

MOTOR OPERATED VALVES FOR CO₂ REFRIGERANT / Type UKV-J, JKV

Type UKV-J



Type JKV-20, 24D



Type JKV-40D

High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

Coil sold separately

FEATURES

- M.O.P.D. 10.0 MPa.
- Compact and lightweight.
- Energy-saving design.
- Standards : UL (UKV-J only) (Please contact us for details.)

COMMON SPECIFICATIONS

- Max. working pressure : 15.0 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 : B → A (Single direction)
 - Excitation method : 1-2 phase, Uni-polar
- * Coils for low temperatures are also available. Please contact us for details.
(Fluid temperature: -40 to 60°C Ambient temperature: -50 to 60°C)

APPLICATIONS

- CO₂ Heat pump water heaters
- CO₂ Display cases, etc.

DESCRIPTION OF CATALOG NO.

UKV - J 08 D □□
I II III IV

JKV - 20 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. | Port size φ (mm) | 0 pulse flow | Cv value | Capacity (U.S.R.T.) (kW) | | * 3 Connection (Solder) (mm) | Operation range pulse | B → A M.O.P.D. (MPa) | * 4 Wt. (kg) |
|-------------|---------------------|-----------------|-------------|-----------------------------|-----------------|---------------------------------------|-----------------------------|----------------------------|--------------------|
| | | | | * 1 R744 | * 2 R744 | | | | |
| UKV-J08D | 0.8 | Close | 0.015 | 0.8 {2.8} | 1.0 {3.7} | φ 6.35 OD | 0 to 480 | 10.0 | 0.05 |
| UKV-J10D | 1.0 | | 0.025 | 1.3 {4.6} | 1.7 {6.1} | | | | |
| UKV-J14D | 1.4 | | 0.056 | 2.9 {10.3} | 3.9 {13.7} | | | | |
| JKV-20D | 2.0 | Close / Open | 0.12 | 6.2 {21.9} | 8.3 {29.0} | φ 7.94 OD | | | 0.13 |
| | | | 0.17 | 8.7 {30.7} | 11.6 {40.7} | | | | |
| JKV-24D | 2.4 | Close | 0.49 | 25.6 {90.1} | 34.0 {119.5} | φ 12.7 OD | | | |
| JKV-40D | 4.0 | | | | | | | | |

* 1 CT -5°C / ET -25°C / SC 0K / SH 0K

* 2 Gas cooler inlet temp. 70°C / Gas cooler outlet temp. 22°C / ET 6°C / SH 0K

* 3 Connection A and B are the same size.

* 4 Valve only. (without coil)

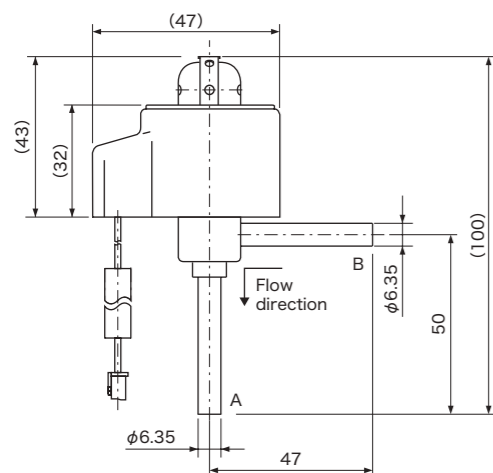
COIL SPECIFICATIONS

| Catalog No. (Valve body) | Rated voltage | Current | * 1 Insulation class | Enclosure | * 2 Wt. (kg) |
|-----------------------------|---------------|--|----------------------------|-----------|--------------------|
| UKV-J08D to J14D | 12V.DC ± 10% | 0.26A / Phase (20°C) 0.13A / Phase (20°C) | Class E molded | IP66 | 0.13 |
| JKV-20D | 24V.DC ± 10% | | | | |
| JKV-24D, 40D | 12V.DC ± 10% | 0.38A / Phase (20°C) 0.21A / Phase (20°C) | | 0.18 | |
| | 24V.DC ± 10% | | | | 0.17 |

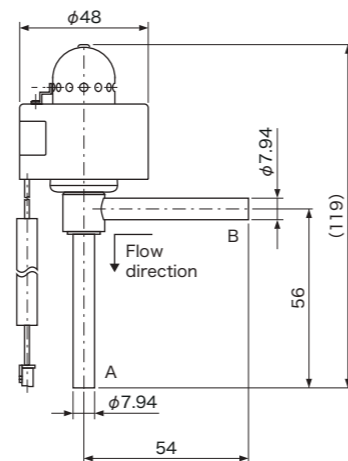
* 1 Compliant with IEC60085, 60335-2-40.

* 2 For lead wire length of 1000mm (UKV-J) / 500mm (JKV).

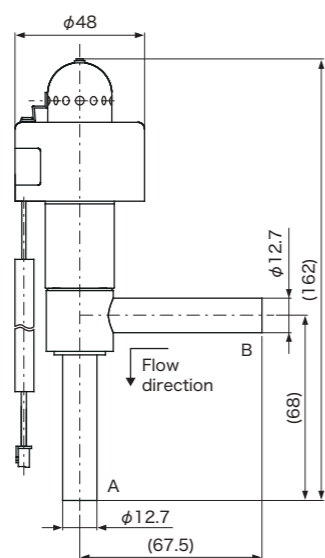
DIMENSIONS



Type UKV-J



Type JKV-20, 24D

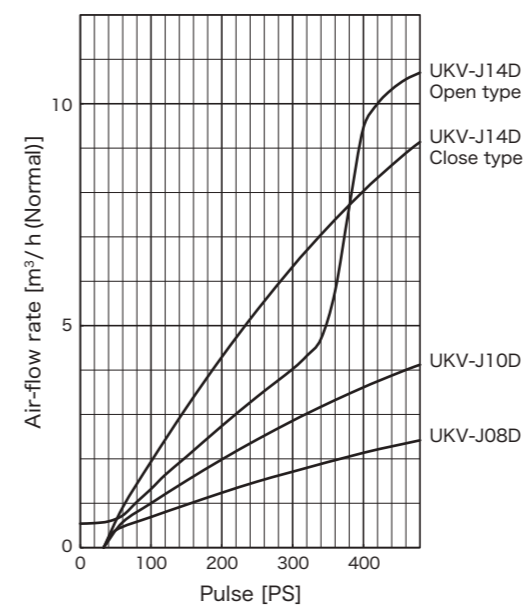


Type JKV-40D

Unit : mm

FLOW CHARACTERISTICS

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



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

