

Saginomiya UKV Series

Electronic Expansion Valves - Series Selection and Technical Data

SERIES-WIDE REFERENCE

Base models UKV-08D through UKV-40D

MODEL SELECTION TABLE

Base model	Port (mm)	R410A kW (USRT)	R134a kW (USRT)	R404A kW (USRT)	R407C kW (USRT)	R22 kW (USRT)	Conn. A (mm O.D.)	Conn. B (mm O.D.)	Operating differential pressure MPa (kgf/cm2)	A -> B reverse-flow reference MPa (kgf/cm2)
UKV-08D	0.8	1.8 (0.5)	1.2 (0.34)	1.1 (0.3)	1.6 (0.4)	1.5 (0.4)	6.35	6.35	0-3.5 (0-35)	2.0 (20)
UKV-10D	1.0	3.1 (0.9)	2.0 (0.58)	1.8 (0.5)	2.7 (0.8)	2.6 (0.7)	7.94	7.94	0-3.5 (0-35)	3.5 (35)
UKV-14D	1.4	6.8 (1.9)	4.5 (1.28)	4.1 (1.2)	5.9 (1.7)	5.8 (1.6)	7.94	7.94	0-3.5 (0-35)	2.0 (20)
UKV-18D	1.8	12.1 (3.4)	8.1 (2.3)	7.3 (2.1)	10.6 (3.0)	10.3 (2.9)	6.35	6.35	0-3.5 (0-35)	2.8 (28)
UKV-25D	2.5	23.0 (6.5)	15.3 (4.4)	13.8 (3.9)	20.1 (5.7)	19.6 (5.6)	7.94	7.94	0-2.8 (0-28)	2.2 (22)
UKV-30D	3.0	31.5 (9.0)	20.9 (6.0)	18.9 (5.4)	27.5 (7.8)	26.8 (7.6)	7.94	7.94	0-2.8 (0-28)	1.5 (15)
UKV-32D	3.2	33.9 (9.6)	22.5 (6.4)	20.3 (5.8)	29.6 (8.4)	28.8 (8.2)	7.94	7.94	0-2.8 (0-28)	1.2 (12)
UKV-40D	4.0	46.0 (13.1)	30.6 (8.7)	27.6 (7.9)	40.2 (11.4)	39.1 (11.1)	7.94	7.94	0-2.1 (0-21)	0.7 (7)

COIL REFERENCE

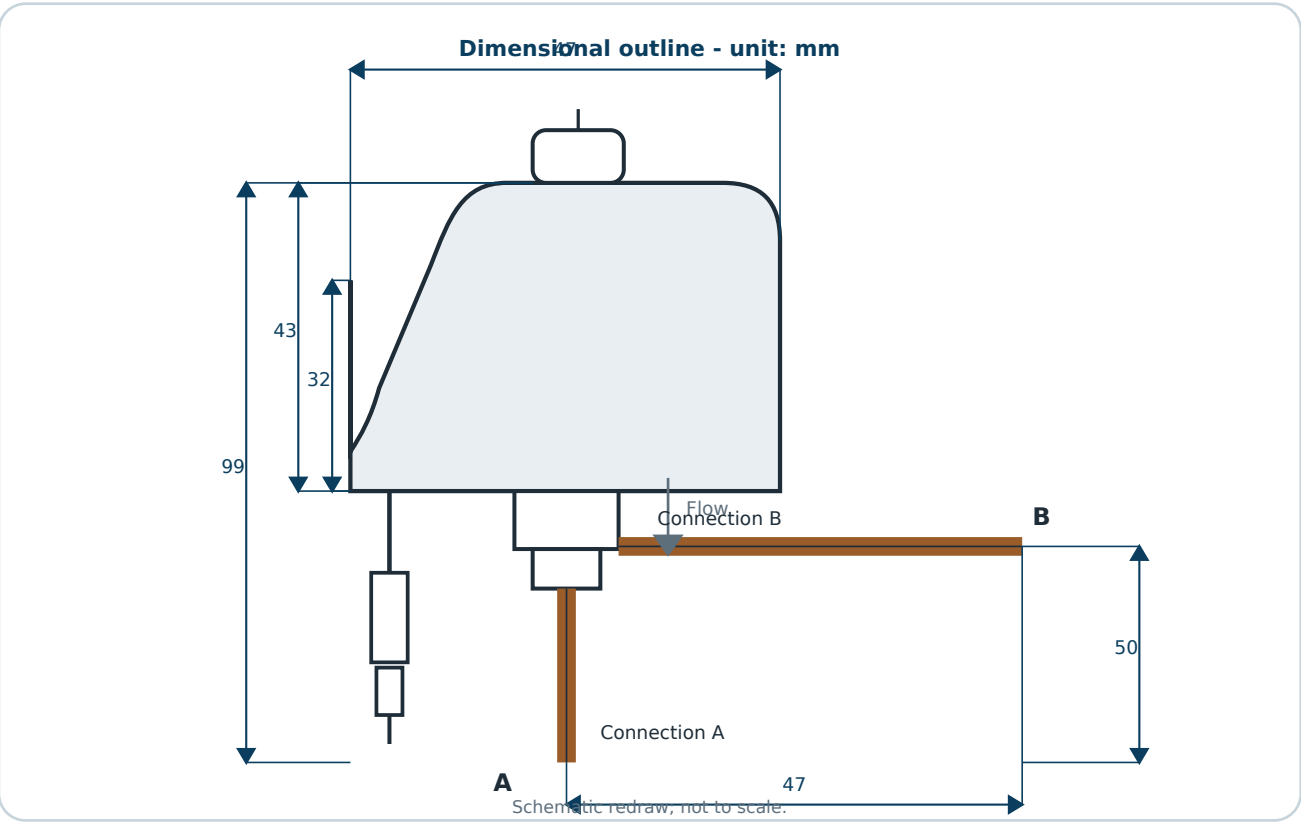
Valve / coil family	Rated voltage and current	Reference weight
UKV series	12 VDC, 260 mA per phase	0.13 kg
VKV series	12 VDC, 380 mA per phase	0.15 kg
AKV series	12 VDC, 375 mA per phase	0.40 kg

SELECTION NOTES

Capacity basis
Condensing temperature: 38 deg C; evaporating temperature: 5 deg C; subcooling: 0 deg C; superheat: 0 deg C.

Model suffix note
The table shows base valve models. Complete part numbers may add two configuration digits, for example UKV-32D61 or UKV-40D08. Confirm the full model code, connection option, coil lead length and wiring sequence for each SKU.

DIMENSIONAL OUTLINE AND CONNECTION REFERENCE



CONNECTION DIAMETER

Base model	A connection	B connection
UKV-08D	6.35 mm O.D.	6.35 mm O.D.
UKV-10D	7.94 mm O.D.	7.94 mm O.D.
UKV-14D	7.94 mm O.D.	7.94 mm O.D.
UKV-18D	6.35 mm O.D.*	6.35 mm O.D.*
UKV-25D	7.94 mm O.D.	7.94 mm O.D.
UKV-30D	7.94 mm O.D.	7.94 mm O.D.
UKV-32D	7.94 mm O.D.	7.94 mm O.D.
UKV-40D	7.94 mm O.D.	7.94 mm O.D.

REFERENCE DIMENSIONS

Dimension	Reference
Upper housing width	Approx. 47 mm
Housing height	Approx. 43 mm
Main body height	Approx. 32 mm
Overall height	Approx. 99 mm
A-to-B vertical dimension	50 mm
B-side horizontal reach	47 mm

Connection note: Values above reproduce the supplied selection table. Complete suffix codes can identify configuration-specific connection options. Confirm the full part number, nameplate and approved drawing before selection or installation. Dimensions are nominal; schematic is not to scale.