

ELECTRONIC EXPANSION VALVES / Type UKV



Type UKV-S



Type UKV-S
(Bent fittings)



Type UKV-SH

High Volume OEM Item
Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately

FEATURES

- Compact and lightweight.
- Energy-saving design (No holding power required).
- Bi-flow operation for heat pump systems.
- Customized flow characteristics.
- Standards : UL, cUL, CQC (UKV-SH only), CE (ATEX)
(Please contact us for details.)

COMMON SPECIFICATIONS

- Max. working pressure : 4.3 MPa
- Fluid temperature : -30 to 70°C
(It should be 50% or less on energizing ratio.)
- Ambient temperature : -30 to 70°C
(It should be 50% or less on energizing ratio.)
- Flow direction : Bi-flow
- Excitation method : 1-2 phase, Uni-polar

APPLICATIONS

- Room air conditioners
- Packaged air conditioners
- VRF, etc.

DESCRIPTION OF CATALOG NO.

UKV - S 18 D □ □
I II III IV

I	Type
II	Port size
III	Connection type
IV	Serial number

* Coil is not included with the valve body.
Please purchase it separately.

TYPE NUMBER SELECTION

Catalog No.	* 1 Refrigerant	Port size φ (mm)	Cv value	* 2 Connection (Solder) (mm)	* 3 Operation range pulse	B → A M.O.P.D. (MPa)	A → B Valve closing pressure (MPa)	* 4 Wt. (kg)		
UKV-S08D	R32	0.8	0.015	φ 6.35 OD or φ 7.94 OD	0 to 480	3.5	3.5 or less	0.05		
UKV-S10D		1.0	0.025							
UKV-S14D		1.4	0.056							
UKV-S18D		1.8	0.10							
UKV-S25D		2.5	0.19							
UKV-S30D		3.0	0.26							
UKV-S32D		3.2	0.28							
UKV-S40D		R448A (UKV-S only)	4.0	0.38		φ 9.52 OD or φ 12.7 OD or φ 12.8 ID	2.6	0.7 or less	0.07 (φ 9.52 OD)	
UKV-SH40D		R449A (UKV-S only)	4.0	0.60			3.5	3.5 or less		
UKV-SH45D		R449A (UKV-S only)	4.5	0.70						
UKV-SH50D		R407H	5.0	0.90						3.0
UKV-SH53D		R407H	5.3	1.00			2.3	2.0 or less		
UKV-SH61D		R407H	6.1	1.15						

- * 1 For other refrigerants, please contact us.
- * 2 Connection A and B are the same size.
- * 3 Also operational with 0 to 500 pulse. Please contact us for details.
- * 4 Valve only. (without coil)

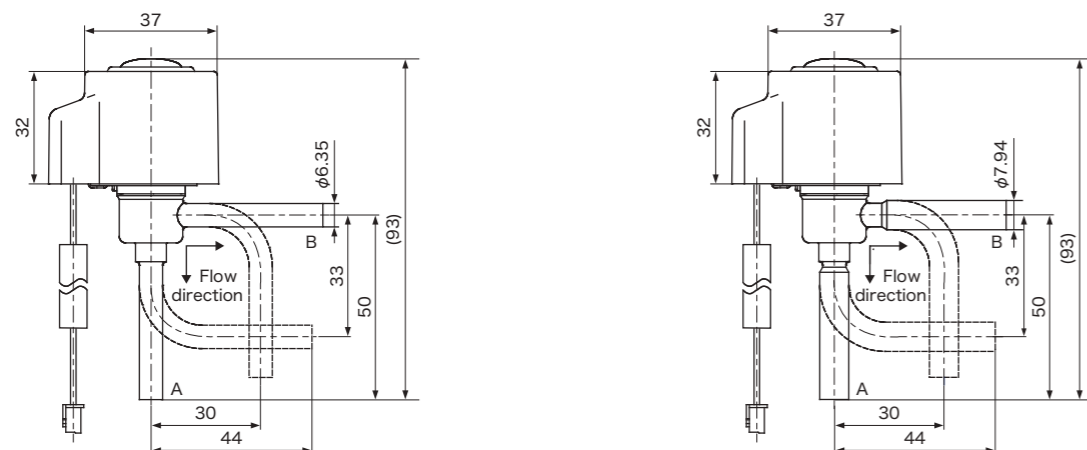
Catalog No.	Capacity (U.S.R.T.) {kW}							
	CT 38°C / ET 5°C / SC 0K / SH 0K							
	R32	R134a	R404A	R407C	R410A	R448A	R449A	R407H
UKV-S08D	0.8 {2.7}	0.3 {1.2}	0.3 {1.1}	0.5 {1.6}	0.5 {1.8}	0.5 {1.6}	0.4 {1.5}	0.5 {1.8}
UKV-S10D	1.3 {4.5}	0.6 {2.0}	0.5 {1.8}	0.8 {2.6}	0.9 {3.0}	0.8 {2.6}	0.7 {2.5}	0.9 {3.0}
UKV-S14D	2.8 {10.0}	1.3 {4.5}	1.2 {4.1}	1.7 {5.9}	1.9 {6.8}	1.7 {5.9}	1.6 {5.7}	1.9 {6.8}
UKV-S18D	5.1 {17.8}	2.3 {8.1}	2.1 {7.3}	3.0 {10.6}	3.4 {12.1}	3.0 {10.6}	2.9 {10.2}	3.5 {12.2}
UKV-S25D	9.6 {33.9}	4.4 {15.3}	3.9 {13.8}	5.7 {20.1}	6.5 {23.0}	5.7 {20.1}	5.5 {19.3}	6.6 {23.1}
UKV-S30D	13.2 {46.3}	6.0 {20.9}	5.4 {18.9}	7.8 {27.5}	9.0 {31.5}	7.8 {27.5}	7.5 {26.4}	9.0 {31.7}
UKV-S32D	14.2 {49.9}	6.4 {22.5}	5.8 {20.3}	8.4 {29.6}	9.6 {33.9}	8.4 {29.6}	8.1 {28.5}	9.7 {34.1}
UKV-S40D	19.3 {67.7}	8.7 {30.6}	7.8 {27.6}	11.4 {40.2}	13.1 {46.0}	11.4 {40.1}	11.0 {38.6}	13.2 {46.3}
UKV-SH40D	30.4 {106.9}	13.7 {48.3}	12.4 {43.6}	18.0 {63.4}	20.7 {72.6}	—	—	20.8 {73.1}
UKV-SH45D	35.5 {124.8}	16.0 {56.4}	14.5 {50.8}	21.0 {74.0}	24.1 {84.8}	—	—	24.2 {85.2}
UKV-SH50D	45.6 {160.4}	20.6 {72.5}	18.6 {65.4}	27.1 {95.2}	31.0 {109.0}	—	—	31.2 {109.6}
UKV-SH53D	50.7 {178.2}	22.9 {80.5}	20.7 {72.6}	30.1 {105.7}	34.4 {121.1}	—	—	34.6 {121.8}
UKV-SH61D	58.3 {205.0}	26.3 {92.6}	23.7 {83.5}	34.6 {121.6}	39.6 {139.2}	—	—	39.8 {140.0}

COIL SPECIFICATIONS

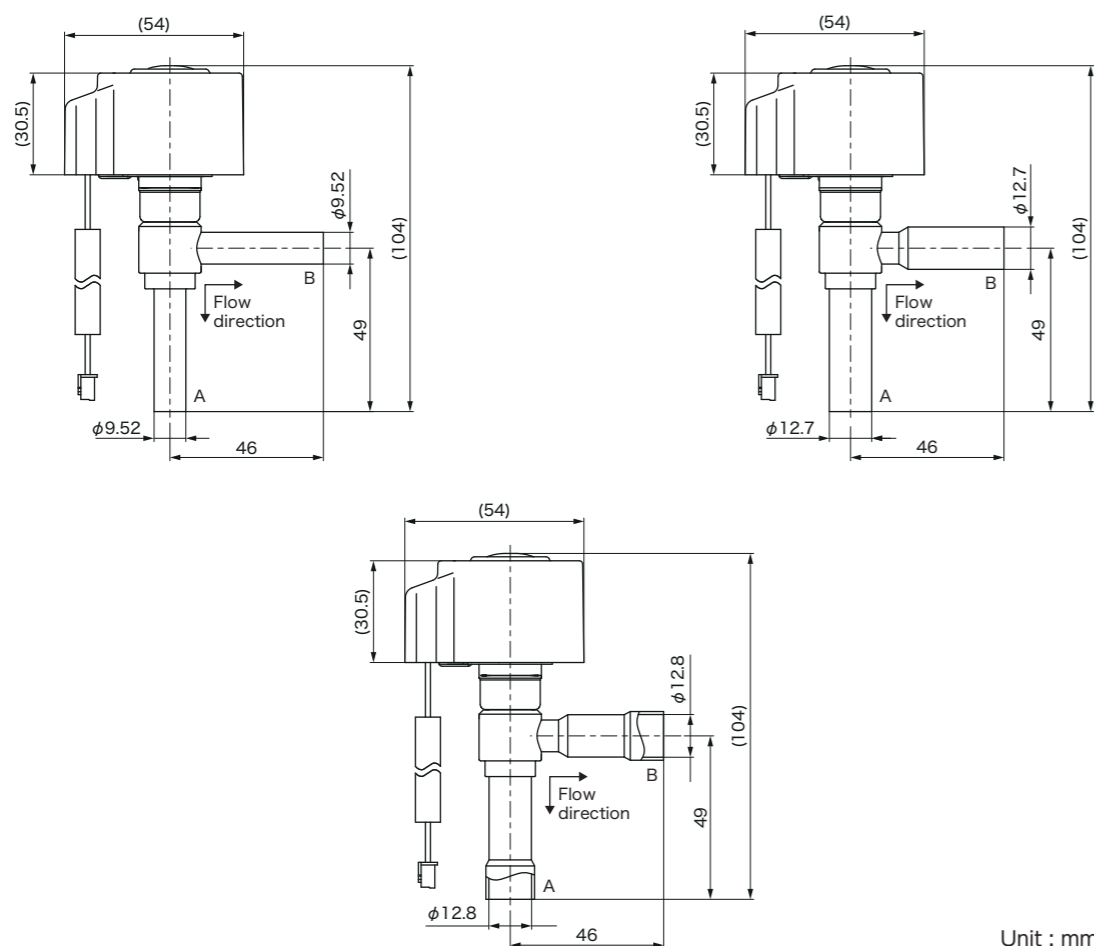
Catalog No. (Coil)	Rated voltage	Current	* 1 Insulation class	Enclosure	* 2 Wt. (kg)	Compatible catalog No. (Valve body)
KVC-1A□□□	12V.DC ± 10%	0.26A / Phase (20°C)	Class E molded	IP66	0.12	UKV-S08D to S40D
KVC-1H□□□		0.375A / Phase (20°C)				

* 1 Compliant with IEC60085, 60335-2-40.
 * 2 For lead wire length of 1000mm.

DIMENSIONS



Type UKV-S



Type UKV-SH

Unit : mm

FLOW CHARACTERISTICS

