

ELECTRONIC EXPANSION VALVES FOR LOW TEMPERATURES / Type PKV



Type PKV

Scan here for the capacity chart. ⇒



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

FEATURES

- Can operate down to -50°C.
- Compatible with type YNE EEV controllers (Pages 35 to 38).
- Can be used together with liquid feed solenoid valves.

APPLICATIONS

- Freezers
- Cold storage
- Display cases, etc.

COMMON SPECIFICATIONS

- Max. working pressure : 4.2 MPa
- Fluid temperature : -50 to 60°C
(It should be 50% or less on energizing ratio.)
- Ambient temperature : -50 to 60°C
(It should be 50% or less on energizing ratio.)
- Ambient humidity : 95%RH or less
- Flow direction : B → A (Single direction)
- Excitation method : 1-2 phase, Uni-polar

DESCRIPTION OF CATALOG NO.

PKV - $\frac{I}{I}$ $\frac{II}{II}$ $\frac{III}{III}$ $\frac{IV}{IV}$ S

I	Type
II	Port size
III	Connection type
IV	Coil style

TYPE NUMBER SELECTION

Catalog No.	* 1 Refrigerant	Port size ϕ (mm)	Cv value	Connection (Flare)		Operation range pulse	Airtight test pressure (MPa)	* 2 M.O.P.D. (MPa)	Strainer	* 3 Wt. (kg)
				Side B	Side A					
PKV-14BS	R134a	1.4	0.05	3/8"	3/8"	0 to 480	4.2	Inlet-side 100 mesh	0.5	
PKV-18BS	R404A	1.8	0.10							
PKV-24BS	R448A	2.4	0.17							
PKV-30BS	R449A	3.0	0.27							
	R407H			1/2"					0.7	
	R463A-J									

* 1 For other refrigerants, please contact us.

* 2 Please be aware of O.P.D when using with high-pressure refrigerant such as R410A.

* 3 Includes coil.

Catalog No.	Capacity (U.S.R.T.) {kW}						
	CT 38°C / ET 5°C / SC 0K / SH 0K						
	R134a	R404A	R410A	R448A	R449A	R407H	R463A-J
PKV-14BS	1.1 {4.0}	1.0 {3.6}	1.7 {6.1}	1.5 {5.3}	1.4 {5.1}	1.7 {6.1}	1.8 {6.5}
PKV-18BS	2.3 {8.1}	2.1 {7.3}	3.4 {12.1}	3.0 {10.6}	2.9 {10.2}	3.5 {12.2}	3.7 {13.0}
PKV-24BS	3.9 {13.7}	3.5 {12.3}	5.9 {20.6}	5.1 {17.9}	4.9 {17.3}	5.9 {20.7}	6.3 {22.1}
PKV-30BS	6.2 {21.7}	5.6 {19.6}	9.3 {32.7}	8.1 {28.5}	7.8 {27.5}	9.3 {32.9}	10.0 {35.1}

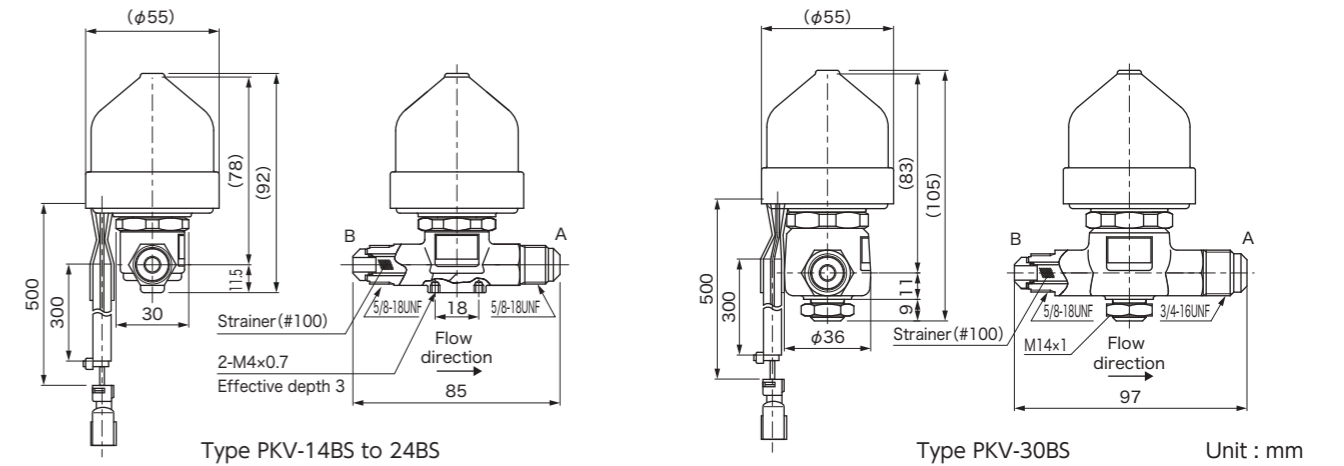
COIL SPECIFICATIONS

Catalog No. (Valve body)	* 1 Rated voltage	Current	Power consumption	* 2 Insulation class
PKV-14BS to 30BS	12V.DC \pm 10%	0.26A / Phase (20°C)	Approx. 6.5W	Class E molded

* 1 24V.DC coil is also available. Please contact us for details.

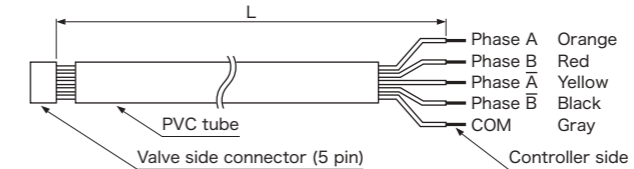
* 2 Compliant with IEC60085, 60335-2-40.

DIMENSIONS



OPTIONAL PARTS

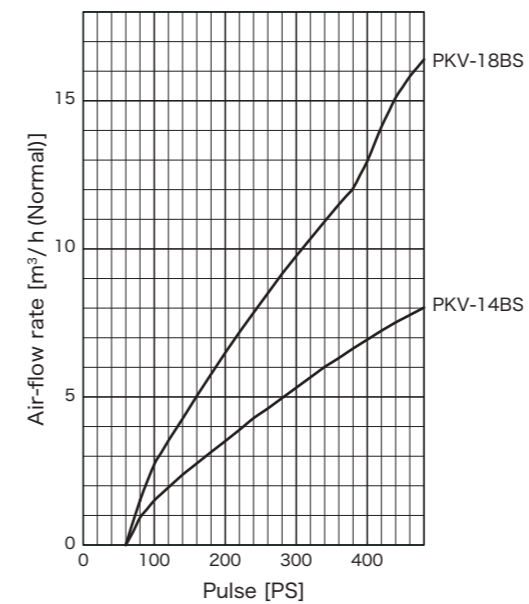
- Relay cable



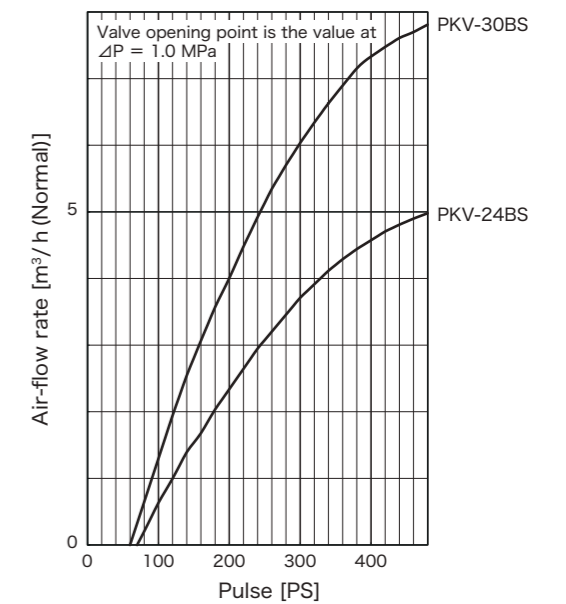
Catalog No.	L (m)
PKV-LK02N	2
PKV-LK05N	5
PKV-LK10N	10

FLOW CHARACTERISTICS

Flow direction : B → A $\Delta P = 1.0$ MPa



Flow direction : B → A $\Delta P = 0.1$ MPa



RELATED PRODUCT

- EEV controllers Type YNE (Pages 35 to 38)
- Pulse converters Type LNE (Pages 39 to 40)