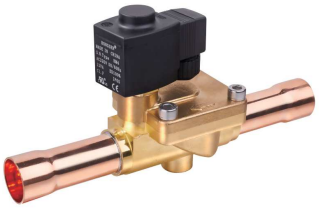
Model HV solenoid valve



Product Description

• Model HV solenoid valve is a one-step on/off or two-step on/off solenoid valve, which is applicable to one-way flow.
• Model HV solenoid valve is used on the piping of liquid, suction gas or hot air on the freezing, cold storage and air conditioner units.
• The valve seat and seals of Model HV solenoid valve have excellent sealing performance.
• Model HV solenoid valve could be supplied with coils of varied voltage.
• Model HV solenoid valve could be supplied in assembly or in separate components, that is, the valve body and the coil could be supplied separately.

Features

• Only NC type solenoid valve is available.
• Coils of various power supply are available for choice.
• For 9W solenoid,MOPD is up to 3.1 MPa.
• For clamping type solenoid valve,it is simple and just need one screwdriver in installation.
• It is suitable to various application in freezing,cold storage and air conditioner units.
• The sealed coil has a long service life and could be used in adverse circumstances.
• Certification • ISO 9001 • QS (XK-015-00246) • CE UL

Technical Parameters

Applicable Refrigerants	HCFC, HFC and related medium viscosity ≤2* E lubricant oil
Applicable Medium Temperature	-30℃~+105℃
Application Ambient Temperature of Solenoid	-40℃~+65℃
Standard Voltage of Solenoid	AC380V、220V、110V、24V/50、60Hz、DC12V
Allowable Voltage Fluctuation for Solenoid	+10%~-15%
Connection of Solenoid	Standard 3-wire insert connector

Model Selection

Structure	Model	Connection		ΔP(bar)		Max Working Pressure(bar)	Kv(m³/h)
		Spec	Type	Min.	MOPD Liquid MOP		
Direct Operated	HV3-2	1/4	SAE	0.0	31 (close)	45	0.2
	HV3-2T		ODF				
	HV3-3	3/8	SAE				0.27
	HV3-3T		ODF				
Servo-Operated	HV8M3		SAE	0.05			0.8
	HV8M3T		ODF				
	HV8M4	1/2	SAE				2.2
	HV8M4T		ODF				
	HV10M4		SAE				
	HV10M4T		ODF				
	HV10M5	5/8	SAE				2.6
	HV10M5T		ODF				
	HV15M5		SAE				
	HV15M5T		ODF				
	HV15M6	3/4	SAE	0.2			2.6
	HV15M6T						
	HV20M7T	7/8	ODF				5.7
	HV25M9T	1-1/8					10

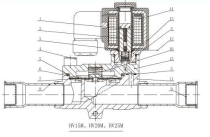
1) Kv value: The flow rate (m^3/h) of water of density $1t/m^3$ passing through the solenoid valve with the pressure differential of 100 KPa.
2) The MOPD of gaseous medium is about 1 bar higher than that of liquid.

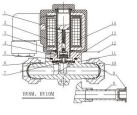
Model	KWNominal Refrigerating Capacity kW											
	Liquid				Air Suction				Hot Vapor			
	R22/R407C	R134a	R404A/R507	R410A	R22/R407C	R134a	R404A/R507	R410A	R22/R407C	R134a	R404A/R507	R410A
HV3-3T	4.03	3.70	2.80	4.02	0.45	0.33	0.40	0.58	1.85	1.48	1.50	2.80
HV8M3T	16.10	14.80	11.20	16.08	1.80	1.30	1.60	2.32	7.40	5.90	6.00	11.18
HV10M4T	38.24	35.15	26.60	38.19	4.28	3.09	3.80	5.51	17.58	14.01	14.25	26.55
HV10M5T												
HV15M5T	52.33	48.10	36.40	52.26	5.85	4.23	5.20	7.54	24.05	19.18	19.50	36.34
HV15M7T	100.63	92.50	70.00	100.50	11.25	8.13	10.00	14.50	46.25	36.88	37.50	69.88
HV20M7T												
HV25M9T	201.25	185.00	140.00	201.00	22.50	16.25	20.00	29.00	92.50	73.75	75.00	139.75

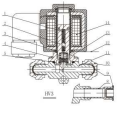
The working condition the nominal refrigerating capacity of liquid and air suction is as follows:
te=-10℃Evaporation Temperature: te = -10℃;
t1=+25℃ Liquid Temperature before Valve: t1 = +25℃;
ΔP=15KPa Pressure Drop after Solenoid Valve: -P = 15KPa

The working condition the nominal refrigerating capacity of hot vapor is as follows:
tc=+40℃ Condensation Temperature: tc = +40℃;
ΔP=0.8bar Pressure Drop after Solenoid Valve: -P = 0.8bar;
th=+65℃ Hot Vapor Temperature: th = +65℃;
Δtsub =4K Liquid Refrigerant Overcooding: -tsub= 4K

Structure

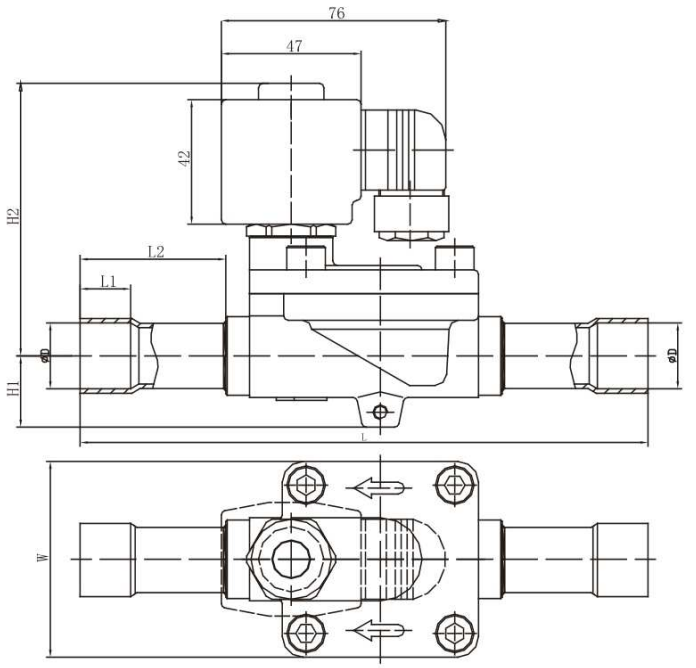




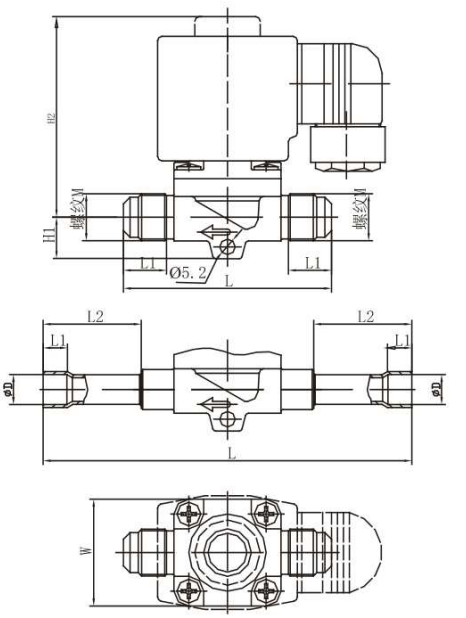


1.recovery spring 2.iron core (modified PTEE sealing) 3.oil-resistance rubber 4.fastening screw(4 pieces) 5. PTFE gasket 6.value core (mobile) (modified PTFE composite diaphragm) 7.flapper 8.copper tube 9. dust cap 10.connection tube nut 11.valve body 12.valve cover 13.solenoidcoils(9W) 14.valve cover 15.big recovery spring

Overall Dimension



HV15M、HV20M、HV25M



HV3、HV8M、HV10M

Model	Overall Dimension							
	H1	H2	W	L	L1	L2	ØD	Thread M
HV3-2	14	66	30	78	14.5	——	——	7/16-20UNF
HV3-2T	14	66	30	102	7	27	6.5	——
HV3-3	14	66	30	78	14.5	——	——	5/8-18UNF
HV3-3T	14	66	30	114	8	35	10.1	——
HV8M3	14	67	36	96	16	——	——	5/8-18UNF
HV8M3T	14	67	36	124	8	33	10.1	——
HV8M4	14	67	36	98	17	——	——	3/4-16UNF
HV8M4T	14	67	36	130	10	36	12.8	——
HV10M4	15	77	45	103	18	——	——	3/4-16UNF
HV10M4T	15	77	45	138	10	36	12.8	——
HV10M5	15	77	45	112	20	——	——	7/8-14UNF
HV10M5T	15	77	45	156	14	42	16.1	——
HV15M5	18	88	52	133	19.5	——	——	7/8-14UNF
HV15M5T	18	88	52	165	14	43	16.1	——
HV15M6	18	88	52	133	21	——	——	1-1/16-14UNS
HV15M6T	18	88	52	172	16	46	19.2	——
HV20M7T	24	92	66	191	17	49	22.3	——
HV25M9T	26.5	96	73	246	22	73	28.7	——