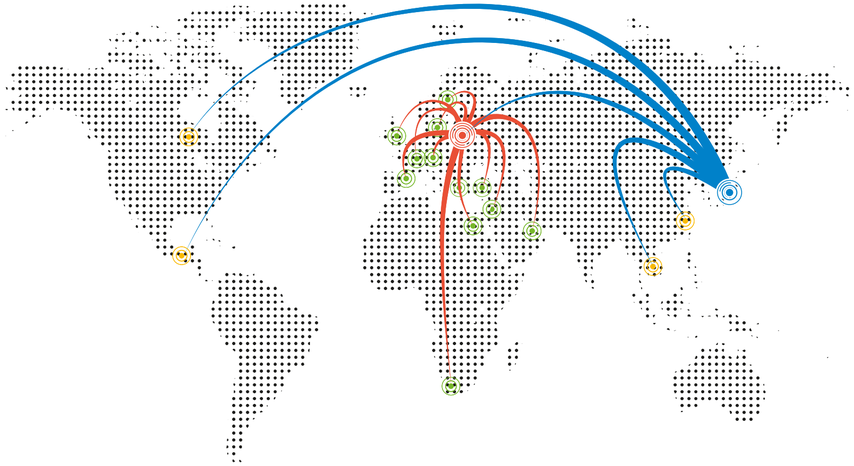


Central Headquarters
Europe Sales office
Distributors
Regional Sales offices

SALES HEADQUARTERS:
SAGINOMIYA SEISAKUSHO, INC.
Shinjuku Garden Tower 22F
8-2, Okubo 3-chome, Shinjuku-ku
Tokyo, 169-0072 Japan
E-mail: inter@saginomiya.co.jp

EUROPE SALES OFFICE:
SAGINOMIYA EUROPE Sp. z o.o.
Address: Aleje Jerozolimskie 212
02-486 Warsaw, Poland
E-mail: info@saginomiya.eu
Telephone: +48 22 101 30 00

REGIONAL SALES OFFICES:
SAGINOMIYA AMERICA, INC.
Address: 655 Metro Place South suite 700,
Dublin, Ohio 43017, U.S.A.
E-mail: Sales@saginomiya-am.com

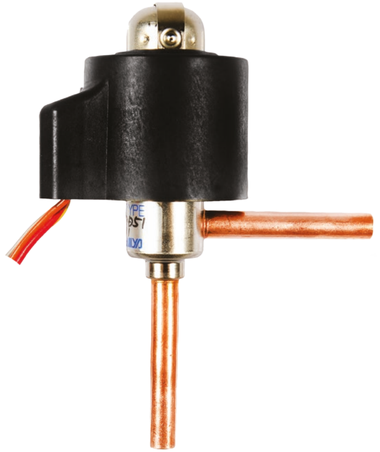
FOSHAN HUALU AUTOMATIC CONTROLS LIMITED
Address: No.59 & 61, Wenhua Nan Road,
Chancheng District, Foshan, Guangdong, China
E-mail: salesdept@foshanhualu.com

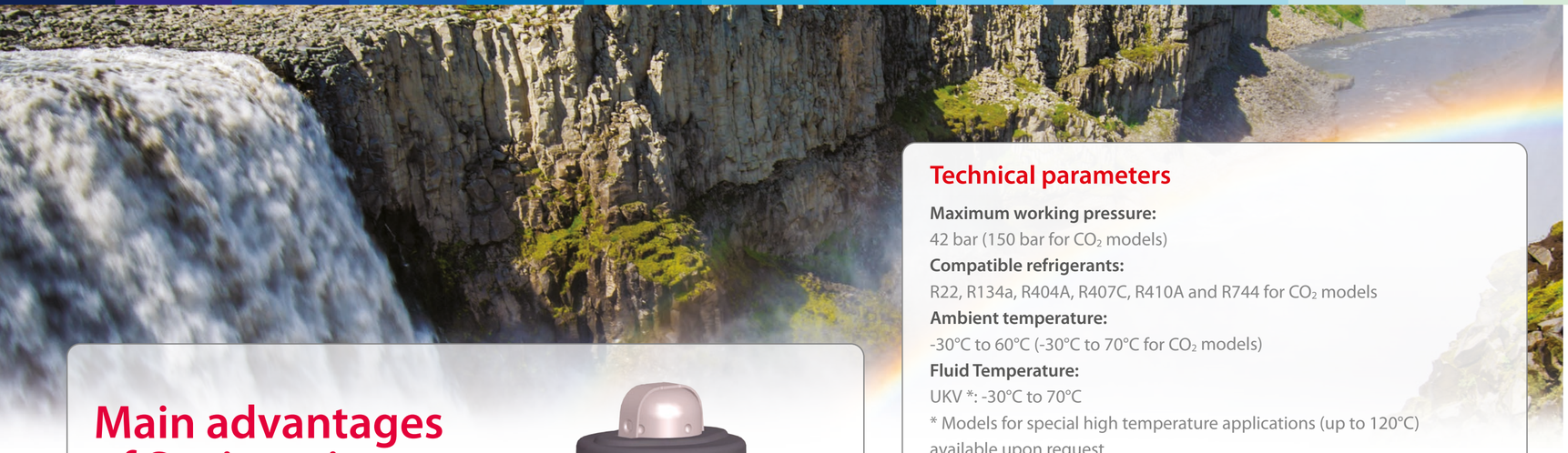
Saginomiya (Thailand) Co., Ltd.
Address: 159 Serm-mit Tower 19th FL.,
Sukhumvit 21 Rd., North-Klongtoey, Wattana,
Bangkok 10110, Thailand
E-mail: info@saginomiya.co.th

RIMSA SAGINOMIYA, S.A. DE C.V.
Address: Av. Central No. 126,
Parque Industrial Toluca 2000,
Km. 52.8 Carretera Toluca Naucalpan,
C.P. 50200, Toluca, Edo. De Mexico,
E-mail: rimsa@saginomiya.com.mx

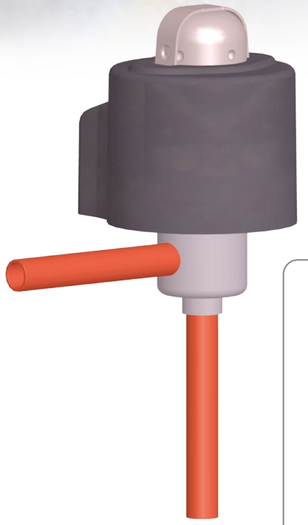
SAGINOMIYA
AUTOMATIC CONTROLS

UKV Electronic Expansion Valve





Main advantages of Saginomiya Electronic Expansion Valve



- Precise flow control.
- High temperature range.
- Patented, innovative construction for noise reduction.
- Wide range of capacity.
- High reliability built upon 30 years of experience.

Technical parameters

Maximum working pressure:
42 bar (150 bar for CO_2 models)
Compatible refrigerants:
R22, R134a, R404A, R407C, R410A and R744 for CO_2 models
Ambient temperature:
-30°C to 60°C (-30°C to 70°C for CO_2 models)
Fluid Temperature:
UKV *: -30°C to 70°C
* Models for special high temperature applications (up to 120°C) available upon request
Modulation:
Permanent magnet type direct operating unipolar stepper motor
Coil voltage:
12 VDC Electrical connection: JST XHP-6
*Other connectors available upon request.

General Description

The KV electronic expansion valves open and close to regulate refrigerant flow by means of a screw structure. This occurs by the rotation of a magnet-needle valve assembly which moves when electrical signals are applied to the surrounding coil. Within the coil structure, there are different winding configurations and the polarities are changed by the electrical signals applied. By application of the appropriate combination of signals (in the form of short, electrical pulses) the coil forces the rotor of the valve to move in a stepwise fashion.
Application of multiple pulses will make the valve mechanism move through a series of steps in the direction of choice, in order for the valve to achieve the required position. High precision of screw movement is ensured by very small value of displacement during one micro-step (pulse).

UKV ELECTRONIC EXPANSION VALVE

Series	Oriffice [mm]	Capacity [kW]			MWP [MPa]	MOPD [MPa]
		R134a	R407C	R410A		
UKV-08	0,8	1,2	1,6	1,8	4,2	3,5
UKV-10	1,0	2,0	2,7	3,1		
UKV-14	1,4	4,5	5,9	6,8		
UKV-18	1,8	8,1	10,6	12,1		
UKV-25	2,5	15,3	20,1	23,0		
UKV-30	3,0	20,9	27,5	31,5		2,8
UKV-32	3,2	22,5	29,6	33,9		
UKV-40	4,0	30,6	40,2	48,6		2,5

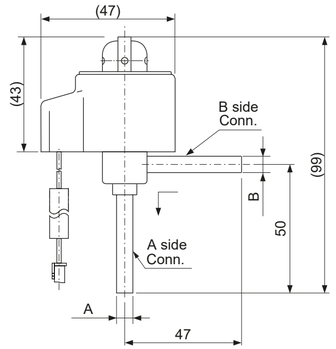
Note [1] Capacity calculated for conditions: CT=38°C, ET=5°C, SC=0K, SH=0K,
Note [2] Capacity in the table are given for fully opened valve.

UKV-J, JKV ELECTRONIC EXPANSION VALVE FOR CO_2

Series	Oriffice [mm]	Capacity [kW]	MWP [MPa]	MOPD [MPa]
UKV-J08	0,8	2,7	15	10
UKV-J10	1,0	4,4		
UKV-J14	1,4	9,7		
JKV-20	2,0	20,6		
JKV-24	2,4	24,2		

Note [3] Capacity calculated for conditions: Gas cooler outlet CT=38°C, ET=0°C, SH=0K, CP=100 bar.
Note [4] Capacity in the table are given for fully opened valve.

TYPE UKV



Catalog No.	A	B
UKV–08D	Ø 6,35	
UKV–10D		
UKV–14D		
UKV–18D		
UKV–25D	Ø 7,94	
UKV–30D		
UKV–32D		
UKV–40D		