

2 Position 2 Way Solenoid Valves

This kind of valve widely used in wide different industry, you can find the valve with different material like brass, stainless steel, engineering plastic, and they are used for pressure range from 0 to 50 bar, temperature from -10 °C to 180°C. If there is no current models with your meet, please contact us, we are available to provide specialized valves according to your requirement.



General Information About Solenoid Valve

Inner structure and categories of two way solenoid valves 

Direct acting solenoid valves

Including normal close style (N.C.) and normal open style(N.O.). The N.C. style solenoid valve stay close at power off condition. When power on, the coil yields electricity-magnetic force, which exceed the spring force and hence pulls active armature approaching to static armature, the valve becomes open; when power off, the electricity-magnetic force disappear and the active armature go back to its original place by the spring force, the valve close. The N.O. style is just opposite. These valve are normally simple structure, dependable action, fast response, high, frequency and with $\leq 6\text{mm}$ small orifice size(N.O. style $\leq 4\text{mm}$).

Diaphragm pilot solenoid valves

This style valve makes main valve and pilot valve together, when power on, the coil yields electricity-magnetic force pulls active armature approaching to static armature, the pilot valve open and control the main valve to open; when power off, the electricity-magnetic force disappear and with the gravity and spring force, the active armature close the pilot valve, which control the main valve to close. The N.O. style is just opposite. These valve are normally with bigger orifice size and $\leq 10\text{Bar}$ working pressure and with zero differential working pressure.

Piston pilot solenoid valves

Similar with piston pilot solenoid valves, but supports for higher pressure and temperature, with $\geq 1\text{ Bar}$ differential working pressure.

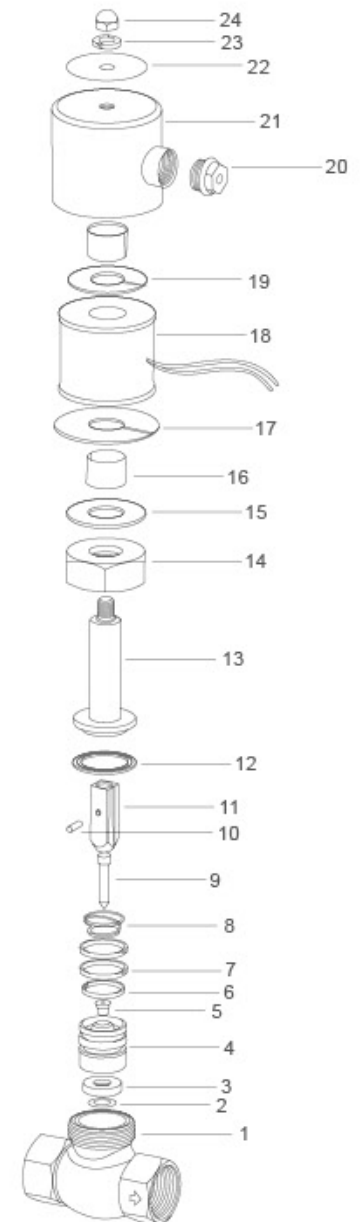
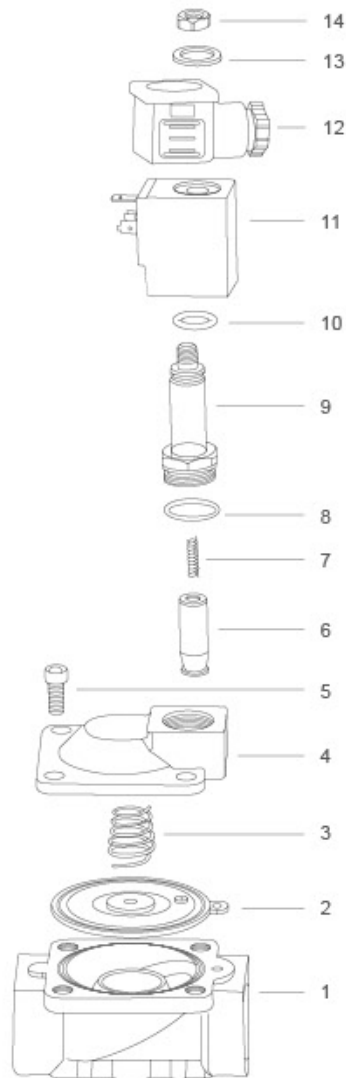
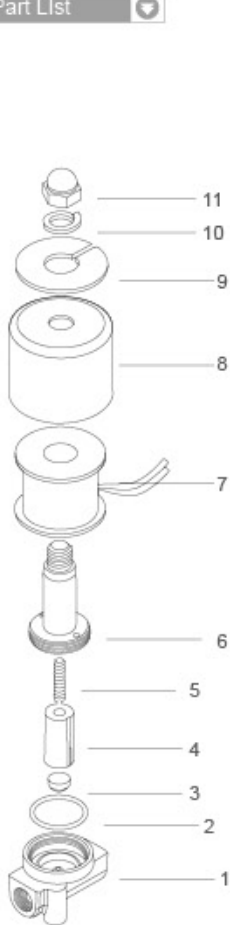
Seal Features 

Material	NBR	HNBR	EPDM	VMQ	FKM	PTFE	PU
Highest working temperature	80℃	120℃	120℃	180℃	120℃	200℃	80℃
Lowest working temperature	-5℃	-10℃	-20℃	-40℃	-20℃	-50℃	-20℃
Anti-burning	×	×	×	△	◎	◎	△
Steam	×	△	◎	○	△	○	×
Oil	◎	◎	×	△	◎	◎	◎
O ₃	△	◎	◎	◎	◎	◎	◎
Chemical	△	○	◎	◎	◎	◎	◎
Acid	△	○	◎	△	◎	◎	×
Alkalinity	○	◎	◎	△	◎	◎	×
Water	○	○	◎	○	○	◎	◎
Wearing	○	◎	○	×	○	◎	◎
Anti distortion	○	○	○	◎	○	×	×
Tension	◎	◎	◎	×	○	×	◎

Description of the symbol: ◎ Very good ○ Good △ Normal level × Not OK

General Information About Solenoid Valve

Part List



No	Designation
1	Valve body
2	O-ring
3	Seal pad
4	Pilot
5	Spring
6	Armature
7	Coil
8	Steel washer
9	Washer
10	Spring washer
11	Nut

No	Designation
1	Valve body
2	Diaphragm
3	Diaphragm spring
4	Valve cover
5	Hexagon screw
6	Pilot units
7	Plunger Spring
8	O-ring
9	Plunger tube assembly
10	O-ring
11	Coil
12	Connector
13	Gasket
14	Lock Nut

No	Designation	No	Designation
1	Valve body	13	Static armature
2	Washer	14	Nut
3	Seal pad	15	Gasket
4	Valve core	16	Bushing
5	Seal	17	Steel plate
6	Gasket	18	Coil
7	Guide ring	19	Steel plate
8	Spring	20	Nut
9	Valve needle	21	Steel cover
10	Pin	22	Min plate
11	Armature	23	Spring washer
12	Seal ring	24	Nut

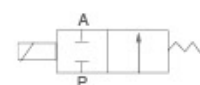


E

2W/2S Normal Open Series Solenoid Valve



Graphic Symbol



Ordering Code

2W

160

10

NO

AC220V

□

Specification Code

2W:Two-position
two-way solenoid
valve (direct drive type)
2S:Stainless steel two
position two way solenoid
valve(direct drive type)

Aperture of Flow Rate

040:4.0mm
160:16mm
200:20mm
250:25mm

Port Size

10:G3/8"
15:G1/2"
20:G3/4"
25:G1"

Initial Estate

NO: Normal Open

Standard Voltage

DC12V DC24V
AC24V 50Hz/60Hz
AC36V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

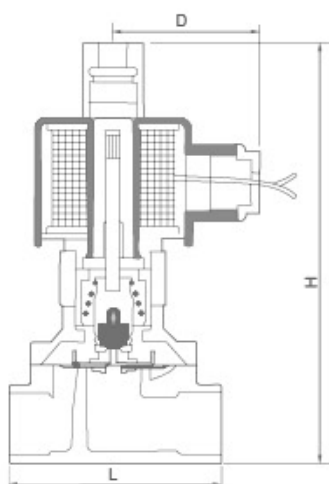
Wiring Form

Blank:Lead Wire Type
D:Joint Connector
E:Blast-proof Coil
G:Water-proof Coil

Specification

Model	2W/2S(040-10NO)	2W/2S(160-10NO)	2W/2S(160-15NO)	2W/2S(200-20NO)	2W/2S(250-25NO)
Working Medium	Air,Water,Oil,Gas				
Motion Pattern	Direct Drive Type				
Type	Normal Open Type				
Aperture of Flow Rate(mm)	4	16	16	20	25
CV Value	0.6	4.8	4.8	7.6	12
Port Size	G3/8"	G3/8"	G1/2"	G3/4"	G1
Operation Fluid Viscosity	20 CST (Below)				
Working-pressure	Water:0~0.5MPa Air:0~0.7MPa Oil:0~0.5MPa Gas: 0~0.7MPa				
Max. Pressure Resistance	1.05MPa				
Operating Temperature Range	-5~+80℃				
Voltage Range	±10%				
Material of Body	2W: Brass; 2S: Stainless steel				
Material of Oil Seal	NBR EPDM or VITON				

Overall Dimensions



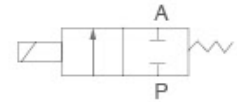
Dimension Sheet

Model	L	H	D
2W040-10NO	53	105	54
2W160-10NO	69	116	62
2W160-15NO	69	116	62
2W200-20NO	73	127	62
2W250-25NO	99	135	62

2W(UD) Series 2/2 Direct Drive Type Solenoid Valve (Small Aperture)



Graphic Symbol



Ordering Code

2W

Specification Code

2W:Two-position Two-way solenoid valve direct drive type
2WH:Two-position Two-way solenoid valve(High pressure direct drive Type)

025

Aperture of Flow Rate

012:1.2mm
020:2.0mm
025:2.5mm
040:4.0mm

08

Port Size

06:G1/8"
08:G1/4"
10:G3/8"

F

Initial Estate

Blank:Pipe Jiont
Ttype
F: Flange Type

AC220V

Standard Voltage

DC12V DC24V
AC24V 50Hz/60Hz
AC36V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

□

Wiring Form

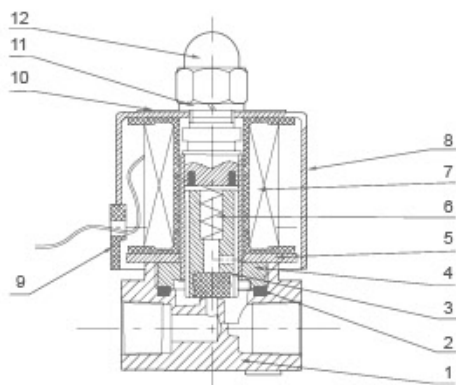
Blank:Lead Wire Type
D:Joint Connector
E:Blast-proof Coil
G:Water-proof Coil

Specifcation

Model	2W025-06	2W025-08	2W040-10	2WH012-06	2WH012-08	2WH020-10
Working Medium	Air,Water,Oil,Gas					
Motion Pattern	Direct Drive Type					
Type	Normal Close Type					
Aperture of Flow Rate(mm)	2.5		4	1.2		2
CV Value	0.23		0.60	0.05		0.15
Port Size	G1/8"	G1/4"	G3/8"	G1/8"	G1/4"	G3/8"
Operation Fluid Viscosity	20 CST (Below)					
Working-pressure	Air,Water,Oil,Gas:0~0.7MPa			Air,Water,Oil:0~2.0MPa		
Max. Pressure Resistance	1.0			3.5		
Operating Temperature Range	-5~+80℃					
Voltage Range	±10%					
Material of Body	Brass					
Material of Oil Seal	NBR EPDM or VITON					

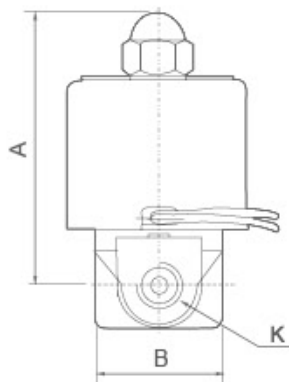
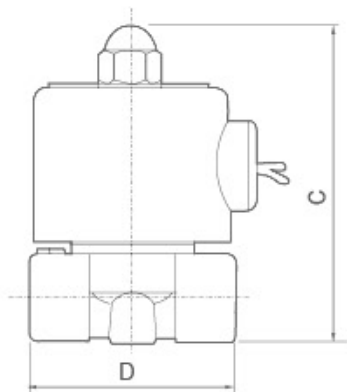
2W(UD) Aperture 2/2 Direct Drive Type Solenoid Valve(Small Aperture)

Internal structure



No	Name
1	Body Of Valve
2	O-ring
3	Assembly Of Iron Core
4	Assembly Of Iron Core
5	Magnetic Plate
6	Spring
7	Assembly Of Coil
8	Iron Cover
9	Cord-locks
10	Name Plate
11	Gasket
12	Head Cover Nut

Overall Dimensions



Dimension Sheet

Symbol/Model	A	B	C	D	K(PT)
2W025-06	66	30.3	75	41.5	G1/8"
2W025-08	66	30.3	75	41.5	G1/4"
2W040-10	74	32.2	85.5	53	G3/8"
2WH012-06	66	30.3	75	40.5	G1/8"
2WH012-08	66	30.3	75	40.5	G1/4"
2WH020-10	74	32.3	85.5	53	G3/8"

2W(UW) Series 2/2 Direct Drive Type Solenoid Valve(Large Aperture)



Graphic Symbol



Ordering Code

2W

Specification Code

2W:Two-position
two-way solenoid
valve (direct drive type)

160

Aperture of Flow Rate

160:16mm
200:20mm
250:25mm
350:35mm
500:50mm

15

Port Size

10:G3/8"
15:G1/2"
20:G3/4"
25:G1"
35:G1 1/4"
40:G1 1/2"
50:G2"

F

Initial Estate

Blank:Pipe Joint Type
F: Flange Type

AC220V

Standard Voltage

DC12V DC24V
AC24V 50Hz/60Hz
AC36V 50Hz/60Hz
AC110V 50Hz/60Hz
AC220V 50Hz/60Hz
AC380V 50Hz/60Hz

□

Wiring Form

Blank:Lead Wire Type
D: Joint Connector

Specification

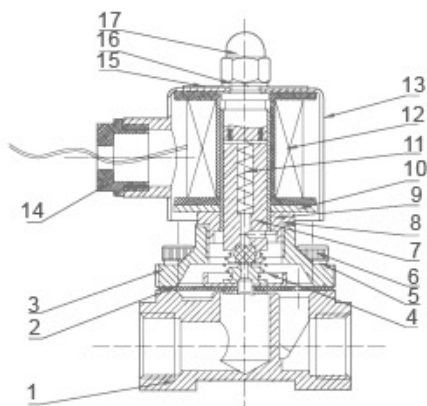
Model	2W160-10	2W160-15	2W200-20	2W250-25	2W350-35	2W400-40	2W500-50
Working Medium	Air,Water,Oil,gas						
Motion Pattern	Direct Drive Type						
Type	Normal Close Type						
Aperture of Flow Rate(mm)	16	20	25	35	40	50	
CV Value	4.8	7.6	12	24	29	48	
Port Size	G3/8"	G1/2"	G3/4"	G1"	G1 1/4"	G1 1/2"	G2"
Operation Fluid Viscosity	20 CST (Below)						
Working-pressure	Air:0~0.7MPa Water:0~0.5MPa Oil:0~0.5MPa Gas: 0~0.7MPa						
Max. Pressure Resistance	1.0MPa						
Operating Temperature Range	-5~+80℃						
Voltage Range	±10%						
Material of Body	Brass						
Material of Oil Seal	NBR EPDM or VITON						



E

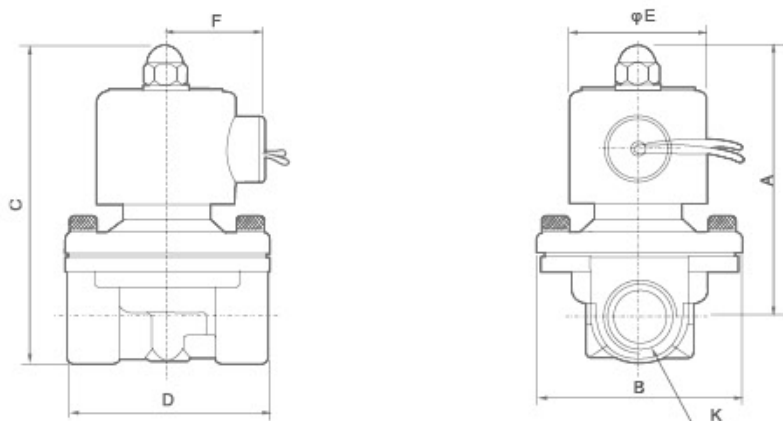
2W(UW) Series 2/2 Direct Drive Type Solenoid Valve(Large Aperture)

Internal structure



NO	Name	NO	Name
1	Body Of Valve	10	Magnetic Plate
2	Assembly Of Diaphragm	11	Spring
3	Valve Cover	12	Assembly Of Coil
4	Pull Spring	13	Iron Cover
5	Gasket	14	Cord-locks
6	Socket Hexagon Screws	15	Name Plate
7	Assembly Of Iron Core	16	Gasket
8	Seal Gasket	17	Head Cover Nut
9	Assembly Of Iron Core		

Overall Dimensions



2W(Large Aperture)

Dimension Sheet

Model	A	B	C	D	E	F	K
2W160-10	101.5	57	117	67	50	36	G3/8"
2W160-15	101.5	57	117	67	50	36	G1/2"
2W200-20	107	57	123.5	72	50	36	G3/4"
2W250-25	111.5	73.5	134.5	92	50	36	G1"
2W350-35	142	95	172	125	70.5	56	G1 1/4"
2W400-40	142	95	172	125	70.5	56	G1 1/2"
2W500-50	172	123	209	168	70.5	56	G2"