

# ELECTRONIC EXPANSION VALVES

Type **UKV-F**

High Volume OEM Item

**Application** : Residential air conditioner, etc

**Refrigerant** : R134a, R404A, R407C, R410A  
R32, R1234yf, R454B, R454C

\*Other refrigerants may be available upon request.

- With internal check valve function
- Power Saving Design
- Compact & Lightweight
- High cool down capability
- Quick response
- UL Recognized



**SAGInoMIYA**

# ELECTRONIC EXPANSION VALVES

Type **UKV-F**

High Volume OEM Item

## SPECIFICATIONS

Max. working pressure: 609 psi[4.2MPa]  
 Valve operating pulse range: 0 to 500 pulse, 1–2 phase excitation  
 Fluid temperature: -22 to 158°F[-30 to 70°C]

## TYPE NUMBER SELECTION

Type UKV-F – With internal check valve function

Catalog No.	Port Size ( $\phi$ inch [mm])	Capacity (U.S.R.T.) [kW]				Connection (Solder) (inch[mm])		Operating Pressure Differential (psi[MPa])		Cv Value Flow Direction A to B Full opening position	Wt. (lb[kg])
		R134a	R404A	R407C	R410A	B side	A side	B to A	A to B		
<b>UKV-F19DU</b>	0.07[1.9]	2.3 {8.1}	2.1 {7.3}	3.0 {10.6}	3.4 {12.1}	$\phi$ 5/16[7.94] OD	0 to 480 [0 to 3.3]	N/A	0.47	0.11 [0.05]	
<b>UKV-F25DU</b>	0.10[2.5]	3.7 {12.9}	3.3 {11.6}	4.8 {16.9}	5.5 {19.4}						
<b>UKV-F32DU</b>	0.13[3.2]	5.0 {17.7}	4.5 {16.0}	6.6 {23.3}	7.6 {26.6}						

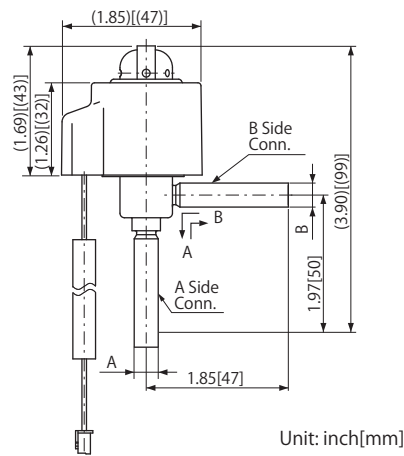
• Capacity: Based on CT = 100°F[38°C], ET = 41°F[5°C], SC = 0 K and SH = 0 K

Coil

Rated Voltage & Current	Wt.(lb[kg])
12V DC...260mA/Phase	0.29[0.13]

• Protection structure: IP66

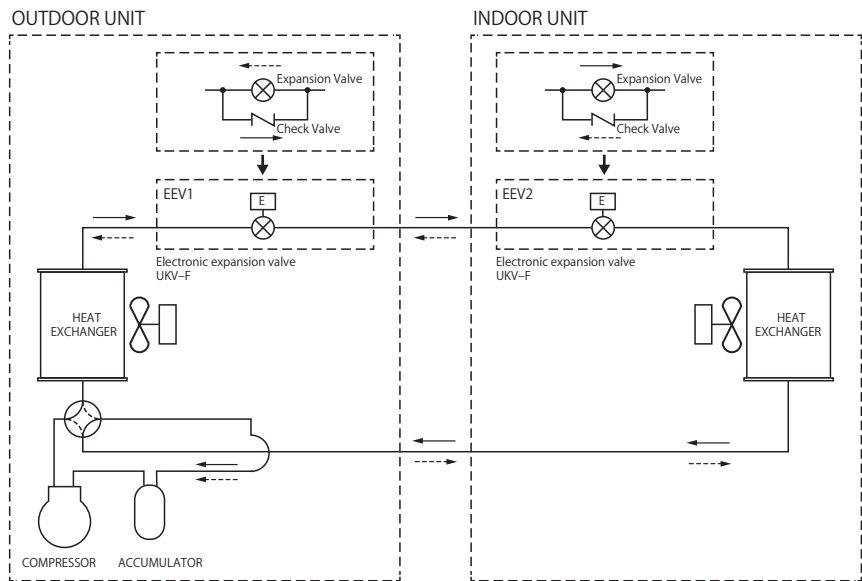
## DIMENSIONS



B → A: Flow when the valve works as an expansion valve.  
 A → B: Flow when the valve works as a tube.

Catalog No.	A	B
<b>UKV-F19DU</b>	$\phi$ 5/16[7.94]	
<b>UKV-F25DU</b>		
<b>UKV-F32DU</b>		

## APPLICATION EXAMPLE



**COOLING CYCLE**  
 EEV1: Flow when the valve works as a tube.  
 EEV2: Flow when the valve works as an expansion valve.

**HEATING CYCLE**  
 EEV1: Flow when the valve works as an expansion valve  
 EEV2: Flow when the valve works as a tube.



### 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.