃
SL	SILICONE	Clean water -5~60℃
E	EPDM	Hot water 100℃

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC220V 50Hz AC240V 50Hz AC24V 50Hz	
Fluid temp.	0 ~ 60℃	EPDM(100℃) FPM(120℃)		Allowable voltage fluctuation	±10% (AC), ±5% (DC)	
Ambient temp.	50℃ (Max.)				Power consumption	AC, DC : 14W
Pressure range	0.5 ~ 20kgf/cm ² (0.05 ~ 2MPa)	Vacuum	Body material	Brass		
Coil insulation	Class B		Seal material	NBR	EPDM, FPM, SILICONE	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Weight	0.53Kg		
Port size	Rc(PT) 3/8					
Orifice	Ø10					

Features

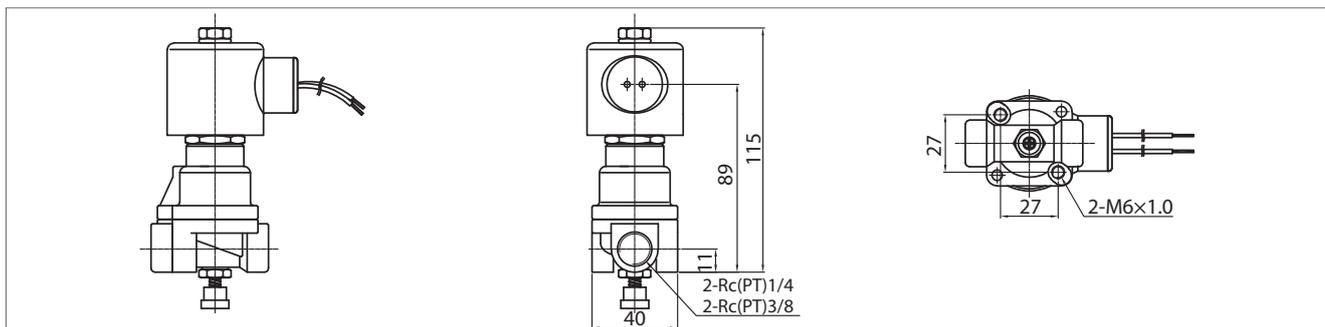
- Diaphragm type
- Normally closed type
- Fire resistant structure, high durability
- Seal material can be changed depending on fluid Specifications.
- Combines the strengths of pilot type and direct acting type

Applications

- Medical instrument
- Industrial cleaner
- Wire cutting machine
- Water piping

※ Not available in explosive atmosphere. ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HPW5020-C series



HPW 5020-C

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order

HPW 50 20 - C - - AC220V

① ② ③ ④ ⑤ ⑥

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

50	Ø50
----	-----

③ Port size

20	2
----	---

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120°C
E	EPDM	Hot water 100°C

⑥ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC220V 50Hz
Fluid temp.	0 ~ 60°C	EPDM, FPM		AC110V 60Hz	AC240V 50Hz
Ambient temp.	50°C (Max.)			AC200V 50/60Hz	AC 24V 50Hz
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1.0MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil Terminal box DIN connector	Body material	Brass	
Port size	Rc(PT) 2		Seal material	NBR	EPDM, FPM
Orifice	Ø50		Weight	3.7kg	

Features

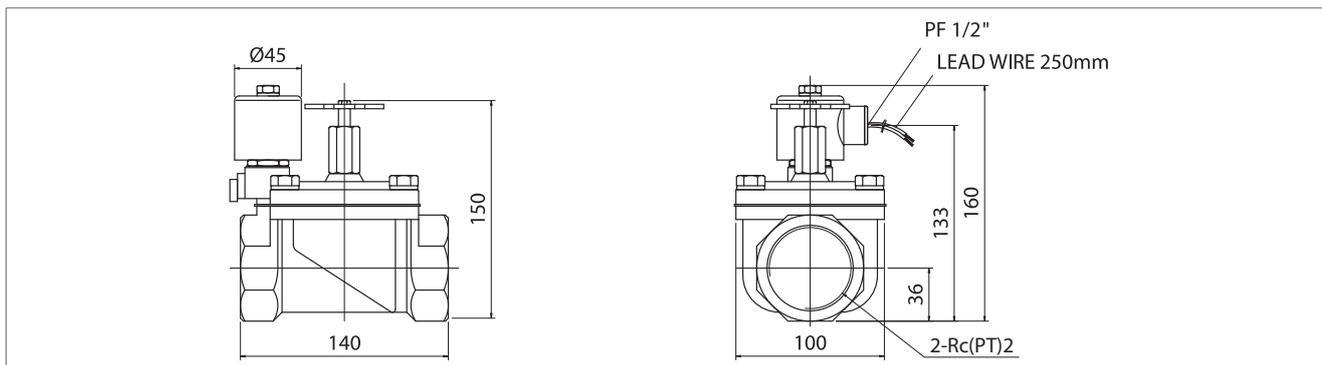
- Diaphragm type
- Flow rate is controlled by manual lever
- Open/close mechanism can be operated manually
- Fire resistant structure, large capacity

Applications

- Medical instrument
- Single acting cylinder
- Industrial cleaner
- Water piping
- Air conditioner
- Compressor

※ Not available in explosive atmosphere. ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions

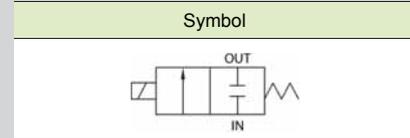


Process Valve
SUS Direct Acting A, W
HKW
SUS Direct Acting S, H
HKS
3Port
HDA
HDW
3Port SUS
HDA
HDW
Special Valve
HPW
HVV
HDW
SV
HCV
Tefflon Valve
HTV
HCTV
Pinch Valve
HPV
Coolant Valve
KLCV
Cyl. Valve
HAV
Actuated Valve
HMV

HVV12FL series



HVV12FL



How to Order

HVV 12 FL - - AC220V

① ② ③

① Orifice

12	Ø12
----	-----

② Seal material

	Material	Applications
Nil	NBR	Standard
E	EPDM	Hot water 100°C

③ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC240V	AC 240V 50/60Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air		Voltage	AC110V 60Hz AC220V 60Hz DC24V	AC240V 50/60Hz DC 12V
Fluid temp.	0 ~ 50°C	EPDM (100°C)			
Ambient temp.	50°C (Max.)				
Pressure range	-1 ~ 1kgf/cm ² (-0.1 ~ 0.1MPa) Vacuum (10 ⁻⁶ Torr)		Allowable voltage fluctuation	±5%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC :18W, DC : 17W	
Electrical connection	Lead wire G(PF)1/2		Body material	SUS 316	
End connection	Ø48 FLANGE		Seal material	NBR	EPDM
Orifice	Ø12		Weight	1.12kg	

※ Not available in explosive atmosphere.

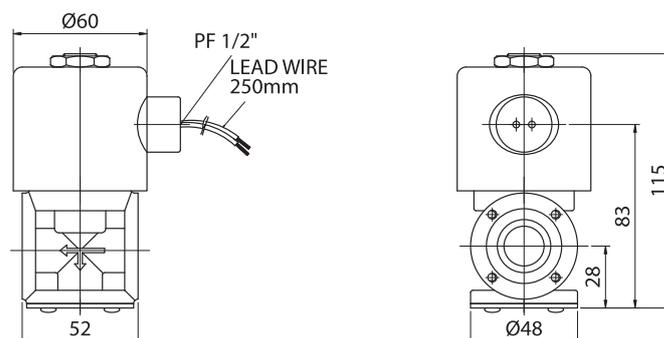
Features

- Direct acting type, normally closed type
- Fire resistant structure
- Seal material can be changed depending on fluid Specifications.
- Stainless body
- Applicable in vacuum
- Horizontal or vertical pipe installation

Applications

- Vacuum relief for storage tank
- Vacuum packing machine
- Medical instrument

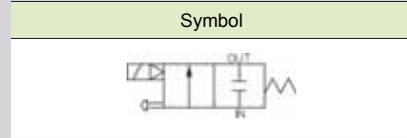
Dimensions



HDW154B series



HDW 154B



How to Order

HDW 15 4 B - AC220V

① ② ③ ④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

15	Ø15
----	-----

③ Port size

4	1/2
---	-----

④ Voltage

DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water		Voltage	DC24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	0.3 ~ 10kgf/cm ² (0.03 ~ 1.0MPa)		Allowable voltage fluctuation	±5% (DC)	
Coil insulation	Class B		Power consumption	DC : 12W	
Electrical connection	Lead wire G(PF)1/2		Body material	Brass	
Port size	Rc(PT) 1/2		Seal material	NBR DIAPHRAGM	
Orifice	Ø15		Weight	0.81kg	

※ Not available in explosive atmosphere.

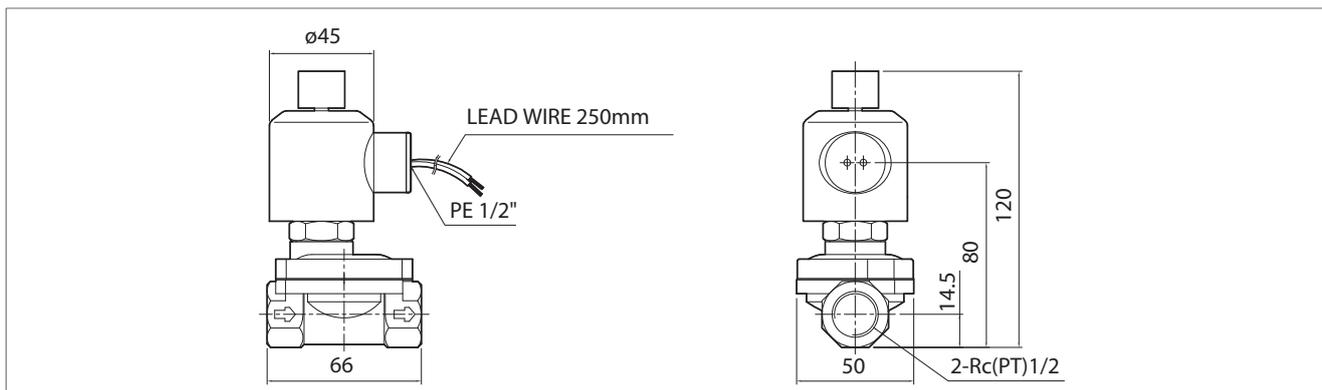
Features

- Diaphragm type
- Fire resistant structure, high durability
- The polarity has to be checked certainly when connecting the power. (DC24V +: Red, -: Blue)
- After testing and operating, press the button on the power supply to return the valve to extinguish-ready mode.

Applications

- Emergency equipment e.g: sprinkler

Dimensions



Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV

SV1430 series



SV 1430

Symbol				
Electrical connection				
Nil	G	T	D	Z

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

14	Ø2.8
----	------

③ Port size

30	1/4
----	-----

④ Electrical connection

Nil	Console box (Standard)
G	Grommet coil
T	Terminal box
D	DIN coil + DIN connector
Z	DIN coil + DIN connector & lamp

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Inert gas		Voltage	AC100V 50/60Hz	AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 150 °C			AC110V 60Hz	
Ambient temp.	50 °C (Max.)			AC200V 50/60Hz	
Pressure range	0 ~ 7kgf/cm ² (0 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class H		Power consumption	AC, DC : 14W	
Electrical connection	Lead wire G(PF)1/2	Grommet coil	Body material	Brass	
Port size	Rc(PT) 1/4		Seal material	FPM	
Orifice	Ø2.8		Weight	0.45kg	

Features

- Easy to attach
- Using high quality coil
- Light weight, compact size

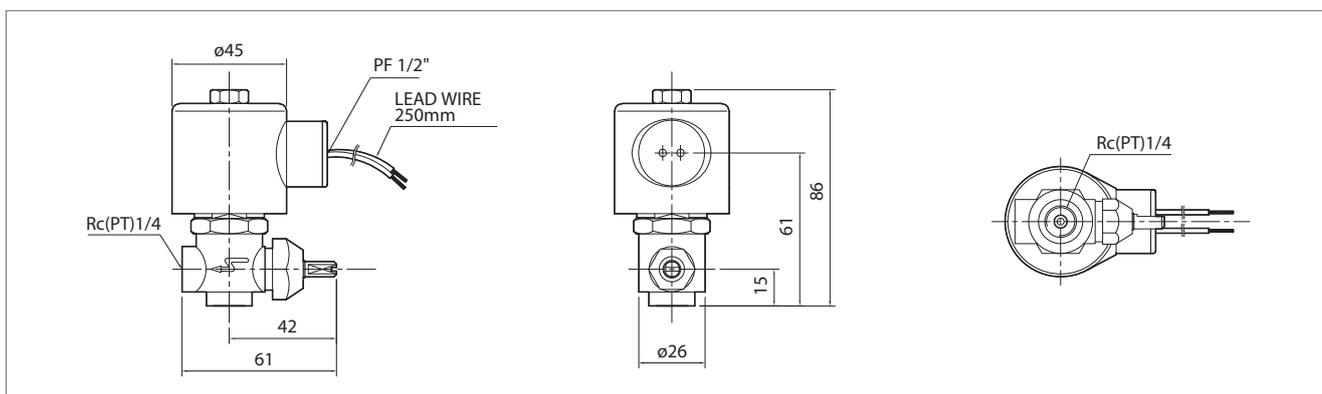
Applications

- Steam iron

* Not available in explosive atmosphere.

* If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



HCV201 ~ 402 series



HCV 201

Symbol	
N.C	
N.O	

How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

2	Ø2
3	Ø3
4	Ø4

③ Port size

01	1/8
02	1/4

④ Initial status

Nil	Normally closed
NO	Normally open

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Chemical, Neutral gas, Hot air, Hot oil		Voltage	AC220V DC24V, 12V	AC110V
Fluid temp.	-10 ~ 80°C				
Ambient temp.	50°C (Max.)				
Pressure range	Refer to the table below		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B, H		Power consumption	AC : 14W, DC : 12W	
Electrical connection	Din connector		Body material	SUS 316	
Port size	Rc(PT)1/8, 1/4		Seal material	FPM	
Orifice	Ø2, Ø3, Ø4		Weight	0.6kg	

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

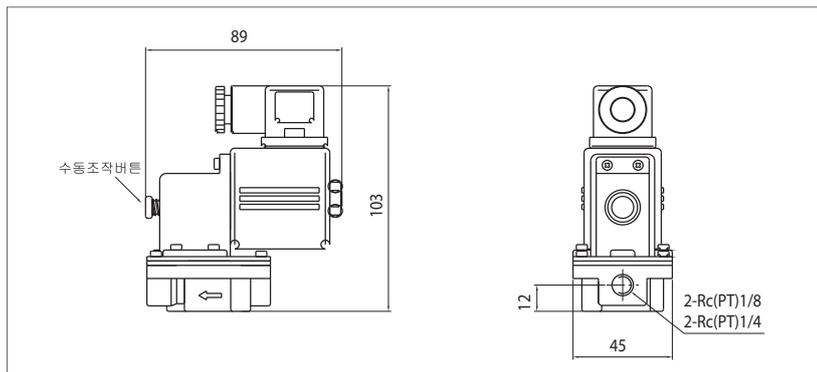
Features

- FPM diaphragm direct acting type
- SUS 316 body
- Manual button

Applications

- Chemical line
- Neutral gas and liquid
- Vacuum line

Dimensions



Orifice	Pressure (kgf/cm ²)	
	IN→OUT	OUT→IN
Ø2	12	8
Ø3	7	5
Ø4	5	3

Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

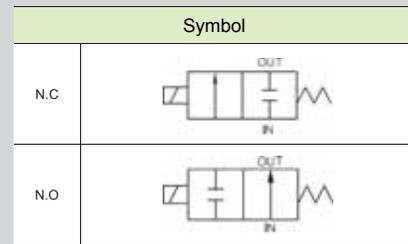
Actuated Valve

HMV

HTV0201~0502 series



HTV 0201-C



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

02	Ø2
03	Ø3
04	Ø4
05	Ø5

③ Port size

01	1/8
02	1/4

④ Initial status

C	Normally closed
O	Normally open

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Chemical, Ozone, Water		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	Refer to the table below		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC : 11W, DC : 12W	
Electrical connection	Lead wire		Body material	TEFLON	
Port size	Refer to the table below		Seal material	NBR + TEFLON COATING	
Orifice	Ø2, Ø3, Ø4, Ø5		Weight	0.35kg	

※ Not available in explosive atmosphere.

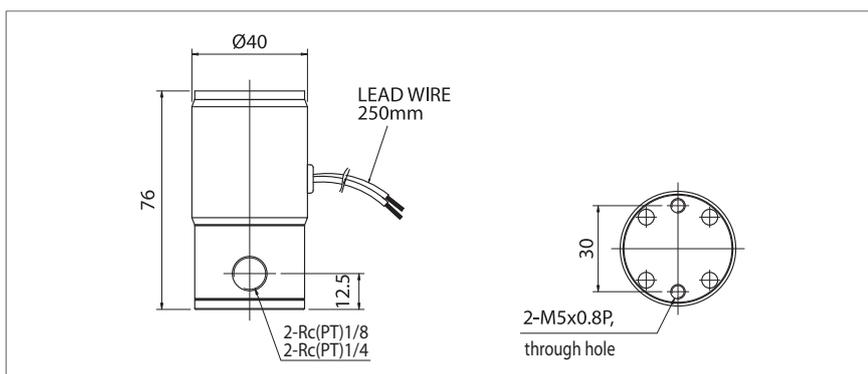
Features

- Direct acting type
- Light weight, compact size
- Teflon body, seat
- Chemical proof
- The part fluid passing through is made of Teflon.

Applications

- Chemical
- Medical instrument
- Pure water piping
- Testing machine

Dimensions



Model	Rc(PT)	Pressure (kgf/cm ²)
HTV 0201	1/8	3.0
HTV 0301	1/8	2.5
HTV 0402	1/4	1.5
HTV 0502	1/4	1.0

Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

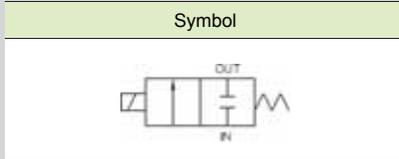
Actuated Valve

HMV

HTV04L2-C ~ 09L4-C series



HTV 04L2-C



How to Order

HTV 04 L 2 - C - AC220V

①
②
③
④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

04	Ø4	2	1/4
05	Ø5		
09	Ø9	3	3/8
09	Ø9		
		4	1/2

③ Port size

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Chemical, Ozone, Water		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V		
Fluid temp.	0 ~ 60°C			Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Ambient temp.	50°C (Max.)				Power consumption	AC : 11W, DC : 12W
Pressure range	0 ~ 3kgf/cm ² (0 ~ 0.3MPa)		Body material	TEFLON		
Coil insulation	Class B		Seal material	TEFLON		
Electrical connection	Lead wire		Weight	Refer to the table below		
Port size	Refer to the table below					
Orifice	Ø4, Ø5, Ø9					

※ Not available in explosive atmosphere.

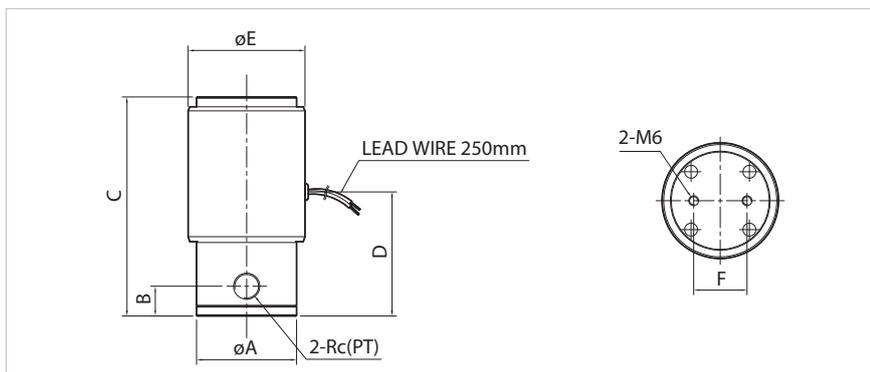
Features

- Direct acting type
- Normally closed type
- Teflon body, seat
- Chemical proof
- The part fluid passing through is made of Teflon.

Applications

- Chemical
- Medical instrument
- Pure water piping
- Testing machine

Dimensions



Model	Port size Rc(PT)	Orifice mm	Weight kg
HTV 04L2-C	1/4	4	0.5
HTV 05L3-C	3/8	5	0.5
HTV 09L3-C	3/8	9	1.8
HTV 09L4-C	1/2	9	1.8

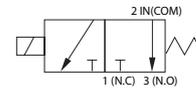
Model	A	B	C	D	E	F
HTV 04L2-C	48	17	107	72	52	32
HTV 05L3-C	48	17	107	72	52	32
HTV 09L3-C	60	18	133	75	70	32
HTV 09L4-C	60	18	133	75	70	32

HTV0301-3 series



HTV 0301-3

Symbol



How to Order

HTV 03 01 - 3 - AC220V

① ② ③ ④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

03	Ø3
----	----

③ Port size

01	1/8
----	-----

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Chemical, Ozone, Water		Orifice	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	40°C (Max.)				
Pressure range	COM → ^{NC} 1.5kgf/cm ²	^{NO} 1.5kgf/cm ²	Allowable voltage fluctuation	±10%(AC), ±5% (DC)	
Coil insulation	Class B		Power consumption	AC, DC : 11W	
Electrical connection	Lead wire		Body material	TEFLON	
Port size	Rc(PT) 1/8		Seal material	NBR + TEFLON COATING	
Orifice	Ø3		Weight	0.35kg	

※ Not available in explosive atmosphere.

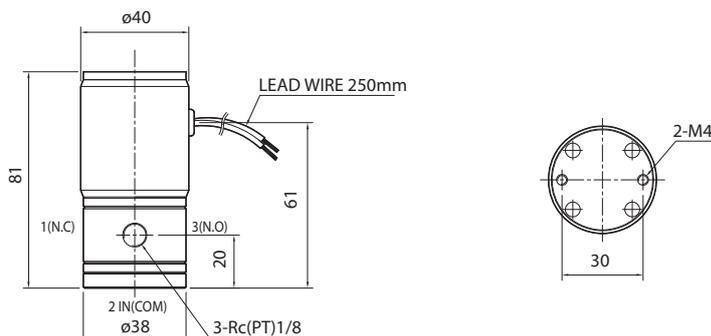
Features

- 3 Way direct acting type
- Teflon body, seat
- Chemical proof
- The part fluid passing through is made of Teflon.

Applications

- Chemical
- Medical instrument
- pure water piping
- testing machine

Dimensions



Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

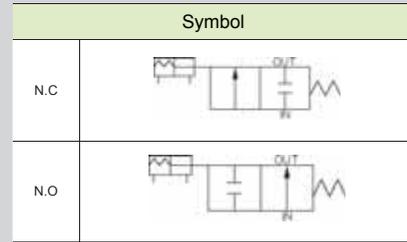
Actuated Valve

HMV

HCTV0201 ~ 0904 series



HCTV 0201-C



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
0201	Ø2	1/8
0301	Ø3	1/8
0402	Ø4	1/4
0502	Ø5	1/4
0903	Ø9	3/8
0904	Ø9	1/2

③ Initial status

C	Normally closed
O	Normally open

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Chemical, Ozone, Water		Orifice	1/8 = Ø2mm, Ø3mm 1/4 = Ø4mm, Ø5mm 3/8, 1/2 = Ø9	
Fluid temp.	0 ~ 60°C				
Ambient temp.	40°C				
Pressure range	0 ~ 5kgf/cm ² (0 ~ 0.5MPa)		Body material	TEFLON	
Cylinder operating pressure	4 ~ 6kgf/cm ² (0.4 ~ 0.6MPa)		Seal material	NBR + PTFE COATING	
Port size	Rc(PT)1/8, 1/4, 3/8, 1/2		Weight	Refer to the table below	

※ Not available in explosive atmosphere.

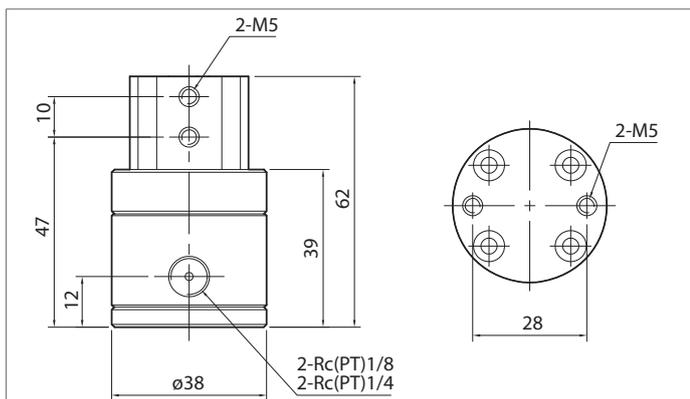
Features

- Air operated valve
- Teflon body, seat
- Light weight, compact size, chemical proof
- Spring return type (Option: Double acting)

Applications

- Chemical line
- Chemical gas line
- Pure water piping
- Medical instrument
- Ozone water piping

Dimensions



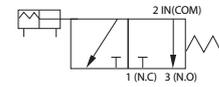
Model	A	B	C	D	E	F	G	Rc(PT)	Weight (kg)
HCTV0201-C(O)	10	47	12	Ø38	39	62	28	1/8	0.22
HCTV0301-C(O)	10	47	12	Ø38	39	62	28	1/8	0.22
HCTV0402-C(O)	10	47	12	Ø38	39	62	28	1/4	0.22
HCTV0502-C(O)	10	47	12	Ø38	39	62	28	1/4	0.22
HCTV0903-C(O)	11	67	12.5	Ø60	55.5	83.5	32	3/8	0.77
HCTV0904-C(O)	11	67	12.5	Ø60	55.5	83.5	32	1/2	0.77

HCTV0201-3 ~ 0502-3 series



HCTV 0201-3

Symbol



How to Order

HCTV 0201 - 3
① ②

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice & Port size

	Orifice	Port size
0201	Ø2	1/8
0301	Ø3	1/8
0402	Ø4	1/4
0502	Ø5	1/4

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Chemical, Ozone, Water		Orifice	1/8 = Ø2mm, Ø3mm 1/4 = Ø4mm, Ø5mm	
Fluid temp.	0 ~ 60°C				
Ambient temp.	40°C				
Pressure range	0 ~ 6kgf/cm ² (0 ~ 0.6MPa)		Body material	PTFE, SUS316L	
Cylinder operating pressure	5 ~ 7kgf/cm ² (0.5 ~ 0.7MPa)		Seal material	NBR + PTFE COATING	
Port size	Rc(PT)1/8, 1/4		Weight	0.25kg	

※ Not available in explosive atmosphere.

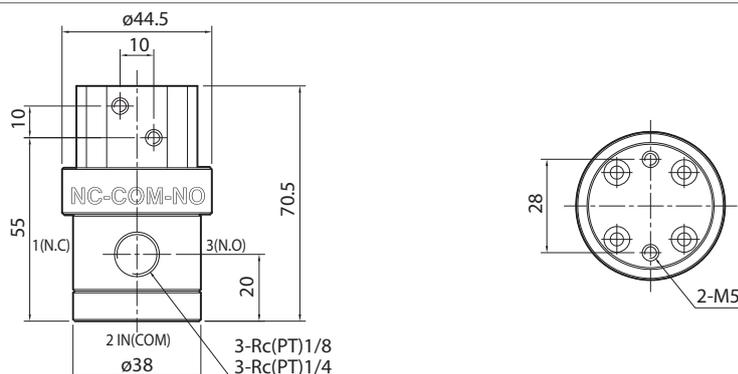
Features

- Air operated valve
- Teflon body, seat
- Light weight, compact size, chemical proof
- Spring return type (Option: Double acting)
- Air supply : 5~7kgf/cm²(5~7Bar)

Applications

- Chemical line
- Chemical gas line
- Pure water piping
- Medical instrument
- Ozone water line

Dimensions



Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

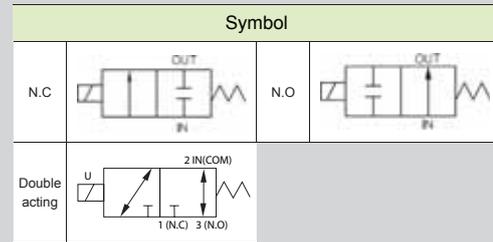
Actuated Valve

HMV

HPV406, 406NO, 406D series



HPV 406 Series



How to Order

HPV 406 - AC220V

① ② ③

① Orifice

406	Tube size : 1x3, 2x4, 3x5, 4x6
-----	--------------------------------

② Initial status

Nil	Normally closed
NO	Normally open
D	Double acting

③ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC90V	DC90V
DC180V	DC180V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Chemical, Liquid, Air, Water		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 90V, 180V	
Fluid temp.	0 ~ 100℃				
Ambient temp.	50℃ (Max.)				
Pressure range	0 ~ 1kgf/cm ² (0 ~ 0.1MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class B		Power consumption	AC : 10W, DC : 6W	
Electrical connection	Lead wire		Body material	PVC	
Port size	Tube size:1x3, 2x4, 3x5, 4x6		Weight	0.3kg	

* Not available in explosive atmosphere.

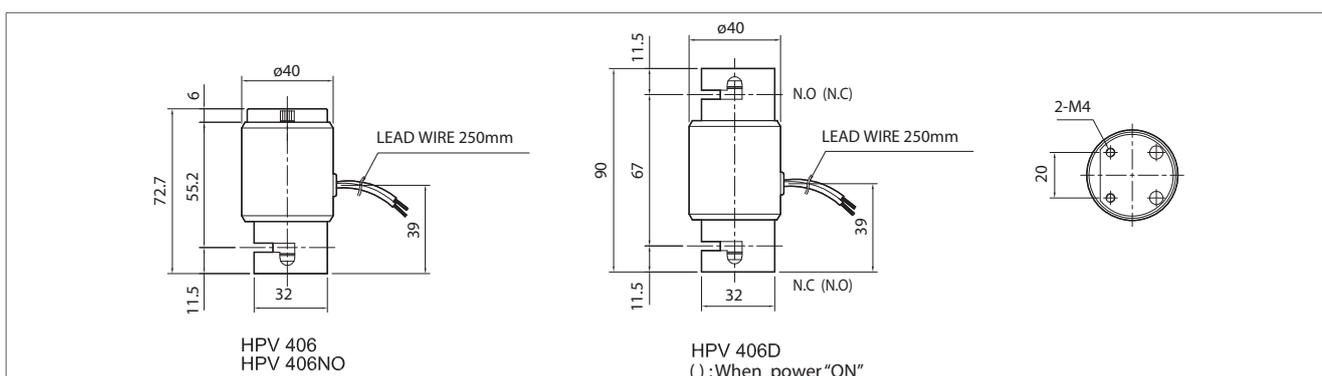
Features

- The silicon tube is installed onto the body. The fluid flow inside the silicon tube is controlled by the solenoid and the external compressor (pinch).
- Suitable for fluid control of beverages, food, medicines and etc.
<Note: No foreign substance>

Applications

- Detector
- Experiment instrument

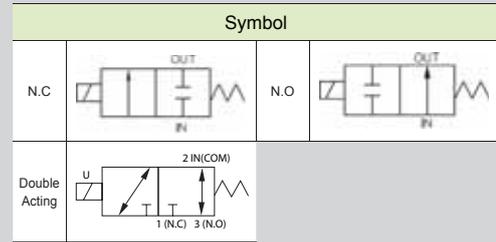
Dimensions



HPV810, 810NO, 810D series



HPV 810 Series



How to Order



① Applicable tube size

810	Tube size : 5x8, 6x9, 7x10, 8x11
-----	----------------------------------

② Initial status

Nil	Normally closed
NO	Normally open
D	Double acting

③ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC90V	DC90V
DC180V	DC180V

Specifications

Classification	Standard	Option	Classification	Standard	Option	
Fluid	Chemical, Liquid, Air, Water		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 90V, 180V		
Fluid temp.	0 ~ 100 °C			Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Ambient temp.	50 °C (Max.)				Power consumption	AC : 15W, DC : 12W
Pressure range	0 ~ 1kgf/cm ² (0 ~ 0.1MPa)		Body material	PVC		
Coil insulation	Class B			Weight	0.8kg	
Electrical connection	Lead wire					
Port size	Tube size:5x8, 6x9, 7x10, 8x11					

* Not available in explosive atmosphere.

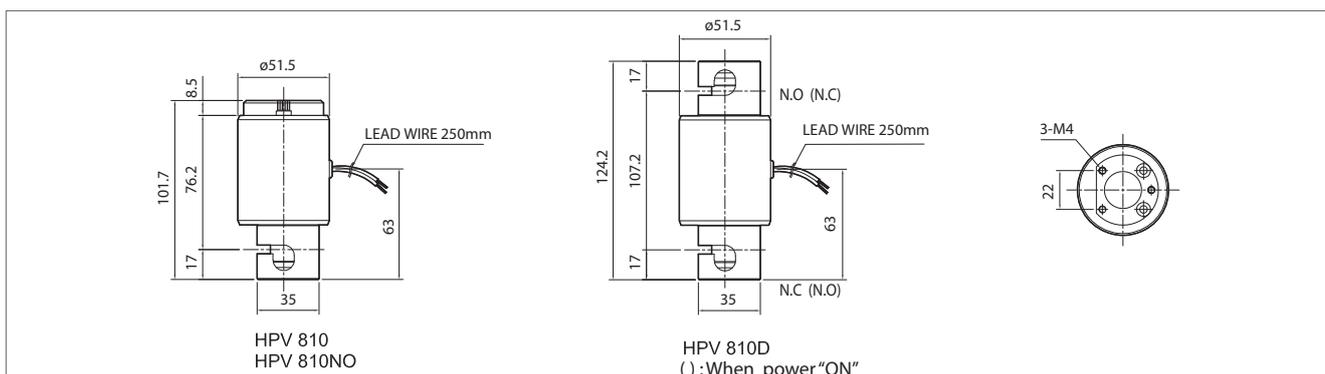
Features

- The silicon tube is installed onto the body. The fluid flow inside the silicon tube is controlled by the solenoid and the external compressor (pinch).
- Suitable for fluid control of beverages, food, medicines and etc.
<Note: No foreign substance>

Applications

- Detector
- Experiment instrument

Dimensions



Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Tefflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

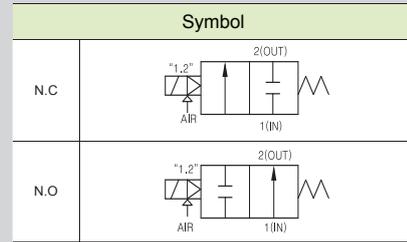
Actuated Valve

HMV

KLCV093, 094 series



KLCV 093



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

09	Ø9
----	----

③ Port size

3	3/8
4	1/2

④ Initial status

Nil	Normally closed
NO	Normally open

⑤ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC230V-50Hz	AC 230V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Oil, Cutting oil		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	0~16kgf/cm ² (0 ~ 1.6MPa)	0~30kgf/cm ² (0 ~ 3.0MPa)			
Pilot air pressure	3 ~ 7kgf/cm ² (0.3 ~ 0.7MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Coil insulation	Class F		Power consumption	AC : 6W, DC : 5W	
Electrical connection	Din connector		Body material	SUS 316	
Port size	Rc(PT) 3/8, 1/2		Seal material	SUS	
Orifice	Ø9		Weight	0.75kg	

Features

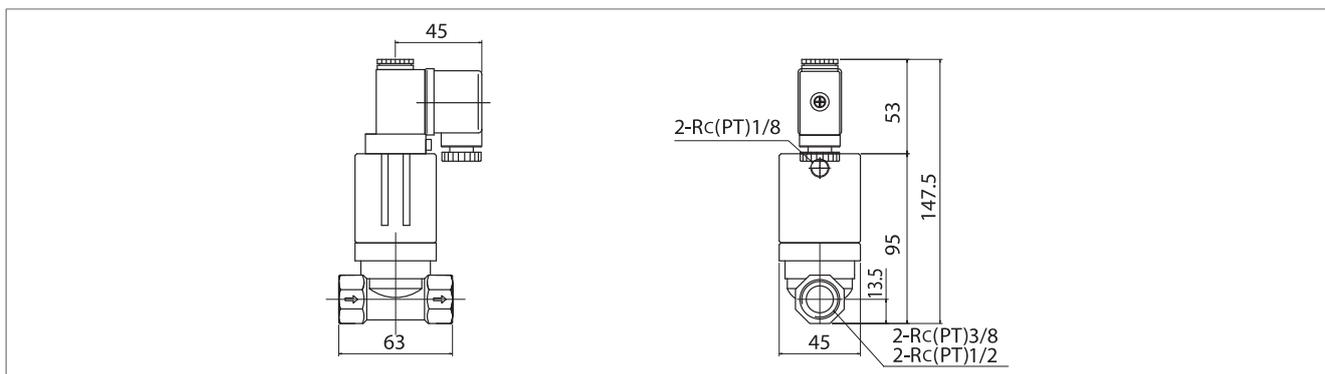
- Direct acting type
- Simple structure
- Fire resistant structure, easy to attach
- Indicator lamp attached type

Applications

- Water piping
- Cutting oil piping
- Compressor
- Medical instrument
- Wire cutting machine
- Oil piping
- High pressure cleaner

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

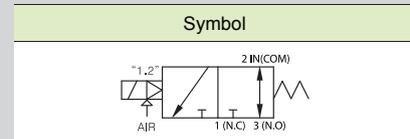
Dimensions



KLCV154-3 series



KLCV 154-3



How to Order

KLCV 15 4 - **3** - AC220V

①
②
③
④

① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

15	Ø9
----	----

③ Port size

4	1/2
---	-----

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC220V-50Hz	AC 220V 50Hz
AC230V-50Hz	AC 230V 50Hz
AC240V-50Hz	AC 240V 50Hz
AC 24V-50Hz	AC 24V 50Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Cutting oil		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 8kgf/cm ² (0 ~ 0.8MPa)	0 ~ 80kgf/cm ² (0 ~ 8.0MPa)	Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Pilot air pressure	3 ~ 7kgf/cm ² (0.3 ~ 0.7MPa)		Power consumption	AC : 6W, DC : 5W	
Coil insulation	Class F		Body material	SUS 316	
Electrical connection	Din connector		Seal material	SUS	
Port size	Rc(PT) 1/2		Weight	2.99kg	
Orifice	Ø9				

Features

- Direct acting type
- Simple structure
- Fire resistant structure, easy to attach
- Indicator lamp attached type

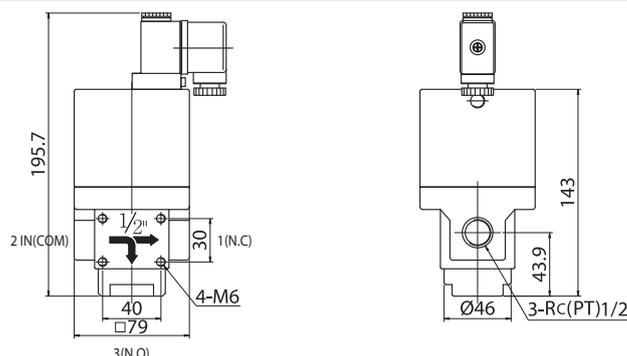
Applications

- Water piping
- Wire cutting machine
- Cutting oil piping
- Oil piping
- Compressor
- CNC machine
- Medical instrument

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

Dimensions



Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

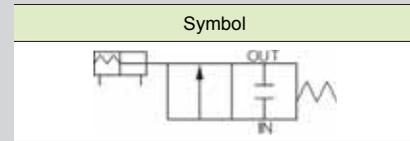
Actuated Valve

HMV

HAV8A ~ 65A series



HAV 8A



How to Order



① Port type

Nil	Rc(PT) (Standard)
G	G

② Orifice

8	Ø10
10	Ø10
15	Ø15
20	Ø20
25	Ø25
32	Ø32
40	Ø40
50	Ø50
65	Ø65

③ Seal material

	Material	Applications
Nil	NBR	Standard
M	FPM	Chemical, Hot water 120℃
E	EPDM	Hot water 100℃
U	URETHANE	Only for air 60℃ High durability

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil		Cylinder operating pressure	5 ~ 7kgf/cm ² (0.5 ~ 0.7MPa)	
Fluid temp.	0 ~ 60℃		Ambient temp.	50℃ (Max.)	
Pressure range	0 ~ 15kgf/cm ² (0 ~ 1.5MPa)		Body material	Brass	
End connection	Rc(PT)		Seal material	NBR	EPDM, FPM, URETHANE
Orifice	Refer to the table below		Weight	Refer to the table below	

※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

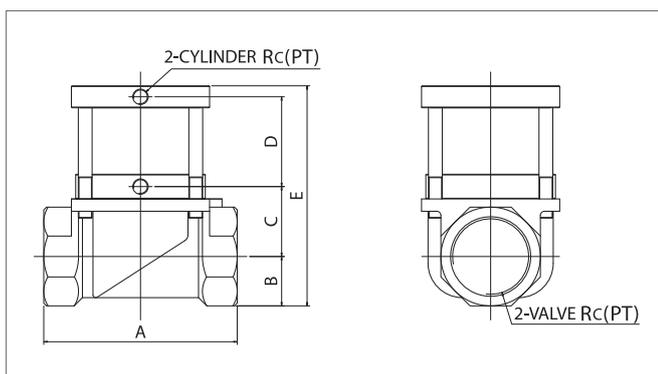
Features

- Air operated valve
- Simple structure
- Easy to attach
- High durability
- Spring return type (Option: Double acting)

Applications

- Water piping
- Air piping

Dimensions



Model	A	B	C	D	E	Orifice	Cylinder Rc(PT)	Valve Rc(PT)	Weight (kg)
HAV 8A	50	11	29	29.5	74.5	Ø10	M5	1/4	0.40
HAV 10A	50	11	29	29.5	74.5	Ø10	M5	3/8	0.40
HAV 15A	66	15	22	52	94	Ø15	1/8"	1/2	0.90
HAV 20A	92	21	28	55	108	Ø20	1/8"	3/4	1.25
HAV 25A	92	21	32	55	115	Ø25	1/8"	1	1.45
HAV 32A	122	29	42	64	139	Ø32	1/4"	1 1/4	2.50
HAV 40A	122	29	44	64	145	Ø40	1/4"	1 1/2	2.90
HAV 50A	140	36	51	66	161	Ø50	1/4"	2	3.80
HAV 65A	166	45	77	73	207	Ø65	1/4"	2 1/2	8.80

HMV40BU ~ 125BU series



HMV 40BU

How to Order

HMV 40 BU - 2 - AC220V

① ② ③

① Disc diameter

40	Ø40
50	Ø50
65	Ø65
80	Ø80
100	Ø100
125	Ø125 (10 sec operating time)

② Operating time

2	2.5 sec
10	10 sec

③ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V

Specification

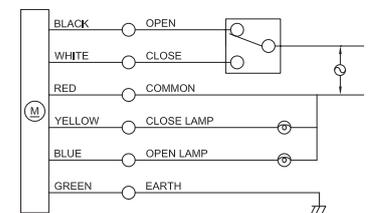
Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C				
Ambient temp.	50°C (Max.)				
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Operating time	2.5 sec, 10 sec		Power consumption	AC : 60W, DC : 20W	
Electrical connection	Lead wire		Body material	FC (DISK : SUS 304)	
End connection	Wafered Type		Seal material	NBR	

* Not available in explosive atmosphere.
* If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

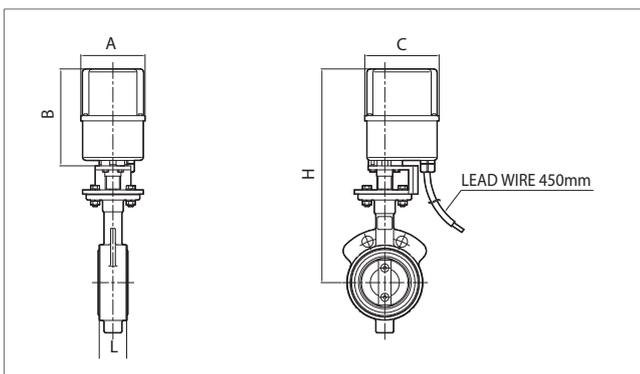
Features

- Butterfly Type valve
- Single phase 3 line Type

Circuit Diagram



Dimensions



Model		A	B	C	H	L	Dia. (Ø)	Weight (kg)
HMV 40BU	2.5 s	108	164	125	332	44	40	7.20
	10 s	108	195	125	363	44	40	7.55
HMV 50BU	2.5 s	108	164	125	342	43	50	7.70
	10 s	108	195	125	373	43	50	8.05
HMV 65BU	2.5 s	108	164	125	352	46	65	8.10
	10 s	108	195	125	383	46	65	8.45
HMV 80BU	2.5 s	108	164	125	362	46	80	8.50
	10 s	108	195	125	393	46	80	8.85
HMV 100BU	2.5 s	108	164	125	377	52	100	10.50
	10 s	108	195	125	408	52	100	10.85
HMV 125BU	2.5 s	-	-	-	-	-	-	-
	10 s	108	195	125	423	56	128	12.35



HMV40BUS(V) ~ 100BUS(V) series



HMV 40BUS

How to Order

HMV 40 BUS - 2 - AC220V

① ② ③ ④

① Disk diameter

40	Ø40
50	Ø50
65	Ø65
80	Ø80
100	Ø100
125	Ø125 (10 sec operating time)

② Type

BUS	SUS Type
BUV	Steam Type

③ Operating time

2	2.5 sec
10	10 sec

③ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V
AC110V-50Hz	AC 110V 50Hz
AC220V-50Hz	AC 220V 50Hz
AC240V-50Hz	AC 240V 50Hz

Specifications

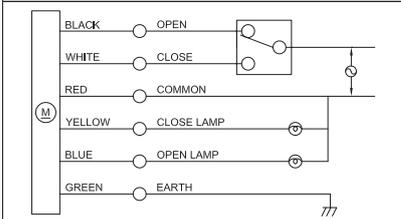
Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Hot water, Clean oil, Steam		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 160 °C				
Ambient temp.	50 °C (Max.)				
Pressure range	Steam-5kgf/cm ² (0.5MPa) Water-10kgf/cm ² (1.0MPa) Air-10kgf/cm ² (1.0MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Operating time	2.5 sec, 10 sec		Power consumption	AC : 60W, DC : 20W	
Electrical connection	Lead wire		Body material	BUV-FC, BUS-SUS 304 DISK : SUS 304	
End connection	Wafered Type		Seal material	TEFLON	

* Not available in explosive atmosphere.
* If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

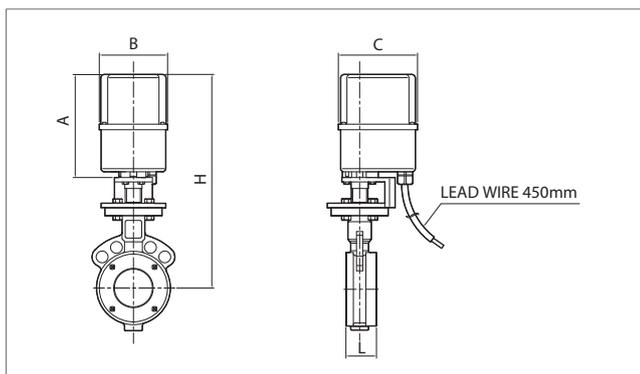
Features

- SUS Type - BUS
- Steam Type- BUV
- Single phase 3 line Type

Circuit Diagram



Dimensions



Model		A	B	C	H	L	Dia. (Ø)	Weight (kg)
HMV 40BUS(V)	2.5 s	108	164	125	307	40	35	7.40
	10 s	108	195	125	338	40	35	7.75
HMV 50BUS(V)	2.5 s	108	164	125	347	45	44	9.70
	10 s	108	195	125	378	45	44	10.10
HMV 65BUS(V)	2.5 s	108	164	125	340	48	60	10.70
	10 s	108	195	125	371	48	60	11.05
HMV 80BUS(V)	2.5 s	108	164	125	352	50	76	11.20
	10 s	108	195	125	383	50	76	11.55
HMV 100BUS(V)	2.5 s	108	164	125	372	56	96	13.20
	10 s	108	195	125	403	56	96	13.55
HMV 125BUS(V)	2.5 s	-	-	-	-	-	-	-
	10 s	108	195	125	428	63	120	18.60

Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV

HMV15FL ~ 65FL series



HMV 15FL

How to Order

HMV 15 **FL** - 2 - AC220V

①

②

③

① Diameter

15	Ø15
20	Ø20
25	Ø25
32	Ø32
40	Ø40
50	Ø50
65	Ø65 (10 sec operating time)

② Operating time

2	2.5 sec
10	10 sec

③ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Steam		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 150 °C				
Ambient temp.	50 °C (Max.)				
Pressure range	Steam-3kgf/cm ² (0.3MPa) Water-10kgf/cm ² (1.0MPa) Air-10kgf/cm ² (1.0MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Operating time	2.5 sec, 10 sec		Power consumption	AC : 60W, DC : 20W	
End connection	JIS 10K RF		Body/Seal material	SCS 13 (SUS304)/PTFE	SCS 14 (SUS316)/PTFE
Orifice	Refer to the table below		Weight	Refer to the table below	

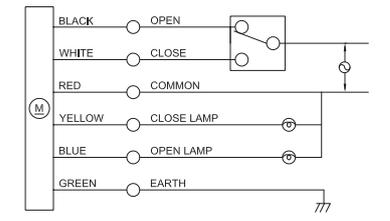
※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

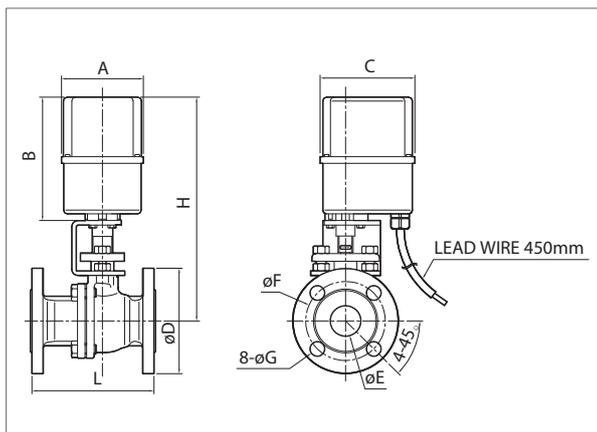
Features

- Flange type
- Single phase 3 line Type

Circuit Diagram



Dimensions



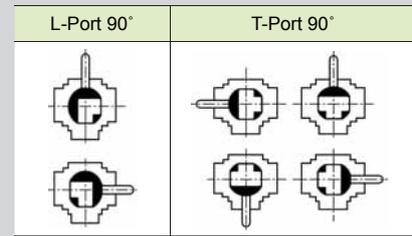
Model		A	B	C	D	E	F	G	L	H	Dia. (Ø)	Weight (kg)
HMV 15FL	2.5 s	108	164	125	Ø95	Ø15	Ø70	Ø15	106	257	15	6.3
	10 s	108	195	125	Ø95	Ø15	Ø70	Ø15	106	288	15	6.65
HMV 20FL	2.5 s	108	164	125	Ø100	Ø20	Ø75	Ø15	115	259	20	6.9
	10 s	108	195	125	Ø100	Ø20	Ø75	Ø15	115	290	20	7.25
HMV 25FL	2.5 s	108	164	125	Ø125	Ø25	Ø90	Ø19	125	273	25	7.8
	10 s	108	195	125	Ø125	Ø25	Ø90	Ø19	125	304	25	8.2
HMV 32FL	2.5 s	108	164	125	Ø135	Ø32	Ø100	Ø19	136	276	32	9.5
	10 s	108	195	125	Ø135	Ø32	Ø100	Ø19	136	307	32	9.85
HMV 40FL	2.5 s	108	164	125	Ø140	Ø40	Ø105	Ø19	161	298	40	10.8
	10 s	108	195	125	Ø140	Ø40	Ø105	Ø19	161	330	40	11.15
HMV 50FL	2.5 s	108	164	125	Ø155	Ø50	Ø120	Ø19	174	305	50	13.3
	10 s	108	195	125	Ø155	Ø50	Ø120	Ø19	174	336	50	13.65
HMV 65FL	2.5 s	-	-	-	-	-	-	-	-	-	-	-
	10 s	108	195	125	Ø175	Ø65	Ø140	Ø19	186	343	65	16.8



HMV15FL-3T(L) ~ 65FL-3T(L) series



HMV 15FL-3T(L)



How to Order

HMV **15** FL **2** - **3** **T** - **AC220V**

① ② ③ ④

① Diameter

15	Ø15
20	Ø20
25	Ø25
32	Ø32
40	Ø40
50	Ø50
65	Ø65 (10 sec operating time)

② Operating time

2	2.5 sec
10	10 sec

③ Port type

T	T-Port 90°
L	L-Port 90°

④ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Steam		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 150 °C				
Ambient temp.	50 °C (Max.)				
Pressure range	Steam-3kgf/cm ² (0.3MPa) Water-10kgf/cm ² (1.0MPa) Air-10kgf/cm ² (1.0MPa)		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
			Power consumption	AC : 60W, DC : 20W	
Operating time	2.5 sec, 10 sec		Body material	SCS 13 (SUS304)	SCS 14 (SUS316)
End connection	JIS 10K RF		Seal material	PTFE	
			2.5 sec 10 sec	PTFE	
Orifice	Refer to the table below		Weight	Refer to the table below	

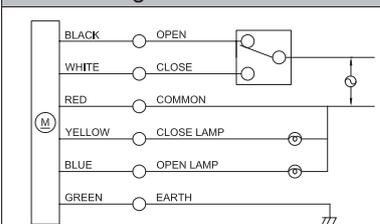
※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

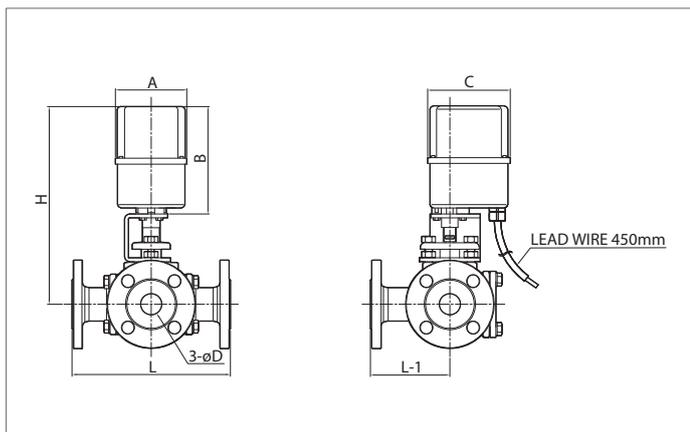
Features

- 3 Way, Flange type (Port-L, T Type)
- Single phase 3 line Type

Circuit Diagram



Dimensions



Model		A	B	C	H	L	L-1	Dia. (Ø)	Weight (kg)
HMV 15FL-3T(L)	2.5 s	108	164	125	263	160	80	15	8.7
	10 s	108	195	125	294	160	80	15	8.7
HMV 20FL-3T(L)	2.5 s	108	164	125	264	160	80	20	9.2
	10 s	108	195	125	295	160	80	20	9.2
HMV 25FL-3T(L)	2.5 s	108	164	125	277	200	100	25	12.2
	10 s	108	195	125	308	200	100	25	12.2
HMV 32FL-3T(L)	2.5 s	108	164	125	302	240	120	32	16.3
	10 s	108	195	125	333	240	120	32	16.3
HMV 40FL-3T(L)	2.5 s	108	164	125	302	240	120	40	17.1
	10 s	108	195	125	333	240	120	40	17.1
HMV 50FL-3T(L)	2.5 s	108	164	125	310	260	130	50	21.1
	10 s	108	195	125	341	260	130	50	21.1
HMV 65FL-3T(L)	2.5 s	-	-	-	-	-	-	-	-
	10 s	108	195	125	356	320	160	65	29.1

Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV

HMV15FLP ~ 50FLP series



HMV 15FLP

How to Order

HMV 15 FLP - 2 - AC220V

①

②

③

① Diameter

15	Ø15
20	Ø20
25	Ø25
32	Ø32
40	Ø40
50	Ø50

② Operating time

2	2.5 sec
10	10 sec

③ Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V

Specification

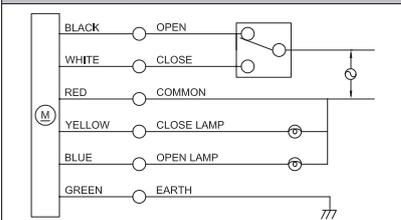
Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Chemical		Voltage	AC110V 50/60Hz AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C			Allowable voltage fluctuation	±10%(AC), ±5%(DC)
Ambient temp.	50°C (Max.)		Power consumption	AC : 60W, DC : 20W	
Pressure range	0 ~ 10kgf/cm ² (0 ~ 1.0MPa)		Body/ Seal material	PP / FPM	
Operating time	2.5 sec, 10 sec			2.5 sec	
End connection	JIS 10K FF		10 sec		
			Weight	Refer to the table below	

※ Not available in explosive atmosphere.

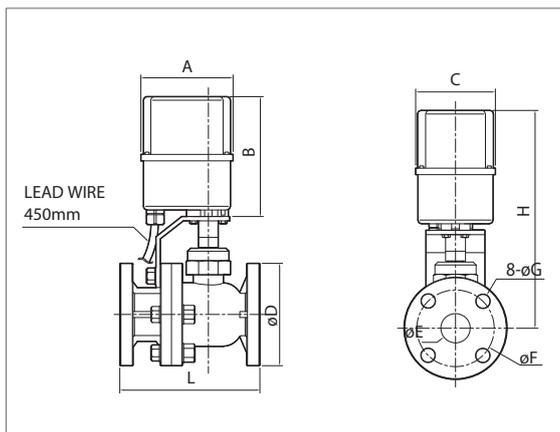
Features

- PVC Flange type
- Single phase 3 line Type

Circuit Diagram



Dimensions



Model		A	B	C	D	E	F	G	L	H	Dia. (Ø)	Weight (kg)
HMV15FLP	2.5 s	125	164	108	Ø95	Ø15	Ø70	Ø15	145	255	15	4.5
	10 s	125	195	108	Ø95	Ø15	Ø70	Ø15	145	286	15	4.9
HMV20FLP	2.5 s	125	164	108	Ø100	Ø20	Ø75	Ø15	150	257	20	4.5
	10 s	125	195	108	Ø100	Ø20	Ø75	Ø15	150	288	20	4.95
HMV25FLP	2.5 s	125	164	108	Ø125	Ø25	Ø90	Ø19	170	262	25	4.8
	10 s	125	195	108	Ø125	Ø25	Ø90	Ø19	170	293	25	5.15
HMV32FLP	2.5 s	125	164	108	Ø135	Ø32	Ø100	Ø19	175	290	32	5.3
	10 s	125	195	108	Ø135	Ø32	Ø100	Ø19	175	321	32	5.75
HMV40FLP	2.5 s	125	164	108	Ø140	Ø40	Ø105	Ø19	190	298	40	5.6
	10 s	125	195	108	Ø140	Ø40	Ø105	Ø19	190	329	40	6.05
HMV50FLP	2.5 s	125	164	108	Ø155	Ø50	Ø120	Ø19	210	301	50	6.1
	10 s	125	195	108	Ø155	Ø50	Ø120	Ø19	210	332	50	6.45

HMV02SC-15 ~ 18SC-15 series



HMV 02SC-15

How to Order

HMV 02 SC - 15 - AC220V

①

②

① Port size

02	1/4
03	3/8
04	1/2
06	3/4
10	1
12	1 1/4
14	1 1/2
18	2

② Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz

Specifications

Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Steam		Voltage	AC100V 50/60Hz AC110V 60Hz AC200V 50/60Hz AC220V 60Hz DC24V, 12V	AC110V 50Hz AC220V 50Hz AC240V 50Hz AC 24V 50Hz
Fluid temp.	0 ~ 100 °C (No freezing)			Allowable voltage fluctuation	±10%(AC), ±5%(DC)
Ambient temp.	50 °C (Max.)		Power consumption	AC : 14W	
Pressure range	Water-10kgf/cm ² (1.0MPa) Air-10kgf/cm ² (1.0MPa)		Body material	SCS 14 (SUS 316)	
Operating time	15 sec		Seal material	TEFLON	
End connection	Rc(PT)				

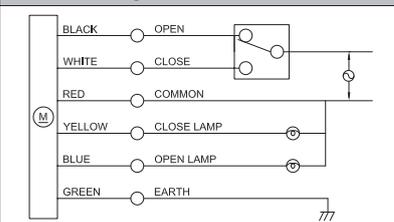
※ Not available in explosive atmosphere.

※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

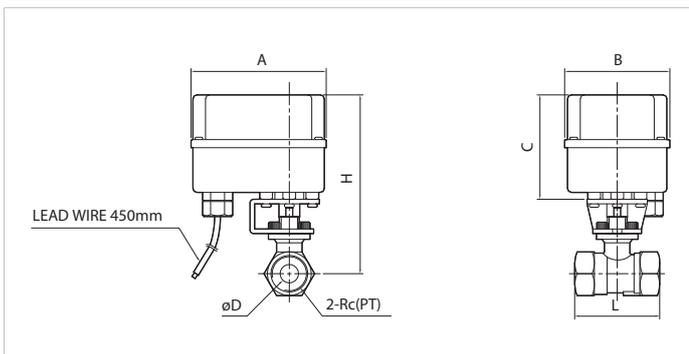
Features

- 1 Piece, screw type
- Single phase 3 line Type

Circuit Diagram



Dimensions



Model	A	B	C	D orifice	L	H	Rc(PT)	Weight (kg)
HMV02SC-15	117	91	91	Ø11.5	55	139	1/4	1.5
HMV03SC-15	117	91	91	Ø12.0	55	139	3/8	1.5
HMV04SC-15	117	91	91	Ø9.2	50	152	1/2	1.5
HMV06SC-15	117	91	91	Ø12.5	60	153	3/4	1.6
HMV10SC-15	117	91	91	Ø16.0	74	156	1	1.7
HMV12SC-15	117	91	91	Ø20.0	78	159	1 1/4	1.9
HMV14SC-15	117	91	91	Ø24.5	90	167	1 1/2	2.2
HMV18SC-15	117	91	91	Ø32.0	100	172	2	2.7

HMV02SC-P ~ 18SC-P series



HMV 02SC-P

How to Order

HMV 02 SC - P - AC220V

①

②

① Port size

02	1/4
03	3/8
04	1/2
06	3/4
10	1
12	1 1/4
14	1 1/2
18	2

② Voltage

AC110V	AC110V 50Hz/60Hz
AC220V	AC220V 50Hz/60Hz
DC12V	DC12V
DC24V	DC24V

Specification

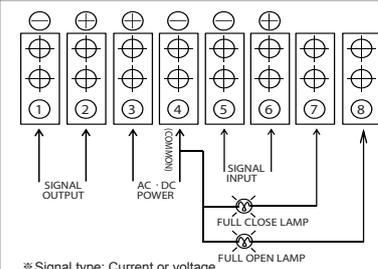
Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Hot water, Clean oil		Allowable voltage fluctuation	±10%(AC), ±5%(DC)	
Ambient temp.	50°C (Max.)		Power consumption	AC : 14W, DC : 6.5W	
Pressure range	Water-10kgf/cm ² (1.0MPa) Air-10kgf/cm ² (1.0MPa)		Current consumption	AC 220V: 60mA, AC 100V: 120mA DC 24V: 270mA	
End connection	Rc(PT)				
Body material	SUS 316		Input signal	4~20mA 1~5V DC	
Seal material	TEFLON		output signal	4~20mA 1~5V DC	

※ Not available in explosive atmosphere.

Features

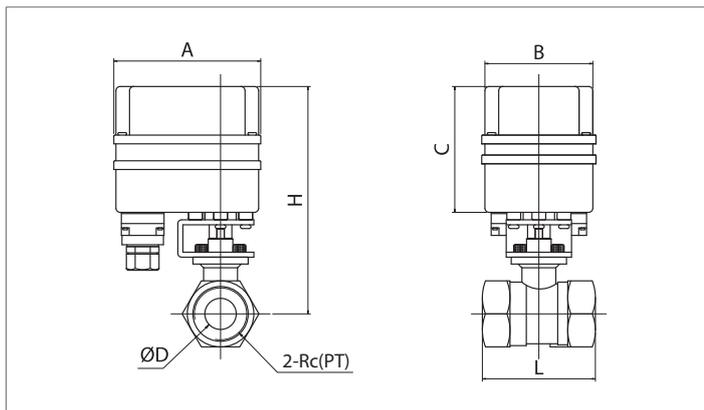
- 1 Piece (1/2"~2"), 2 Piece(1/4" 3/8")
- Screw ball valve type

Circuit Diagram



※ Signal type: Current or voltage

Dimensions



Model	A	B	C	ØD Orifice	L	H	Rc(PT)	Weight (kg)
HMV 02SC-P	117	91	115	Ø11.0	50	181	1/4	2.3
HMV 03SC-P	117	91	115	Ø12.0	50	181	3/8	2.3
HMV 04SC-P	117	91	115	Ø10.0	50	170	1/2	2.2
HMV 06SC-P	117	91	115	Ø12.5	60	177	3/4	2.3
HMV 10SC-P	117	91	115	Ø15.0	73	179	1	2.4
HMV 12SC-P	117	91	115	Ø20.0	78	183	1 1/4	2.6
HMV 14SC-P	117	91	115	Ø25.0	90	187	1 1/2	2.9
HMV 18SC-P	117	91	115	Ø32.0	100	195	2	3.4

Process Valve
SUS Direct Acting A, W
HKW
SUS Direct Acting S, H
HKS
3Port
HDA
HDW
3Port SUS
HDA
HDW
Special Valve
HPW
HVV
HDW
SV
HCV
Teflon Valve
HTV
HCTV
Pinch Valve
HPV
Coolant Valve
KLCV
Cyl. Valve
HAV
Actuated Valve
HMV

HMV02BSC ~ 06BSC series



HMV 02BSC

How to Order

HMV 02 BSC - AC220V

①

②

① Port size

02	1/4
03	3/8
04	1/2
06	3/4

② Voltage

AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V

Specification

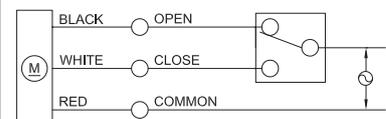
Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Gas		Voltage	AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C			Allowable voltage fluctuation	±10%(AC), ±5%(DC)
Ambient temp.	50°C (Max.)		Power consumption		AC, DC : 5W
Pressure range	10kgf/cm ² (1.0MPa)		Body material	Brass	
Operating time	10 sec	1/4, 3/8, 1/2 (5 sec)	Seal material	PTFE	
End connection	Rc(PT)				

- ※ Not available in explosive atmosphere.
- ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

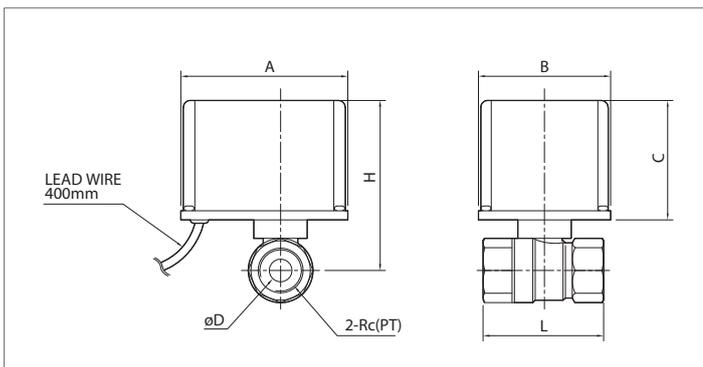
Features

- 2 WAY 2 Piece screw type Type
- Single phase 3 line Type

Circuit Diagram



Dimensions

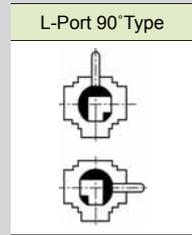


Model	A	B	C	D	L	H	Rc(PT)	Weight (kg)
HMV02BSC	72	57	52	Ø8	72	47	1/4	0.4
HMV03BSC	72	57	52	Ø8	72	47	3/8	0.4
HMV04BSC	72	57	52	Ø10	74	52	1/2	0.45
HMV06BSC	72	57	52	Ø15	77	57	3/4	0.5

HMV02BSC-3 ~ 06BSC-3 series



HMV 02BSC



How to Order

HMV 02 BSC - 3 - AC220V

① ②

① Port size

02	1/4
03	3/8
04	1/2
06	3/4

② Voltage

AC220V	AC220V 50Hz/60Hz
DC24V	DC24V
DC12V	DC12V

Specification

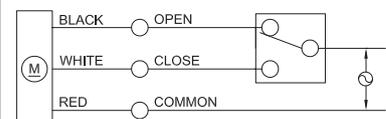
Classification	Standard	Option	Classification	Standard	Option
Fluid	Air, Water, Clean oil, Gas		Voltage	AC220V 50/60Hz DC24V, 12V	
Fluid temp.	0 ~ 60°C			Allowable voltage fluctuation	±10%(AC), ±5%(DC)
Ambient temp.	50°C (Max.)		Power consumption		AC, DC : 5W
Pressure range	10kgf/cm ² (1.0MPa)		Body material	Brass	
Operating time	10 sec		Seal material	PTFE	
End connection	Rc(PT)				

※ Not available in explosive atmosphere.
 ※ If oil is applied, the range of pressure shall be based on 50cst for oil viscosity.

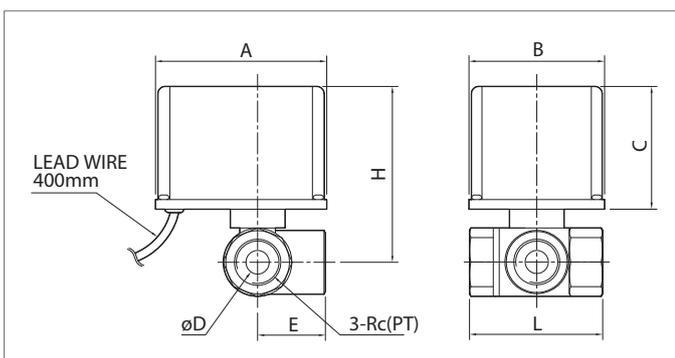
Features

- 3 WAY-2 PIECE SCR'D Type
- Single phase 3 line Type

Circuit Diagram



Dimensions



Model	Rc(PT)	A	B	C	D	E	H	L	Weight (kg)
HMV 02BSC-3	1/4	72	57	52	Ø8	22.5	72	47	0.42
HMV 03BSC-3	3/8	72	57	52	Ø8	23.5	72	47	0.45
HMV 04BSC-3	1/2	72	57	52	Ø10	28.5	75	52	0.55
HMV 06BSC-3	3/4	72	57	52	Ø15	32.0	78	57	0.65

Process Valve

SUS Direct Acting A, W

HKW

SUS Direct Acting S, H

HKS

3Port

HDA

HDW

3Port SUS

HDA

HDW

Special Valve

HPW

HVV

HDW

SV

HCV

Teflon Valve

HTV

HCTV

Pinch Valve

HPV

Coolant Valve

KLCV

Cyl. Valve

HAV

Actuated Valve

HMV