

SOLENOID VALVES SERIES



SAGINOMIYA PRODUCT CATALOG

● Solenoid Valves

Contents

2-WAY VALVES

Type	Applications	Connection	
		Style	Connection size
SEV  Versatile product lineup	SOLENOID VALVES FOR REFRIGERANT • Condensing units • Cooling units • Chillers • Dehumidifiers • Air conditioning systems	Flare	1/4" ~ 3/4"
		Solder	1/4" ~ 7/8"
RPV  High Pressure Available Energy Saving Coil	HIGH PRESSURE SOLENOID VALVES FOR REFRIGERANT • Condensing units • Cooling units • Chillers • Dehumidifiers • Air conditioning systems	Flare	1/4" ~ 3/4"
		Solder	1/4" ~ 7/8"
REV  Large Port Size Available Explosion-Proof Type Available	SOLENOID VALVES FOR REFRIGERANT • Condensing units • Chillers • Air conditioning systems	Flare	3/8" ~ 3/4"
		Rc	3/8" ~ 3/4"
		Solder	3/8" ~ 1-5/8"
		Square Flange	20A ~ 80A
UEV  Normally Opened	SOLENOID VALVES FOR REFRIGERANT • Condensing units • Chillers • Air conditioning systems	Flare	1/2" ~ 3/4"
		Rc	3/8" ~ 1"
		Solder	1/2" ~ 1-1/8"
JEV  Built-In Strainer	SOLENOID VALVES FOR REFRIGERANT • Condensing units • Chillers • Air conditioning systems	Square Flange	10A ~ 32A
HEV  SMALL SIZED SOLENOID VALVES FOR WATER	• Hot water boilers • Water heaters • Electric water heaters	Rc	1/2"
WEV  SOLENOID VALVES FOR WATER / BRINE	• Cooling / Heating equipment • Air conditioning systems • Various industrial equipment	Rc	1/2" ~ 2"
		Flange (Round Type)	15A ~ 80A
AMV  Water Steam Air Oil	SOLENOID VALVES FOR GENERAL PURPOSE • Heating and cooling equipment • Sterilizers • Humidifiers • Oiling equipment	Rc	1/2" ~ 1"
GMV  Both Normally Closed and Normally Opened types available	SOLENOID VALVES FOR OIL • Water boilers • Air heaters • Fuel oil supply devices	Rc	3/8" ~ 1/2"

Available fluids						Normal operation		Strainer	Max. working pressure (MPa)	Page
Refrigerant	Air	Water	Steam	Oil	Inert gases	Normally Closed	Normally Opened			
✓	✓				✓	✓		✓ part	4.2	7
✓						✓			4.3	13
✓	✓				✓	✓			4.2 (Y) 2.94 (X)	17
									2.94	
✓	✓				✓		✓		2.94	23
✓	✓				✓	✓		✓	2.94	27
		✓				✓			0.10 (Direct operated) 0.29 (Pilot operated)	31
		✓				✓			0.98	33
	✓	✓	✓	✓		✓			0.98	37
				✓		✓	✓		2.06	39

Contents

2-WAY VALVES

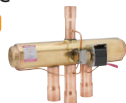
Type	Applications	Connection	
		Style	Connection size
GEV  SMALL SIZED SOLENOID VALVES FOR OIL Both Normally Closed and Normally Opened types available	- Water boilers - Air heaters - General industrial equipment	Rc	1/8" ~ 3/8"
HMV  SOLENOID VALVES FOR AMMONIA REFRIGERANT	Refrigerator / Freezers	Rc Oval Flange Square Flange	1/4" ~ 3/4" 20A ~ 25A 32A ~ 50A
TEV-S OEM  SMALL SIZED SOLENOID VALVES FOR REFRIGERANT	- Room air conditioners - Packaged air conditioners - Heat pump water heaters - Bottle coolers - Dehumidifiers - Ice makers	Solder	1/4"
VPV OEM  SMALL SIZED SOLENOID VALVES FOR REFRIGERANT	- Room air conditioners - Packaged air conditioners - Heat pump water heaters - Bottle coolers - Dehumidifiers - Ice makers	Solder	1/4" ~ 1/2"
BPV OEM  BI-FLOW SOLENOID VALVES Bi-flow control	- Packaged air conditioners - VRF	Solder	3/8" ~ 3/4"
EPV OEM  HIGHLY DURABLE SOLENOID VALVES FOR SHOWCASES high durability Functions as both a liquid supply solenoid valve and an expansion valve	Display cases	Solder	3/8"
MHV OEM  BI-FLOW 2-WAY VALVE FOR REFRIGERANT High flow rate Low pressure drop	- Packaged air conditioners - VRF	Solder	1/2" ~ 3/4"
HPV OEM  SOLENOID VALVES FOR CO2 REFRIGERANT Ultra-high pressure	- CO2 Condensing units - CO2 Display cases - CO2 Bottle coolers - CO2 Refrigerator / Freezers - CO2 Heat pump water heaters	Solder	1/4" ~ 5/16"
HPV-E OEM  ELECTRIC EXPANSION VALVE FOR CO2 REFRIGERANT high durability Functions as both a liquid supply solenoid valve and an expansion valve	CO2 Display cases	Solder	1/4"

High Volume OEM Item ⇒ **OEM**

Available fluids						Normal operation		Strainer	Max. working pressure (MPa)	Page
Refrigerant	Air	Water	Steam	Oil	Inert gases	Normally Closed	Normally Opened			
				✓		✓	✓		2.06	41
✓ NH ₃						✓			2.55	43
✓						✓			4.3	47
✓						✓	✓ part		4.3	47
✓						✓		✓ part	4.2	51
✓						✓		✓ part	4.2	53
✓						✓	✓		4.15	55
✓ CO ₂						✓			13.0 ~ 15.0	57
✓ CO ₂						✓		✓	8.0	59

Contents

3-WAY VALVES

Type	Applications	Connection	
		Style	Connection size
IEV  3-WAY VALVES FOR REFRIGERANT Heat recovery systems Hot gas defrosting systems	• Condensing units • Refrigerator / Freezers	Solder	5/8" ~ 1-3/8"
STF-C OEM  3-WAY VALVES FOR REFRIGERANT High flow rate	• Cooling units • Packaged air conditioners • VRF • Chillers	Solder	1/2", 3/4" 3/4", 7/8" (High pressure, Low pressure)

4-WAY VALVES

Type	Applications	Connection	
		Style	Connection size
STF OEM  4-WAY REVERSING VALVES FOR REFRIGERANT	• Room air conditioners • Packaged air conditioners • VRF • Heat pump water heaters • Chillers	Solder	5/16" ~ 2-5/8"

High Volume OEM Item ⇒ **OEM**

Available fluids						Strainer	Max. working pressure (MPa)	Page
Refrigerant	Air	Water	Steam	Oil	Inert gases			
✓							2.94	61
✓							4.2	65

High Volume OEM Item ⇒ **OEM**

Available fluids						Strainer	Max. working pressure (MPa)	Page
Refrigerant	Air	Water	Steam	Oil	Inert gases			
✓							4.15 (G) 4.2 (H)	67

REFERENCE INFORMATION

TERMINOLOGIES RELATED TO REFRIGERATION

Pressure

$$\text{Absolute Pressure} \begin{matrix} \text{MPa (abs)} \end{matrix} = \text{Gauge Pressure} \begin{matrix} \text{MPa} \end{matrix} + \text{Standard Atmosphere} \begin{matrix} 0.101325 \text{ MPa} \end{matrix}$$

Degree of Vacuum

$$P = 0.1013 \cdot \frac{h}{76}$$

P : Absolute Pressure MPa (abs)

h : Degree of Vacuum (Column of Mercury) cmHg

Power and Heat

$$1 \text{ kW} = 102 \text{ kgf} \cdot \text{m/sec} = 860 \text{ kcal/h}$$

Cooling Capacity

This Catalog uses "U.S.R.T." and "kW" to indicate nominal capacity.

Coefficient of Performance (COP)

$$\varepsilon = \frac{Q_2}{A_w} = \frac{Q_2}{Q_1 - Q_2} = \frac{T_1 + T_2}{T_1 - T_2}$$

ε : COP of a Refrigeration equipment

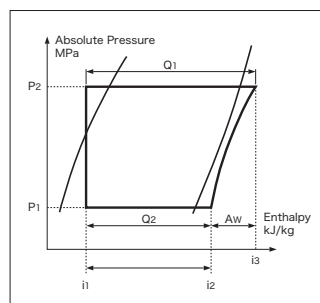
A_w : Heat Quantity Equivalent to Compression Work (kW)

Q₁ : Heat Quantity Discharged at the Condenser (kW)

Q₂ : Cooling Capacity (Load) (kW)

T₁ : Condensing Temperature (°C)

T₂ : Evaporating Temperature (°C)



Cooling Effect (Cooling Power)

$$q = i_2 - i_1$$

q : Cooling Effect (kJ/kg)

i₁ : Enthalpy of liquid immediately before expansion valve (kJ/kg)

i₂ : Enthalpy of vapor discharged from the evaporator (kJ/kg)

Circulating Refrigerant Amount

$$G = 3,600 \times Q/q$$

G : Circulating Refrigerant Amount (kg/h)

Q : Cooling Capacity (kW)

q : Cooling Effect (kJ/kg)

Water Amount and Water Temperature Difference

$$Q = 1/60 \cdot \rho \cdot \alpha \cdot G_w (t_1 - t_2)$$

Q : Cooling Capacity (kW)

ρ : Specific Gravity of Water (kg/m³)

α : Specific Heat Capacity of Water (J/K · kg)

G_w : Circulating Water Amount (m³/min)

t₁ : Inlet Water Temperature (°C)

t₂ : Outlet Water Temperature (°C)

CONVERSION TABLES

1) Temperature conversion table (°C ↔ °F)

The figures in the center column show the temperature to be converted. The figures on the left show conversion from Fahrenheit to Celsius and the figures on the right from Celsius to Fahrenheit.

Example :

°C		°F
-15.0	5	41.0
-15.0°C	5°F	

Temperature conversion formula :

$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32)$$

$$^{\circ}\text{F} = 9/5 \times ^{\circ}\text{C} + 32$$

°C	↓	°F	°C	↓	°F	°C	↓	°F	°C	↓	°F	°C	↓	°F
-101.1	-150	-238.0	-37.2	-35	-31.0	-23.3	-10	14.0	-9.4	15	59.0	4.4	40	104.0
-95.6	-140	-220.0	-36.7	-34	-29.2	-22.8	-9	15.8	-8.9	16	60.8	5.0	41	105.8
-90.0	-130	-202.0	-36.1	-33	-27.4	-22.2	-8	17.6	-8.3	17	62.6	5.6	42	107.6
-84.4	-120	-184.0	-35.6	-32	-25.6	-21.7	-7	19.4	-7.8	18	64.4	6.1	43	109.4
-78.9	-110	-166.0	-35.0	-31	-23.8	-21.1	-6	21.2	-7.2	19	66.2	6.7	44	111.2
-73.3	-100	-148.0	-34.4	-30	-22.0	-20.6	-5	23.0	-6.7	20	68.0	7.2	45	113.0
-67.8	-90	-130.0	-33.9	-29	-20.2	-20.0	-4	24.8	-6.1	21	69.8	7.8	46	114.8
-62.2	-80	-112.0	-33.3	-28	-18.4	-19.4	-3	26.6	-5.6	22	71.6	8.3	47	116.6
-56.7	-70	-94.0	-32.8	-27	-16.6	-18.9	-2	28.4	-5.0	23	73.4	8.9	48	118.4
-51.1	-60	-76.0	-32.2	-26	-14.8	-18.3	-1	30.2	-4.4	24	75.2	9.4	49	120.2
-45.6	-50	-58.0	-31.7	-25	-13.0	-17.8	0	32.0	-3.9	25	77.0	10.0	50	122.0
-45.0	-49	-56.2	-31.1	-24	-11.2	-17.2	1	33.8	-3.3	26	78.8	15.6	60	140.0
-44.4	-48	-54.4	-30.6	-23	-9.4	-16.7	2	35.6	-2.8	27	80.6	21.1	70	158.0
-43.8	-47	-52.6	-30.0	-22	-7.6	-16.1	3	37.4	-2.2	28	82.4	26.7	80	176.0
-43.3	-46	-50.8	-29.4	-21	-5.8	-15.6	4	39.2	-1.7	29	84.2	32.2	90	194.0
-42.8	-45	-49.0	-28.9	-20	-4.0	-15.0	5	41.0	-1.1	30	86.0	37.8	100	212.0
-42.2	-44	-47.2	-28.3	-19	-2.2	-14.4	6	42.8	-0.6	31	87.8	43.3	110	230.0
-41.7	-43	-45.4	-27.8	-18	-0.4	-13.9	7	44.6	0.0	32	89.6	48.9	120	248.0
-41.1	-42	-43.6	-27.2	-17	1.4	-13.3	8	46.4	0.6	33	91.4	54.4	130	266.0
-40.6	-41	-41.8	-26.7	-16	3.2	-12.8	9	48.2	1.1	34	93.2	60.0	140	284.0
-40.0	-40	-40.0	-26.1	-15	5.0	-12.2	10	50.0	1.7	35	95.0	65.6	150	302.0
-39.4	-39	-38.2	-25.6	-14	6.8	-11.7	11	51.8	2.2	36	96.8	71.1	160	320.0
-38.9	-38	-36.4	-25.0	-13	8.6	-11.1	12	53.6	2.8	37	98.6	76.7	170	338.0
-38.3	-37	-34.6	-24.4	-12	10.4	-10.6	13	55.4	3.3	38	100.4	82.2	180	356.0
-37.8	-36	-32.8	-23.9	-11	12.2	-10.0	14	57.2	3.9	39	102.2	87.8	190	374.0

2) Temperature difference conversion table (°C ↔ °F)

This table is a comparison table of temperature difference. For example, a 9° F difference (77°F – 68°F) corresponds to a 5°C difference (25°C – 20°C).

°C	↓	°F
0.056	0.1	0.18
0.111	0.2	0.36
0.278	0.5	0.90
0.56	1	1.8
1.11	2	3.6
1.67	3	5.4
2.22	4	7.2
2.78	5	9.0
3.33	6	10.8
3.89	7	12.6
4.44	8	14.4
5.00	9	16.2
5.56	10	18.0
6.11	11	19.8
6.67	12	21.6
8.33	15	27.0

3) Pressure conversion table (kgf/cm² ↔ MPa)

The figures in the center column show the pressure to be converted. The figures on the right show conversion from MPa to kgf/cm² and the figures on the left from kgf/cm² to MPa.

Example : 1 MPa = 10.1972 kgf/cm², 1 kgf/cm² = 0.09807 MPa

MPa	↓	kgf/cm ²	MPa	↓	kgf/cm ²	MPa	↓	kgf/cm ²
0.000000	0.0	0.00000	0.0980665	1	10.1972	1.961330	20	203.944
0.0098067	0.1	1.01972	0.1961330	2	20.3944	2.941995	30	305.916
0.0196113	0.2	2.03944	0.2941995	3	30.5916	3.922660	40	407.888
0.0294200	0.3	3.05916	0.3922660	4	40.7888	4.903325	50	509.860
0.0392266	0.4	4.07888	0.4903325	5	50.9860	5.883990	60	611.832
0.0490333	0.5	5.09860	0.5883990	6	61.1832	6.864655	70	713.804
0.0588399	0.6	6.11832	0.6864655	7	71.3804	7.845320	80	815.776
0.0686466	0.7	7.13804	0.7845320	8	81.5776	8.825985	90	917.748
0.0784532	0.8	8.15776	0.8825985	9	91.7748	9.806650	100	1019.72
0.0882599	0.9	9.17748	0.9806650	10	101.972			

4) Pressure conversion table (MPa ↔ psi)

Example : 1 MPa = 145.052 psi, 1 psi = 0.006895 MPa

MPa	↓	psi	MPa	↓	psi	MPa	↓	psi
0.000000	0	0.00000	0.006895	1	145.052	0.137900	20	2901.04
0.000690	0.1	14.5052	0.013790	2	290.104	0.206850	30	4351.56
0.001379	0.2	29.0104	0.020685	3	435.156	0.275800	40	5802.08
0.002069	0.3	43.5156	0.027580	4	580.208	0.344750	50	7252.60
0.002758	0.4	58.0208	0.034475	5	725.260	0.413700	60	8703.12
0.003448	0.5	72.5260	0.041370	6	870.312	0.482650	70	10153.6
0.004137	0.6	87.0312	0.048265	7	1015.36	0.551600	80	11604.2
0.004827	0.7	101.536	0.055160	8	1160.42	0.620550	90	13054.7
0.005516	0.8	116.042	0.062055	9	1305.47	0.689500	100	14505.2
0.006206	0.9	130.547	0.068950	10	1450.52			

5) Capacity conversion table (kW ↔ kcal/h)

Example : 1 kW ↔ 860 kcal/h

kW	↓	1000 kcal/h	kW	↓	1000 kcal/h	kW	↓	1000 kcal/h	kW	↓	1000 kcal/h
0.166	0.1	0.086	1.162	1	0.86	11.62	10	8.6	116.2	100	86
0.232	0.2	0.172	2.325	2	1.72	23.25	20	17.2	232.5	200	172
0.348	0.3	0.258	3.488	3	2.58	34.88	30	25.8	348.8	300	258
0.465	0.4	0.344	4.651	4	3.44	46.51	40	34.4	465.1	400	344
0.581	0.5	0.430	5.813	5	4.33	58.13	50	43.3	581.3	500	433
0.697	0.6	0.516	6.976	6	5.16	69.76	60	51.6	697.6	600	516
0.813	0.7	0.602	8.139	7	6.02	81.39	70	60.2	813.9	700	602
0.930	0.8	0.688	9.302	8	6.88	93.02	80	68.8	930.2	800	688
1.046	0.9	0.774	10.46	9	7.74	104.6	90	77.4	104.6	900	774

6) Length conversion table (in ↔ mm)

in	mm	in	mm	in	mm	in	mm
1/8	3.18	1/32	0.79	1/64	0.40	33/64	13.10
1/4	6.35	3/32	2.38	3/64	1.19	35/64	13.89
3/8	9.53	5/32	3.97	5/64	1.98	37/64	14.68
1/2	12.70	7/32	5.56	7/64	2.78	39/64	15.48
5/8	15.88	9/32	7.14	9/64	3.57	41/64	16.72
3/4	19.05	11/32	8.73	11/64	4.39	43/64	17.07
7/8	22.23	13/32	10.32	13/64	5.16	45/64	17.86
1	25.40	15/32	11.91	15/64	5.95	47/64	18.65
1/16	1.59	17/32	13.49	17/64	6.75	49/64	19.45
3/16	4.76	19/32	15.08	19/64	7.54	51/64	20.24
5/16	7.94	21/32	16.67	21/64	8.33	53/64	21.04
7/16	11.11	23/32	18.26	23/64	9.13	55/64	21.83
9/16	14.29	25/32	19.84	25/64	9.92	57/64	22.62
11/16	17.46	27/32	21.43	27/64	10.72	59/64	23.42
13/16	20.64	29/32	23.02	29/64	11.51	61/64	24.21
15/16	23.81	31/32	24.61	31/64	12.30	63/64	25.00

7) Vacuum conversion table (MPa ↔ MPa (abs) ↔ cmHgV ↔ kgf/cm² (abs))

Example : -0.0667 MPa ↔ 0.0347 MPa(abs) ↔ 50 cmHgV ↔ 0.3535 kgf/cm² (abs)

MPa	MPa (abs)	cmHg V	kgf/cm ² (abs)	MPa	MPa (abs)	cmHg V	kgf/cm ² (abs)	MPa	MPa (abs)	cmHg V	kgf/cm ² (abs)
-0.1013	0.0000	76	0.0000	-0.0613	0.0400	46	0.4078	-0.0213	0.0800	16	0.8157
-0.0987	0.0027	74	0.0272	-0.0587	0.0427	44	0.4350	-0.0187	0.0827	14	0.8429
-0.0960	0.0053	72	0.0544	-0.0560	0.0453	42	0.4622	-0.0160	0.0853	12	0.8700
-0.0933	0.0080	70	0.0816	-0.0533	0.0480	40	0.4894	-0.0133	0.0880	10	0.8972
-0.0907	0.0107	68	0.1088	-0.0507	0.0507	38	0.5166	-0.0107	0.0907	8	0.9245
-0.0880	0.0133	66	0.1360	-0.0480	0.0533	36	0.5438	-0.0080	0.0933	6	0.9517
-0.0853	0.0160	64	0.1631	-0.0453	0.0560	34	0.5710	-0.0053	0.0960	4	0.9788
-0.0827	0.0187	62	0.1903	-0.0427	0.0587	32	0.5981	-0.0027	0.0987	2	1.0060
-0.0800	0.0213	60	0.2175	-0.0400	0.0613	30	0.6254	0	0.1013	0	1.0332
-0.0773	0.0240	58	0.2447	-0.0373	0.0640	28	0.6526				
-0.0747	0.0267	56	0.2719	-0.0347	0.0667	26	0.6798				
-0.0720	0.0293	54	0.2991	-0.0320	0.0693	24	0.7069				
-0.0693	0.0320	52	0.3263	-0.0293	0.0720	22	0.7341				
-0.0667	0.0347	50	0.3535	-0.0267	0.0747	20	0.7613				
-0.0640	0.0373	48	0.3806	-0.0240	0.0773	18	0.7885				

OVERVIEW OF EXPANSION VALVE

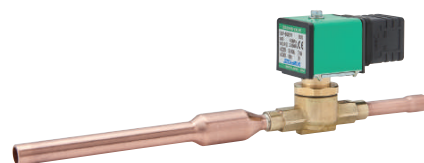
TERMS AND DEFINITIONS

- Catalog No. On standard products, specify the Catalog No. only.
- Port Size The inner diameter of the valve.
- Capacity Nominal capacity under standard operating conditions
- Connection (Copper tube solder)

ODF (Outside Diameter Female) :
 "Connection size" is the outside diameter of the piping to be connected.
 Insert the piping into the connection tube of the valve and braze connection.

ODM (Outside Diameter Male) :
 "Connection size" is the outside diameter of the valve connection tube.
 Cover the pipe, such as an expanded pipe, with the connection tube of the valve and braze connection.
- Operating Pressure Differential (O.P.D) The pressure difference between the inlet and outlet sides of the valve is within this range, the valve will open and close reliably.
- Max. Working Pressure The maximum usable pressure at which the valve will function without any problems under normal operating conditions.
- Fluid Temperature The temperature range of fluid that can flow inside the valve.
- Pressure indication Gauge pressure

SOLENOID VALVES FOR REFRIGERANT / Type SEV

Type SEV-603BYF
(Lead Wire type)Type SEV-603DYF
(DIN plug)Type SEV-1004DYF
(Lead Wire type)Type SEV-603DYF
(DIN plug (with socket), with Strainer)Click or scan here
for the capacity
table. ⇒URL : https://saginomiya.co.jp/en/auto/pdf/sev_capacity.pdf

Coil sold separately

TYPE NUMBER SELECTION

Catalog No.				Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Max. working pressure (MPa)	Strainer with / without	* 2 Wt. (kg)
Type	Model	Fluid	Special application			Style	Connection size	Min.	Max.			
SEV	303BY	F Various refrigerants * 1	—	3	0.25	Flare	3/8"	0	0.007	4.2	with	0.3
	502BY			5	0.51		1/4"					
	603BY			6	0.80		3/8"					
	1004BY			10	1.75		1/2"					
	1205BY			12	2.9		5/8"					
	1506BY			15	4.5		3/4"					
	303DY			3	0.25	Copper tube solder (ODF)	3/8"	0	0.007	2.45 (AC Coil) 1.96 (DC Coil)	without	0.15
	502DY			5	0.53		1/4"					
	603DY			6	0.83		3/8"					
	604DY			6	0.83		1/2"					
	1004DY			10	2.0		1/2"					
	1005DY			10	2.0		1/2"					
	1205DY			12	3.5		5/8"					
	1506DY			15	5.3		3/4"					
	1507DY			15	5.3		7/8"					
	502DY		Q50	5	0.53	Copper tube solder (ODF)	1/4"	0	0.007	4.2	with	0.25
	603DY			6	0.83		3/8"					
	604DY			6	0.83		1/2"					
	604DY			6	0.83		1/2"					
	603DY	A (Air)	Q300	5	0.53	Copper tube solder (ODF)	1/4"	0	0.007	4.2	with	0.25
	604DY			6	0.83		1/2"					
	603DY	C (Inert gases)	Q300	5	0.53	Copper tube solder (ODF)	1/4"	0	0.007	4.2	with	0.25
	604DY			6	0.83		1/2"					
	603DY	C (Inert gases)	Q300	5	0.53	Copper tube solder (ODF)	1/4"	0	0.007	4.2	with	0.25
	604DY			6	0.83		1/2"					
	603DY	C (Inert gases)	Q300	5	0.53	Copper tube solder (ODF)	1/4"	0	0.007	4.2	with	0.25
	604DY			6	0.83		1/2"					
	603DY	C (Inert gases)	Q300	5	0.53	Copper tube solder (ODF)	1/4"	0	0.007	4.2	with	0.25
	604DY			6	0.83		1/2"					
	603DY	C (Inert gases)	Q300	5	0.53	Copper tube solder (ODF)	1/4"	0	0.007	4.2	with	0.25
	604DY			6	0.83		1/2"					
	603DY	C (Inert gases)	Q300	5	0.53	Copper tube solder (ODF)	1/4"	0	0.007	4.2	with	0.25
	604DY			6	0.83		1/2"					

* 1 R134a, R404A, R407C, R410A, R448A, R449A, R407H, R463A-J (For other refrigerants, please contact us.)

* 2 Valve only (without coil)

FEATURES

- Versatile valve body and coil lineup enable wider applications.
- Capable of handling various low GWP refrigerants (R448A, R449A, R407H, R463A-J and others)
- Strainer is installed in flare connection models. Solder connection models with strainer (type Q50) are also available for some sizes.
- Coils can be selected from various lineups. It can be used in common regardless of valve body types and connection sizes.
- Standards : CQC, CE, UKCA (Please contact us for details such as approved specifications.)

APPLICATIONS

- Condensing units
- Cooling units
- Chillers
- Dehumidifiers
- Air conditioning systems, etc.

COMMON SPECIFICATIONS

- Max. working pressure : 4.2 MPa
- Fluid Temperature : -40~125°C
- Ambient temperature : -30~50°C
- Normally Closed
- Flare type, Solder type

DESCRIPTION OF CATALOG NO. (BODY) *

SEV - 15 06 B Y F
I II III IV V VI

I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection type
V	Pressure class
VI	Fluid

* Coil is not included with the body.
Please specify the catalog number
of coil and purchase it separately.

COIL SELECTION

Description of Coil Catalog No.

SEV - A 1 W 20C
I II III IV

I	Power supply
II	Voltage
III	Coil Style
IV	Cable gland size

• IV is only when the Coil Style is "W".

Power supply / Voltage
A1 : 100V.AC
A2 : 200V.AC
A3 : 110V.AC
A4 : 220V.AC
A7 : 24V.AC
AA : 230V.AC
AB : 240V.AC
AC : 120V.AC
D6 : 12V.DC
D7 : 24V.DC

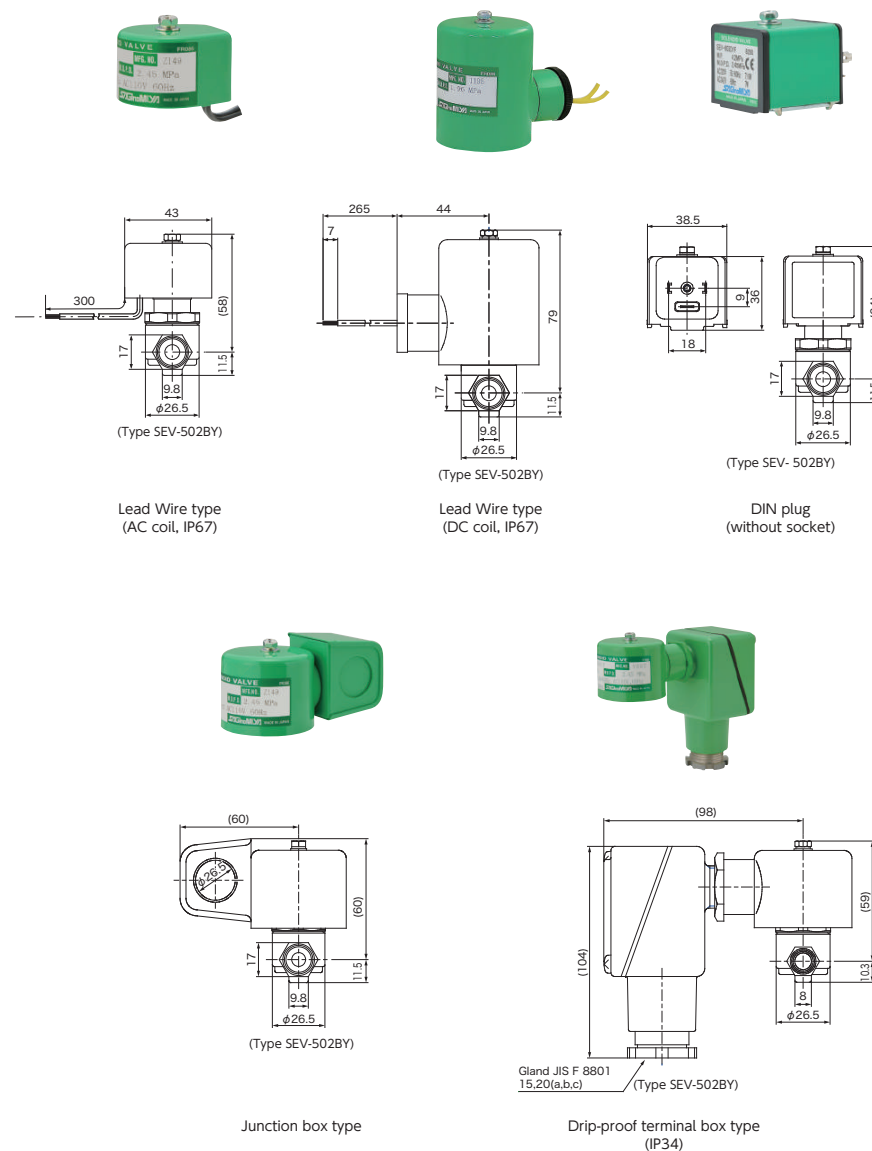
Coil Style
R : Lead Wire type
D : DIN plug (with socket)
E : DIN plug (without socket)
U : Junction box type
W : Drip-proof terminal box type

COIL SELECTION

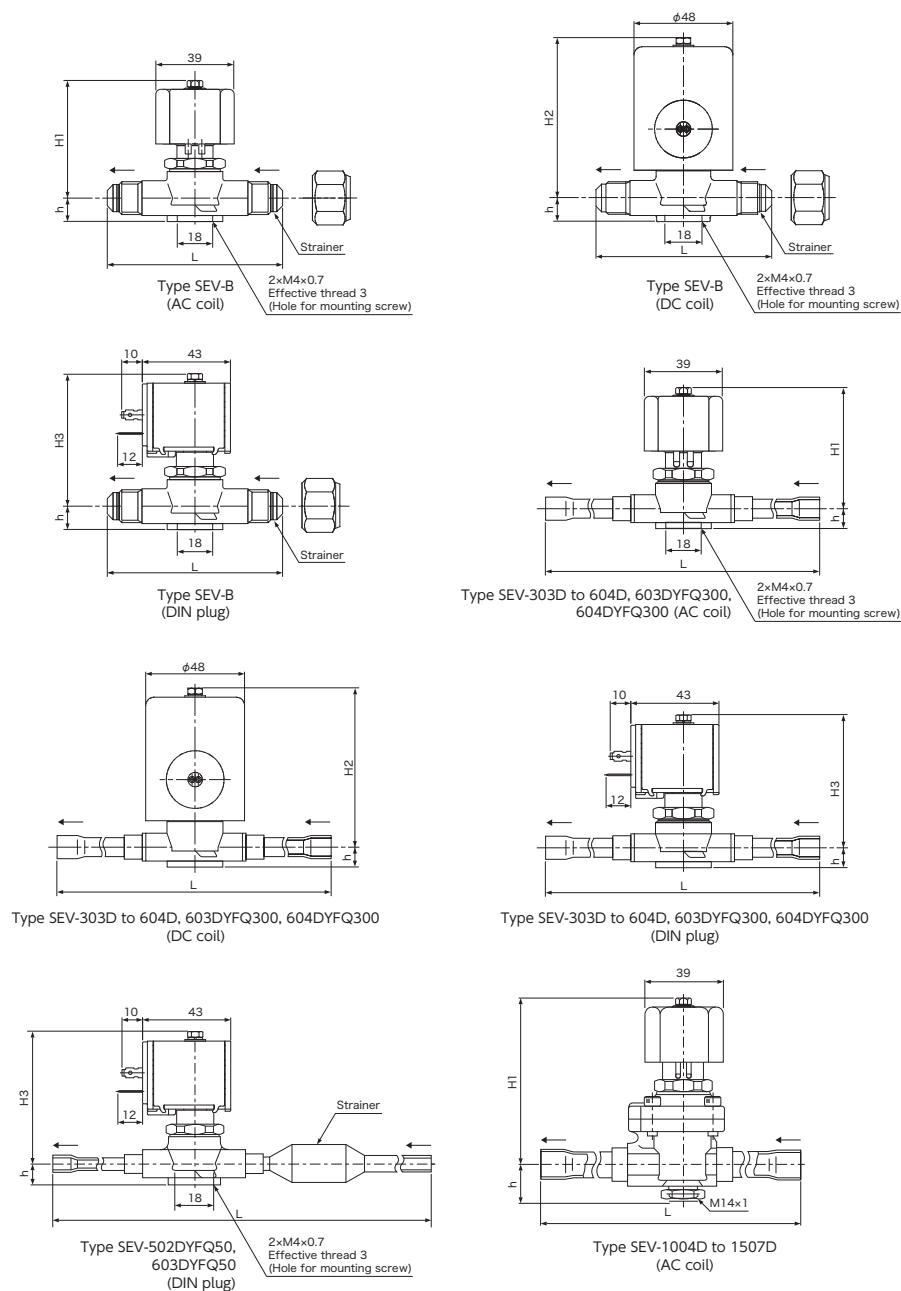
Catalog No.		Coil Style	Coil Wt. (kg)	Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class						
Type	Model						Running	Inrush								
SEV	A1R	Lead Wire type	0.1	100V. AC	50/60	± 10	15/11	45/33	7/6	Class B Molded						
	A1D	DIN plug (with socket)	0.2													
	A1E	DIN plug (without socket)	0.15													
	A1U	Junction box type	0.2													
	A1W20C	Drip-proof terminal box type	0.4	200V. AC												
	A2R	Lead Wire type	0.1													
	A2D	DIN plug (with socket)	0.2													
	A2E	DIN plug (without socket)	0.15													
	A2U	Junction box type	0.2	110V. AC												
	A2W20C	Drip-proof terminal box type	0.4													
	A3R	Lead Wire type	0.1													
	A3D	DIN plug (with socket)	0.2													
	A3E	DIN plug (without socket)	0.15	220V. AC												
	A3U	Junction box type	0.2													
	A3W20C	Drip-proof terminal box type	0.4													
	A4R	Lead Wire type	0.1													
	A4D	DIN plug (with socket)	0.2	24V. AC												
	A4E	DIN plug (without socket)	0.15													
	A4U	Junction box type	0.2													
	A4W20C	Drip-proof terminal box type	0.4	230V. AC												
	A7R	Lead Wire type	0.1													
	A7D	DIN plug (with socket)	0.2													
	A7E	DIN plug (without socket)	0.15	240V. AC												
	A7U	Junction box type	0.2													
	A7W20C	Drip-proof terminal box type	0.4													
	AAR	Lead Wire type	0.1	120V. AC												
	AAD	DIN plug (with socket)	0.2													
	AAE	DIN plug (without socket)	0.15													
	AAU	Junction box type	0.2	12V. DC												
	AAW20C	Drip-proof terminal box type	0.4													
	ABR	Lead Wire type	0.1													
	ABD	DIN plug (with socket)	0.2	24V. DC												
	ABE	DIN plug (without socket)	0.15													
	ABU	Junction box type	0.2													
	ABW20C	Drip-proof terminal box type	0.4													
	ACR	Lead Wire type	0.1	10V. AC												
	ACU	Junction box type	0.2													
	ACW20C	Drip-proof terminal box type	0.4													
	D6C	Lead Wire type	0.3	12V. DC												
	D6W20C	Drip-proof terminal box type	0.5													
	D7C	Lead Wire type	0.3	24V. DC												
	D7W20C	Drip-proof terminal box type	0.5													

- The catalog numbers of drip-proof terminal box types are for the standard type (gland size 20c). Other gland sizes, 15a, 15b, 15c, 20a, and 20b are also available upon request.
- DIN plug socket : EN 175301-803 / ISO4400 (DIN 43650-A)
- IP Lead Wire type : IP67, DIN plug (with socket) : IP65, Drip-proof terminal box type : IP34
- Current (A) = Voltampere / Rated Voltage
- Drip-proof terminal box type can be used indoors where water drops may fall.

COIL SELECTION



DIMENSIONS



DIMENSIONS

Catalog No.		Unit : mm				
Type	Model	L	H1	H2	H3	h
SEV	303BY	85	58	79	64	11
	502BY					
	603BY					
	1004BY	105	85	106	91	20
	1205BY	115	88	109	94	22
	1506BY	135	95	116	101	25
	303DY	150	58	79	64	10
	502DY					
	603DY					
	604DY					
	1004DY	160	85	106	91	20
	1005DY	168				
	1205DY	180	88	109	94	22
	1506DY	190	95	116	101	25
	1507DY	196				
	502DYFQ50	270				
	603DYFQ50					
603DYFQ300	138					
604DYFQ300						

STANDARD ACCESSORY

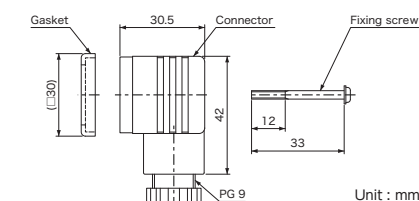
- Flare Nut (only for flare connection model)
- Mounting bracket (Optional for some model)

OPTIONAL PARTS

- DIN socket for DIN plug coil
 - * Please specify necessity of the parts when ordering

[illegible]

* Available upon request



HIGH PRESSURE SOLENOID VALVES FOR REFRIGERANT / Type RPV

Type RPV-603BYF
(Lead Wire type)Type RPV-804DYF
(DIN plug)Click or scan here
for the capacity
table. ⇒URL : https://saginomiya.co.jp/en/auto/pdf/rpv_capacity.pdf

Coil sold separately

FEATURE

- Normally Closed solenoid valve compatible with R410A and R463A-J refrigerants.
- Energy-saving model with low power consumption while supporting high voltage.
- DIN plug coils are also available.
- Standards : CQC, CE, UKCA (Please contact us for details such as approved specifications.)

COMMON SPECIFICATION

- Max. working pressure : 4.3 MPa
- Fluid Temperature : -40 ~ 125°C
- Ambient temperature : -30 ~ 50°C
- Normally Closed
- Flare type, Solder type

APPLICATIONS

- Condensing units
- Cooling units
- Chillers
- Dehumidifiers
- Air conditioning systems, etc.

DESCRIPTION OF CATALOG NO.

$$\text{RPV} - \frac{16}{\text{I}} \frac{06}{\text{II}} \frac{\text{B}}{\text{III}} \frac{\text{Y}}{\text{IV}} \frac{\text{F}}{\text{V VI}}$$

* Coil is not included with the body.
Please specify the catalog number
of coil and purchase it separately.

I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection type
V	Pressure class
VI	Fluid

TYPE NUMBER SELECTION

Catalog No.			Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Max. working pressure (MPa)	* Wt. (kg)
Type	Model	Refrigerant			Style	Connection size	Min.	Max.		
RPV	302BY	F (R410A R463A-J)	3	0.27	Flare	1/4"	0	3.6	4.3	0.2
	303BY			0.30		3/8"				
	602BY		6	0.60		1/4"				0.005
	603BY			0.90		3/8"				
	804BY		8	1.4		1/2"	0.5			
	1004BY		10	2.4						0.6
	1205BY		12	3.6	5/8"	0.1				
	1606BY		16	5.6	3/4"		0.1			
	302DY		3	0.27	1/4"					0
	303DY			0.30	3/8"					
	602DY		6	0.60	1/4"	0.005	0.4			
	603DY			0.90	3/8"					
	804DY		8	1.4	1/2"					0.5
	1004DY		10	2.4		5/8"	0.5			
	1205DY		12	3.6	3/4"	0.9				
	1606DY		16	5.6	7/8"					
	1607DY									

* Valve only (without coil)

COIL SELECTION

Description of Coil Catalog No.

$$\text{RPV} - \frac{\text{A}}{\text{I}} \frac{1}{\text{II}} \frac{\text{R}}{\text{III}}$$

I	Power supply
II	Voltage
III	Coil Style

Power supply / Voltage	
A1	: 100V.AC
A2	: 200V.AC
A3	: 110V.AC
A4	: 220V.AC
A7	: 24V.AC
AA	: 230V.AC
AB	: 240V.AC
AC	: 120V.AC

Coil Style	
R	: Lead Wire type
D	: DIN plug (with socket)
E	: DIN plug (without socket)

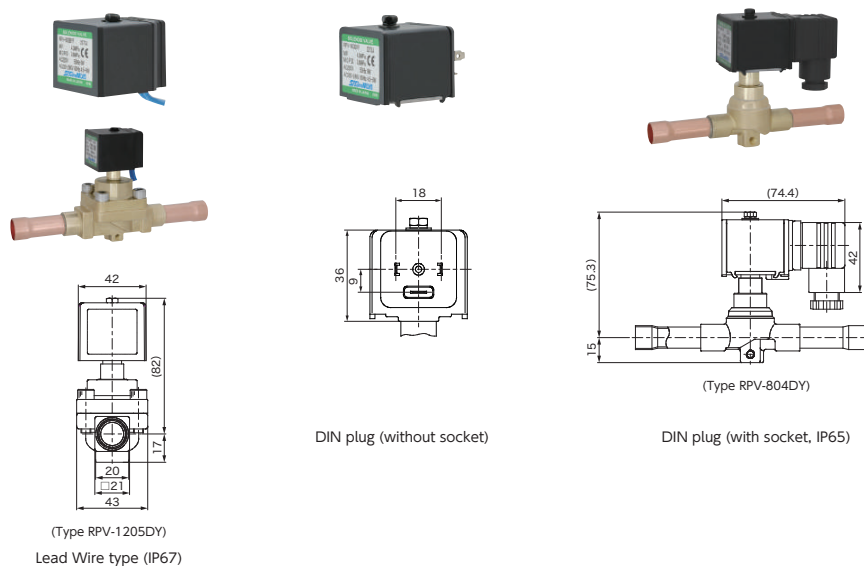
Catalog No.		Coil Style	Coil Wt. (kg)	Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class
Type	Model						Running	Inrush		
RPV	A1R	Lead Wire type	0.15	100V.AC	50/60	± 10	12.5/9.5	45/44	6/4.5	Class B Molded
	A1D	DIN plug (with socket)	0.2							
	A1E	DIN plug (without socket)	0.15							
	A2R	Lead Wire type	0.15	200V.AC * 1						
	A2D	DIN plug (with socket)	0.2							
	A2E	DIN plug (without socket)	0.15							
	A3R	Lead Wire type	0.15	110V.AC						
	A3D	DIN plug (with socket)	0.2							
	A3E	DIN plug (without socket)	0.15							
	A4R	Lead Wire type	0.15	220V.AC * 2						
	A4D	DIN plug (with socket)	0.2							
	A4E	DIN plug (without socket)	0.15							
	A7R	Lead Wire type	0.15	24V.AC						
	A7D	DIN plug (with socket)	0.2							
	A7E	DIN plug (without socket)	0.15							
	AAR	Lead Wire type	0.15	230V.AC * 3						
	AAD	DIN plug (with socket)	0.2							
	AAE	DIN plug (without socket)	0.15							
	ABR	Lead Wire type	0.15	240V.AC * 4						
	ABD	DIN plug (with socket)	0.2							
	ABE	DIN plug (without socket)	0.15							
	ACR	Lead Wire type	0.15	120V.AC						

See below for * 1 to * 4

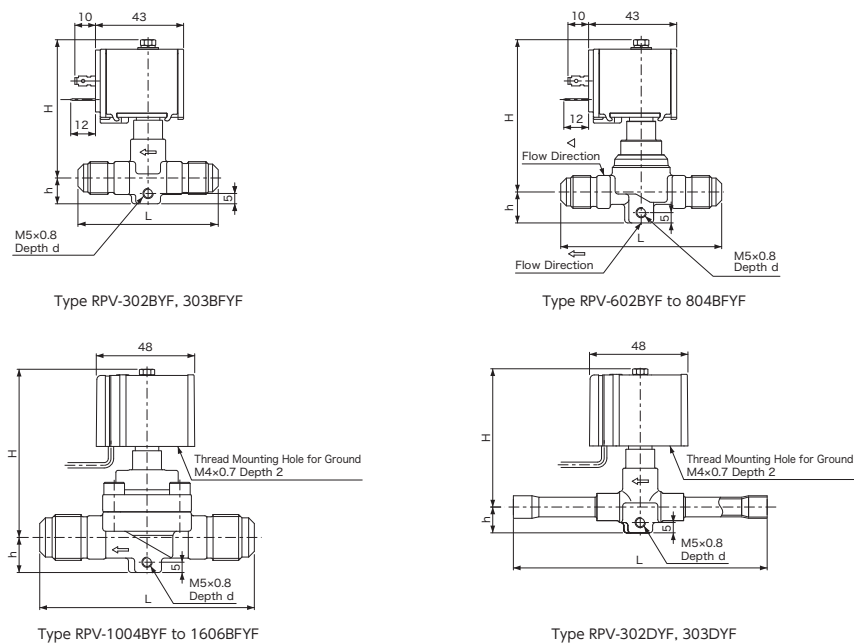
In case of the following voltage and frequency	Voltampere (VA)	
	Running	
* 1 200 ~ 208V.AC (60Hz)	9.5 to 11	4.5 to 5
* 2 220 ~ 230V.AC (60Hz)		
* 3 220 ~ 230V.AC (50Hz)	10.5 to 12.5	5.2 to 6
* 3 230 ~ 240V.AC (60Hz)		
* 4 230 ~ 240V.AC (50Hz)	10.5 to 12.5	5.2 to 6

- DIN plug socket : EN 175301-803 / ISO4400 (DIN 43650-A)
- Current (A) = Voltampere / Rated Voltage
- IP Lead Wire type : IP67, DIN plug (with socket) : IP65

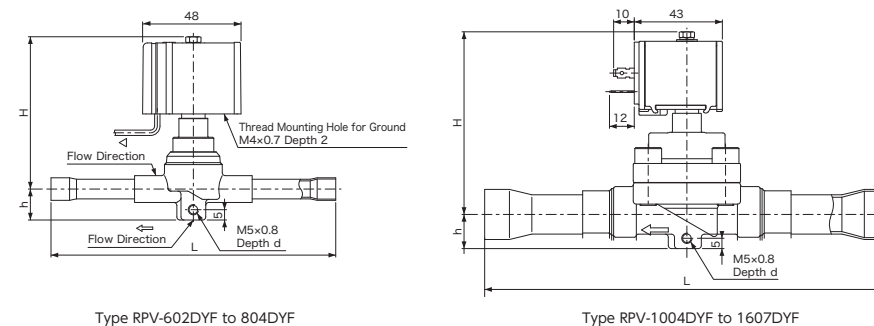
COIL SELECTION



DIMENSIONS



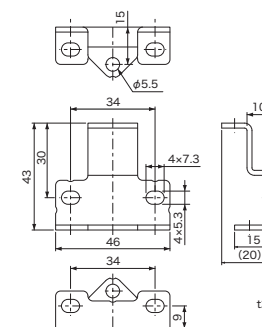
DIMENSIONS



Catalog No.		Unit : mm				
Type	Model	L	H	h	d	
RPV	302BYF	64	67	12.5	12	
	303BYF	68				
	602BYF	71	74	15		14
	603BYF	78				
	804BYF	90	75.5	17		
	1004BYF	96	77	15.5	17	
	1205BYF	104	82	17	20	
	1606BYF	124	89	19	24	
	302DYF	123	67	12.5	12	
	303DYF					
	602DYF	140	74	15		14
	603DYF	138				
	804DYF	139	75.5	17		
	1004DYF	158	77	15.5	17	
	1205DYF	171	82	17	20	
	1606DYF	196	89	19	24	
1607DYF						

STANDARD ACCESSORY

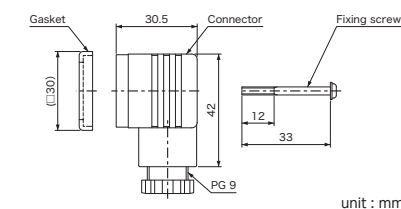
- Flare Nut (only for flare connection model)
- Mounting bracket



unit : mm

OPTIONAL PARTS

- DIN socket for DIN plug coil
 - * Please specify necessity of the parts when ordering



unit : mm

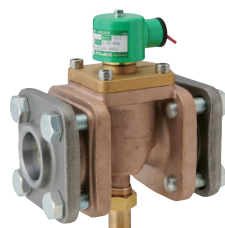
SOLENOID VALVES FOR REFRIGERANT / Type REV



Type REV-B



Type REV-D



Type REV-EX



Type REV-G

Click or scan here
for the capacity
table. ⇒



URL : https://saginomiya.co.jp/en/auto/pdf/rev_capacity.pdf

FEATURES

- Solenoid valves for fluorocarbon refrigerants. Also available for air.
- Various connection styles are available.
- Manual opening mechanism (Manual opening stem) is also available.
- It can also be installed on vertical piping, simplifying the piping design.
- Drip-proof types are also available.
- Standards : CE, UKCA (Please contact us for details such as approved specifications.)

COMMON SPECIFICATIONS

- Fluid Temperature : -40~125°C
- Ambient temperature : -30~40°C
- Normally Closed

APPLICATIONS

- Condensing units
- Chillers
- Air conditioning systems, etc.

DESCRIPTION OF CATALOG NO.

REV - 15 06 B X F * A 4 C
I II III IV V VI VII VIII IX

I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection type
V	Pressure class
VI	Fluid
VII	Coil power supply
VIII	Coil voltage
IX	Coil Style

TYPE NUMBER SELECTION

Catalog No.					Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Max. working pressure (MPa)	Manual Opening Stem	Wt. (kg)				
Type	Model	Fluid	Power supply / Voltage	Coil Style			Style	Connection size	Min.	Max.							
REV	703BY	F (Various refrigerants) * 1			7	1.0	Flare	3/8"	0.007	2.45	4.2	—	0.4				
	1004BY				10	2.0		1/2"					0.7				
	1205BY				12	3.5		5/8"					0.9				
	1506BY				15	5.3		3/4"					1.3				
	1003GY				10	2.0	Rc	3/8"					0.8				
	1204GY				12	3.5		1/2"					1.1				
	1506GY				15	5.3		3/4"					1.5				
	703DY	A (Air)	* A1 (100V. AC)	7	1.0	Copper tube solder (ODF)	3/8"	0.3									
	1004DY			10	2.0		1/2"	0.6									
	1205DY			12	3.5		5/8"	0.7									
	1506DY	15	5.3	3/4"	0.9												
	2007DY		* A2 (200V. AC)	20	9.0		7/8"						1.4				
	2010DY					1"											
	2011DY					1-1/8"											
	703BX		* A3 (110V. AC)		7	1.0	Flare	3/8"			2.94	Option * 4	0.4				
	1004BX				10	2.0		1/2"					0.7				
	1205BX				12	3.5		5/8"					0.9				
	1506BX				15	5.3		3/4"					1.3				
	1003GX					* A4 (220V. AC)	10	2.0					Rc	3/8"	0.8		
	1204GX													12	3.5	1/2"	1.1
	1506GX													15	5.3	3/4"	1.5
	703DX	F (Various refrigerants) * 2	* A7 (24V. AC)		7	1.0	Copper tube solder (ODF)	3/8"						0.3			
	1004DX				10	2.0		1/2"						0.6			
	1205DX				12	3.5		5/8"					0.7				
	1506DX				15	5.3		3/4"					0.9				
	2007DX					* D1 (100V. DC)		20					9.0	7/8"	1.4		
	2010DX						1"							1.4			
	2011DX						1-1/8"							1.4			
	2511DX	A (Air)	* D6 (12V. DC)		25	13.8	Copper tube solder (ODF)	1-1/8"			2.0						
	2512DX							1-1/4"			2.0						
	2513DX							1-3/8"			2.0						
	3213DX	C (Inert gases)	* D7 (24V. DC)		32	19.4		1-3/8"			3.0						
	3214DX							1-1/2"			3.0						
	3215DX							1-5/8"			3.0						
2006EX				20	9.0	Flange * 3	20A	with	4.9								
2510EX				25	13.8		25A		7.5								
3212EX				32	19.4		32A		8.7								
4014EX				40	32.0		40A		10.6								
5020EX				50	45.0		50A		16.1								
6524EX				65	74.0		65A		23.0								
6530EX							80A		26.4								

* 1 R134a, R404A, R407C, R410A, R448A, R449A, R407H, R463A-J (For other refrigerants, please contact us.)

* 2 For available refrigerants, please contact us.

* 3 Joint flange can be attached as an option.

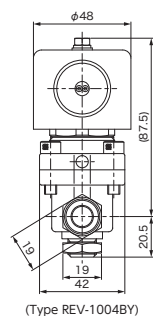
* 4 If required, please add 'M' after the catalog number. (e.g. REV-M703BYF)

* 5 Valve only (without coil). The weight of the flange type is included the flange and a set of the tie bolt.

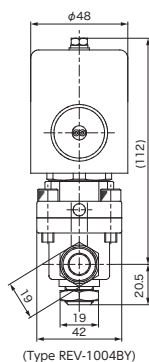
SPECIFICATIONS OF COILS

Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style	Wt. (kg)
			Running	Inrush				
24V.AC	50/60	+ 10 – 15	17/14	43/35	8/7	Class B Molded	Lead Wire type	0.2
100V.AC							Drip-proof terminal box type	0.5
							Lead Wire type	0.2
110V.AC							Drip-proof terminal box type	0.5
							Lead Wire type	0.2
200V.AC							Drip-proof terminal box type	0.5
							Lead Wire type	0.2
220V.AC							Drip-proof terminal box type	0.5
	Lead Wire type	0.2						
240V.AC	Drip-proof terminal box type	0.5						
—	± 10	—	—	10	Lead Wire type		0.3	
					Drip-proof terminal box type		0.6	
					Lead Wire type		0.3	
					Drip-proof terminal box type		0.6	
					24V.DC		Lead Wire type	0.3
							Drip-proof terminal box type	0.6
					100V.DC	Lead Wire type	0.3	
						Drip-proof terminal box type	0.6	

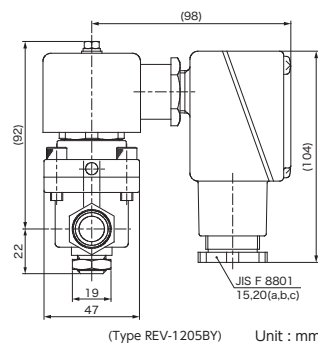
- Current (A) = Voltampere / Rated Voltage
- IP Lead Wire type : IP67, Drip-proof terminal box type : IP34
- The standard specification of the coil style is the Lead wire type.
- Drip-proof terminal box type can be used indoors where water drops may fall.



Lead Wire type
(AC Coil, IP67)



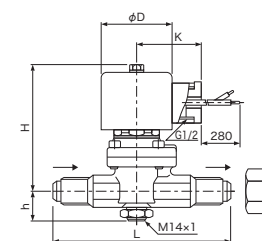
Lead Wire type
(DC Coil, IP67)



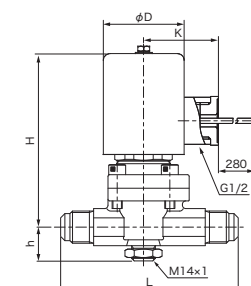
Drip-proof terminal box type
(IP34)

Unit : mm

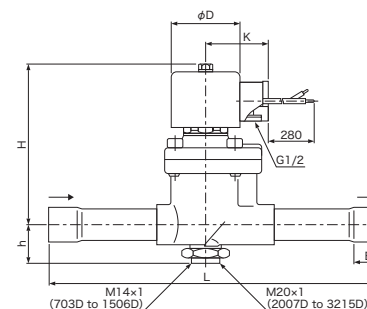
DIMENSIONS



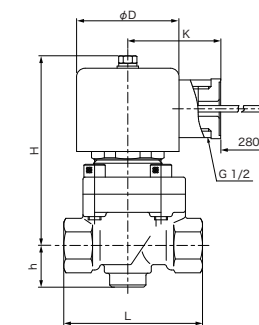
Type REV-B (AC Coil)



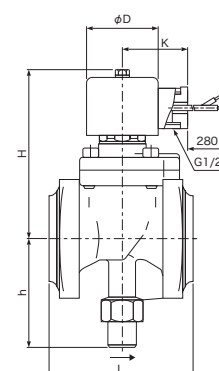
Type REV-B (DC Coil)



Type REV-D (AC Coil)



Type REV-G (AC Coil)



Type REV-EX (AC Coil)

Catalog No.		Unit : mm						
Type	Model	L	H *		h	E	φ D	K
			AC	DC				
REV	703B	90	73	95	19	—	48	44
	1004B	105	90	112	21			
	1205B	115	92	114	22			
	1506B	135	99	121	25			
	1003G	65	91	113	20			
	1204G	75	96	118	21			
	1506G	85	102	124	24	10		
	703D	150	73	95	19			
	1004D	160	90	112	21			
	1205D	180	92	114	22			
	1506D	190	99	121	25			
	2007D	230	116	138	29			
	2010D							
	2011D							
	2006EX	95	112	134	76	—		
	2510EX	110	123	145	78			
	3212EX	120	126	148	87			
	4014EX	130	133	155	92			
5020EX	170	149	171	115				
6524EX	200	169	191	129				
6530EX	210	169	191	129				

* AC" refers assembled with AC power supply coil and "DC" refers assembled with DC power supply coil.

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	Connection		Flange type (square flange)	Pipe type	Outer diameter of connection pipe [mm]	Flange inner diameter φ d [mm]	Insert hole			Joint flange Catalog No.		
		Style	Connection size					Screw thread	Inner diameter φ d0 [mm]	Depth L [mm]			
REV	2006EX	20A	06D	Socket brazing type type RBK	Copper pipe	19.05	17.1	—	19.4	12	REV-06E06D		
			07D			22.22	19.8		22.4		REV-06E07D		
			10D			25.40	22.6		25.6		REV-06E10D		
			11D			28.58	25.8		28.8		REV-06E11D		
			12D			31.75	28.6		32.0		REV-06E12D		
			06K	Slip-on welding type type RSK	Steel pipe	27.20	21.4	—	27.6	—	REV-06E06K		
			06S			27.20	27.6		27.6		REV-06E06S		
			06G			Screwed type	Steel pipe		—		—	Rc 3/4	—
			2510EX	25A	10D	Socket brazing type type RBK	Copper pipe	25.40	22.6	—	25.6	14	REV-10E10D
					11D			28.58	25.8		28.8		REV-10E11D
					12D			31.75	28.6		32.0		REV-10E12D
					13D			34.92	31.4		35.2		REV-10E13D
					14D			38.10	34.5		38.1		REV-10E14D
	10K	Slip-on welding type type RSK			Steel pipe	34.00	27.2	—	34.5	—	REV-10E10K		
	10S					34.00	34.5		34.5		REV-10E10S		
	10G					Screwed type	Steel pipe		—		—	Rc 1	—
	3212EX	32A			12D	Socket brazing type type RBK	Copper pipe	31.75	28.6	—	32.0	16	REV-12E12D
					13D			34.92	31.4		35.2		REV-12E13D
					14D			38.10	34.5		38.3		REV-12E14D
					15D			41.28	37.3		41.5		REV-12E15D
					12K			Slip-on welding type type RSK	Steel pipe		42.70		35.5
			14K	48.60	41.2	49.3	REV-12E14K						
			12S	42.70	43.3	43.4	REV-12E12S						
			14S	48.60	49.3	49.3	REV-12E14S						
			12G	Screwed type	Steel pipe	—	—	Rc 1-1/4	—	—	REV-12E12G		
			14G			—	—	Rc 1-1/2	—		REV-12E14G		
			4014EX	40A	14D	Socket brazing type type RBK	Copper pipe	38.10	34.5	—	38.3	16	REV-14E14D
					15D			41.28	37.3		41.5		REV-14E15D
					16D			44.45	40.8		44.7		REV-14E16D
	20D	50.80			45.8			51.1	REV-14E20D				
	14K	Slip-on welding type type RSK			Steel pipe	48.60	41.2	—	49.3		16	REV-14E14K	
	14S					48.60	49.3		49.3			REV-14E14S	
	14G					Screwed type	Steel pipe		—			—	Rc 1-1/2

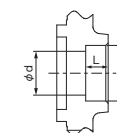
OPTIONAL PARTS

Valve Body Catalog No.		Joint flange type									* 1
Type	Model	Connection		Flange type (square flange)	Pipe type	Outer diameter of connection pipe [mm]	Flange inner diameter φ d [mm]	Insert hole			Joint flange Catalog No.
		Style	Connection size					Screw thread	Inner diameter φ d0 [mm]	Depth L [mm]	
REV	5020EX	50A	20D	Socket brazing type type RBK	Copper pipe	50.80	45.8	—	51.1	19	REV-20E20D
			21D			53.98	49.0		54.3		REV-20E21D
			22D			57.15	51.2		57.5		REV-20E22D
			24D			63.50	57.5		63.8		REV-20E24D
			20K	Slip-on welding type type RSK	Steel pipe	60.50	52.7		61.3		REV-20E20K
			20S			60.50	61.3		61.3		REV-20E20S
			20G			Screwed type	Steel pipe	—	—	Rc 2	—
	6224EX	65A	24D	Socket brazing type type RBK	Copper pipe	63.50	57.5	—	63.8	22	REV-24E24D
			25D			66.68	60.7		67.0		REV-24E25D
			30D			76.20	69.2		76.6		REV-24E30D
			24K			76.30	65.9		77.2		REV-24E24K
			24S	Slip-on welding type type RSK	Steel pipe	76.30	77.2		77.2		REV-24E24S
			24G	Screwed type	Steel pipe	—	—		Rc 2-1/2		—
	6530EX	80A	30D	Socket brazing type type RBK	Copper pipe	76.20	69.2	—	76.6	26	REV-30E30D
			31D			79.38	71.4		79.8		REV-30E31D
			34D			88.90	80.9		89.3		REV-30E34D
			30K			89.10	78.1		90.2		REV-30E30K
			30S	Slip-on welding type type RSK	Steel pipe	89.10	90.2		90.2		REV-30E30S
			30G	Screwed type	Steel pipe	—	—		Rc 3		—

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

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

Connection size of Joint flange	Flange packing Catalog No.
20A	REV-1N-00003
25A	REV-1N-00004
32A	REV-1N-00005
40A	REV-1N-00006
50A	REV-1N-00007
65A	REV-1N-00008
80A	REV-1N-00009



Example of Joint flange insert hole

STANDARD ACCESSORY

- Flare Nut (only for flare connection model)

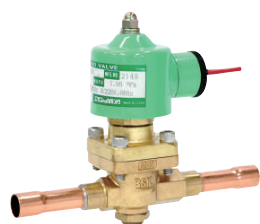
SOLENOID VALVES FOR REFRIGERANT [NORMALLY OPENED VALVE] / Type UEV



Type UEV-B



Type UEV-G



Type UEV-D

Click or scan here
for the capacity
table. ⇒



URL : https://saginomiya.co.jp/en/auto/pdf/uev_capacity.pdf

TYPE NUMBER SELECTION

Catalog No.					Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Manual Opening Stem	* 2 Wt. (kg)	
Type	Model	Fluid	Rated Voltage	Coil Style			Style	Connection size	Min.	Max.			
UEV	1004BX	F (Various refrigerants * 1)	* A1 (100V. AC)	C (Lead Wire type)	10	2.0	Flare	1/2"	0.007	1.96	without	0.7	
	1205BX				12	3.5		5/8"				0.9	
	1506BX				15	5.3		3/4"				1.3	
	1003GX		* A2 (200V. AC)		10	2.0	Rc	3/8"				0.8	
	1204GX				12	3.5		1/2"				1.1	
	1506GX		* A3 (110V. AC)		15	5.3		3/4"				1.5	
	2010GX	A (Air) C (others)	* A4 (220V. AC)	W (Drip-proof terminal box type)	20	9.0	Copper tube solder (ODF)	1"				1.7	
	1004DX				10	2.0		1/2"				0.6	
	1205DX				12	3.5		5/8"				0.7	
	1506DX		* A7 (24V. AC)		15	5.3		3/4"				0.9	
	2007DX				20	9.0		7/8"				1.4	
	2010DX		* AB (240V. AC)					1"					
	2011DX							1-1/8"					

* 1 R134a, R404A (For other refrigerants, please contact us.)

* 2 Valve only (without coil)

FEATURE

- Solenoid valves for fluorocarbon refrigerants. Also available for air.
- It can also be installed on vertical piping, simplifying the piping design.
- Drip-proof types are also available.

COMMON SPECIFICATION

- Max. working pressure : 2.94 MPa
- Fluid Temperature : -40~120°C
- Ambient temperature : -30~40°C
- Normally Opened

APPLICATIONS

- Condensing units
- Chillers
- Air conditioning systems, etc

DESCRIPTION OF CATALOG NO.

UEV - 15 06 B X F * A 4 C
I II III IV V VI VII VIII IX

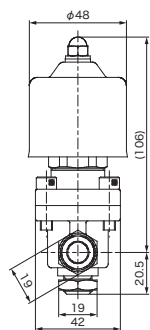
I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection type
V	Pressure class
VI	Fluid
VII	Coil Power supply
VIII	Coil Voltage
IX	Coil Style

SPECIFICATIONS OF COILS

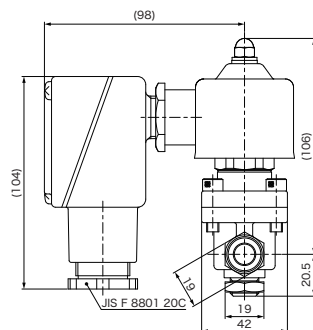
Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style	Wt. (kg)
			Running	Inrush				
24V.AC	50/60	+10 -15	17/14	45/35	8/7	Class B Molded	Lead Wire type	0.2
							Drip-proof terminal box type	0.5
100V.AC							Lead Wire type	0.2
							Drip-proof terminal box type	0.5
110V.AC							Lead Wire type	0.2
							Drip-proof terminal box type	0.5
200V.AC							Lead Wire type	0.2
							Drip-proof terminal box type	0.5
220V.AC							Lead Wire type	0.2
							Drip-proof terminal box type	0.5
240V.AC							Lead Wire type	0.2
							Drip-proof terminal box type	0.5

- Current (A) = Voltampere / Rated Voltage
- IP Lead Wire type : IP67, Drip-proof terminal box type : IP34
- The standard specification of the coil style is the Lead wire type.
- Drip-proof terminal box type can be used indoors where water drops may fall.

SPECIFICATIONS OF COILS



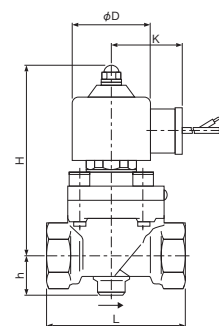
(Type UEV-1004BX)

Lead Wire type
(IP67)

(Type UEV-1004BX)

Drip-proof terminal box type
(IP34)

DIMENSIONS



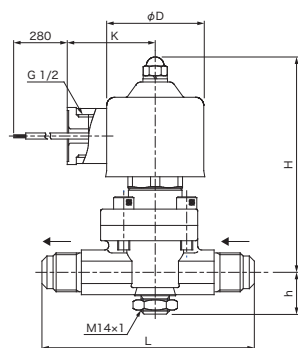
Type UEV-G

Catalog No.		Unit : mm					
Type	Model	L	H	h	E	φ D	K
UEV	1004BX	105	108	21	—	48	44
	1205BX	115	110	22			
	1506BX	135	116	25			
	1003GX	65	109	20			
	1204GX	75	112	21			
	1506GX	85	119	24			
	2010GX	100	133	33			
	1004DX	160	108	21	13		
	1205DX	180	110	22	16		
	1506DX	190	116	25	19		
	2007DX	230	132	29	20		
	2010DX						
2011DX							

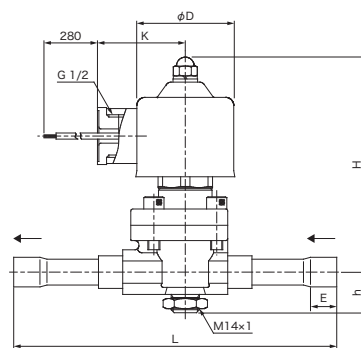
STANDARD ACCESSORY

- Flare Nut (only for flare connection model)

DIMENSIONS



Type UEV-B



Type UEV-D

SOLENOID VALVES FOR REFRIGERANT / Type JEV



Type JEV

Click or scan here
for the capacity
table. ⇒



URL : https://saginomiya.co.jp/en/auto/pdf/jev_capacity.pdf

FEATURE

- Solenoid valves for fluorocarbon refrigerants. Also available for air.
- It can also be installed on vertical piping.
- Built-in strainer

APPLICATIONS

- Condensing units
- Chillers
- Air conditioning systems, etc.

COMMON SPECIFICATION

- Max. working pressure : 2.94 MPa
- Fluid Temperature : -40 ~ 125°C
- Ambient temperature : -30 ~ 40°C
- Normally Closed

DESCRIPTION OF CATALOG NO.

JEV - $\frac{12}{I}$ $\frac{03}{II}$ $\frac{X}{III}$ $\frac{X}{IV}$ $\frac{F}{V}$ $\frac{*}{VI}$ $\frac{A}{VII}$ $\frac{4}{VIII}$ $\frac{C}{IX}$

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

TYPE NUMBER SELECTION

Catalog No.					Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Manual Opening Stem	*3 Wt. (kg)
Type	Model	Fluid	Rated Voltage	Coil Style			Style	Connection size	Min.	Max.		
JEV	1203EX	F (Various refrigerants) *1	* A1 (100V.AC) * A2 (200V.AC) * A3 (110V.AC) * A4 (220V.AC) * A7 (24V.AC)	C (Lead Wire type)	12	3.0	Flange *2	10A	0.015	2.45	with	4.1
	2006EX		* AB (240V.AC) * D1 (100V.DC) * D6 (12V.DC) * D7 (24V.DC) * D8 (48V.DC)		20	6.4		20A				5.3
	2510EX	A (Air)		W (Drip-proof terminal box type)	25	10.9		25A				9.1
	3212EX	C (Inert gases)			32	16.5		32A				11.1

*1 R134a, R404A (For other refrigerants, please contact us.)

*2 Joint flange can be attached as an option.

*3 The weight is included a coil (AC lead wire type), the joint flange and a set of the tie bolt.

SPECIFICATIONS OF COILS

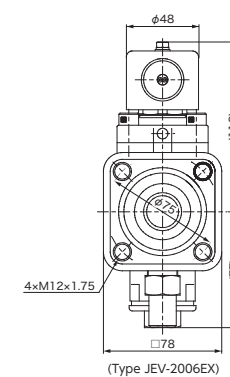
Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style
			Running	Inrush			
24V.AC	50/60	+10 -15	17/14	43/35	8/7	Class B Molded	Lead Wire type Drip-proof terminal box type
100V.AC							
110V.AC							
200V.AC							
220V.AC							
240V.AC							
12V.DC	—	±10	—	—	10		
24V.DC							
48V.DC							
100V.DC							

• Current (A) = Voltampere / Rated Voltage

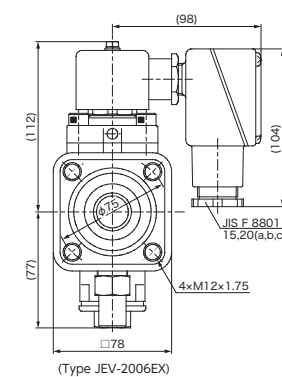
• IP Lead Wire type : IP67, Drip-proof terminal box type : IP34

• The standard specification of the coil style is the Lead Wire type.

• Drip-proof terminal box type can be used indoors where water drops may fall.



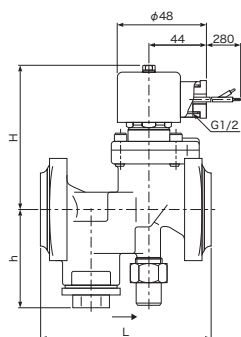
Type Lead Wire (IP67)



Drip-proof terminal box type (IP34)

Unit : mm

DIMENSIONS



Type JEV

Catalog No.		Unit : mm			
Type	Model	L	H *		h
JEV	1203EX	130	AC	DC	60
	2006EX		112	134	77
	2510EX	160	123	145	88
	3212EX	190	125	147	102

* "AC" refers assembled with AC power supply coil and
 "DC" refers assembled with DC power supply coil.

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.

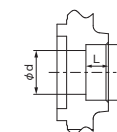
OPTIONAL PARTS

Valve Body Catalog No.		Joint flange type								* 1	
Type	Model	Connection		Flange type (square flange)	Pipe type	Outer diameter of connection pipe [mm]	Flange inner diameter φ d [mm]	Insert hole			Joint flange Catalog No.
		Style	Connection size					Screw thread	Inner diameter φ d0 [mm]	Depth L [mm]	
JEV	1203EX	10A	05D	Socket brazing type RBK	Copper pipe	15.88	13.8	—	16.1	10	JEV-03E05D
			06D			19.05	17.1		19.3		JEV-03E06D
			07D			22.22	19.8		22.4		JEV-03E07D
			03K		Steel pipe	17.30	12.7		17.7		JEV-03E03K
			04K			21.70	16.1		22.1		JEV-03E04K
	2006EX	20A	06D	Socket brazing type RBK	Copper pipe	19.05	17.1	—	19.4	12	JEV-06E06D
			07D			22.22	19.8		22.4		JEV-06E07D
			10D			25.40	22.6		25.6		JEV-06E10D
			11D			28.58	25.8		28.8		JEV-06E11D
			12D		31.75	28.6	32.0		JEV-06E12D		
			06K	Steel pipe	27.20	21.4	27.6		JEV-06E06K		
			06S	Slip-on welding type RSK	Steel pipe	27.20	27.6		27.6	—	JEV-06E06S
			06G	Screw type	Steel pipe	—	—		Rc 3/4	—	JEV-06E06G
			2510EX	25A	10D	Socket brazing type RBK	Copper pipe		25.40	22.6	—
	11D	28.58			25.8			28.8	JEV-10E11D		
	12D	31.75			28.6			32.0	JEV-10E12D		
	13D	34.92			31.4			35.2	JEV-10E13D		
	14D	38.10			34.5		38.1	JEV-10E14D			
	10K	Steel pipe			34.00	27.2	34.5	JEV-10E10K			
	10S	Slip-on welding type RSK			Steel pipe	34.00	34.5	34.5	—	JEV-10E10S	
	10G	Screw type			Steel pipe	—	—	Rc 1	—	JEV-10E10G	
	3212EX	32A			12D	Socket brazing type RBK	Copper pipe	31.75	28.6	—	
			13D	34.92	31.4			35.2	JEV-12E13D		
			14D	38.10	34.5			38.3	JEV-12E14D		
			15D	41.28	37.3			41.5	JEV-12E15D		
			12K	Steel pipe	42.70		35.5	43.3	JEV-12E12K		
			14K		48.60	41.2	49.3	JEV-12E14K			
			12S	Slip-on welding type RSK	Steel pipe	42.70	43.3	43.4	—		JEV-12E12S
			14S			48.60	49.3	49.3	JEV-12E14S		
			12G		Screw type	Steel pipe	—	—	Rc 1-1/4		—
	14G	Rc 1-1/2	JEV-12E14G								

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

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

Connection size of Joint flange	Flange packing Catalog No.
10A	JEV-1N-00001
20A	JEV-1N-00003
25A	JEV-1N-00004
32A	JEV-1N-00005



Example of Joint flange insert hole

SMALL SOLENOID VALVES FOR WATER / Type HEV



Type HEV-G

FEATURES

- It can also be installed on vertical piping.
- Bronze valve body
- Normally Closed

APPLICATIONS

- Water boilers
- Water heaters
- Electric water heaters, etc.

COMMON SPECIFICATIONS

- Fluid Temperature : 0 ~ 95°C
- Ambient temperature : -10 ~ 50°C
- Normally Closed

DESCRIPTION OF CATALOG NO.

HEX - 10 04 G K W * A 4 R
I II III IV V VI VII VIII IX

I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection type
V	Pressure class
VI	Fluid
VII	Coil power supply
VIII	Coil voltage
IX	Coil Style

TYPE NUMBER SELECTION

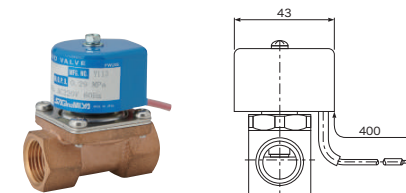
Catalog No.				Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Max. working pressure (MPa)	Operation	* Wt. (kg)
Type	Model	Power supply / Voltage	Coil Style			Style	Connection size	Min.	Max.			
HEV	604GKW	* A1 (100V.AC) * A2 (200V.AC) * A4 (220V.AC) * A7 (24V.AC)	R (Lead Wire type)	6	0.94	Rc	1/2"	0	0.10	0.10	Direct operated	0.27
	1004GKW			10	1.1				0.29	0.29	Pilot operated	0.24

* Valve only (without coil)

SPECIFICATIONS OF COILS

Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style	Coil Wt. (kg)
			Running	Inrush				
24V.AC	50/60	± 10	12/9	30/23	5/4	Class B Molded	R (Lead Wire type)	0.13
100V.AC								
200V.AC								
220V.AC								

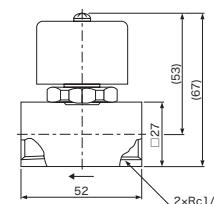
- Current (A) = Voltampere / Rated Voltage
- IP Lead Wire type : IP67



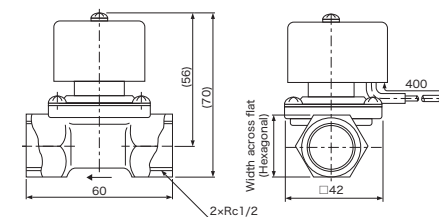
Lead Wire type (IP67)

Unit : mm

DIMENSIONS



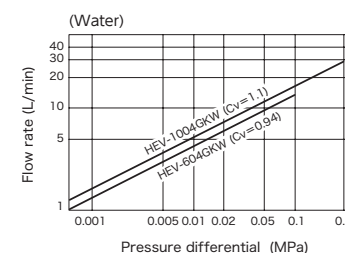
Type HEV-604GKW



Type HEV-1004GKW

Unit : mm

FLOW CHARACTERISTICS



SOLENOID VALVES FOR WATER/BRINE / WEV



Type WEV-G



Type WEV-F

FEATURE

- Normally Closed Solenoid valve dedicated for water and brine.
- It can also be installed on vertical piping.
- Standards : CE, UKCA (Please contact us for details such as approved specifications.)

APPLICATIONS

- Cooling / Heating equipment
- Air conditioning systems
- Various industrial equipment, etc.

COMMON SPECIFICATION

- Max. working pressure : 0.98 MPa

DESCRIPTION OF CATALOG NO.

WEV - $\frac{15}{I}$ $\frac{04}{II}$ $\frac{G}{III}$ $\frac{L}{IV}$ $\frac{W}{V}$ * $\frac{A}{VI}$ $\frac{4}{VII}$ $\frac{C}{IX}$

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

TYPE NUMBER SELECTION

Catalog No.					Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		
Type	Model	Fluid	Rated Voltage	Coil Style			Style	Connection size	Min.	Max.	
WEV	1504GL	W (Water) B * 1 (Hot Water, Glycol and Equivalent Fluid)	* A1 (100V.AC)	C (Lead Wire type) W (Drip-proof terminal box type)	15	4.3	Rc	1/2"	0.015	0.9	
	2006GL		* A2 (200V.AC)		20	7.8		3/4"			
	2510GL		* A3 (110V.AC)		25	10.4		1"			
	3212GL		* A4 (220V.AC)		32	17.6		1-1/4"			
	4014GL		* A7 (24V.AC)		40	26		1-1/2"			
	5020GL		* AB (240V.AC)		50	42		2"	0.03		
	1504FL		* D1 (100V.DC)		15	4.3	Flange * 2 (Round Type)	15A	0.015		0.9
	2006FL		* D6 (12V.DC)		20	7.8		20A			
	2510FL		* D7 (24V.DC)		25	10.4		25A			
	3212FL		* D8 (48V.DC)		32	17.6		32A			
	4014FL				40	26		40A			
	5020FL				50	42		50A	0.03		
	6524FL				65	65		65A			
	8030FL				80	100		80A			

* 1 Only Nybrine (ethylene glycol and propylene glycol) can be used.

* 2 The joint flange is not included. Please prepare the joint flange separately.

Catalog No.					Fluid Temperature (°C)	Ambient temperature (°C)	* 3 Wt. (kg)
Type	Model	Fluid	Rated Voltage	Coil Style			
WEV	1504GL	W (Water) B * 1 (Hot Water, Glycol and Equivalent Fluid)	* A1 (100V.AC)	C (Lead Wire type) W (Drip-proof terminal box type)	0~60 (W) -35~90 (B) * No fluid freezing	-30~50 * No fluid freezing	0.6
	2006GL		* A2 (200V.AC)				0.8
	2510GL		* A3 (110V.AC)				1.1
	3212GL		* A4 (220V.AC)				1.6
	4014GL		* A7 (24V.AC)				2.4
	5020GL		* AB (240V.AC)				3.6
	1504FL		* D1 (100V.DC)				2.0
	2006FL		* D6 (12V.DC)				2.6
	2510FL		* D7 (24V.DC)				3.7
	3212FL		* D8 (48V.DC)				5.0
	4014FL						5.7
	5020FL						7.7
	6524FL						12.8
	8030FL						16.5

* 1 Only Nybrine (ethylene glycol and propylene glycol) can be used.

* 2 The joint flange is not included. Please prepare the joint flange separately.

* 3 Includes a coil. (AC lead wire type)

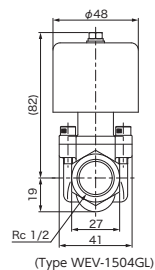
SPECIFICATIONS OF COILS

Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style
			Running	Inrush			
24V.AC	50/60	± 10	18/14	54/47	9/8	Class B Molded	Lead Wire type Drip-proof terminal box type
100V.AC							
110V.AC							
200V.AC							
220V.AC							
240V.AC							
12V.DC	—	—	—	—	11		
24V.DC							
48V.DC							
100V.DC							

- Current (A) = Voltampere / Rated Voltage
- IP Lead Wire type : IP67, Drip-proof terminal box type : IP34
- The standard specification of the coil style is the Lead Wire type.
- Drip-proof terminal box type can be used indoors where water drops may fall.



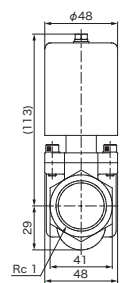
Lead Wire type
(AC coil, IP67)



(Type WEV-1504GL)



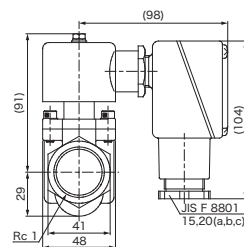
Lead Wire type
(DC coil, IP67)



(Type WEV-2510GL)



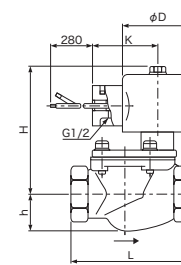
Drip-proof terminal box type
(IP34)



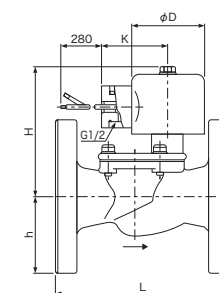
(Type WEV-2510GL)

Unit : mm

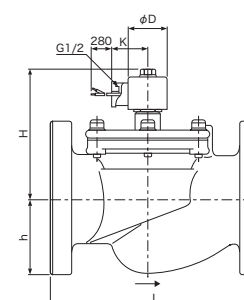
DIMENSIONS



Type WEV-G



Type WEV-1504FL to 4014FL

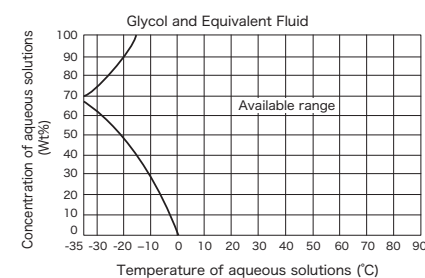


Type WEV-5020FL to 8030FL

Catalog No.		Unit : mm					
Type	Model	L	H*		h	ϕD	K
WEV	1504GL	65	82	104	19	48	44
	2006GL	80	86	108	25		
	2510GL	90	91	113	29		
	3212GL	105	97	119	36		
	4014GL	120	103	125	47		
	5020GL	140	126	148	55		
	1504FL	105	82	104	48		
	2006FL	115	86	108	50		
	2510FL	125	91	113	63		
	3212FL	140	97	119	68		
	4014FL	150	103	125	70		
	5020FL	160	126	148	78		
	6524FL	200	138	160	88		
	8030FL	240	152	174	93		

* "AC" refers assembled with AC power supply coil and "DC" refers assembled with DC power supply coil.

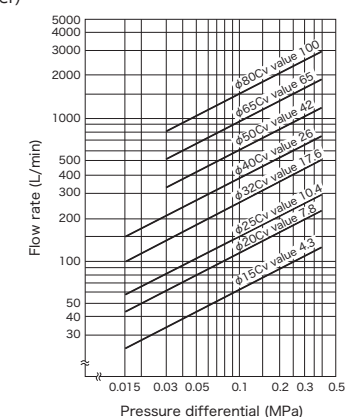
AVAILABLE RANGE OF GLYCOL



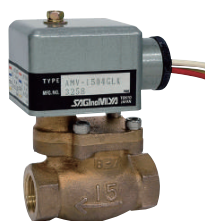
FLOW CHARACTERISTICS

for Water
(hot water)
piping

When used with brain, please expect
a few percent decrease of flow rate.



SOLENOID VALVES FOR GENERAL PURPOSE / Type AMV



Type AMV-G

FEATURE

- Available to use with water, steam, air or oil (50mm²/s or less).
- Apply H-class insulation molded coil for common use in AC100V and AC200V.
- It can also be installed on vertical piping.
- Normally Closed

COMMON SPECIFICATION

- Max. working pressure : 0.98 MPa
- Fluid Temperature : -10~180°C ((No fluid freezing)
- Ambient temperature : -20~70°C (No fluid freezing)
- Normally Closed

APPLICATIONS

- Heating and cooling equipment
- Sterilizers
- Humidifiers
- Oiling equipment, etc.

DESCRIPTION OF CATALOG NO.

AMV - 15 04 G L K
I II III IV V VI

I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection type
V	Pressure class
VI	Fluid

TYPE NUMBER SELECTION

Catalog No.			Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		* Wt. (kg)
Type	Model	Fluid			Style	Connection size	Min.	Max.	
AMV	1504GL	K (water / steam / air / oil)	15	4.0	Rc	1/2"	0.03	0.98	0.8
	2006GL		20	6.5		3/4"			1.0
	2510GL		25	10.8		1"			1.5

• There is no identification of coil in the catalog number.

* Includes a coil.

SPECIFICATIONS OF COILS

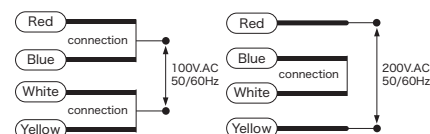
Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style
			Running	Inrush			
100V.AC 200V.AC	50/60	+10 -15	15/12	32/28	8/7	Class H Molded	Lead Wire type

• Current (A) = Voltampere / Rated Voltage

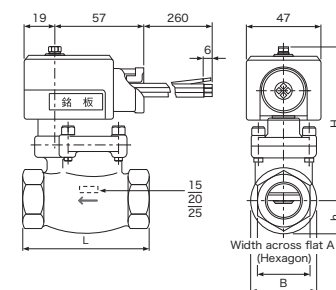


Lead Wire type

WIRING METHOD

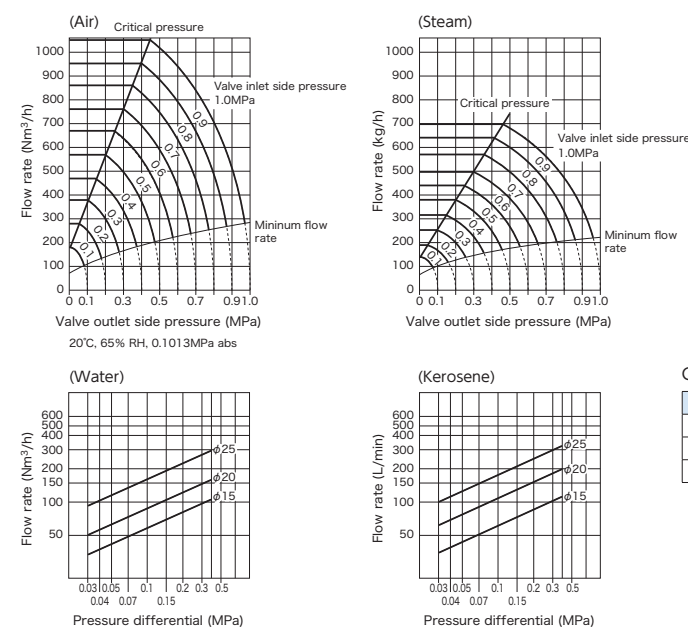


DIMENSIONS



Catalog No.		Unit : mm				
Type	Model	L	H	h	A	B
AMV	1504GL	65	91.5	18.5	28	37
	2006GL	80	96	21	34	42
	2510GL	90	105.5	27	44	56

FLOW CHARACTERISTICS



Correction factor table

Port size	Factor
15	0.62
20	1.00
25	1.66

• The flow rate of Air or Steam should be multiplied by the correction factor.

SOLENOID VALVES FOR OIL / Type GMV



Type GMV-G

FEATURE

- Solenoid valves for diesel fuel, kerosene, fuel oil
- Available both normally closed types and normally opened types.
- Standards : DNV (Please contact us for details such as approved specifications.)

APPLICATIONS

- Water boilers
- Air heaters
- Fuel oil supply devices, etc.

COMMON SPECIFICATION

- Fluid Temperature : -20 ~ 130°C
- Ambient temperature : -20 ~ 40°C

DESCRIPTION OF CATALOG NO.

GMV - H 3 03 G * A 1 U
I II III IV V VI VII VIII

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

TYPE NUMBER SELECTION

Catalog No.				Operation	Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Max. viscosity (mm²/S)	Max. working pressure (MPa)	* 2 Wt. (kg)	
Type	Model	Rated Voltage	Coil Style				Style	Connection size	Min.	Max.				
GMV	H303G	* A1 (100V. AC)	U (Junction box type)	Normally Closed	2.8	0.24	Rc	3/8"	0	2.06	500	2.06	1.4	
	H304G					1/2"								
	H403G				4	0.38		3/8"						
	H404G							1/2"						
	H603G							3/8"		0.98				
	H604G				6	0.63		1/2"						
	H803G					3/8"		0.49						
	H804G			8	0.95	3/8"								
	H1204G * 1			10.5	1.87	1/2"						2.8		
	S303G					3/8"			2.06				1.4	
	S304G	2.8	0.24	1/2"										
	S403G			3/8"										
	S404G	4	0.38	1/2"										
	S603G			3/8"	0.98									
	S604G	6	0.63	1/2"				2.6						
	S803G			3/8"	0.49									
S804G	8	0.95	1/2"											

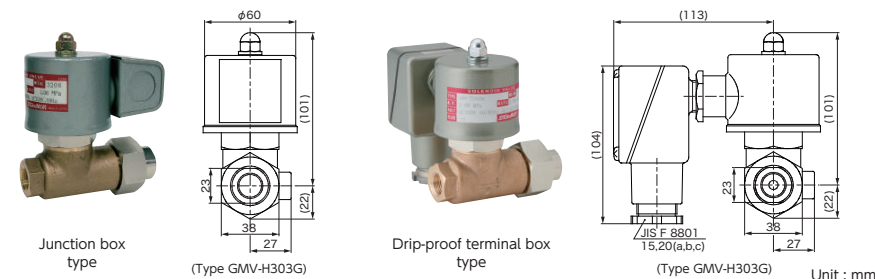
* 1 GMV-H1204G is 3-way valve. Please contact us for details.

* 2 Includes a coil (Junction box type).

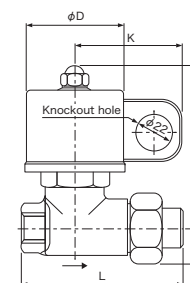
SPECIFICATIONS OF COILS

Valve Body Type	Catalog No. Model	Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style
					Running	Inrush			
GMV	H303G H304G S303G S304G	100V.AC 200V.AC	50/60	± 10	31/24	62/48	15/13	Class B Molded	Junction box type
	Other than the above				48/42	96/84	30/28		Drip-proof terminal box type

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

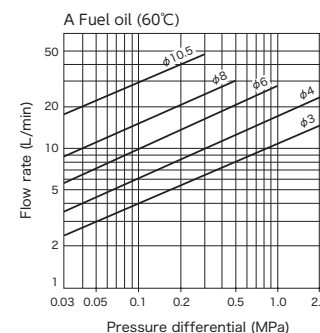


DIMENSIONS



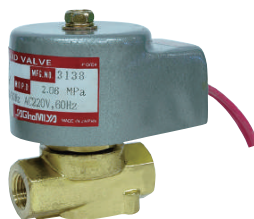
Type GMV-G

FLOW CHARACTERISTICS



Catalog No.		Unit : mm				
Type	Model	L	H	h	φ D	K
GMV	H303G	100	101	22	60	66
	H304G	125				
	H403G					
	H404G					
	H603G	135	139	27	75	75
	H604G					
	H803G					
	H804G					
	H1204G	139		35		
	S303G	100	101	22	60	66
	S304G	125				
	S403G					
	S404G					
	S603G	135	139	27	75	75
	S604G					
	S803G					
	S804G					

SOLENOID VALVES FOR OIL / Type GEV



Type GEV-H, S

FEATURE

- Solenoid valves for diesel fuel, kerosene, A and B fuel oil.
- Available both normally closed types and normally opened types.
- Small sized valve but working in large operating pressure differential.

COMMON SPECIFICATION

- Max. working pressure : 2.06 MPa
- Fluid Temperature : -20 ~ 100°C
- Ambient temperature : -20 ~ 40°C

APPLICATIONS

- Water boilers
- Air heaters
- General industrial equipment, etc.

DESCRIPTION OF CATALOG NO.

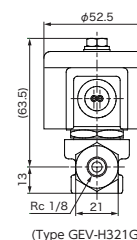
GEV - H 32 3 G * A 4 R
I II III IV V VI VII VIII

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

SPECIFICATIONS OF COILS

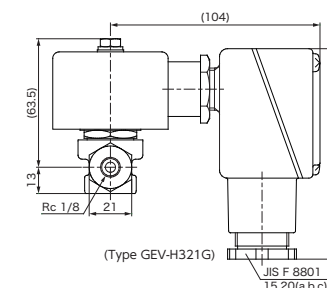
Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style
			Running	Inrush			
100V.AC	50/60	± 10	30/25	150/125	14/13	Class B Molded	Lead Wire type Drip-proof terminal box type
110V.AC							
200V.AC							
220V.AC							

- Current (A) = Voltampere / Rated Voltage
- IP Lead Wire type : IP67, Drip-proof terminal box type : IP34
- The standard specification of the coil style is the Lead Wire type.
- Drip-proof terminal box type can be used indoors where water drops may fall.



(Type GEV-H321G)

Lead Wire type



(Type GEV-H321G)

Drip-proof terminal box type

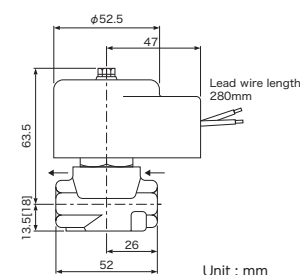
Unit : mm

TYPE NUMBER SELECTION

Catalog No.				Operation	Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Max. viscosity (mm ² /S)	* Wt. (kg)			
Type	Model	Rated Voltage	Coil Style				Style	Connection size	Min.	Max.					
GEV	H321G	* A1 (100V.AC) * A2 (200V.AC) * A3 (110V.AC) * A4 (220V.AC)	R (Lead Wire type)	Normally Closed	3.2	0.22	Rc	1/8"	0	2.06	120	0.7			
	H322G							1/4"							
	H323G							3/8"							
	S321G		W (Drip-proof terminal box type)	Normally Opened				1/8"							
	S322G							1/4"							
	S323G							3/8"							

- Weight includes a coil (Lead Wire type)
- * Includes a coil.

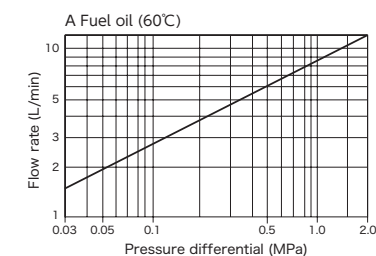
DIMENSIONS



Unit : mm

Type GEV-H
[Type GEV-S]

FLOW CHARACTERISTICS



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

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

DESCRIPTION OF CATALOG NO.

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

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

TYPE NUMBER SELECTION

Catalog No.				Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Manual Opening Stem	* 2 Wt (kg)	
Type	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	* A2 (200V.AC)		7	1.0		1/4"	0.015 (Standard type)	1.96 [AC] 1.57 [DC] (Standard type)	1.0		
	1003G	* A3 (110V.AC)		10	1.9		3/8"			1.1		
	1304G	* A4 (220V.AC)		13	3.2		1/2"			1.2		
	1606G	* D1 (100V.DC) * D6 (12V.DC) * D7 (24V.DC) * D8 (48V.DC)		16	5.4		3/4"			1.5		
	1906E			19	8.8	Oval Flange * 1	20A	0 (No differential pressure type)	0.98 (No differential pressure type)		4.4	
	2508E			25	14.1		25A				7.6	
	3212E			32	21.2	Square Flange * 1	32A				11.5	
	3814E			38	29.2		40A				14.2	
	5020E			50	42.4		50A	0.015	1.96 [AC] 1.57 [DC]	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.

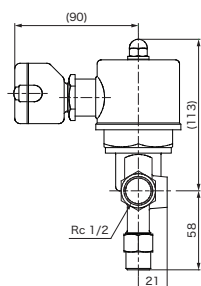
* 2 Includes a coil (AC Indoor terminal box type). The weight of the flange type is not included the joint flange.

SPECIFICATIONS OF COILS

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

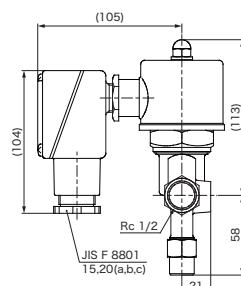
- Current (A) = Voltampere / Rated Voltage
- IP Drip-proof terminal box type : IP34
- The standard specification of the coil style is the Indoor terminal box type
- Drip-proof terminal box type can be used indoors where water drops may fall.

SPECIFICATIONS OF COILS



(Type HMV-1304G)

Indoor terminal box type

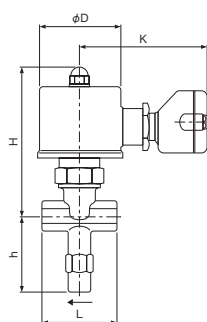


(Type HMV-1304G)

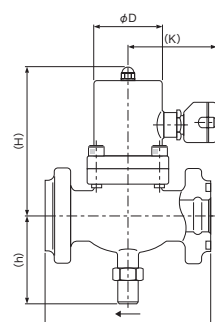
Drip-proof terminal box type

Unit : mm

DIMENSIONS



Type HMV-G



Type HMV-E

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

OPTIONAL PARTS

JOINT FLANGE

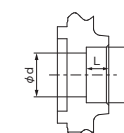
- The lower limit of operating temperature for flanges is -10°C. In case operating temperature would be below the lower limit, please contact us.
- When ordering the joint flange separately, please specify the "Joint Flange Catalog Number" from the compatibility table below.

Valve Body Catalog No.		Joint flange type								* 1 Joint flange Catalog No.	
		Connection		Flange type (square flange)	Pipe type	Outer diameter of connection pipe [mm]	Flange inner diameter φ d [mm]	Insert hole			
Type	Model	Style	Connection size								Screw thread
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

SMALL SOLENOID VALVES FOR REFRIGERANT / Type TEV-S, VPV



Type TEV-S



Type VPV-303DQ1, 603D

High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately



Type VPV-803DQ50, 1204DQ50



Type VPV-L202D

FEATURE

- Available for applications such as oil return, hot gas defrost, and heat exchanger switching.
- TEV-S type contributes to energy saving and space saving by its low power consumption (4.5kW), small size and light weight (24g).
- VPV has a lineup of three types of joint shapes to fit various piping configurations.
- Standards : Type TEV-S (UL/CSA, CE, UKCA, CQC)
Type TVPV (UL/CSA, CE, UKCA)
(Please contact us for details such as approved specifications.)

APPLICATIONS

- Room air conditioners
- Packaged air conditioners
- Heat pump water heaters
- Bottle coolers
- Dehumidifiers
- Ice makers, etc.

COMMON SPECIFICATION

- Max. working pressure : 4.3 MPa
- Fluid Temperature : -30 ~ 120°C
- Ambient temperature : -30 ~ 50°C

DESCRIPTION OF CATALOG NO.

TEV-S - 12 20 D
I II III IV

VPV - 8 03 D Q50
I II III IV V

I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection type
V	Serial number

* Coil is not included with the body.

TYPE NUMBER SELECTION

Catalog No.		Refrigerant	Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Operation		* 2 Wt. (kg)
Type	Model				Style	Connection size	Min.	Max.			
TEV-S	1220D	Various refrigerants * 1	1.2	0.037	Copper tube solder (ODM)	1/4"	0	3.6	Normally Closed	Direct operated	0.025
	1620D		1.6	0.07				2.75			
	1920D		1.9	0.09				2.06			
VPV	L202D		1.8	0.06		5/16"	0.005	3.6	Normally Opened		0.06
	303DQ1		3.0	0.21							0.08
	603D		5.8	0.65					Normally Closed	Pilot operated	0.08
	803DQ50		7.8	1.5		3/8"	0.01	2.75			0.14
	1204DQ50		11	3.0		1/2"	0.015				0.26

* 1 R32, R1234yf, R1234ze, R410A, R134a, R404A, R448A, R449A, R407H, R463A-J (For other refrigerants, please contact us.)

* 2 Valve only (without coil)

Catalog No.		Capacity (kW)									
Type	Model	R32	R1234yf	R1234ze	R410A	R134a	R404A	R448A	R449A	R407H	R463A-J
TEV-S	1220D	0.8	0.4	0.6	0.6	0.5	0.4	0.5	0.5	0.6	0.5
	1620D	1.5	0.8	1.1	1.0	1.0	0.7	0.9	1.0	1.1	1.0
	1920D	2.0	1.0	1.4	1.5	1.5	1.0	1.2	1.2	1.5	1.3
VPV	L202D	1.3	0.7	0.9	1.0	1.0	0.7	0.8	0.8	1.0	0.9
	303DQ1	4.6	2.3	3.3	3.1	3.1	2.2	2.8	2.9	3.4	3.0
	603D	14.1	7.3	10.2	9.7	9.6	6.7	8.7	8.8	10.6	9.4
	803DQ50	32.5	16.8	23.6	22.4	22.2	15.4	20.1	20.4	24.4	21.6
	1204DQ50	65.0	33.6	47.2	44.8	44.4	30.9	40.1	40.7	48.9	43.2

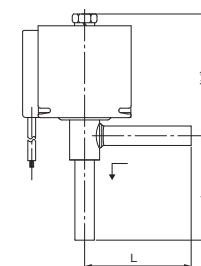
ΔP = 0.015 MPa CT = 38°C ET = 5°C SH = 0K

COIL SELECTION

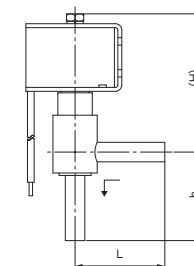
Type	electrical rating	Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Wt. (kg)
					Running	Inrush			
TEV-S	B	24V.AC	50/60	± 10	9/7	22/16	4.5/3.5	Class B Molded *	0.1
	C	100V.AC							
	D	110V.AC							
	E	120V.AC							
	G	200V.AC							
	Q	208V.AC							
	H	220V.AC							
	I	230V.AC							
	J	240V.AC							
VPV	B	24V.AC	50/60	± 10	13/10	36/30	8/7	Class B Molded *	0.14
	C	100V.AC							
	D	110V.AC							
	E	120V.AC							
	G	200V.AC							
	H	220V.AC							
	I	230V.AC							
	J	240V.AC							

* Compliant with IEC60085, 60335-2-40.
 • Current (A) = Voltampere / Rated Voltage

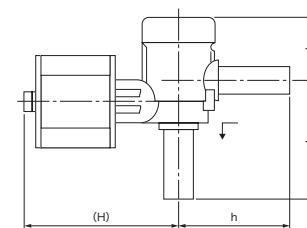
DIMENSIONS



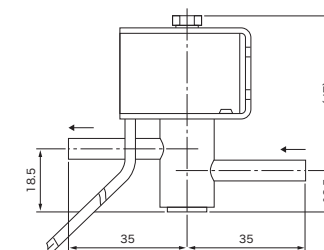
Type TEV



Type VPV-303DQ1, 603



Type VPV-803DQ50, 1204DQ50



Type VPV-L202D

Catalog No.		Unit : mm			
Type	Model	L	H	h	l
TEV-S	1220D	35	40	33	—
	1620D				
	1920D				
VPV	303DQ1	36.5	55	36	—
	603D				
	803DQ50	41.5	53.5	38.5	22.5
	1204DQ50	61.5	57.5	61.5	28.5

BI-FLOW SOLENOID VALVES / Type BPV



Type BPV

High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately

FEATURE

- Bi-flow control simplifies the refrigeration circuit.
- Also suitable for flow control of heat exchangers in multi-type heat pump air conditioners.
- Standards : CE (Please contact us for details such as approved specifications.)

COMMON SPECIFICATION

- Max. working pressure : 4.2 MPa
- Fluid Temperature : -30 ~ 120°C
- Ambient temperature : -20 ~ 60°C

APPLICATIONS

- Packaged air conditioners
- VRF, etc.

DESCRIPTION OF CATALOG NO.

BPV - 8 03 A D Y
I II III IV V VI

I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection direction
V	Connection type
VI	Pressure class

* Coil is not included with the body.

TYPE NUMBER SELECTION

Catalog No.		Refrigerant	Port Size (mm)	Cv Value	When valve close B to A Cv value * 2 (Bleed flow rate)	Connection		O.P.D. (MPa)		* 3 Wt. (kg)
Type	Model					Style	Connection size	Pressure differential at valve opening	Max.	
BPV	803ADY	Various refrigerants * 1	7.8	1.5	0.01 or less	Copper tube solder (ODM)	3/8"	0.01	2.0	0.16
	1204ADY		11	2.9	1/2"		0.30			
			1706ADY	17	6.6	0.013 or less	Copper tube solder (ODF)	3/4"	0.015	0.69

* 1 R134a, R404A, R407C, R410A, R448A, R449A, R407H (For other refrigerants, please contact us.)

* 2 Flow direction B to A flows even when the valve is closed.

* 3 Valve only (without coil)

TYPE NUMBER SELECTION

Catalog No.		Capacity (kW)						
Type	Model	R410A	R134a	R404A	R448A	R449A	R407H	R463A-J
BPV	803ADY	22.4	22.2	15.4	20.1	20.4	24.4	21.6
	1204ADY	43.3	42.9	29.8	38.8	39.4	47.3	41.7
	1706ADY	98.5	97.7	68.0	98.3	89.6	107.5	95.0

ΔP = 0.015 MPa CT = 38°C ET = 5°C SH = 0K

COIL SELECTION

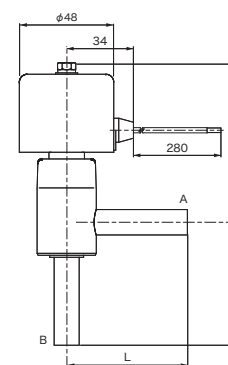
Valve body catalog No.		Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	* 2 Wt (kg)
Type	Model				Running	Inrush			
BPV	803ADY 1204ADY	100V.AC	50/60	± 10	12/1 0	36/30	6/5	Class B Molded * 1	0.18
		200V.AC							
		220V.AC							
		240V.AC							
	1706ADY	100V.AC	50/60	± 10	17/14	51/42	7.5/6		
		200V.AC							
		220V.AC							
		240V.AC							

* 1 Compliant with IEC60085, 60335-2-40.

* 2 For lead wire length of 280mm.

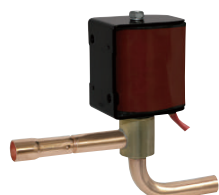
• Current (A) = Voltampere / Rated Voltage

DIMENSIONS



Catalog No.		Unit : mm		
Type	Model	L	H	h
BPV	803ADY	48	76	48
	1204ADY	61	69	69
	1706ADY	91	85	82

HIGHLY DURABLE SOLENOID VALVES FOR SHOWCASES / Type EPV



Type EPV-1730D

High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately

FEATURE

- High durability (35 million times) achieved by special design.
- No liquid supply solenoid valve is required by valve closing during stopped power supply.
- The duty control performs precise control of pumping liquid.
- Standard : CE (Please contact us for details such as approved specifications.)

APPLICATIONS

- Display cases, etc.

COMMON SPECIFICATION

- Max. working pressure : 4.2 MPa
- Fluid Temperature : -30~70°C
- Ambient temperature : -30~50°C
- Normally Closed

DESCRIPTION OF CATALOG NO.

EPV - 17 30 D Q □ □ 1
I II III IV V VI

I	Type
II	Port size
III	Connection tube O.D.
IV	Connection type
V	Serial number
VI	Orifice size

* Coil is not included with the body.

TYPE NUMBER SELECTION

Catalog No.		* 1 Refrigerant	Orifice size (mm)	Cv Value	* 2 Capacity (kW)			
Type	Model				R404A	R448A	R449A	R407H
EPV	1730DQ□□1	R404A R448A R449A R407H	0.6	0.017	1.5	2.0	2.0	2.4
	1730DQ□□2		0.7	0.023	2.0	2.7	2.8	3.3
	1730DQ□□3		0.9	0.037	3.2	4.4	4.4	5.3
	1730DQ□□4		1.1	0.052	4.4	6.2	6.2	7.5
	1730DQ□□5		1.3	0.073	6.2	8.7	8.7	10.5
	1730DQ□□6		1.7	0.106	9.1	12.6	12.7	15.2

Catalog No.		Connection		O.P.D. (MPa)		* 3 Wt. (kg)
Type	Model	Style	Connection size	Min.	Max.	
EPV	1730DQ□□1	Copper tube solder Inlet side : ODF Outlet side : ODM	3/8"	0	3.0	0.09
	1730DQ□□2					
	1730DQ□□3					
	1730DQ□□4					
	1730DQ□□5					
	1730DQ□□6					

* 1 For other refrigerants, please contact us.

* 2 CT = 38°C ET = 5°C SH = 0K

* 3 Valve only (without coil)

COIL SELECTION

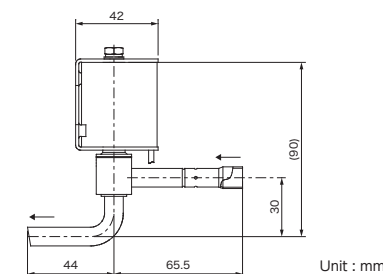
Rated Voltage	Frequency (Hz)	Tolerance (%)	Rated Current (mA)	Power consumption (W)	Insulation Class	* 2 Wt. (kg)
100V.AC	50/60	± 10	162	15.5	Class B Molded * 1	0.21
200V.AC			74	13.5		
220V.AC			65	13.0		

* 1 Compliant with IEC60085, 60335-2-40. Some models are of Class E Molded. Please contact us for details.

* 2 For lead wire length of 600mm.

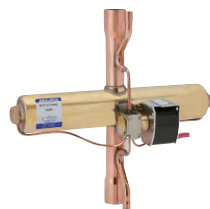
• Built-in diode bridge in coil

DIMENSIONS



Unit : mm

REVERSIBLE 2-WAY VALVE FOR REFRIGERANT / Type MHV



Type MHV

High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately

FEATURE

- 2-way valve with high flow rate and low pressure drop.

APPLICATIONS

- Packaged air conditioners
- VRF, etc.

COMMON SPECIFICATION

- Max. working pressure : 4.2 MPa
- Maximum Operating Pressure Differential : 3.1 MPa
- Minimum Operating Pressure Differential : 0.3 MPa
- Fluid Temperature (°C) : -20 ~ 120°C
- Ambient temperature (°C) : -20 ~ 55°C

DESCRIPTION OF CATALOG NO.

MHV — $\frac{I}{II} \frac{11}{III} \frac{04}{IV} \frac{S}{V}$

I	Type
II	Normally Closed / Opened
III	Port Size
IV	Connection Size
V	Pilot tube

TYPE NUMBER SELECTION

Catalog No.		* 1 Refrigerant	Port Size (mm)	Connection			Normal operation
Type	Model			Style	Connection size		
		High-pressure side	Low-pressure side				
MHV	L1104S	R407C R410A R448A	11.1	Copper tube solder (ODF)	1/2"	1/2"	Normally Opened
	H1104S						Normally Closed
	L1606BG	R449A R407H	15.5		3/4"	3/4"	Normally Opened
	H1606BG						Normally Closed

Catalog No.		Pilot tube		* 2 Wt. (kg)	Remarks
Type	Model	Style	Connection size		
MHV	L1104S	Copper tube solder (ODF)	1/4"	0.35	Dedicated to high-pressure gas lines in refrigeration circuits
	H1104S				
	L1606BG			0.77	Dedicated to gas lines in refrigeration circuits
	H1606BG				

* 1 For other refrigerants, please contact us.

* 2 Valve only (without coil)

COIL SELECTION

Catalog No.		Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	* 2
Type	Model				Running	Inrush			Wt. (kg)
STF	(G) □ □ □ □	100V.AC	50/60	+ 10 - 15	13/10	39/30	7/6	Class B Molded * 1	0.13
		200V.AC							
		110V.AC							
		220V.AC		± 10	11/9	33/27	6/6		
		230V.AC							
		240V.AC							

* 1 Compliant with IEC60085, 60335-2-40.

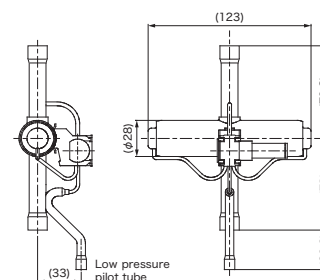
* 2 For lead wire length of 600mm.

• Use the STF-G type 4-way reversing valve coil.

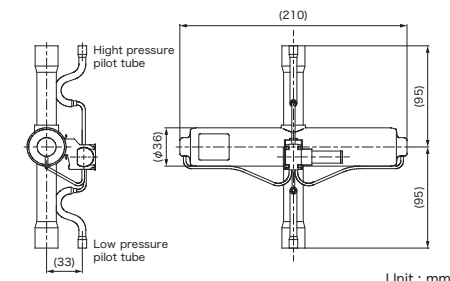
• Coil is not included. Please specify coil voltage when ordering the valve body.

• Current (A) = Voltampere / Rated Voltage

DIMENSIONS



Type MHV-L1104, H1104



Type MHV-L1606, H1606

Unit : mm

SOLENOID VALVES FOR CO₂ REFRIGERANT / Type HPV

Type HPV-102D



Type HPV-122D



Type HPV-402DQ3



Type HPV-825D

High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately

FEATURE

- Ultra-high pressure available. (MAX working pressure 13.0 to 15.0 MPa)
- Compact design and highly sealed structure
- Available for hot gas defrosting circuits and for emergency cut-out.
- Standards : CE, UKCA (Please contact us for details such as approved specifications.)

COMMON SPECIFICATION

- Fluid Temperature : -30 ~ 120°C
- Ambient temperature : -20 ~ 50°C
- Normally Closed

APPLICATIONS

- CO₂ Condensing units
- CO₂ Display cases
- CO₂ Bottle coolers
- CO₂ Refrigerator / Freezers
- CO₂ Heat pump water heaters, etc.

COMMON SPECIFICATION

DESCRIPTION OF CATALOG NO.

HPV - 10 2 D Q1
I II III IV V

HPV - 8 25 D S
I II III IV VI

I	Type
II	Port Size
III	Connection tube O.D.
IV	Connection type
V	Serial number
VI	—

* Coil is not included with the body.

TYPE NUMBER SELECTION

Catalog No.		Port Size (mm)	Cv Value	Connection		O.P.D. (MPa)		Max. working pressure (MPa)	* Wt. (kg)	
Type	Model			Style	Connection size	Min.	Max.			
HPV	102DQ1	1.0	0.028	Copper tube solder (ODM)	1/4"	0	10.0	13.0	0.05	
	122D	1.2	0.038					13.8	0.08	
	402DQ3	4.0	0.32		5/16"	0.1		14.0	0.09	
	825DS	7.8	0.54					15.0	0.13	

* Valve only (without coil)

COIL SELECTION

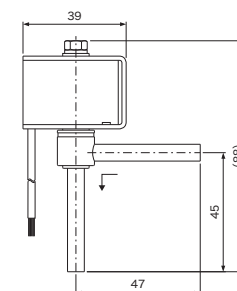
Valve body catalog No.		Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	* 2 Wt. (kg)
Type	Model				Running	Inrush			
HPV	102DQ1	100V.AC 200V.AC 220V.AC	50/60	± 10	11/8	32/27	6/4.5	Class B Molded * 1	0.13
	122D	100V.AC 200V.AC 220V.AC			16/13	52/38	9/8		0.18
	402DQ3	200V.AC			10/8	32/26	5.5/4.5		0.16
	825DS	200V.AC			14/11	42/33	7/6		0.20

* 1 Compliant with IEC60085, 60335-2-40. Some models are Class E coils. Please contact us for details.

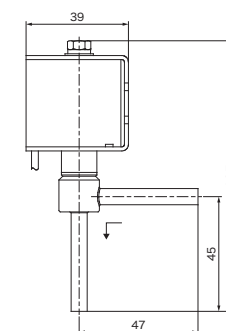
* 2 HPV-102DQ1, 122D, 402DQ3 : For lead wire length of 300mm, HPV-825DS : For lead wire length of 280mm.

• Current (A) = Voltampere / Rated Voltage

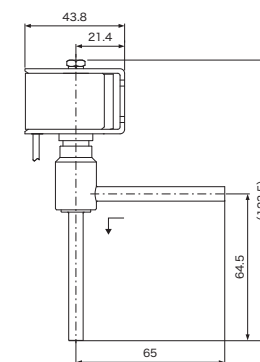
DIMENSIONS



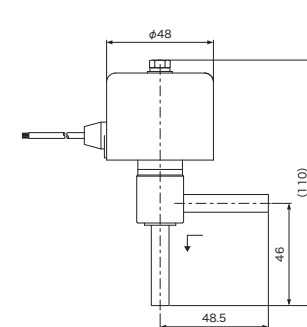
Type HPV-102DQ1



Type HPV-122D



Type HPV-402DQ3



Type HPV-825D

Unit : mm

* Please contact us if other connection types are required.

ELECTRIC EXPANSION VALVE FOR CO₂ REFRIGERANT / Type HPV-E

Type HPV-E

High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately

FEATURE

- High durability (35 million times) achieved by special design.
- High quietness
- No liquid supply solenoid valve is required by valve closing during stopped power supply.
- The duty control performs precise control of pumping liquid.
- Built-in strainer

APPLICATIONS

- CO₂ Display cases, etc.

COMMON SPECIFICATION

- Fluid Temperature : -40 ~ 30°C
- Ambient temperature : -30 ~ 50°C

DESCRIPTION OF CATALOG NO.

HPV-E - 11 20 D Q1
I II III IV V

I	Type
II	(Port Size)
III	Connection tube O.D.
IV	Connection type
V	Serial number

* Coil is not included with the body.

TYPE NUMBER SELECTION

Catalog No.		Orifice size (mm)	Cv Value	Connection		O.P.D. (MPa)		Max. working pressure (MPa)	* Wt. (kg)
Type	Model			Style	Connection size	Min.	Max.		
HPV	E1120DQ1	0.5	0.01	Copper tube solder (ODM)	1/4"	0	6.0	8.0	0.08
	E1120DQ2	0.65	0.019						
	E1120DQ3	0.8	0.03						
	E1120DQ4	1.1	0.047						

* Valve only (without coil)

COIL SELECTION

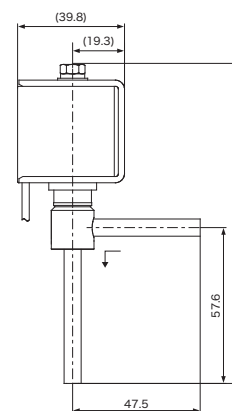
Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)	Power consumption (W)	Insulation Class	* 2 Wt. (kg)
100V.AC	50/60	± 10	37	12	Class B Molded * 1	0.15
200V.AC			58			

* 1 Compliant with IEC60085, 60335-2-40. Some models are of Class E Molded. Please contact us for details.

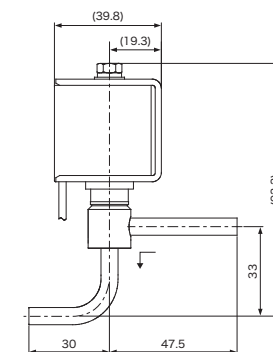
* 2 For lead wire length of 600mm.

• Built-in diode bridge in coil

DIMENSIONS



Type HPV-E1120DQ1 to 4



Line connection type

Unit : mm

* Line connection type is also available.
Please contact us for details.

3-WAY VALVES / Type IEV



Type IEV-B1505



Type IEV-B3211

FEATURE

- For branch circuits
- Available for branching refrigerant circuits such as heat recovery systems and hot gas defrost systems.

APPLICATIONS

- Condensing units
- Refrigerator / Freezers, etc.

COMMON SPECIFICATION

- Max. working pressure : 2.94 MPa
- Ambient temperature : -20 ~ 50°C

DESCRIPTION OF CATALOG NO.

IEV - B 15 05 D X F * A 4 C
I II III IV V VI VII VIII IX X

I	Type
II	Operation
III	Port Size
IV	Connection tube O.D.
V	Connection type
VI	Pressure class
VII	Fluid
VIII	Coil power supply
IX	Coil voltage
X	Coil Style

TYPE NUMBER SELECTION

Catalog No.					Port Size (mm)	Cv Value	Connection	
Type	Model	* 1 Fluid	Rated Voltage	Coil Style			Style	Connection size
IEV	B1505DX	F (Fluorocarbon refrigerants)	* A1 (100V.AC) * A2 (200V.AC) * A3 (110V.AC) * A4 (220V.AC)	C (Lead Wire Type)	18	6.3	Copper tube solder (ODF)	5/8"
	B2007DX				20	9.0		7/8"
	B3211DX			C (Lead Wire Type)	30	25		1-1/8"
	B3212DX			W (Drip-proof terminal box type)				1-1/4"
	B3213DX							1-3/8"

Catalog No.					* 2 O.P.D. (MPa)		Fluid Temperature (°C)	Operation	* W (kg)
Type	Model	* 1 Fluid	Rated Voltage	Coil Style	Min.	Max.			
IEV	B1505DX	F (Fluorocarbon refrigerants)	* A1 (100V.AC) * A2 (200V.AC) * A3 (110V.AC) * A4 (220V.AC)	C (Lead Wire Type)	0.49	2.25	-20～120	Branched	0.
	B2007DX								1
	B3211DX			C (Lead Wire Type)	0.29	2.06	-20～125		2
	B3212DX			W (Drip-proof terminal box type)					
	B3213DX								

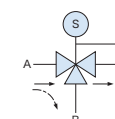
* 1 For available refrigerants, please contact us.

* 2 The difference between the compressor discharge side or evaporator outlet side (connection A) and the compressor suction side (connection D).

* 3 Includes a coil (Lead wire type).

For branch circuits

Flow	Power ON	Power OFF
	A → C	A → B



A : Compressor discharge line
B : Condenser inlet line
C : Sub-Condenser inlet line or Evaporator Inlet Line
D : Compressor suction line

SPECIFICATIONS OF COILS

Valve body catalog No.		Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	Coil Style	
Type	Model				Running	Inrush				
IEV	B1505DX B2007DX	100V.AC	50/60	± 10	11/9	33/27	6/5	Class B Molded	Lead Wire Type	
		110V.AC								
		200V.AC								
		220V.AC								
	B3211DX B3212DX B3213DX	100V.AC			16/13	40/33	8/7		Lead Wire Type	
		110V.AC								
		200V.AC								
		220V.AC								

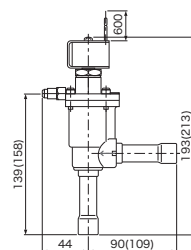
• IP Lead Wire type : IP67, Drip-proof terminal box type : IP34

• The standard specification of the coil style is the Lead wire type.

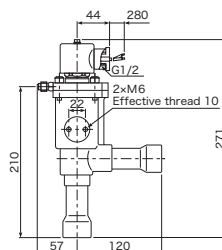
• Drip-proof terminal box type can be used indoors where water drops may fall.

• Current (A) = Voltampere / Rated Voltage

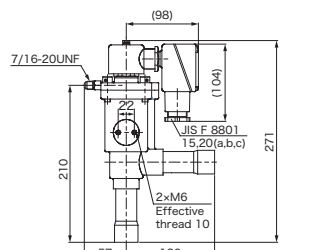
SPECIFICATIONS OF COILS

Type IEV-15D
(Type IEV-25D)

Lead Wire Type



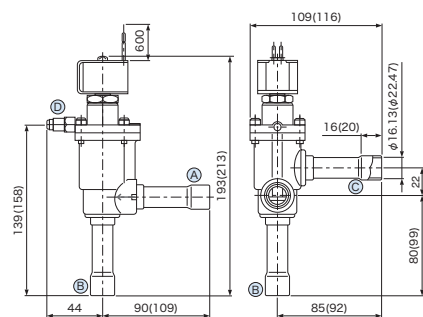
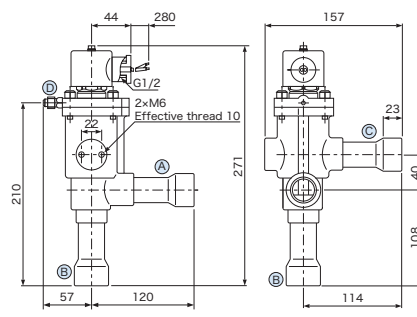
Type IEV-32



Drip-proof terminal box type

Unit : mm

DIMENSIONS

Type IEV-B1505DXF
(Type IEV-B2007DXF)

Type IEV-B3211 ~ 3213DXF

Unit : mm

CAPACITY TABLE

Cooling capacity when used for discharge gas pipe

Condensing temperature : 38°C, Evaporating temperature : 5°C,
Gas temperature : 50°C.

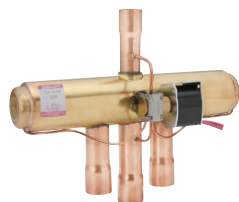
Port size (mm)	Capacity (kW)			
	R134a			
	Pressure difference between inlet and outlet of valve (MPa)			
	0.01	0.015	0.02	0.03
18	14	16	19	23
20	19	23	27	34
30	53	65	76	93

· In case the evaporating temperature is different, the value is multiplied by the correction factor in the evaporating temperature correction factor table.

Evaporating temperature correction
factor table

Evaporating temperature (°C)	Factor
5	1
0	0.99
-10	0.96
-20	0.93
-30	0.90
-40	0.87

3-WAY SOLENOID VALVES / Type STF-C



Type STF-C

High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately

FEATURE

- 3-way valve with high flow rate.

APPLICATIONS

- Cooling units
- Packaged air conditioners
- VRF
- Chillers, etc.

COMMON SPECIFICATION

- Max. working pressure : 4.2 MPa
- Maximum Operating Pressure Differential : 3.1 MPa
- Minimum Operating Pressure Differential : 0.3 MPa
- Fluid Temperature : -20 ~ 120°C
- Ambient temperature : -20 ~ 55°C

DESCRIPTION OF CATALOG NO.

STF-C - 04 07
I II III

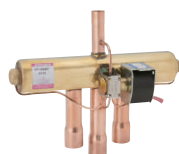
I	Type
II	Capacity
III	Serial number

TYPE NUMBER SELECTION

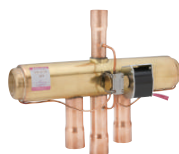
Catalog No.		* 1 Refrigerant	Port Size (mm)		Connection		* 2	Remarks
Type	Model				Style	Connection size		
		High-pressure side	Low-pressure side	Wt. (kg)				
STF-C	0407	R407C R410A R448A	15.5	Copper tube solder (ODF)	1/2"	3/4"	0.8	Dedicated to high- pressure gas lines in refrigeration circuits
	0708	R449A R407H	20		3/4"	7/8"	1.35	

* 1 For other refrigerants, please contact us.

* 2 Valve only (without coil)



Type STF-C0407



Type STF-C0708

COIL SELECTION

Coil Catalog No.		Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	* 2 Wt (kg)
Type	Model				Running	Inrush			
STF	(G)□□□□	100V.AC	50/60	+ 10 - 15	13/10	39/30	7/6	Class B Molded * 1	0.13
		200V.AC							
		110V.AC		± 10	11/9	33/27	6/6		
		220V.AC							
		230V.AC							
		240V.AC							

* 1 Compliant with IEC60085, 60335-2-40.

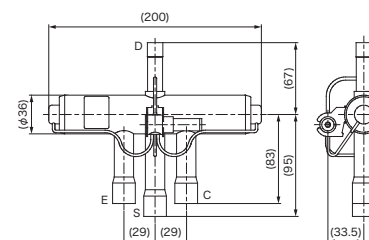
* 2 For lead wire length of 600mm.

• Use the STF-G type 4-way reversing valve coil.

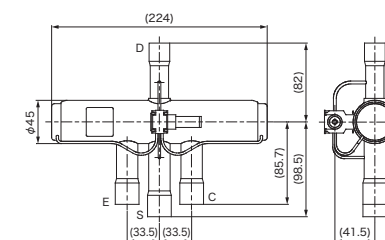
• Coil is not included. Please specify coil voltage when ordering the valve body.

• Current (A) = Voltampere / Rated Voltage

DIMENSIONS



Type STF-C0407



Type STF-C0708

Unit : mm

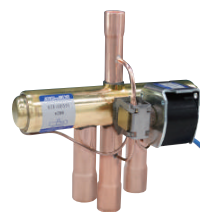
Flow direction (flow path)

Flow	Power ON	Power OFF
	D → E	D → C

4-WAY REVERSING VALVES / Type STF



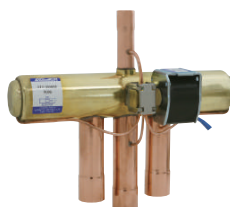
Type STF-H01



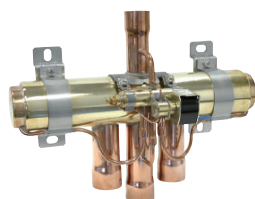
Type STF-H035



Type STF-H04



Type STF-H06



Type STF-30

Click or scan here
for the capacity
table. ⇒



URL : https://saginomiya.co.jp/en/auto/pdf/stf_capacity.pdf

High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately

TYPE NUMBER SELECTION

Catalog No.		* 1 Refrigerant	Port Size (mm)	Connection			O.P.D. (MPa)		* 2 Wt. (kg)
Type	Model			Style	Connection size		Min.	Max.	
STF	H0167	R407C R410A R448A R449A R407H	8		Copper tube solder (ODF)	5/16"			3/8"
	H0267		11.1	3/8"		1/2"	0.32		
	H0321		11.5	1/2"		5/8"	0.36		
	H0351		14				0.39		
	H0429		16	3/4"		0.69			
	H0651		18.1			0.74			
	H0731		20	3/4"		7/8"	1.21		
	H0951		21.3				1.24		
	H0954		24	7/8"		1-1/8"	1.55		
	2027G			1"		1-1/4"	1.51		
	2522G						3.6		
	3019G						4.4		
	4013G						8.4		
	5020G		50				2-1/8"	8.5	
	6009G		60	Copper tube solder (High-pressure side : ODM) (Low-pressure side : ODF)	1-5/8"	2-5/8"	21		

* 1 For other refrigerants, please contact us.

* 2 Valve only (without coil)

COIL SELECTION

Valve body catalog No.		Rated Voltage	Frequency (Hz)	Tolerance (%)	Voltampere (VA)		Power consumption (W)	Insulation Class	* 2 Wt. (kg)
Type	Model				Running	Inrush			
STF	H□□□□	100V.AC	50/60	+ 10 - 15	10/8	30/24	6/5	Class B Molded * 1	0.13
		200V.AC							
		110V.AC		± 10	11/9	33/27			
		220V.AC							
		230V.AC							
		240V.AC							
	(G)□□□□	100V.AC		+ 10 - 15	13/10	39/30	7/6		
		200V.AC		± 10	11/9	33/27	6/6		
		110V.AC							
		220V.AC							
		230V.AC							
		240V.AC							

* 1 Compliant with IEC60085, 60335-2-40.

* 2 For lead wire length of 600mm.

• Coil is not included. Please specify coil voltage when ordering the valve body.

FEATURE

- Used for a switch of cooling ↔ heating, defrosting ↔ heating.
- Standards : UL/CSA, CE, UKCA, VDE (Please contact us for details such as approved specifications.)

APPLICATIONS

- Room air conditioners
- Packaged air conditioners
- VRF
- Heat pump water heaters
- Chillers, etc.

COMMON SPECIFICATION

- Max. working pressure : 4.2MPa
- Fluid Temperature : -20 ~ 120°C *
- Ambient temperature : -20 ~ 55°C

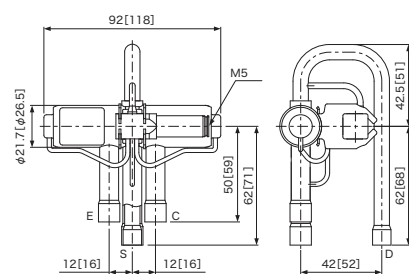
* Products up to 130° C are also available. Please contact us for details.

DESCRIPTION OF CATALOG NO.

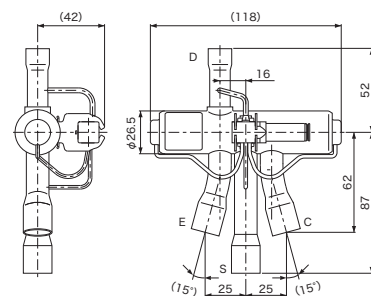
STF-H - 01 67	I Type
I II III	II Capacity
	III Serial number

STF - 20 27 G
I II III I

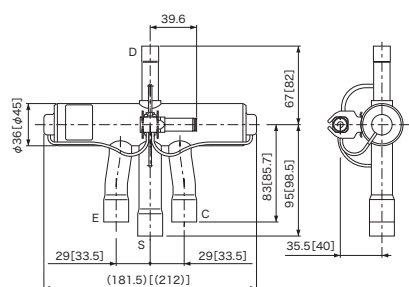
DIMENSIONS



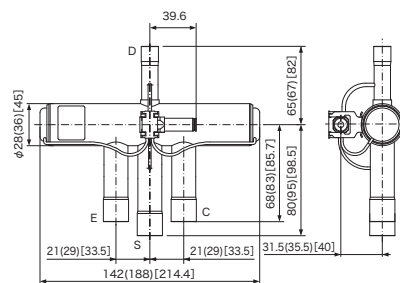
Type STF-H01
[Type STF-H02]



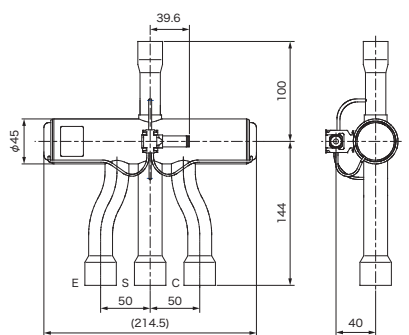
Type STF-H03



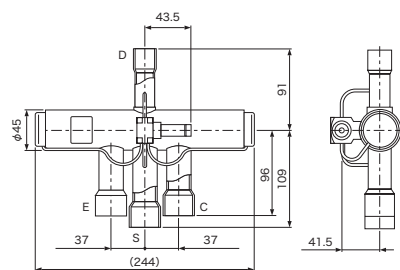
Type STF-H04
[Type STF-H07]



Type STF-H035
(Type STF-H06)
[Type STF-H09]

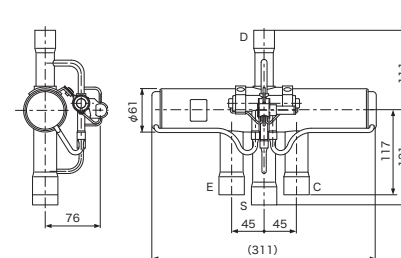


Type STF-H09

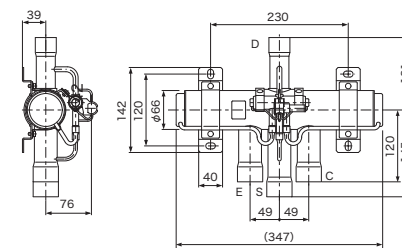


Type STF-20G

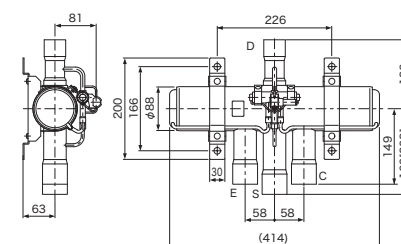
DIMENSIONS



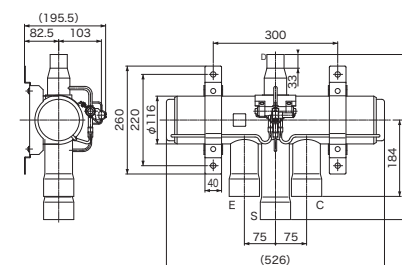
Type STF-25G



Type STF-30G



Type STF-40G
[Type STF-50G]



Type STF-60G

Unit : mm

Flow direction (flow path)

Flow	Power ON		Power OFF	
	D → E	C → S	D → C	E → S

CONSENT RELATED TO DISCLAIMERS

We, SAGINOMIYA SEISAKUSHO, INC., (hereinafter referred to as "Saginomiya"), truly appreciate your choosing Saginomiya's products (hereinafter referred to as "Products").
When the Products are used, this document as provided below shall be applicable except to the extent that there is anything to the contrary in any applicable estimate, agreement, catalogue, specification, etc.

● CONFIRMATION OF OPERATION

All customers using the Products (hereinafter referred to as "Customers") are requested to, after properly installing the Products, test the operation of the Products to confirm that all the systems in connection with the Products fully function.
In order to prevent the occurrence of bodily injury, fire accidents, serious damage, etc., in connection with the Customers' machinery or equipment due to improper installation of the Products, Saginomiya kindly requests the Customers to take the necessary safety measures by preparing safe designs such as a fail-safe design (*1) and a fire spread prevention design, as well as to make the proper adjustments for product reliability necessary for fault-tolerance (*2).

(*1) Fail-safe design: Design to ensure safety in the event of any mechanical failure

(*2) Fault-tolerance: Utilization of redundancy technology

Periodic Inspection of the Products

Be sure to confirm the proper operation of the Products and keep records of such operation at least once a year.

Saginomiya shall be held harmless and be indemnified by the Customers from any damages incurred due to the Customers failing to conduct the above operational procedures, provided, however, that, this shall not apply if the damages which the Customers incurred due to the defect of the Products caused by Saginomiya.

● RESTRICTIONS OF USE

The Products are designed and manufactured for the purpose of using them for cooling and heating and refrigerating appliances and air conditioning equipment or various industrial equipment, but are not designed and manufactured for the purpose of using the Products for any instrument or system related to human life or health purposes.
Therefore, the use of the Products in fields related to items (1) through (3) below is not intended whatsoever. Saginomiya shall be held harmless and be indemnified from any and all damages incurred by use of the Products under item (3).

(1) In any field related to nuclear power and radiation;

(2) In any field related to space or seafloor equipment;

(3) In any equipment or device requiring a high degree of reliance on such equipment or device with respect to which it is reasonably foreseeable that failure or malfunction of the equipment or device would either directly or indirectly cause serious damage to human life, health or property;

Also, when using the Products under the fields related to items (1) through (9) below (except for item (3), in relation to which the Products must never be used), please be sure to notify our Saginomiya's contact desk in charge of sales and obtain Saginomiya's prior written approval for such use. Saginomiya shall be held harmless and be indemnified from any and all damages incurred by use of the Products in relation to these fields if the Customers do not notify Saginomiya's contact desk and obtain Saginomiya's prior written approval.

(4) Transportation device (railroad, aviation, ship or vessel, vehicle equipment, etc.);

(5) Disaster-prevention or crime-prevention device;

(6) Facility or application directly related to medical equipment, burning appliances, electro thermal equipment, amusement rides and devices, facilities/applications associated directly with billing, or device using flammable fluid;

(7) Equipment requiring high reliance on supply systems such as electricity, gas, water, etc., in large-scale communication system, or in transportation or air traffic control system;

(8) Facilities that are to comply with regulations of governmental / public agencies or specific industries or

(9) Other machineries or equipment equivalent to those set forth in the above items (4) to (8) which require for high reliability and safety.

It is recommended to replace the Products within 5 to 10 years of delivery if no other duration of use is provided in the applicable specifications or instruction manual because the conditions and environment of use also have an impact on the Products.

● SCOPE OF WARRANTY

SAGINOMIYA WILL PROVIDE THE CUSTOMERS WITH REPLACEMENT OR REPAIRED THE PRODUCTS DELIVERED, FREE OF COST, ONLY WITHIN ONE YEAR OF DELIVERY TO THE CUSTOMER, IF FAILURE OCCURS IN THE CUSTOMERS' EQUIPMENT USING THE PRODUCTS DUE TO A DEFECT OF THE PRODUCTS, PROVIDED, HOWEVER, THAT IN ANY EVENT THE RATIO OF THE AMOUNT THAT SAGINOMIYA BEARS FOR THE DAMAGES INCURRED BY THE FAILURE OF THE PRODUCTS OR CUSTOMERS' EQUIPMENT SHALL NOT EXCEED THE PRICE OF THE PRODUCTS WE DELIVERED. IN ADDITION, SAGINOMIYA SHALL BE HELD HARMLESS AND BE INDEMNIFIED FROM ANY AND ALL DAMAGES INCURRED WHEN THE FAILURE OF THE CUSTOMERS' EQUIPMENT OCCURRED DUE TO ANY CAUSE SET FORTH BELOW.

(1) WHEN CAUSED BY INAPPROPRIATE HANDLING OR USE OF THE PRODUCTS BY THE CUSTOMERS (SUCH AS NOT COMPLYING WITH THE CONDITIONS, ENVIRONMENTAL SPECIFICATIONS OR CAUTIONS INDICATED IN ANY APPLICABLE CATALOGUE, SPECIFICATIONS, INSTRUCTION MANUAL, ETC.);

(2) WHEN FAILURE OCCURRED DUE TO ANY REASON OTHER THAN THE PRODUCTS.

(3) WHEN CAUSED BY MODIFICATION OR REPAIR OF THE PRODUCTS MADE BY ANYONE OTHER THAN SAGINOMIYA OR DESIGNEE OF SAGINOMIYA;

(4) WHEN CAUSED BY THE USE OF THE PRODUCTS IN VIOLATION OF THE ABOVE "RESTRICTIONS OF USE" OR "CONFIRMATION OF OPERATION";

(5) WHEN SUCH FAILURE WAS NOT REASONABLY FORESEEABLE AT THE TIME OF SAGINOMIYA'S SHIPMENT; OR

(6) BY ANY OTHER CAUSE NOT ATTRIBUTABLE TO SAGINOMIYA, SUCH AS AN ACT OF GOD, DISASTER, OR ACT OF ANY THIRD PARTY.

PLEASE NOTE THAT THE CUSTOMERS WILL NOT BE ENTITLED TO ANY OF THE ABOVE WARRANTY IF THE CUSTOMERS PURCHASED THE PRODUCTS FROM INTERNET AUCTION, ETC.

SAGINOMIYA
SEISAKUSHO, INC.

Revision1 (2014.12) 2014.10



WARNING

Failure to read and follow all instruction carefully before installing or operation the product could cause personal injury and/or property damage.

Specifications are subject to change without notice.



Headquarters



Sayama Plant



Tokorozawa Plant

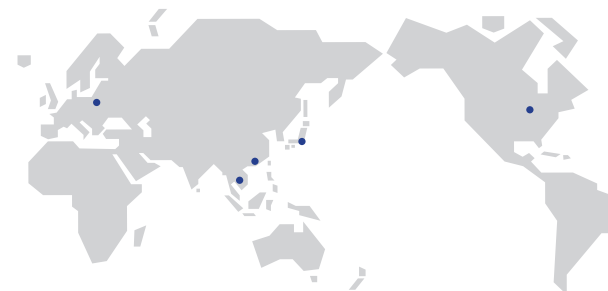
SAGINOMIYA

Shinjyuku Garden Tower 22F
8-2, Okubo 3-chome, Shinjyuku-ku
Tokyo, 169-0072 Japan



Yonezawa Plant

OVERSEAS NETWORK



SAGINOMIYA EUROPE Sp. z o.o. (Poland)
Aleje Jerozolimskie 212 02-486
Warsaw, Poland
Sales



FOSHAN HUALU AUTOMATIC CONTROLS LIMITED (China)
No.59&61, Wenhua Nan Road, Chancheng District
Foshan, Guangdong, China
Sales & Manufacturing



SAGINOMIYA AMERICA, INC. (USA)
655 Metro Place South suite 220, Dublin
Ohio 43017, U.S.A.
Sales



Danfoss Saginomiya Sp. z o.o. (Poland)
ul. Chrzanowska 5, 05-825 Grodzisk
Mazowiecki, Poland
Manufacturing



Saginomiya (Thailand) Co., Ltd. (Thailand)
159/38 Serm-mit Tower, Room No.2401, 24th floor
Sukhumvit 21 Road, Klongtoey Nua Sub-district
Wattana District, Bangkok 10110, Thailand
Sales & Manufacturing



NOTES FOR SAFETY

Failure to read and follow all instruction carefully before installing or operating the product could cause personal injury and/or property damage.

Specifications are subject to change without notice.

SAGINOMIYA SEISAKUSHO, INC.

<Japan, Korea, Oceania>

E-mail : inter@saginomiya.co.jp

Tel : +81-3-6205-9120 Fax : +81-3-6205-9122

URL : <http://www.saginomiya-global.com/en/>

<Asia>

Saginomiya (Thailand) Co., Ltd. E-mail : info@saginomiya.co.th
Tel : +66-2260-8364 Fax : +66-2260-8366

<Europe, Middle East, Africa>

SAGINOMIYA EUROPE Sp. z o.o. E-mail : info@saginomiya.eu
Tel : +48-22-101-30-00 Fax : +48-22-101-30-01

<North America, Latin America>

SAGINOMIYA AMERICA, INC. E-mail : Sales@saginomiya-am.com
Tel : +1-614-766-7390 Fax : +1-614-766-7391

2023.9

