

SOLENOID VALVES FOR AMMONIA REFRIGERANT / Type HMV



Type HMV-G



Type HMV-E

FEATURE

- Normally closed Solenoid valve for ammonia refrigerant.
- Only horizontal piping can be installed with the coil in the upper position.

APPLICATIONS

- Refrigerator / Freezers, etc.

COMMON SPECIFICATION

- Max. working pressure : 2.55 MPa
- Fluid Temperature :
 - 5 to 80°C (302G to 1304G)
 - 0 to 80°C (1606G to 5020E)
 - 50 to 80°C (For perating pressure 1.02 MPa or less)
- Ambient temperature :
 - 5 to 40°C (302G to 1304G)
 - 0 to 40°C (1606G to 5020E)
 - 35 to 40°C (For perating pressure 1.02 MPa or less)
- Normally Closed

DESCRIPTION OF CATALOG NO.

HMV - $\frac{10}{I} \frac{03}{II} \frac{G}{III} * \frac{A}{IV} \frac{1}{V} \frac{B}{VI} \frac{VII}$

I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection type
V	Coil Power supply
VI	Coil Voltage
VII	Coil Style

We ask for your consent regarding the disclaimer for the use of ammonia refrigerant. Please contact us for details.

TYPE NUMBER SELECTION

Type	Catalog No.			Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Manual Opening Stem	* 2 Wt. (kg)				
	Model	Rated Voltage	Coil Style			Style	Connection size	Min.	Max.						
HMV	302G	* A1 (100V.AC)	B (Indoor terminal box type) W (Drip-proof terminal box type)	2.8	0.25	Rc	1/4"	0	1.96 [AC] 1.57 [DC]	without	0.9				
	303G						3/8"								
	702G						1/4"								
	1003G	3/8"													
	1304G	1/2"													
	1606G	3/4"													
	1906E	* D1 (100V.DC)		0 (Standard type) 0 (No differential pressure type)	20A	0.015	1.96 [AC] 1.57 [DC]	with	0.98 (No differential pressure type)	4.4					
	2508E	* D6 (12V.DC)									Oval Flange * 1	25A	0.015	1.96 [AC] 1.57 [DC]	
	3212E	* D7 (24V.DC)									Square Flange * 1	32A			11.5
	3814E	* D8 (48V.DC)										40A			
	5020E											50A	18.6		

* 1 Joint flange can be attached as an option for flange type (Type HMV-E). You can choose from the joint flange table of OPTIONAL PARTS.

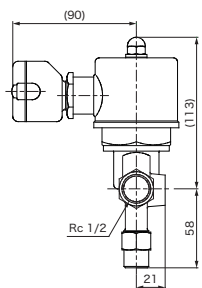
* 2 Includes a coil (AC Indoor terminal box type). The weight of the flange type is not included the joint flange.

SPECIFICATIONS OF COILS

Valve Body Catalog No.	Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style	
				Running	Inrush				
HMV	302G	50/60	± 10	26/22	130/110	9/8	Class B Molded	Indoor terminal box type Drip-proof terminal box type	
	303G								110V.AC
	702G								200V.AC
	1003G	220V.AC		—	—	15			
	1304G	12V.DC							
	1606G	24V.DC							
	1906E	48V.DC		50/60	72/60	360/300			32/27
	2508E	100V.DC							
	3212E	110V.AC							
	3814E	200V.AC		—	—	25			
	5020E	220V.AC							
		12V.DC							
		24V.DC							
		48V.DC							
		100V.DC							

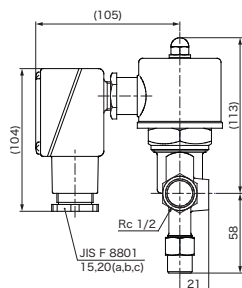
- Current (A) = Voltampere / Rated Voltage
- IP Drip-proof terminal box type : IP34
- The standard specification of the coil style is the Indoor terminal box type
- Drip-proof terminal box type can be used indoors where water drops may fall.

SPECIFICATIONS OF COILS



(Type HMV-1304G)

Indoor terminal box type

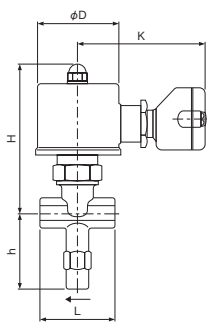


(Type HMV-1304G)

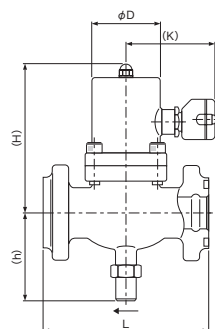
Drip-proof terminal box type

Unit : mm

DIMENSIONS



Type HMV-G



Type HMV-E

Catalog No.		Unit : mm				
Type	Model	L	H	h	ϕD	K
HMV	302G	55	95	12	60	90
	303G					
	702G					
	1003G	60	107	54		
	1304G	75	113	58		
	1606G	80	105	82		
	1906E	120	116			
	2508E	150	156	96		
	3212E	180	164	97		
	3814E	200	175	116		
5020E	220	188	135	75	100	

OPTIONAL PARTS

• JOINT FLANGE

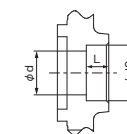
- The lower limit of operating temperature for flanges is -10°C. In case operating temperature would be below the lower limit, please contact us.
- When ordering the joint flange separately, please specify the "Joint Flange Catalog Number" from the compatibility table below.

Valve Body Catalog No.		Joint flange type							* 1		
Type	Model	Style	Connection		Pipe type	Outer diameter of connection pipe [mm]	Flange inner diameter ϕd [mm]	Insert hole		Joint flange Catalog No.	
			Connection size	Flange type (square flange)				Screw thread	Inner diameter $\phi d0$ [mm]		Depth L [mm]
HMV	1906E	20A	06K	Socket brazing type (Oval Flange)	Steel pipe	22	27.2	—	27.7	15	HMV-06E06K
			06G	Screwed type (Oval Flange)	Steel pipe	—	—	Rc 3/4	—	—	HMV-06E06G
	2508E	25A	08K	Socket brazing type (Oval Flange)	Steel pipe	28	34.0	—	34.5	18	HMV-08E10K
			08G	Screwed type (Oval Flange)	Steel pipe	—	—	Rc 1	—	—	HMV-08E10G
	3212E	32A	12K	Socket brazing type (Oval Flange)	Steel pipe	36	42.7	—	43.1	18	HMV-12E12K
			12G	Screwed type (Oval Flange)	Steel pipe	—	—	Rc 1-1/4	—	—	HMV-12E12G
	3814E	40A	14K	Socket brazing type (Oval Flange)	Steel pipe	42	48.6	—	49.3	18	HMV-14E14K
			14G	Screwed type (Oval Flange)	Steel pipe	—	—	Rc 1-1/2	—	—	HMV-14E14G
	5020E	50A	20K	Socket brazing type (Oval Flange)	Steel pipe	53	60.5	—	61.3	18	HMV-20E20K
			20G	Screwed type (Oval Flange)	Steel pipe	—	—	Rc 2	—	—	HMV-20E20G

* 1 The joint flange is a set of one joint flange on one side, the necessary bolts and flange packing * 2.

* 2 Only the flange packing can be purchased separately. Please specify the Flange packing Catalog No. from table below.

Connection size of Joint flange	Flange packing Catalog No.
20A	HMV-1N-00027
25A	HMV-1N-00028
32A	HMV-1N-00029
40A	HMV-1N-00030
50A	HMV-1N-00031



Example of Joint flange insert hole