

CONTROL APPLIANCES FOR HOT WATER SUPPLY UNITS BY CO₂ REFRIGERANT

High Volume OEM Item

Type CCB, HSK, HPV & UKV-J

SAGINOMIYA

GENERAL DESCRIPTION

- Used for CO₂ refrigerant applications.
- Available for extreme high pressure.



Type CCB



Type HSK



Type HPV



Type UKV-J

● PRESSURE CONTROL for High Pressure [Type CCB]

SPECIFICATIONS

Unit: MPa {kgf/cm²}

Catalog No.	Setting		Max. Pressure	Contact Function	Pressure Connection	Terminal Construction	Appilication	Wt. (kg)
	on	off						
CCB-AA01	10 {100}	15 {150}	15 {150}	SPST (High Cut)	1/4" Solder	Open	High Pressure Cut Out	0.07

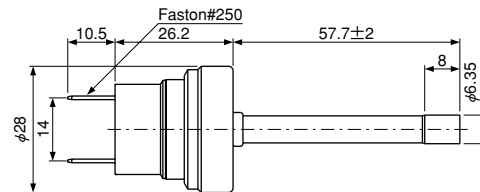
- Allowable fluid temperature: -30 to 100 °C
- Enclosure: IP20 (IP66 model: available upon request)

ELECTRICAL RATINGS

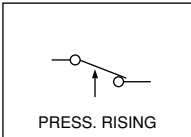
Category of Ratings			T Rating	
Rated Amps. (A)	Rated Voltage (V)	Power Factor (cos φ)	24V. DC	12V. DC
	Non-Inductive Current		1	0.01 to 0.05
Inductive Current	Full Load	0.75	—	—
	Locked Rotor	0.45	—	—

DIMENSIONS

Type CCB



CONTACT FUNCTION



● PRESSURE SENSOR for High Pressure [Type HSK]

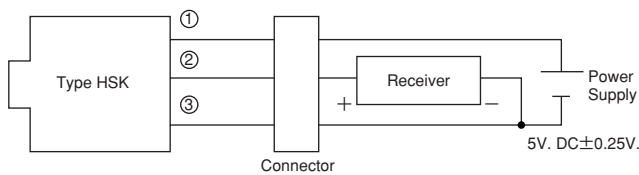
SPECIFICATIONS

Unit: MPa {kgf/cm²}

Catalog No.	Pressure Range	Supply Voltage	Output	Accuracy	Current Consumption	Load Resistance	Airtight Pressure	Pressure Connection	Wt. (kg)
HSK-BC150D-***	{0 to 150} 0 to 15	5V. DC±0.25V	0.5 to 4.5V. DC	±2.5% F.S.	Max. 10mA	Min. 10kΩ	15 {150}	1/4" Solder	0.07

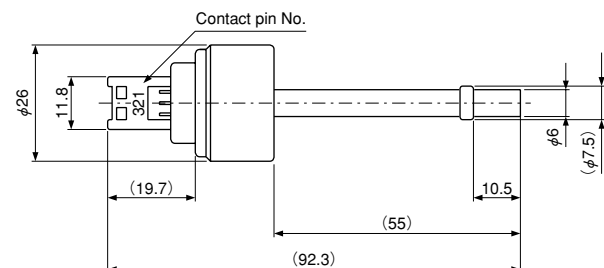
- Allowable fluid temperature: -30 to 120 °C
- Enclosure: IP66
- Ambient temperature: -30 to 100 °C

WIRING



DIMENSIONS

Type HSK



● SOLENOID VALVE for High Pressure [Type HPV]

TYPE NUMBER SELECTION (SPECIFICATIONS)

Catalog No.	Port Size (mm)	Cv Value	Connection		O.P.D.		Max. Working Pressure	Operation	Wt. (kg)
			Copper Tube O.D.	Style	Min.	Max.			
HPV-102D	1.0	0.028	1/4"	Solder	0	10.0 {100}	13.0 {130}	Normal close	0.05
HPV-122D	1.2	0.038					13.8 {138}		0.09

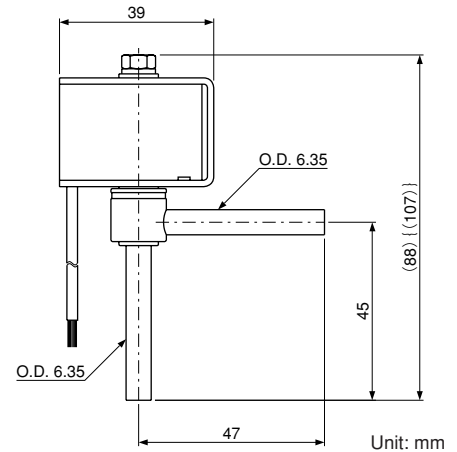
- O.P.D.: Operating Pressure Differential (by air pressure)
- Ambient temperature: -20 to 50 °C
- Allowable fluid temperature: -30 to 120 °C

ELECTRICAL RATING OF SOLENOID COILS

Valve Type	Rated Voltage	Tolerance (%)	Voltampere		Power Consumption (W)	Insulation Class	Wt. (kg)
			Running	Inrush			
HPV-102D	100V. AC	50/60Hz	±10	11/8	32/27	Class B Molded	0.13
HPV-122D	200V. AC			16/13	52/38		9/8

DIMENSIONS

Type HPV-102D {HPV-122D}



● ELECTRONIC EXPANSION Valve for High Pressuer [Type UKV-J]

SPECIFICATIONS

Catalog No.	Port Size (φ mm)	Cv Value	Max. Working Pressure (MPa) {kgf/cm²}	Operating Pressure Differential (MPa) {kgf/cm²}	Connection (Solder) (mm)		Wt. (kg)
					B side	A side	
UKV-J14D	1.4	0.055	15 {150}	0 to 10 {0 to 100}	φ 6.35 OD	φ 6.35 OD	0.05

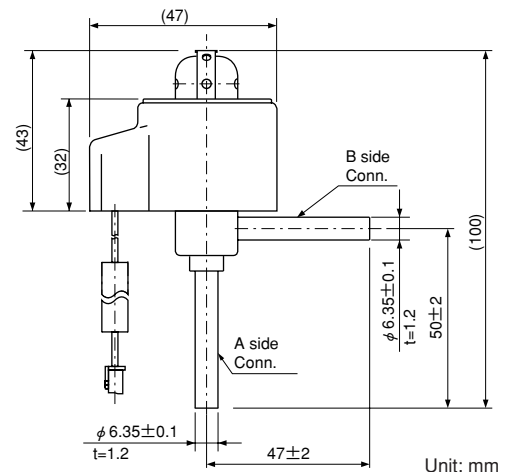
- Allowable fluid temperature: -30 to 70 °C

SPECIFICATIONS OF COIL

Valve Type	Excitation method	Rated Voltage & Current	Insulation Class	Wt. (kg)
Type UKV-J	1-2 Phase excitation	12V. DC. 260mA/Phase	Class E Molded	0.13

DIMENSIONS

Type UKV-J



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