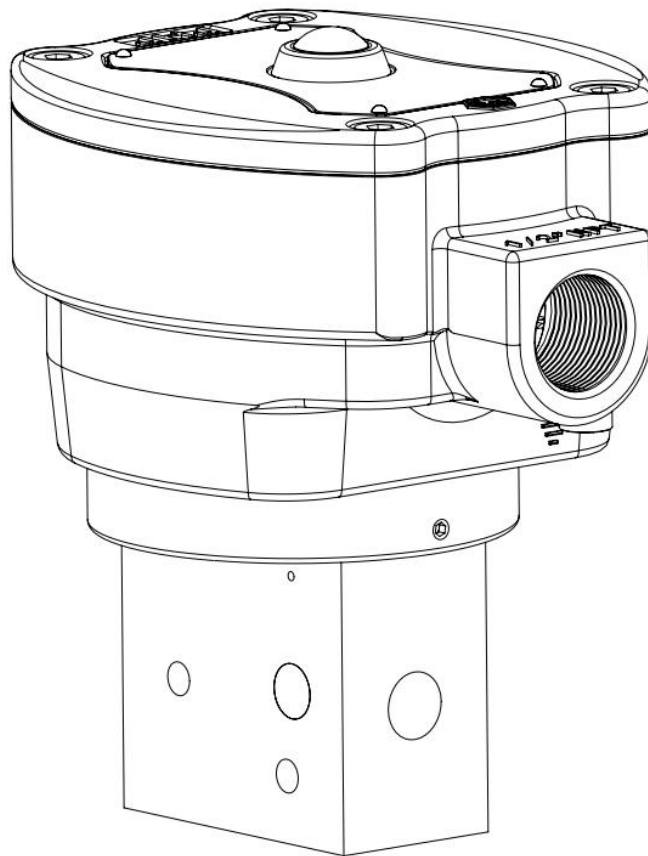




SIL CE

JHJ —
CONTROLS

**Safety. Waterproof. Low Power
Consumption**



定州宇飞电子科技有限公司

DINGZHOU YUFEI ELECTRONIC TECHNOLOGY CO., LTD

cncvw.com

Content

Company profile	3
R & D strength	4
Quality control	5
S01 Electromagnetic head	7
S02 Electromagnetic head	8
S04 Electromagnetic head	9
S05 Electromagnetic head	10
S06 Electromagnetic head	11
S07 Electromagnetic head	12
S02X Intrinsically safe electromagnetic head	15
Additional functions of valve body	16
DA series Direct acting solenoid valve	17
PA series Pilot operated solenoid valve	28
Redundant series	41
Air control valve	55
GY series High-pressure two-way solenoid valve	57
Z series Two-way solenoid valve	61
Industry applications	65
Order model description for Redundant series	66
Order model description for DA/PA series	67
Order model description for Air control valve	68
Order model description for GY/Z series	69

Company Profile

Dingzhou Yufei Electronic Technology Co., Ltd. is located in Dingzhou City, an ancient historical and cultural city in Hebei Province. Since its inception, the company has focused on the development, research and production of solenoid valves, and is committed to the localization of high-end solenoid valves. So far, the company has developed a series of products, such as direct-acting solenoid valve, pilot-operated solenoid valve, redundant series solenoid valve group, intelligent bus series solenoid valve and so on. We are providing professional solenoid valve integrated solutions for global petrochemical, metallurgical, offshore platform, chemical, energy, mineral processing and other industries.

The company has set up a technology research and development center in Beijing to facilitate timely understanding of the development trend of the industry, access to the world's cutting-edge production technology, and develop the best solenoid valve solutions for users.

With the joint efforts of the team, our products have served more than 100 well-known domestic enterprises such as Sinopec, CNOOC, PetroChina and China Shipbuilding Heavy Industry, and our products are exported to Russia, Britain, Southeast Asia and other regions.

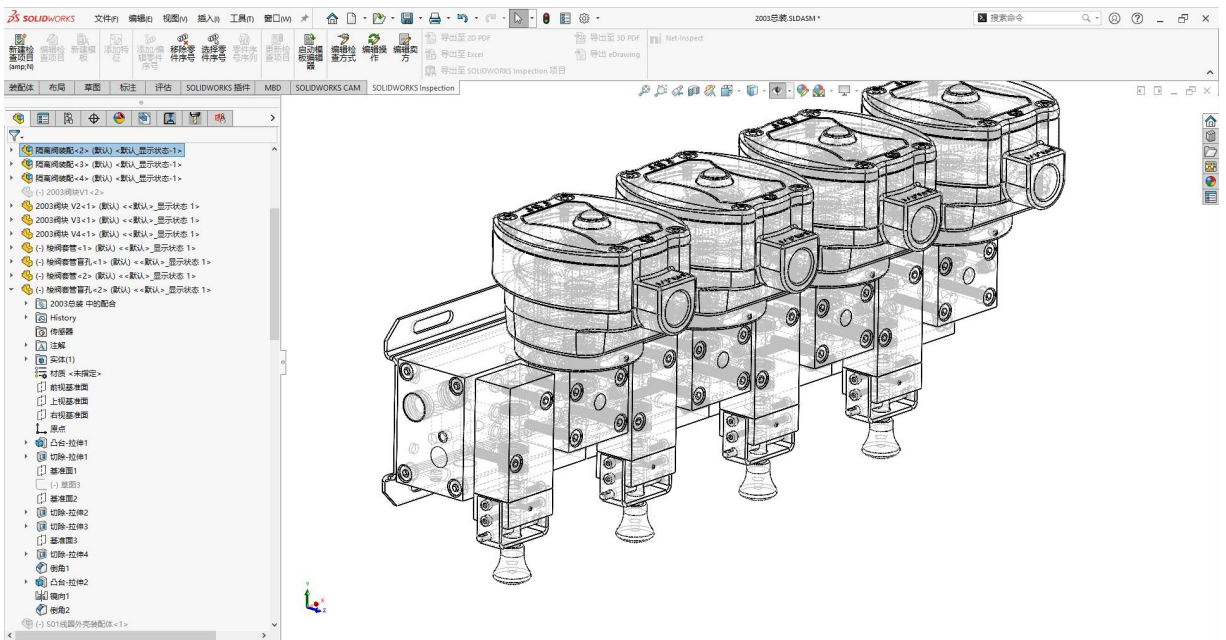
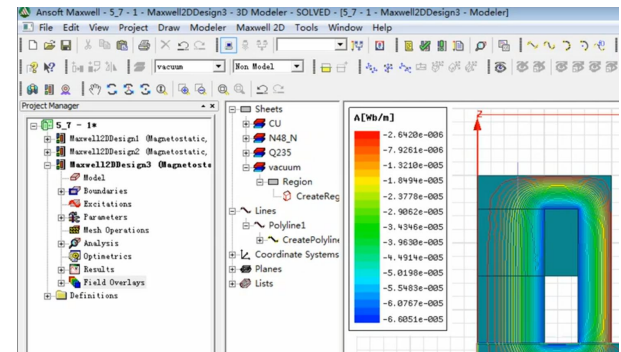
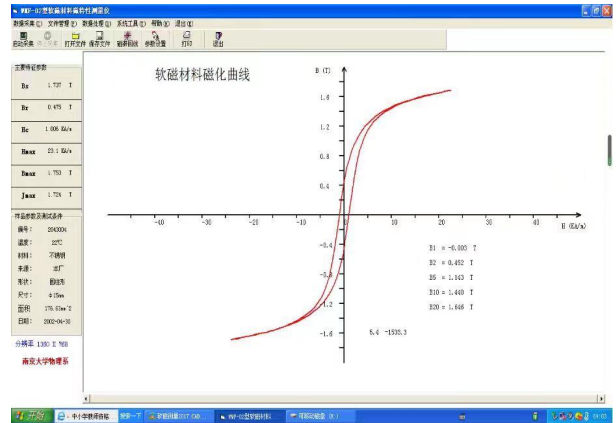
Our solenoid valve products are designed in strict accordance with IEC61508, GB20438 and other industry general functional safety specifications and explosion-proof specifications. So far, we have obtained 26 national patents. It has passed ISO9001 system certification, TUV-SIL functional safety certification, NEPS explosion-proof certification, CCC certification and so on.

We are willing to join hands with colleagues from all walks of life to work together for Made in China and Created in China.



R & D strength

Founded in 2012, Yufei Electronics Beijing R & D Center (RDC) focuses on providing creative high-quality solenoid valve product design and automation integration solutions. It brings together scientific researchers from many well-known universities to make Made-in-China go to the world successfully. Its research results cover many fields, including intelligent 5G, high temperature and high pressure materials, aviation, military industry and so on, which lays a solid foundation for the company to provide integrated fluid control solutions for global petrochemical, metallurgical, offshore platform, chemical, new energy, mineral processing and other industries.





Dingzhou Yufei Electronic Technology Co., Ltd. is a high-end fluid control system supplier integrating R & D, design, production, sales and service. The company mainly produces high-end solenoid valves, adopts modern management mode, scientific and technological production mode, and has CNC machine tools with ultra-high precision, sub-assembly production line, low-power product production line, conventional product production line and automat IC testing system independently designed and developed, which can eliminate human interference and carry out 100% testing of products. To ensure the quality of all components and finished products. At the same time, the company has a strong production management operation and maintenance team and modern production management software to ensure the stability and reliability of products from planning, production, inspection, testing, delivery, acceptance, after-sales, customer feedback and other aspects.

As a R & D and production-oriented high-tech enterprise, Dingzhou Yufei Electronic Technology Co., Ltd. has more than ten kinds of products with independent intellectual property rights, among which zero differential pressure direct-acting structure and pilot spacer structure are our core products. In strict accordance with the requirements of ISO9001: 2015 quality management system and China Compulsory Certification (CCC), the company strictly controls all aspects of the company's production to ensure that the product quality meets the relevant national standards and customer requirements.

Dingzhou Yufei Electronic Technology Co., Ltd. has obtained a series of relevant certifications such as ISO9001 quality management system, ISO14001 environmental management system, ISO45001 occupational health and safety management system and TUV-SIL2, and controls the whole process of product design, manufacturing and after-sales service in strict accordance with relevant certification regulations.

Dingzhou Yufei Electronic Technology Co., Ltd. has first-class production and inspection equipment, such as secondary element detector, spring tester, high and low temperature test chamber, automatic leak detector, life test system, salt spray test instrument, high voltage test equipment and other advanced testing equipment, covering the verification and testing requirements of all products and components.

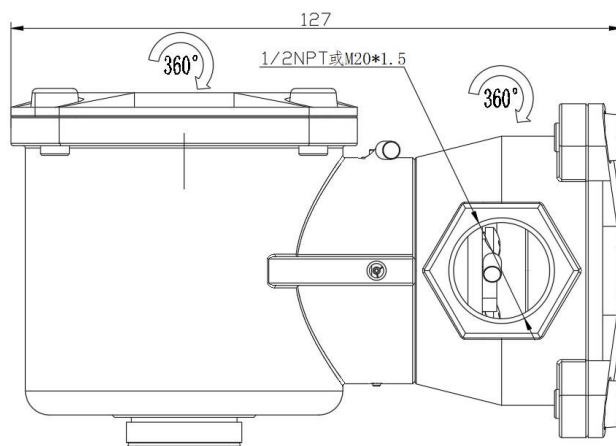
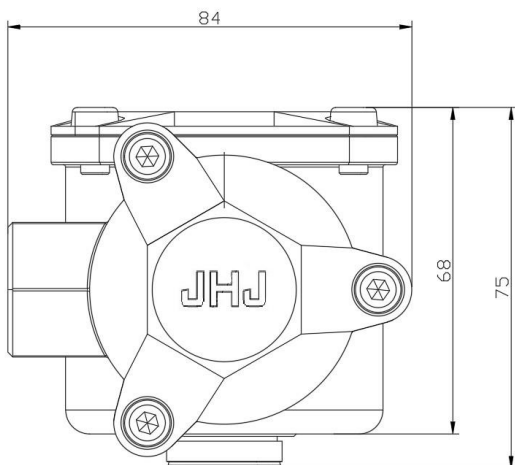
Product features

- Explosion-proof grade of enclosure: Ex db IIC T6 Gb/Ex TB IIC T80 °C Db
- Coil insulation class: H
- Unique dual-cavity structure, both the wiring cavity and the coil can be rotated 360 °
- The wiring cavity is separated from the coil cavity to effectively prevent water vapor from entering the coil cavity
- Simple wiring method as screw terminal type
- Electrical interface with 1/2 " NPT or M20 × 1.5 options
- Degree of protection: IP67
- Available with direct-acting, pilot-operated and other valve bodies
- DC coil built-in power failure protection and peak overflow element, anti-surge element

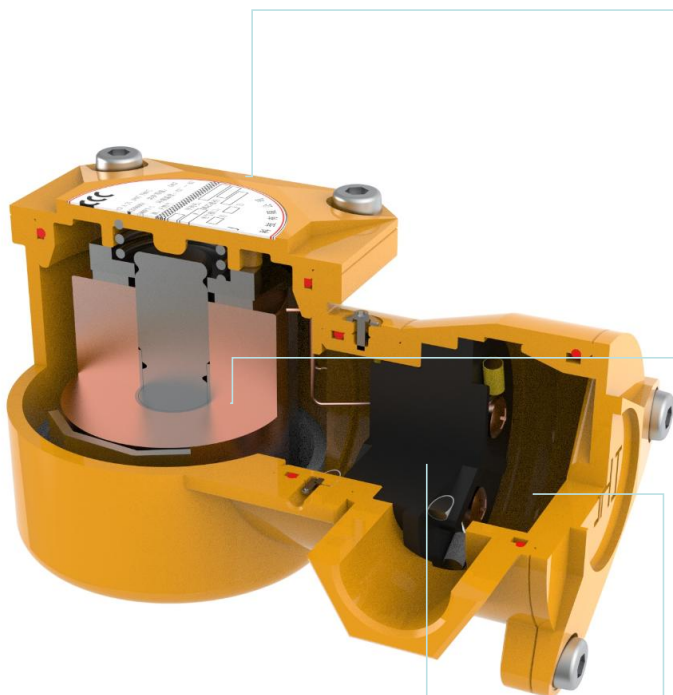


Mateiral of enclosure	Aluminum alloy/316 stainless steel ^①
Set screw	Stainless steel
Grounding screw	Stainless steel
Nameplate	304 stainless steel
Operating voltage	24V DC, 110V DC, 230V DC, 220V AC
Coil power	1.8W, 3.7W, 10W ^② , 15W

Note: ① The 316 L junction box can be customized. ② The direct-acting valve body with 1/2 " working connection should be equipped with a coil ≥ 10 W.



Analysis of double-cavity structures of S01



Flameproof enclosure design

- ◆ Explosion-proof grade: Ex db IIC T6
- ◆ Protection grade: IP67
- ◆ Enclosure material: 316 stainless steel/aluminum alloy

Solenoid coil

- ◆ Separate plastic package for coil winding
- ◆ Low power design
- ◆ Peak overflow element, anti-surge element

Wiring chamber

- ◆ Chromate passivation of inner cavity of aluminum alloy shell
- ◆ Neutral salt spray test for 96 hours without corrosion
- ◆ 360 ° rotation of wiring direction, simple and convenient installation

Double-chamber waterproof structure design

- ◆ The wiring cavity and the coil cavity are separated by epoxy resin, and the electric and water insulation effect is remarkable

Product features

- Explosion-proof grade: Ex db MB IIC T6 GbEx TB MB IIIC T80 °C Db
- Coil insulation class: H
- The wiring cavity is separated from the coil cavity to effectively prevent water vapor from entering the coil cavity
- Simple wiring method as screw terminal type
- Electrical interface with 1/2 " NPT or M20 × 1.5 options
- Degree of protection: IP66/IP67
- Available with direct-acting, pilot-operated and other valve bodies
- Built-in power-off protection and peak overflow element for DC coil

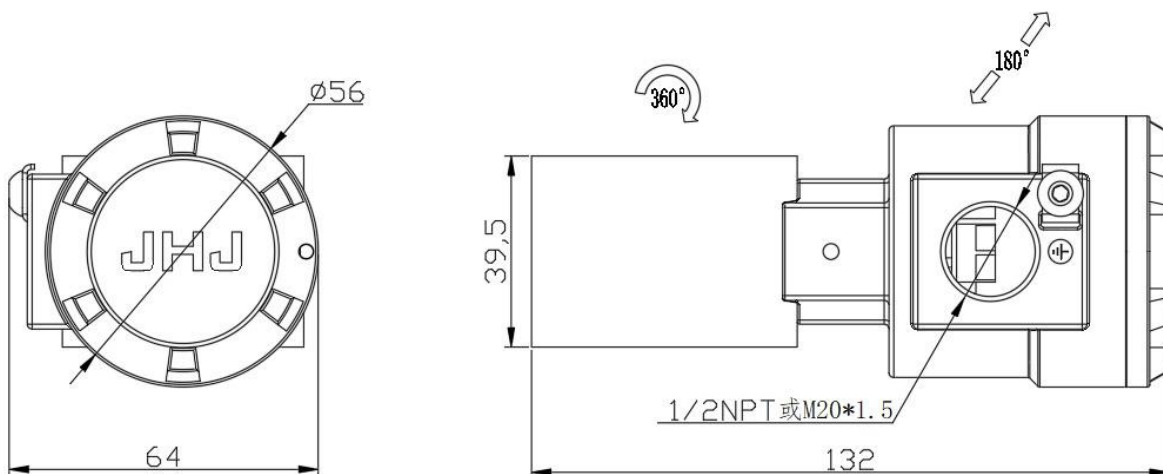


Junction box material	Aluminum alloy/316 stainless steel ^①
Insect-proof exhaust nut	Brass/stainless steel/aluminum alloy/POM
Set screw	Stainless steel
Grounding screw	Stainless steel
Nameplate	304 Stainless steel
Working voltage	24V DC, 110V DC, 230V DC, 220V AC
Coil power	1.4W ^② , 3.7W, 6W, 10W ^③ , 15W, 20W

Note: ① 316 L junction box can be customized;

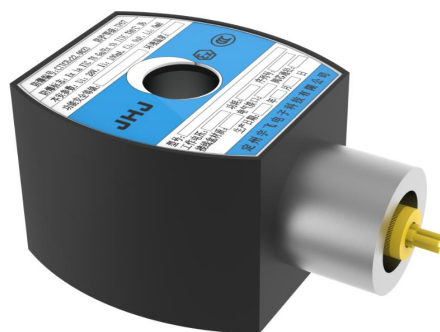
② Coil with power of 1.4 W is only applicable to pilot-operated valve body;

③ Direct-acting valve body with 1/2 " working connection shall be equipped with coil power ≥ 10 W.



Product features

- Coil insulation class: Class H
- Degree of protection: IP67
- Available with direct-acting, pilot-operated and other valve bodies
- Built-in power-off protection and peak overflow element for DC coil
- Standard lead wire length 50cm, 0.25mm²①③
- Standard electrical connection 1/2 NPT

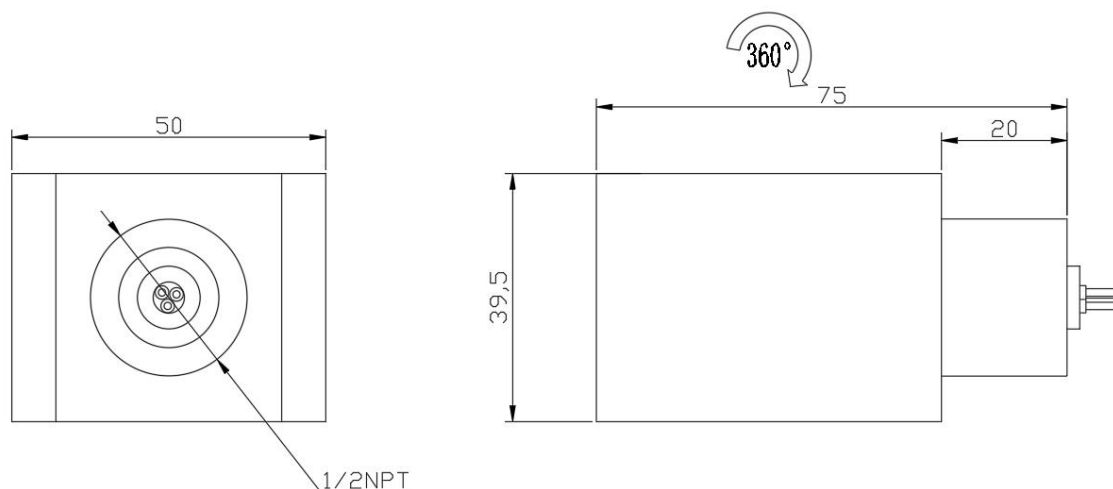


Material of enclosure	BMC
Insect-proof exhaust nut	Bronze/Stainless steel/Aluminum alloy/POM
Nameplate	304 stainless steel
Working voltage	24V DC, 110V DC, 230V DC, 220V AC
Coil power	1.4W ^② , 3.7W, 10W ^③ , 15W

Note: ① Other lead wire specifications can be customized;

② Coil with power of 1.4 W is only applicable to pilot-operated valve body;

③ Direct-acting valve body with 1/2" working connection shall be equipped with coil power ≥ 10 W.



Product features

- Explosion-proof grade: Ex db IIC T5/T6 Gb/Ex TB IIIC T95 °C/T80 °C Db
- Coil insulation class: H
- Inflow alarm function ①
- Coil potential failure warning function ①
- Terminal waterproof structure coil ①
- Simple wiring method as screw terminal type
- Electrical interface with 1/2 " NPT or M20 × 1.5 options
- Protection class: IP66/IP67
- Available with direct-acting, pilot-operated and other valve bodies
- DC coil built-in power-off protection and peak overflow components, anti-surge device

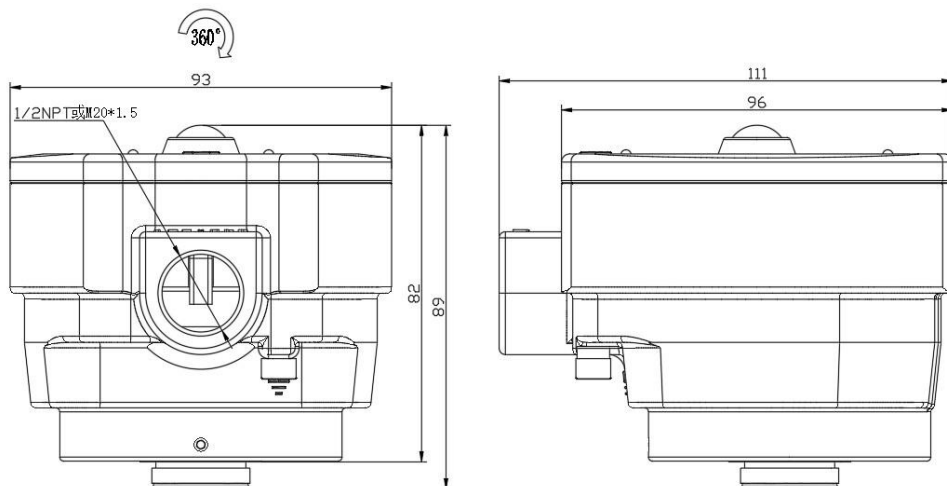


Material of enclosure	Aluminum alloy/316 stainless steel ^②
Explosion-proof window	Plexiglass
Set/fastening screw	Stainless steel
Grounding screw	Stainless steel
Nameplate	304 Stainless steel
Working voltage	24V DC, 110V DC, 230V DC, 220V AC
Coil power	1.8W, 3.7W, 10W ^③ , 15W

Note: ① Optional function, non-standard configuration, only applicable to S05 coil;

② 316 L junction box can be customized;

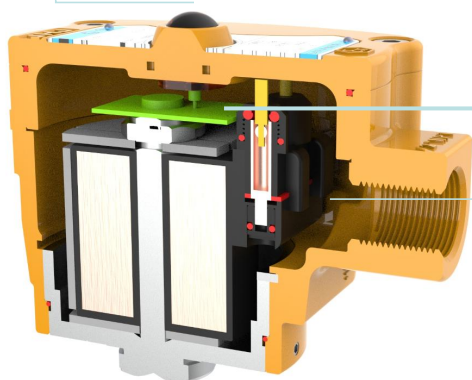
③ Direct-acting valve body with 1/2 " working connection shall be equipped with coil power ≥ 10 W.



Product features

Explosion-proof window

Explosion-proof threaded window is made of high-strength plexiglass with light transmittance up to 80%, and the flash signal is obvious and visible.



Coil potential failure alarm

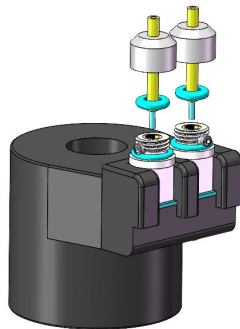
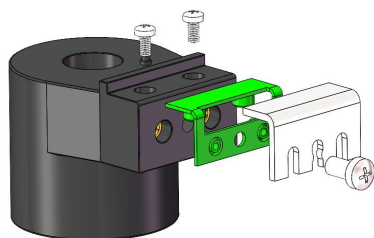
The fault indicator lamp is configured to display the working status of the coil.

Water intake alarm

When water enters the coil, the coil red light flashes to give an alarm.

Wiring room

The inner cavity of the aluminum alloy shell is chromate passivated; the neutral salt spray test has no corrosion for 96 hours; The wiring direction rotates 360°, which is convenient for installation at any angle.



Flameproof enclosure design

Flameproof type: Ex db IIC T6;
Protection grade: IP66/IP67;
Material: 316 stainless steel/aluminum alloy.

Built-in terminal waterproof coil

The coil winding is separately plastic sealed; Peak overflow element, anti-surge element; Unique terminal waterproof patented technology.

Note:

- Two functions of coil fault alarm and water inlet alarm can be selected simultaneously;
- The water inlet alarm shall not coexist with the terminal waterproof coil;
- Terminal waterproof coil structure, the presence of flowing water inside the housing does not affect the normal operation of the coil;
- Terminal waterproof coils shall only be used in S05 explosion-proof enclosures.

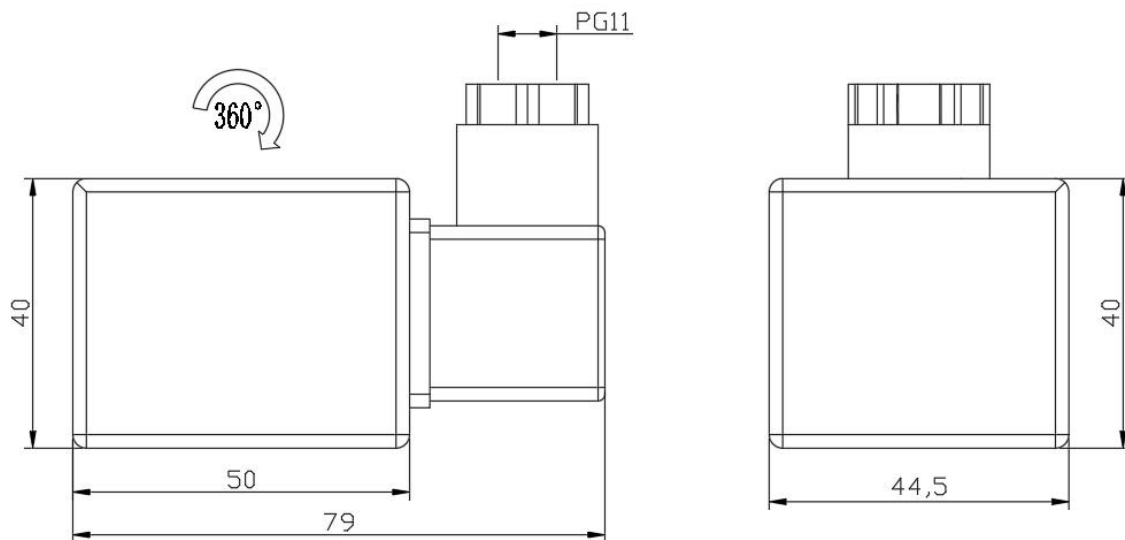
Product features

- Ordinary waterproof coil
- Coil insulation class: F
- Electrical interface PG11 or M18 × 1.5
- IP65 protection
- Available with direct-acting, pilot-operated and other valve bodies
- Applicable cable 7-8mm



Enclosure material	BMC
Nameplate	304 stainless steel
Working voltage	24V DC , 220V AC
Coil power	4W, 6W, 10W ^① , 15W, 20W

Note: ① Direct-acting 1/2 valve body can only be equipped with 10W coil



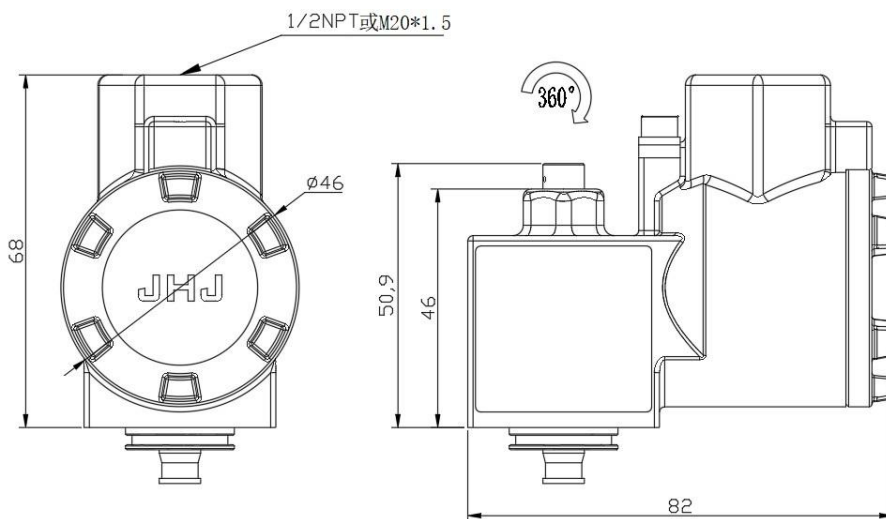
Product features

- Explosion-proof: Ex db IIC T5/T6 Gb/Ex TB IIIC T95 °C/T80 °C Db
- Coil insulation class: H
- Screw terminal type simple wiring method
- Electrical interface with 1/2 " NPT or M20 × 1.5 options
- Degree of protection: IP67
- Available with pilot-operated body only
- DC coil built-in power-off protection and peak overflow component anti-surge device

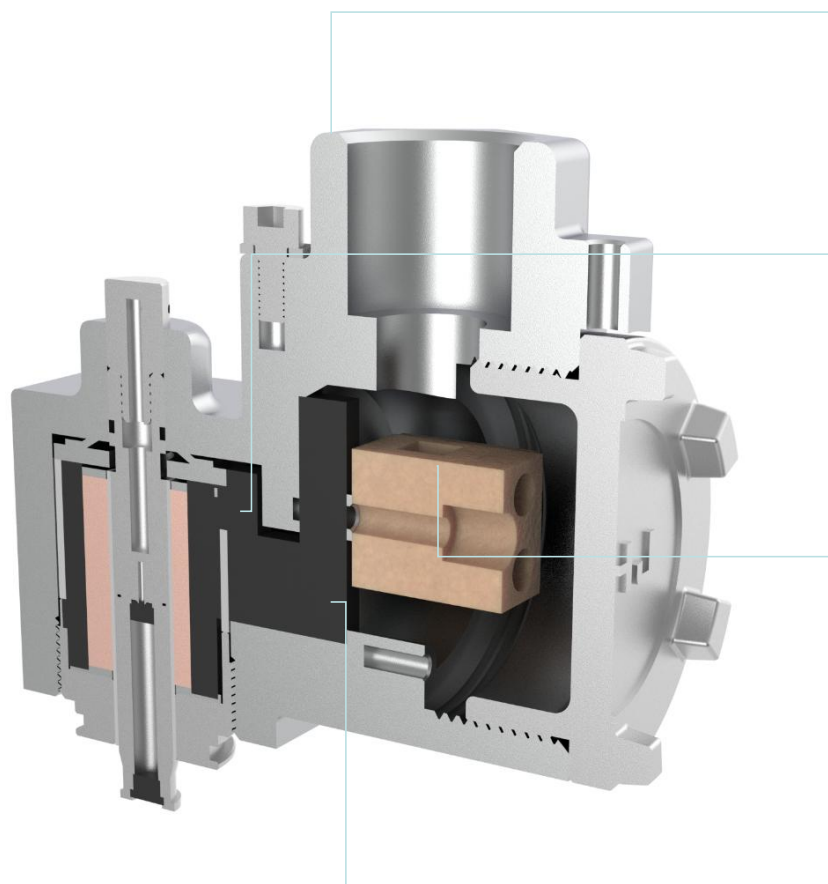


Enclosure material	Aluminum alloy/316 Stainless steel ^①
Exhaust nut	Stainless steel
Set screw	Stainless steel
Grounding screw	Stainless steel
Nameplate	304 Stainless steel
Working voltage	24VDC , 220VAC
Coil power	2.5W

Note: ① 316 L junction box can be customized.



Detailed explanation of product features



Flameproof enclosure design

Explosion-proof grade: Ex db IIC T6;
Protection grade: IP67;
Enclosure material: 316 stainless steel/aluminum alloy.

Electromagnetic coil

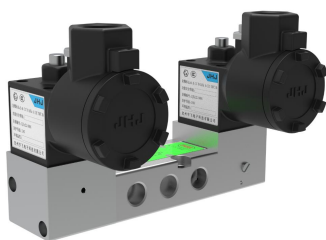
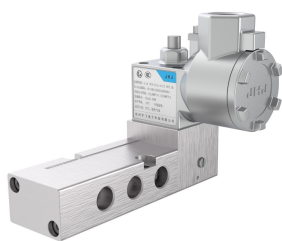
The internal coil is sealed with epoxy resin to ensure the waterproof property of the coil;
Low power design 2.5 W.

Wiring cavity

The inner cavity of the aluminum alloy shell is chromate passivated, and the neutral salt spray test is carried out for 96 hours without corrosion.

Waterproof function

The wiring cavity is filled with epoxy resin, which effectively prevents water vapor from entering the coil and has excellent waterproof performance.



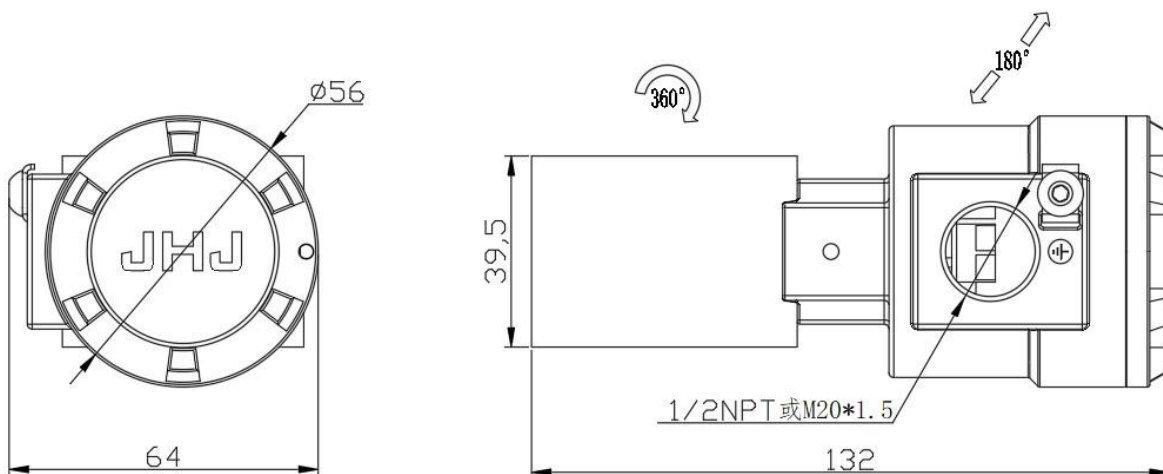
Product features

- Explosion-proof grade: Ex ia IIC T6 Ga/Ex TB III C T80 °C Db
- Coil insulation class: H
- The wiring cavity is separated from the coil cavity to effectively prevent water vapor from entering the coil cavity
- Simple wiring method as screw terminal type
- Electrical interface with 1/2" NPT or M20 × 1.5 options
- Degree of protection: IP67
- Available with pilot-operated body



Junction box material	Aluminum alloy/316 stainless steel ^①
Insect-proof exhaust nut	Brass/stainless steel/Aluminum alloy/POM
Set screw	Stainless steel
Grounding screw	Stainless steel
Nameplate	304 stainless steel
Rated voltage	24V DC
Coil power	1.3W
Intrinsically safe parameters	Ui: 28V, li: 100mA, Ci: 0uF, Li: 0mA

Note: ① 316L material needs to be customized



Valve position indication

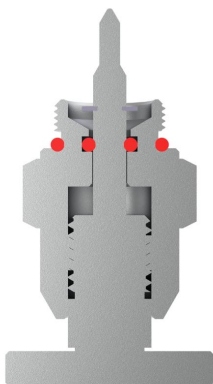


Valve position indication

- In the process of valve installation and commissioning, the state of the solenoid valve can be judged by the valve position indication function
- Reduce the workload of valve installation, commissioning and troubleshooting
- Valve position indication can be observed locally or transmitted remotely
- Valve position indication function is optional for direct-acting valve body

Manual operation and manual reset

MS

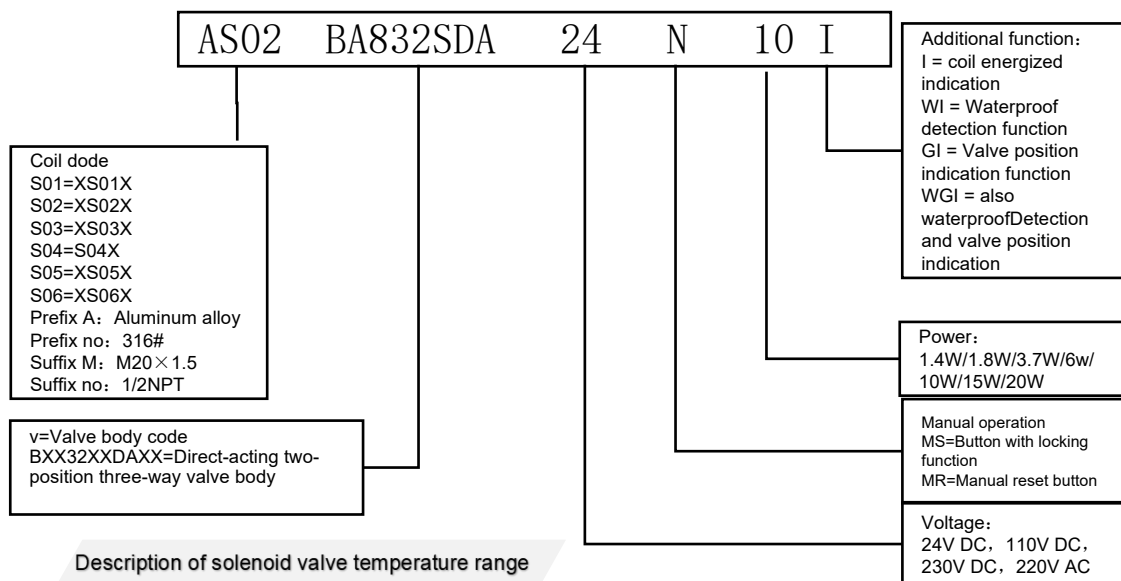


MR



Solenoid valve selection rules

Select one code from each category to complete the model

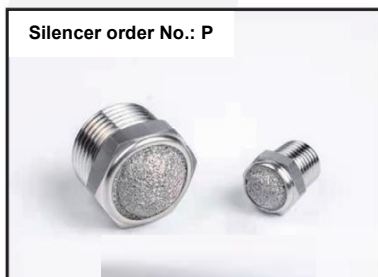


Description of solenoid valve temperature range

- The operating temperature range of the valve body depends on the material of the seals and the nature of the medium under normal operating conditions (e.g. steam).
- The temperature range of the magnetic head depends on the power consumption class of the coil and the safety regulations that must be observed.
- The operating temperature of the solenoid valve as a whole is between the upper and lower limits of the above two.

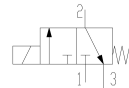
Sealing materials	Temperature range	Medium
NBR Nitrile rubber (standard)	-20°C to+80°C	Medium Air, water other media
HNBR Hydrogenated butyronitrile (low temp. type)	-30°C to+90°C	
FPM Viton	-40°C to+170°C	
VMQ Silicone rubber	-60°C to+130°C	

Order accessories



Direct-acting solenoid valve silencer as standard

NAMUR 2-position 5-way universal adapter seal as standard



Product overview

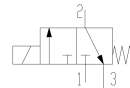
Direct-acting universal two-position three-way solenoid valve, no minimum operating pressure requirements, widely used in power, oil and gas, chemical, pharmaceutical, metallurgical and other industries; balanced lifting structure, high flow at the lowest power, PTFE ring guide can reduce friction, eliminate bonding phenomenon, thus providing a long service life.

Optional manual reset function, optional valve position indication function, optional aluminum alloy and stainless steel valve body material, 316 stainless steel valve body is suitable for high corrosive environment, 1/4 NPT and 1/2 NPT interface are optional, the connection mode is pipe connection type and NAMUR type, the solenoid coil is optional S01, S02, S04, S05, S06 series.

Product features

- Working nozzle caliber 1/4 " NPT and 1/2 " NPT optional
- Refer to IEC61508 or GB20438 for functional safety
- Response time: 40ms ~ 50ms
- Coil can be charged for a long time (low power consumption type)
- Working pressure: 0-10bar
- Control mode: normally open, normally closed
- Special noise reduction design, mute effect 40 decibels
- The overall structural design shall comply with IEC specifications.

Junction box	Standard 316/Aluminum alloy ADC12
Valve body	316 ss/Aluminum alloy
Moving core	Silicon steel
Permeable tube	316 stainless steel
Static core	Soft magnetic alloy + surface passivation treatment
Spool spring	304 stainless steel
Sealing	VMQ
Compression nut	316 stainless steel
Spool	316ss/Aluminum alloy/POM
Spool diameter	5.7mm/12mm
Pressure range	0-10Bar



SIL

Direct acting 3/2 solenoid valve

Product details

Can be matched with various electromagnetic heads

S01, S02, S04, S05, S06 and other electromagnetic heads can be matched according to the requirements of explosion-proof grade.

Balanced lifting structure

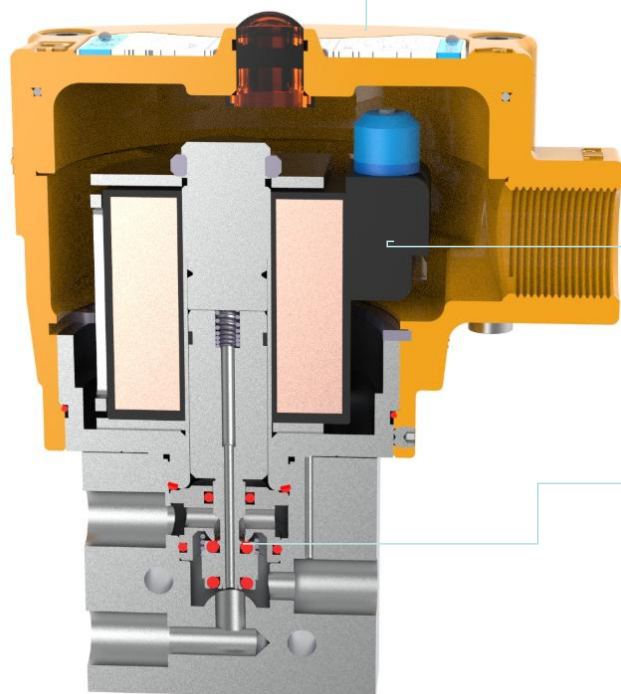
Bidirectional seal;
Good sealing, no leakage.

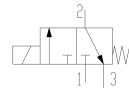
Zero differential pressure start, fast response

Short action time and quick response:
Response time: 40-50ms.

Valve position indication

The state of the valve core can be observed on the spot to reduce the troubleshooting time of the valve.





Direct-acting 2-position 3-way solenoid valve products



Direct acting 3/2+AS01



Direct acting 3/2+AS02



Direct acting 3/2+AS05



Direct acting 3/2+S06



(1/2) Direct acting 3/2+S02



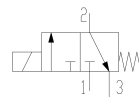
(1/2) Direct acting 3/2+S05

Basic parameters

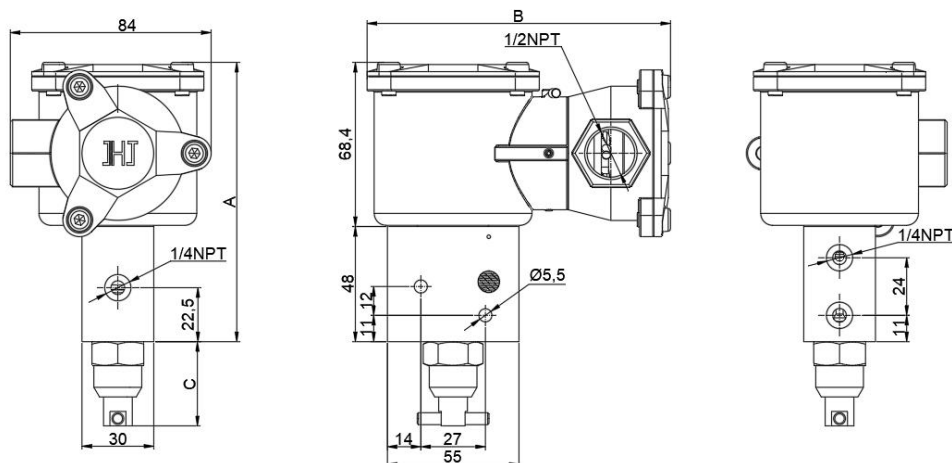
Basic parameters-Direct-acting 2-position 3-way solenoid valve

Valve body material	BS (316) //316L ^① /BA (Aluminum alloy)	
Working voltage	DC24V / AC110V / AC220V	
Working connection pipe	NPT thread, G thread, customized thread	
	1/4"	1/2"
Spool diameter	5.7mm	12mm
Flow coefficient (Cv)	0.5	1.5
Spool structure	Normally Open (NO)/Normally Closed (NC) General Purpose	
Working pressure	0-10bar	
Working medium	Water, oil, natural gas, air, inert gas	
Sealing material	Nitrile rubber (NBR), hydrogenated nitrile rubber (HNBR), fluororubber (FPM), silicone rubber (VMQ)	

注：①316L材质需要定制

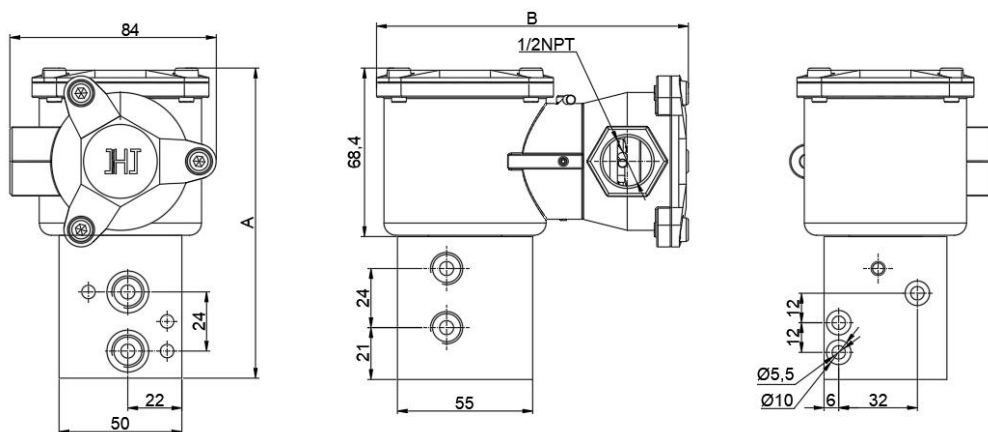


Dimension Drawing of Pipe-connected 1/4 " Valve Body with S01 Coil Unit: mm



Dimensional Drawing of NAMUR Valve Body with S01 Coil

Unit : mm



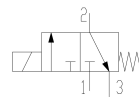
Dimension table of direct-acting 2-position 3-way solenoid valve

Weight: Kg

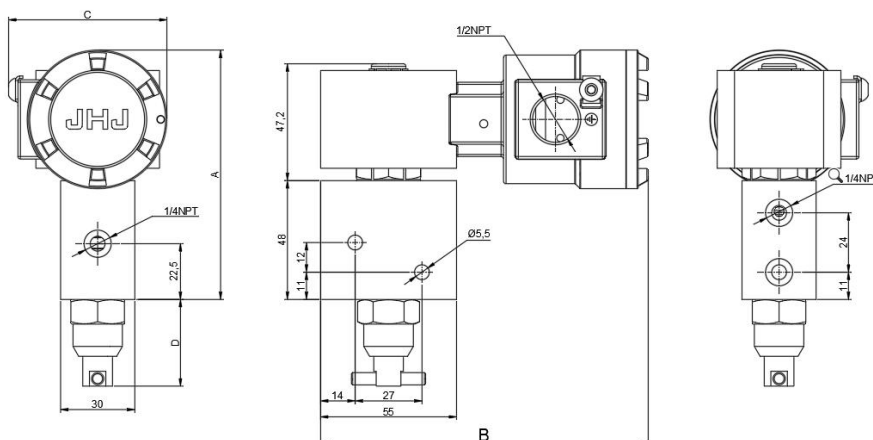
Coil code	Valve body code	A	B	C	Aluminum alloy	Stainless steel
S01	BX832XXDA	116.5	127	35	2.45	2.65
S01	BX832TXXDA	126.5	127	--	2.7	3.16

Note 1: The dimension drawing indicates the maximum dimension. If the valve is not equipped with manual function, the dimension of the manual part can be ignored. The NAMUR valve body cannot be equipped with manual function.

Note 2: This table is standard configuration, and other configurations can be selected in the order example. For details, please consult JHJ Sales Manager.

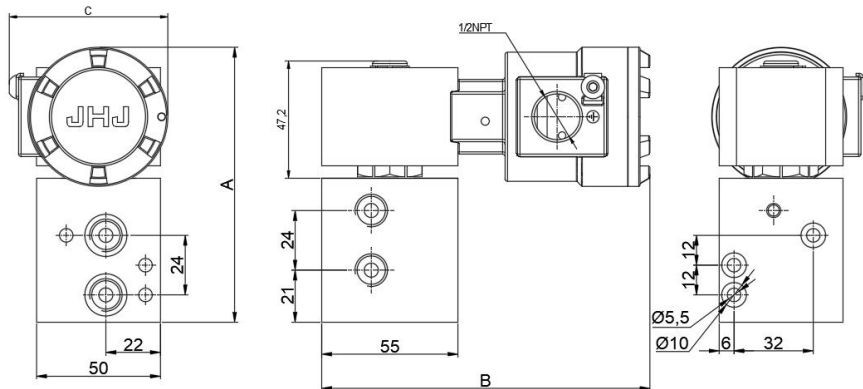


Dimension Drawing of Pipe-connected 1/4 " Valve Body with S02 Coil Unit: mm



Dimensional Drawing of NAMUR Valve Body with S02 Coil

Unit : mm



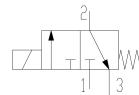
Dimensions of Direct-acting 2-position 3-way Solenoid Valve

Weight: Kg (重量核实)

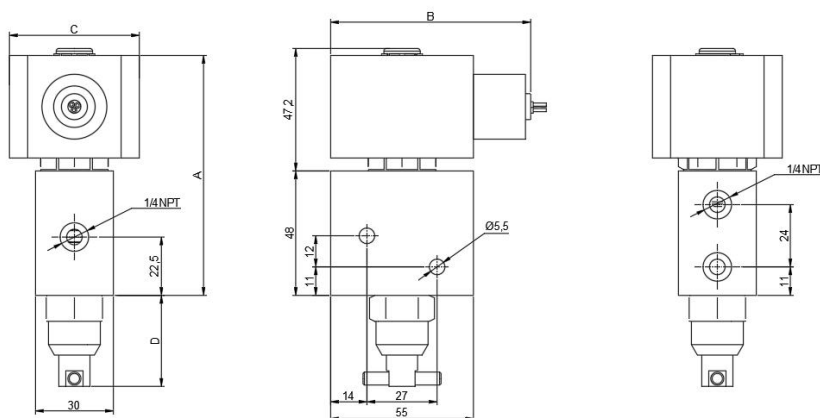
Coil code	Valve body code	A	B	C	D	Aluminum alloy	Stainless steel
S02	BX832XXDA	101	132.5	64	35	2.45	2.65
S02	BX832TXXDA	110	132.5	64	—	2.7	3.16

Note 1: The dimension drawing indicates the maximum dimension. If the valve is not equipped with manual function, the dimension of the manual part can be ignored. The NAMUR valve body cannot be equipped with manual function.

Note 2: This table is standard configuration, and other configurations can be selected in the order example. For details, please consult JHJ Sales Manager.

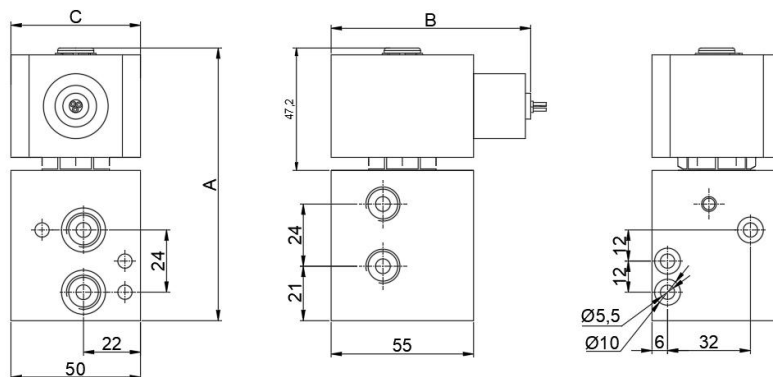


Dimension Drawing of Pipe-connected 1/4 " Valve Body with S04 Coil Unit: mm



Dimensional Drawing of NAMUR Valve Body with S04 Coil

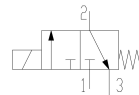
Unit : mm



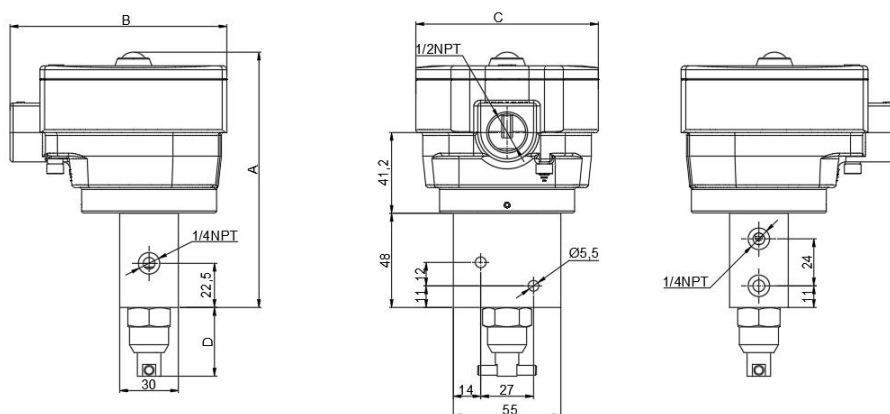
Dimensions of Direct-acting 2-position 3-way Solenoid Valve							Weight: Kg
Coil code	Valve body code	A	B	C	D	Aluminum alloy	Stainless steel
S04	BX832XXDA	92.5	77	50	35	2.1	2.35
S04	BX832TXXDA	102.5	77	50	—	2.3	3.02

Note 1: The dimension drawing indicates the maximum dimension. If the valve is not equipped with manual function, the dimension of the manual part can be ignored. The NAMUR valve body cannot be equipped with manual function.

Note 2: This table is standard configuration, and other configurations can be selected in the order example. For details, please consult JHJ Sales Manager.

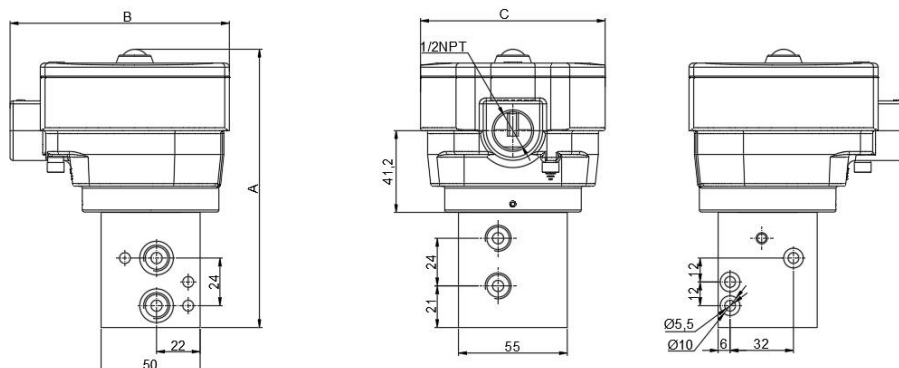


Dimension Drawing of Pipe-connected 1/4 " Valve Body with S05 Coil Unit: mm



Dimensional Drawing of NAMUR Valve Body with S05 Coil

Unit : mm



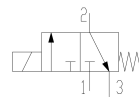
Dimensions of Direct-acting 2-position 3-way Solenoid Valve

Weight: Kg

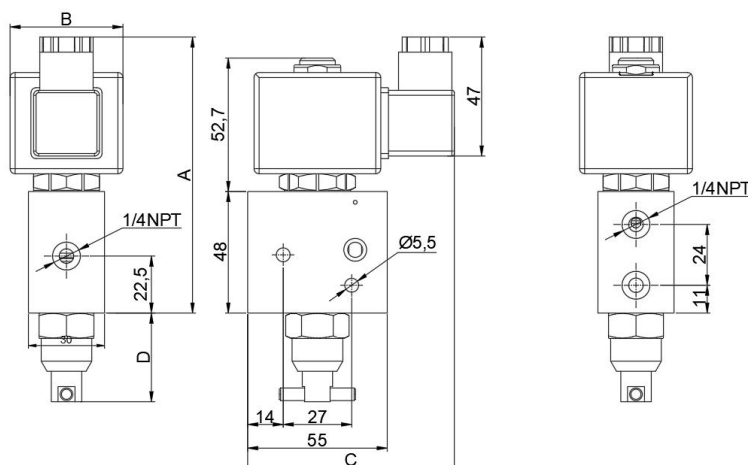
Coil code	Valve body code	A	B	C	D	Aluminum alloy	Stainless steel
S05	BX832XXDA	130.2	111	93	35	2.55	2.75
S05	BX832TXXDA	140.2	111	93	—	2.75	3.16

Note 1: The dimension drawing indicates the maximum dimension. If the valve is not equipped with manual function, the dimension of the manual part can be ignored. The NAMUR valve body cannot be equipped with manual function.

Note 2: This table is standard configuration, and other configurations can be selected in the order example. For details, please consult JHJ Sales Manager.

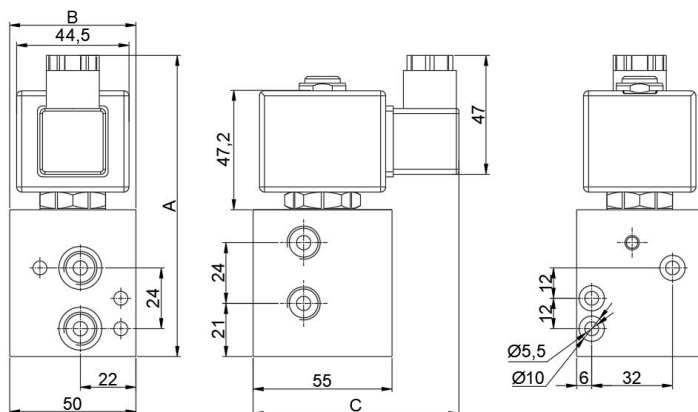


Dimension Drawing of Pipe-connected 1/4 " Valve Body with S06 Coil Unit: mm



Dimensional Drawing of NAMUR Valve Body with S06 Coil

Unit : mm



Dimensions of Direct-acting 2-position 3-way Solenoid Valve

Weight: Kg

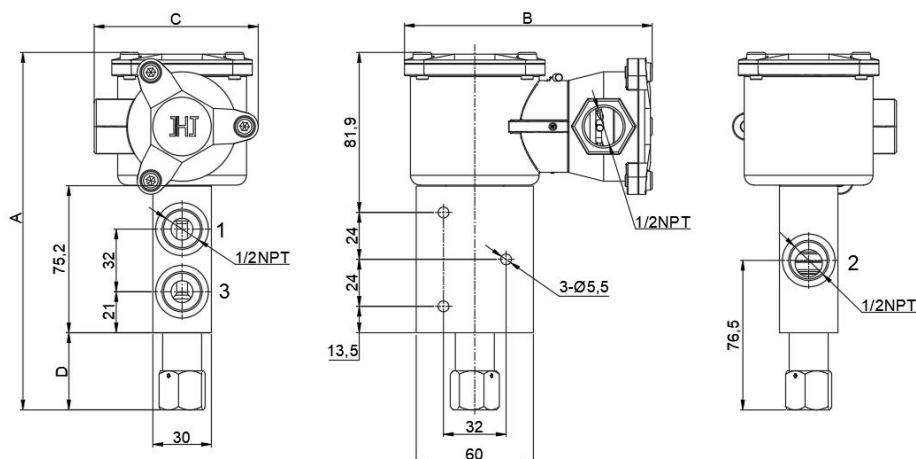
Coil code	Valve body code	A	B	C	D	Aluminum alloy	Stainless steel
S06	BX832XXDA	109	44.5	81	35	2.1	2.75
S06	BX832TXXDA	119	50	81	—	2.45	3.16

Note 1: The dimension drawing indicates the maximum dimension. If the valve is not equipped with manual function, the dimension of the manual part can be ignored. The NAMUR valve body cannot be equipped with manual function.

Note 2: This table is standard configuration, and other configurations can be selected in the order example. For details, please consult JHJ Sales Manager.

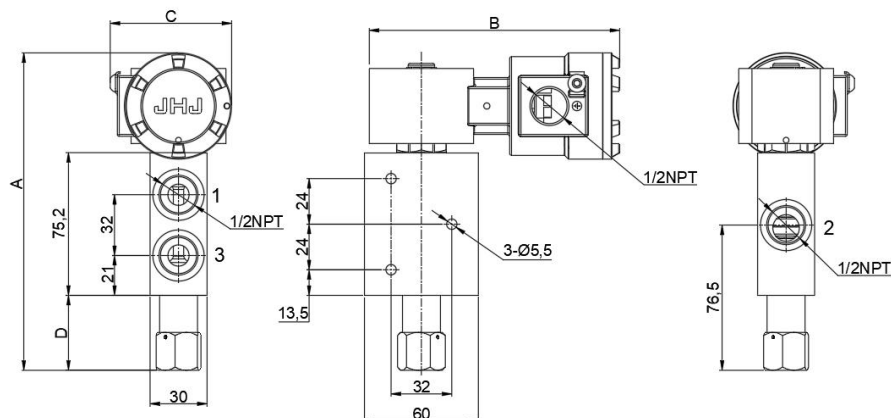
Dimensional Drawing of Pipe-connected 1/2 " Valve Body with S01 Coil

Unit: mm



Dimensional Drawing of Pipe-connected 1/2 " Valve Body with S02 Coil

Unit: mm



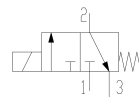
1/2 " Direct-acting 2-position 3-way solenoid valve Dimension table

Weight: Kg

Coil code	Valve body code	A	B	C	D	Aluminum alloy	Stainless steel
S01	BX432XXDA	183	127	84	40	3.65	3.89
S02	BX432XXDA	167	132	64	40	3.55	3.78

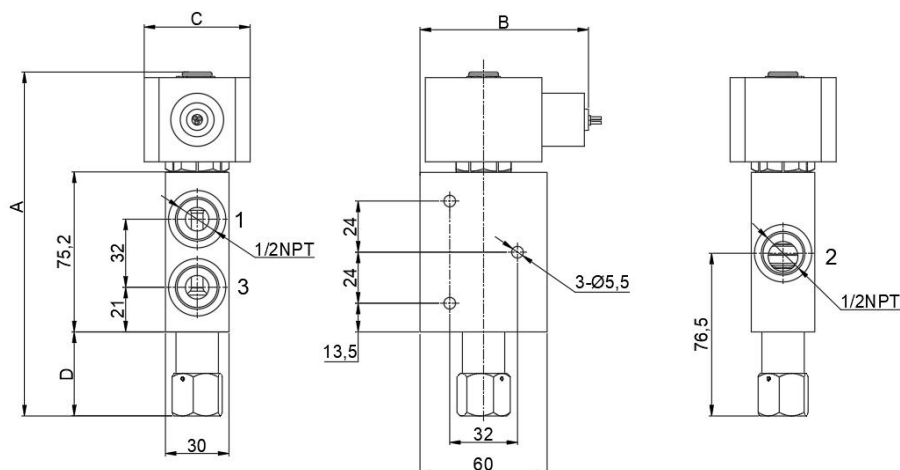
Note 1: The dimension drawing indicates the maximum dimension. If the valve is not equipped with manual function, the dimension of the manual part can be ignored. The NAMUR valve body cannot be equipped with manual function.

Note 2: This table is standard configuration, and other configurations can be selected in the order example. For details, please consult JHJ Sales Manager.



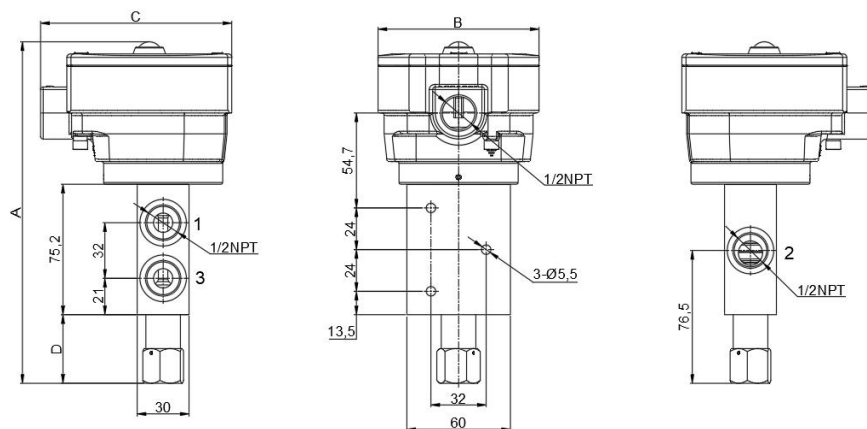
Dimensional Drawing of Pipe-connected 1/2 " Valve Body with S04 Coil

Unit: mm



Dimensional Drawing of Pipe-connected 1/2 " Valve Body with S05 Coil

Unit: mm



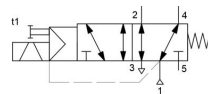
Dimensions of 1/2" Direct-acting 2-position 3-way Solenoid Valve

Weight: Kg

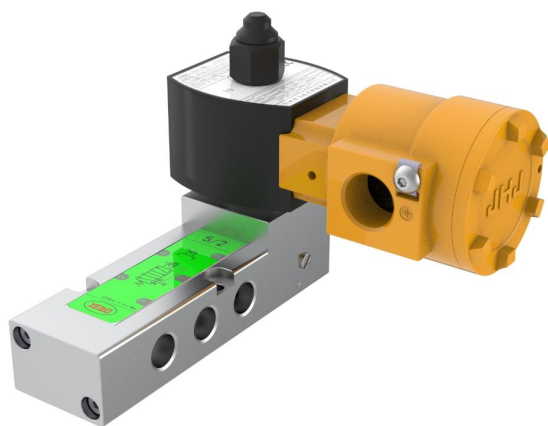
Coil code	Valve body code	A	B	C	D	Aluminum alloy	Stainless steel
S04	BX432XXDA	162	80	50	40	3.1	—
S05	BX432XXDA	197	111	64	40	3.58	3.82

Note 1: The dimension drawing indicates the maximum dimension. If the valve is not equipped with manual function, the dimension of the manual part can be ignored. The NAMUR valve body cannot be equipped with manual function.

Note 2: This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.



SIL Pilot 5/2 (3/2) Solenoid valve? ?



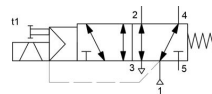
Product introduction

The pilot-operated two-position five-way solenoid valve is widely used in electric power, oil and gas, chemical, pharmaceutical, metallurgy and other industries. After years of development, the products include single electric control, double electric control, pipe connection type, NAMUR type, 2-position five-way (3-way), 3-position five-way, optional aluminum alloy valve body and stainless steel valve body, 1/4 "NPT and 1/2" NPT interface. Different thread forms such as NPT and G thread can be selected.

Product features

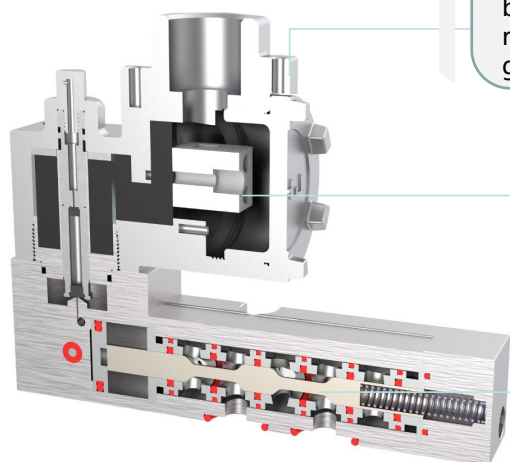
- Pilot type, electrical connection 1/2 NPT or M20x1.5
- Refer to IEC61508 or GB20438 for functional safety
- Response time: 80ms ~ 100ms
- Manual operation as standard
- Coil can be charged for a long time (low power type)
- Suitable for harsh working conditions, outdoor and other environments
- The overall structural design shall comply with IEC specifications.
- Standard medium: air, inert gas

Junction box	316ss/Aluminum alloy	
Valve body	316ss/Aluminum alloy	
Valve stem	316 stainless steel	
Permeable tube	316 stainless steel	
Static core	Soft magnetic alloy + surface passivation treatment	
Spool spring	304 stainless steel	
Seal	VMQ	
Guide ring	PTFE	
Working interface	1/4"	1/2"
Thread form	NPT thread, G thread, Customized thread	
Spool diameter	6mm	12mm
Flow Coefficient (Cv)	0.75	2.3
Working pressure	2.5-10bar	
Ambient temperature	-45°C to +80°C	



Pilot 5/2 Solenoid valve

Product details



Can be matched with various electromagnetic heads

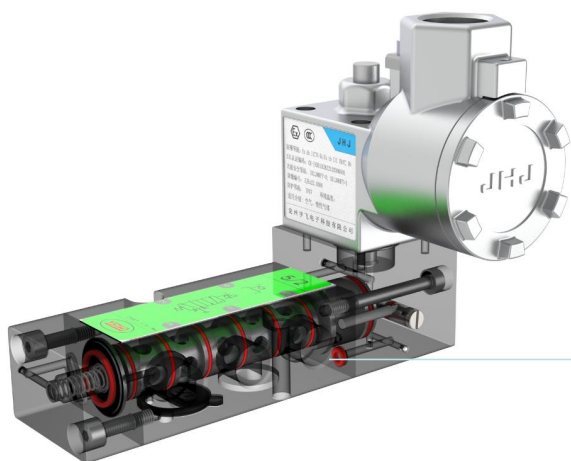
S01, S02, S04, S05, S06, S07 and other electromagnetic heads can be matched according to the requirements of explosion-proof grade

Low power coil

Low Power Coil 1.4 W/3.7 W;
S07 Coil 2.5 W;
Optional Intrinsic Waterproof Coil S05.

Spacer type spool valve construction

Static seal
Automatic compensation of sealing ring

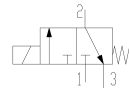


The working interface 1/2 " solenoid valve adopts the integrated design of pipe connection/veneer, which is more convenient to use.

Product features

Advantages of Spacer Spool Valve Design

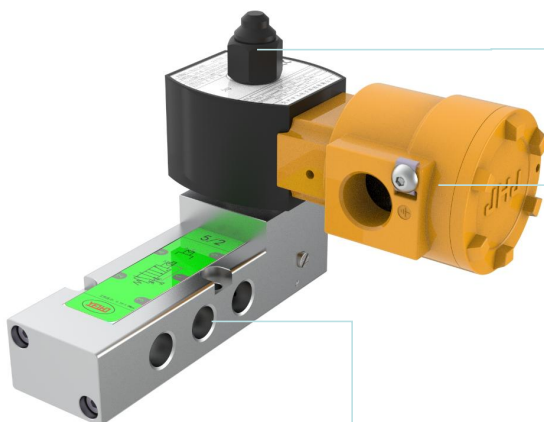
- More reliable performance, smooth action, superior sealing effect
- Longer service life, no leakage after 5 million life tests
- Resistant to harsh environmental conditions, suitable for outdoor working conditions



SIL

Pilot 5/2, 3/2 Solenoid valve

Pilot 2-Position 5-Way Pipe-connection Product Structure



Dust exhaust nut

Materials are optional:

316 SST, Brass, POM

**Flameproof enclosure
design**

S01/S02/S03/S04/S05/S07
Select the coil according to
the actual requirement
Low Power Coil 1.4 W/3.7
W

Spool diameter

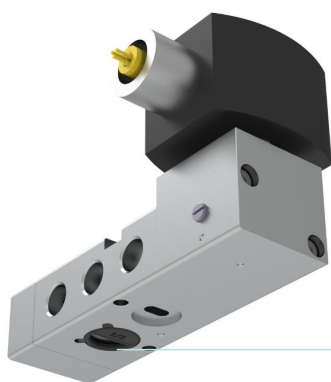
6mm/12mm optional

Valve body material

**316 stainless
steel/aluminum alloy
optional;**

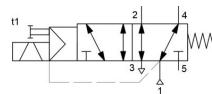
Pressure range 2.5-10bar;
Temperature range: -45
°C to + 80 °C.

Pilot 2-position 5-way NAMUR Product Structure



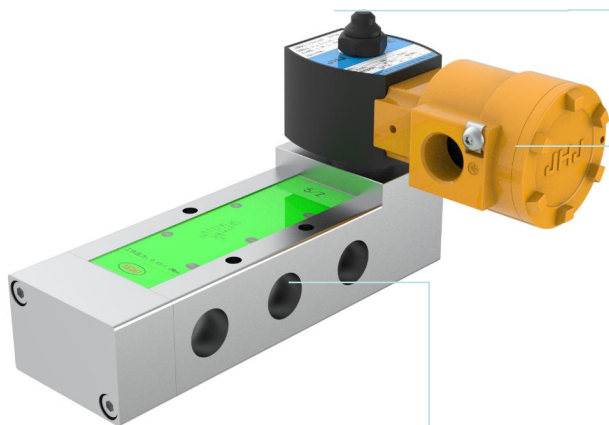
NAMUR solenoid valve
The 1/4 pilot 2-position
5-way solenoid valve ;
NAMUR structure is
equipped with a
universal adapter seal
ring, which can be used
as a 2-position 5-way
structure and a 2-
position 3-way structure
simultaneously.





1/2 " Pilot 5/2 Solenoid valve

1/2 Pilot 2-Position 5-Way Pipe-connection Product Structure



Dust exhaust nut

Material options: 316

stainless steel, brass POM

Flameproof enclosure design

S01/S02/S03/S04/S05/S07

Select the coil according to the actual requirement

Low Power Coil 1.4 W/3.7 W

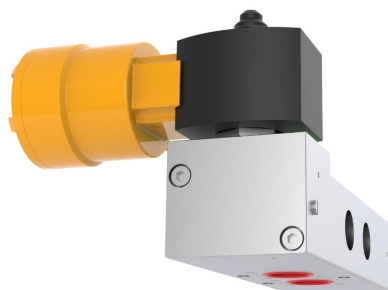
Spool diameter: 12 mm

Valve body material: 316 stainless steel/aluminum alloy optional

Pressure range 2.5-10 bar

Temperature range -45 °C to + 120 °C

1/2 Pilot 2-Position 5-Way NAMUR Product Structure



X2

Pipe connection valve body structure

The pasting hole is plugged with a blind plate to form the pipe connection structure.

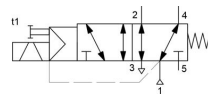


X2



X2

NAMUR solenoid valve
The pipe-connection hole is plugged with a blind plug, and a veneer is installed, so that the solenoid valve can be used as a NAMUR type.

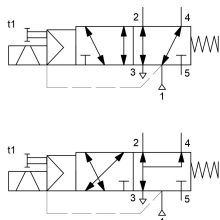


SIL

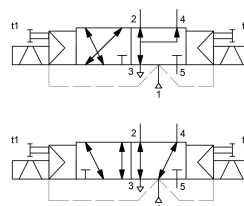
Pilot 5/2 Solenoid valve

Process control solenoid valve products

Pilot 2-position 5-way solenoid valve (single electric control)



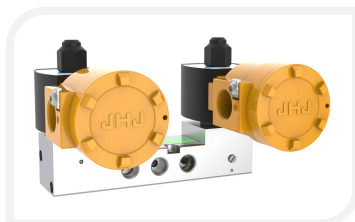
Pilot 2-position 5-way solenoid valve (dual electric control)



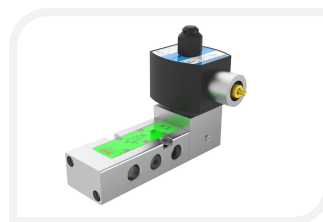
Pilot 2-position 5-way solenoid valve



S07 coil (stainless steel)



S02 coil (double electric control)



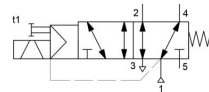
S04 coil (stainless steel)

Basic parameters

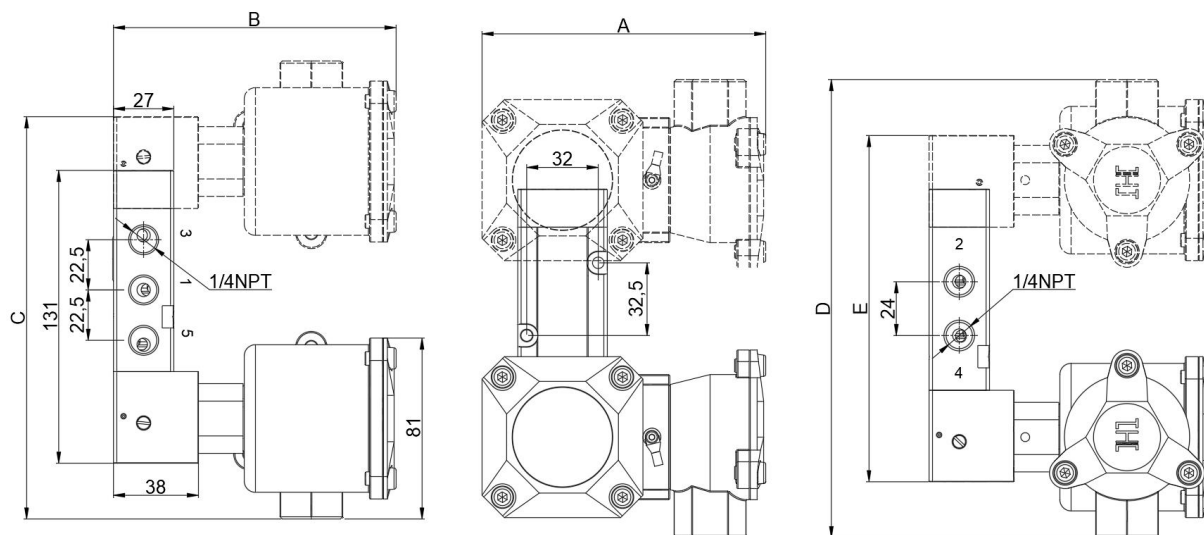
Basic Parameters----Pilot 2-Position 5-Way Solenoid Valve

Valve body material	BS (316) / 316L ^① / BA (Aluminum alloy)	
Working voltage	DC24V / DC110V / AC110V / AC220V / DC230V	
Air connection	NPT thread, G thread, customized thread	
Spool diameter	6mm	12mm
Flow coefficient	0.5	1.5
Working pressure	2.5-10bar	
Working medium	Air, inert gas	
Sealing material	Nitrile rubber (NBR), hydrogenated nitrile rubber (HNBR), fluororubber (FPM), silicone rubber (VMQ)	

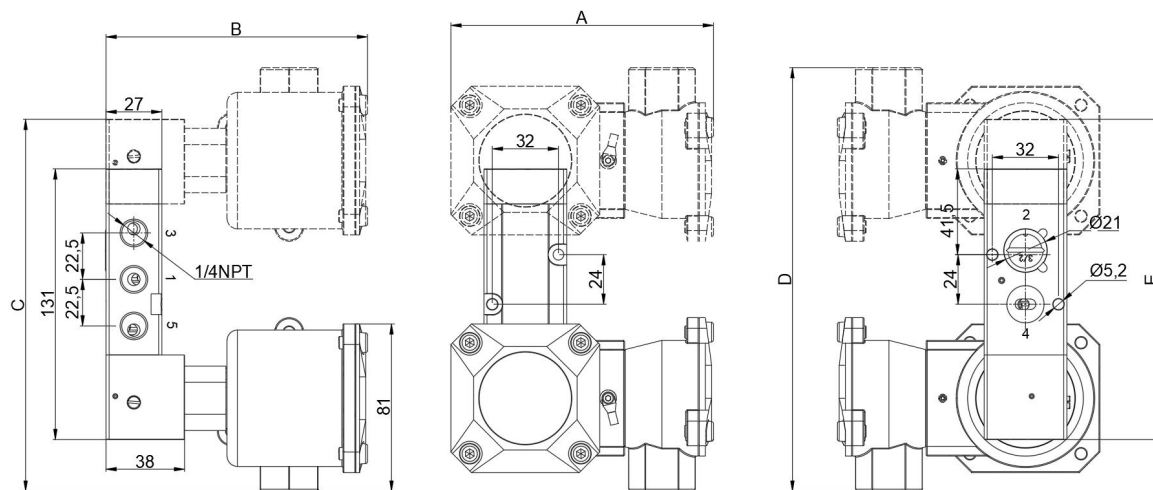
Note: ① 316L material needs to be customized



Dimension Drawing of Pipe-connected 1/4 Pilot Single (Double) Electric Control S01



Dimension Drawing of NAMUR1/4 Pilot Single(Dual) Electric Control with S01

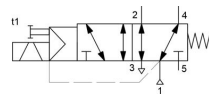


Dimension of 1/4 pilot single (double) electric control with S01

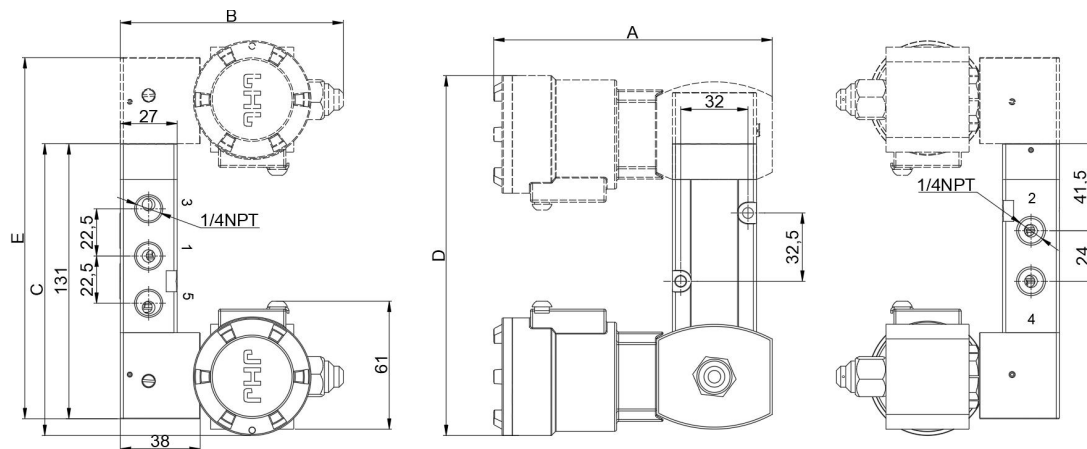
Weight: Kg

Connection size	Coil code	Valve body code	A	B	C	D	E	Aluminum alloy	Stainless steel
1/4	XS01X	BS852ALPA24MS3.0D/S	127	126	180	205	155	2.195	2.972

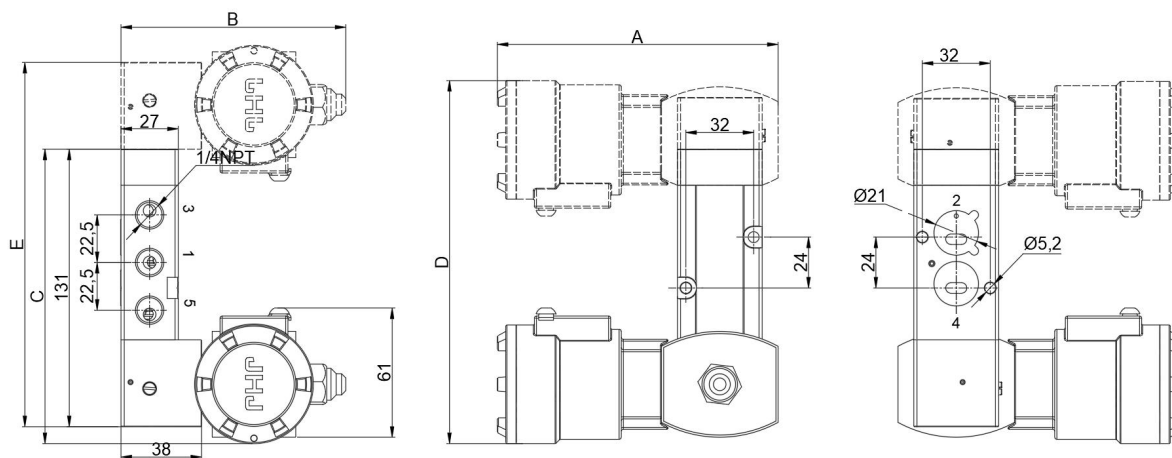
This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.



Dimension Drawing of Pipe-connected 1/4 Pilot Single (Double) Electric Control S02



Dimension Drawing of NAMUR1/4 Pilot Single(Dual) Electric Control with S02

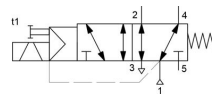


Dimension of 1/4 pilot single (double) electric control with S02

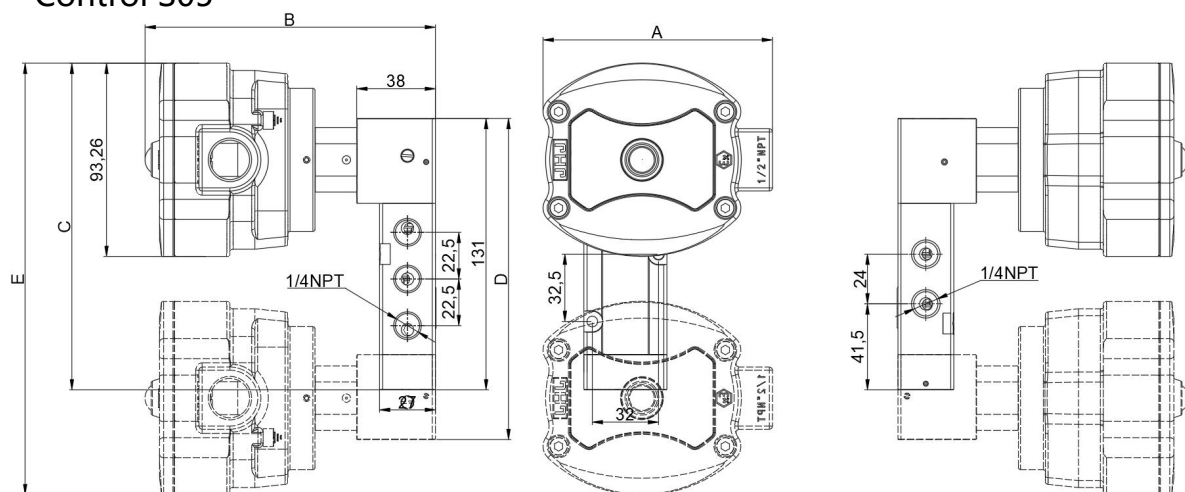
Weight: Kg

接口尺寸	线圈代码	阀体代码	A	B	C	D	E	铝合金	不锈钢
1/4	XS02X	BS852ALPA24MS3.0D/S	83.5	104	134	161	155	1.691	2.196

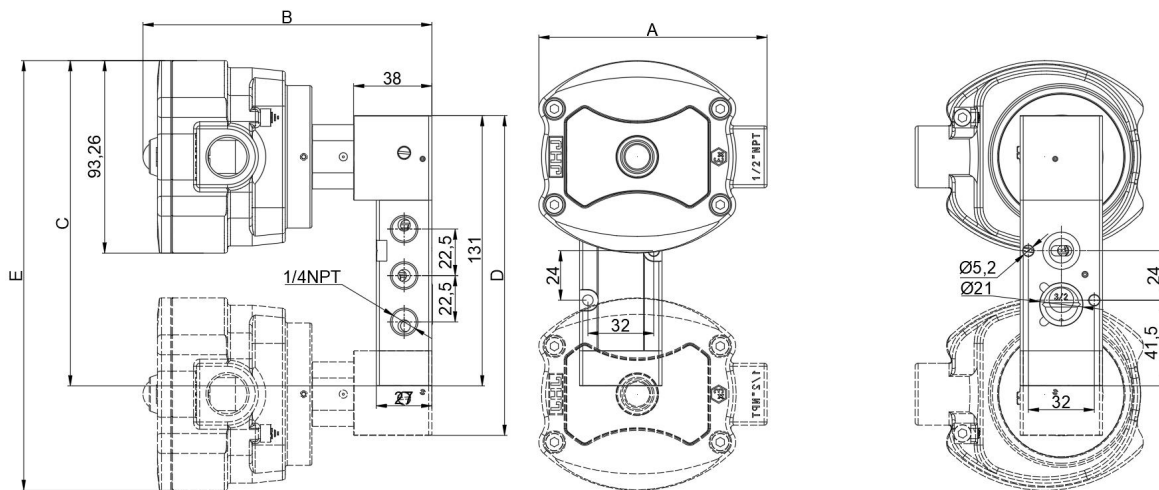
This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.



Dimension Drawing of Pipe-connected 1/4 Pilot Single (Double) Electric Control S05



Dimension Drawing of NAMUR1/4 Pilot Single(Dual) Electric Control with S05

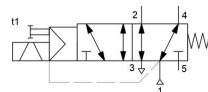


Dimension of 1/4 pilot single (double) electric control with S05

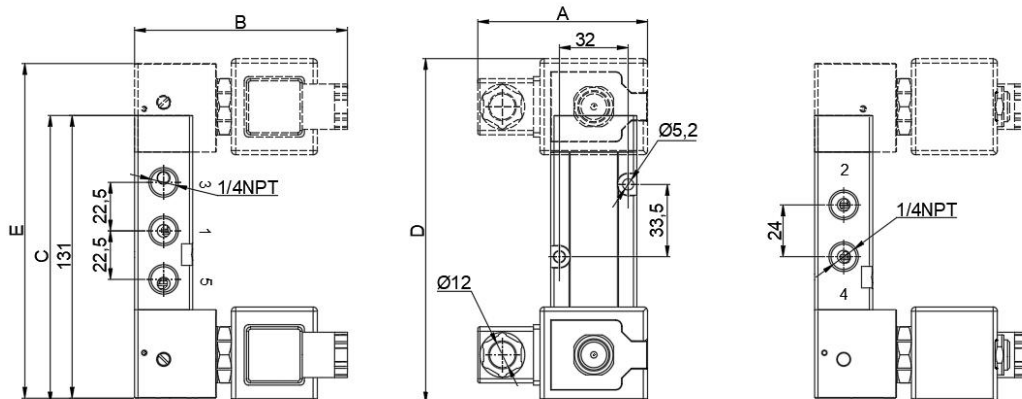
Weight: Kg

接口尺寸	线圈代码	阀体代码	A	B	C	D	E	铝合金	不锈钢
1/4	XS05X	BS852ALPA24MS3.0D/S	110	140	157	158	208	1.87	2.83

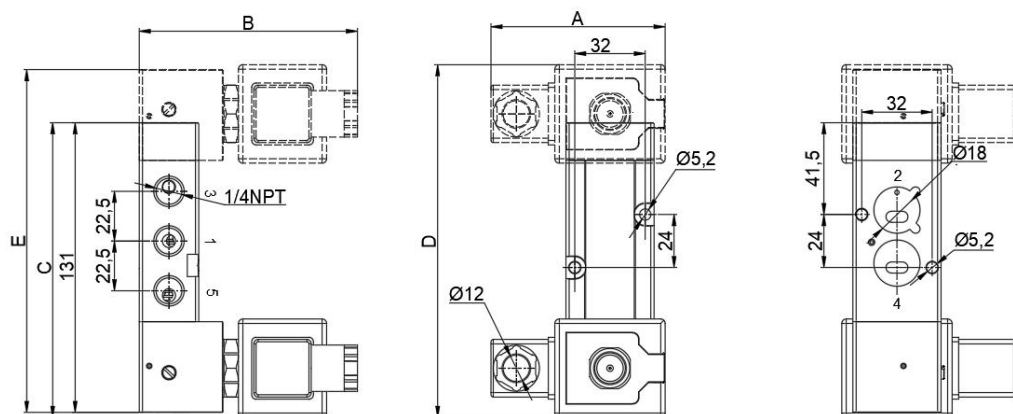
This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.



Dimension Drawing of Pipe-connected 1/4 Pilot Single (Double) Electric Control S06



Dimension Drawing of NAMUR1/4 Pilot Single(Dual) Electric Control with S06

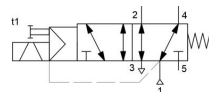


Dimension of 1/4 pilot single (double) electric control with S06

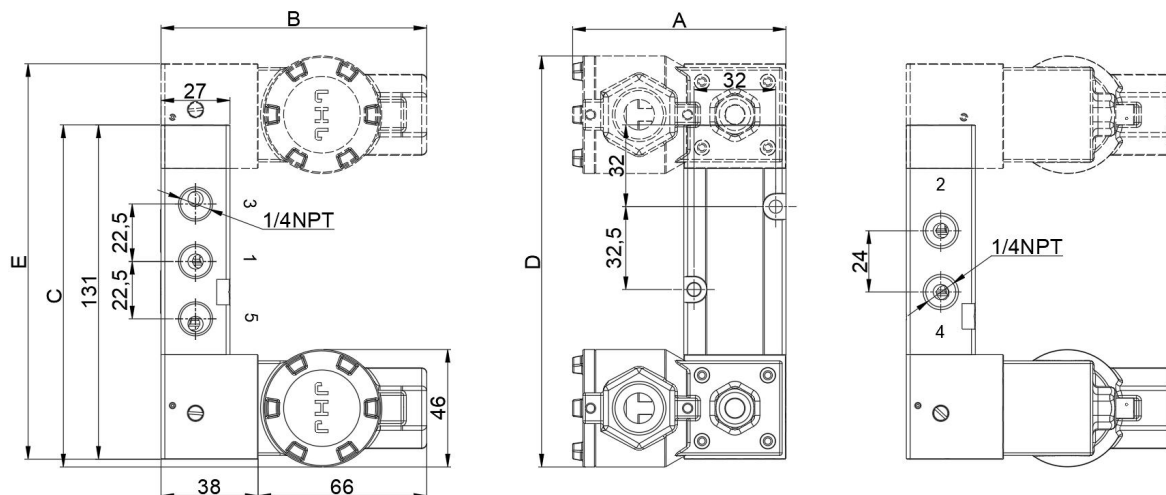
Weight: Kg

接口尺寸	线圈代码	阀体代码	A	B	C	D	E	铝合金	不锈钢
1/4	XS05X	BS852ALPA24MS3.0D/S	79	99	133	159	155	1.48	2.43

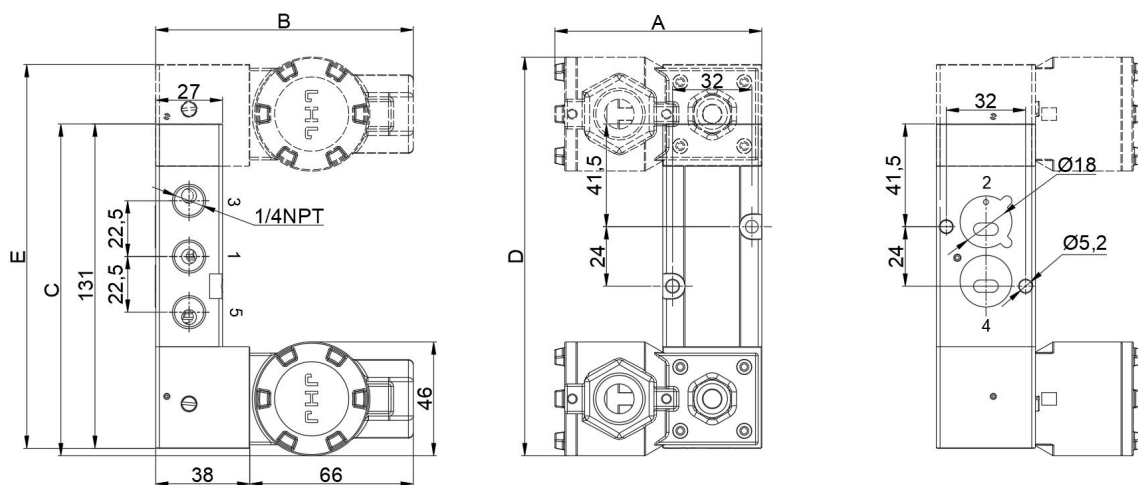
This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.



Dimension Drawing of Pipe-connected 1/4 Pilot Single (Double) Electric Control S07



Dimension Drawing of NAMUR1/4 Pilot Single(Dual) Electric Control with S07

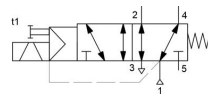


Dimension of 1/4 pilot single (double) electric control with S07

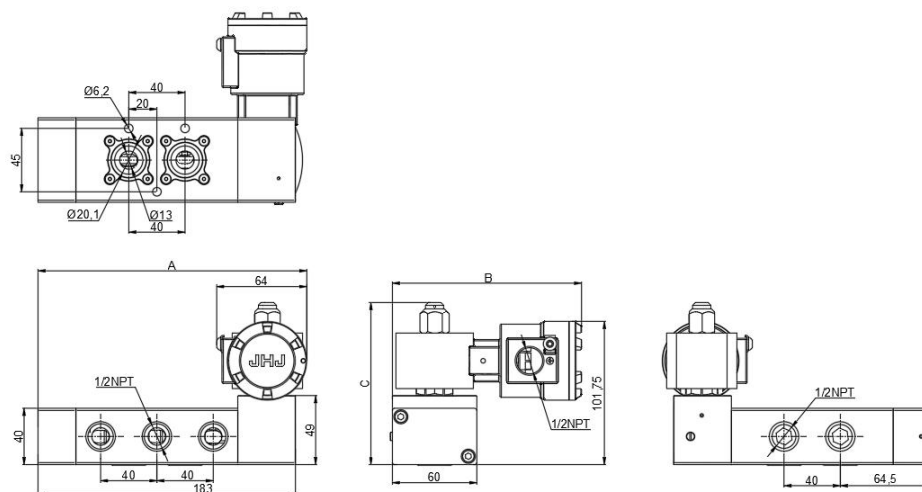
Weight: Kg

接口尺寸	线圈代码	阀体代码	A	B	C	D	E	铝合金	不锈钢
1/4	XS07X	BS852ALPA24MS3.0D/S	83	104	134	161	155	1.87	2.83

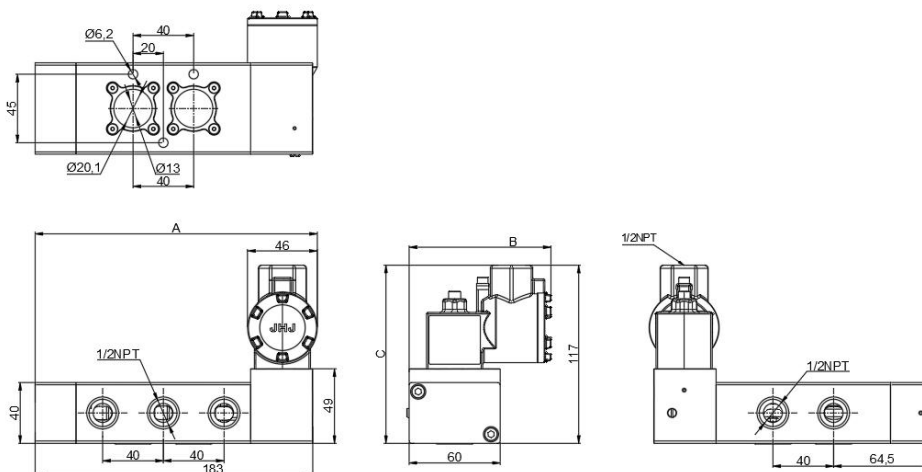
This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.



Dimension Drawing of Pipe-connected 1/2 Pilot Single Electric Control with S02



Dimension Drawing of NAMUR1/2 Pilot Single Electric Control with S07

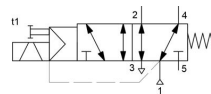


Dimension of 1/2 pilot single electric control with S07

Weight: Kg

Connection size	Coil code	Valve body code	A	B	C	Aluminum alloy	Stainless steel
1/2	XS02X	BS452ALPA24MS3.0D/S	191	134.5	115	3.1	3.5
1/2	XS07X	BS452ALPA24MS3.0D/S	186	93.5	117	3.2	3.6

This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.

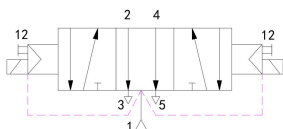


SIL

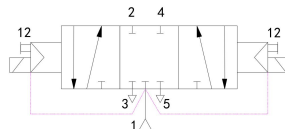
Pilot 5/3 Solenoid valve

Process Control Solenoid Valve Products

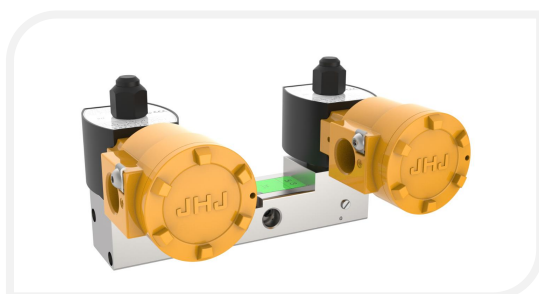
Middle discharge function
pilot three-position five-way



Middle sealing function pilot
three-position five-way



Pilot 3-position 5-way solenoid valve



PA53+S02 Electromagnetic head

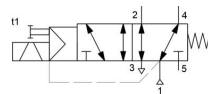


PA53+S07 Electromagnetic head

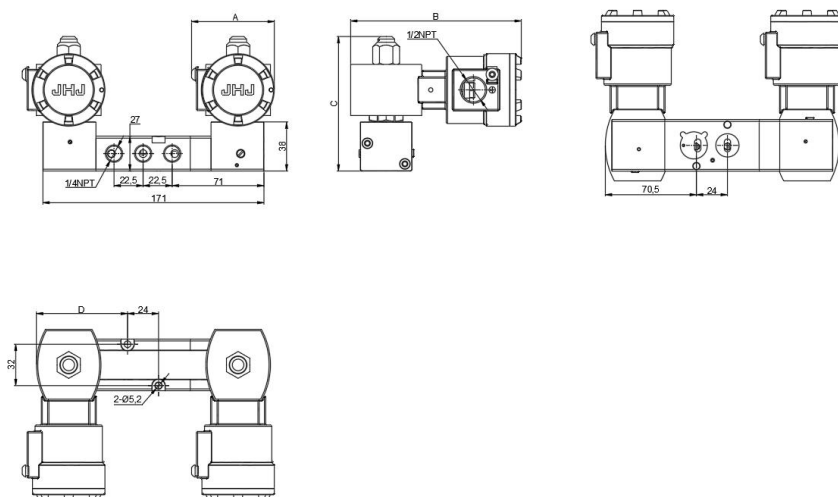
Basic parameters

Basic Parameters-Pilot 3-Position 5-Way Solenoid Valve		
Valve body material	BS (316) / 316L ^① / BA (Aluminum alloy)	
Working voltage	DC24V / DC110V / AC110V / AC220V / DC230V	
Air supply connection	NPT thread, G thread, customized thread	
Spool diameter	6mm	12mm
Flow coefficient	0.5	1.5
Working pressure	2.5-10bar	
Working medium	Air, inert gas	
Sealing material	Nitrile rubber (NBR), hydrogenated nitrile rubber (HNBR), fluororubber (FPM), silicone rubber (VMQ)	

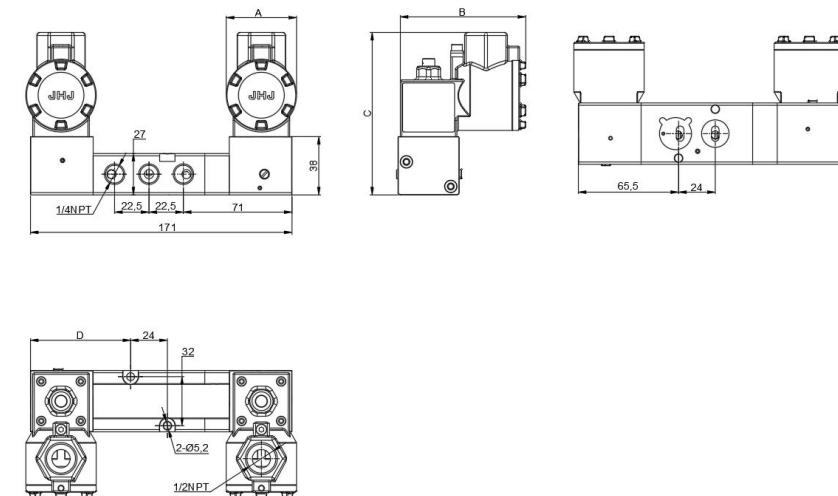
Note: ① 316L material needs to be customized



Dimension Drawing of NAMUR 1/4 Pilot Three-Position Five-Way Solenoid Valve with S02



Dimension Drawing of NAMUR 1/4 Pilot Three-Position Five-Way Solenoid Valve with S07



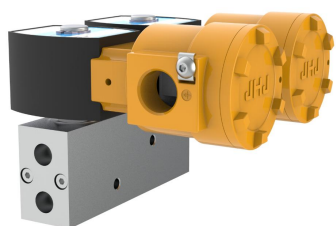
Dimension of 1/4 pilot three-position five-way NAMUR solenoid valve

Weight: Kg

Connecti on size	Coil code	Valve body code	Power (W)	A	B	C	D	Alumin um alloy	Stainle ss steel
1/4	XS02X	BA853T1SPA24MS10D	10-15	64	132	104	61	1.5	3.1
1/4	XS07X	BA853T1SPA24MS10D	10-15	46	82	106	56	1.2	2.8

This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.

The redundant manifold series products are specially designed for the redundant control scheme of the chemical field, providing a variety of redundant structures (direct-acting DA redundant series and pilot PA redundant series) to meet the requirements of safety and reliability.



Product overview

1oo2-Interlocking structure based on high safety

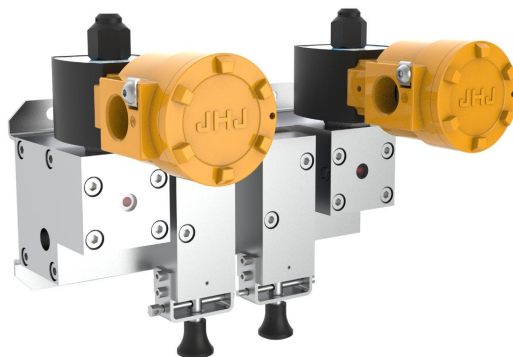
2oo2-Redundant structure based on high reliability

HFT (Hardware Fault Margin) = 1 up to SIL3

2oo3-Redundant fabric with high security and reliability

Product features

- Research and development based on direct-acting DA series two-position three-way solenoid valve
- Direct-acting structure has the unique performance of zero differential pressure start
- Direct acting valve body has the advantages of large flow and high reliability.
- Online maintenance and replacement of spare parts
- High integration, saving installation space
- Higher safety, effectively reduce leakage points



Optional configuration

- Valve block can be aluminum alloy or 316 stainless steel
- Manual button MO with locking function structure MS can be added
- Optional pressure gauge or pressure switch to indicate fault
- Optional high flow or low temperature
- Optional voltage 24V DC/220V AC; optional power consumption 1.8 w/3.7 w
- Coil can be S01, S02, S04, S05

High cost-effectiveness

- Coil housing can be aluminum alloy or 316 stainless steel
- Compared with the use of multiple solenoid valves in series to achieve the function and effect of redundant solenoid valves, redundant solenoid valves can reduce the overall cost of use.
- Simple and convenient maintenance, saving parking time and maintenance time as a whole
- Single redundant valve group can realize safety functions above SIL2

Humanized design and operation

- Manual button is optional, and each manual button can control the action of one valve core.
- The isolation valve is manually operated, with humanized buttons and safety lock.
- Redundant valve body is equipped with installation lifting ring to ensure the safety factor during installation.
- Configure the installation backplane to ensure convenient and firm installation and fixation

Rich functions

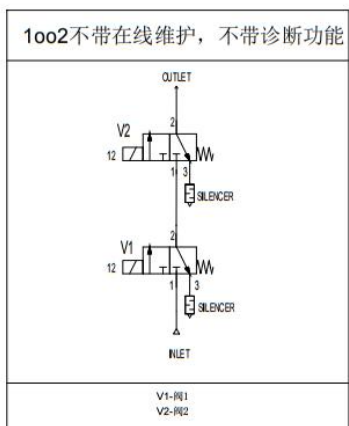
- In case of coil fault, the optional on-site pressure indication or remote pressure switch can be installed to display the fault and transmit the fault signal to the control room.
- Manual button can be added
- Optional valve position indication function or pressure gauge
- Online maintenance and replacement of spare parts
- Coil built-in power-off protection and peak overflow components, anti-surge devices
- Unique waterproof and moisture-proof alarm indication function



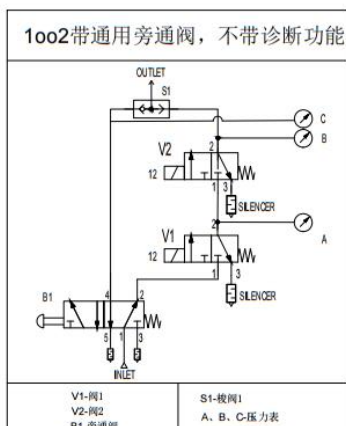
Basic parameters

Valve body material	316 stainless steel/Aluminum alloy
Spool material	Stainless steel
Spindle material	430F
Working pressure range	0-10bar
Axial balancing ring	PTFE
Junction box material	316 stainless steel/Aluminum alloy
Working voltage	24V DC, 110V DC, 230V DC, 220V AC, 允许波动: $\pm 15\%$
Magnetic isolation tube	316 stainless steel
Spring	Spring steel
Sealing	Nitrile rubber (NBR), hydrogenated nitrile rubber (HNBR), fluororubber (FPM), silicone rubber (VMQ)
Temperature resistance range	-45°C to +80°C
Nominal diameter	5.7mm/12mm
Coil power	1.8W, 3.7W, 10W, 15W
Flow capacity	750L/M or 1900L/M
Degree of protection	IP66/IP67
Electrical interface size	1/2NPT or M20×1.5
Air supply interface size	1/4NPT, 1/2NPT or M20×1.5 (See outline drawing of valve body)
Manual operation type	Optional
Surge prevention	Yes
Peak overflow	Diode and varistor
Coil insulation class	H Class
Response time	40-50ms
Suitable medium	Air, inert gas, water
Optional electromagnetic head	S01、S02、S04、S05、S06 (See the outline drawing for the dimensions of the valve group)

Schematic Diagram of Redundant Series



气路1



气路2

1oo2真值表(*)

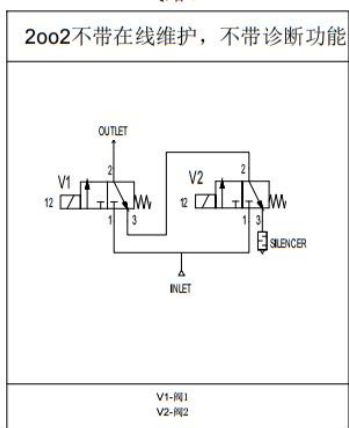
CH1 V1	CH2 V2	输出
1	1	1
1	0	0
0	1	0
0	0	0

CH1-通路1
CH2-通路2
0-电磁阀失电
1-电磁阀触发

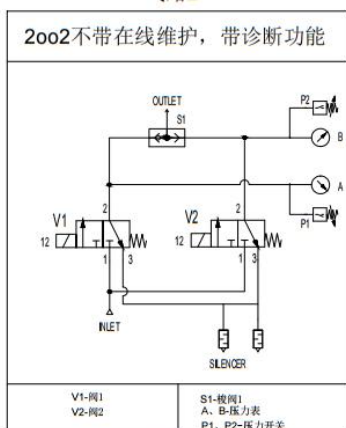
2oo2真值表(*)

CH1 V1	CH2 V2	输出
1	1	1
1	0	1
0	1	1
0	0	0

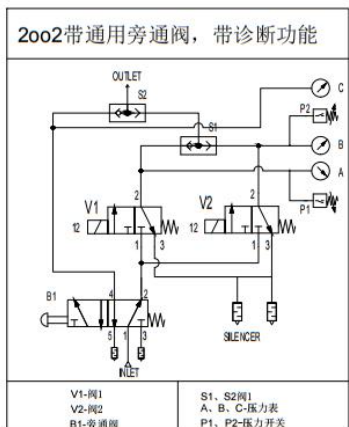
CH1-通路1
CH2-通路2
0-电磁阀失电
1-电磁阀触发



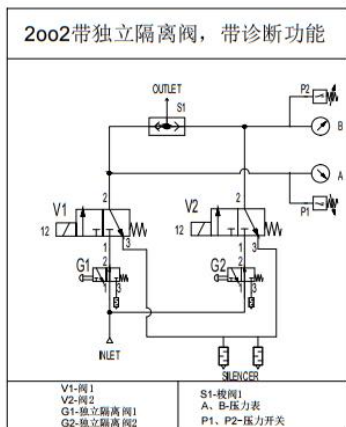
气路3



气路4

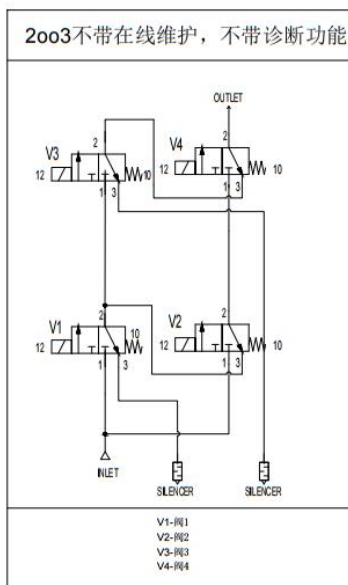


气路5

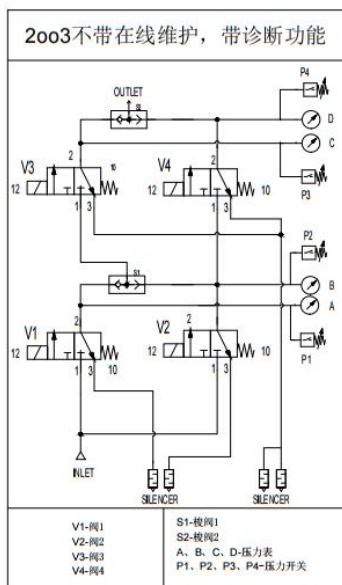


气路6

Schematic Diagram of Redundant Series



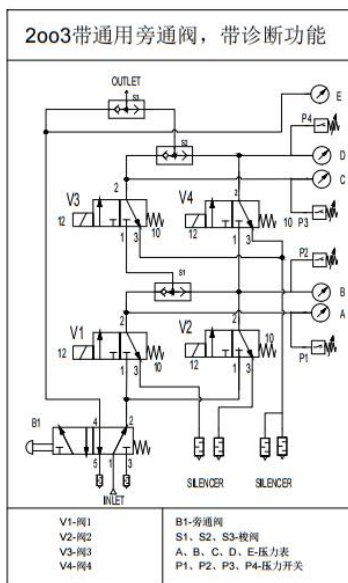
气路7



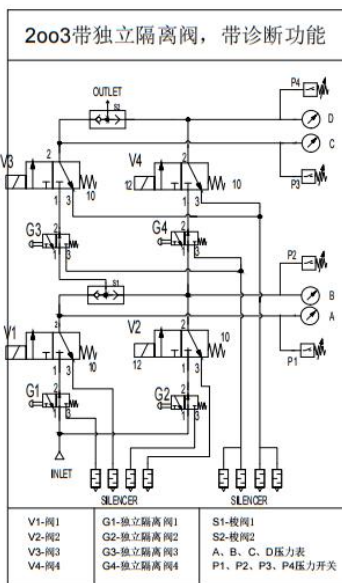
气路8

2oo3真值表(*)				
CH1	CH2	CH3	输出	
V1	V4	V2	V3	输出
1	0	0	0	0
1	1	0	0	0
1	1	1	0	1
1	1	1	1	1
0	1	0	0	0
0	1	1	0	0
0	1	1	1	1
0	1	0	1	1
0	0	1	0	0
0	0	1	1	0
1	0	1	1	1
1	0	1	0	1
0	0	0	1	0
1	0	0	1	1
1	1	0	1	1
0	0	0	0	0

CH1-通路1
CH2-通路2
CH3-通路3
0-电磁阀失电
1-电磁阀触发
*适用于-7



气路9



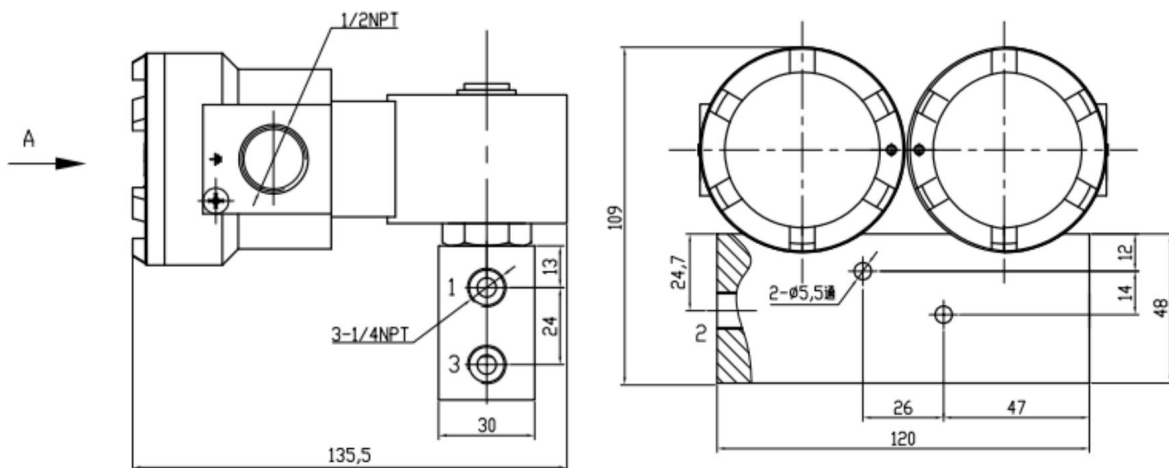
气路A

2oo3真值表(*)				
CH1	CH2	CH3	输出	
V1	V4	V2	V3	输出
1	0	0	0	0
1	0	1	0	0
1	0	1	1	1
1	1	1	1	1
0	0	1	0	0
0	0	1	1	1
0	1	1	1	1
0	1	1	0	1
0	0	0	1	0
0	1	0	1	0
1	1	0	1	1
1	0	0	1	1
0	1	0	0	0
1	1	0	0	0
1	1	1	0	1
0	0	0	0	0

CH1-通路1
CH2-通路2
CH3-通路3
0-电磁阀失电
1-电磁阀触发
*适用于-8, 9, A

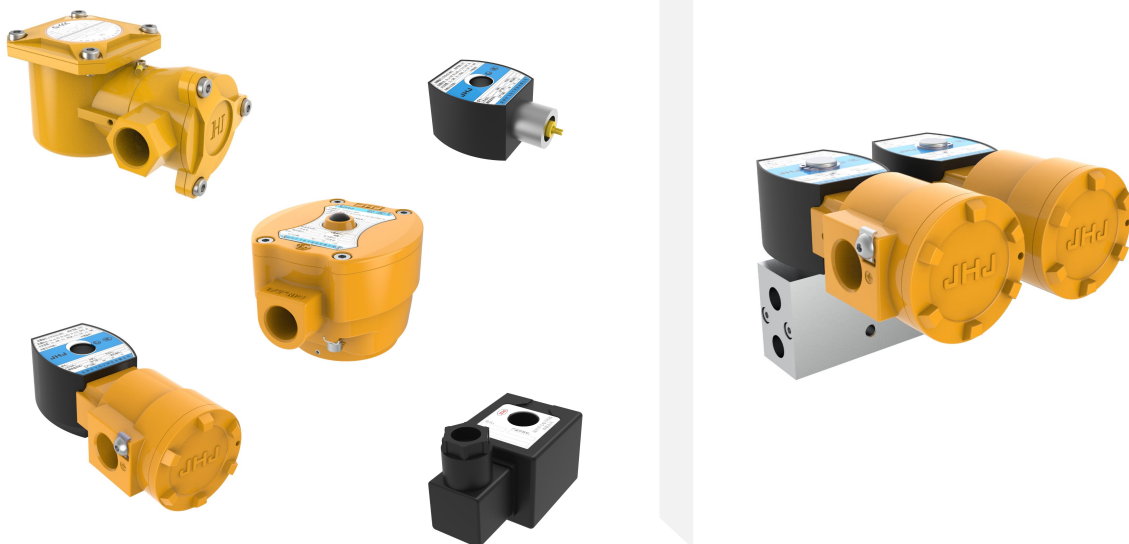
1oo2 (2oo2) Simple Redundant valve group + S02 Coil Housing

Unit: mm Weight: 11 kg



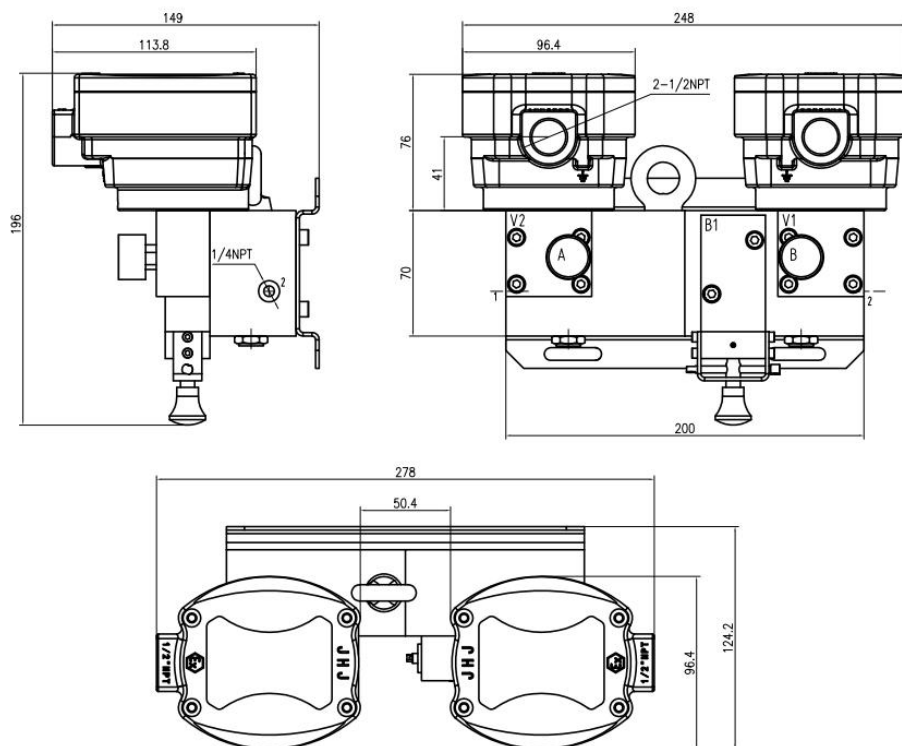
1oo2 is without online maintenance and diagnosis function; 2oo2 is without online maintenance and diagnosis function; the external dimensions are the same, Applicable to air line 1 and 3

Coils optional



1oo2 (2oo2) Redundant valve group + S05 Coil housing

Unit: mm Weight: 12.2kg



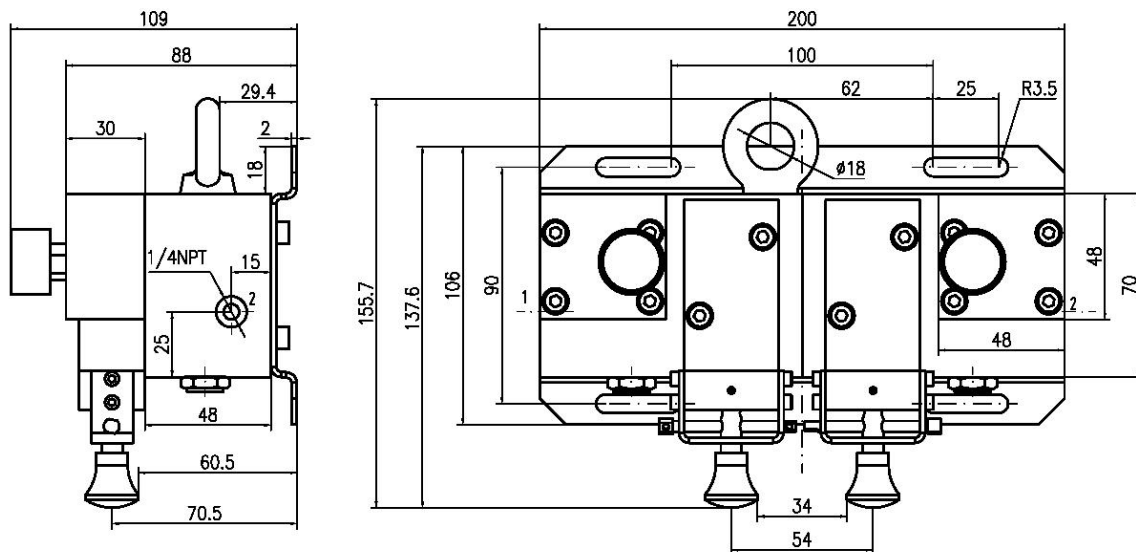
1oo2 with bypass valve, without diagnostic function; 2oo2 with bypass valve, with diagnostic function; same overall dimensions, Applicable to gas path 2 and 5

Coils optional



2oo2 Redundant Valve Installation Dimensions

Unit: mm Weight: 14.2kg



Note: This valve body dimension is not repeated in the outline dimension drawing of each explosion-proof enclosure of DA series.

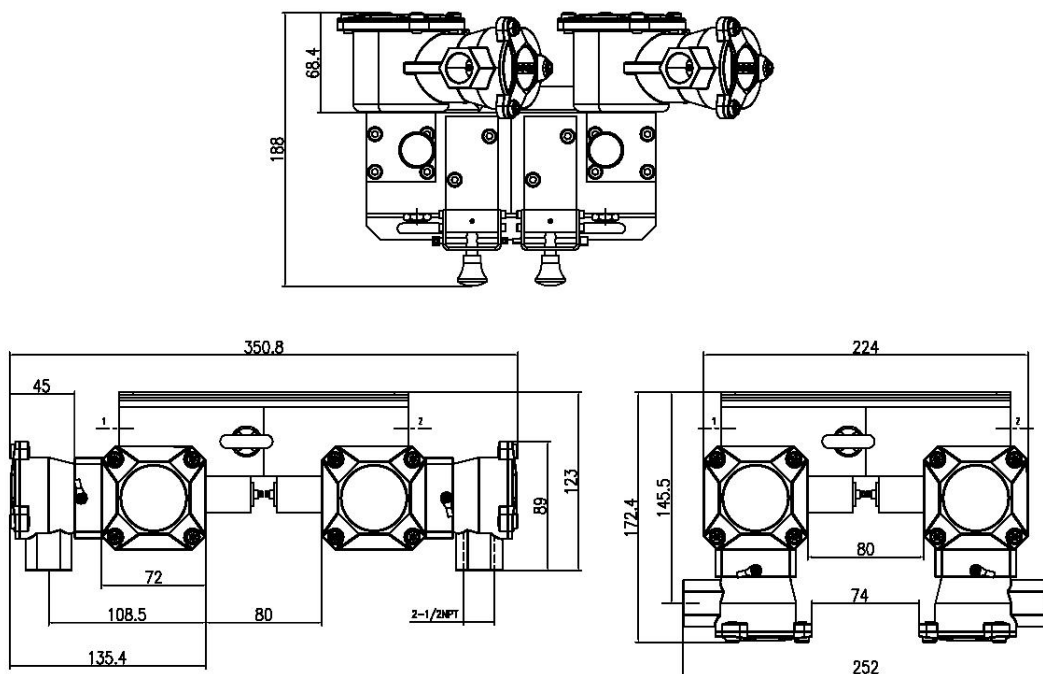
Optional explosion-proof coil type



2oo2 Redundant valve group + S01 Enclosure

Unit: mm

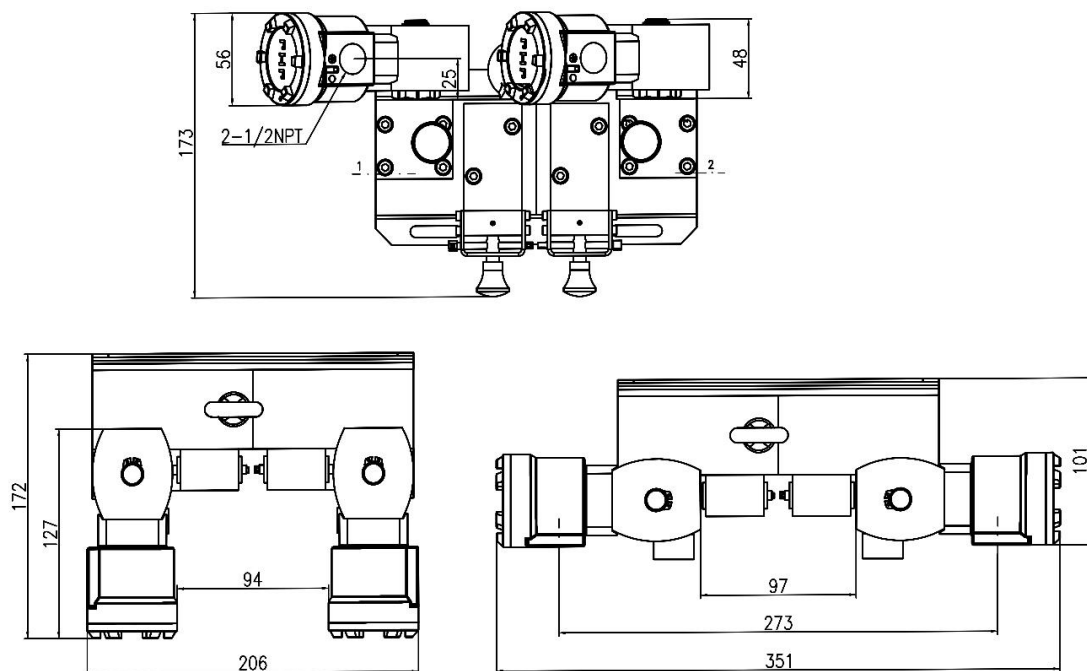
Weight: 16 Kg



2oo2 Redundant valve group + S02 Enclosure

Unit: mm

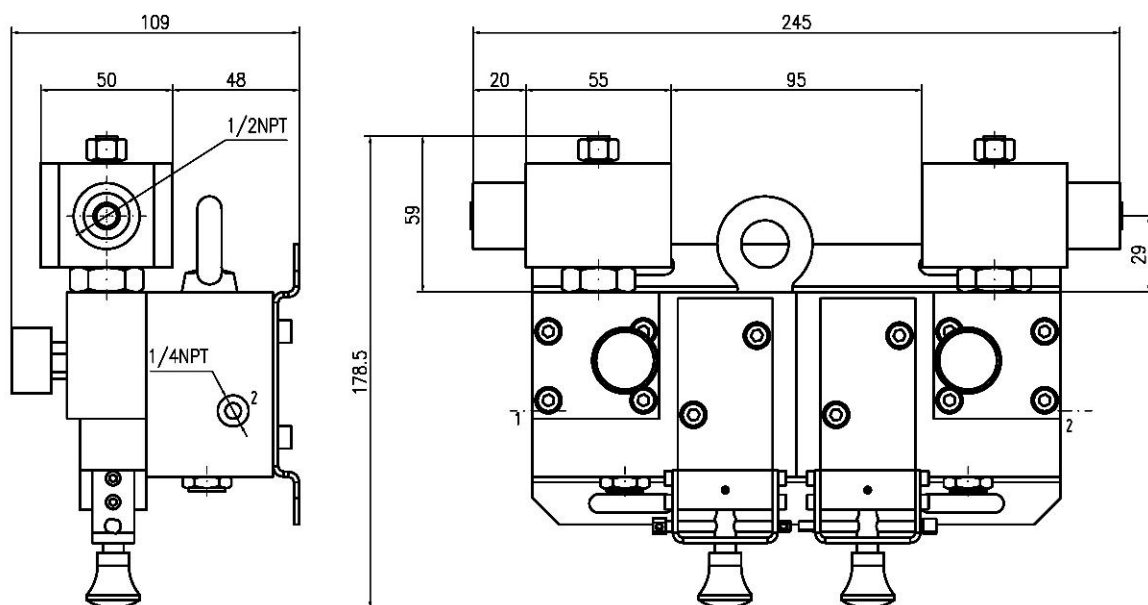
Weight: 15.8 Kg



2oo2 Redundant valve group + S04 Enclosure

Unit: mm

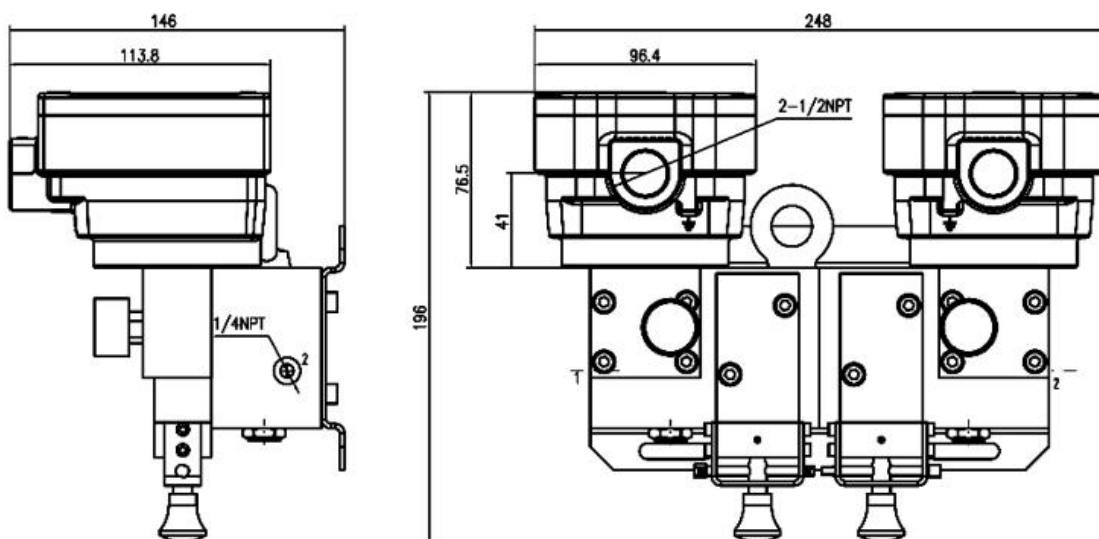
Weight:15.5 Kg



2oo2 Redundant valve group + S05 Enclosure

Unit: mm

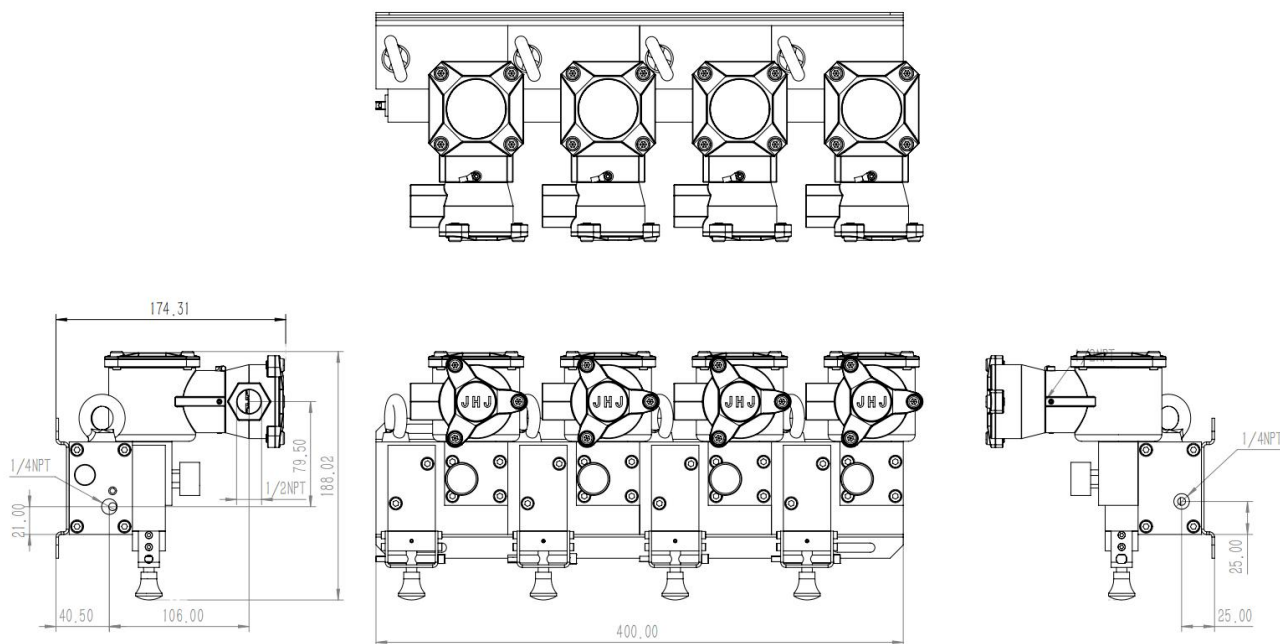
Weight:18 Kg



2oo3 Redundant valve group + S01 Enclosure

Unit: mm

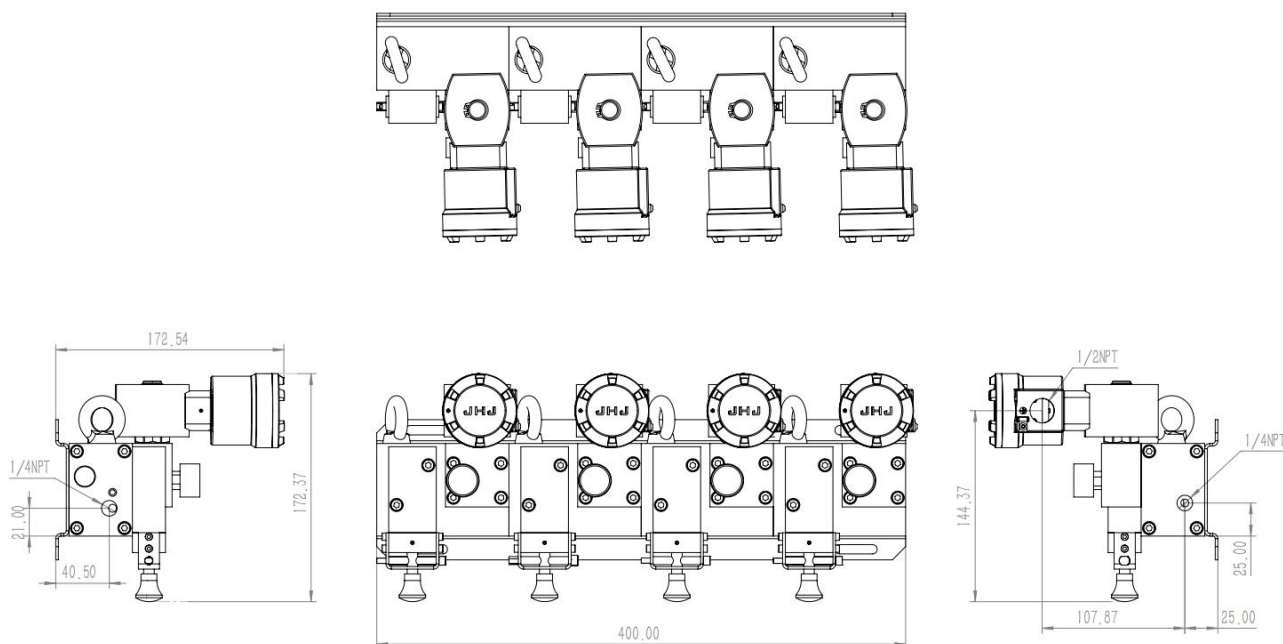
Weight: 35 Kg



2oo3 Redundant valve group + S02 Enclosure

Unit: mm

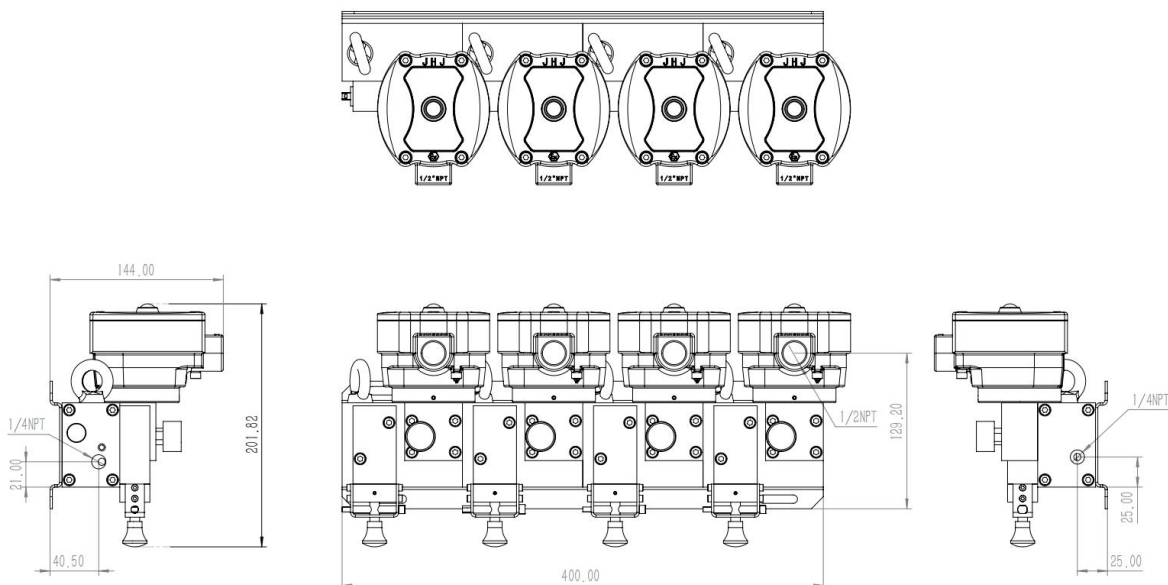
Weight: 32.2 Kg



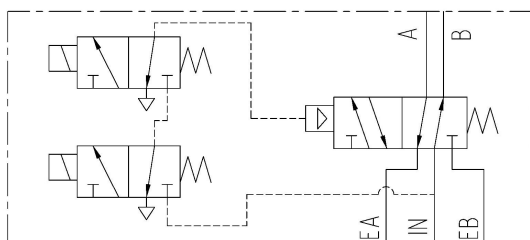
2003 Redundant valve group + S05 Enclosure

Unit: mm

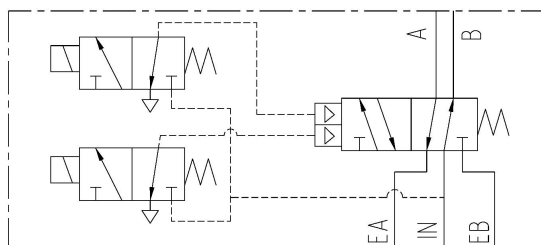
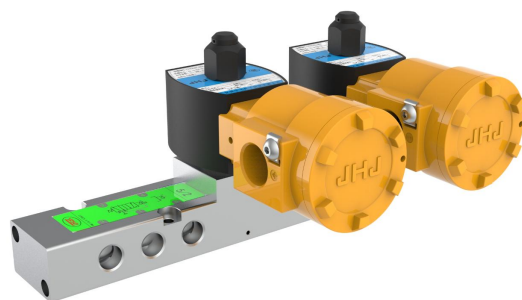
Weight: 36 Kg



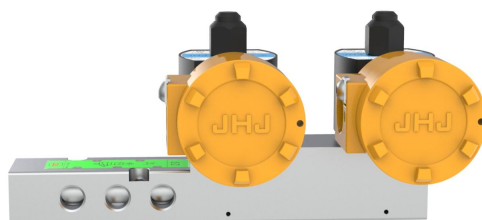
Redundant Valve Group 1002/2002 based on 2-Position 5-Way Pilot Series



Schematic diagram of pilot type 1002 solenoid valve



Schematic diagram of pilot type 2002 solenoid valve

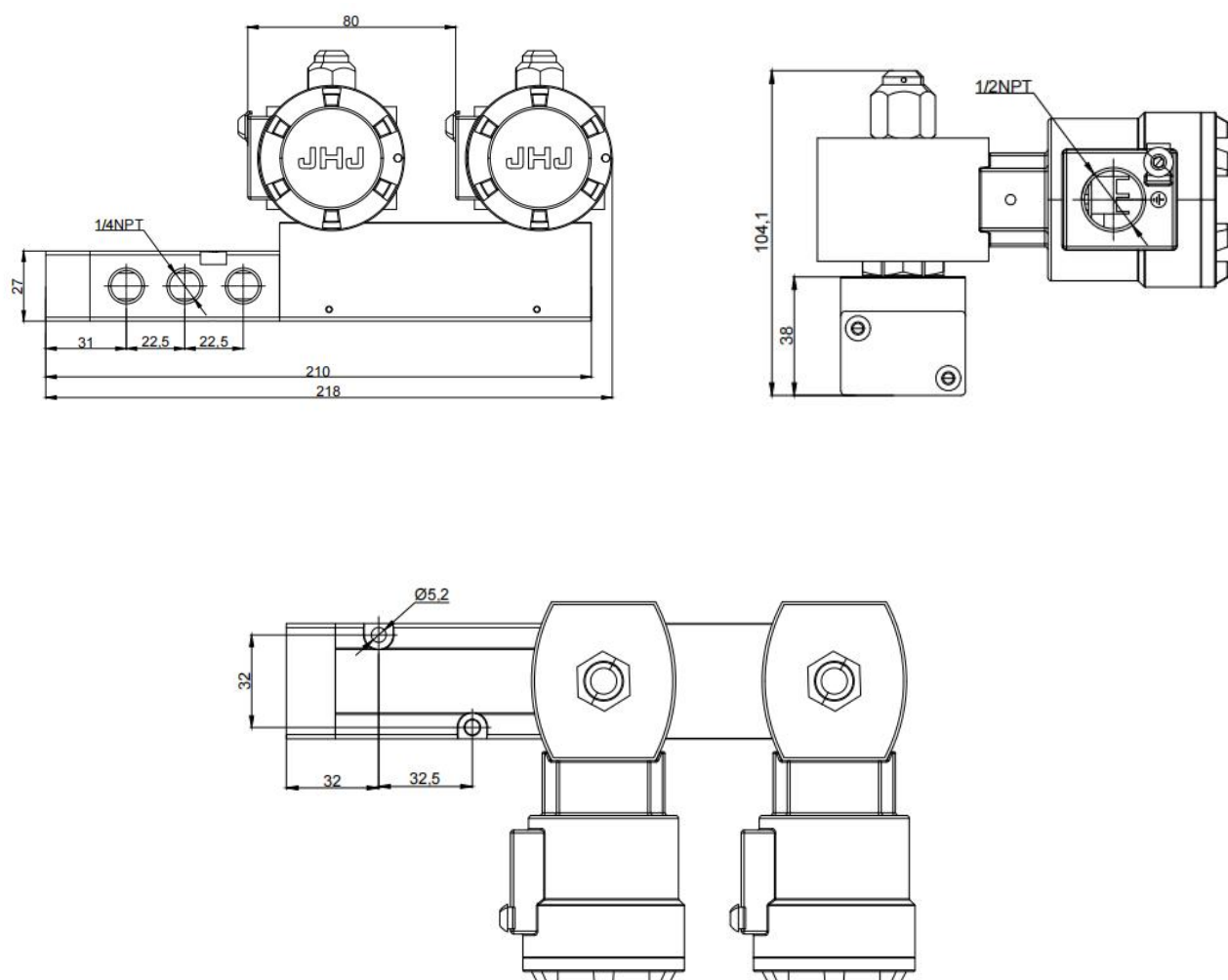


Note: The online replacement function is not available for the pilot type. For details, please consult the sales staff of JHJ.

Optional explosion-proof coils

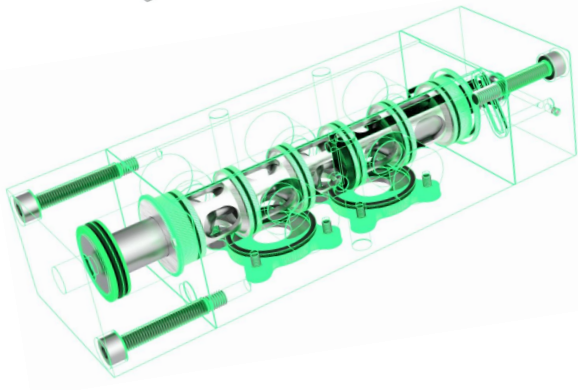
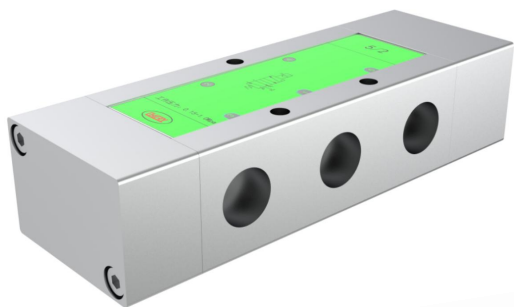


Dimension of Redundant valve group 1oo2/2oo2 for 2-position 5-way pilot series
Unit: mm Weight: 11 kg



Note: The pilot structure is redundant 1oo2/2oo2, and the overall dimensions and installation dimensions are completely consistent.

Pneumatic control valve (spacer structure),
Air supply connection size 1/2 "NPT; signal air
supply connection size 1/8" NPT,
Piping and NAMUR integrated design.



Material of main components

Valve body	316 ss/Aluminum alloy
Valve stem	316 stainless steel
Spool spring	304 stainless steel
Spacer	Aluminum alloy 6061/POM
Piston	Aluminum alloy 6061
Sealing	VMQ

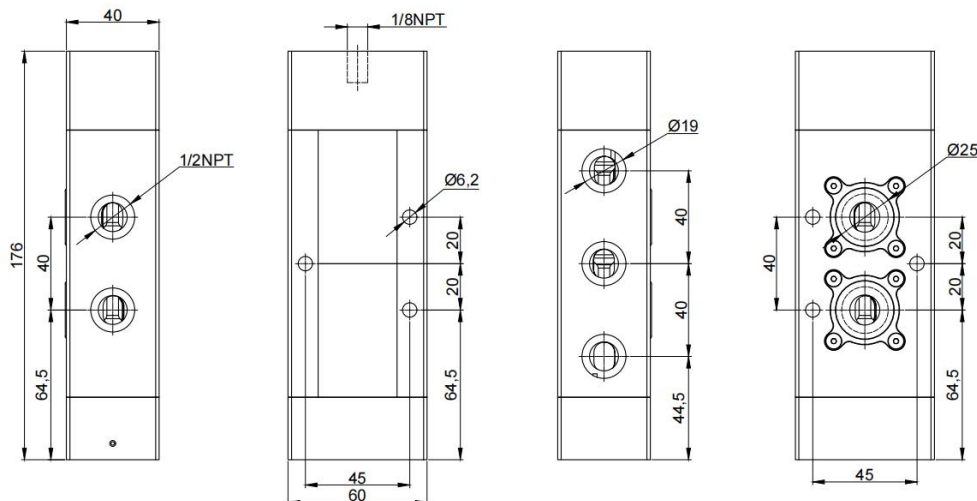
Product overview

The pneumatic control valve adopts the spacer type slide valve structure, which can effectively reduce the wear of the sealing ring and greatly improve the service life. The sealing is reliable. The integrated design of pipe connection type and NAMUR type has better cost performance. The sealing materials are optional, including HNBR, VITON and other low-temperature resistant materials (hydrogenated nitrile and fluororubber), which are widely used in power, oil and gas, chemical, pharmaceutical, metallurgical and other industries.

Product features

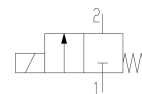
- Spacer-type slide valve structure for longer service life
- Integrated design of pipe connection type and NAMUR type, with better cost performance
- Air supply connecting pipe caliber 1/2 "NPT
- Signal air source interface 1/8 "NPT
- Suitable for harsh environments
- Large flow
- Static seal, automatic seal compensation
- The overall structural design shall comply with IEC specifications.
- Standard medium: air, inert gas

Dimension drawing of 1/2" stainless steel pneumatic control valve NAMUR/pipe connection type



Basic parameters—Air control valve SSAM (Air control valve -NAMUR) SSAV (Air control valve - pipe connection type)

Model	Medium	Nominal diameter	Nozzle thread	Ambient temperature (°C)	Working pressure (MPa)	Flow rate (L/min)	Commutati on time	Weight (Kg)
SSAM551-15	Gas	12	3/8	-40~80	0.2~1.0	2400	35(ms)	1.07
SSAM351-15			1/2					1
SSAV551-15		12	3/8			2400		1.07
SSAV351-15			1/2					1



GY series solenoid valve, the maximum diameter is 4mm, the maximum working pressure is 25MPa, and the coil can be S01/S02/S04/S05/S06.



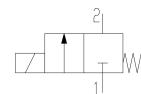
Product overview

With compact structure, reliable sealing and convenient maintenance, GY series solenoid valves are widely used in electric power, oil and gas, chemical, pharmaceutical, metallurgy and other industries. The unique noise reduction design can also meet the needs of military industry. They are suitable for water, steam, oil and other general working media. At present, this product has adequate models and can meet the selection in various environments and working conditions.

Product features

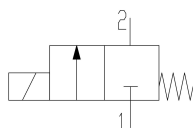
- Working nozzle caliber 1/8 "NPT, 1/4" NPT, nozzle optional
- Refer to IEC61508 or GB20438 for functional safety
- Response time: $\leq 100\text{ms}$
- Coil can be charged for a long time (low power consumption type)
- Working pressure: 0-25 MPa
- Valve core structure: normally open, normally closed optional
- Unique noise reduction design
- The overall structural design shall comply with IEC specifications.

Junction box	316 ss/Aluminum alloy ADC12
Valve body	316 ss/316L ss/Brass
Moving core	Silicon steel
Permeable tube	316 stainless steel
Static core	Soft magnetic alloy + surface passivation treatment
Spool spring	304 stainless steel
Sealing	VMQ
Compression nut	316 stainless steel
Spool	316 stainless steel

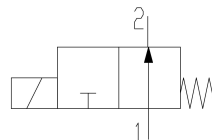


Process Control Solenoid Products

GY Series Solenoid Valve
(Normally Closed)



GY Series Solenoid Valve
(Normally Open)



GY Series Solenoid Valve



GY series + S02
electromagnetic head



GY series + S05
electromagnetic head

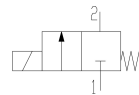


GY series + S06
electromagnetic head

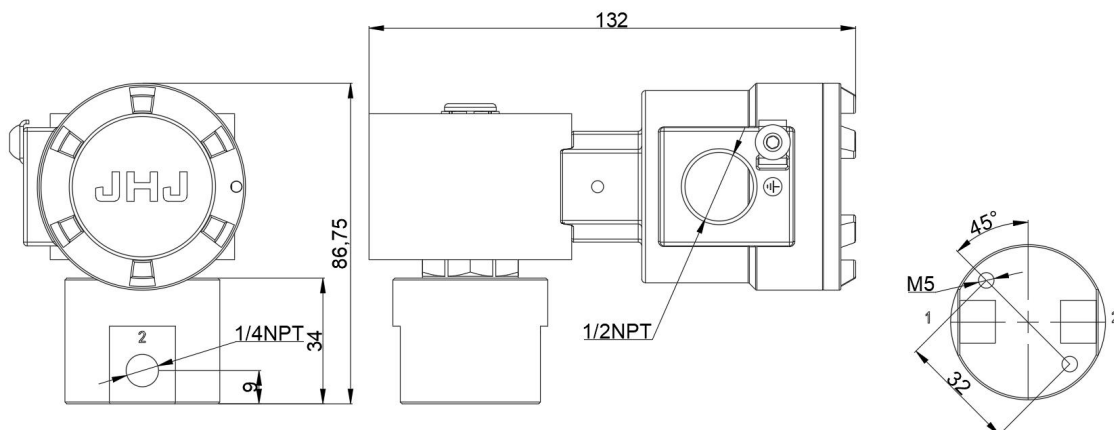
Basic parameters

Basic parameters-Direct-acting high pressure solenoid valve	
Valve body material	316 ss/316L ss/Brass
Working voltage	DC24V / AC110V / AC220V (can be customized)
Working pipe connection	NPT thread, G thread, customized thread
Spool diameter	1mm-4mm
Spool structure	Normally open (NO) /Normally close (NC)
Working pressure	0-25MPa
Working medium	Liquid, Gas
Sealing material	Nitrile rubber (NBR), hydrogenated nitrile rubber (HNBR), fluororubber (FPM), silicone rubber (VMQ)

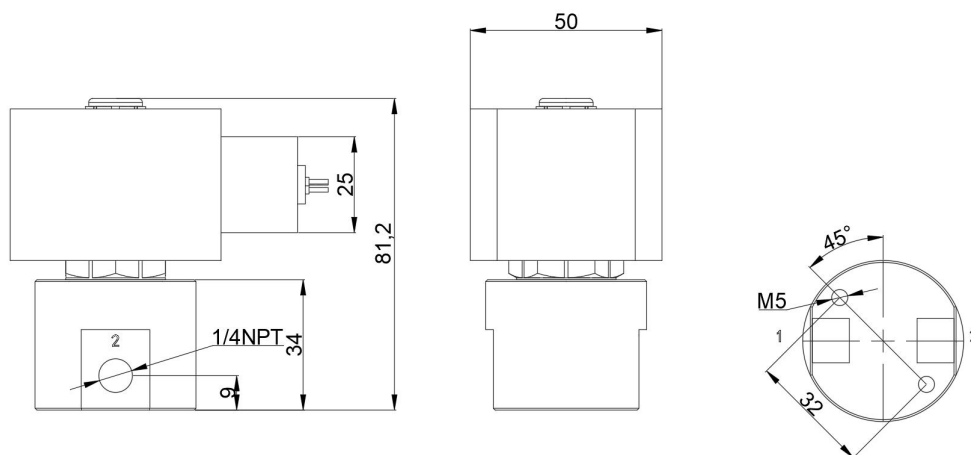
Note: ①316L material needs to be customized



Dimension Drawing of Solenoid Valve with S02 Coil Unit: mm



Dimension Drawing of Solenoid Valve with S04 Coil Unit: mm

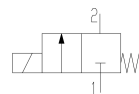


Dimension table of direct-acting high pressure solenoid valve (standard)

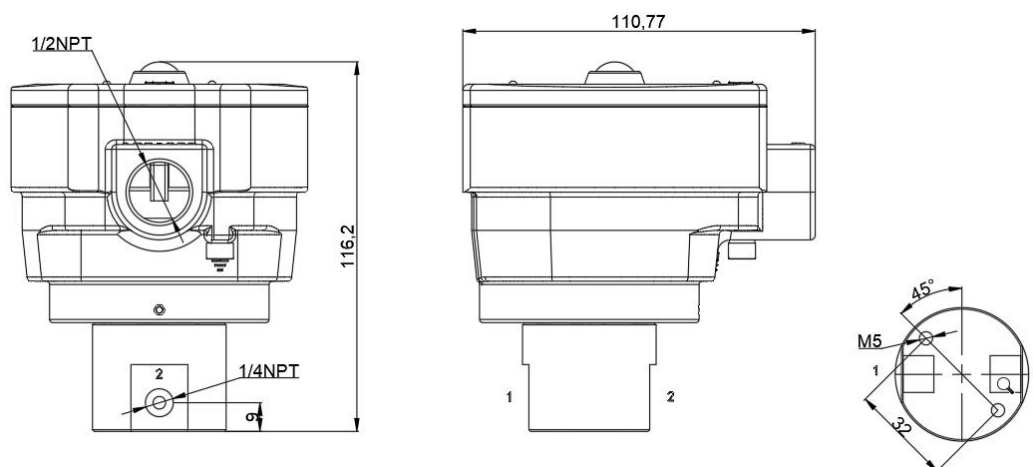
Weight: Kg

Coil code	Valve body code	A (Electric connection)	1 and 2 (Pipe connection size)	Aluminum alloy	Stainless steel
S02	Z11C21V12R20	1/2NPT	1/4NPT	1.126	1.756
S04	Z11C21X12R20	1/2NPT	1/4NPT	—	0.989

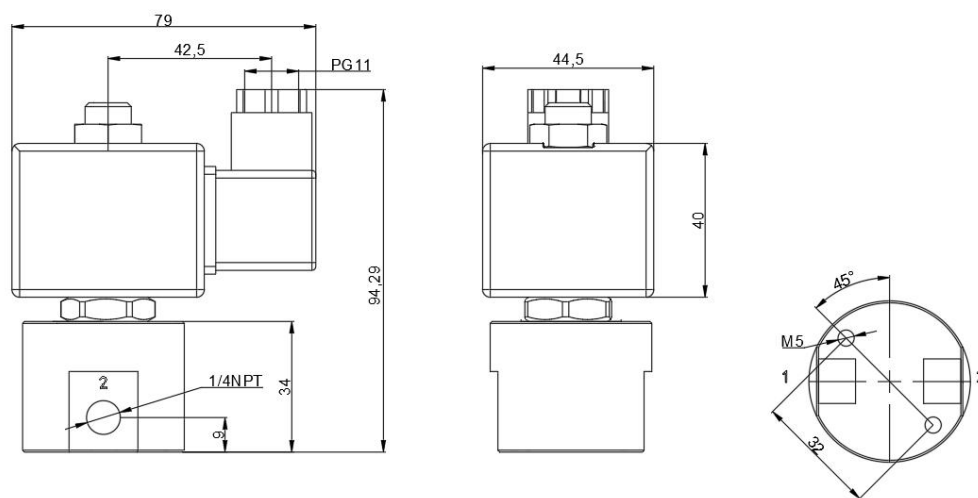
This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.



Dimension Drawing of Solenoid Valve with S05 Unit: mm



Dimension Drawing of Solenoid Valve with S06 Unit: mm

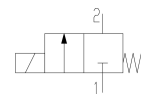


Dimension table of direct-acting high pressure solenoid valve (standard)

Weight: Kg

Coil code	Valve body code	A (Electric connection)	1 and 2 (Pipe connection size)	Aluminum alloy	Stainless steel
S05	Z11C21Y12R20	1/2NPT	1/4NPT	1.126	1.756
S06	Z11C21Z12R20	PG11	1/4NPT	—	0.989

This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.



Z series two-way solenoid valve, the maximum diameter is 4mm, the maximum working pressure is 3MPa, and the coil can be S01/S02/S04/S05/S06



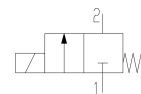
Product overview

Z series two-way solenoid valve, with compact structure, reliable sealing and convenient maintenance, is widely used in electric power, oil and gas, chemical, pharmaceutical, metallurgy and other industries. Its unique noise reduction design can also meet the needs of military industry. It is suitable for water, steam, oil and other general working media. At present, this product has adequate models and can meet the selection in various environments and working conditions.

Product features

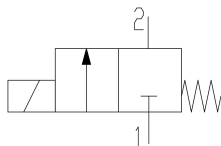
- Working pipe connection 1/8 "NPT, 1/4" NPT, nozzle optional
- Refer to IEC61508 or GB20438 for functional safety
- Response time: $\leq 50\text{ms}$
- Coil can be charged for a long time (low power consumption type)
- Working pressure: 0-3MPa
- Valve core structure: normally open, normally closed optional
- Unique noise reduction design
- The overall structural design shall comply with IEC specifications.

Junction box	316 ss/Aluminum alloy ADC12
Valve body	316 ss/ 316L ss/ Brass
Moving core	430 stainless steel
Permeable tube	316 stainless steel
Static core	Soft magnetic alloy + surface passivation treatment
Spool spring	304 stainless steel
Sealing	VMQ
Compression nut	316 stainless steel
Spool	316 stainless steel

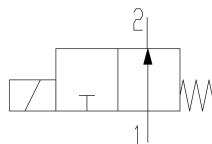


Process Control Solenoid Products

Z Series 2-Way Solenoid Valve (Normally Closed)



Z Series 2-Way Solenoid Valve (Normally Open)



Z Series 2-Way Solenoid Valve



Z series solenoid valve + S02 electromagnetic head



Z series solenoid valve + S05 electromagnetic head



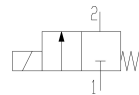
Z series solenoid valve - S06 coil

Basic parameters

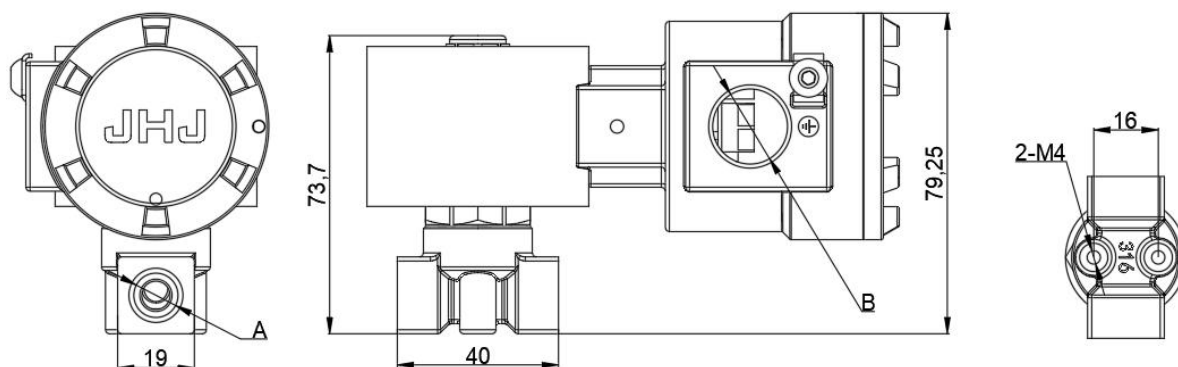
Basic parameters: Direct-acting 2-position 2-way solenoid valve

Valve body materials	BS (316) / 316L ^① / BA (Aluminum alloy)			
Working voltage	DC24V / AC110V / AC220V (can be customized)			
Working pipe connection	NPT thread, G thread, customized thread			
Spool diameter	1.2mm	2.4mm	3.2mm	4mm
Flow coefficient Cv	0.05	0.17	0.29	0.43
Spool struction	Normally open (NO) /Normally close (NC)			
Working pressure	0-3MPa			
Working medium	Liquid, Gas			
Sealing materials	Nitrile rubber (NBR), Hydrogenated nitrile rubber (HNBR), Fluororubber (FPM), Silicone rubber (VMQ)			

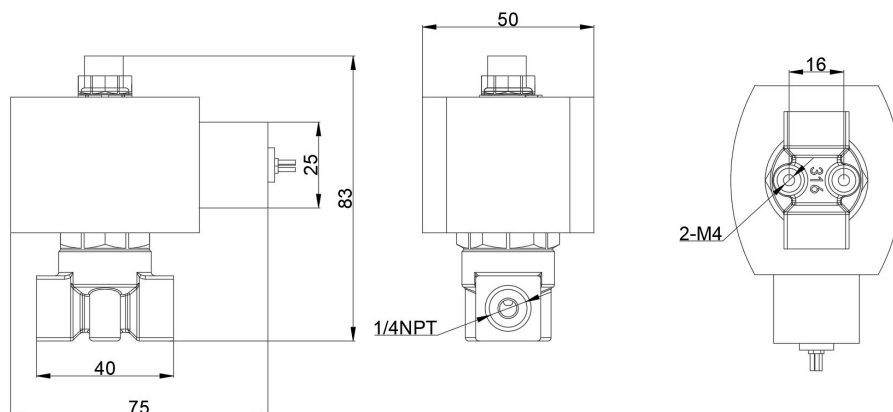
Note: ① 316L material needs to be customized.



Dimension Drawing of Z Series Solenoid Valve with S02 coil Unit: mm



Dimension Drawing of Z Series Solenoid Valve with S04 coil Unit: mm

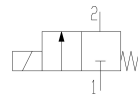


Dimension table of Z series solenoid valve (standard)

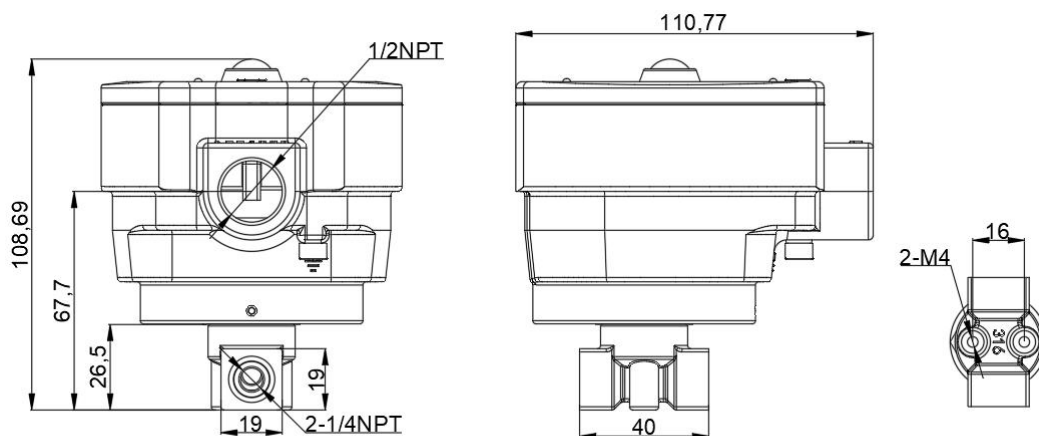
Weight: Kg

Coil code	Body code	A (Electric connection)	1 and 2 (Pipe connection size)	Aluminum alloy	Stainless steel
S02	Z11C21V12R20	1/2NPT	1/4 NPT	1.126	1.756
S04	Z11C21X12R20	1/2NPT	1/4 NPT	—	0.989

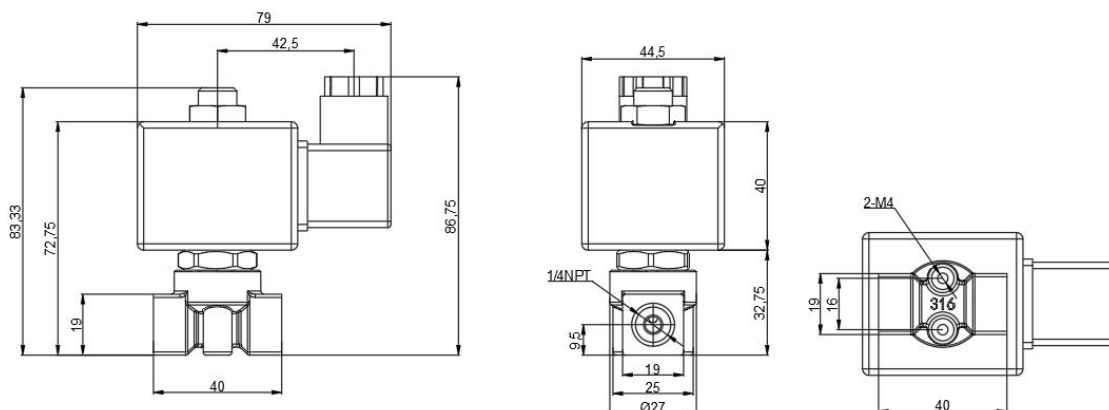
This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.



Dimension Drawing of Z Series Solenoid Valve with S05 coil Unit: mm



Dimension Drawing of Z Series Solenoid Valve with S06 coil Unit: mm



Dimension table of Z series solenoid valve (standard)

Weight: Kg

Coil code	Body code	A (Electrical interface)	1 and 2 (Pipe connection size)	Aluminum alloy	Stainless steel
S05	Z11C21Y12R20	1/2NPT	1/4NPT	1.126	1.756
S06	Z11C21Z12R20	PG11	1/4NPT	—	0.989

This table is the standard configuration. You can choose other configurations in the order example. For details, please consult the JHJ sales manager.

Industrial applicaton

JHJ brand solenoid valve



Ordering example

RD											Redundant code
XS01X XS02X XS03X XS04X XS05X											Coil selection
BS 316 stainless steel BA Aluminum alloy											Body material
8 1/4 " MPT ANSI 1.20.3 G 1/4 " ISO228/1 4 1/2 " NPT 4G 1/2 " ISO228/1											Interface size
A-1oo2 basic function, without online maintenance and logic switching B-1oo2 function, with online maintenance and logic switching C-2oo2 basic function, no online maintenance, no logic switching D-2oo2 function, with online maintenance and logic switching E-2oo3 basic functions, no online maintenance, no logic switching F-2oo3 function, with online maintenance and logic switching											Function description
S nitrile rubber (standard type) (-20 °C to + 80 °C) SA hydrogenated nitrile rubber (low temperature type) (-30 °C to + 90 °C) V Viton (-40 °C to + 170 °C) AL silicone rubber (-60 °C to + 130 °C)											Sealing material
DA Direct acting PA Pilot type											Mode of action
24 24V DC 110 110V AC 220 220V AC											Working voltage
EP1-1/2NPT EP2-M20*1.5											Electric connection
1.8 1.8W 3.7 3.7W 10 10W 24.4 24.4W											Power
x											Special code
S02	BA	8	32	S	DA	24	N	10			
Model preparation: RDS05BS8DSDA24EP13.7X											


Ordering example

(A) ●S01X ●S02X ●S03X ●S04X ●S05X ●S09X Note: Prefix A is for those made of aluminum alloy											Coil code			
S02	BS 316 stainless steel BA Aluminum alloy BR Brass										Body material			
		9	1/8 "					G	G Pipe thread			Interface size		
		8	1/4 "					●	NPT thread					
		5	3/8 "											
		4	1/2 "											
		3	3/4 "											
		32 two-position three-way pipe connection type 32T two-position three-way NAMUR type 52 Two-position five-way pipe connection type 52T two-position five-way NAMUR type 53 Three-position five-way pipe connection type 53T Three-position five-way NAMUR type										Body structure		
			S Standard type (-25℃ to +80℃) SA Low temperature type (-30℃ to +90℃) V Fluorine rubber (-40℃ to +170℃) AL Silicone rubber (-60 ℃ to + 130 ℃) EP Ethylene propylene diene monome (-70℃ to +130℃)										Temperature resistance	
				DA Direct acting type PA Pilot type										Structural form
					24 24V DC 24A 24V AC 110 110V AC 110D 110V DC 220 220V AC 220D 220V DC									
					M Manual operation with retention function MR Manual reset N Without manual operation									
								1.4 1.4W 1.8 1.8W 3.7 3.7W 6 6W 10 10W 15 15W 20 20W		Power				
									D Double electronic control S single electronic control This option is for pilot type only		Single and double electronic control			
											I =Coil energized indication WI = Waterproof detection function GI = Valve position indication function WGI = Dual Function WI and GI P = Waterproof coil	Special code		
S02	BA	8	32	S	DA	24	N	10						
Model preparation: S02BA832SDA24N10GI														



- S06 series direct-acting solenoid valve can only select 6 W
- The default electrical interface is 1/2 NPT. If other specifications are required, please specify.

Order accessories (Including)

NAMUR accessories




X2

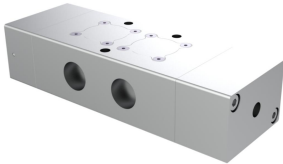
X2



Pipe connection accessories



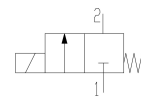
X2



Ordering example

SSAM (Pneumatic control valve NAMUR) SSAV (Pneumatic control valve Pipe connection)					Body type
	5 Two-position five-way 3 Two-position three-way				Body structure
	12 (Nominal diameter 12)				Nominal diameter
	1 (Single pneumatic control) 2 (Double pneumatic control)				Single and double pneumatic control
			5 3/8 "	4 1/2 " N (NPT) Default	Interface size
SSAM	5	12	1	5	

Model preparation: SSAM51215



Ordering example

GY (Direct acting high voltage) Z (Direct acting) X (Pilot type)										Body code	
1 (304) /2 (Aluminum alloy) /3(316)/4(316L)										Body material	
1mm/1.5mm/2mm/2.5mm/** mm										Spool diameter	
A 1/8 " N NPT Thread C 1/4 " F Flange E 3/8 " G 1/2 " H 3/4 " K 1 " L 1 1/4 " M 1 1/2 " N 2 "										Air supply connection pipe	
1 (Normally open) 2 (Normally close)										Control mode	
1 Nitrile rubber (standard type) (-20°C to+80°C) 2 Hydrogenated nitrile rubber (low temperature type) (-30°C to +90°C) 3 Fluorine rubber. (-40°C to+170°C) 4 Silicone rubber (-60°C to+130°C) 5 Ethylene propylene diene monomer (-70°C to+130°C) 6 Tetrafluoro (High pressure 6MPa and above)										Sealing material	
U (S01) V (S02) X (S04) Y (S05) Z(S06)										Coil model	
1 (316) /2 (Aluminum alloy)										Coil material	
1 4W 2 10W 3 15W 4 20W										Power	
R 24V DC S 110V AC T 220V AC										Working voltage	
kg/cm ²										Nominal pressure	
Z	1	1	CN	2	1	V	1	2	R	20	

Model preparation: Z11C21V12R20

Dingzhou Yufei Electronic Technology Co., Ltd

Professional manufacturer of solenoid
valve products