

# SOLENOID VALVES FOR REFRIGERANT

Type REV & UEV

SAGInoMIYA

## GENERAL DESCRIPTION

- Type REV: Pilot operated, 2-way, Normally closed valve.  
Type UEV: Pilot operated, 2-way, Normally opened valve.
- For non-corrosive refrigerant (liquid or gas) in refrigeration, cooling, air conditioning systems.
- “Double plunger” construction provides reliable On/Off action.
- Compact molded coil commonly fits all valve sizes.
- Operates in any position ... can be conveniently located in horizontal or vertical line with coil on top.
- Manual Opening Stem ... On Flange connection models, supplied as standard. On Flare or Solder connection models, supplied upon request.



Type UEV-D



Type REV-D

## SPECIFICATIONS

- Fluid temperature: -40 to 125°C (Type REV)  
-40 to 120°C (Type UEV)
- Ambient temperature: -30 to 40°C

## TYPE NUMBER SELECTION

Type REV – Normally closed valve (1)

Unit: MPa {kgf/cm<sup>2</sup>}

Catalog No.	Port Size (mm)	Cv Value	Nominal Capacity (U.S.R.T.) {kw}				Connection			O.P.D.		Max. Working Pressure	Wt. (kg)					
			R410A	R134a	R404A	R22	Copper Tube O.D.	Steel Tube O.D.	Style	Min.	Max.							
REV-703BXF	7	1.0	4.2 {14.9}	4.2 {14.8}	2.9 {10.3}	4.6 {16}	3/8"		Flare	0.007 {0.07}	2.45 {25}	2.94 {30}	0.6					
REV-1004BXF	10	2.0	8.5 {29.8}	8.4 {29.6}	5.9 {20.6}	9.1 {32}	1/2"						0.9					
REV-1205BXF	12	3.5	14.9 {52.2}	14.7 {51.8}	10.2 {36}	15.9 {56}	5/8"						1.1					
REV-1506BXF	15	5.3	22.5 {79.1}	22.3 {78.5}	15.5 {54.5}	23.9 {84}	3/4"						1.5					
REV-1003GXF	10	2.0	8.5 {29.8}	8.4 {29.6}	5.9 {20.6}	9.1 {32}	3/8"						1.0					
REV-1204GXF	12	3.5	14.9 {52.2}	14.7 {51.8}	10.2 {36}	15.9 {56}	1/2"						1.3					
REV-1506GXF	15	5.3	22.5 {79.1}	22.3 {78.5}	15.5 {54.5}	23.9 {84}	3/4"						1.7					
REV-703DXF	7	1.0	4.2 {14.9}	4.2 {14.8}	2.9 {10.3}	4.6 {16}	3/8"						0.5					
REV-1004DXF	10	2.0	8.5 {29.8}	8.4 {29.6}	5.9 {20.6}	9.1 {32}	1/2"						0.8					
REV-1205DXF	12	3.5	14.9 {52.2}	14.7 {51.8}	10.2 {36}	15.9 {56}	5/8"						0.9					
REV-1506DXF	15	5.3	22.5 {79.1}	22.3 {78.5}	15.5 {54.5}	23.9 {84}	3/4"						1.1					
REV-2007DXF						7/8"		Solder					0.007 {0.07}	2.45 {25}	2.94 {30}	0.5		
REV-2010DXF	20	9.0	38.2 {134.3}	37.9 {133.2}	26.3 {92.6}	40.7 {143}	1"			0.8								
REV-2011DXF						1-1/8"			0.9									
REV-2511DXF						1-1/8"			1.1									
REV-2512DXF	25	13.8	—	58.1 {204.3}	40.4 {141.9}	62.3 {219}	1-1/4"			1.6								
REV-2513DXF						1-3/8"			2.2									
REV-3213DXF						1-3/8"			3.2									
REV-3214DXF	32	19.4	—	81.7 {287.2}	56.7 {199.5}	87.6 {308}	1-1/2"			5.1								
REV-3215DXF						1-5/8"			7.7									
REV-2006EXF	20	9.0	38.2 {134.3}	37.9 {133.2}	26.3 {92.6}	40.7 {143}	7/8"		1-1/8"	3/4"	Flange	0.007 {0.07}				2.45 {25}	2.94 {30}	5.1
REV-2510EXF	25	13.8	—	58.1 {204.3}	40.4 {141.9}	62.3 {219}	1"		1-1/2"	1"								7.7
REV-3212EXF	32	19.4	—	81.7 {287.2}	56.7 {199.5}	87.6 {308}	1-1/4"		1-5/8"	1-1/4"								8.9
REV-4014EXF	40	32.0	—	134.7 {473.7}	93.6 {329.1}	144.5 {508}	1-1/2"	2"	1-1/2"	10.8								
REV-5020EXF	50	45.0	—	189.5 {666.2}	131.6 {462.9}	165.8 {583}	2"	2-1/2"	2"	16.3								
REV-6524EXF							2-1/2"	3"	2-1/2"	23.2								
REV-6530EXF	65	74.0	—	311.6 {1095.5}	216.5 {761.1}	272.7 {959}	3"	3-1/2"	3"	26.6								

- Weight includes a coil.
- Enclosure IP34 (REV-W: Drip proof model)
- Nominal capacities (R410A) are based on  $\Delta P = 0.015$  MPa, condensing temp. = 38°C and evaporating temp. = 5°C

## TYPE NUMBER SELECTION

### Type REV – Normally closed valve (2)

Unit: MPa {kgf/cm<sup>2</sup>}

Catalog No.	Port Size (mm)	Cv Value	Nominal Capacity (U.S.R.T.) {kw}				Connection		O.P.D.		Max. Working Pressure	Wt. (kg)						
			R410A	R134a	R404A	R22	Copper Tube O.D.	Style	Min.	Max.								
REV-703BYF	7	1.0	4.2 {14.9}	4.2 {14.8}	2.9 {10.3}	4.6 {16}	3/8"	Flare	0.007 {0.07}	2.45 {25}	4.2 {42}	0.6						
REV-1004BYF	10	2.0	8.5 {29.8}	8.4 {29.6}	5.9 {20.6}	9.1 {32}	1/2"					0.9						
REV-1205BYF	12	3.5	14.9 {52.2}	14.7 {51.8}	10.2 {36}	15.9 {56}	5/8"					1.1						
REV-1506BYF	15	5.3	22.5 {79.1}	22.3 {78.5}	15.5 {54.5}	23.9 {84}	3/4"					1.5						
REV-1003GYF	10	2.0	8.5 {29.8}	8.4 {29.6}	5.9 {20.6}	9.1 {32}	3/8"	Rc				0.007 {0.07}	2.45 {25}	4.2 {42}	1.0			
REV-1204GYF	12	3.5	14.9 {52.2}	14.7 {51.8}	10.2 {36}	15.9 {56}	1/2"								1.3			
REV-1506GYF	15	5.3	22.5 {79.1}	22.3 {78.5}	15.5 {54.5}	23.9 {84}	3/4"								1.7			
REV-703DYF	7	1.0	4.2 {14.9}	4.2 {14.8}	2.9 {10.3}	4.6 {16}	3/8"	Solder							0.007 {0.07}	2.45 {25}	4.2 {42}	0.5
REV-1004DYF	10	2.0	8.5 {29.8}	8.4 {29.6}	5.9 {20.6}	9.1 {32}	1/2"											0.8
REV-1205DYF	12	3.5	14.9 {52.2}	14.7 {51.8}	10.2 {36}	15.9 {56}	5/8"											0.9
REV-1506DYF	15	5.3	22.5 {79.1}	22.3 {78.5}	15.5 {54.5}	23.9 {84}	3/4"											1.1
REV-2007DYF	20	9.0	38.2 {134.3}	37.9 {133.2}	26.3 {92.6}	40.7 {143}	7/8"											0.007 {0.07}
REV-2010DYF							1"											
REV-2011DYF							1-1/8"											

- Weight includes a coil.
- Enclosure IP34 (REV-W: Drip proof model)
- Nominal capacities (R410A) are based on  $\Delta P = 0.015$  MPa, condensing temp. = 38°C and evaporating temp. = 5°C

## TYPE NUMBER SELECTION

### Type UEV – Normally opened valve

Unit: MPa {kgf/cm<sup>2</sup>}

Catalog No.	Port Size (mm)	Cv Value	Nominal Capacity (U.S.R.T.) {kw}				Connection		O.P.D.		Max. Working Pressure	Wt. (kg)									
			R410A	R134a	R404A	R22	Copper Tube O.D.	Style	Min.	Max.											
UEV-1004BXF	10	2.0	8.5 {29.8}	8.4 {29.6}	5.9 {20.6}	9.1 {32}	1/2"	Flare	0.007 {0.07}	1.96 {20}	2.94 {30}	0.9									
UEV-1205BXF	12	3.5	14.9 {52.2}	14.7 {51.8}	10.2 {36}	15.9 {56}	5/8"					1.1									
UEV-1506BXF	15	5.3	22.5 {79.1}	22.3 {78.5}	15.5 {54.5}	23.9 {84}	3/4"					1.5									
UEV-1003GXF	10	2.0	8.5 {29.8}	8.4 {29.6}	5.9 {20.6}	9.1 {32}	3/8"	Rc				0.007 {0.07}	1.96 {20}	2.94 {30}	1.0						
UEV-1204GXF	12	3.5	14.9 {52.2}	14.7 {51.8}	10.2 {36}	15.9 {56}	1/2"								1.3						
UEV-1506GXF	15	5.3	22.5 {79.1}	22.3 {78.5}	15.5 {54.5}	23.9 {84}	3/4"								1.7						
UEV-2010GXF	20	9.0	38.2 {134.3}	37.9 {133.2}	26.3 {92.6}	40.7 {143}	1"	Solder							0.007 {0.07}	1.96 {20}	2.94 {30}	1.9			
UEV-1004DXF	10	2.0	8.5 {29.8}	8.4 {29.6}	5.9 {20.6}	9.1 {32}	1/2"											0.8			
UEV-1205DXF	12	3.5	14.9 {52.2}	14.7 {51.8}	10.2 {36}	15.9 {56}	5/8"											0.9			
UEV-1506DXF	15	5.3	22.5 {79.1}	22.3 {78.5}	15.5 {54.5}	23.9 {84}	3/4"											1.1			
UEV-2007DXF	20	9.0	38.2 {134.3}	37.9 {133.2}	26.3 {92.6}	40.7 {143}	7/8"											0.007 {0.07}	1.96 {20}	2.94 {30}	1.6
UEV-2010DXF							1"														
UEV-2011DXF							1-1/8"														

- Weight includes a coil.
- Enclosure IP34 (UEV-W: Drip proof model)
- Nominal capacities (R410A) are based on  $\Delta P = 0.015$  MPa, condensing temp. = 38°C and evaporating temp. = 5°C

## ELECTRICAL RATING OF SOLENOID COILS

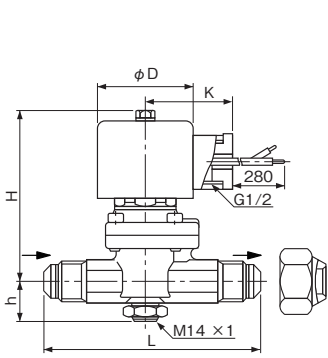
Type	Rated Voltage	Tolerance (%)	Voltampere (VA)		Power Consumption (W)	Insulation Class	
			Running	Inrush			
REV	24V.AC, 100V.AC, 110V.AC 200V.AC, 220V.AC, 240V.AC	50/60Hz	+10 -15	17/14	43/35	8/7	* Class B Molded
	12V.DC, 24V.DC 48V.DC, 100V.DC	—	±10	—	—	10	
UEV	24V.AC, 100V.AC, 110V.AC 200V.AC, 220V.AC, 240V.AC	50/60Hz	+10 -15	17/14	43/35	8/7	

Current (A) = Voltampere / Rated Voltage

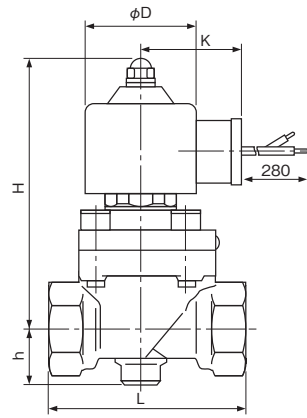
\* IEC compliance

# DIMENSIONS

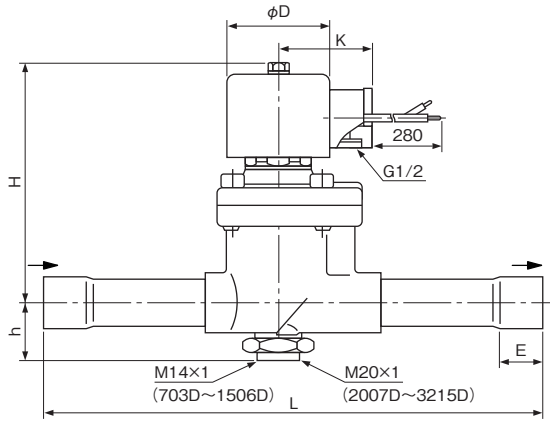
Type REV-B, UEV-BX



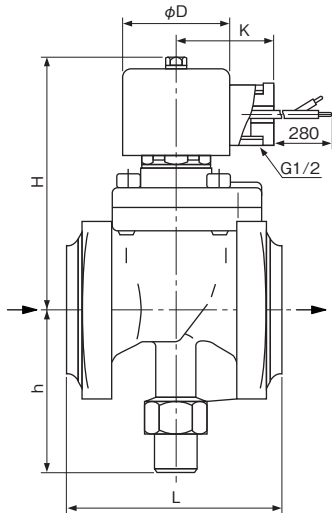
Type REV-G, UEV-GX



Type REV-D, UEV-DX



Type REV-EX



Unit: mm

Catalog No.	Unit: mm											
	L	H	h	E	φD	K						
703BX [Y]	90	70 [73]	19	-	48	44						
1004BX [Y]	105	88 [90]	21									
1205BX [Y]	115	90 [92]	22									
1506BX [Y]	135	96 [99]	25									
1003GX [Y]	65	89 [91]	20									
1204GX [Y]	75	94 [96]	21									
1506GX [Y]	85	99 [102]	24									
703DX [Y]	150	70 [73]	19				10					
1004DX [Y]	160	88 [90]	21				13					
1205DX [Y]	180	90 [92]	22				16					
1506DX [Y]	190	96 [99]	25	19								
2007DX [Y]	230	112 [116]	29	20	48	44						
2010DX [Y]												
2011DX [Y]												
2511DX	260	126	35	26	48	44						
2512DX												
2513DX												
3213DX												
3214DX												
3215DX	95	112	73	-	48	44						
2006EX												
2510EX												
3212EX												
4014EX												
5020EX												
6524EX												
6530EX												
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	48	44						
2010DX												
2011DX												