

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.

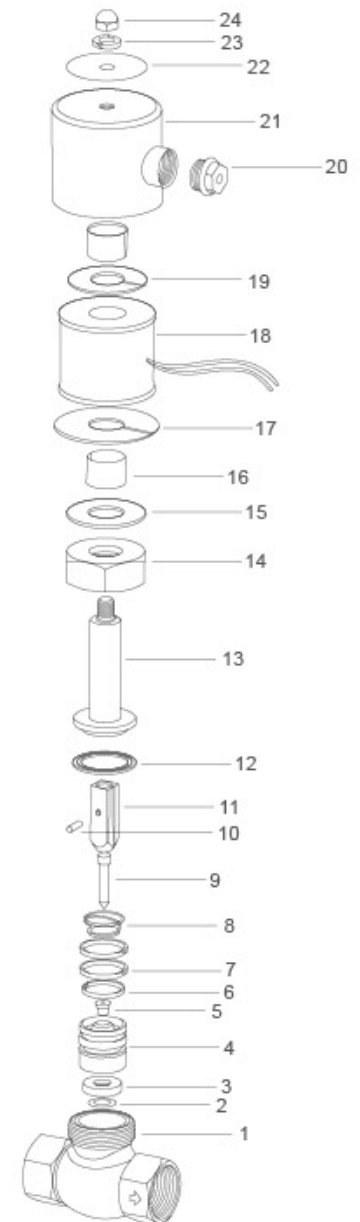
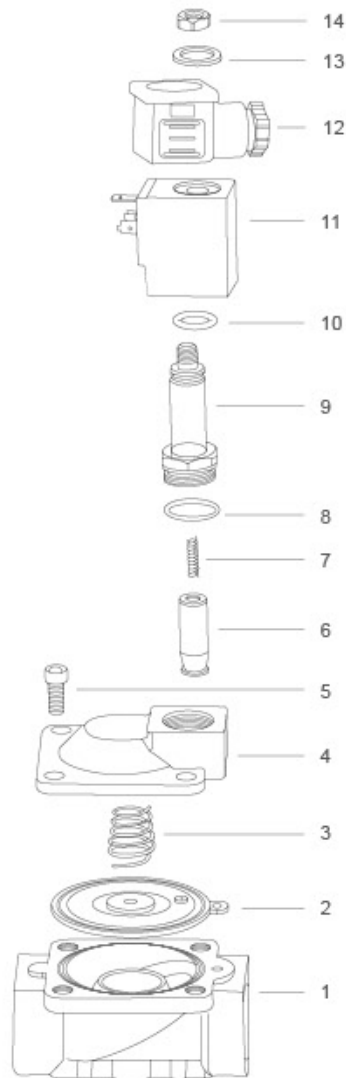
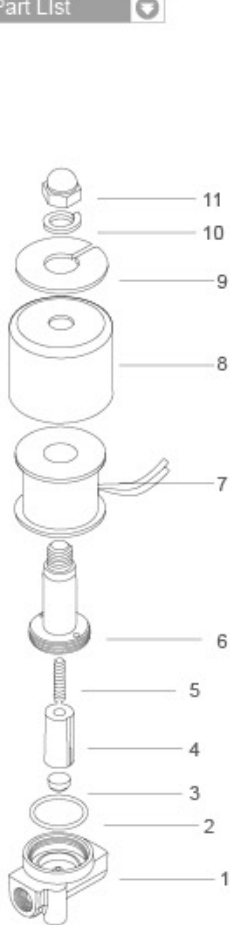
Seal Features 

Material	NBR	HNBR	EPDM	VMQ	FKM	PTFE	PU
Medium Applicability							
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

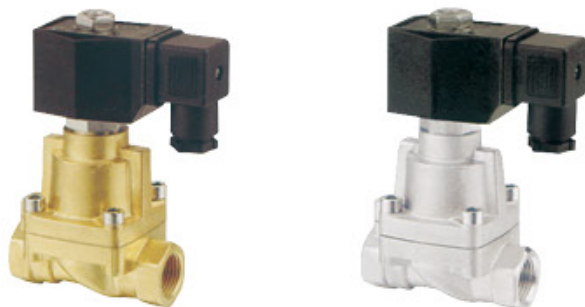
No	Designation
1	Valve body
2	Diaphragm
3	Diaphragm spring
4	Valve cover
5	Hexagon screw
6	Pilot units
7	Plunger Spring
8	O-ring
9	Plunger tube assembly
10	O-ring
11	Coil
12	Connector
13	Gasket
14	Lock Nut

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

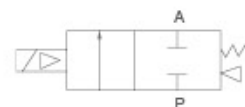


E

THP Series 2/2 Solenoid Valve(Normal Close)



Graphic Symbol



Ordering Code

THP	06	E2		2.5L	S2		
THP Series	Port Size	Voltage	Seal Material	Orifice(mm)	Body material	Control style	Coil type
	06: G1/8" 08: G1/4"	E1: AC110V	T: Teflon	2.5L: 2.5	Blank: Brass	Blank: Normal close	Blank: DIN connector
	10: G3/8" 15: G1/2"	E2: AC220V	V: VITON(N,V,E orifices≤Φ5.5mm optional)	4.5L: 4.5	S1: SS316	H: Normal open	F: Flying leads
	20: G3/4" 25: G1"	E3: AC380V		15L: 15.0	S2: SS304		
	35: G1-1/4"	E4: DC24V		20L: 20.0			
	40: G1-1/2"	E5: DC12V		25L: 25.0			
	50: G2"	E6: AC36V		35L: 35.0			
	25F: 1" Flange	E7: AC24V		40L: 40.0			
	35F: 1-1/4" Flange	E8: DC110V		50L: 50.0			
	40F: 1-1/2" Flange	E9: DC48V					
	50F: 2" Flange	E10: DC36V					

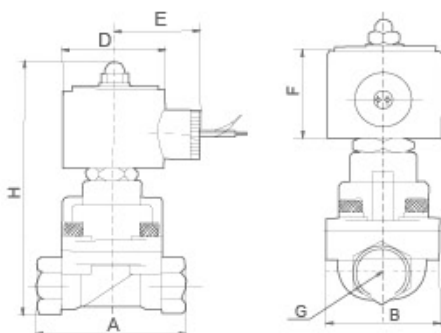
Cancel if same with port size

- THP series, 2 port, 2 position, 1/8" port size, AC110V, NBR Seal, Orifice: 2.5mm, Brass valve body, normal close, DIN coil, model: THP06E1-2.5L
- THP series, 2 port, 2 position, 3/8" port size, AC220V, teflon Seal, Orifice: 15mm, SS304 valve body, normal open, flying leads coil, model: THP10TE2-15LS2HF

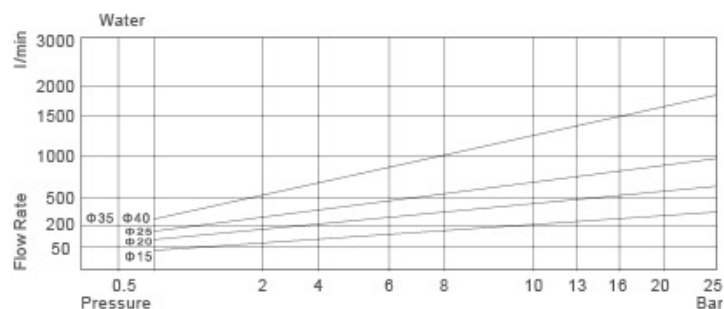
Product Features

- Normal Close, available body: brass, SS304, SS316
- Multiple seals are available for different medium
- Wide size range from 1/8" to 2"
- DIN style / flying leads coil, thread / flange connection
- Piston pilot solenoid valve with high working pressure and temperature

Overall Dimensions



Flow Chart



THP Series 2/2 Solenoid Valve(Normal Close)

Specification

Port size (G)	Orifice (mm)	CV value	Pressure difference(Bar)								Max. temperature (°)	Power		Model 220VAC 50/60Hz		Overall dimension
			Min. pressure	Max.working pressure						VA AC 220		W DC 24V	Brass	Stainless steel	Length ×Width × Height A × B ×H(mm)	
				Air,	Gas	Water、Hot water、 Liquid	Light oil ≤20CST		Steam							
							AC	DC								AC
G1/8"	2.5	0.23	0	8	8	8	8	6	6	10	180	22	13	THP06T-2.5L	-	48×25×85.5
	2.5	0.23	0	13	13	13	13	7	7	10	110	22	13	THP06V-2.5L	-	48×25×85.5
	4.5	0.6	0	7	4	7	4	4	4	7	165	22	13	THP06T-4.5L	-	58×25×85.5
	4.5	0.6	0	7	4	7	4	4	4	7	110	22	13	THP06V-4.5L	-	58×25×85.5
G1/4"	2.5	0.23	0	7	4	7	4	4	4	10	180	22	13	THP08T2-2.5L	-	48×25×85.5
	2.5	0.23	0	13	13	13	4	7	7	10	110	22	13	THP08V-2.5L	-	48×25×85.5
	4.5	0.6	0	7	4	7	4	4	4	7	165	22	13	THP08T-4.5L	-	58×25×85.5
	4.5	0.6	0	7	4	7	4	4	4	7	110	22	13	THP08V-4.5L	-	58×25×85.5
G3/8"	15	4.5	0.5	25	20	25	20	20	20		110	33	32	THP10T-15L	THP10T-15LS2	75×52×129
	15	4.5	0.5	25	20	25	20	20	20	10	185	30	25	THP10T-15LF	THP10T-15LS2F	75×52×129
G1/2"	15	4.5	0.5	25	20	25	20	20	20		110	33	32	THP-15T	THP-15TS2	75×52×129
	15	4.5	0.5	25	20	25	20	20	20	10	185	30	25	THP-15TF	THP-15TS2F	75×52×129
G3/4"	20	9.0	0.5	25	20	25	20	20	20		110	33	32	THP-20T	THP-20TS2	85×60×141
	20	9.0	0.5	25	20	25	20	20	20	10	185	30	25	THP-20TF	THP-20TS2F	85×60×141
G1"	25	13	0.5	25	20	25	20	20	20		110	33	32	THP-25T	THP-25TS2	100×70×148
	25	13	0.5	25	20	25	20	20	20	10	185	30	25	THP-25TF	THP-25TS2F	100×70×148
G1-1/4"	35	26	0.5	25	20	25	20	20	20	10	110	33	32	THP-35T	THP-35TS2	120×90×168
	35	26	0.5	25	20	25	20	20	20		185	30	25	THP-35TF	THP-35TS2F	120×90×168
G1-1/2"	35	26	0.5	25	20	25	20	20	20	10	110	33	32	THP40T-35L	THP40T-35LS2	120×90×168
	35	26	0.5	25	20	25	20	20	20		185	30	25	THP40T-35LF	THP40T-35LS2F	120×90×168
G2"	50	48	0.5	25	20	25	20	20	20		110	33	32	-	THP-50TS2	150×110×190
	50	48	0.5	25	20	25	20	20	20	10	185	30	25	-	THP-50TS2F	150×110×190
G1" Flange	25	13	0.5	25	20	25	20	20	20		110	33	32	-	THPPFT-25LS2	134×110×185
	25	13	0.5	25	20	25	20	20	20	10	185	30	25	-	THPFT-25LS2F	134×110×185
G1-1/4" Flange	35	26	0.5	25	20	25	20	20	20		110	33	32	-	THPFT-35LS2	160×135×200
	35	26	0.5	25	20	25	20	20	20	10	185	30	25	-	THPFT-35LS2F	160×135×200
G1-1/2" Flange	35	26	0.5	25	20	25	20	20	20		110	33	32	-	THPFT-40LS2	160×145×205
	35	26	0.5	25	20	25	20	20	20	10	185	30	25	-	THPFT-40LS2F	160×145×205
G2" Flange	50	45	0.5	25	20	25	20	20	20	10	110	33	32	-	THPFT-50LS2	200×155×250
	50	45	0.5	25	20	25	20	20	20		185	30	25	-	THPFT-50LS2F	200×155×250

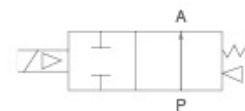


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THP Series 2/2 Solenoid Valve(Normal Open)



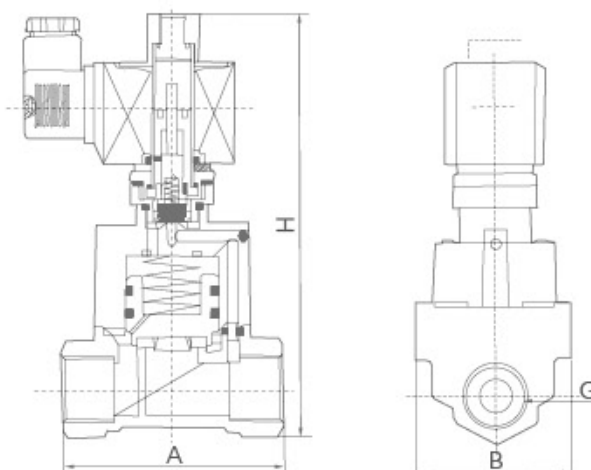
Graphic Symbol



Product Features

- Normal open, available body: brass, SS304, SS316
- Multiple seals are available for different medium
- Wide size range from 1/8" to 2"
- DIN style / flying leads coil, thread / flange connection
- Piston pilot solenoid valve with high working pressure and temperature

Overall Dimensions



Specification

Port size (G)	Orifice (mm)	CV value	Pressure difference(Bar)						Max. temperature (℃)	Power		Model 220VAC 50/60Hz		Overall dimension
			Min. pressure	Max.working pressure				VA AC 220		W DC 24V	Brass	Stainless steel	Length ×Width × Height A × B ×H(mm)	
				Air、Gas	Water、Hot water、 Liquid	Light oil ≤20CST	Steam							
3/8"	15	4.5	0.5	8	8	8	8	130	33	32	THP10T-15LH	THP10T-15LS2H	75×52×147	
	15	4.5	0.5	8	8	8	8	130	33	32	THP10T-15LHF	THP10T-15LS2HF	75×52×147	
1/2"	15	4.5	0.5	8	8	8	8	130	33	32	THP-15TH	THP-15TS2H	75×52×147	
	15	4.5	0.5	8	8	8	8	130	33	32	THP-15THF	THP-15TS2HF	75×52×147	
3/4"	20	9	0.5	8	8	8	8	130	33	32	THP-20TH	THP-20TS2H	85×60×159	
	20	9	0.5	8	8	8	8	130	33	32	THP-20T2HF	THP-20TS2HF	85×60×159	
1"	25	13	0.5	8	8	8	8	130	33	32	THP-25TH	THP-25TS2H	100×70×166	
	25	13	0.5	8	8	8	8	130	33	32	THP-25THF	THP-25TS2HF	100×70×166	
1-1/4"	35	26	0.5	6	6	6	6	130	33	32	THP-35TH	THP-35TS2H	120×90×186	
	35	26	0.5	6	6	6	6	130	33	32	THP-35THF	THP-35TS2HF	120×90×186	
1-1/2"	35	26	0.5	6	6	6	6	130	33	32	THP40T-35LH	THP40T-35LS2H	120×90×186	
	35	26	0.5	6	6	6	6	130	33	32	THP40T-35LHF	THP40T-35LS2HF	120×90×186	
1"	25	25	0.5	8	8	8	8	130	33	32	-	THP-25FE2TS2H	134×110×200	
Flange	25	13	0.5	8	8	8	8	130	33	32	-	THP-25FE2TS2HF	134×110×200	
1-1/4"	35	26	0.5	6	6	6	6	130	33	32	-	THP-35FE2TS2H	160×134×215	
Flange	35	26	0.5	6	6	6	6	130	33	32	-	THP-35FE2TS2HF	160×134×215	
1-1/2"	40	26	0.5	6	6	6	6	130	33	32	-	THP-40FE2TS2H	160×145×200	
Flange	40	26	0.6	6	6	6	6	130	33	32	-	THP-40FE2TS2HF	160×145×200	