

PRESSURE REGULATING VALVES

Type EPR

SAGINOMIYA

GENERAL DESCRIPTION

- Evaporating pressure regulating valves
- Direct operated, 2-way valves designed for maintaining suitable evaporating pressure in refrigeration. Fitted at the evaporator outlet to keep suitable set evaporating pressure.



Type EPR-B



Type EPR-D

SPECIFICATIONS

Operation	Direct Operation type
Specifications	
Max. Working Pressure	2.5MPa {25kgf/cm ² }
Airtight Test Pressure	3MPa {30kgf/cm ² }
Fulid Temp.	to 100°C
Pressure Adjustment	○ Increase 1604 to 05: 0.08MPa {Approx.0.82kgf/cm ² } /rotation 1905 to 07: 0.05MPa {Approx.0.51kgf/cm ² } /rotation

TYPE NUMBER SELECTION

Catalog No.		Equalization	Port size (mm)	Nominal Capacity (U.S.R.T.) {kW}				Adjusting Range (MPa) {kgf/cm ² }	Connection		Factory Setting (MPa) {kgf/cm ² }	Wt. (kg)
				CT 38°C ΔP0.074MPa {0.75kgf/cm ² } ET 5°C								
Type	Model			R22	R134a	R404A	R407C		Style	Copper Tube (O.D.)		
EPR-	1604B	Internal	15	2.6 {9.1}	1.5 {5.3}	1.9 {6.7}	2.0 {6.9}	0 to 0.6 {0 to 6}	Flare	1/2"	0.3 {3}	0.3
	1605B									5/8"		
	1905B		20	5.5 {19}	3.5 {12}	4.1 {14}	5.4 {19}			3/4"		0.5
	1906B								12.7	0.2		
	1604D		15	2.6 {9.1}	1.5 {5.3}	1.9 {6.7}	2.0 {6.9}		15.88	0.4		
	1605D								19.05			
	1905D		20	5.5 {19}	3.5 {12}	4.1 {14}	5.4 {19}		22.23			
	1906D											
1907D												

- Nominal capacity is based on condensing temp. 38°C, evaporating temp. 5°C, pressure drop across the valve 0.074 MPa {0.75kgf/cm²}, and Set Pressure R134a...0.1MPa {1kgf/cm²}, R22, R407C...0.2MPa {2kgf/cm²}, R404A...0.3MPa {3kgf/cm²}

APPLICATION EXAMPLE

- Evaporating pressure regulating valve type EPR

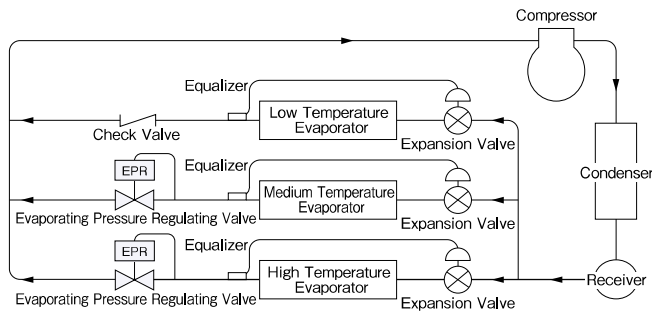
Fitted at the evaporator outlet to keep suitable set evaporating pressure.

At multi evaporator system, evaporating pressure regulating valves are used to control each different pressure (temperature) of evaporators.

Compressor operates based on the lowest pressure (temperature) of evaporators, pressure regulating valves keep pressure (temperature) of each evaporator at their setting pressure.

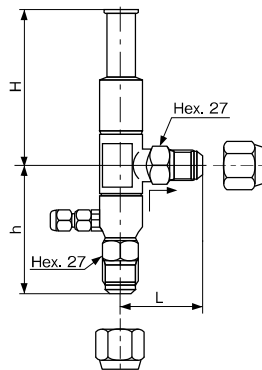
In this case, a check valve is required at the outlet of lowest pressure evaporator.

Also, evaporating pressure regulating valve is used at water chiller for prevent form congelation of cool water and vegetable warehouse for prevents form over dehumidification.

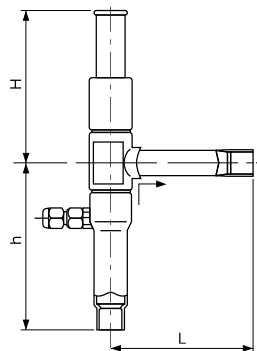


DIMENSIONS

Type EPR-B



Type EPR-D



Unit: mm

Direct Operation Type

Catalog No.		Unit: mm		
Type	Model	L	H	h
EPR-	1604B	45	82	91
	1605B	53		94
	1905B	56	109	100
	1906B	60		105
	1604D	71	82	78
	1605D			
	1905D	100	109	120
	1906D			
	1907D			